EUSTON TOWER

ES Volume 3: Technical Appendices

December 2023

British Land

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Appendix: Introduction

Euston Tower: Statement of Competent Experts

Regulation 18(5) of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (referred to as 'the EIA Regulations') require that 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".

The 'developer' as referenced in the EIA Regulations is British Land Property Management Limited.

As set out in **ES Volume 1, Chapter 1: Introduction** of the ES, Trium is an environmental consultancy specialising in urban regeneration and property development projects in the United Kingdom (UK), with a specific focus in London. Trium is therefore considered to be 'competent experts' as referenced in the EIA Regulations. In addition, and for completeness, Table 1 below sets out the company, persons and expertise of all the key technical specialists that have worked on the EIA.

Table 1 Competent Expert Experience and Expertise

Discipline	Company	Expertise
EIA Coordination	Trium	Trium is an environmental consultancy specialising in urban regeneration and property development projects in the United Kingdom (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 500 EIAs within the commercial, retail, residential, leisure, cultural, infrastructure and industrial sectors. They have particular expertise in London based development projects. Trium's lead EIA practitioner for this project has 20 years EIA experience of managing EIA projects within London.
Socio-Economics	Trium	Trium is a consultancy with a specialism in socioeconomic and health assessments. Trium specialises in urban regeneration and property development projects in the United Kingdom (UK), with a specific focus in London. Trium have extensive experience in assessing socioeconomics and health issues and impacts surrounding large scale, high profile urban regeneration development projects. Trium have worked on numerous socio-economic and health assessments within the commercial, retail and residential sectors. Trium's lead for this project's socio-economics assessment has over 20 years' experience within Environmental Impact Assessments (EIAs) and socio-economic assessments within London.
Demolition and Construction	Lendlease	Lendlease is a globally integrated real estate and investment group with core expertise in shaping cities and creating strong and connected communities. We create award-winning urban precincts, new communities for older people and young families just starting out, retail precincts, and workplaces to the highest sustainability standards. We are also privileged to create essential civic and social infrastructure including state-of-the-art hospitals, universities and stadiums around the world. Lendlease has been entrusted with many projects of public, cultural and social significance: constructing the Sydney Opera House, creating the National September 11 Memorial & Museum in New York, and restoring and renovating historic buildings such as London's Tate Britain and National Theatre. As we expand our experience and our footprint, we aspire to continue creating places people want and care about and providing value for securityholders and the broader community. Headquartered in Sydney, our people are located in four operating regions: Australia, Europe, the Americas and Asia. The Construction segment provides project management, design and construction services across a wide range of sectors. Our construction capability is showcased in the places and structures we create – workplaces for some of the world's largest organisations, vibrant retail centres, residential apartments, including affordable housing options, state of the art hospitals, and other buildings of civic and social importance. We have delivered construction projects around the world for more than six decades, creating thousands of buildings – and the projects delivered by businesses acquired by Lendlease span more than a century. We are recognised for creating innovative places that stand the test of time and we have been entrusted to create and restore iconic buildings that shape city skylines.
Traffic and Transport	Velocity	Velocity Transport Planning Ltd is a specialist consultancy providing transport planning and highways services to public and private sector clients. Velocity's Directors alone have in excess of 100 years of experience within the industry, providing services to a broad range of sectors, with extensive experience in delivery of residential, education, hotel, retail, commercial and mixed-use development projects.
Air Quality, Climate Change and Greenhouse Gases	AQC	Air Quality Consultants provides expert advice and support to developers, industry, local authorities and policy makers. The Company has played a leading role in developing the air quality monitoring, modelling and assessment regime both in the UK and overseas. The Company frequently provides expert evidence at Public Inquiries and it has staff who have been involved in UK Government expert groups and European Commission working groups on air quality management and assessment. A large team of highly qualified consultants now provides expert services in the field of ambient air quality and climate change. Competent experts involved in the assessment and preparation of the Air Quality and Greenhouse Gas Emissions chapters have membership of the Institution of Environmental Sciences (MIEnvSc) and Institute of Air Quality Management (MIAQM); the air quality lead for this project has over 20 years relevant experience of undertaking assessments across the UK.
Noise and Vibration	Hann Tucker	Hann Tucker Associates is an independent acoustic consultancy offering expertise in a large number of sectors; from major building development planning and design to sound insulation testing and environmental monitoring. As one of the original names in the field of acoustic consultancy Hann Tucker staff have worked with nearly every major developer, architect, and contractor in the UK and have played a key role in major projects throughout Europe and internationally, showcasing our global reach and consistent performance. Hann Tucker's lead engineers for this project have over 20 years' combined experience in the field.
Wind Microclimate	Arup	Arup are responsible for numerous complex environmental wind studies over the last 40 years, including many of the tallest developments in the UK and London. Arup have a good understanding of the type of wind issues that can arise for such projects. Arup use decades of experience based on their desk top studies, previous wind tunnel and planning studies, and practical delivery of mitigation, to assist with feasible, safe, and economic design. Arup work with many wind tunnel laboratories and research facilities around the world.
Daylight, Sunlight and Overshadowing	Point 2	Point 2 is firm of surveyors specialising in Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution. Point 2 have advised on over 3,200 projects and have worked alongside the majority of the UK's leading developers, institutions, architects and professional teams to advise on the impacts caused by some of the largest and highest profile urban development projects in London and across the UK. Point 2 have vast experience in advising on highly technically and politically challenging projects and have provided ES Chapters predominantly within the commercial, retail and residential sectors. Point 2's project lead has over 16 years' experience advising on the subject matter and is supported by other experienced members of staff.
Built Heritage, Townscape and Visual Impact Assessment	Tavernor	Tavernor Consultancy is a townscape and heritage practice, advising on design and planning matters relating to the historic and urban built environment. Tavernor Consultancy have over two decades of experience advising on large and small scale projects, many of which involve complex and sensitive sites, primarily in London. The team includes architects and conservation professionals with a range of backgrounds and decades of experience of heritage-sensitive London sites between them.

It can be confirmed that British Land Property Mangement Limited (the 'developer') has ensured that the ES is prepared by competent experts. This document is therefore considered to address the requirements of Regulation 18(5) of the EIA Regulations.

Appendix: Introduction

Annex 1: Statement of Competence

Annex 2: Location of Information within the ES

Annex 3: Glossary of Terms and Abbreviations

Annex 2 – Location of Information within the ES ('Wayfinding' Document)

Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017		How the EIA will address the Information Specifications
1.	A description of the development, including in particular:	
(a)	a description of the location of the development;	**ES Volume 1:** Chapter 1: Introduction;
(b)	a description of the physical characteristics of the whole development, including, where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases;	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 5: Deconstruction and Construction;
(c)	a description of the main characteristics of the operational phase of the development (in particular any production process), for instance, energy demand and energy used,	**ES Volume 1:** Chapter 4: The Proposed Development;
	…nature and quantity of the materials and natural resources (including water, land, soil and biodiversity) used; and	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 5: Demolition and Construction;
(d)	an estimate, by type and quantity, of expected residues and emissions (such as water, …	**ES Volume 1:** Chapter 4: The Proposed Development;
	…air, …	**ES Volume 1:** Chapter 8: Air Quality; **ES Volume 3:** Appendix: Air Quality;
	…soil and subsoil pollution,…	**ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
	…noise, vibration, …	**ES Volume 1:** Chapter 9: Noise and Vibration; **ES Volume 3:** Appendix: Noise and Vibration;
	…light, …	**ES Volume 1:** Chapter 11: Daylight, Sunlight, Overshadowing and Solar Glare; **ES Volume 3:** Appendix: Daylight, Sunlight, Overshadowing and Solar Glare;
	…heat, radiation and …	**ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
	…quantities and types of waste produced during the construction and operation phases;	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 5: Demolition and Construction;
2.	A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	**ES Volume 1:** Chapter 3: Alternatives and Design Evolution;
3.	A description of the relevant aspects of the current state of the environment (baseline scenario) …	**ES Volume 1:** Chapter 1: Introduction; Chapter3: Alternatives and Design Evolution; Technical Chapters 6 - 12;

Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017		How the EIA will address the Information Specifications
	…and an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	**ES Volume 1:** Chapter 2: EIA Methodology; Technical Chapters 6 – 12;
4.	A description of the factors specified in regulation 4(2) likely to be significantly affected by the development: population, human health, …	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 6: Socio-Economics;
	…biodiversity (for example fauna and flora), …	**ES Volume 1:** Chapter 4: The Proposed Development; **ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
	…land (for example land take), ….	**ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
	…soil (for example organic matter, erosion, compaction, sealing), …	**ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
	…water (for example hydromorphological changes, quantity and quality), …	**ES Volume 1:** Chapter 4: The Proposed Development; **ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
	…air, …	**ES Volume 1:** Chapter 8: Air Quality; **ES Volume 3:** Appendix: Air Quality;
	…climate (for example greenhouse gas emissions, impacts relevant to adaptation), …	**ES Volume 1:** Chapter 4: Proposed Development; Chapter 8: Air Quality; Chapter 12: Climate Change and Greenhouse Gases; **ES Volume 3:** Appendix: Air Quality; Appendix: Climate Change and Greenhouse Gases;
	…material assets, cultural heritage, including architectural and archaeological aspects, and landscape…	**ES Volume 2:** Townscape, Visual and Built Heritage Impact Assessment; **ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
5.	A description of the likely significant effects of the development on the environment resulting from, inter alia:	**ES Volume 1:** Technical Chapters 6 – 12; Chapter 14: Likely Significant Effects;
(a)	the construction and existence of the development, including, where relevant, demolition works.	**ES Volume 1:** Chapter 5: Deconstruction and Construction;
(b)	the use of natural resources, in particular land, soil, …	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 5: Deconstruction and Construction;
	…water and …	**ES Volume 1:** Chapter 4: The Proposed Development;

Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017		How the EIA will address the Information Specifications
		ES Volume 3: Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
	…biodiversity, …	**ES Volume 1:** Chapter 4: The Proposed Development; **ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
	…considering as far as possible the sustainable availability of these resources;	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 5: Deconstruction and Construction; Technical Chapters 6 – 12;
(c)	the emission of pollutants, …	**ES Volume 1:** Chapter 7: Traffic and Transport; Chapter 8: Air Quality; Chapter 12: Climate Change and Greenhouse Gases **ES Volume 3:** Appendix: Traffic and Transport; Appendix: Air Quality; Appendix: Climate Change and Greenhouse Gases
	…noise, vibration.	**ES Volume 1:** Chapter 9: Noise and Vibration; **ES Volume 3:** Appendix: Noise and Vibration;
	…light, …	**ES Volume 1:** Chapter 10: Daylight, Sunlight, Overshadowing and Solar Glare; **ES Volume 3:** Appendix: Daylight, Sunlight, Overshadowing and Solar Glare;
	…heat and radiation, …	**ES Volume 3:** Appendix: EIA Methodology, Annex 3 – EIA Scoping Report ('Topics to be Scoped Out');
	…the creation of nuisances, …	**ES Volume 1:** Chapter 8: Air Quality; Chapter 9: Noise and Vibration; **ES Volume 3:** Appendix: Air Quality; Appendix: Noise and Vibration;
	…and the disposal and recovery of waste;	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 5: Deconstruction and Construction; **ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
(d)	the risks to human health, cultural heritage or the environment (for example due to accidents or disasters);	**ES Volume 1:** Chapter 6: Socio-Economics; Technical Chapters 6 – 12; **ES Volume 2:** Townscape, Visual and Built Heritage Impact Assessment; **ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping

Information for Inclusion in Environmental Statements, as Specified in Schedule 4 of the EIA Regulations 2017		How the EIA will address the Information Specifications
		Report ('Topics to be Scoped Out'); Appendix: Socio-Economics;
(e)	the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;	**ES Volume 1** Technical Chapters 6 – 12; **ES Volume 2:** Townscape, Visual and Built Heritage Impact Assessment;
(f)	the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change; and	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 12: Climate Change and Greenhouse Gases;
(g)	the technologies and the substances used.	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 5: Deconstruction and Construction; Technical Chapters 6 – 12;
6.	A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	**ES Volume 1:** Chapter 2: EIA Methodology; Technical Chapters 6 – 12;
7.	A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.	**ES Volume 1:** Chapter 4: The Proposed Development; Chapter 5: Deconstruction and Construction; Technical Chapters 6 – 12; Chapter 15: Environmental Management, Mitigation and Monitoring Schedule;
8.	A description of the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to EU legislation such as Directive 2012/18/EU(c) of the European Parliament and of the Council or Council Directive 2009/71/Euratom(d) or UK environmental assessments may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	**ES Volume 3:** Appendix: EIA Methodology, Annex 1 – EIA Scoping Report ('Topics to be Scoped Out');
9.	non-technical summary of the information provided under paragraphs 1 to 8.	ES Non-Technical Summary;
10.	A reference list detailing the sources used for the descriptions and assessments included in the environmental statement.	**ES Volume 1:** Chapter 2: EIA Methodology; Technical Chapters 6 – 12.

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GLOSSARY OF TERMS

Accuracy	A measure of how well a set of data fits the true value.
Accurate Visual Representations	A static or moving image which shows the location of a proposed development as accurately as possible; it may also illustrate the degree to which the development will be visible, its detailed form or the proposed use of materials. AVRs are produced by accurately combining images of the proposed building with a representation of its context.
Acoustic Screening	Use of a fabric-covered, double-sided screen used in open areas such as offices to absorb noise.
ADMS Roads	Atmospheric Dispersion Modelling System Roads is a line-source Gaussian dispersion model with the capability to model 3-point sources.
AERMOD 8	Atmospheric dispersion integrated modelling system.
Air Quality Objective	Policy target generally expressed as a maximum ambient concentration to be achieved, either without exception or with a permitted number of exceedances within a specific timescale (see also air quality standard).
Air Quality Standard	The concentrations of pollutants in the atmosphere which can broadly be taken to achieve a certain level of environmental quality. The standards are based on the assessment of the effects of each pollutant on human health including the effects on sensitive sub groups (see also air quality objective).
Ambient air	Outdoor air in the troposphere, excluding workplace air.
Ambient Noise Level	The totally encompassing sound in a given situation at a given time, usually composed of a sound from many sources both distant and near (LA_{Feq},T).
Amenity	A pleasant or advantageous aspect of the environment.
Annual mean	The average (mean) of the concentrations measured for each pollutant for one year. Usually this is for a calendar year, but some species are reported for the period April to March, known as a pollution year. This period avoids splitting winter season between 2 years, which is useful for pollutants that have higher concentrations during the winter months.
Annual Probable Sunlight Hours	A measure of sunlight that a given window may expect over a year period.
AQC	Climate Change Consultants
Arisings	Material (often spoil) derived from the ground through excavation.
Asbestos	A mineral substance previously used as in insulator but, is highly toxic.
A-weighting, dB(A)	The unit of sound level, weighted according to the A-scale, which takes into account the increased sensitivity of the human ear at some frequencies.
Baseline Studies	Studies of existing environmental conditions which are designed to establish the baseline conditions against which any future changes can be measured or predicted.
Biodiversity	The diversity, or variety of plants and animals and other living things in a particular area of region. It encompasses landscape diversity, ecosystem diversity, species diversity and genetic diversity.
Borehole	A deep hole bored into the ground as part of intrusive geological investigations.
Bunding	A constructed retaining wall around storage 'where potentially polluting substances are handled, processed or stored, for the purposes of containing any unintended escape of material from that area until such time as remedial action can be taken'.
Carbon Budget	A tolerable quantity of greenhouse gas emissions that can be emitted in total over a specified time.
Carbon Dioxide (CO_2)	Carbon dioxide is a naturally occurring gas comprising 0.04% of the atmosphere. The burning of fossil fuels releases carbon dioxide fixed by plants many millions of years ago, and this has increased its concentration in the atmosphere by some 12% over the past century. It contributes about 60 per cent of the potential global warming effect of manmade emissions of greenhouse gases.
Cast In Situ	The process of pouring liquid material into a mould or form work.
Combined Heat and Power	A low carbon technology which generates electricity whilst also capturing usable heat that is produced in the process.
Completed Development	A development scheme which has been build out.
Conservation Area	An area designated by the Local Authority as being of special architectural or historic interest under the provisions of the Planning (Listed Buildings and Conservation Areas 1990) Act, the character or appearance of which it is desirable to preserve or enhance.
Considerate Constructors Scheme	A non-profit-making, independent organisation founded in 1997 by the construction industry to improve its image.
Construction Environmental Management Plan	A documented management system with environmental procedures to monitor residual impacts of the construction phase of a development.
Construction Logistics Plan	A documented travel plan specific for a construction site.
Cumulative Schemes	Developments that have received planning permission and have a signed legal agreement in place. They are assumed to be in place by the time the Development being assessed is completed.
Decibel	A scale for comparing the ratios of two quantities, including sound pressure and sound power. The difference in level between two sounds s1 and s2 is given by 20 log10 (s1 / s2). The decibel can also be used to measure absolute quantities by specifying a reference value that fixes one point on the scale. For sound pressure, the reference value is 20μPa.
Defra Air Information Resource	Webpages providing in-depth information on air quality and air pollution in the UK.
Point 2	Daylight, Sunlight, Overshadowing and Solar Glare
Demarcation	The action of fixing the boundary or limits of something.
Design Brief	A written document for a design project developed by a person or team in consultation with the 'client'.
Design Freeze	A method used during design development stage to mitigate the risks associated with change. This organizes and complies the design process, control changes, and force the completion of design stages on time.
Desk-Top Study	A non-intrusive study and review of all available information pertaining to a site, including historical records, collated and monitored data, and consultation with relevant stakeholders.
Directive	European Union (EU) Directives impose legal obligations on European Member States. They are binding as to the results to be achieved but, allow individual states the right to decide the form and methods used to achieve the results. An example of this is the EU Air Quality Framework Directive (1996) that is brought into legal effect in the UK by the Air Quality (England) Regulations (2000).
Displacement	An estimate of economic factors that may have reasonably been attained by other competitors in the absence of the development.
Dust Soiling	The accumulation of particulates that can give rise to human health effects.

Glossary of Terms and Abbreviations

EIA Scoping	An initial stage in determining the nature and potential scale of the environmental impacts arising from a proposed development and assessing what further studies are required to establish their significance.
EIA Scoping Opinion	A written statement of the opinion of the relevant planning authority as to the information to be provided in the Environmental Statement which specifically requires a local planning authority to respond or consult with consultees within a statutory period.
EIA Screening	An initial stage in which the need for EIA is considered in respect of a development. Some developments are automatically subject to EIA by means of their inevitable size, nature and effects (Schedule 1 developments). Other projects are made subject to EIA because it is anticipated that they are likely to have significant environmental effects (Schedule 2 developments).
Emission	A material that is expelled or released to the environment. Usually applied to gaseous or odorous discharges to the atmosphere.
Environmental Impact Assessment	A process by which information about the environmental effects of a development is collected and taken into account by the relevant decision-making body before a decision is given on whether the development should go ahead.
Environmental Statement	A statement that includes such information that is reasonably required to assess the environmental effects of a development.
Exceedance	A period of time where the concentrations of a pollutant is greater than, or equal to, the appropriate air quality standard.
Façade	The front or face of a building.
Fit-out	Installation of all non-substructure and non-superstructure items such as electrical water services, as well as final internal finishings.
Floodplain	Land adjacent to a watercourse over which water flows, or would flow but for defences in place, in times of flood.
Flood Resistance and Resilience	Measures put in place to protect a property against flooding.
Fugitive emissions	Emissions arising from the passage of vehicles that do not arise from the exhaust system.
Geotechnical	Ground investigation, typically in the form of boreholes and/or trial/test pits, carried out for engineering purposes to determine the nature of the subsurface deposits.
Glare	The uncomfortable brightness of a light source or illuminated area when viewed against a dark background.
Grade I Listed Building	A listed building that is of exceptional interest.
Grade II Listed Building	A listed building that is of special interest.
Grade II* Listed Building	A listed building that is of particular importance and of more than special interest.
Greater London Authority's Population Yield Calculator	A tool for estimating population yield from new housing development.
Gross External Area	A measure of floor space calculated in accordance with the Royal Institution of Chartered Surveyors (RICS) Code of Measuring Practice.
Gross Internal Area	A measure of the area of a building measured to the internal face of the perimeter walls at each floor level.
Hardstanding	Ground surfaced with a hard material for parking vehicles on.
Heritage Asset	A building, area or scene which makes a positive contribution of special architectural, historic or environmental interest.
Hoarding	A temporary board fence set up on the perimeter of a building site.
Hydrogeology	The study of geological factors relating to the Earth's water.
Indices of Multiple Deprivation	A UK government qualitative study of deprived areas in English local councils.
In-situ	In the natural, original or appropriate position.
Intrusive Investigation	An in-depth investigation involving further sampling and analysis, such as the gathering of samples from the ground, walls, ceilings for the detection of contamination, asbestos and or archaeological remains.
$L_{AFeq,T}$	The A-weighted noise level index called the equivalent continuous noise level over the time period T. This is the level of a notional steady sound that would contain the same amount of sound energy as the actual, possibly fluctuating, sound that was recorded.
$L_{AFmax,T}$	The A-weighted noise level index defined as the maximum noise level during the period T. L_{max} is sometimes used for the assessment of occasional loud noises, which may have little effect on the overall Leq noise level but will still affect the noise environment. Unless described otherwise, it is measured using the 'fast' sound level meter response.
L_{A90}	The noise level exceeded for 90% of the measurement period A-weighted and calculated by Statistical Analysis.
Lawson Comfort Criteria	The so called 'Lawson' criteria which define whether a space is comfortable for business walking, strolling or sitting by a threshold wind speed i.e. the hourly mean wind speed exceeded 5% of the time.
Lawson Safety Criteria	Criteria for the safety of an individual in relation to the wind environment. There are two categories: S1: unsafe for typical use (threshold speed 20m/s) and S2: unsafe for sensitive use (threshold speed 15m/s).
Light Trespass	The spilling of light beyond the boundary of the area to be lit.
Listed Building	A building or structure of special architectural or historic interest which is included in a list made by the Secretary of State.
Local Plan	A series of documents which sets out the vision and framework for development in the borough.
London Plan	The adopted Spatial Development Strategy for London that sets out a vision for London and identifies the means by which this vision might be achieved. Issued in 2016.
Made Ground	Soils or other material which has been deposited by man rather than natural processes, for example to make up ground levels.
Magnitude of Impact	The degree and extent to which the project changes the environment.
Massing	Massing refers to the structure in three dimensions, usually outlining the height and size of a building.
Mechanical Ventilation Heat Recovery	An energy recovery ventilation system using equipment known as a heat recovery ventilator, heat exchanger, air exchanger, or air-to-air heat exchanger which employs a cross flow or counter-flow heat exchanger (counter current heat exchange) between the inbound and outbound air flow. The system provides fresh air and improved climate control, while also saving energy by reducing heating (and cooling) requirements.
Microclimate	The climate of a very small or restricted area, particularly when this is different from the climate of the surrounding area.
Mitigation	Any process, activity of thing designed to avoid, reduce or remedy adverse environmental impacts likely to be caused by a development project.

Glossary of Terms and Abbreviations

Mitigation Measure	Measure aiming at reducing an adverse environmental effect.
National Planning Policy Framework	Came into force on 27 March 2012 and was most recently updated in September 2023. It sets out the Government's economic, environmental and social planning policies for England and summarises, in a single document, all previous national planning policy advice (Planning Policy Statements and Planning Policy Guidance notes).
Nitrogen Dioxide	Road transport and the burning of fossil fuels for power are the main sources of Nitrogen dioxide. In addition to being a greenhouse gas it also contributes to photochemical smog formation. It is an irritant to the respiratory system.
Non-Technical Summary	A summary of the Environmental Statement in 'non-technical language'.
No-sky Line	A measure of the distribution of diffuse daylight within a room.
Obtrusive Light	Any light emitted from artificial sources into spaces where this light would be unwanted.
Open Space	Includes all open spaces, plus other spaces that provide a break from the densely built-up urban form, such as pedestrianised areas and station concourses; hard-landscaped areas with private access; pedestrian/cycle and wildlife routes; and all the green infrastructure that links open spaces together, including green corridors, private residential gardens, trees, green roofs, and green landscaped areas.
Ordnance Datum	Land levels are measured relative to the average sea level at Newlyn, Cornwall. This average level is referred to as 'Ordnance Datum'.
Oversailing	Something (part of a project) being above or beyond something else (a lower part).
Overshadowing	Overshadowing occurs when a structure blocks out sunlight from neighbouring properties mainly on the northern side of that structure. It can affect the amount of daylight let into neighbouring properties when the shadow cast falls across windows or glazed doors, or on amenity spaces.
Particulate Matter	Discrete particles in ambient air, sizes ranging between nanometres (nm, billionths of a metre) to tens of micrometres (µm, millionths of a metre).
Party Wall	A wall common to two adjoining buildings or rooms.
Party Wall Act (1996)	A framework for preventing or resolving disputes in relation to party walls, part structures, boundary walls and excavations near neighbouring buildings.
Pathways	The routes by which impacts are transmitted through air, water, soils or plants and organisms to their receptors.
Pedestrian Level Wind Speed	Mean or gust wind speed measured at 1.5 m above ground level.
Pedestrian Environment Review System (PERS)	Pedestrian Environment Review System (PERS) is a walking audit tool developed by TfL for assessing the level of service and quality provided for pedestrians to across a range of pedestrian environments.
Percentile	The percentage of results below a given value.
Photomontage	The use of photographs of a site from a certain viewpoint to show both the current base (pre-development) state of the site and the anticipated view of the site once development is complete.
Pile	A timber, steel or concrete post which is driven, jacked or cast (bored) into the ground to carry vertical or horizontal loads.
Pile Cap	A thick, concrete mat that rests on concrete or timber piles that have been driven into the ground.
Plant	A building's generator, heating, ventilation, and/or electricity-production system.
Planning Application Red Line Boundary	Border that incorporates all land necessary to carry out the proposed development.
Planning Inspectorate	An executive agency of the Department for Communities and Local Government with responsibility of determining final outcomes of town planning and enforcement appeals and public examination of local development plans.
Planning Practice Guidance	A web-based resource that came into force in 2014 and is updated at regular intervals. It seeks to consolidate existing technical guidance into a consolidated online format and provides further detail on the policies contained within the NPPF.
Planning Statement	Sets out the policy background to the proposal, describes the site and its surroundings, identifies constraints and explores the planning policy framework.
Porous	A rock or material having minute holes through which liquid or air can pass.
Proposed Development	An area of land that has had a potential scheme put forward to be built on.
Public Transport Accessibility Level Assessment	A means of quantifying and comparing accessibility by public transport for a given site.
Public Realm	The space between and within buildings that are publicly accessible, including streets, squares, forecourts, parks and open spaces.
Ratification (Monitoring)	Involves a critical review of all information relating to a data set, in order to amend or reject the data. When the data have been ratified they represent the final data to be used (see also validation).
Receptor (Sensitive)	A component of the natural, created, or built environment such as human being, water, air, a building, or a plant that is affected by an impact.
Residual Effects	Those effects of a development following implementation of any relevant mitigation proposals.
Risk Assessment	An assessment of the likelihood and severity of an occurrence.
Safeguarding	Protecting from harm or damage with an appropriate measure.
Screening (townscape)	A natural or man-made feature which separates land uses.
Secure by Design standards	Initiative combining the principles of 'designing out crime' with physical security.
Sensitive Area	According to EIA Regulations is any of the following: land notified under section 28(1) (Sites of Special Scientific Interest) of the Wildlife and Countryside Act 1981 (23); a National Park; the Broads; a property on the World Heritage List; a scheduled monument; AONB or a European site.
Setting	The context in which a building or area can be appreciated.
Severance	The perceived divisions that can occur within a community when it becomes separated by a traffic route.
Site of Importance for Nature Conservation	A non-statutory site identified as being areas of importance for wildlife and geology.
Site Suitability Assessment	A comprehensive analysis of both the on-site subsoil characteristics and the local hydrogeological features of the site to determine the most feasible means of treating effluent on-site whilst ensuring full compliance with wastewater treatment requirements.
Socio-Economics	The social science that studies how economic activity affects and is shaped by social processes.
Solar Glare	A continuous source of excessive brightness from the sun.
Sound Power Level	The total sound power emitted by a source in all directions in watts (joules per second).

Specific Noise Level	The equivalent continuous A-weighted sound pressure level at the assessment position produced by the specific noise source (the noise source under investigation) over a given time interval (LAeq,T)
Statement of Community Involvement	Required by local authorities to explain to the public, their involvement in the preparation of local planning documents. The Statement of Community Involvement for this project was prepared by the London Communications Agency (LCA) and British Land Property Management Limited.
Statutory Consultees	Groups or bodies that, by law, must be consulted as part of the planning application process for EIA development.
Strata	Layer of rock or soil.
Substructure	Elements of a development below ground level, typically basements and foundations.
Superstructure	Elements of a development above ground principally the mega frame, supporting northern core and outer shell cladding.
Supplementary Planning Document	Documents which seek to give guidance and support on the Council's planning processes and are one of the material considerations in determining planning applications.
Surface Water Drainage Strategy	A report into how surface water, usually caused by rain, affects a site and the surrounding area.
The Applicant	The persons or entities making the planning application.
The London Clay Formation	A marine geological formation of Ypresian age which crops out in the southeast of England.
The Site	The extent of the development site, as defined by the red-line boundary plan.
Time slicing	A technique to implement multitasking in operating systems.
Topography	The natural and man-made features of an area collectively.
Townscape	The visual appearance of a town or urban area.
Transport Assessment	Prepared and submitted alongside planning applications for developments likely to have significant transport implications.
Travel Plan	A document which puts measures in place that will encourage sustainable travel and reduce reliance on single occupancy cars.
Uncertainty	A measure, associated with the result of a measurement, which characterizes the range of values within which the true value is expected to lie. Uncertainty is usually expressed as the range within which the true value is expected to lie with a 95% probability, where standard statistical and other procedures have been used to evaluate this figure. Uncertainty is more clearly defined than the closely related parameter 'accuracy', and has replaced it on recent European legislation.
Unexploded ordnance	Explosive weapons that did not explode when they were employed and still pose a risk of detonation, sometimes many decades after they were used or discarded.
Urban Grain	The combined pattern of blocks and streets, taking into account the character of street blocks and building height and size and how they work together to enable movement and access.
Urban Heat Island Effect	An urban area or metropolitan area that is significantly warmer than its surrounding rural areas due to human activities.
Validation (modelling)	Refers to the general comparison of modelled results against monitoring data carried out by model developers.
Validation (monitoring)	Screening monitoring data by visual examination to check for spurious and unusual measurements (see also ratification).
Verification (modelling)	Comparison of modelled results versus any local monitoring data at relevant locations.
Verified Image	An outline image of a development on a base photograph to provide projections of key views.
Vertical Sky Component	A 'spot' measure of the skylight reaching the mid-point of a window from an overcast sky. It represents the amount of visible sky that can be seen from that reference point, from over and around an obstruction in front of the window.
Ward	An administrative division of a city or borough that typically elects and is represented by a councillor or councillors.
Waste Arisings	Materials forming the secondary or waste products of industrial operations.
Watching Brief (archaeological)	An archaeological watching brief is 'a formal programme of observation and investigation conducted during any operation carried out for non–archaeological reasons.'
Wind Tunnel Testing	Assessment used in aerodynamic research to study the effects of air moving past solid objects.
Wireline	A single line representing the outline of the building.

ABBREVIATIONS

μgm^{-3} Micrograms per cubic metre	A measure of concentration in terms of mass per unit volume. A concentration of $1\mu g/m^3$ means that one cubic metre of air contains one microgram (millionth of a gram) of pollutant.
µm	Micrometres
AADT	Annual Average Daily Total
AAWT	Annual Average Weekly Total
ADMS	Atmospheric Dispersion Modelling System
AHU	Air Handling Unit
AI	Access Index
AI	Artificial Intelligence
APA	Archaeological Priority Area
APSH	Annual Probable Sunlight Hours
AQ	Air Quality
AQAL	Air Quality Assessment Level
AQAP	Air Quality Action Plan
AQC	Air Quality Consultants
AQG	Air Quality Guidance
AQN	Air Quality Neutral Assessment
AQMA	Air Quality Management Area
AQO	Air Quality Objectives
ASHP	Air Source Heat Pumps
ASR	Annual Status Report
ATC	Automatic Traffic Counters
ATMs	Air Traffic Management systems
ATZ	Active Tarvel Zone
AURN	Automatic Urban and Rural Network
AVRs	Accurate Visual Representations
B	Beaufort
BAP	Biodiversity Action Plan
BEB	Building Emissions Benchmark
BEIS	Business, Energy, and Industrial Strategy
BLG	Below Ground Level
BNG	Biodiversity Net Gain
BOH	Back of House
BPM	Best Practicable Means
BRE	Building Research Establishment
BREEAM	British Research Establishment Environmental Assessment Method
BS	British Standard
BSI	British Standard Institute
BST	British Summer Time
CA	Conservation Area
CAAP	Clean Air Action Plan
CC	Congestion Charge
CCC	Climate Change Committe
CERS	Cycle Environment Review System
CFA	Continuous Flight Auger: A piling method.
CFD	Computational Fluid Dynamics
CHP	Combined Heating and Power
CIL	Community Infrastructure Levy
CLOCS	Construction Logistics and Cycle Safety
CLP	Construction Logistics Plan
CMP	Construction Management Plan
CMS	Construction Method Statement
CO	Carbon monoxide
CO_2	Carbon dioxide
CoCP	Code of Construction Practice
CoP	Code of Practice
CoPA	Control of Pollution Act
COSHH	Control of Substances Hazardous to Health
CoW	City of Westminster
CPDMP	Car Parking Design and Management Plan
CPG	Camden Planning Guidance
CRTN	Calculation of Road Traffic Noise
CS	Cycle Superhighway
DAS	Design and Access Statement
dB	Decibel
DBA	Desk Based Assessment
DECC	Department for Energy and Climate Change
DEFRA	Department of Environment, Food and Rural Affairs
DfE	Department for Education
DfT	Department for Transport
DHW	Domestic Hot Water
DLUHC	Department for Levelling Up, Housing and Communities
DMP	Dust Management Plan
DMR	Dry Mixed Recyclable Waste
DMRB	Design Manual for Roads and Bridges
DMS	Deconstruction Method Statement
DRA	Dust Risk Assessment
DRP	Design Review Panel

DSOSG	Daylight, Sunlight, Overshadowing and Solar Glare
DSP	Delivery Servicing Plan
EA	Environment Agency
EAL	Environmental Assessment Level
EAP	Euston Area Plan
EC	European Commission
EFT	Emission Factor Toolkits
EHO	Environmental Health Officer
EHV	Extra High Voltage Lines
EIA	Environmental Impact Assessment
EMR	East Midlands Railway
EPA	Environmental Protection Act
EPUK	Environmental Protection UK
ES	Environmental Statement
Fv	Vertical Illuminance In Lux
FORS	Fleet Operator Recognition Scheme
FRA	Flood Risk Assessment
FTE	Full Time Equivalent
FW Drainage	Foul Water Drainage
GBN	Ground-borne Noise
GDP	Gross Domestic Product
GEA	Gross External Area
Geoarch	Geoarchaeological Deposit Model
GHG	Greenhouse Gas
GIA	Gross Internal Area
GLA	Greater London Authority
GLAAS	Greater London Archaeology Advisory Service
GLHER	Greater London Historic Environment Record
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GMT	Greenwich Mean Time
GRC	Glass Reinforced Concrete
GWP	Global Warming Potential
Ha	Hectare
HCA	Homes and Communities Agency
HDV	Heavy-Duty Vehicle
HE	Historic England
HFCs	Hydrofluorocarbons
HGV	Heavy Goods Vehicle
HMRC	His Majesty’s Revenue and Customs
HMSO	His Majesty’s Stationery Office
HS2	High Speed 2
HSE	Health and Safety Executive
HU	Habitat Units
HUDU	Healthy Urban Development Unit
IAQM	Institute of Air Quality Management
ICE	The Inventory of Carbon and Energy
IDP	Infrastructure Delivery Plan
IEMA	Institute of Environmental Management and Assessment
IFC	International Finance Corporation
ILP	Institution of Lighting Professionals
IOA	Institute of Acoustics
IoD	Indices of Deprivation
IWEC	International Weather for Energy Calculation
JAQU	Joint Air Quality Unit
Kg	Kilograms
km	Kilometres
KSI	Killed or Seriously Injured
kWh	Kilowatt hour
l/s	Litres per second
LAEI	London Atmospheric Emission Inventory
LAQM	Local Air Quality Management
LAQM.TG	Local Air Quality Management Technical Guidance
LBC	London Borough of Camden
LCC	London Congestion Charge
LDDC	London Docklands Development Corporation
LDV	Light Duty Vehicles
LEGGI	London Energy and Greenhouse Gas Inventory
LEZ	Low Emission Zone
LGV	Light Goods Vehicle
LLFA	Lead Local Flood Authority
LLSOAs	Lower Layer Super Output Areas
LMA	London Metropolitan Archive
LNER	London North Eastern Railway
LOAEL	Lowest Observed Adverse Effect Level
LPA	Local Planning Authority
LTHW	Low Temperature Hot Water
LUL	London Underground Limited
LVMF	London View Management Framework
LWA	The mean A-weighted sound power level
m	Metre

Glossary of Terms and Abbreviations

m^2	Square metre
m^3	Cubic metre
mAOD	Metres Above Ordnance Datum
MEP	Mechanical, Electrical and Plumbing
MHCLG	Ministry of Housing, Communities and Local Government
mm/s	Millimetres per second
m/s	Meters per Second
MTS	Mayor's Transport Strategy
MVHR	Mechanical Ventilation and Heat Recovery
NAEI	National Atmospheric Emission Inventory
NAQO	National Air Quality Objectives
N/A	Not Applicable
NGET	National Grid Electrical Transmission
NHS	National Health Service
NIA	Net Internal Area
NIP	National Infrastructure Planning
NMR	National Monuments Record
NMVOCs	Non-methane Volatile Organic Compounds
NNR	National Nature Reserve
NO	Nitrogen monoxide, a.k.a. nitric oxide
NO_2	Nitrogen Dioxide
NOx	Nitrogen Oxides
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
NPSE	Noise Policy Statement for England
NRMM	Non-Road Mobile Machinery
NSL	No-Sky Line
NTS	Non-Technical Summary
NVZ	Nitrate Vulnerability Zone
O_3	Ozone
OC	Organic Carbon
OD	Ordnance Datum
ONS	Office of National Statistics
OS	Ordnance Survey
OWMP	Operational Waste Management Plan
PAN	Public Admission Numbers
PCL	Pedestrian Comfort Level
PEA	Preliminary Ecological Appraisal
PERS	Pedestrian Environment Review System
PFCs	Perfluorocarbons
PFRA	Preliminary Flood Risk Assessment
PIC	Personal Injury Collision
$PM^{2.5}/PM^{10}$	Particulate Material of a particular size fraction
ppb parts per billion	The concentration of a pollutant in the air in terms of volume ratio. A concentration of 1 ppb means that for every billion (10^9) units of air, there is one unit of pollutant present.
PPE	Personal Protective Equipment
PPG	Planning Practice Guidance
PPG	Pollution Prevention Guidelines
ppm parts per million	The concentration of a pollutant in the air in terms of volume ratio. A concentration of 1 ppm means that for every billion (10^6) units of air, there is one unit of pollutant present.
PPV	Peak Particle Velocity
PRA	Preliminary Risk Assessment
ProPG	Professional Practice Guidance on Planning & Noise
PRoW	Public Right of Way
PV	Photovoltaic
PTAL	Public Transport Accessibility Level
RANS	Reynolds Averaged Navier-Stokes
RFRA	Regional Flood Risk Assessment
RHS	Royal Horticulture Society
RICS	Royal Institution of Chartered Surveyors
RMP	Resource Management Plan
SAC	Special Area of Conservation
SCI	Statement of Community Involvement
SFRA	Strategic Flood Risk Assessment
SINC	Site of Importance for Nature Conservation
SOAEL	Significant Observed Adverse Effect Level
SoS	Secretary of State
SO_2	Sulphur Dioxide
SOC	Standard Occupational Classification
SPA	Special Protection Area
SPD	Supplementary Planning Documents
SPG	Supplementary Planning Guidance
SPZ	(Groundwater) Source Protection Zone
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Urban Drainage Systems
SW Drainage	Surface Water Drainage
SWMP	Site Waste Management Plan
TA	Transport Assessment
TEB	Transport Emissions Benchmark
TfL	Transport for London

TLR	Transport Research Labratory
TLRN	Transport for London Road Network
TOC	Take Off and Climb Surface
TP	Travel Plan
TPC	Travel Plan Coordinator
TTE	Total Transport Emissions
TVBHIA	Townscape, Visual and Build Heritage Impact Assessment
UCH	University College Hospital
UK	United Kingdom
UGF	Urban Greening Factor
UKAS	United Kingdom Accreditation Service
UKCP	United Kingdom Climate Projections
ULEZ	Ultra Low Emission Zone
VDV	Vibration Dose Values
VOA	Valuation Office Agency
VOC/SVOCs	Volatile Organic Compounds
VSC	Vertical Sky Component
WEBCAT	Web-based Connectivity Assessment Toolkit
WHO	World Health Organization
WHS	World Heritage Site
WSHP	Water Source Heat Pump
WSI	Written Scheme of Investigation

Appendix: EIA Methodology
Annex 1: EIA Scoping Report
Annex 2: EIA Scoping Opinion
Annex 3: Cumulative Schemes List and Map

Appendix: EIA Methodology

Annex 1: EIA Scoping Report

Annex 2: EIA Scoping Opinion

Annex 3: Cumulative Schemes List and Map

Euston Tower

Request for an EIA Scoping Opinion

Prepared for:

British Land Property Management Limited

Date:

August 2023

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CONTENTS

INTRODUCTION

1 British Land Property Management Limited (hereinafter referred to as the 'Applicant') is seeking detailed planning permission for the redevelopment of a single parcel of land (approximately 0.88 hectares (ha) in size) located at 286 Euston Road within the London Borough of Camden (LBC) ('the site'). The site is bound by Brock Street to the north, Hampstead Road to the east, Euston Road (A501) to the south and Triton Square and commercial buildings of Regents Place to the west.

2 The site currently consists of a single, ground plus 36-storey building with a basement. The existing building is predominately vacant (although some of the retail units at ground level are still occupied), previously accommodating retail uses at ground floor with office uses above.

3 Figure 1 provides a site location plan and Figure 2 presents the draft planning application boundary. Further information on the current site conditions is provided in the *'Environmental Context'* section of this EIA Scoping Report.

4 The scheme proposals (hereafter referred to as the 'Proposed Development') comprise the demolition of a majority of the existing structure on-site, with retention and re-use of the central core elements, basement and foundations, and the construction of a new mixed-use development including office floorspace, laboratory enabled and flexible retail floorspace. Where possible, the Applicant intends to re-use/recycle the deconstructed elements. The Proposed Development is likely to consist of a ground plus 31-storey building, alterations to the current basement as well as improved public amenity and landscaping. The scheme proposals are still evolving in response to the development brief and pre-application consultation.

5 Given the proposals described, the Proposed Development does not fall within the classification of Schedule 2, 10(b) (Infrastructure Projects – Urban Development Projects) of the EIA Regulations. The site area does not exceed the 5ha threshold, nor does it provide over 1ha of development that is dwelling/house, nor does it provide over 150 residential units. The site is also not located within a 'sensitive area' as defined by the EIA Regulations.

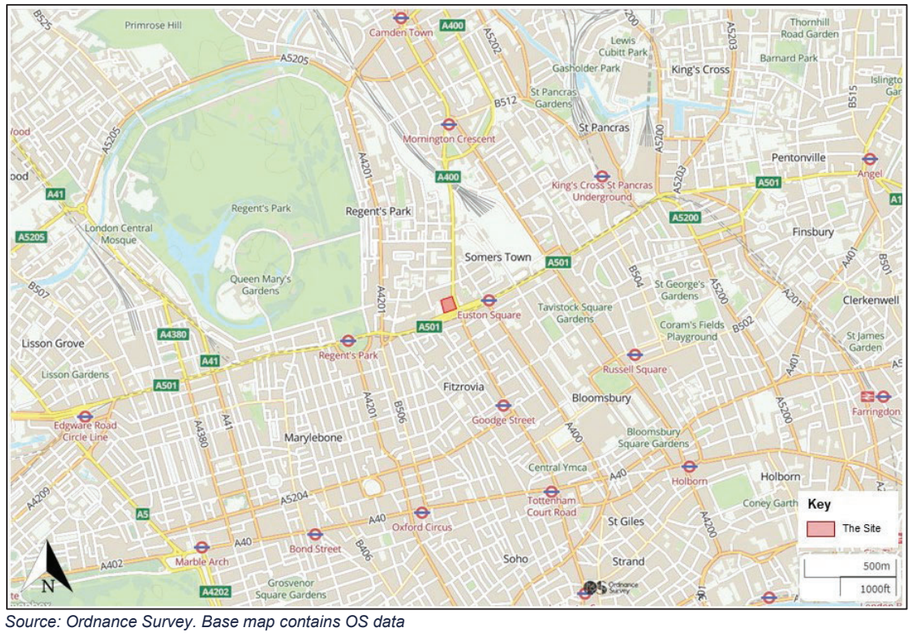
6 However, taking into account the scale of the development proposed and the nature of the site and surrounding area (dense urban environment with a potentially high concentration of sensitive receptors in the vicinity of the site), it is considered that there is the potential for significant environmental effects to arise. On this basis, the Applicant has decided to undertake an EIA for the Proposed Development and prepare an Environmental Statement (ES) to accompany the planning application. As the Proposed Development is not 'EIA development' under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017/571 (hereafter referred to as the 'EIA Regulations'), the EIA will be undertaken voluntarily and in accordance with the requirements of the EIA Regulations.

7 Trium Environmental Consulting LLP (Trium) has been appointed by the Applicant to undertake the EIA Scoping exercise. This EIA Scoping Report is submitted to the LBC to seek a formal EIA Scoping Opinion in accordance with Regulation 15 of the EIA Regulations. This process is carried out to agree the approach and scope of the EIA and will be reported in the ES, which is to be submitted in support of the future full (detailed) planning application.

8 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.* (Regulation 18(5))*'* 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:

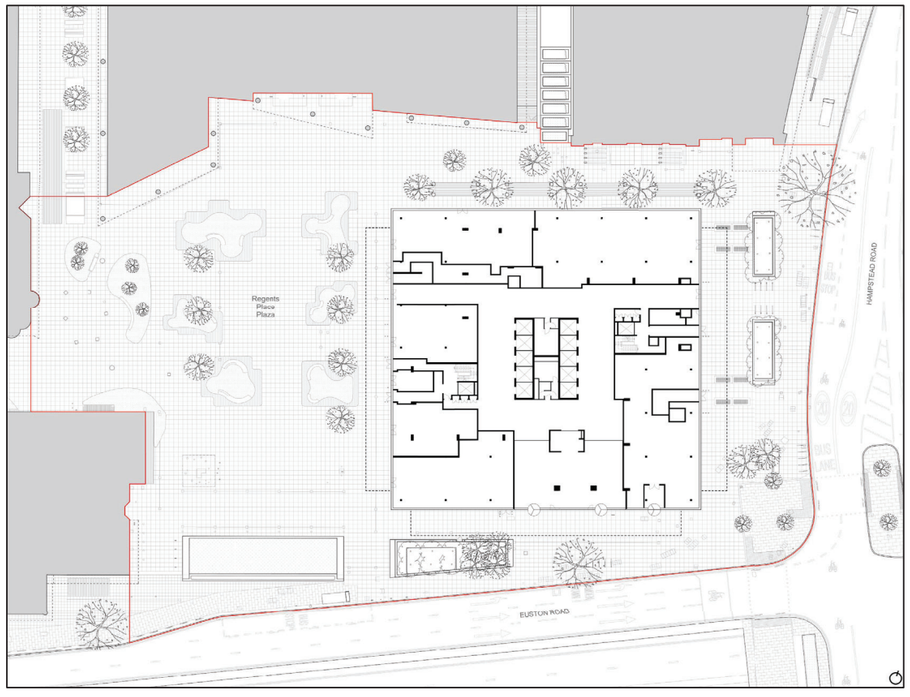
"Trium is an environmental consultancy specialising in urban regeneration and property development projects in the United Kingdom (UK), with a specific focus in London. Trium's Partners and Employees have extensive experience in managing the environmental issues and impacts surrounding large scale, high 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 500 EIAs within the commercial, retail, residential, leisure, cultural, infrastructure and industrial sectors. They have particular expertise in London based development projects."

Figure 1 Site Location Plan



Source: Ordnance Survey. Base map contains OS data

Figure 2 Indicative Redline Planning Application Boundary on the Existing Site Plan



PURPOSE OF THE REPORT

9 This EIA Scoping Report has been prepared to ensure that the subsequent EIA focuses on the impacts which are likely to give rise to significant effects and to agree with the London Borough of Camden (LBC) the EIA approach and scope.

10 The Scoping Report also identifies the technical topics not considered likely to result in impacts which would be considered significant and as such where no further assessment is required as part of the EIA. Notwithstanding this, various technical reports will accompany the planning application which consider these technical topics further.

11 In accordance with regulation 15 (1) of the EIA Regulations, Table 1 sets out the information that the EIA Regulations require a Scoping Report to include and where this can be located within this Scoping Report.

Table 1 Information Required to Accompany a Request for a Scoping Opinion

Information Required	Location within this Report
a plan sufficient to identify the land;	Figure 1, Figure 2
a brief description of the nature and purpose of the development, including its location and technical capacity;	See **THE PROPOSED DEVELOPMENT** (paragraphs 21-27)
an explanation of the likely significant effects of the development on the environment; and	See **PROPOSED EIA SCOPE – ENVIRONMENTAL TOPICS**, **ANNEX D** and **ANNEX E**.
such other information or representations as the person making the request may wish to provide or make.	See **STRUCTURE OF THE EIA SCOPING REPORT** (paragraphs 12-13)

STRUCTURE OF THE EIA SCOPING REPORT

12 This EIA Scoping Report is structured as follows and provides:

- A description of the location and existing uses of the site;
- A description of the environmental context of the site and surrounding area;
- A description of the Proposed Development;
- A summary of the environmental topics (factors) that are considered to potentially result in significant effects on the environment and those that are considered unlikely to result in significant effects on the environment; and
- The proposed structure of the ES.

13 This EIA Scoping Report is supported by the following Annexes:

- Annex A: Approach to EIA Scoping and EIA Methodology;
- Annex B: Planning Policy Context;
- Annex C: Cumulative Schemes;
- Annex D: “Scoped In” Topic Sheets

  Topic Sheets for the topics that are considered to potentially result in significant effects on the environment and which include 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.

  The following topic sheets are proposed to be ‘SCOPED IN’ to the ES:

  - Air Quality;
  - Climate Change and Greenhouse Gases;

  - Daylight, Sunlight, Overshadowing and Solar Glare;
  - Noise and Vibration;
  - Socio-economics;
  - Townscape, Visual and Built Heritage Assessment;
  - Traffic and Transport; and
  - Wind Microclimate.
- Annex E: 'SCOPED OUT' Topic Sheets

  Topic Sheets for the topics that are considered unlikely to result in significant effects on the environment with supporting evidence/justification.

  The following topic sheets are proposed to be 'SCOPED OUT' of the ES:

  - Archaeology;
  - Ecology and Biodiversity (including Arboriculture);
  - Geoenvironmental (Ground Conditions, Groundwater and Land Take and Soils);
  - Health (scoped out as a specific ES chapter, a Health Impact Assessment will be undertaken);
  - Light Spill;
  - Project Vulnerability, Major Accidents and Natural Hazards;
  - Waste and Materials; and
  - Water Resources, Drainage and Flood Risk.
- Annex F: Archaeological Desk Based Assessment; and
- Annex G: Preliminary Ecological Appraisal.

SITE LOCATION AND DESCRIPTION

14 The site (as shown in Figure 1 and Figure 2) comprises a broadly rectangular area of land and covers an area of approximately 0.88 ha. The site is located at grid reference TQ 29192 82354 and falls within the administrative boundary of the LBC. It is located approximately 400m to the east of Regent's Park and approximately 350m to the west of Euston Station.

15 The site is occupied by the current Euston Tower and Regent's Place. The ground floor of Euston Tower includes currently operational commercial properties including cafes and shops, with vacant office floorspace on the floors above. The existing basement within Euston Tower provides 102 car parking spaces and 200 cycle parking spaces. This basement is connected to the wider Regents Campus basement, which also provides a servicing yard used by Euston Tower. The open space within Regent's Place is predominantly paved with limited greening, and this paving extends around the perimeter of the existing building.

16 The site is bounded by:

- Residential and commercial properties to the north;
- Hampstead Road to the east;
- Euston Road (A501) to the south; and
- Regent's Place and commercial properties to the west.

17 Euston Tower is part of Regent's Place, which offers a pedestrian-friendly environment with largely pedestrianised streets, alleyways and plazas. Around the site there are wide footways, signalised pedestrian crossings with dropped kerbs and tactile paving.

18 There are eight loading bays currently provided on site, all accessed at street level along Drummond Street and located in the basement, with access up to Euston Tower achieved via platform lifts.

ENVIRONMENTAL CONTEXT

19 The area surrounding the site is comprised of a mixture of use classes, including (but not limited to) commercial uses, residential dwellings, retail and open spaces.

20 The site and surrounding environmental context is described in Table 2 and illustrated in Figure 3.

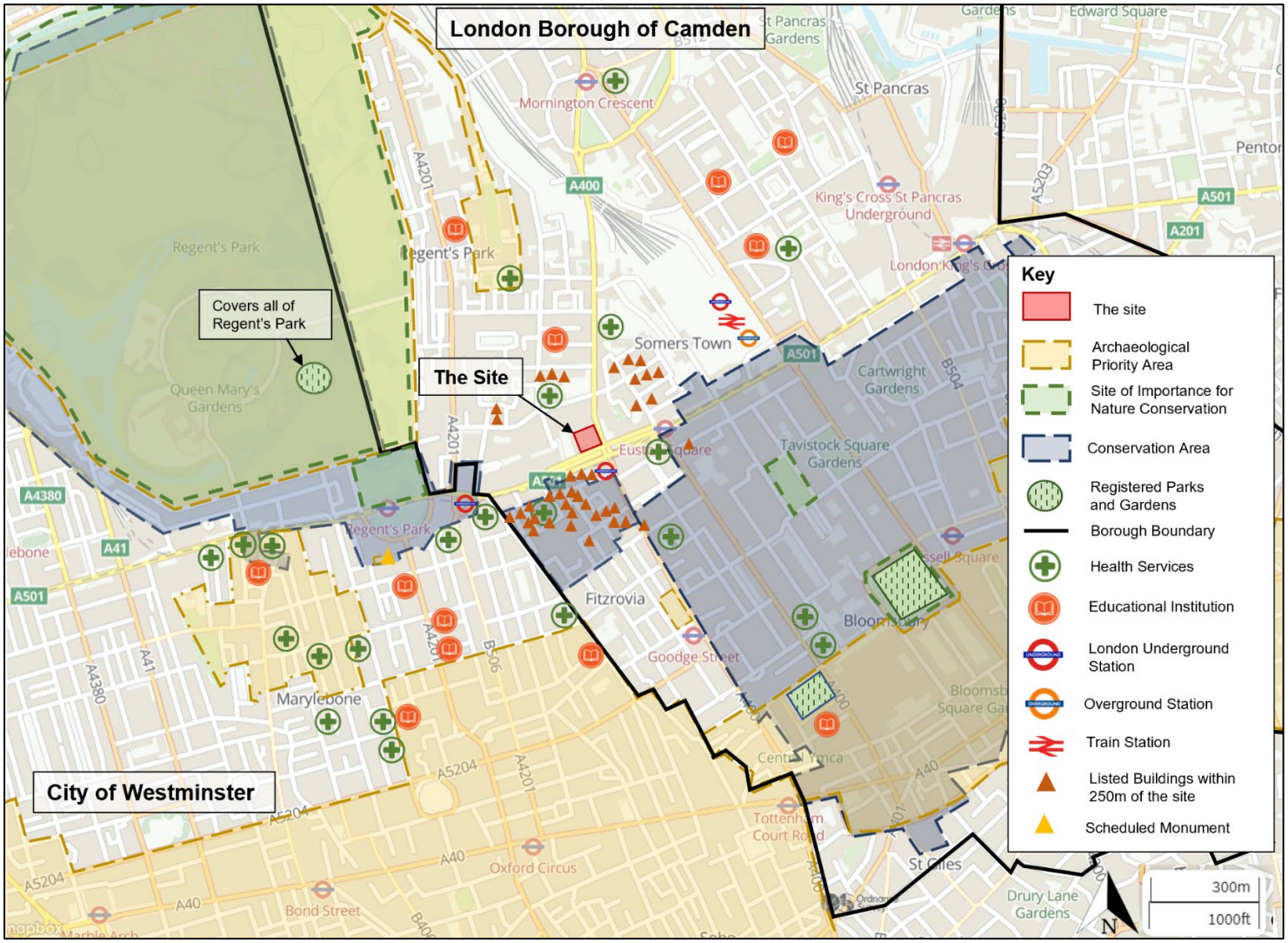
Table 2 Environmental Context

Environmental Topics	Key Features and Designations
Air Quality	• The site is located within the LBC's borough wide Air Quality Management Area (AQMA), which is designated for exceedances of the 24-hour mean objective value for particulate matter (PM_{10}) and the annual mean objective value nitrogen dioxide (NO_2)[1] as a result of transport emissions. The AQMA was declared in September 2002. • Sensitive receptors in close proximity to the site include University College Hospital approximately 100m south-east of the site, residential properties on Euston Road approximately 60m south of the site, residential properties on Hampstead Road approximately 60m east of the site and residential properties on Hampstead Road approximately 30m north of the site.
Archaeology (Buried Heritage)	• The site is not located within any Archaeological Priority Areas (APA).
Built Heritage	• The site is not located within a Conservation Area (CA) and there are no buildings on the site that are statutorily or locally listed. • The site is located approximately 75m to the north of the LBC Fitzroy Square CA, 200m to the northwest of the LBC Bloomsbury CA and 170m to the east of the LBC Regent's Park CA. • There are three Registered Parks and Gardens within a 1km radius of the site, including Regents Park approximately 480m west, Russell Square approximately 860m southeast, and Bedford Square Garden approximately 870m southeast of the site. • There are 132 listed buildings within a 500m radius of the site, 13 of which are Grade I listed buildings, 111 are Grade II listed buildings and 8 are Grade II* listed buildings. • The closest listed buildings to the site are Nos.48-52 Stanhope Street (Grade II) to the north of the site and Nos.15, 16, 17, 20, 21, 56, 58-62, 63-68 Warren Street (all Grade II) and Nos.159-161 Whitfield Street (Grade II), to the south, which are within 150m of the site boundary.
Daylight, Sunlight, Overshadowing, Solar Glare and Light Spill	• Daylight and sunlight receptors in proximity to the site include a number of residential buildings along William Road, Drummond Street, Hampstead Road, Warren Street and Euston Road. • Schafer House, University College, is a student accommodation receptor relevant to daylight and sunlight. • Regents Place and Tomer's Square are outside amenity areas in proximity to the site that are sensitive to overshadowing impacts. • Euston Road and Hampstead Road cross just to the southeast of the site. The road junctions in this area are considered sensitive to solar glare. • Some immediately surrounding residential receptors could be sensitive to light spill.
Ecology and Biodiversity	• The site is not subject to any ecological designation (statutory or non-statutory). • The site is not within a 1km radius of any of the following designated sites: Areas of Outstanding Natural Beauty (AONB), Biosphere Reserves, National Nature Reserves (NNR), Ramsar Sites, Site of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) or Special Protection Areas (SPA). • The nearest designation is a Metropolitan Site of Importance for Nature Conservation (SINC) at The Regent's Park approximately 450m west of the site which is connected to a Borough II SINC in park square immediately south of The Regent's Park, approximately 420m west.
Noise and Vibration	• Noise and vibration at the site is dominated by road traffic along Euston Road (A501) and Hampstead Road in addition to underground trains that run underneath the site. • There are multiple residential receptors in close proximity to the site that are already affected by noise and vibration.
Socio-Economics	• There are 11 GP surgeries within a 1km radius of the site, the closest (within 500m) being: GP at Hand – Drummond St (approximately 100m north-west); Fitzrovia Medical Centre (approximately 280m south-west); Special Allocation Scheme (approximately 280m north); and The Regents Park Practice (approximately 440m north-west).

[1] *Objective values set out in the Air Quality Standards Regulations (2010)*

Environmental Topics	Key Features and Designations
	• There are 12 hospitals within a 1km radius of the site, the closest (within 500m) being: University College Hospital (approximately 130m east); Mya St Lukes Hospital (approximately 170m south-west); Royal National Orthopaedic Hospital Trust (approximately 280m southwest); Hospital for Tropical Diseases (approximately 360m southeast); and Portland Hospital (approximately 380m southwest).
Townscape and Visual Impact Assessment	• The existing building on site is tall in the context of its surroundings, making it highly visible to surrounding viewpoints. • The existing building on site is visible within London View Management Framework ('LVMF') London Panoramas from Parliament Hill to Westminster, LVMF London Panorama from Primrose Hill to Westminster, and LVMF River Prospects from Lambeth Bridge.
Traffic and Transport	• The site has a Public Transport Accessibility Level (PTAL) rating of 6b (where 0 is the worst and 6b is the best) and therefore is considered to offer the best possible access to public transport. • Warren Street Underground Station, serviced by the Victoria and Northern lines, is located approximately 60m south of the site. Euston Square Underground Station, serviced by the Circle, Hammersmith & City and Metropolitan lines, is located approx. 240m east of the site. Great Portland Street Underground Station, serviced by the Circle, Hammersmith & City and Metropolitan lines, is located approximately 330m west of the site. • Euston Rail Station is located approximately 470m north-east of the site and is serviced by Avanti West Coast, West Midlands Trains, Caledonian Sleeper, and London Overground rail services. • Warren Street Station (Stop KA) bus stop is located immediately south of the site, serviced by Bus Routes 18, 30, 205 and N205. Warren Street Station (Stop V) bus stop is located approx. 50m south and is serviced by Bus Routes 18, 27, 30, 205, N27 and N205. Drummond Street (Stop S) bus stop is located approx. 20m north-east, serviced by Bus Routes 24, 29, N29 and N279. Warren Street Station Euston Road (Stop U) bus stop is located approx. 30m east, serviced by Bus Routes 24, 27, 29, 134, N27, N29 and N279. University College Hospital Warren Street Station (Stop W) is located approx. 120m east, serviced by Bus Routes 18, 30, 73, 205, 390, N5, N20, N73 and N205. • Euston Road, bordering the south of the site, and Hampstead Road, bordering the east of the site, have comprehensive footway provision along both sides of the carriageways. • A London Cycle Network route runs along Hampstead Road east of the site. Cycleway 27 (C27) is located approximately 280m south of the site running between North Acton and Lower Clapton.
Water Resources, Flood Risk and Hydrology	• The site is located in Flood Zone 1 and therefore is considered at very low risk from flooding. • The entire site is categorized as 'very low risk' from surface water flooding, meaning the area has less than a 0.1% chance of flooding each year. • The nearest water body is the Boating Lake in The Regent's Park approximately 880m west of the site. • There is a 'Superficial Drift Secondary A aquifer' running through the site. • The site is within an area classified as low groundwater vulnerability.
Ground Conditions and Land Contamination	• The underlying bedrock geology is the London Clay Formation comprising clay, silt, and sand. • The site is not located within any ground water Source Protection Zones (SPZ).
Wind Microclimate	• Winds for the London area are predominantly from the south-west, with a secondary peak from the north-east during spring. Winds are typically stronger in the winter season, and lighter throughout the summer.

Figure 3 Environmental Context



Source: Ordnance Survey. Base map contains OS data.

THE PROPOSED DEVELOPMENT

21 The design of the Proposed Development is evolving at the time of preparing this EIA Scoping Report; however, it is anticipated to comprise the partial demolition of the existing building on-site, with the building's central core, basement and foundations to be retained, and the construction of a commercial-led development designed to accommodate office, laboratory enabled floorspace, retail and flexible commercial space. In terms of building heights, the maximum height of the Proposed Development is approximately 126m Above Ordnance Datum (AOD). The Proposed Development will be served by all-electric energy means[2] and be constructed of low carbon materials wherever technically, practically and feasibly possible, to reduce its Whole Lifecycle Carbon (WLC) figure. The final designs and land use classes will be assessed in the EIA and the findings will be reported within the ES and each technical assessment. Currently, it is anticipated that the Proposed Development will comprise:

- Approximately 80,000m^2 (GIA) of total floorspace across all use classes;
- Approximately 63,500m^2 (GIA) of office and lab enabled (Use Class E) floorspace;
- Approximately 6,300m^2 (GIA) of Flexible Use Class E floorspace with retail at ground level, lower-level lobby, tenant and shared amenity space throughout the tower;
- Associated open space, public realm, and landscaping;
- Cycle parking;
- Alterations/modifications of the existing basement and new foundations including piling;
- Bin storage and other servicing;
- New and replacement plant; and
- All other associated engineering and ancillary works.

22 A key consideration in the evolution of the Proposed Development's design is to retain as much of the existing building as technically, practically, and feasibly possible to reduce waste and minimise new carbon emissions. A feasibility study has been undertaken to determine the suitability for reuse in the Proposed Development of the existing building's primary elements (structures, facade, services). Considering existing building retention, practicality (health & safety), future proofing (flexibility & adaptability), and viability, the preferred approach for the Proposed Development, preceding conclusion of third-party review, is to retain the core, basement, and foundation. This enables new floorplates designed to be flexible and adaptable, improving the longevity of the Proposed Development (in accordance with LPG Circular Economy Statements Chapter 2). The facade and services are beyond their useful life and require replacement, resulting in significantly improved energy performance compliant with current Building Regulations for ventilation and energy (ADF & ADL). As part of the feasibility study, a whole life carbon assessment of the options was undertaken. The Proposed Development's option has the lowest whole life carbon over the reference period (when considering total tonnage), and the second lowest when considering intensity (due to the different gross internal areas delivered by different options). The feasibility study has been discussed with the LBC and is currently undergoing third-party review on behalf of the LBC. Comments from the third-party reviewers will be incorporated, where appropriate, before the feasibility study is concluded, and this option forms the basis of ongoing design for the Proposed Development.

23 The basement of the existing building is to be retained and expanded as part of the Proposed Development. Cycle parking and associated facilities (lockers and showers), waste facilities, storage space, mechanical and electrical plant, deliveries and servicing bays are to be provided within the basement of the Proposed Development. The existing 102 car parking spaces in the basement will be removed, except for two blue-badge parking spaces to be retained. Electric vehicle charging points for blue badge spaces will also be provided.

[2] *With the potential for the inclusion of a backup generator*

24 The design of the Proposed Development, including the landscaping design, will incorporate ecological measures to enhance the biodiversity of the site. The Applicant is seeking to maximise the biodiversity value of the site in accordance with policy including Urban Greening Factor and Biodiversity Net Gain.

25 Main pedestrian access to the Proposed Development is currently proposed to be achieved via the southwestern corner of Euston Road and via the Regent's Place public realm. Cycle access is to be provided either in the form of a ramp accessed in the southwest corner of the building or via a set of steps and a lift located to the east of the building. Vehicular access would continue to utilise the vehicle ramps to the basement area located on Drummond Street and Longford Street, and delivery and servicing vehicles would continue to access the basement via Longford Street. For hazardous deliveries associated with the lab-enabled floorspace, access will be achieved at ground level adjacent to the building.

26 The demolition and construction programme is currently being developed, and at the time of writing is estimated to have a duration of approximately 5 years. The demolition and construction works would result in the demolition of the current building on-site, with the exception of the building core, basement and foundations, and the construction of a new building of the same height (although greater floor to floor heights).

SCOPE OF THE EIA

27 EIA Scoping refers to the process of identifying those environmental aspects that may be significantly affected by the Proposed Development. In doing so, the potential for significant effects associated with each environmental aspect becomes clearly defined, resulting in the identification of issues to be addressed in the EIA (i.e., these aspects are 'scoped in' to the ES).

28 Defining the scope of an EIA is an important part of the overall EIA process and is recommended by best practice. In accordance with Regulation 15 of the EIA Regulations and current EIA best practice, this EIA Scoping Report sets out the following information to assist the LBC:

- A plan sufficient to identify the land;
- Brief description of the nature, purpose, size and scale of the Proposed Development;
- The proposed approach to the EIA;
- Consultation that will be undertaken as part of the EIA;
- The key environmental issues identified in respect of the Proposed Development;
- A summary description of the likely significant environmental effects of the Proposed Development, together with the approach and methodology for assessing them; and
- The intended structure of the ES.

29 The EIA Scoping Report sets out information on the baseline and key issues for each technical topic, where topics are considered likely to result in significant environmental effects (i.e. 'scoped in'), the technical topics have provided their scope of assessment and cumulative assessment approach. This is provided in the section titled "**Annex D: Scoped In Topic Sheets** and **Annex E: Scoped Out Topic Sheets**".

30 Further detail on the EIA Methodology can be found within **Annex A: Approach to EIA Scoping and EIA Methodology**. This annex provides further detail on the EIA Scoping approach and EIA purpose, process, methodology and assessment approach.

Demolition and Construction Phasing

31 Whilst the demolition and construction phasing is still being developed, it is expected that all works will be completed prior to occupation of any aspect of the Proposed Development. It is therefore unlikely that there would be any introduced sensitive receptors requiring assessment. Should the phasing be altered to include early occupation during construction, this would be considered within the technical assessments where applicable.

Cumulative Assessment

32 An indicative list and map of cumulative schemes to be considered within the ES can be found within **Annex C** of this report. **Annex C** also provides details of the general screening thresholds used to determine those applications which may constitute a cumulative scheme.

Environmental Topics

33 The following table sets out the proposed scope of the EIA. Further detail on each topic is provided in the Annexes to this Scoping Report (**Annex D: Scoped In Topic Sheets** and **Annex E: Scoped Out Topic Sheets**). These topic sheets are supported by early technical assessments and baseline work where relevant. For scoped in topic sheets the proposed approach and methodology is set out in the relevant topic sheet. For scoped out topic sheets, justification for scoping out is provided.

Table 3 Environmental EIA Topics: EIA Scope

Topic	'Scoped Into' the EIA✓ 'Scoped Out' of the EIA✗		Additional Assessments to Accompany the Planning Application
	Demolition and Construction	Completed Development	
Topics expected to be Scoped In			
Air Quality	✓	✓	
Climate Change and Greenhouse Gases (Greenhouse Gas Emissions and Climate Change Resilience)	✓	✓	
Daylight, Sunlight, Overshadowing and Solar Glare (Receptors outside of the site boundary)	✓ (*qualitatively*)	✓	
Townscape, Visual and Built Heritage Assessment	✓	✓	
Noise and Vibration	✓	✓	
Socio-economics	✓	✓	
Traffic and Transport	✓	✓	Transport Assessment (TA) (standalone planning deliverable)
Wind Microclimate	✓ (*qualitatively*)	✓	
Topics expected to be Scoped Out			
Archaeology (Buried Heritage)	✗	✗	Archaeology Desk Based Assessment (draft appended to this EIA Scoping Report in **Annex F**) to be submitted as a standalone planning deliverable as part of the Planning Application.
Daylight, Sunlight and Overshadowing (Internal, new receptors within the Proposed Development)	✗	✗	Internal report as a separate planning deliverable
Ecology and Biodiversity	✗	✗	Preliminary Ecological Appraisal (draft appended to this EIA Scoping Report in **Annex G**) to be submitted as a standalone planning deliverable as part of the Planning Application.
Geo-environmental (Ground Conditions, Groundwater and Land Take and Soils)	✗	✗	Phase 1 Ground Conditions Report to be submitted as a standalone planning deliverable as part of the Planning Application.

Topic	'Scoped Into' the EIA✓ 'Scoped Out' of the EIA✗		Additional Assessments to Accompany the Planning Application
	Demolition and Construction	Completed Development	
Health	✗	✗	A Health Impact Assessment will be prepared and submitted as a standalone planning deliverable.
Light Spill	✗	✗	
Project Vulnerability, Major Accidents and Natural Hazards	✗	✗	
Waste and Materials	✗	✗	Outline Waste Management Strategy (standalone planning deliverable)
Water Resources, Flood Risk and Drainage	✗	✗	Flood Risk Assessment and Sustainable Drainage Strategy (standalone planning deliverables)

Format of the Planning Application

34 The planning application will be submitted in detail. This planning application will include the following information, which the technical assessments within the ES will be based on:

- Detailed Drawings;
- 3D Model;
- Floor Plans;
- Elevation Plans; and
- The Proposed Development's 'Use Class' area schedule.

35 In addition to the above, the technical assessments will consider demolition works and construction information including the likely construction methodologies and programme. Other planning application documents such as the Energy Strategy, Sustainability Strategy and Fire Strategy will be considered and used to inform the technical assessments where relevant.

36 The ES will present a description of the Proposed Development, in terms of the detailed design sought for approval. Sufficient information will be presented to enable the assessment of potential impacts and likely significant effects of the completed and occupied Proposed Development. Any assumptions made will be clearly presented in the narrative.

37 Further detail on the relevant planning policy guidance followed through this EIA Scoping Report as well as within the ES can be found within **Annex B: Planning Policy Context**.

Documents Submitted in Support of the Planning Application

38 A number of documents are being prepared to support to the Planning Application for the Proposed Development. Those that are related to the technical topics considered within this EIA Scoping Report, providing justification on the scope of the ES proposed, are listed below alongside their intended location:

- Archaeological Desk Based Assessment (**Annex F of this EIA Scoping Report**);
- Biodiversity Net Gain Report (**ES Volume 3, Technical Appendices**);
- Circular Economy Statement (**Standalone Planning Deliverable**);
- Flood Risk Assessment (**Standalone Planning Deliverable**);
- Health Impact Assessment (**Standalone Planning Deliverable**);
- Phase 1 Land Contamination Report (**Standalone Planning Deliverable**);

- Preliminary Ecological Appraisal (**Annex G of this EIA Scoping Report**);
- Outline Waste Management Strategy (**Standalone Planning Deliverable**);
- Sustainable Drainage Strategy (**Standalone Planning Deliverable**);
- Transport Assessment, including Travel Plan and Delivery and Servicing Plan (**Standalone Planning Deliverable**);
- Tree Survey (**Standalone Planning Deliverable**);
- Urban Greening Factor Calculations (**Contained within the Landscape Strategy/Design and Access Statement**);
- Utilities and Foul Sewage Assessment (**Standalone Planning Deliverable**); and
- Whole Life Carbon Assessment (**Standalone Planning Deliverable**).

PROPOSED STRUCTURE OF THE ENVIRONMENTAL STATEMENT

39 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;
  - Chapter 2. EIA Methodology;
  - Chapter 3. Alternatives and Design Evolution;
  - Chapter 4. The Proposed Development;
  - Chapter 5. Demolition and Construction;
  - Chapter 6. Socio-economics;
  - Chapter 7. Traffic and Transport;
  - Chapter 8. Air Quality;
  - Chapter 9. Noise and Vibration;
  - Chapter 10. Daylight, Sunlight, Overshadowing, and Solar Glare;
  - Chapter 11. Wind Microclimate;
  - Chapter 12. Climate Change and Greenhouse Gases;
  - Chapter 13. Effect Interactions;
  - Chapter 14. Likely Significant Effects and Conclusions;
  - Chapter 15. Environmental Management, Mitigation and Monitoring Schedule; and
  - Glossary and Abbreviations.
- **ES Volume 2: Townscape, Visual and Built Heritage Assessment** – a separate townscape, visual and built heritage assessment document that will be accompanied by a full set of views and verified images.
- **ES Volume 3: Technical Appendices** – comprises background data, technical reports, tables, figures and surveys.
- **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.

REQUEST FOR AN EIA SCOPING OPINION

40 This EIA Scoping Report forms a statutory request for an EIA Scoping Opinion from the LBC.

41 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 LBC and consultees are invited to consider the contents of this Report and comment accordingly within the five-week period prescribed by the EIA Regulations.

Annex A: EIA Scoping and Environmental Statement Methodology

ANNEX A: APPROACH TO EIA SCOPING AND EIA METHODOLOGY

APPROACH TO EIA SCOPING AND EIA METHODOLOGY

Use of Competent Experts

1 Trium Environmental Consulting LLP (Trium) has been commissioned by the Applicant to prepare a statutory request for an EIA Scoping Opinion for the redevelopment of the site in line with the requirements of the EIA Regulations and relevant EIA guidance (e.g. the Environmental Impact Assessment guidance as set out in the National Planning Policy Guidance[1]).

2 This includes submitting an EIA Scoping Opinion Request Report (hereafter referred as the 'EIA Scoping Report') to the local authority that sets out the proposed scope of the EIA and the content and approach to preparing the ES that will be submitted to support the planning application.

3 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 considers 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 projects in the UK. 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 500 EIAs within the commercial, retail, residential, leisure, cultural, infrastructure and industrial sectors. Trium's lead EIA practitioner for this project has 9 years of EIA experience, predominantly focussing on major, mixed-use developments in the UK."

4 Information on Trium's lead EIA practitioners (Project Director and Project Manager), as well as the technical contributors to the EIA, will be included within the Environmental Statement.

EIA Purpose and Process

5 EIA is a process carried out which examines available environmental information to ensure that the likely significant environmental effects of certain 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 then be designed to avoid or to minimise significant environmental effects, and appropriate mitigation and monitoring can be implemented.

6 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:*

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[1] *Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government, (2014); Environmental Impact Assessment (as amended 2020). Available at: https://www.gov.uk/guidance/environmental-impact-assessment*

(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).”

7 The potential for likely significant effects on the below topic areas, during both the demolition and construction works associated with the Proposed Development and once the Proposed Development is complete and operational, have been considered:

- Air Quality;
- Archaeology (Buried Heritage);
- Climate Change (Greenhouse Gases and Climate Change Resilience);
- Daylight, Sunlight, Overshadowing, Light Spill and Solar Glare;
- Ecology and Biodiversity;
- Ground Conditions and Land Contamination;
- Health;
- Noise and Vibration;
- Project Vulnerability (Major Accidents and Natural Disasters);
- Socio-Economics;
- Townscape, Visual and Built Heritage Assessment;
- Traffic and Transport;
- Waste and Materials;
- Water Resources, Flood Risk and Drainage; and
- Wind Microclimate.

The Scoping Process

8 EIA Scoping forms one of the first stages of the EIA process. Requesting an EIA Scoping Opinion from a local planning authority, under Regulation 15 of the EIA Regulations, involves the preparation of an EIA 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. A Scoping Opinion is sought under the EIA Regulations within the five-week response period.

9 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 topics of which could result in potential significant effects from the development both during its demolition and construction and operation.

10 In accordance with the requirements of the Town and Country Planning (Development Management Procedure) Order 2015 (article 18, Schedule 4), this EIA Scoping Report will need to be issued by the local planning authority 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 local planning authority will also issue the EIA 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.

11 The process of consultation is a key requirement of the EIA process, and the views of statutory consultees and other 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 assistance in progressing the EIA.

12 The EIA Scoping Report (this document) and EIA Scoping Opinion will be appended to the ES, which will include a summary of any other consultation undertaken as part of the EIA process.

EIA Methodology and Approach to Assessment of the Proposed Development

13 In addition to the EIA Regulations, there is also guidance available that has been referenced where appropriate in the Scoping Report, 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 Department for Levelling Up, Housing and Local Communities (DLUHC) overarching Planning Practice Guidance (PPG);
- In addition, the Department for Transport's ‘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 Institute of Environmental Management and Assessment (IEMA) publications as these include best practice/suggested improvements to the EIA process. This includes:
  - IEMA ES Review Criteria (COM3-6)[2];
  - IEMA ‘Guidelines for Environmental Impact Assessment’ (2004)[3];
  - IEMA ‘Special Report into the State Environmental Impact Assessment Practice in the UK’ (2011)[4];
  - IEMA ‘Shaping Quality Development’ (2015)[5];
  - IEMA ‘Delivering Quality Development’ (2016)[6];
  - IEMA ‘Delivering Proportionate EIA’ (2017)[7];
  - IEMA ‘Guide to Materials & Waste in EIA’ (2020)[8];
  - IEMA ‘Climate Change Resilience and Adaption’ (2020)[9];
  - IEMA ‘Assessing Greenhouse Gas Emissions and Evaluating their Significance’ (2022)[10];

[2] *Institute of Environmental Management and Assessment, undated; EIA Quality Mark – ES Review Criteria COM 3-6.*
[3] *Institute of Environmental Management and Assessment, 2004, Guidelines for Environmental Impact Assessment.*
[4] *Institute of Environmental Management and Assessment, 2011. The State of Environmental Impact Assessment Practice in the UK.*
[5] *Institute of Environmental Management and Assessment, November 2015. Shaping Quality Development.*
[6] *Institute of Environmental Management and Assessment, 2016; Delivering Quality Development.*
[7] *Institute of Environmental Management and Assessment, 2017; Delivering Proportionate EIA*
[8] *Institute of Environmental Management and Assessment, 2020; Guide to Materials and Waste in Environmental Impact Assessment*
[9] *Institute of Environmental Management and Assessment, 2020; Climate Change Resilience and Adaption’*
[10] *IEMA, 2022. Institute of Environmental Management and Assessment (IEMA) Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance, 2nd Edition*

- IEMA ‘A New Perspective on Land and Soil in Environmental Impact Assessment’ (2022)[11];
- IEMA ‘Environmental Assessment of Traffic and Movement’ (2023)[12];
- IEMA ‘Major Accidents and Disasters in EIA: A Primer’ (2020) [13];
- IEMA ‘Effective Scoping of Human Health in EIA’ (2022)[14]; and
- IEMA ‘Determining Significance for Human Health in EIA’ (2022)[15].

- Whilst primarily written for major infrastructure projects, reference is also made to guidance/advice notes published by the National Infrastructure Planning where appropriate; and
- Applicable case law.

14 The method behind the EIA process generally[16] 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 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.

Baseline Conditions

15 Baseline assessments will utilise any existing and available information, as well as new information either collected through baseline surveys undertaken during 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.

16 In accordance with industry best practice, some assessments (such as traffic and transport and air quality) when assessing the effects of the operation of the Proposed Development will include a projected environmental condition in the future (i.e. ‘future baseline’), at the projected year of opening of the Proposed Development (if relevant a different future year appropriate/specific for the technical assessment may be used). Where using a future baseline is more appropriate, this will be detailed in the relevant methodology of the technical assessment and be made clear in the ES.

17 In addition, as per the requirements of the 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 considered qualitatively, supplemented by quantitative information where relevant and will be used to support the assessment of cumulative development effects.

Sensitive Receptors

18 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.

19 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

[11] IEMA, 2022. Institute of Environmental Management and Assessment (IEMA) Guide to: A New Perspective on Land and Soil in Environmental Impact Assessment.
[12] IEMA, 2023 ‘Environmental Assessment of Traffic and Movement’
[13] IEMA, 2020, Major Accidents and Disasters Guidelines
[14] IEMA, 2022. Effective Scoping of Human Health in EIA.
[15] IEMA, 2022. Determining Significance for Human Health in EIA.
[16] 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.

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 Impact Assessments

20 The ES (within an informative ES chapter titled ‘Demolition and Construction’) will provide an outline of the anticipated demolition and construction phasing and programme and related activities and aspects (i.e. demolition works, substructure works, superstructure works etc., 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.

21 Whilst the demolition and construction phasing is still being developed, it is expected that all works will be completed prior to occupation of any aspect of the Proposed Development. It is therefore unlikely that there would be any introduced sensitive receptors requiring assessment. Should the phasing be altered to include early occupation during construction, this would be considered within the technical assessments where applicable.

22 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.

23 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. Defined baseline conditions will be considered and will, as appropriate/relevant, take into account any phased demolition and construction works (if relevant and appropriate) and subsequent use of the completed Proposed Development. 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.

24 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.

25 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).

26 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 (‘CEMP’) (or equivalent) and it is proposed that the requirement for this document be secured by means of suitably worded planning conditions to be attached to the permission (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.

Environmental Design Management Measures

27 Throughout the EIA (including this EIA Scoping Report and the ES), where applicable, the way that likely environmental effects have been or will be avoided, prevented, reduced or offset through design and/or management measures will be described. These are measures that are inherent in the design and construction of the Proposed Development (also known as ‘embedded measures’). Where known at this stage, some of these embedded measures have been identified at the EIA scoping stage and are described, where relevant, in the technical topic annexes.

28 Embedded measures relevant to the demolition and construction works will be summarised within **ES Volume 1, Chapter 15: Environmental Management, Mitigation and Monitoring Schedule**. These measures are to be included within a CEMP, the requirement for which is proposed to be secured via an appropriate planning condition.

29 For the operational phase, such embedded measures will be integral to Proposed Development. A number of technical studies (e.g. ecology) have been undertaken to inform the design and allow early identification of mitigation measures so that these can be incorporated into the Proposed Development.

Embedded measures are therefore either incorporated into the design from the outset or identified through the assessment process. Proposed environmental enhancements will also be described, where applicable. The scheme's development has been informed by a series of workshops which have involved a wide range of environmental specialists to ensure that constraints and opportunities have been properly identified, understood and, where required, measures incorporated into designs for the Proposed Development.

30 Embedded measures will be considered prior to the assessment of effects to avoid considering assessment scenarios that are unrealistic in practice, i.e. do not take account of such measures even though they are likely to be standard practice and/or form part of the proposed design. These will then be followed through the assessment to ensure that realistic likely environmental effects are identified. Where likely significant adverse effects are identified after considering these embedded measures, 'further mitigation measures' will be proposed.

31 All embedded mitigation and enhancement measures will be described within the Proposed Development chapter of the ES with the rationale for the inclusion of the identified embedded measures and the associated commitment to implementing such measures clearly stated. In addition, mitigation and enhancement measures and any monitoring requirements will be summarised within **ES Volume 1, Chapter 15: Environmental Management, Mitigation and Monitoring Schedule**.

Completed Development Impact Assessments

32 The Applicant intends to submit a detailed planning application and a detailed design (scale, layout, appearance, use, amount of development and landscaping) in respect of the Proposed Development shall be submitted for approval.

33 The ES will present a description of the Proposed Development and the detailed design sought for approval. Sufficient information will be presented to enable the assessment of potential impacts and likely significant effects of the completed and occupied development. Any assumptions made will be clearly presented in the narrative.

34 The ES will use the fixed design, land uses classes and floor areas of the Proposed Development as the basis of the assessments of the likely environmental and socio-economic effects within the ES. For assessing Use Class E, where confirmation on the end use within this use class cannot be provided, the EIA will assess the realistic worst-case end use within the Use Class E floorspace sought for approval, depending on the technical topic. However, there are likely to be components of this assessment where a different end use represents the worst-case scenario in terms of resulting likely significant effects, for example in terms of job generating floorspace for socio-economics. Where this is the case, the end use within the Use Class E that represents the realistic worst-case scenario for each technical topic will be used within the relevant ES chapters.

Cumulative Effects Assessment

35 The cumulative assessment will be based on the information available on the local authorities' planning register. Generally, the schemes (referred to as 'cumulative schemes') to be included within the cumulative effects assessment will be within 1km of the site and either have:

- Full planning consent; or
- A resolution to grant consent; or
- Applications that have been submitted but not yet determined; and
- An uplift of more than 10,000m^2 GEA of mixed-use floorspace or, provide over 150 residential units; or
- Office to residential conversions (granted under the General Permitted Development Order) giving rise to over 150 residential units; or
- An overall area exceeding 50,000m^2.

36 By applying an initial screening exercise (using the above criteria) to all the surrounding redevelopment schemes, the cumulative effects assessment of the EIA becomes more focused on the larger schemes (i.e. those with the most potential to interact in a cumulative manner).

37 A preliminary list of cumulative schemes for consideration within the EIA has been identified and is presented in **Annex C** of this EIA Scoping Report. As part of this EIA scoping process, the local authority (and other consultees, as relevant following the submission of the formal request in due course) is invited to comment on the proposed cumulative schemes, so that the list of cumulative schemes can be agreed.

38 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.

39 Other schemes that are under construction, where the construction works are significantly progressed (i.e. likely to be completed before the opening year of the Proposed Development/first occupation on site) or where early phases are occupied, will be factored into the baseline scenario for assessment.

Effect Interactions Assessment

40 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.

41 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. Based on the definitions of what negligible effects comprise for each of the technical assessments, these do not warrant further consideration in relation to cumulative effects and therefore will not been pulled through into the assessment of effect interactions. Only residual effects described as minor and above will therefore be considered in the assessment of effect interactions.

42 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, consideration will be given as to whether or not the combination of many not significant effects could result in a combined significant effect, based on professional opinion. Consideration of effect interactions will be presented within the ES in a separate chapter (i.e. **ES Volume 1, Chapter 13: Effect Interactions**).

Alternatives and Design Evolution

43 In addition, the EIA Regulations (Schedule 4) require 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*".

44 The ES will summarise the evolution of the Proposed Development, any relevant alternatives considered, and key modifications made during the design process. Environmental considerations which have influenced this process will be discussed, and a qualitative comparison will be undertaken of the different design options and their relevant environmental effects, as relevant. Matters that will be considered in terms of design evolution include land uses, layout, building heights and massing. The preferred design, culminating with the Proposed Development being sought for approval, will be discussed.

45 A specific chapter, **ES Volume 1, Chapter 3: Alternatives and Design Evolution**, will focus on the consideration of the main alternatives (as relevant) and the design evolution. The focus will be on main alternatives considered (as relevant), the evolution of the design, and how environmental considerations influenced the evolution of the scheme. The summary of the design evolution will also consider initial environmental analysis undertaken on the evolving scheme.

DETERMINING EFFECT SIGNIFICANCE – TERMINOLOGY AND APPROACH

Reference to 'Impact' and 'Effect'

46 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 potentially other factors (such as duration). The description 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

47 To achieve a consistent approach across the different technical disciplines addressed within the **ES** (**Volume 1** and **Volume 2**), 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. Terminology to describe the sensitivity of receptors and magnitude of impact or change from the baseline conditions is broadly as follows:

- High;
- Medium;
- Low;
- Negligible; and
- No Impact (in relation to magnitude of impact or change only).

48 Where there is no impact/change, no assessment will be required due to there being no potential for effects.

49 Each of the technical assessment chapters of the **ES** (**Volume 1** and **Volume 2**) 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

50 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 1.

Table 1 Resultant Effects

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

Effect Scale

51 The categories and definitions of the 'scale' of the resultant effect i.e. definitions of Major, Moderate, Minor and Negligible effects will be adjusted to suit the technical topic in question; 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**.

52 Where there is no impact to a receptor and therefore no effect, this will be stated.

Effect Nature

53 Table 2 provides definitions of the 'nature' of the resultant effect i.e. definitions of Adverse and Beneficial. Typically, the 'nature' of an effect is defined where the 'scale of the effect' is classified as Minor, Moderate or Major (i.e. the 'nature' is not defined for effects classified as negligible in scale).

Table 2 Definition of the Nature of the Resultant Effect

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.

Geographic Extent of Effect

54 The **ES** (**Volumes 1** and **Volume 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 the LBC beyond the vicinity of the site and its neighbours are considered to be at a 'district/ borough' level. Effects affecting adjoining boroughs 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

55 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 may be 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 Proposed Development will be classed as 'permanent' or 'long-term' effects.

Direct and Indirect Effects

56 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

57 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 'not significant', although they may be a matter of local concern; and
- 'Negligible' effects are 'not significant' and not a matter of local concern.

58 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.

59 The ES will then highlight the 'residual' likely significant effects (those effects which remain following the implementation of suitable mitigation measures) and will classify these in accordance with the terminology defined above.

PLANNING POLICY CONTEXT

Planning Policy in the ES

1 The ES, within **ES Volume 1, Chapter 2: EIA Methodology**, will define the relevant national, regional and local policy context. Specifically, the ES will list out the key relevant policy documents.

2 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.

3 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

4 The EIA will be undertaken having regard to the 2019 National Planning Policy Framework ('NPPF') (as amended 20th July 2021)[1]. 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.

5 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.

6 The EIA will also refer to, as relevant to the EIA technical topics, the National Planning Practice Guidance ('PPG') published in March 2014, 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.

Regional Planning Policy and Guidance

7 Key regional policy documents that will be considered throughout the preparation of the ES as relevant include:

[1] *Ministry of Housing, Communities and Local Government, 2021, National Planning Policy Framework. Available here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1004408/NPPF_JULY_2021.pdf*

- The London Plan – The Spatial Development Strategy for Greater London (March 2021)[2]:
  - Opportunity Area (No. 2 Euston);
  - Policy SD4 The Central Activities Zone (CAZ); and
  - Policy E8 Sector growth and opportunities cluster.
- Supplementary Planning Guidance (SPG) (i.e. further guidance on policies in the London Plan that cannot be addressed in sufficient detail in the plan itself).

Local Planning Policy and Guidance

8 Key local planning policy documents that will be considered throughout preparation of the ES as relevant include:

- The Development Plan for Camden – the LBC have adopted a number of planning documents that together form the development plan for Camden:
  - Camden Local Plan[3] (2017) – the key strategic document in Camden's development plan. It sets out the vision for shaping the future of the Borough and contains policies for guiding planning decisions. The Camden Local Plan policies are supported by Supplementary Planning Documents (SPDs), including:
    - Employment Sites and Business Premises[4] (2021);
    - Energy Efficiency and Adaptation[5] (2021);
    - Air Quality[6] (2021);
    - Basements[7] (2021);
    - Biodiversity[8] (2018);
    - Design[9] (2021);
    - Developer Contributions[10] (2019);
    - Public Open Space[11] (2021);
    - Access for All[12] (2019);
  - Camden Site Allocations Plan[13] (2013) – the site allocations plan sets out guidelines for future development on significant sites across the borough likely to be subject to development proposals; and
  - As relevant, additional Supplementary Planning Documents (SPDs) and other relevant environmental strategies that provide further guidance on policies set out in the Camden Local Plan.

9 Any additional local planning policy and guidance documents considered relevant to the technical assessments which are covered by the EIA will also be considered.

Other Guidance

10 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.

[2] *Mayor of London. (2021). The London Plan. The Spatial Development Strategy for London*
[3] *LBC, 2017: Camden Local Plan*
[4] *LBC, 2021: Camden Planning Guidance 'Employment Sites and Business Premises'*
[5] *LBC, 2021: Camden Planning Guidance 'Energy Efficiency and Adaptation'*
[6] *LBC, 2021: Camden Planning Guidance 'Air Quality'*
[7] *LBC, 2021: Camden Planning Guidance 'Basements'*
[8] *LBC, 2018: Camden Planning Guidance 'Biodiversity'*
[9] *LBC, 2021: Camden Planning Guidance 'Design'*
[10] *LBC, 2019: Camden Planning Guidance 'Developer Contributions'*
[11] *LBC, 2021: Camden Planning Guidance 'Public open space'*
[12] *LBC, 2019: Camden Planning Guidance 'Access for all'*
[13] *LBC, 2013: Camden Site Allocations*

Annex C: Cumulative Schemes

Please refer to ES Volume 3, Appendix EIA Methodology - Annex 3

Annex D: Scoped In Topic Sheets

TOPIC SHEET

Air Quality

Introduction

1 It is considered that there is the potential for likely significant effects relating to air quality and so this topic shall be **scoped in** to the EIA.

The ES shall:

- Define the air quality baseline conditions;
- Identify relevant receptors sensitive to air quality;
- Assess:
  - The potential for air quality impacts throughout the demolition and construction works and as a result of the completed development and resultant air quality effects;
  - The likely significant air quality effects;
  - Any required mitigation or monitoring to address any likely significant adverse air quality effects; and
  - The potential for cumulative effects in relation to air quality with other agreed upon schemes in the surrounding area.
- Undertake an air quality neutral assessment and an air quality positive statement in accordance with Policy SI 1 of the London Plan[1]. The Proposed Development should be at least Air Quality Neutral based upon benchmarks set by the Greater London Authority (GLA) while the air quality positive statement will demonstrate how proposals have considered ways to maximise benefits to local air quality and what measures or design features will be put in place to reduce exposure to pollution.

Baseline Conditions

Current Baseline Conditions

2 The London Borough of Camden (LBC) has declared an Air Quality Management Area (AQMA), encompassing the whole borough, for exceedances of the annual mean nitrogen dioxide (NO_2) and 24-hour mean particulate matter (PM_{10}) objectives. The site is also located within the *'Marylebone Road from Marble Arch / Euston / King's Cross Junction'* air quality Focus Area; these are areas that have been identified by the Greater London Authority (GLA) as locations that not only exceed the annual mean limit value for NO_2 (40µg/m^3) but are also locations with high levels of human exposure. These are areas where the GLA considers there to be the greatest potential for air quality improvements and are, therefore, where actions will be focused, by the GLA and Transport for London (TfL), to improve air quality.

3 The LBC operates five automatic monitoring stations within its administrative boundary, with three monitoring stations located within 1.5km of the site ('BL0', 'CD9' and 'KGX'). All three stations monitor PM_{10} while BL0 and CD9 also monitor NO_2 and $PM_{2.5}$ concentrations. The LBC also operates a number of NO_2 diffusion tube monitoring sites, eight of which are located within 1.5km of the Proposed Development.

4 The latest NO_2 monitoring data for the automatic and diffusion tube monitoring sites within 1.5km of the site are shown in Table 1 and the monitoring locations are displayed in Figure 1.

[1] *GLA (2021) The London Plan, The Spatial Development Strategy for Greater London*

Table 1 Summary of LBC NO_2 Monitoring (µg/m³) (2015-2021)[2] [a, b, c]

Site ID	Site Type	Location	2015	2016	2017	2018	2019	2020	2021
Annual Mean NO_2 (µg/m³)									
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	**48**	**42**	38	36	32	28	27
CD9	Roadside	Euston Road	**90**	**88**	**83**	**82** [d]	**70**	**43**	**48**
CA4A	Kerbside	Euston Road	-	-	-	-	**70.7**	**53.7**	**57.1** [d]
CA6	Urban Background	St George's Gardens (prev. "Wakefield Gardens")	35.8	31.3	34.8 [d]	26.7	25.2	- [e]	- [e]
CA10	Urban Background	Tavistock Gardens	**44.6**	39.7	**46.2** [d]	35.4	33.9	26.8	22.3 [d]
CA11	Kerbside	Tottenham Court Road	**85.6**	**83.6**	**74.0** [d]	**65.8**	**62.6**	**43.3**	**44.4** [d]
CA20A	Roadside	Brill Place	-	-	-	-	**44.1**	**43.9**	34.5 [d]
CA28	Urban Background	St George's Gardens East	-	-	-	-	28.3	22.5	17.4 [d]
CA29	Roadside	Endsleigh Gardens	-	-	-	-	**49.5**	35.3	34.5 [d]
Objective			**40**						
Number of Hourly Mean Concentrations > 200 µg/m³									
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	0	0	0	0	0	0	0
CD9	Roadside	Euston Road	**54**	**39**	**25**	18	7	0	1
Objective			**18**						

[a] *Exceedances are shown in **bold**.*

[b] *Exceedances of the 60 µg/m³ proxy value, indicating a potential exceedance of the 1-hour mean NO_2 objective, are shown in **bold and underlined**.*

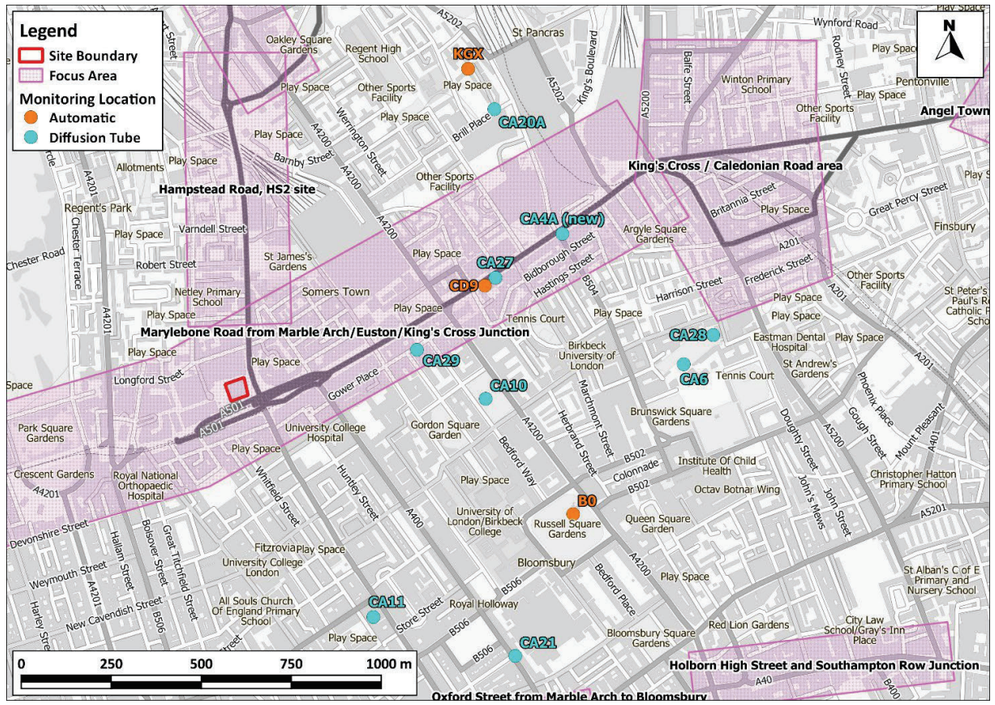
[c] *The 2020 and 2021 monitoring results will have been affected by the Covid-19 pandemic so may not represent current conditions in the local area (discussed further below).*

[d] *Data capture for the monitoring period was less than 75%, and as such the results were annualised in accordance with LLAQM Technical Guidance.*

[e] *The monitor was decommissioned in 2020.*

[2] *London Borough of Camden (2022) Air Quality Annual Status Report for 2021*

Figure 1 Site Boundary, Nearby Monitoring Locations and Air Quality Focus Areas



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5 As shown in Table 1, exceedances of the annual mean NO_2 objective occurred at all the kerbside and roadside locations within 1.5km of the Proposed Development between 2015 and 2021. Concentrations of more than 60µg/m³ were also measured at three sites (two of which are located on Euston Road (A501)), indicating potential exceedances of the 1-hour mean objective. However, all automatic monitoring sites recorded concentrations below this level in 2019, including the 'CD9' automatic monitor which, despite measuring concentrations above 60µg/m³, has not measured any exceedances of the 1-hour mean objective since 2017. There was an overall downward trend in concentrations between 2015 and 2019.

6 While 2020 and 2021 results have been presented for completeness, they will not be relied upon in any way as they are not representative of 'typical' air quality conditions due to the impact of the Covid-19 pandemic on traffic volumes and thus pollutant concentrations. Therefore, concentrations measured in 2019 will be used within the air quality ES chapter, unless 2022 monitoring data are published by the time the assessment is undertaken and are deemed appropriate for use.

7 The LBC also measures PM_{10} and $PM_{2.5}$ concentrations at 'BL0' and 'CD9' automatic stations, and only PM_{10} concentrations at 'KGX'. Table 2 shows the latest monitoring data, and the locations of these monitors are presented in Figure 1.

Table 2 Summary of LBC PM_{10} and $PM_{2.5}$ Monitoring (µg/m³) (2015-2021)

Site ID	Site Type	Location	2015	2016	2017	2018	2019	2020	2021
Annual Mean PM_{10} (µg/m³)									
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	22	20	19	17	18	16	16
CD9	Roadside	Euston Road	28	24	20	21	22	18	19
KGX	Urban Background / Industrial	Coopers Lane	-	-	-	15	15	13	13 [a]
Objective			**40**						
Annual Mean $PM_{2.5}$ (µg/m³)									
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	11	12	13	10	11	9	9
CD9	Roadside	Euston Road	17	17	14	15	14	11	11
Objective / GLA Target			**20 / 10**						
No. of Days PM_{10} > 50 µg/m³									
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	6	9	6	1	9	4	0
CD9	Roadside	Euston Road	5	10	3	2	8	2	2
KGX	Urban Background / Industrial	Coopers Lane	-	-	-	1	5	1	0
Objective			**18**						

[a] Data capture for the monitoring period was less than 75%, and as such the result was annualised according to the LLAQM Technical Guidance.

8 As shown in Table 2, the measured annual mean and 24-hour mean PM_{10} concentrations were below their respective objectives in all years presented. PM_{10} concentrations across the study area are, therefore, likely to also be below the objectives. In addition, $PM_{2.5}$ concentrations were also below the objective, in all years presented. They do, however, exceed the GLA target value at the 'BL0' monitoring station between 2015 and 2019 and at 'CD9' monitoring station in all years presented, which is common across much of London. The nationwide achievement is very unlikely to be possible before 2030, especially in London[3].

Future Baseline Conditions

9 Air quality is generally expected to improve with time, due (for example) to more stringent emissions standards for motor vehicles and implementation of strategic policies designed to improve local air quality such as the London Ultra Low Emissions Zone (ULEZ); thus, the likely evolution of the baseline conditions will be considered. Future baseline concentrations of NO_2, PM_{10} and $PM_{2.5}$ (in the anticipated opening year of the Proposed Development) at existing receptors will be assessed using a combination of background maps published by Defra[4], predicted background concentrations from the London Atmospheric Emissions Inventory (LAEI) and local air quality monitoring trends. Should a detailed assessment of the impacts of road traffic emissions be required (see '*Methodology*' section below), future baseline concentrations will be predicted using the dispersion model ADMS-Roads, at selected receptor locations.

10 A detailed air quality assessment would use the predicted future air quality conditions as a baseline from which to determine the significance of the effects of the completed and operational Proposed Development. The methodology is described below within the '*Methodology*' section.

Receptors

Demolition and Construction

11 For the onsite 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 construction vehicles up to 500m from the site exit(s). For the construction dust assessment, relevant receptors in the area will be considered. Relevant receptors in the area include residential dwellings and hospitals (high sensitivity receptors) as well as offices and shops (medium sensitivity receptors). Receptors will be identified based upon the distance bandings set out in guidance from the Institute of Air Quality Management (IAQM)[5]. This is the approach recommended in the GLA's guidance on The Control of Dust and Emissions during Construction and Demolition[6].

Completed Development

12 For the assessment of operational effects, suitable receptor locations will be identified based on detailed maps, satellite imagery, and plans of the Proposed Development. Receptors will be identified to represent a range of exposure, focusing on worst-case locations where the air quality objectives apply. Future receptor locations within the Proposed Development will also be considered. The objectives apply at locations where members of the public are likely to be regularly present and are likely to be exposed over the averaging period of the objective (i.e., locations with relevant exposure). Consideration will be given to those locations with relevant exposure to the annual mean objectives (i.e., residential areas, including outdoor amenity spaces) and the 1-hour mean NO_2 objective (i.e., retail areas and public realm spaces). The air quality objectives do not apply at places of work (e.g., offices).

Potential Effects

Demolition and Construction

13 The scope of the air quality assessment in relation to the demolition and construction activities associated with the Proposed Development will include:

- The identification of relevant sensitive receptor locations for the demolition and construction of the Proposed Development;
- A qualitative assessment of impacts of the Proposed Development on dust soiling and concentrations of PM_{10} resulting from activities during the demolition and construction period;
- A quantitative assessment of the impacts of emissions from construction traffic (both Heavy Duty Vehicles (HDVs) and Light Duty Vehicles (LDVs)) on concentrations of NO_2, PM_{10} and $PM_{2.5}$, if construction traffic flows exceed published screening criteria (see '*Methodology*' section below); and
- The identification of any cumulative effects of construction dust in combination with the any nearby cumulative schemes.

Completed Development

14 The scope of the air quality assessment in relation to the complete and operational Proposed Development, will include:

- Impacts of NO_2, PM_{10} and $PM_{2.5}$ emissions from road traffic generated by the Proposed Development once operational at existing sensitive receptors in the local area if operational traffic flows exceed published screening criteria (see '*Methodology*' section below);
- Impacts of NO_2 and PM_{10} emissions from any energy plant (if included) in the Proposed Development once operational at existing sensitive receptors in the local area;

[3] *Defra (2019) Assessing progress towards WHO guideline levels of PM2.5 in the UK.*
[4] *Defra (2021) Local Air Quality Management (LAQM) Support Website*

[5] *IAQM (2016) Guidance on the Assessment of Dust from Demolition and Construction v1.1*
[6] *GLA (2014) The Control of Dust and Emissions from Construction and Demolition SPG, Available: https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/control-dust-and.*

- Impacts of existing sources of pollution, from both traffic using the local road network and (if proposed) energy plant within the Proposed Development on sensitive receptors at the Proposed Development itself; and
- The potential for the Proposed Development and cumulative schemes to cumulatively impact air quality at sensitive receptors during the operation of the Proposed Development.

15 A preliminary air quality assessment will be undertaken prior to preparation of the Environmental Statement (ES) to identify any design opportunities that will avoid or reduce the air quality effects associated with the Proposed Development, and to identify any air quality constraints.

16 The air quality neutrality of the Proposed Development, as well as measures aimed at ensuring the Proposed Development is Air Quality Positive, will also be addressed in accordance with the requirements of the London Plan.

Methodology

Demolition and Construction

17 The potential impacts from dust generated during the demolition and construction of the Proposed Development will be considered using the approach presented in the IAQM guidance for assessing impacts from construction activities[4], upon which the GLA's SPG[7] is based. Where relevant, the cumulative impacts arising from cumulative schemes being constructed concurrently in the study area will also be considered. Appropriate mitigation measures will be recommended based on the outcome of the dust risk assessment. The IAQM guidance is clear that, with appropriate mitigation in place, the residual effects will normally be 'not significant'.

18 Emissions from construction plant (Non-Road Mobile Machinery (NRMM)) will not be explicitly modelled, as 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*". Significant effects as a result of NRMM emissions can thus likely be discounted. However, suitable mitigation measures for site plant will be presented as part of the mitigation measures based on advice presented in the IAQM guidance document and in accordance with the NRMM Low Emissions Zone (LEZ).

19 The number of demolition and construction vehicles (including HDVs) in use during the demolition and construction of the Proposed Development will be considered in the context of the screening criteria provided in the EPUK/ IAQM guidance[8]. If the increase in HDV movements exceeds the screening criteria, then emissions from traffic generated during the demolition and construction works will be assessed quantitatively using the ADMS Road dispersion model. The IAQM screening criteria of an increase of 100 Light Duty Vehicles / 25 HDVs Annual Average Daily Traffic (AADT) on roads within the AQMA will be used to define the study area.

20 If dispersion modelling of construction traffic is required, the scenarios that will be considered as part of the assessment will include:

- Current baseline scenario;
- Peak Construction Year[9] without the Proposed Development, but including traffic generated by relevant cumulative schemes; and
- Peak Construction Year with the Proposed Development, including traffic generated by relevant cumulative schemes and the construction of the Proposed Development itself.

Completed Development

21 The number of vehicle movements generated as a result of the operation of the Proposed Development will be considered in the context of the screening criteria (25 HDVs or 100 LDVs) provided in the guidance from EPUK and the IAQM[8]. If the Proposed Development is predicted to lead to an increase in vehicle movements that exceeds the screening criteria, then emissions from traffic generated during the operational stage will be assessed quantitatively using the ADMS-Roads dispersion model. The model requires a variety of inputs, including road traffic data (flows, speeds and vehicle fleet composition) and meteorological data.

22 The proposed energy strategy for the Proposed Development will use an all-electric solution which includes Air Source Heat Pumps (ASHPs) and, as such, will have no onsite emissions which would need to be considered in the ES. A life safety generator, sprinklers and wet riser are currently being considered. If the details of the plant are available, the emissions will be initially screened against IAQM guidance, in combination with their proposed location, operating profile and dispersion parameters, to identify whether a detailed assessment of emissions is required.

23 If detailed dispersion modelling is required to assess emissions from traffic generated during the operational stage, an ADMS Roads model will be used to predict concentrations of NO_2, PM_{10} and $PM_{2.5}$ for the following three scenarios:

- Baseline year;
- Opening year (earliest year of possible occupation/operation) without the Proposed Development, but including traffic generated by relevant cumulative schemes; and
- Opening year (earliest year of possible occupation/operation) with the Proposed Development, including traffic generated by relevant cumulative schemes and the completed Proposed Development itself.

24 An important element of the modelling study will be to verify the ADMS-Roads model output against measured results. This will be undertaken by identifying suitable roadside air quality monitoring locations against which the model performance can be compared, in line with the methodology set out in Defra's TG (22)[10] guidance document.

25 Meteorological data will be taken from London City Airport (LCA), which is the nearest and most representative meteorological site to the Proposed Development. The year of meteorological data will be selected to match the baseline assessment year and the latest available representative monitoring data.

26 Traffic data for the assessment will be provided by the appointed Transport Consultant and may, where necessary, be supplemented with data from the LAEI.

27 Background pollutant concentrations will be determined using data derived from the background maps published by Defra[4].

28 The overall effect will be evaluated using criteria recommended by EPUK/IAQM8 and will be determined based on predicted impacts at receptors and professional judgement. Where required, mitigation measures will be proposed to ensure that residual effects are not significant.

29 The Proposed Development will include an allocation for fume cupboards to allow potential end users operating research and development type activities to occupy some of the development. Although the use of such facilities requires extraction of air, there are tight regulations on the design and operation of fume cupboards. Any such end users will need to ensure that all activities meet the requirements of various British Standards (e.g., BSEN 14175) and Health and Safety Executive (HSE)/Control of Substances Hazardous to Health (COSHH) standards for all substances handled. Any residual emissions will need to be appropriately minimised using filtration where necessary. Given the strict regulations on the operation of fume cupboards, there can be a high level of confidence that provided the air extraction system is appropriately designed, that significant air quality effects will be avoided. It is therefore proposed to scope fume cupboard emissions out of the air quality assessment.

Cumulative Effects

30 The cumulative construction dust effects of the Proposed Development and identified cumulative schemes will be considered based on the location and proximity of each scheme, and the IAQM Guidance for assessing impacts from construction activities.

31 Cumulative operational effects include those associated with road traffic emissions and combustion plant. If the Proposed Development leads to a net decrease in traffic, or an increase in traffic below the screening criteria, then cumulative road traffic impacts will be considered qualitatively. Otherwise, the inclusion of traffic generated by the cumulative schemes in the 'Opening year with the Proposed Development' scenario will ensure that cumulative effects are quantified. With regards to combustion plant sources, a review of nearby cumulative schemes will be undertaken to determine the cumulative impacts of any combustion plant sources.

Air Quality Neutral Assessment

32 The GLA's London Plan Guidance (Air Quality Neutral)[11] sets out guidance on how an 'air quality neutral' assessment should be undertaken and aims at ensuring that new developments meet this status. This will involve the calculation of emissions associated with the buildings and transport generated by their use. These emissions will then be compared with published benchmarks. Any excess emissions over and above the benchmarks will need to be reduced by mitigation or off-set.

[7] *GLA (2014) The Control of Dust and Emissions from Construction and Demolition SPG*
[8] *Moorcroft and Barrowcliffe et al (2017) Land-Use Planning & Development Control: Planning For Air Quality v1.2*
[9] *The earliest construction year with the greatest construction traffic flows*
[10] *Defra (2022) Review & Assessment: Technical Guidance LAQM.TG22 August 2022 Version.*
[11] *GLA (2023) London Plan Guidance – Air Quality Neutral*

Air Quality Positive

33 The GLA has published guidance[12] to ensure large-scale developments deliver maximum air quality benefits and improvements and incorporate best practice and good design measures to reduce exposure to air pollution as far as possible. An Air Quality Positive Statement will be included in the assessment which will set out the inherent measures included within the Proposed Development's design to improve air quality.

[12] *GLA (2023) London Plan Guidance – Air Quality Positive.*

TRIUM

TOPIC SHEET

CLIMATE CHANGE AND GREENHOUSE GASES (GHG)

Introduction

1 The 2017 Environmental Impact Assessment (EIA) EIA Regulations[1] (as amended) introduced the requirement for the consideration of climate as part of the EIA process. 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)).

2 Based on the requirement of the EIA Regulations to address climate change and relevant guidance suggesting that any greenhouse gas (GHG) emissions or reductions from a project may be considered as significant, this topic is **scoped in** to the EIA.

The ES shall:

- Define the GHG baseline conditions;
- Assess:
  - The potential for GHG impacts throughout the demolition and construction works and as a result of the completed development and resultant GHG effects;
  - The resultant likely significant GHG effects; and
  - Any required mitigation or monitoring to address any likely significant adverse GHG effects.

3 The Climate Change ES chapter will also outline relevant climate change resilience and adaptation measures which have been incorporated into the design of the Proposed Development. Additionally, it will consider how, under an alternate future climate scenario, receptors may be affected by the Proposed Development.

4 The GHG assessment will be conducted in accordance with the principles set out in the following policies and guidance:

- National Planning Policy Framework[2];
- Climate Change Act 2008;
- Climate Change Act 2008 (2050 Target Amendment) Order 2019;
- Energy Act 2013;
- Climate Change and Sustainable Energy Act 2006;
- The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting[3];
- The Clean Growth Strategy[4];
- Approved Documents L1A and L2A;

[1] *Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (amended 2018, 2019, 2020)*
[2] *Department for Levelling Up, Housing and Communities (2021) National Planning Policy Framework*
[3] *Department for Environment, Food and Rural Affairs (2018) The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting*
[4] *Department for Business, Energy and Industrial Strategy (2017) The Clean Growth Strategy*

- The London Plan[5];
- London Environment Strategy[6];
- Delivering London's Energy Future: The Mayor's Climate Change Mitigation and Energy Strategy[7];
- London Borough of Camden Local Plan[8];
- IEMA 'Assessing Greenhouse Gas Emissions and Evaluating their Significance' (2022)[9].

5 The greenhouse gas element of the ES chapter will be undertaken by Air Quality Consultants (AQC).

The Proposed Development's Potential Impact on Climate

Baseline Conditions

6 An appropriate baseline will be determined based on the availability of information. Where information is available, baseline carbon dioxide equivalent (CO_2e) emissions relating to the current operation of the site in terms of transport and energy emissions will be calculated. Transport emissions will be calculated based on the number of transport trips generated by the current operation of the site and available data on travel distances, taking account of the mode of transport. Energy emissions will be calculated taking account of current energy consumption of the site (electricity and gas). Should data on the existing use of the site be unavailable, a worst-case assumption will be used whereby the baseline transport and energy emissions are assumed to be zero.

Receptors

7 GHGs contribute towards climate change, which is a global-scale cumulative effect, but do not cause direct local or regional effects, therefore no specific receptor locations are assessed in the GHG assessment. Instead, the global climate is the only receptor considered.

Assessment of Effects

8 The approach to assessing the potential impact of the Proposed Development on climate will be undertaken in accordance with the Institute for Environmental Management and Assessment (IEMA) guidance[9]. 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.

9 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 IEMA guidance assigns significance criteria to the impact of a development's lifecycle GHG emissions, relative to its alignment with the UK Government's decarbonisation targets to achieve Net Zero Carbon by 2050, and limit global temperature increase to 1.5°C above pre-industrial levels. In order for a development to comply with the 1.5°C trajectory of decarbonisation, mitigation is encouraged early and throughout the design process, in line with IEMA's acknowledgement that the ability to effect change to achieve GHG emissions reduction for a project reduces over time.

10 Consistent with the guidance, the approach taken in the EIA will be to:

- Quantify the lifecycle GHG emissions[10] from the Proposed Development;
- Compare the lifecycle GHG emissions against an existing carbon budget projected trajectory that complies with the UK's requirement to be Net Zero by 2050;
- Evaluate the consistency of the Proposed Development with relevant policies as national, regional and local scale that relate to GHG emissions; and
- Evaluate the robustness and effectiveness of mitigation measures designed to minimise GHG emissions throughout the lifetime of the Proposed Development.

11 These key components will be used to evaluate the significance of the Proposed Development's impact on climate change in line with the IEMA guidance.

12 The lifecycle GHG footprint for the Proposed Development will include the following emissions sources:

- Embodied carbon in construction materials;
- Construction transport;
- Construction site activities (fuel and energy consumption and waste);
- Operational energy consumption;
- Operational transport; and
- Repair, maintenance and refurbishment during the Proposed Development's life.

13 IEMA guidance allows elements of a project's GHG footprint to be scoped out where they contribute only a small proportion of the lifecycle emissions. For the Proposed Development, the elements scoped out of the assessment will include construction site activities (i.e. energy and fuel use associated with demolition and construction), operational waste, and water supply and treatment. As the Proposed Development is designed with a lifetime that extends well beyond 2050, when the UK has committed to net zero carbon, the emissions from decommissioning of the development at the end of its life are assumed to be net zero and scoped out of the assessment.

14 The Proposed Development's GHG emissions will be contextualised against relevant carbon budgets and appraised in their compatibility with the UK's trajectory to net zero 2050.

15 The ES will include a review of the compliance of the Proposed Development to relevant policies relating to GHG emissions, such as Part 14 of the NPPF, and local policies relevant to energy and sustainable transport.

16 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.

17 The assessment of GHG emissions will draw together these analyses to determine the significant effects associated with GHG emissions, which will be presented in the ES chapter. Relevant information relating to carbon mitigation measures will be presented within the ES chapter describing the Proposed Development and the Demolition and Construction ES chapter.

Cumulative Effects

18 As set out in the IEMA guidance "*GHG emissions from all projects will contribute to climate change; the largest interrelated cumulative environmental effect*". This statement relates to 'cumulative' on a global scale as all emissions of GHG's contribute to climate change. The definition of 'cumulative effects' in the context of greenhouse gases and climate change therefore goes far beyond the typical definition of cumulative effects for EIA, which tends to focus on other proposed projects in the vicinity of the Proposed Development. The GHG assessment is therefore intrinsically a cumulative assessment and no consideration to specific local cumulative schemes is required.

The Potential Impact of Climate Change on The Proposed Development

19 The approach to assessing the potential impact of climate change on the Proposed Development will be undertaken by Trium (with input from the wider consultant team) in accordance with IEMA's guidance '*Climate*

[5] *Greater London Authority (2021) The London Plan 2021: The Spatial Development Strategy for Greater London*
[6] *Greater London Authority (2018) London Environment Strategy*
[7] *Greater London Authority (2011) Delivering London's Energy Future: The Mayor's Climate Change Mitigation and Energy Strategy*
[8] *London Borough of Camden (2017) Camden Local Plan*
[9] *Institute of Environmental Management and Assessment, 2022. Institute of Environmental Management and Assessment (IEMA) Guide to: Assessing Greenhouse Gas Emissions and Evaluating their Significance, 2nd Edition*
[10] *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.*

Change Resilience and Adaption'[11] 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.

20 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.

21 Consistent with the guidance, the EIA will describe a future climate scenario which will be developed using the future climate projections published by the Met Office (through the UK Climate Projections (UKCP18) website[12]). The results include projections for variables including annual mean temperatures, and annual changes in summer and winter precipitation.

22 To describe the predicted future climate, it is proposed that a medium emissions scenario (Relative Concentration Pathway (RCP) 8.5) for 2080 will be utilised as the future baseline. RCP8.5 has been used as it represents a conservative high emissions scenario. The year 2080 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. A Climate Change Technical Note setting out the emissions scenario used and probability levels shall be provided as an annex to the Climate Change ES chapter.

23 The future climate change scenario will be considered for each of the technical topics covered by the EIA. 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 climate regime, 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 will be to identify the likely effect of those receptors considered more vulnerable to changes in climate, having considered 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.

24 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).

25 The ES chapter on Climate Change will present the review of the future climate change scenario in terms of how the effects on receptors (under the current condition, without climate change) are likely to be different under an alternative future climate regime. In addition, the adaption and resilience measures proposed as part of the description of the Proposed Development shall be identified.

[11] *IEMA (2020) Climate Change Resilience and Adaption, Available: https://www.iema.net.*
[12] *https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/download-data*

TRIUM

TOPIC SHEET

Daylight, Sunlight, Overshadowing and Solar Glare

Introduction

1 It is considered that there is the potential for likely significant effects relating to daylight and sunlight to impact sensitive surrounding residential buildings and other sensitive uses, overshadowing of surrounding outdoor amenity areas and solar glare to major road junctions surrounding the site. Therefore, this topic shall be **scoped in** to the EIA.

2 The ES shall:

- Define the baseline conditions relevant to daylight, sunlight, overshadowing and solar glare;
- Identify relevant receptors; and
- Assess:
  - The potential impacts throughout the demolition and construction works and as a result of the completed development;
  - The likely significance of any effects;
  - Any required mitigation to minimise and reduce any significant adverse effects; and
  - The potential for cumulative effects in relation to daylight, sunlight, overshadowing and solar glare, with other agreed upon schemes in the surrounding area.

3 The technical assessments and authoring of the ES chapter will be undertaken by Point 2.

Baseline Conditions

Daylight, Sunlight & Overshadowing

4 The current Euston Tower building has been in existence since between 1962 and 1972 and will therefore form the current baseline condition by reference to the Vertical Sky Component (VSC), No-Sky Line (NSL) and Annual Probable Sunlight Hours (APSH) methods.

5 With regards to the relevant outdoor amenity areas within the site and the baseline level of overshadowing, Sun Hours on Ground (SHOG) methods will be used.

6 The daylight, sunlight and overshadowing effects of the Proposed Development will then be assessed against this baseline condition.

Solar Glare

7 The current Euston Tower building produces a degree of Solar Glare. Consequently, the assessments will consider the effect of the Proposed Development in absolute terms as well as comparatively with the existing building. Professional judgement will be used to determine any impact.

Receptors

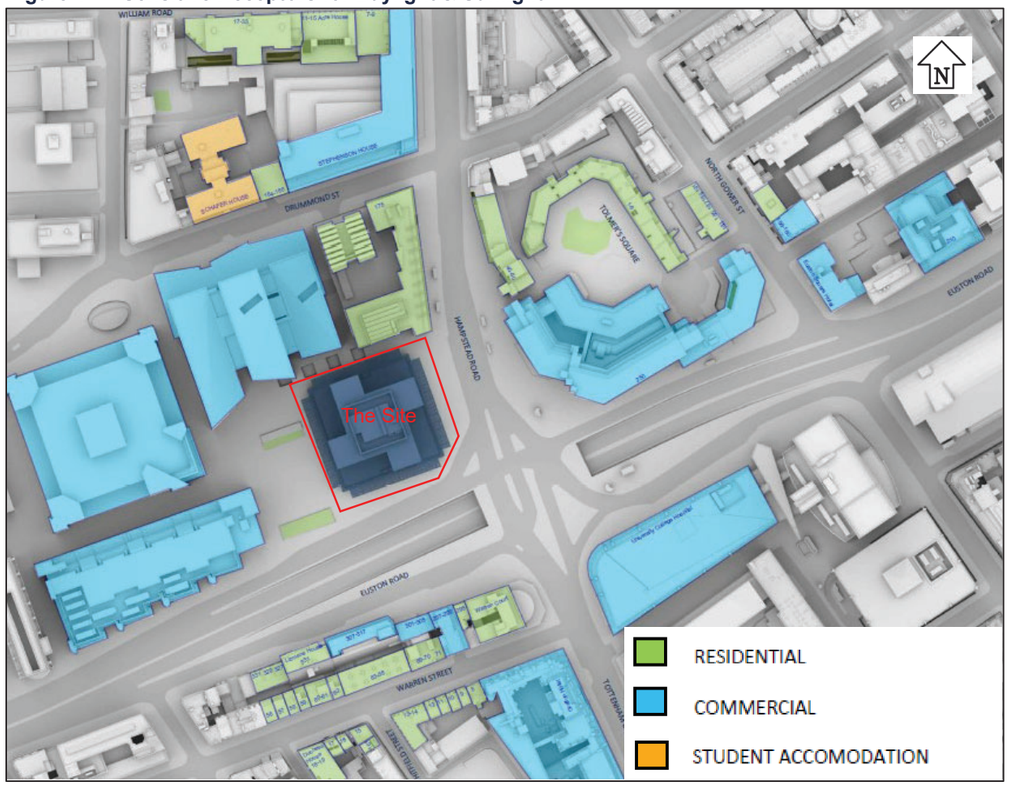
Daylight & Sunlight

8 Existing residential receptors have been identified on nearby roads/streets that are considered sensitive in relation to daylight and sunlight; these will therefore be included within the assessments. The BRE Guidelines[1] consider that guidance may also be applied to any existing non-domestic building where occupants have a reasonable expectation of daylight; as such, changes in daylight and sunlight to student accommodation surrounding the site will also be assessed. Habitable rooms within the following sensitive receptors surrounding the site will be assessed and are shown in Figure 1 below:

- 17 to 33 William Road
- Schafer House, University College - Student
- 164-166 Drummond Street
- 175 Drummond Street
- 40-60 Hampstead Road
- 1-6 Tolmers Square
- 183 North Gower Street
- Euston Square Hotel
- Warren Court, Euston Road
- 301-305 Euston Road & 69-70 Warren Street
- Lizmans House, 321 Euston Road
- 56 Warren Street
- 57 Warren Street
- 58 Warren Street
- 59 Warren Street
- 60-61 Warren Street
- 62 Warren Street
- 63-68 Warren Street
- 71 Warren Street
- The Grafton Hotel
- 9 Warren Street
- 10 Warren Street
- 11 Warren Street
- 12 Warren Street
- 13-14 Warren Street & 118-120 Whitfield Street
- 15 Warren Street & 161 Whitfield Street
- 16 Warren Street
- 17 Warren Street
- Duchess House, 18-19 Warren Street

[1] *The BRE Guidelines 2022 – Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice by Paul J Littlefair*

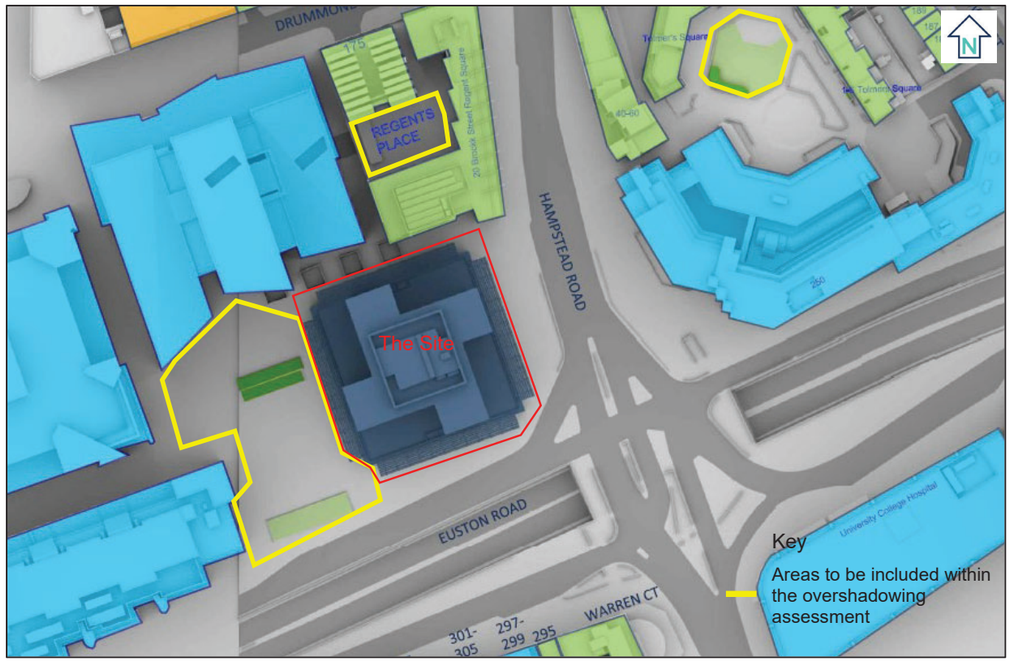
Figure 1 Sensitive Receptors for Daylight & Sunlight



Overshadowing

9 Areas of amenity space are considered most sensitive to overshadowing effects resulting from the Proposed Development. Owing to the southerly location of the sun path, only open spaces located from the north-west through to north-east of the site require consideration in relation to overshadowing. The areas deemed relevant for analysis within the immediate vicinity of the site are outlined in yellow in Figure 2 below.

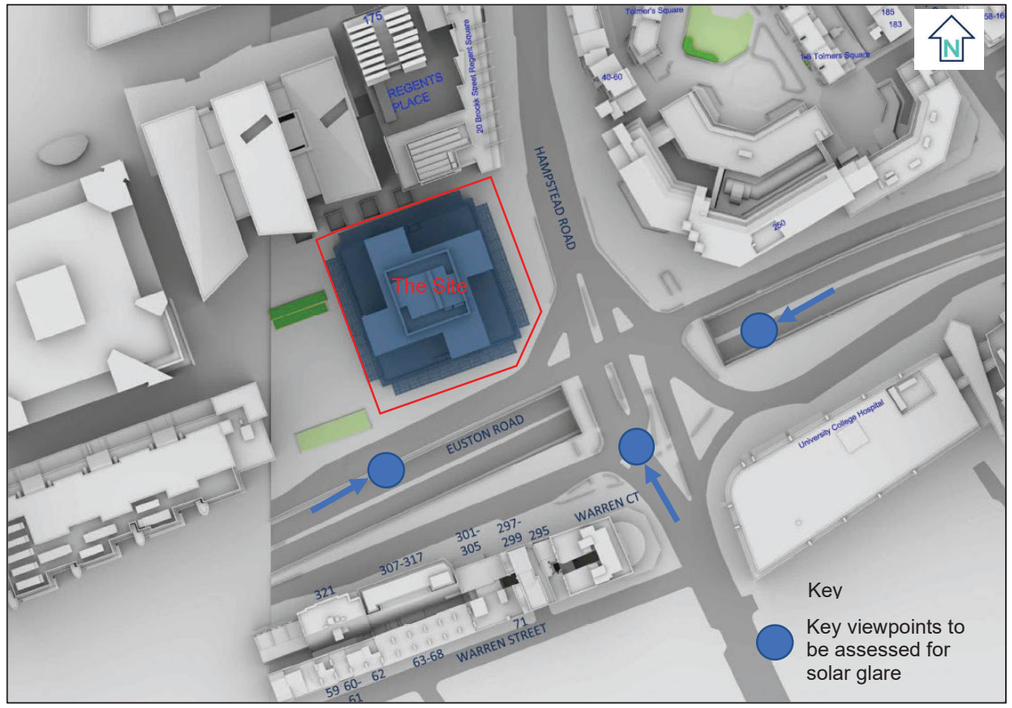
Figure 2 Sensitive Receptors for Overshadowing



Solar Glare Receptors

10 The assessment will consider potentially sensitive viewpoints for road users surrounding the site. The viewpoints will generally be located at major road junctions or signals within the immediate vicinity and to the south of the site, where drivers have the potential to be affected. The most relevant receptors sensitive to solar glare have been identified in Figure 3 below. Other junctions to the south of the site are a considerable distance away and are not considered to be sensitive given the density of the buildings around them.

Figure 3 Sensitive Receptors for Solar Glare



11 The three viewpoints identified above are key junctions to the south of the site that contain traffic lights and pedestrian crossings.

Potential Effects

Demolition and Construction

12 Owing to the evolving and changing nature of demolition and construction activities, the assessment of potential effects during the demolition and construction of the Proposed Development will not be modelled. Instead, a qualitative assessment of the demolition and construction phases 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).

Completed Development

13 The scope of the daylight, sunlight, overshadowing and solar glare assessment, in relation to the completed Proposed Development, will include the current baseline conditions compared against the implementation of the Proposed Development and a quantitative analysis on the daylight, sunlight, overshadowing and solar glare to the surrounding sensitive receptors as a result of the implementation of the Proposed Development.

Methodology

14 Daylight, sunlight and overshadowing analysis will be undertaken by reference to the BRE Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (The Guidelines 2022).

15 In relation to the properties surrounding the site, we will only assess the impact to main habitable accommodation (i.e. living rooms, bedrooms and kitchens) within residential properties. Commercial properties and non-habitable rooms such as bathrooms, toilets, storerooms, circulation areas and garages will not be considered within the ES chapter.

16 The BRE Guidelines provide two principal measures of daylight for assessing the impact on properties neighbouring a site, namely Vertical Sky Component (VSC) and No Sky Line (NSL). In terms of sunlight, the Annual Probable Sunlight Hours (APSH) will be examined.

17 These measures of daylight and sunlight are discussed in the following paragraphs.

Diffuse Daylight

18 VSC is a measure of the direct skylight reaching a point from an overcast sky. It is the ratio of the illuminance at a point on a given vertical plane to the illuminance at a point on a horizontal plane due to an unobstructed sky.

19 For existing buildings, the BRE Guidelines are based on the loss of VSC at a point at the centre of a window, on the outer plane of the wall.

20 The BRE Guidelines state that if the VSC at the centre of a window is less than 27%, and it is less than 0.8 times its former value (i.e. the proportional reduction is greater than 20%), then the reduction in skylight will be noticeable, and the existing building may be adversely affected.

21 NSL is a measure of the distribution of daylight within a room. It maps out the region within a room where light can penetrate directly from the sky, and therefore accounts for the size of and number of windows by simple geometry.

22 The BRE suggest that if the area of the working plane within a room that can receive direct skylight is reduced to less than 0.8 times its former value, the effect will be noticeable.

23 The BRE Guidelines considers bedrooms to be less sensitive for daylight distribution (section 2.2.10).

Sunlight

24 In relation to sunlight, Annual Probable Sunlight Hours (APSH), the BRE recommends that the APSH received at a given window in the affected receptor should be at least 25% of the total available, including at least 5% in winter.

25 Where the proposed values fall short of these, and the absolute loss is greater than 4%, then the proposed values should not be less than 0.8 times their previous value in each period (i.e. the proportional reductions should not be greater than 20%).

26 The BRE Guidelines state that '...all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun. Normally loss of sunlight need not be analysed to kitchens and bedrooms, except for bedrooms that also comprise a living space, for example a bed sitting room in an old people's home. (3.2.3)

27 In accordance with the BRE, sunlight to kitchens and bedrooms that do not contain a living space will not be assessed.

28 The APSH figures are calculated for each window, and where a room is served by more than one window the contribution of each is accounted for in the overall figures for the room. The acceptability criteria will be applied to overall room-based figures.

Balconies and Projections over Windows

29 The BRE Guidelines also recognises that balconies and overhangs located above windows inherently restrict the access to direct daylight and sunlight. With regards to daylight, the BRE comments on page 16, paragraph 2.2.13:

"Existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even a modest obstruction opposite may result in a large relative impact on the VSC, and on the area receiving direct skylight."

30 With regards to sunlight, the BRE comments on page 25, paragraph 3.2.11:

"Balconies and overhangs above an existing window tend to block sunlight, especially in summer. Even a modest obstruction opposite may result in a large relative impact on the sunlight received."

31 In situations such as this, the BRE outlines a supplementary assessment that can be undertaken to understand whether the presence of the balcony, rather than the size of the new obstruction, is the main factor in the relative loss of light. Section 2.2.13 states:

"One way to demonstrate this would be to carry out an additional calculation of the VSC and area receiving direct skylight, for both the existing and proposed situations, without the balcony in place. For example, if the proposed VSC with the balcony was under 0.80 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of light.

32 Where appropriate, an additional 'without balconies' assessment will also be undertaken and discussed within the ES chapter.

Overshadowing (Sun on Ground)

33 Section 3.3 of the BRE guidelines describes the method of assessment of the availability of sunlight within amenity spaces. This relates to the proportion of shading on March 21st.

34 The BRE criteria for amenity areas are as follows: "It is recommended that for it to appear adequately sunlit throughout the year, at least half of an amenity space should receive at least two hours of sunlight on the 21st March".

Solar Glare

35 Our analysis is carried out in two separate stages; 1) Annual Sequence Analysis and Annual Temporal Veiling Luminance Analysis and 2) Solar Reflectance Imaging which are both discussed further below.

Annual Sequence Analysis

36 The Annual Sequence Analysis will identify the times and locations of all instances of solar reflection from the Proposed Development throughout the year. The reflective elements of the façade of the Proposed Development will be simulated with red coloured mirrors in order to more easily identify possible incidents of glare and their locations. The path of the sun for the entire year will then be simulated around the Proposed Development in order to identify where and when instances of solar reflections may affect sensitive viewpoints.

37 The Annual Sequence Analysis creates conditions for optimal reflectance i.e. a perfectly reflective (specular) façade material and adopts an entirely unobstructed sky. The objective is to identify all possible incidents where solar reflection could occur, however brief, under optimal conditions.

Annual Temporal Veiling Luminance Analysis and Solar Reflectance Imaging

38 In order to understand the overall solar reflection effect of the Proposed Development upon each of the agreed sensitive viewpoints, the durations, viewing angles and intensity levels of all of the identified solar reflectance instances within a year are analysed. The time, duration and intensity of each instance of solar reflection is then

plotted onto a grid to create an Annual Temporal Veiling Luminance Calendar Graph for each sensitive viewpoint. The Annual Temporal Veiling Luminance Calendar Graph's axes capture the 365 days of the year along the X axis and the time of day on the Y axis. The Y axis is divided into Greenwich Mean Time (GMT) and British Summer Time (BST).

39 Disability glare is a reduction in visibility caused by light from bright sources being scattered within the eye, across the retina. The result is that vision is impaired by the veiling effect caused by the scattered light. David NH Hassall proposed a method of disability glare analysis based on the calculation of veiling luminance perceived by the eye. Hassall suggested that a threshold of 500 candelas per square meter (cd/m^2), be used in solar reflection assessments i.e. if an instance of solar reflection is identified as having a veiling luminance level of greater than $500cd/m^2$ it is considered to potentially give rise to disability glare.

40 The instance of solar reflection which produces the highest level of veiling luminance is then visualised using Radiance. The image also has the focal point of the observers' view ranging from 10° from the centre of the visual axis and moving out in concentric circles from 20° to 90° overlaid upon it. This provides a reference from which potential issues can be judged.

Cumulative Effects

A cumulative scenario is not considered necessary for daylight, sunlight, overshadowing and solar glare. There are no cumulative schemes located near enough to the site considered to have the potential for a cumulative impact on the daylight, sunlight, overshadowing and solar glare effects of the Proposed Development.

TRIUM

TOPIC SHEET

NOISE AND VIBRATION

Introduction

1 It is considered that there is the potential for likely significant effects relating to noise and vibration and so this topic shall be **scoped in** to the EIA.

2 The noise and vibration chapter of the ES will assess the likely impact of the Proposed Development upon noise sensitive receptors surrounding the site. This topic sheet sets out the proposed approach that will be taken in the assessment of noise and vibration effects, together with a summary of information that is currently available. The assessment is to be undertaken and prepared by Hann Tucker Associates.

3 The ES shall:

- Define the noise and vibration baseline conditions;
- Identify relevant noise and vibration receptors;
- Assess:
  - The potential for noise and vibration impacts throughout the demolition and construction works and as a result of the completed development and resultant noise and vibration effects;
  - The likely significant noise and vibration effects;
  - Any required mitigation or monitoring to address any likely significant adverse noise and vibration effects; and
  - The potential for cumulative effects in relation to noise and vibration with other agreed upon cumulative schemes in the surrounding area.

Baseline Conditions

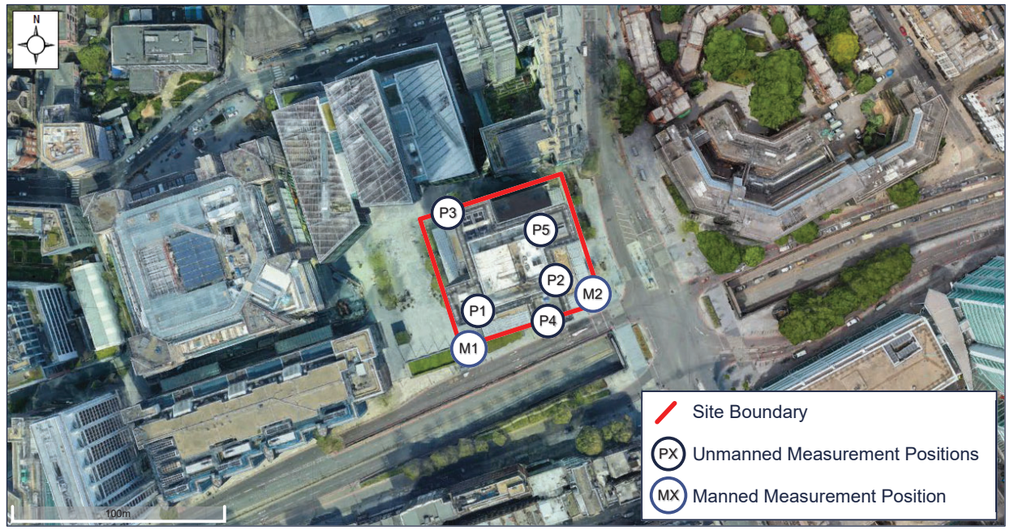
Current Baseline Conditions

4 Hann Tucker Associates undertook a baseline noise and vibration survey at the site in November 2022. During this survey, the dominant airborne noise sources were noted to be road traffic on Euston Road (A501) and Hampstead Road. Sources of vibration at the site comprise London Underground trainlines that pass close to the site; these include Circle, Hammersmith & City, Metropolitan, Northern and Victoria underground lines.

5 Noise monitoring undertaken in November 2022 included four unmanned monitoring locations and two manned positions. The measurement positions were carefully selected in order to ensure noise levels could be considered representative of those at surrounding noise sensitive receptors, as well as providing sufficient data for various acoustic design assessments for the Proposed Development (including an assessment of the suitability of the site for the intended use classes).

6 The noise monitoring locations are shown in Figure 1.

Figure 1 Noise Survey Monitoring Locations



7 The noise monitoring locations were as described below in Table 1.

Table 1 Manned and Unmanned Noise Monitoring Locations

Position No.	Description
P2	The sound level meter was placed on the podium roof. The microphone was attached to a pole fixed along the podium roof edge overlooking Euston Road (A501), approximately 15m from roadside and 8m above ground level.
P2	The sound level meter was placed on the podium roof. The microphone was attached to a pole fixed along the podium roof edge overlooking the road junction, approximately 14m from Euston Road, 16m from Hampstead Road and 8m above ground level.
P3	The sound level meter was placed on the podium roof. The microphone was attached to a pole fixed along the podium roof edge overlooking Regent's Plaza and Brock Street (pedestrians only/no motor vehicles), approximately 63m from Euston Road, 70m from Hampstead Road and 8m above ground level.
P4	The sound level meter was placed on the tower roof. The microphone was attached to a pole fixed along the tower roof edge overlooking nearby road network, approximately 120m above ground level and 1.5m above the roof.
P5	The sound level meter was placed on Level 11 East Staircase. The microphone was attached to a pole extruding a window overlooking nearby road network, approximately 40m above ground level and 1m from façade.
M1	The sound level meter was hand-held. The microphone was positioned approximately 1.5m above ground level and 3m from Euston Road (A501).
M2	The sound level meter was hand-held. The microphone was positioned approximately 1.5m above ground level and 6m from Hampstead Road.

8 The typical daytime $L_{Aeq(16\text{-}hour)}$ and night time $L_{Aeq(8\text{-}hour)}$ noise levels measured during the unmanned survey are presented in Table 2.

Table 2 Typical Daytime $L_{Aeq(16\text{-}hour)}$ and Night Time $L_{Aeq(8\text{-}hour)}$ Noise Levels (Unmanned)

Position	Measured $L_{Aeq,T}$ Noise Level (dB re 2 x 10^{-5} Pa)	
	Daytime (07:00 – 23:00) Hours, $L_{Aeq,16hr}$	Night-Time (23:00 – 07:00) Hours, $L_{Aeq,8hr}$
1	68	67
2	66	63
3	62	57
4	60	57
5	70	67

9 The A-weighted (dBA) L_{90}, L_{eq} and L_{max} sound levels from the manned survey are presented in Table 3.

Table 3 A-Weighted (dBA) L_{90}, L_{eq} and L_{max} Sound Levels (Manned)

Position	Time	Sound Levels dBA		
		L_{90}	L_{eq}	L_{max}
M1	13:00 to 13:15 hours	63	69	81
M2	14:45 to 14:55 hours	66	71	85

Future Baseline Conditions

10 In relation to traffic and transport and associated road traffic noise effects, a future baseline year, i.e., when the Proposed Development is expected to be complete and operational, will be considered. Operational road traffic noise will be assessed by considering the change in traffic flows for the predicted future baseline year, the data for which is to be provided by Velocity Transport Planning, the appointed transport consultants.

Receptors

11 The existing and proposed noise and vibration sensitive receptors which could be affected by noise and vibration impacts associated with the Proposed Development are indicated within Figure 2 and Table 4.

Figure 2 Existing and Proposed Sensitive Receptors

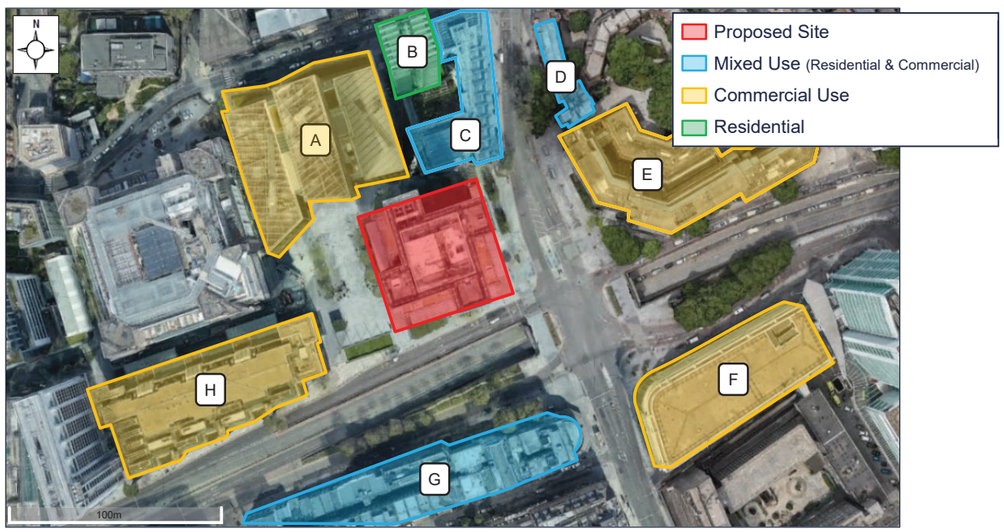


Table 4 Existing and Proposed Sensitive Receptors

Ref	Type	Description
A	Existing Commercial	10 Brock Street, commercial office building
B	Existing Residential	The Triton Building, 26-storey residential tower
C	Existing Mixed-use	Commercial units with residential properties above on Hampstead Road
D	Existing Mixed-use	44 – 66 Hamstead Road, commercial and residential properties
E	Existing Commercial	250 Euston Road, university, and commercial office building
F	Existing Commercial	The Podium, 235 Euston Rd, University Collage Hospital
G	Existing Mixed-use	Commercial and residential properties on Euston Road
H	Existing Commercial	1 Triton Square, commercial office building

Potential Effects

Demolition and Construction

12 The scope of the noise and vibration assessment in relation to the demolition and construction activities associated with the Proposed Development will comprise an assessment of the demolition, construction activity and traffic. An assessment based on a reasonable worst-case scenario in terms of site extent and associated demolition and construction vehicles, equipment and activity will be undertaken in respect of the identified sensitive receptors.

Completed Development

13 The scope of the noise and vibration assessment in relation to the completed Proposed Development, will include:

- Assessment of the noise from traffic generation: This includes the maximum anticipated road traffic (as assessed by the Applicant's Transport Consultant), as this represents the worst-case in potential increases in ambient noise levels at the existing and future receptors; and
- Assessment of noise from building services plant: This would remain unaffected regardless of site extent with the building services plant being designed to achieve the London Borough of Camden (LBC) requirements for plant noise.

Methodology

14 The methodology employed for the assessment of likely significant noise and vibration effects resulting from the Proposed Development, and to ensure the Proposed Development provides an acceptable noise environment to its future occupants, will include the following:

- Identification of the receptors within the vicinity of the Proposed Development that are and/or would be potentially sensitive to noise and vibration impacts;
- Establishment of baseline noise conditions undertaking a detailed noise monitoring survey;
- Identify and recommend appropriate mitigation and best practice measures to minimise noise and vibration levels anticipated to be generated by the demolition and construction of the Proposed Development;
- Review of baseline and likely future baseline road traffic flow counts against surveyed noise levels to obtain likely future baseline noise levels for assessment purposes;
- Establishment of noise criteria for fixed plant associated with the complete and operational Proposed Development in line with LBC requirements;
- Prediction and assessment of changes in noise levels due to the completed and operational occupied Proposed Development plant in line with LBC requirements;
- Formulation of appropriate design interventions and mitigation measures where appropriate; and
- Establishment of the likely residual noise and vibration effects of the Proposed Development.

15 All relevant technical noise and vibration data and information used to inform the assessment will be appended to the ES.

Policy and Legislation

16 The noise and vibration assessment will be conducted in accordance with the principles set out in the following policies and guidance:

- Method for Rating and Assessing Industrial and Commercial Sound - BS 4142:2014+A1:2019[1]
- Noise and Vibration Control on Construction and Open Sites. Part 1, 2 & 4. Code of Practice – BS 5228:2009+A1:2014[2]
- Guidance on Sound Insulation and Noise Reduction in Buildings – BS 8233:2014[3]
- Guide to Evaluation of Human Exposure to Vibration in buildings – BS 6472-1:2008[4]
- Evaluation and Measurement for Vibration in Buildings – BS 7385 Part 1-2: 1990/93[5]
- Control of Pollution Act, Chapter 40, Part III, 1974[6]
- Calculation of Road Traffic Noise – 1988[7]
- Design Manual for Roads and Bridges (DMRB) Volume 11 – 2011[8]
- World Health Organization - Guidelines for Community Noise – 2000[9]

Non-Significant Effects to be Scoped out of the EIA

Noise Associated with Demolition and Construction Traffic

17 Given the relatively high flows on the local roads, vehicle movements generated by the demolition and construction works are unlikely to affect traffic noise levels significantly. Notwithstanding this, in addition to a Construction Environmental Management Plan (CEMP), a detailed logistics plan and Temporary Traffic Management (TTM) plan will be developed by the Principal Contractor prior to commencing works, which will include a route or routes to be agreed with the LBC to minimise, as far as practicable, any effects on the surrounding receptors and road users. Therefore, construction traffic noise-related effects are not considered to be significant and are scoped out of the EIA.

Vibration Associated with the Complete and Operational Proposed Development

18 No significant sources of vibration will be introduced by the complete and operational Proposed Development. Accordingly, the assessment of vibration in relation to the complete and operational Proposed Development will be scoped out of the ES.

Other Sources Associated with the Completed and Operational Development

19 Beyond the buildings services plant that will be considered as part of the EIA, other noise may be associated with the operation of any proposed commercial uses. Any such uses will generally be away from existing receptors and will be designed and managed such that sound levels are kept to a practicable minimum. Where necessary, it is assumed that the sound from any such spaces (whether internal or external) would be addressed

[1] *British Standards Institute, 2014, 'Method for Rating and Assessing Industrial and Commercial Sound BS 4142'*
[2] *British Standards Institute, 2009, 'Noise and Vibration Control on Construction and Open Sites. Part 1, 2 & 4.Code of Practice. BS 5228'*
[3] *British Standards Institute, 2014, 'Guidance on Sound Insulation and Noise Reduction in Buildings. BS 8233'*
[4] *British Standards Institute, 2008, 'Guide to Evaluation of Human Exposure to Vibration in Buildings'. BS 6472*
[5] *British Standards Institute BS 7385 Part 1-2, 1990/93, 'Evaluation and Measurement for Vibration in Buildings'*
[6] *Control of Pollution Act, Chapter 40, Part III, 1974, HMSO*
[7] *Department of Transport/Welsh Office, 1988, 'The Calculation of Road Traffic Noise'*
[8] *Great Britain Department for Transport, Highways Agency, 2011, 'Design Manual for Roads and Bridges (DMRB) Volume 11'. London*
[9] *World Health Organisation, 2000, Guidelines for Community Noise'. WHO, Geneva*

via appropriate planning conditions. Therefore, non-plant noise-related effects associated with the operation of the Proposed Development are not considered to be significant and are scoped out of the EIA.

Cumulative Effects

20 The cumulative impacts associated with the Proposed Development and other proposed schemes (i.e., cumulative schemes) within the locality will be established and assessed. This will be in relation to demolition and construction as well as building services noise, and any other potential for new noise sources.

TOPIC SHEET

SOCIO-ECONOMICS

Introduction

1 It is considered that there is the potential for significant effects relating to socio-economics and so this topic shall be **scoped in** to the EIA. The socio-economic assessment will be undertaken by Trium Environmental Consulting LLP ('Trium').

2 The ES shall:

- Define the socio-economic baseline conditions;
- Identify relevant socio-economic receptors;
- Assess:
  - The potential for socio-economic effects as a result of the completed development;
  - The likely significant socio-economic effects;
  - Any required mitigation to address any likely significant adverse socio-economic effects; and
  - The potential for cumulative socio-economic effects.

3 The socio-economic assessment will assess the direct and indirect employment opportunities generated as a result of the Proposed Development. It will also consider the indirect impacts of the employment uses, such as the contribution to commercial space (including life sciences) within the London Borough of Camden (LBC), as well as the contribution to the public realm and placemaking. As the scheme is solely commercial, no residential impacts are assessed.

Baseline Conditions

Current Baseline Conditions

4 A detailed assessment of the baseline conditions of the site and surrounding area will be undertaken as part of the socio-economic assessment, through a combination of desk-top research and review of relevant policy.

5 The baseline review will consider the most recent published information available relating to the site from the current owners and from publicly available database records for the study area. This includes the following sources:

- Office for National Statistics (ONS) and NOMIS[1];
- Indices of Multiple Deprivation (2019);
- NHS Choices and NHS Digital (2022); and
- London Borough of Camden (LBC), Greater London Authority (GLA) and UK Government data.

6 This baseline analysis will consider the following socio-economic conditions:

[1] https://www.nomisweb.co.uk/customerrors/nodataset.asp

- Demographics: population and deprivation;
- Economy and labour market: employment, sectoral employment, unemployment and claimant count, labour skill levels, economic activity, local jobs, provision of commercial space (including laboratory and research floorspace); and
- Social infrastructure: access to and provision of publicly-accessible open space and public realm.

7 The baseline conditions will be considered at different geographic scales. The study areas for each element of the assessment will be set out in the ES chapter and are anticipated to comprise:

- Site – the area within the planning application boundary;
- Local Area – Regents Park ward;
- Borough – LBC;
- Region – London; and
- Nation – England/Great Britain.

Receptors

8 Receptors are likely to include, but may not be limited to:

- Existing uses on-site;
- The local economy and labour market i.e. local businesses and economically active residents; and
- Local social infrastructure and its users, specifically open space within 800m walking distance of the site.

9 It is not possible to ascribe specific 'values' or a quantifiable scale of 'sensitivity' to all socio-economic receptors due to their diversity in nature and scale. The assessment will therefore focus on the qualitative 'sensitivity' of each receptor, and on their ability to respond to change created by the Proposed Development.

Potential Effects

10 Based on the sensitive receptors and impacts outlined above, the Proposed Development is expected to generate a range of socio-economic effects during both the demolition and construction works, and once complete and operational.

11 The assessment will consider the potential for the following likely significant effects:

- Creation of temporary employment opportunities during the demolition and construction phase;
- Spending effects associated with the temporary construction workers;
- Creation of permanent employment opportunities once complete and operational;
- Increased demand for social infrastructure as a result of the Proposed Development, notably in relation to open space provision; and
- Spending effects associated with the employees brought to the site by the Proposed Development.

12 The effects in Table 1 are considered unlikely to be significant and therefore are proposed to be scoped out of the assessment.

Table 1 Socio-Economic Elements to be Scoped Out of the EIA

Impact	Receptor	Justification for Scoping Out of the EIA
Demolition and Construction		
Demand for GPs and A&E services	GP and A&E provision	The demolition and construction workers will be temporary and are not expected to have a significant effect on health provision of either GPs or the local A&E service. Prior to the start of work on site, the Applicant will be required to discharge planning conditions relating to construction and logistics management. The information set out for approval in respect of these aspects will demonstrate how the contractors will follow best practice throughout the demolition and construction works, thus minimizing the risk of accidents, and in turn any such minor impacts upon local healthcare facilities. It is therefore proposed to be scoped out of the EIA.

Impact	Receptor	Justification for Scoping Out of the EIA
Completed Development		
Housing provision	Current and future residents	The Proposed Development provides no housing and hence this effect is proposed to be scoped out of the EIA.
Change in demand for educational services	Educational services (current and future residents)	As the Proposed Development does not provide housing, no impacts on the availability of school places in the local area are anticipated. The children of workers at the Proposed Development are likely to be educated at schools located near to their places of residence and therefore this element of the assessment is proposed to be scoped out of the EIA.
Availability of healthcare services	GP & A&E provision (current and future residents and workers)	It is expected that workers at the Proposed Development (and their families) will continue to access primary healthcare facilities near to their places of residence. Though GP practices are permitted to register new patients living outside their catchment areas, they are not obliged to do so – particularly where there is already a shortage of capacity to serve the local resident population. In terms of A&E provision, a significant increase in admissions as a result of the operation of the commercial floorspace provided by the Proposed Development is not expected. It is therefore proposed that the impacts of the Proposed Development on the availability of healthcare services is scoped out of the EIA.
Access to play space	Current and future residents	As stated, the Proposed Development provides no housing and so is not expected to have a material effect on the residential population in the local area. The population yield calculator requires that 10m^2 of play space is provided for every additional child expected to reside at the Proposed Development. The levels of children present in the area are not expected to change, and so access to play space is proposed to be scoped out of the EIA.
Demand for other community facilities	Dentists, nurseries, leisure and other community facilities	It is not possible to undertake a quantitative assessment of the Proposed Development's impact on the capacity of dentists, nurseries, leisure and other community facilities in the same way as for schools and GPs surgeries. This is because the take up and usage of these types of facilities is non-statutory, varies and cannot be accurately predicted or measured. Use of these facilities varies amongst the population and can be more spatially disparate compared to schools and GP facilities, for which attendance is often based on location and proximity to these services. Demand for these facilities tends to therefore be met by the market. The effect of the Proposed Development (due to its scale and location) on these types of facilities is not expected to be significant and is therefore proposed to be scoped out of the EIA.
Introduction of Crime	Current and future residents	The Proposed Development comprises a commercial scheme only, to be occupied by private businesses, and will be designed to limit opportunities for crime and/or anti-social behaviour. The staff and visitors expected to arise as a result of the Proposed Development will increase natural surveillance which may have a minor beneficial impact upon crime through better design and greater visible presence on site, but it is not expected that this impact would be significant. Consequently, it is therefore proposed that this is scoped out of the EIA.

Methodology

13 The socio-economic assessment will, wherever possible, be appraised against relevant national standards such as those provided by Homes England (which replaced the Homes and Community Agency (HCA) in January 2018). Where no standards exist, professional experience and judgement will be applied and justified.

14 The assessment of socio-economic impacts will utilise a number of methodologies, data sources and assumptions. These are set out below:

- **Employment generation:** where flexibility is sought, or Class E uses are proposed, the assessment will define two scenarios – a minimum and a maximum employment generating scenario. The scenario applied will vary by effect so that a reasonable worst-case assessment is applied for all effects. For example, the minimum commercial scenario will be used to estimate jobs and worker spending impacts. Any such assumptions and scenarios will be clearly outlined in the socio-economic chapter;
- **Open space:** the assessment of the Proposed Development's population on existing provision of open space will be assessed based on the total population of the Proposed Development. Open space will be assessed within an 800m walking distance of the Proposed Development as specified in the GLA's Shaping Neighbourhoods: Play and Informal Recreation SPG[2];
- **Additional spending:** the assessment of spending likely to occur once the Proposed Development is complete, and the impact of this additional expenditure on the local economy includes the worker expenditure generated by the new employees who may buy goods and services locally.

15 Following this assessment, any required mitigation or monitoring shall be identified.

16 The ES chapter will conclude with a summary of the likely significant socio-economic effects.

[2] *GLA, 2011, Shaping Neighbourhoods: Play and Informal Recreation – Supplementary Planning Guidance*

Cumulative Effects

17 Consideration will be given to the potential for cumulative effects associated with the Proposed Development and other surrounding cumulative schemes on the receptors identified previously.

Conclusion

18 As noted above, it is concluded that the Proposed Development could potentially give rise to significant residual effects with respect to socio-economics; therefore, it is proposed socio-economics is **scoped in** to the EIA.

TRIUM

TOPIC SHEET

Townscape, Visual and Built Heritage Assessment

Introduction

1 It is considered that there is the potential for likely significant effects relating to townscape, visual and above ground built heritage receptors, and so this topic shall be **scoped in** to the EIA. The Townscape, Visual and Built Heritage Assessment ('TVBHA') will be carried out by the Tavernor Consultancy Limited.

2 The TVBHA will be presented in **Volume 2** of the ES and sufficient signposts will be included within the main text of the ES (**Volume 1**), to ensure readers will be aware of the location of the TVBHA.

3 Townscape, visual and built heritage assessments are separate, although related. The townscape and built heritage baseline analysis contributes to the scope of the baseline for the Visual Assessment – and the Visual Assessment of change to the content and character of views in turn informs the assessment of potential effects on townscape and built heritage assets.

4 The assessment of townscape effects will consider how the Proposed Development will affect the aesthetic and perceptual aspects of the townscape and its distinctive character. The visual assessment will consider the composition and character of views, including both protected views and representative views and how change is likely to be experienced by people as the visual receptors. As required by the NPPF, the effects on the heritage significance of built heritage assets will be considered in proportion to the value of each heritage asset and the susceptibility to change of the heritage asset and/or its setting. There will be no effects on the fabric of designated built heritage assets; all effects as a result of the Proposed Development will be on setting.

5 The ES shall:

- Define the townscape, visual and built heritage baseline conditions;
- Identify relevant townscape, visual and built heritage receptors;
- Assess:
  - The potential for townscape, visual and built heritage impacts throughout the demolition and construction works and as a result of the completed development and resultant townscape, visual and built heritage effects;
  - The likely significant townscape, visual and built heritage effects;
  - Any required mitigation or monitoring to address any likely significant adverse townscape, visual and built heritage effects; and
  - The potential for cumulative effects in relation to townscape, visual and built heritage with other agreed upon schemes in the surrounding area.

Baseline Conditions

Current Baseline Conditions

6 The study area will be centered on the site and limited to locations from which the site can be seen, or from which new buildings within the Proposed Development have the potential to result in significant townscape, visual and built heritage effects. Generally, the study area will be limited to a 500m radius. Based on visual

impact testing, it is judged that outside this area, while development on the site could be visible, effects would not generally be 'significant'. However, there are limited more distant areas of potential visual impact outside the study area, in particular across the open spaces of Regent's Park and Primrose Hill, where there may be significant townscape and built heritage effects due to the potential high visibility of the Proposed Development, the sensitivity of the intervening townscape and landscape, and the designation of London View Management Framework (LVMF) and Euston Area Plan (EAP) views. Areas outside the core 500m study area where potential significant effects are identified, for example Regent's Park and Primrose Hill, will be included in the assessments where appropriate.

7 The identification of the study area has been based upon:

- Site survey of the baseline townscape;
- The form, scale and massing of the Proposed Development in comparison to the existing Euston Tower on the site; and
- Visibility of the existing Euston Tower and the Proposed Development through Zone of Visual Influence (ZVI) mapping and visual impact analysis of areas of potential visibility identified in the ZVI.

8 The site is not within a designated conservation area and does not include any listed buildings. It is currently occupied by the unlisted 36-storey Euston Tower. The townscape to the north, east and west of the site, north of Euston Road is varied but largely post-war in character and includes the tall modern commercial quarter of Regent's Place, the post-war Regent's Park Estate and the ongoing redevelopment of Euston Station. To the south of Euston Road, the townscape is finer grained and more historic in character.

9 The site is located approximately 75m to the north of the LBC Fitzroy Square Conservation Area (CA), 200m to the north-west of the LBC Bloomsbury CA and 170m to the east of the LBC Regent's Park CA. Regent's Park is a Grade I listed landscape approximately 400m to the west of the site. The closest listed buildings to the site are Nos.48-52 Stanhope Street (Grade II) to the north of the site and Nos.15, 16, 17, 20, 21, 56, 58-62, 63-68 Warren Street (all Grade II) and Nos.159-161 Whitfield Street (Grade II), to the south, which are within 150m of the site boundary. There are numerous listed buildings within 500m of the site boundary including the Grade I listed Holy Trinity Church, Grade I listed Nash terraces fronting Regent's Park, Grade I and Grade II* listed buildings defining Fitzroy Square, and the Grade II* listed Church of St Mary Magdalene.

10 The Proposed Development will be visible in designated LVMF views, in the same location as the existing 1969 Euston Tower which is currently seen in several LVMF views, and in locally designated Euston Area Plan (EAP) views as well as in non-designated local townscape views.

Receptors

Townscape Receptors

11 An assessment will be made of the existing townscape of the site and surrounding area. This will be based on study of the historic development of the site and surrounding area with reference to the EAP Historic Area Assessment (2014), and study of the present-day condition of the area based on site visits.

12 This analysis will inform the division of the study area into Townscape Character Areas, i.e., geographical areas which have readily identifiable townscape characteristics in common. It should be noted that townscape character almost invariably forms part of a continuum and that character area boundaries are often not distinct. The impact of the Proposed Development on these townscape character areas will then be assessed, informed by views modelled in the Visual Assessment and supplementary views in the appendices to the TVBHA. The boundaries of the character areas will be identified in the relevant section of the TVBHA. The criteria for assessing townscape receptors are based on a number of factors, including the designation of the townscape and individual features within it.

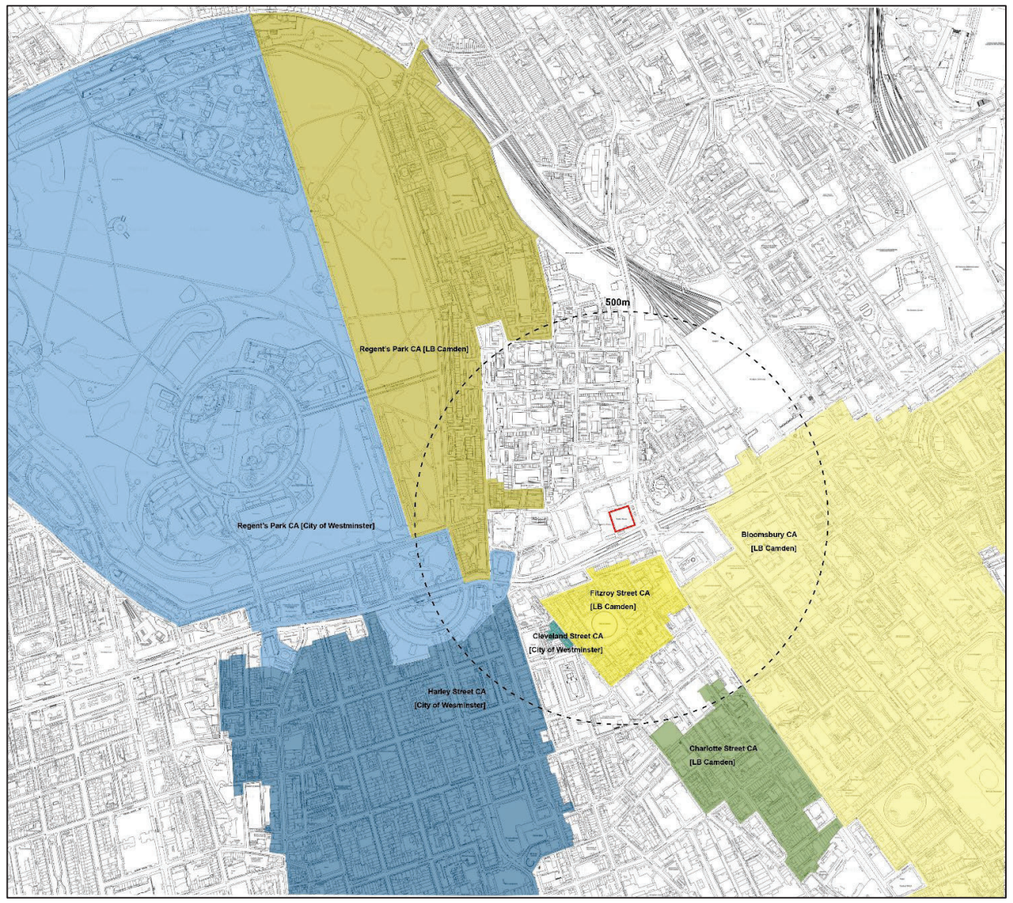
Visual Receptors

13 The baseline description will identify the people within the study area who will be potentially affected by changes in the views; these will be the 'visual receptors'.

14 The following viewing locations will be identified:

- Designated LVMF views including:
  - LVMF London Panoramas from Parliament Hill to Westminster (Assessment Points 2A.2 and 2B.1);
  - LVMF London Panorama from Primrose Hill to Westminster (Assessment Point 4A.2); and
  - LVMF River Prospects from Lambeth Bridge (Assessment Points 19A.1, 19A.2 and points between).
- Views that have been identified as significant, by the London Borough of Camden (LBC) or others, e.g. in relevant planning policy and guidance documents including relevant LBC Euston Area Plan views and views identified in local conservation area appraisals;
- Other locations or views of particular sensitivity, including those of or from sensitive built heritage assets, which will inform the built heritage assessment; and
- Representative townscape views from streets and open spaces.

Figure 1 Conservation Areas



15 Verified views for assessment will be selected in consultation with the LBC through pre-application discussion. The detailed location of each viewpoint will be carefully considered to be typical or representative of the view likely to be experienced by a visual receptor in this location. The views selected will allow a methodical 360-degree view analysis of near, middle and distant views of the Proposed Development on representative visual receptors in the area likely to be affected by the visibility of the Proposed Development. The visual assessment is not intended as an exhaustive assessment of all potential visual effects, but rather an assessment of a

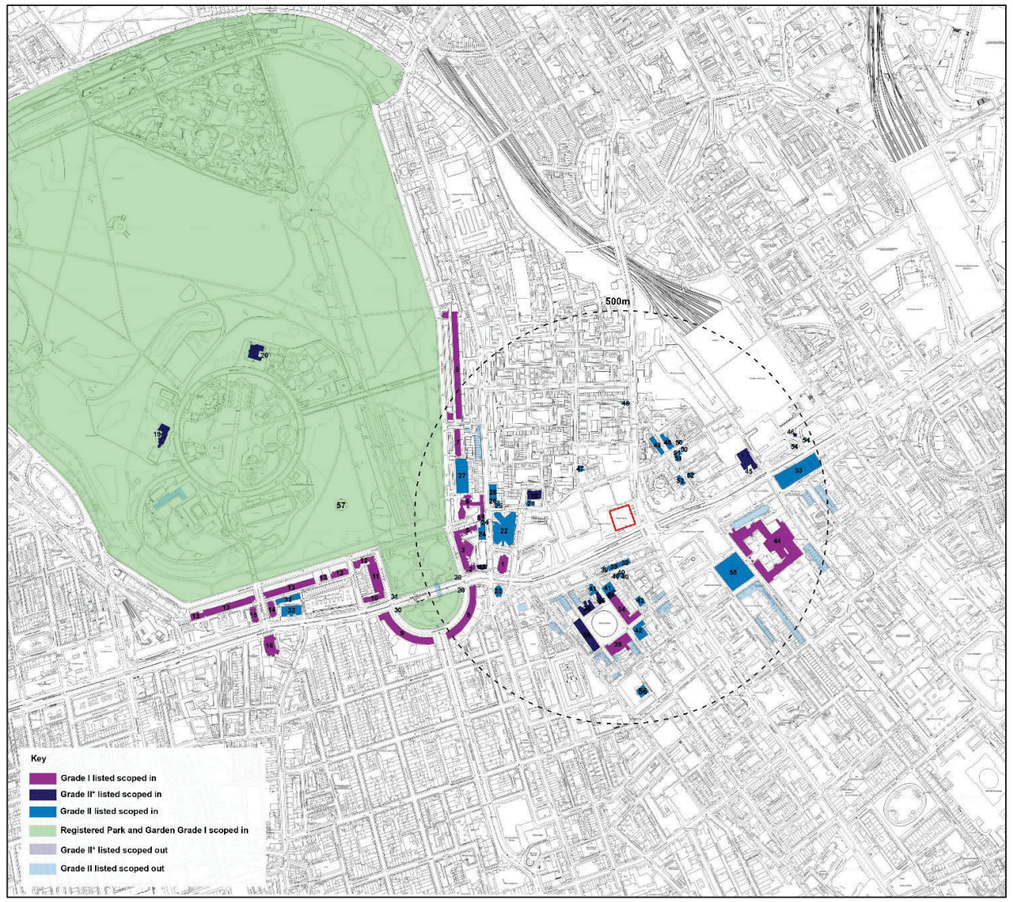
sufficient number of views from a variety of distances and directions that allow a proportionate assessment of changes to visual amenity.

16 A set of views for testing and potential inclusion in the TVBHA will be agreed with LBC officers. The split of wireline and render modelling will also be agreed with LBC officers during the pre-application period. A representative selection of verified views will be individually assessed in the visual assessment and additional verified and non-verified views (not individually assessed) will be included in the appendices to the TVBHA. These supplementary views will inform the visual, townscape and heritage assessments and will demonstrate the additional testing carried out of potential visual impacts identified during the ZVI mapping that has informed the radius of the townscape and built heritage study areas and the scoping in or out of designated heritage assets.

Built Heritage Receptors

17 The scale of the Proposed Development is limited by the Protected Silhouette of the Westminster World Heritage Site (WHS) seen in LVMF River Prospects from Lambeth Bridge. The Proposed Development will therefore not be materially taller than the existing Euston Tower on the site. For this reason, many of the designated built heritage assets in the 500m study area would not be significantly affected by the replacement of the existing Euston Tower with another tall building of equal height on the site and will be scoped out of the assessment. However, sensitive receptors will be identified where testing has shown potentially sensitivity to change in the architectural form, articulation or materiality of the Proposed Development. This may be due to proximity or particularly high sensitivity understood through baseline analysis and visual impact testing. A map of designated heritage assets to be included in the built heritage assessment is included as Figure 2.

Figure 2 Built Heritage Receptors



Potential Effects

18 The potential effects on townscape and visual receptors, as well as built heritage receptors, have been detailed in Table 1. The receptor, impact, and resultant effect have been described.

Table 1 Potential Townscape, Visual and Built Heritage Effects

Receptor	Impact	Potential Effect
Townscape receptors: Townscape Character Areas ('TCAs')	Addition of the Proposed Development. The built form and elevational treatment in comparison to the existing Euston Tower will be considered in relation to TCAs.	Permanent and/or temporary effects on the townscape quality and character of TCAs.
Visual receptors: The people experiencing the identified views	Changes to visual amenity as a consequence of the proposed built form, including form, massing and appearance in comparison to the existing Euston Tower, and potential changes to the perception of existing features in the view.	Permanent and/or temporary effects on the perception of local, medium and distant views.
Built heritage receptors: Designated built heritage assets	Changes to the settings of designated built heritage assets with potential consequential effects on the heritage significance of those heritage assets.	Permanent and/or temporary effects on the significance or ability to appreciate the significance of designated built heritage assets.

Methodology

19 The methodologies for the townscape and visual assessments and built heritage assessment are set out separately below. These assessments will take into account the nature of the existing physical fabric of the area, the settings of designated heritage assets in the vicinity of the site, the appropriateness of the form of the Proposed Development, and the architectural character and quality of its design. Structured, informed and reasoned professional judgement will be used to take account of quantitative and qualitative factors. This is widely accepted as best practice and has been based on an analysis of desk research and field assessment. It is recognised that the townscape character of London is one of contrasts, of historic and modern buildings, and that modern buildings of high design quality do not necessarily, or by definition, harm the character of historic townscape or views including historic townscape.

Townscape and Visual

Assessment Criteria

20 The assessment will follow the guidance set out in the Guidelines for Landscape and Visual Impact Assessment (GLVIA). It will entail consideration of the magnitude of impact in relation to the sensitivity of each receptor, resulting in a judgement on the significance of effect.

21 Different detailed elements of methodology apply to townscape assessment and visual assessment, but each follows the same assessment sequence:

1. Identify the receptors;
2. For each receptor, consider its 'value' and 'susceptibility to change' and combine those judgements to assess its sensitivity;
3. For each receptor, consider the size and scale of the change and its geographic extent to assess the magnitude of impact as the result of the Proposed Development; and
4. Combine the judgements of sensitivity of the receptor and magnitude of impact as a result of the Proposed Development in a matrix to assess the scale of the effect; for effects that are moderate or major in scale, also assess the nature (adverse, neutral or beneficial) of the effect.

22 Simple word scales are used as a means of summarising judgements at each stage of the assessment sequence described above, with detailed narrative describing the reasoning for each judgement in the accompanying text.

23 A more detailed description of assessment criteria and the assessment process is set out in **Annex A** of the EIA Scoping Report.

Built Heritage

Assessment Criteria

24 The assessments will follow the step by step guidance set out in *The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3* (Historic England, 2017) and the *Principles of Cultural Heritage Impact Assessment in the UK* (Institute of Environmental Management and Assessment, 2021). It will entail consideration of the magnitude of change in relation to the sensitivity of each receptor, resulting in a judgement on the significance of effects on the heritage significance of heritage assets in accordance with the NPPF.

25 The assessment sequence will be as follows:

1. Identify the receptors;
2. For each receptor consider its 'value' and 'susceptibility to change' and combine those judgements to assess its sensitivity;
3. For each receptor consider the size and scale of the change and its geographic extent to assess the magnitude of impact as the result of the Proposed Development; and
4. Combine the judgements of sensitivity of the receptor and magnitude of impact as a result of the Proposed Development in a matrix to assess the scale of the effect; for effects that are moderate or major in scale also assess the nature (adverse, neutral or beneficial) of the effect.

26 Simple word scales are used as a means of summarising judgements at each stage of the assessment sequence described above, with detailed narrative describing the reasoning for each judgement in the accompanying text.

27 A more detailed description of assessment criteria and the assessment process is set out in **Annex A** of the EIA Scoping Report.

Demolition and Construction

28 The scope of the townscape, visual and built heritage assessment in relation to the demolition and construction activities associated with the Proposed Development will take into account the same receptors as for the assessment of the completed and operational Proposed Development. However, due to the complexity in accurately predicting the constantly evolving numerous different visual changes during the demolition and construction process, and the temporary nature of the effects, verified views will not be prepared to inform the assessment and receptors will be assessed in broad qualitative terms informed by the views prepared of the completed Proposed Development. The extent and detail of the assessment will be proportionate to the temporary nature of the effects and be focused on potentially significant effects.

Completed Development

29 The Proposed Development will bring about change in the massing and character of the site. It is therefore expected that the Proposed Development will have effects, including likely significant effects, on the surrounding townscape, visual and built heritage receptors. These effects will be assessed in full in the TVBHA.

30 Consideration of townscape visual and built heritage effects will be integral to the design process and will be considered at each stage alongside consultation with the LBC and other key stakeholders.

Cumulative Effects

31 The cumulative visual assessment will consider the additional effect of the Proposed Development on top of those effects that would arise from other 'cumulative schemes' that have been proposed or consented; i.e. the effect of the Proposed Development if the cumulative schemes were already in place and formed a 'cumulative baseline'.

32 All cumulative schemes agreed for consideration in the ES will be modelled in the cumulative views within the visual assessment and supplementary views, which will inform the townscape and built heritage assessments.

TRIUM

TOPIC SHEET

Traffic and Transport

Introduction

1 A Transport Assessment (TA) will be prepared by Velocity Transport Planning and submitted as a standalone document as part of the Planning Application. The TA will assess the impact of the Proposed Development on the surrounding transport network to accord with the policy requirements of the London Plan[1] and the London Borough of Camden (LBC) Local Plan[2].

2 The Traffic and Transport ES chapter will be prepared based on information and analysis undertaken as part of the TA. It will provide sufficient information to enable the reader to understand the likely significant effects of the Proposed Development in relation to transportation and access. The methodology to be applied in the TA is subject to separate parallel scoping discussions with transport/highways officers at the LBC and Transport for London (TfL).

3 There is the potential for likely significant effects relating to traffic and transport, so this topic shall be **scoped in** to the EIA.

4 The ES shall:

- Define the traffic and transport baseline conditions; this includes the existing conditions and site accessibility, accident data and traffic data. A mixture of TfL data and new traffic surveys will be used.
- Identify relevant traffic and transport receptors;
- Assess:
  - The potential for traffic and transport impacts throughout the demolition and construction works and as a result of the completed development and resultant traffic and transport effects;
  - The likely significant traffic and transport effects;
  - The forecast traffic and transport impacts through the demolition and construction period;
  - Any required mitigation or monitoring to address any likely significant adverse traffic and transport effects; and
  - The potential for cumulative effects in relation to traffic and transport with other scoped in schemes in the surrounding area.

Baseline Conditions

Current Baseline Conditions

5 Euston Tower is located in Regent's Place in the LBC. Euston Tower is bounded north by Brock Street, a private pedestrianised area within Regent's Place; to the east the site is bounded by Hampstead Road (A400) and to the south by Euston Road (A501), both form part of the Transport for London Road Network (TLRN); and west by Regent's Place Plaza, which is also a private pedestrianised area within Regent's Place.

[1] *The London Plan (2021)*
[2] *London Borough of Camden; Camden Local Plan (2017)*

6 The basement within Euston Tower provides existing car and cycle parking. This basement is connected to the wider Regents Place Campus basement, which also provides a servicing yard used by Euston Tower and 10 Brock Street.

Pedestrian Network

7 Euston Tower is part of Regent's Place, which offers a pedestrian-friendly environment with largely pedestrianised streets, alleyways and plazas. Around the Euston Tower site there are wide footways, signalised pedestrian crossings with dropped kerbs and tactile paving.

8 Wayfinding facilities are placed strategically within and around the site to help pedestrians navigate journeys.

Cycle Network

9 As part of the development of the Central London Grid, a set of connected routes for cyclists is being developed across central London comprising a network of Quietways and Cycle Superhighway routes, as shown Figure 1.

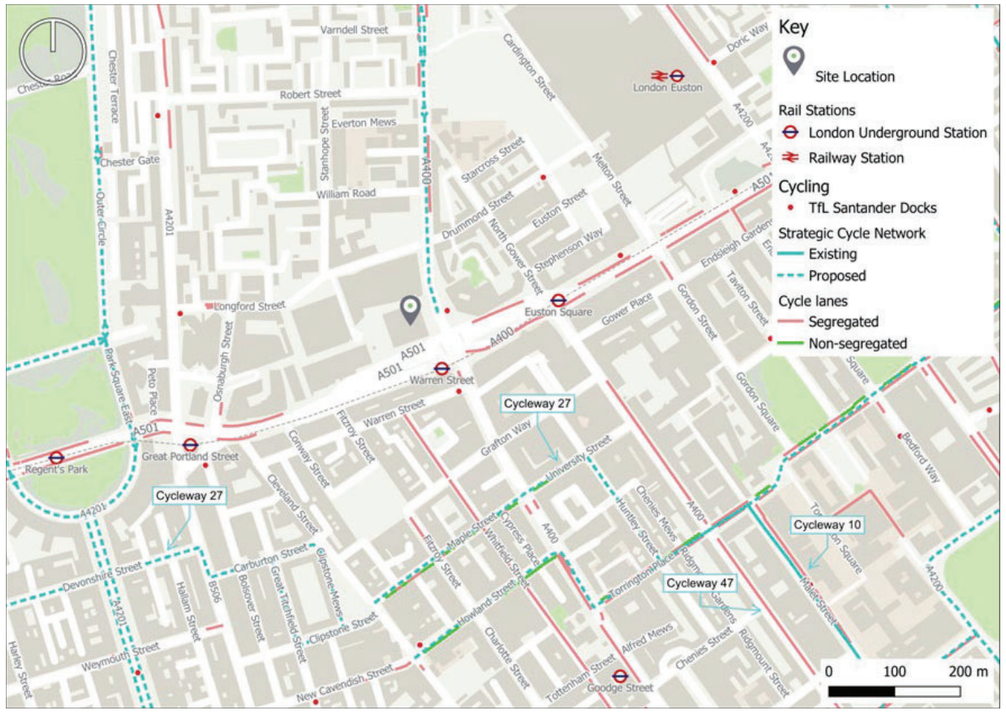
10 Quietway 3 (Q3), between Regent's Park and Gladstone Park, originates at the north-west corner of Regent's Park, some 2.9km north-west of the site and travels through St. John's Wood, South and West Hampstead, Kilburn, Willesden Green and Dollis Hill.

11 The north-south Cycle Superhighway (CS6) runs between Elephant & Castle to the south and King's Cross to the north (approximately 1.4km northeast of the site).

12 The cycle routes near to the site include Longford Street and Drummond Street, two of the many quieter local roads recommended for cyclists. To the south there are a network of routes that are signed or marked for use by cyclists and connect across Marylebone, Fitzrovia and within central London.

13 Additionally, the nearest TfL Santander bike docking stations are located to the east of the site on the eastern side of Hampstead Road and another station is located to the south of Euston Road on Warren Street.

Figure 1 Cycle Routes

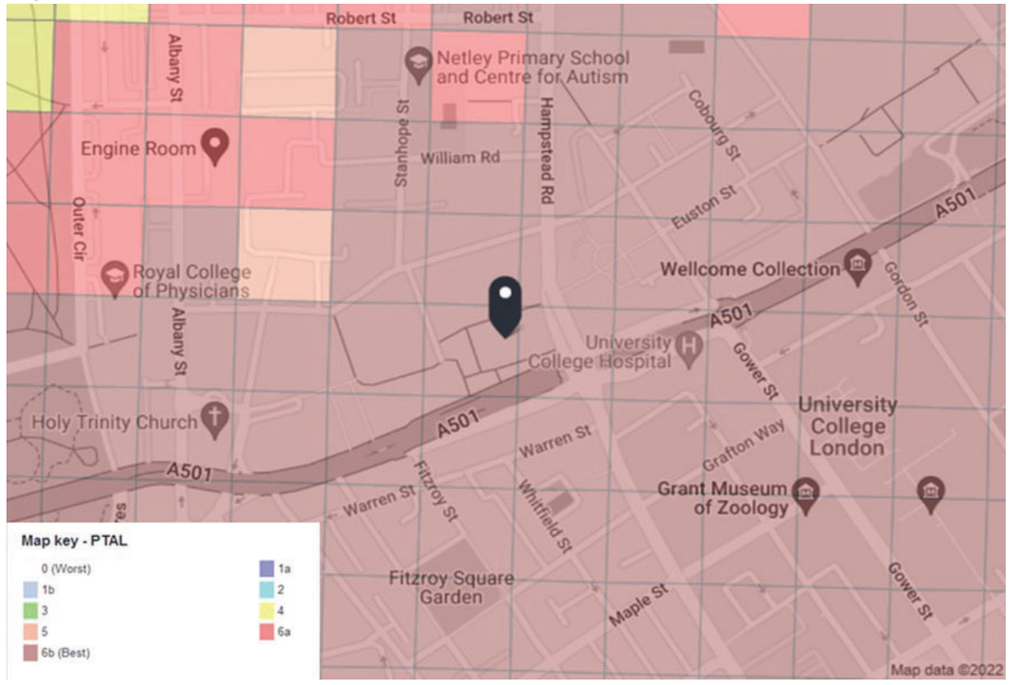


Public Transport

14 The Public Transport Accessibility Level (PTAL) of Euston Tower has been calculated using TfL's WebCAT. This assumes a walking speed of 4.8km per hour and considers rail stations within a 12-minute walk (960m) of the site and bus stops within an eight-minute walk (640m) as accessible.

15 The site has a PTAL rating of 6b. This is rated as 'Excellent' with 6b being the highest accessibility, as shown in Figure 2.

Figure 2 PTAL Map



Buses

16 The nearest bus stops are adjacent to the site on Hampstead Road and Euston Road. The local bus services provide approximately 143 buses per hour to various destinations across London including the City of London, London Bridge, Camden, Victoria, and Angel.

London Underground

17 There are six London Underground stations within a 960m walking distance of the site:

- Warren Street (Northern line and Victoria line);
- Euston Square (Hammersmith & City line, Circle line and Metropolitan line);
- Great Portland Street (Hammersmith & City line, Circle line and Metropolitan line);
- Regent's Park (Bakerloo line);
- Euston (Northern line and Victoria line); and
- Goodge Street (Northern line and Victoria line).

18 The frequency of services is shown in Table 1.

Table 1 London Underground Peak Hour Frequency

Line	AM Peak Hour	PM Peak Hour
Victoria	36	36
Northern Line	23	24
Hammersmith & City	6	6
Circle	6	6
Metropolitan	16	16
Bakerloo	22	21

19 Tottenham Court Road station which provides access to the Central Line and Elizabeth Line is located 1.2km to the south of the site.

National Rail

20 Euston Station is located a 450m walking distance of Euston Tower. Euston Station provides services to destinations in Scotland, north-west England, Wales and the West Midlands on services operated by Avanti West Coast Trains, London Northwestern Railway, West Midlands Railway and Caledonian Sleeper.

London Overground

21 Euston Station also provides access to London Overground services. A London Overground route terminates at Euston Station and serves Watford Junction via Queen's Park, Willesden Junction, Wembley Central and Harrow & Wealdstone.

22 There are 4 London Overground services in the AM peak and 4 in the PM peak.

Existing Local Highway Network

23 There is no public highway immediately north and west of the site. Longford Street and Drummond Street provide two vehicles access to the Regent's Place Campus basement:

- The Longford Street access is used to access various servicing yards and car parking including the servicing yard shared by Euston Tower and 10 Brock Street.
- The Drummond Street access is used to access car and cycle parking, including spaces that are within the Euston Tower basement.

24 The location of these is shown in Figure 3.

Figure 3 **Vehicle Access to Site**

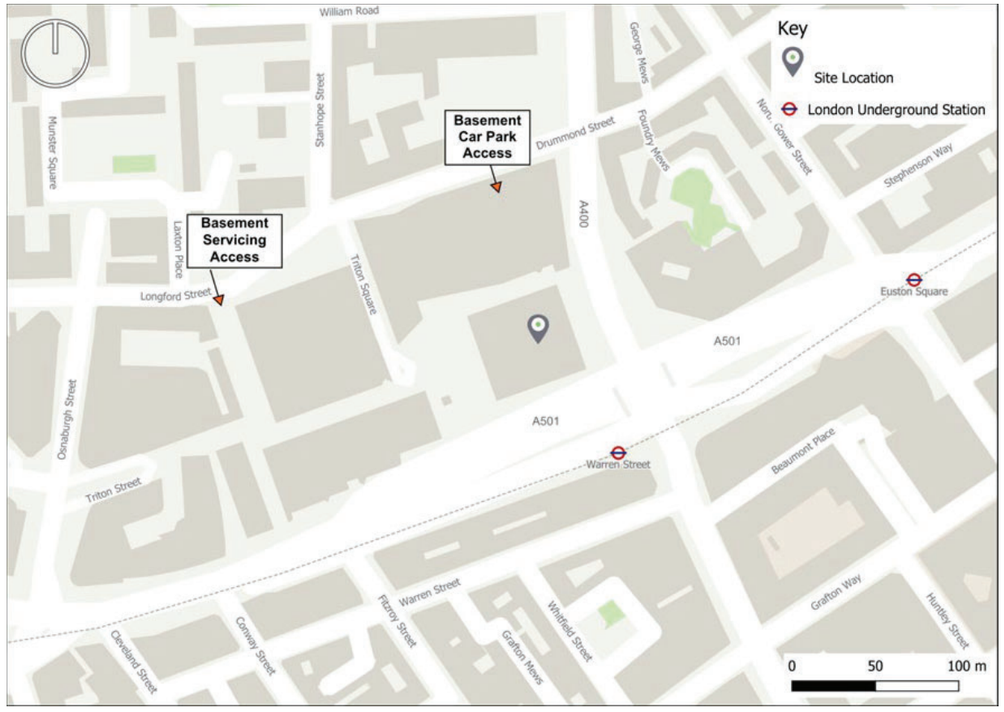
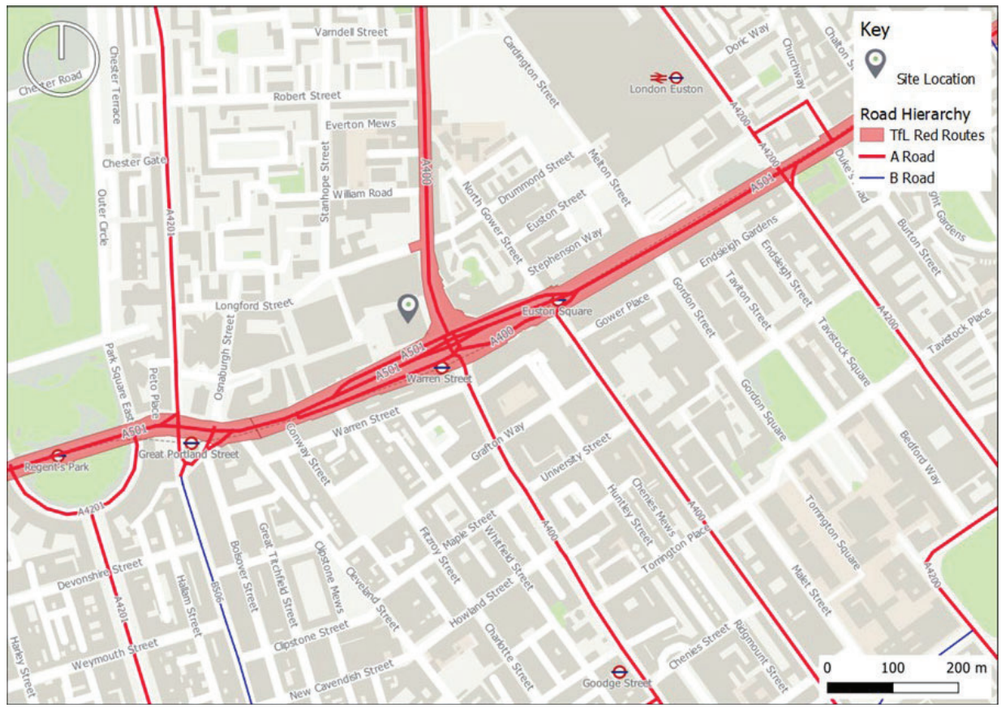


Figure 4 **Local Highway Network**



25 Longford Street continues as Drummond Street to the east and intersects with Hampstead Road. Hampstead Road forms part of the A400 that connects Charing Cross to Archway in north London.

26 The site is bounded by Hampstead Road to the east and Euston Road to the south , both of which form part of the Transport for London Road Network (TLRN).

27 Euston Road is part of the London Inner Ring Road, a 19km route formed by a number of major roads that encircle central London. It also forms the northern boundary of the London Congestion Charge (LCC) zone, but the road itself is not part of it.

28 The local highway network and road hierarchy in the vicinity of the site is shown in Figure 4. Euston Road and Hampstead Road form a signalised junction at the site's eastern boundary. Both are distributor roads that carry relatively high volumes of traffic.

Cycle Parking

29 Approximately 200 cycle parking spaces are provided in the Euston Tower basement. These are provided as Sheffield stands in several separate locations.

On-site Car Parking

30 Approximately 102 car parking spaces are provided within the Euston Tower basement.

Delivery and Servicing

31 A total of eight loading bays (two ten-metre and six eight-metre bays, plus offload space) are provided within the Regent's Place Campus basement that are shared by Euston Tower and 10 and 20 Brock Street servicing area. Platform lifts connect the loading bays to the Euston Tower basement and building core

Existing Baseline Data

32 The following traffic data locations and data sources are expected to provide the baseline traffic data:

- Euston Road – traffic survey to be undertaken in April 2023;
- Hampstead Road – TfL traffic data provided from 2022; and
- Drummond Street/Longford Street – traffic survey to be undertaken in April 2023.

33 Pedestrian data at the following locations is also being gathered and surveys will be undertaken in April 2023:

- Euston Road;
- Hampstead Road; and
- Brock Street.

Future Baseline Conditions

Future Baseline Traffic

34 The Future Baseline Scenario (Do Minimum) includes any changes which are committed to take place to existing conditions by the future design year.

35 Confirmation will be required from TfL and LBC on any cumulative development or highways schemes which need to be considered. The submitted Transport Assessments associated with cumulative schemes will be reviewed to identify the forecast and agreed levels of future traffic.

London Underground

36 As part of TfL's ongoing commitment to improving London Underground services, the following upgrades to stations and London Underground lines in the vicinity of the site are planned:

- New signaling for the Circle, Hammersmith & City, District, and Metropolitan lines (Four Lines modernisation).

37 The new S-stock trains are operational on the Circle, Hammersmith & City, District and Metropolitan lines. When the new signalling system is in place and operational (planned for 2023), the Circle and Hammersmith & City lines will see a 65% increase in capacity. This will mean that both lines will be able to carry 17,000 additional passengers per hour. In addition, the District line signalling will increase capacity on the line by 24%, equating to 10,000 additional passengers per hour. When the upgrade of the Metropolitan line is complete, the line capacity will increase by 27%, meaning that an additional 9,500 passengers can be accommodated per hour.

High Speed 2

38 High Speed 2 train services will link London to Birmingham and the West Midlands and, later, from Birmingham and the West Midlands to Leeds and Manchester will depart from Euston station. No opening date for Phase One has been set yet, but services are expected to commence in the late 2020s.

39 The proposals include a new ticket hall with direct connections to Euston Square station and from HS2 platforms and Euston station will have fully accessible step-free access from street level to platform level.

Receptors

40 The identified sensitive receptors are:

- People making journeys within the relevant study area; pedestrians, cyclists, public transport users and vehicle drivers/passengers. Existing receptors are those persons currently making journeys; and
- Newly introduced receptors will be those travelling to and from the Proposed Development, primarily the new office workers at the site.

41 The impacts relevant to transport are:

- Increases in HGV movements and changes to access during the demolition and construction of the Proposed Development; and
- Additional trips, by active modes and public transport, during the operation of the completed and occupied Proposed Development.

42 The Institute for Environmental Management and Assessment (IEMA), *'Guidelines for the Environmental Assessment of Road Traffic, 1993'*[3] sets out a number of potential environmental effects which may require assessment. Those which relate to the traffic and transport ES chapter are summarised below:

- Severance;
- Delay;
- Amenity;
- Fear and Intimidation;
- Accidents and Safety; and
- Hazardous Loads.

43 The environmental effects noted above may have different impacts on the demolition, construction and operational phases of the Proposed Development, which are discussed separately later in this section.

Scope of Assessment

44 The technical scope for each potential environmental effect identified for the construction and operational stages is discussed below, setting out whether the effects are scoped in or scoped out and the basis for that judgement.

[3] *Institute of Environmental Management and Assessment (IEMA), 'Guidelines for the Environmental Assessment of Road Traffic' (1993).*

The initial transport strategy for the Proposed Development has informed the judgement with the key features being:

- A reduction in the amount of car parking (c 100 spaces) such that the scheme becomes car-free other than accessible parking spaces;
- A significant provision of cycle parking spaces and supporting active travel facilities;
- Retention of the shared servicing yard accessed via Longford Street; and
- Retained and improved pedestrianised space and footways surrounding the site.

Severance

45 Severance is defined by the 'IEMA 1993' guidance in paragraph 4.27:

46 *"Severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery. The term is used to describe a complex series of factors that separate people from places and other people. Severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by the road itself. It can also relate to quite minor traffic flows if they impede pedestrian access to essential facilities".*

47 The usual threshold for a non-negligible severance effect is a 30% change in vehicle flow or HGV flow on a link. This can be used as a benchmark when considering whether or not severance should be scoped in or scoped out. This can also be used to inform the extent of any assessment.

48 During the demolition and construction period, the Proposed Development could change perceptions of severance. Although Euston Road and Hampstead Road are relatively heavily trafficked, they would experience additional HGV volumes during the demolition and construction phase. Drummond Street, which provides access to the basement servicing area, may also experience additional HGV volumes during the construction phase. Severance will be assessed along Euston Road and Hampstead Road during the demolition and construction works.

49 The Proposed Development is not expected to result in changes which could detrimentally affect perceptions of severance during operation. The development will be car-free and will remove existing parking, and although servicing demand will increase, it will not affect perceptions of severance during operation. Assessments of severance are therefore scoped out for the complete and operational Proposed Development.

Delay

50 The 'IEMA 1993' guidance references potential delays to drivers and pedestrians. Users of other modes can also experience delays, such as cyclists and those travelling by public transport.

Pedestrian and Cyclist Delay

51 Pedestrian and cyclist delays may change due to an increase in pedestrian or cyclist volumes and network changes such as footway width or pedestrian crossings.

52 During the demolition and construction period, the Proposed Development could change perceptions of pedestrian and cyclist delay. There may be a need to narrow footways surrounding the site to facilitate the demolition and construction works.

53 The Proposed Development could result in changes which affect perceptions of pedestrians and cyclist delays during operation because the volume of pedestrians and cyclists is expected to increase. However, as there are no planned material changes to the existing highway network, a qualitative discussion of pedestrian and cyclist delays will be included within the traffic and transport ES chapter. A detailed quantitative review is scoped out to assess the development in operation, instead being supplemented by a qualitative discussion.

54 Assessment of pedestrian delays during both the construction and operational stages will be provided within the ES chapter. This will be based on pedestrian comfort analysis that will be undertaken as part of the TA.

Driver and Bus Delay

55 During the demolition and construction period, the Proposed Development is not expected to result in changes significantly affecting perceptions of driver/bus delay. The volume of vehicular construction trips is expected to be low relative to the capacity of local roads and would also be managed as part of the Construction Logistics Plan (CLP). A qualitative commentary reviewing driver/bus delays associated with any off-site highway works will be provided within the ES chapter, but a detailed quantitative assessment is scoped out for the demolition and construction assessment.

56 The Proposed Development is not expected to result in changes affecting perceptions of driver/bus delays during operation. The number of vehicular trips expected to be generated by the complete and operational Proposed Development will be minimal due to the car-free nature of the scheme. No speed limits on the existing highway network are expected to be changed. No changes to existing bus routes are anticipated as a direct result of the Proposed Development. Therefore, the assessment of driver/bus delay is scoped out of the ES chapter.

Rail Delay

57 Rail delay, as experienced by passengers of the Underground and National Rail, could change due to changes to station or rail service capacity or volumes, for instance, if a station or rail service becomes congested.

58 During the demolition and construction period, the Proposed Development is not expected to result in changes which would significantly affect perceptions of rail delay and is therefore scoped out of the EIA.

59 Given the significant local public transport provision during operation, the Proposed Development is not expected to result in changes which would significantly affect perceptions of rail delay. The assessment of rail delay is therefore scoped out of the EIA.

Amenity, Fear and Intimidation

60 As set out within 'IEMA 1993' guidance, amenity, fear and intimidation broadly relate to the pleasantness of a journey and is generally affected by the availability of pedestrian/cyclist provisions and the flow of vehicle and HGV traffic.

61 During the demolition and construction period, the Proposed Development could change perceptions of amenities, fear and intimidation. While the change in HGV activity relative to the baseline is unlikely to be perceptible, footway narrowing may be required. Qualitative assessment of amenities, fear and intimidation are therefore scoped in for the demolition and construction period.

62 The Proposed Development will not result in any significant changes to the public realm in terms of transport and access once operational and is to be car-free. As such amenity, fear and intimidation are therefore scoped out for the operational stage assessment of the EIA.

Accidents And Safety

63 The potential for changes to accidents and safety can relate to the increased use of the transport network; however, the greatest potential for change relates to more fundamental street and junction layout changes, such as new access or pedestrian/cyclist crossing.

64 During the demolition and construction period, the Proposed Development is not expected to result in changes which could affect accidents and safety. Traffic changes arising from the demolition and construction of the Proposed Development will be low and unlikely to be perceptible relative to baseline conditions. Road safety would also be further managed and mitigated through the Construction Logistics and Cycle Safety (CLOCS) scheme and the use of contractors registered on the Considerate Constructors Scheme. Accidents and safety are therefore scoped out for the demolition and construction period assessment.

65 The Proposed Development is not expected to result in changes which could affect accidents and safety during operation. No major changes to the road network are envisaged and the servicing strategy will minimise the potential for vehicle and pedestrian/cyclist conflict. Accidents and safety are therefore scoped out for the operational stage assessment.

Hazardous Loads

66 Hazardous loads are discussed in paragraph 4.43:

"Some developments may involve the transportation of dangerous or hazardous loads by road and this should be recognised within any Environmental Statement. Such movements should include specialist loads which might be involved in the construction or decommissioning phases of the development, in addition to movement associated with the operation of the establishment"

67 The Proposed Development is not expected to generate or attract hazardous loads during the demolition and construction works. Hazardous loads are therefore scoped out of the demolition and construction period assessment.

68 The Proposed Development may generate or attract hazardous loads due to the potential laboratory use of part of the Proposed Development. The number of deliveries of hazardous loads is expected to be very low, and all suppliers will follow the UK Transport Legislation, regulations and agreements[4] required for the transportation of hazardous loads. Hazardous Loads are therefore scoped out for the operational stage assessment.

Mitigation

69 Mitigation measures integral to the Proposed Development (embedded mitigation) will form part of the transport strategy. The embedded mitigation measures are typical of development of this nature and include management plans required by planning policy secured by a planning condition, expected to include:

- A Construction Logistics Plan (CLP) to manage the routing and arrival profile of construction vehicles which will minimise disruption to the surrounding area and, in particular, to pedestrians and cyclists;
- A Travel Plan (TP) focusing on the promotion of cycling; and
- A Delivery & Servicing Plan (DSP) sets the delivery strategy and minimises/manages servicing demands.

70 These documents will be appended to the TA.

Summary of Scope of Assessment

71 A review of the potential effects of the Proposed Development has been undertaken for both the demolition and construction works and one complete and operational. The Proposed Development will result in minimal changes to the transport network. Typically, embedded mitigation measures will be in place to manage potential adverse effects and secured through a planning condition.

Table 2 Summary of Scope

Effect	Receptor	Demolition and Construction of the Proposed Development	Completed and Operational Development
Severance	Pedestrians, cyclists	Scoped In	Scoped Out
Pedestrian and Cyclist Delay	Pedestrians, cyclists	Scoped In	Scoped In
Vehicle and Bus Delay	Car drivers and passengers, bus passengers	Scoped In	Scoped Out
Rail Delay	Rail passengers	Scoped Out	Scoped Out
Amenity, Fear and Intimidation	Pedestrians, cyclists	Scoped In	Scoped Out
Accidents and Safety	All modes	Scoped Out	Scoped Out

[4] *ADR 2023 - Agreement concerning the International Carriage of Dangerous Goods by Road*

Effect	Receptor	Demolition and Construction of the Proposed Development	Completed and Operational Development
Hazardous Loads	All modes	Scoped Out	Scoped Out

Methodology

72 A separate TA will be prepared in relation to the Proposed Development. The ES chapter will be prepared based on the TA, but this ES chapter will provide sufficient information to enable the reader to understand the likely significant effects of the Proposed Development in relation to traffic and transport. The methodology to be applied in the TA is subject to separate but parallel scoping discussions.

Cumulative Effects

73 A cumulative effects scenario will be considered and is expected to include those nearby developments which have planning permission (or committee resolution to grant consent) and that the local planning authority reasonably expects to be constructed by the assessment year. This assessment will also be subject to TA scoping discussions.

74 The changes to existing conditions arising as a result of cumulative schemes (which will define the baseline scenario) will be taken from either the TA supporting those schemes, data held and provided by the relevant highway authorities, by a first principles review or by any other methodology as may be agreed with the relevant highway authorities.

TRIUM

TOPIC SHEET

WIND MICROCLIMATE

Introduction

1 It is considered that there is potential for significant effects relating to wind microclimate and this topic will be **scoped in** to the EIA. The wind microclimate assessment will be undertaken by Arup.

2 The ES will:

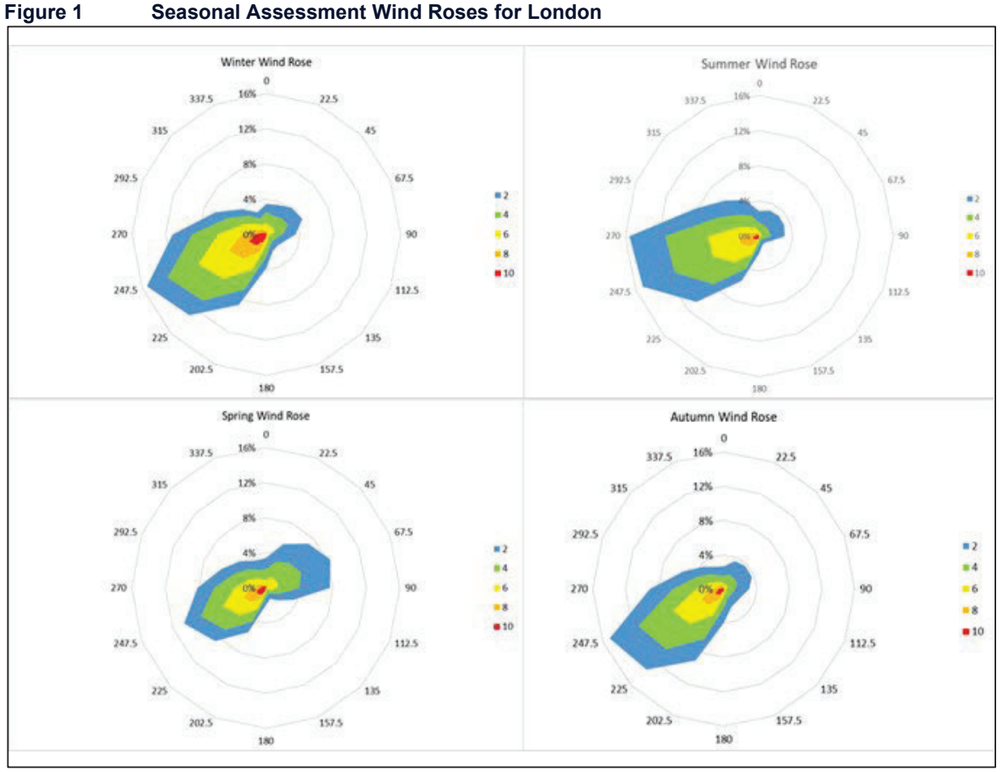
- Define the baseline wind conditions;
- Identify relevant wind microclimate receptors;
- Assess:
  - The potential for wind microclimate impacts throughout the demolition and construction works, and as a result of the completed development;
  - The resultant likely significant wind microclimate effects;
  - Any required mitigation or monitoring to address any likely significant adverse wind microclimate effects; and
  - The potential for cumulative effects in relation to wind microclimate with other agreed upon cumulative schemes in the surrounding area.

Baseline Conditions

Current Baseline Conditions

3 The strength and directionality of the winds at the site are fundamental aspects of the environmental wind assessment. The wind statistics for London are based on peer reviewed historical wind data obtained from Holborn Weather Centre. The wind data for London was obtained from Holborn Weather Centre and was peer reviewed for the Lawson LDDC Criteria. It has been used to inform the established assessment criteria used for the wind microclimate assessment as discussed in this topic sheet. These wind statistics are corrected for conditions over the site. Figure 1 shows the wind roses per season for the London area.

Figure 1 Seasonal Assessment Wind Roses for London



4 The key aspects of the wind climate in London are as follows:

- West and west-south-west winds are the most frequent and strongest winds at all times of the year. These winds are relatively warm and wet. Most cases of adverse wind conditions due to strong winds around buildings are caused by these winds;
- North-east winds are almost as common as the south-west winds during the winter months but are weaker. They are often associated with cold dry conditions. North-east winds can be more unpleasant than suggested by their strength due to the lower than average air temperature; and
- South-east winds are generally warm and light and are rarely associated with adverse ground level wind conditions.

5 The areas within and around the Proposed Development will be accessible by pedestrians at all times of the year. Therefore, the environmental wind assessment will be based on the 'worst season' (typically the winter season) for areas that will be accessible all year round, and summer season for areas typically only used in summer (i.e. flexible amenity space). Measurements will be taken 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. The assessment will consider 16 wind directions evenly spread at 22.5 degree intervals. This is slightly more refined than the original Lawson LDDC criteria to better capture the impact of prevailing winds. The baseline results from the wind tunnel will be combined with long-term meteorological climate data for the London area to understand the baseline conditions specific to the site. Testing in the wind tunnel will be conducted in the absence of any hard or soft landscaping in the first instance, in order to provide a least sheltered, worst-case result.

Receptors

6 Pedestrian safety (in relation to strong winds or safety/distress criteria) is assessed in the wind microclimate assessment as well as pedestrian comfort. The areas that pedestrians are likely to use within and around the Proposed Development are assessed as the sensitive receptors for the assessment. Cyclists and vehicles are also considered as sensitive receptors in the wind assessment, at receptor locations that they would typically use.

7 Onsite sensitive receptors can include building entrances, public/pedestrian routes, outdoor amenity spaces (seating and play areas), public terraces or balconies. Offsite sensitive receptors can include thoroughfares, building entrances, waiting areas such as bus stops and pick-up/drop-off points, pedestrian crossings, retail frontages and outdoor amenity spaces.

Potential Effects

Demolition and Construction

8 There will be no assessment of the wind environment within or around the Proposed Development during the demolition and construction scenario. This is because wind mechanisms from developments do not fully develop until the external cladding is installed on the buildings. Additionally, the activity on-site during this time (i.e. construction activity) is temporary, transient, and less sensitive to wind conditions (due to protection from site hoarding, and site access being restricted to site workers).

9 It is considered that the complete and operational Proposed Development would represent the worst-case wind conditions, and that this final massing will eventually be achieved as the demolition and construction works take place until completion.

Completed Development

10 Undesirable wind speeds can make spaces uncomfortable or unsafe for pedestrian use. The introduction of the Proposed Development's massing onsite will, therefore, have the potential to influence the wind conditions on and surrounding the Proposed Development.

11 The potential wind microclimate effects associated with the Proposed Development are considered to be undesirable wind speeds at ground and publicly accessible levels of the Proposed Development, including entrances, publicly accessible podium/terrace levels, thoroughfares and amenity spaces, surrounding buildings (including entrances), thoroughfares around the surrounding buildings, pedestrian junctions, bus stops, cycle lanes and nearby areas accessible to the public.

12 Adverse wind microclimate conditions can be responsible of a degradation of the usability of outdoor spaces depending on their intended use.

13 High levels of windiness can also cause difficulties of staying upright for the general public, especially for the less-abled bodied and cyclists.

14 Appropriate levels of windiness near building entrances are important to ensure a safe transition from conditions inside to outside and to ensure that doors can be operated safely and reliably.

Methodology

15 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 public realm, it is important to avoid undesirable wind speeds being generated at ground and publicly accessible elevated levels.

16 The wind microclimate assessment will therefore quantify the potential changes to the local wind environment (both onsite and within the surrounding area) in terms of pedestrian amenity and public open space and quantify these in relation to their 'usability' for a range of pedestrian and amenity activities as set out above at paragraph

7, as defined by the well-known and established Lawson criteria (LDDC version) (shown in Table 1 of this topic sheet).

Initial Testing and Design Guidance

17 A qualitative desk study aided by high-level Computational Fluid Dynamic (CFD) simulations will be undertaken during the design process before the scheme is fixed to ensure that critical locations for wind tunnel measurements are identified and to qualitatively assess the environmental wind conditions that may affect pedestrians and cyclists in and around the Proposed Development. The baseline will also be assessed through CFD simulations and will be used to identify and minimise areas of potentially excessive windiness, and to provide advice on likely suitable positions and size of landscaping elements, possible mitigation strategies, as well as preferred locations of doors, pedestrian pathways, and outdoor areas. This will be supplemented by wind tunnel studies which will be used to explore alternatives for mitigation in more detail.

Demolition and Construction

18 As discussed in paragraphs 8 and 9, no detailed assessment of the wind environment will be performed around the Proposed Development during the demolition and construction works.

Completed Development

19 Wind tunnel tests will be carried out to quantify conditions around the existing site (baseline) and the Proposed Development and further develop the scope and design of any necessary mitigation. Tests will be undertaken using a 1:300 scale model of the Proposed Development, covering a full-scale radius of 360-400m (depending on the impact of building upstream). The scale model of the Proposed Development will be constructed and tested in a boundary layer wind tunnel test facility.

20 Gust and mean speeds will be measured in key locations around the Proposed Development using "*Irwin probe*" anemometers. Measurements will be taken in areas of wind-sensitive activities (as per paragraph 7) or where significant windiness is expected due to the geometry and exposure of the Proposed Development. For each test configuration, wind speeds will be measured for 16 equal increments of wind directions.

21 Levels of windiness will be compared to the intended future usage using the Lawson LDDC criteria for pedestrian comfort and distress (safety) as per paragraphs 23, 24, and 25.

22 Comfort and distress (safety) conditions will be reported together on figures with additional photographs of the testing arrangements and any significant mitigation features.

23 Comfort thresholds are shown in Table 1 below. If the measured wind conditions exceed the threshold wind speed for more than 5% of the time (whether that is seasonally or annually), then they are unacceptable for the stated pedestrian activity and the expectation is that there may be complaints of nuisance or people will not use the area for its intended purpose.

Table 1 Lawson LDDC Criteria, Comfort

Comfort Criteria	Key	Threshold 5% speed (m/s)	Description
Long Term 'Sitting'		4	Regular use for reading a newspaper, eating, and drinking
'Standing' or short term 'Sitting'		6	Bus stops, window shopping, building entrances and parks
Walking or 'Strolling'		8	Thoroughfares and general areas of walking and sightseeing
Business 'Walking'		10	Areas where people are not expected to linger

24 As a mixed-use scheme, the target wind environment onsite would usually include the following activities:

- 'Sitting' for amenity spaces (in the summer months) - A mixture of sitting and standing may be tolerable where no seating provisions are specifically provided, and in private spaces;
- 'Standing'/entrance conditions outside building entrances, and pick-up/drop-off points etc. (throughout the year); and
- 'Strolling' for most of the year and 'Business Walking' in the worst case for thoroughfares and general areas of transit for members of the public.

Table 2 Lawson LDDC Criteria, Distress (Safety)

Distress Criteria	Key	Description
'General Public Access'		Suitable for access by General Public and Cyclists
'Able Bodied Access'		Unsuitable for General Public access during strong winds. Restrictions may be required.

25 Strong winds are reported for exceedances of 15m/s (to account for less able-bodied people or vulnerable users such as cyclists) or 20m/s (for able bodied people) for more an 0.022% of the year (or above approximately 2 hours).

Assessment Configurations

26 Four configurations will be tested within the wind tunnel as set out below:

- **Configuration 1:** Existing site (baseline scenario) with the existing surrounding buildings and landscaping;
- **Configuration 2:** Proposed Development with the existing surrounding buildings (excluding proposed landscaping);
- **Configuration 3:** Proposed Development with the existing surrounding buildings (including proposed landscaping and wind mitigation); and
- **If Relevant - Configuration 4:** Proposed Development with cumulative surrounding buildings (including proposed landscaping and wind mitigation).

Cumulative Effects

27 The wind conditions across the site and the immediate surrounding area (within approximately a 360-400m radius of the site) with cumulative schemes in place will be quantified during the wind tunnel tests using the methodology described above.

28 A list of cumulative schemes to be considered is included within **Annex C** of this scoping report. At the time of scoping, no cumulative schemes are located close enough to the site or are in an area which would interact with the Proposed Development, and so no cumulative assessment is anticipated.

Annex E: Scoped Out Topic Sheets

TOPIC SHEET

Archaeology

Introduction

1 A Baseline Archaeological Desk Based Assessment (DBA) has been prepared by MOLA to inform this topic sheet and has been provided as **Annex F** of this EIA Scoping Report. Based on the results, it is considered that the potential for significant effects relating to Archaeology for the Proposed Development is minimal.

2 This topic is **scoped out** of the EIA.

Baseline Conditions

3 The site does not contain any nationally designated (protected) heritage assets, such as World Heritage sites, Scheduled Monuments, Listed Buildings or Registered Parks and Gardens. A 500m radius study area around the site's centre point was considered by professional judgement[1] as a sufficient size to provide an evidence-base to establish the archaeological character of the site. Within this study area there are no World Heritage sites or Scheduled Monuments. The Grade I Registered Regent's Park and Garden is 400m to the west of the site. The nearest Listed Building is the Grade II Listed Numbers 63–68 Warren Street and attached railings, 80m to the south of the site.

4 The site is not in an Archaeological Priority Area (APA). The Tier 2 Regents Canal and Rail Infrastructure APA is 450m north-west of the site. The Tier 3 Regent's Park APA is 400m to the west of the site.

5 There are no known burial grounds in the site. The nearest burial ground is St James's Garden cemetery, 300m to the north-east of the site.

6 The topography of the site is relatively flat with levels recorded between 27.6m and 27.7m Above Ordnance Datum (AOD). According to British Geological Survey (BGS) digital data the geology of the area comprises Thames Gravels of the Lynch Hill Formation. Lynch Hill gravels are known to have potential for isolated finds of Palaeolithic stone tools.

7 Greater London Historic Environment Record (GLHER) data was ordered, and received on 17th February 2023 (GLHER Licence 17627) and has been used to inform this topic sheet as summarised below.

8 One previous archaeological investigation has been undertaken on the site. In December 2005, a watching brief was carried out by Museum of London Archaeological Service (MoLAS). Work on a new loading bay was monitored during the redevelopment of the underground car park (Site code RPL05). No archaeological remains were observed, and it was concluded that within its footprint the basement had already removed any archaeological remains previously present, down to natural deposits.

9 Within the 500m radius study area, 11 archaeological investigations have taken place, and it is considered that the archaeology of the area is reasonably well understood. Most of these investigations recorded either no archaeological features or post-medieval remains of low significance. Two investigations have recorded remains

[1] *The study area radius is determined by MOLAs understanding, experience, and what the GLHER and Greater London Archaeology Advisory Service (GLAAS) guidance states for search radius. 500m is the maximum search radius recommended for Inner London projects.*

from earlier periods. At 250 Euston Road, 80m east of the site, an excavation revealed a stone garderobe pit containing 16th-century deposits, together with yard surfaces and fragments of walls on the site of later-medieval Tottenhall Manor House (Tottenham Court). Some early-medieval pottery was also found.

10 Remains from the prehistoric period recorded in the 500m study area comprise one possible piece of Palaeolithic struck flint recovered at University College Hospital (80m south-east of the site) and two findspots of Neolithic polished stone axes. Any prehistoric remains would likely be restricted to isolated stone tools. The site was located away from known settlements and roads during the Roman and early medieval periods, and only isolated finds from these periods are recorded in the study area.

11 During the later-medieval period the area of the site was part of the Manor of Tottenhall: the manor house was located approximately 80m to the east of the site. Remains associated with the manor house were recorded during the excavation at 250 Euston Road.

12 Rocque's map of 1746 shows the site in fields just to the north of gardens with a number of small buildings at the junction of the present day Euston and Hampstead Roads. The area of the site was site was developed as terraced houses in the late 18th/early 19th century.

13 The current building was constructed in the 1960s, including the basement which occupies the entirety of the site.

Discussion for Scoping Out

14 The design of the Proposed Development is ongoing; however, it is anticipated to comprise the demolition of a majority of the existing structure on-site, with retention of key core elements and basement, and the construction of a new office-led, mixed-use development including laboratory enabled floorspace. The Proposed Development is likely to consist of a ground plus 36-storey building (the same height as the current building on site), an extension to the current basement as well as improved public amenity and landscaping.

15 The identification of physical impacts on buried heritage assets within the site takes into account any activity which would entail ground disturbance, for example site set up works at basement depth and the construction of deepened basements and new foundations.

16 The site is not in an APA. The following below-ground heritage potential has been identified for the site: Prehistoric remains – the Lynch Hill gravels are noted for occasional *in situ* Palaeolithic artefacts at depth within the fine-grained interglacial lenses, but their likely presence is very difficult to predict. There is a low to moderate potential for isolated stone tools within the gravels, of low heritage significance.

17 Intrusive activities associated with the Proposed Development, including the deepening of the existing basement, could have the potential to remove archaeological remains. However, the previous watching brief on the site recorded no archaeological features at the site. All archaeological remains within the site's footprint will have been removed by the construction of the existing basement to its formation level. In view of the above, likely significant effects relating to archaeology are not expected and archaeology can be scoped out of the ES. An Archaeological Desk-based Assessment including an indicative assessment of any impacts of the Proposed Development on archaeology has been prepared and forms **Annex F** of this EIA Scoping Report.

Mitigation Measures

18 In view of the low potential of the site to contain significant archaeological remains, further investigation is not anticipated to be required in relation to the determination of any future planning consent. Dependent on the exact scale and nature of any excavation and basement works, an archaeological watching brief way be required during these works to ensure that any previously unrecorded archaeological assets present, are not removed without record. If required, it is anticipated this would be secured via a suitably worded planning condition.

Conclusion

19 In view of the above, likely significant effects relating to archaeology are not expected and archaeology can be **scoped out** of the ES. An Archaeological Desk-based Assessment including an indicative assessment of any

impacts of the Proposed Development on archaeology has been prepared and forms **Annex F** of this EIA Scoping Report.

TOPIC SHEET

ECOLOGY AND BIODIVERSITY

Introduction

1 This topic sheet has been prepared by Greengage Environmental Ltd. and is based on the findings of a Preliminary Ecological Appraisal (PEA) (see **Annex G**) undertaken at the site in January 2023. This comprised a site walkover and a review of readily available biological data. Based on the findings of this report it is considered that there is no potential for significant effects relating to ecology and so this topic is **scoped out** of the EIA.

2 The purpose of the PEA is to establish the current ecological value of this site and the potential presence of legally protected species in order to inform appropriate mitigation, compensation and enhancement actions that could be required as a result of the Proposed Development.

3 The survey area extended to 0.93 hectares and comprised building and hardstanding, ruderal, scattered trees, introduced shrub and modified grassland.

4 The site survey undertaken by Greengage identified the site as having low potential to support nesting birds within the existing building and mature London Plane trees. The site has negligible potential for all other protected species.

5 The PEA sets out recommended mitigation measures to ensure no nesting birds are killed or injured during site clearance. These recommendations primarily consist of the careful timing of works or inspections before the demolition and construction works commence.

6 Ecological enhancement recommendations have been made to improve the ecological value of the site. These consider the site and surroundings and local and regional policy priorities. Enhancement recommendations include:

- A sensitive lighting strategy following best practice guidance produced by the Bat Conservation Trust (BCT) and Institute of Lighting Professionals;
- Intensive green roof planted with biodiverse and nectar-rich wildlife friendly herbaceous/shrub mix;
- Provision of extensive, substrate-based biodiverse roofs on all available flat roof spaces, which are compatible with PV arrays;
- SUDS features such as rain gardens and attenuation basins should be incorporated to provide ephemeral wetland habitats at ground level;
- Nectar-rich wildlife planting of known benefit to wildlife, at terrace and ground level within planters;
- Retention of existing trees as well as native street tree planting;
- Green walls using wire trellis and/or modular systems;
- Invertebrate habitat features including bee houses/log piles to be incorporated into the public realm areas and onto the extensive living roof;
- Bird boxes for swift, house sparrow, black redstart and peregrine falcon; and
- Bat boxes targeting crevices-dwelling species.

7 With the effective implementation of enhancement measures, no adverse impacts on biodiversity within or adjoining the site are predicted. A Biodiversity Net Gain (BNG) assessment will be undertaken for the Proposed Development, to be submitted as a standalone planning report, which will demonstrate any anticipated gains in the biodiversity value of the site.

8 All of the above key ecological mitigation, compensation and enhancement recommendations should be detailed within an Ecological Management Plan (EMP) for the site, which will be secured through a planning condition.

Baseline Conditions

9 The site visit to inform the PEA was undertaken on the 12th of January 2023 by Greengage Environmental, comprising a desk study, Phase 1 Habitat Survey, protected species assessment and ecological evaluation of the existing buildings and land on-site.

10 The site is not subject to any statutory or non-statutory nature conservation designations, and there are no statutory designated sites within a 1km radius. There is, however, one Local Nature Reserve (LNR) within 2km, Camley Street Nature Park, located 1.25km northeast of the site.

11 The nearest non-statutory designated site is Park Square Gardens and Regents Park, Sites of Importance for Nature Conservation (SINCs), 400m west of the site.

12 MAGIC[1] also identified the Lee Valley Special Protection Area (SPA) and Ramsar site 7.7km northeast of the site.

13 The site lies within the Impact Risk Zone for Sites of Special Scientific Interest (SSSI) of Hampstead Woods. However, the impact zone only refers to developments that relate to infrastructure such as airports, helipads and other aviation proposals, and livestock and poultry units. As the Proposed Development does not relate to either of these categories the fact that the site falls within the impact zone of a SSSI is not considered further.

14 Records from Greenspace Information of Greater London (GiGL) also identified 27 non-statutory Sites of Importance for Nature Conservation (SINCs) within 2km of the site boundary. SINCs are recognised by Local Planning Authorities (LPAs) as important wildlife sites.

15 Any potential impacts, such as pollution events, dust deposition and noise pollution/vibration either associated with the demolition, construction or operation of the Proposed Development will not affect any designated sites due to the distance and presence of geographical barriers. As the Proposed Development is non-residential, there are no foreseeable impacts associated with the operational phase. The designated sites are also already in an urban context and managed to facilitate recreation.

16 The site currently comprises building and hardstanding, ruderal, scattered trees (London Plane and common lime), introduced shrub and modified grassland. The site is in a highly urban area and the habitats on the site are of low ecological value.

17 The potential for the site to support protected and invasive species was also considered as part of the PEA and it was determined that the site had low potential to support nesting birds within the existing building and mature London Plane trees. The site has negligible potential for all other protected species.

Discussion for Scoping Out

18 There are no statutory or non-statutory designated sites or notable habitats within the likely zone of influence of site preparation, demolition, construction or operation; therefore, no significant impacts upon ecology and biodiversity beyond the site boundary are anticipated.

19 There are records of multiple common and widespread bird species within the surrounding 2km of the site.

20 The flat roof on level two and the rooftop have the potential for supporting common nesting birds including pigeons and gull species. Given the height of the building it is also possible for Peregrine Falcons to use the roof. There was no evidence of previous years' nests or evidence of use by peregrine falcons. However, this

[1] https://magic.defra.gov.uk/MagicMap.aspx

site visit was undertaken outside of the bird nesting season and the extreme weather may have resulted in any previous evidence being blown away.

21 The scattered trees on site have the potential to provide nesting opportunities for birds. However, the artificial lighting wrapped around the trees reduces the suitability. The London Plane trees had no evidence of previous years' nests. The lime trees are small in size, therefore offer limited space for nesting birds.

22 Continuous bird spikes overhang the podium on the second level. This will deter pigeons and gulls from roosting and nesting on level three.

23 Despite the overall limited availability on site, there was still evidence of bird scat, as well as missing panelling between levels 2-3, this provides access points where birds can nest.

24 Therefore, the site was identified as having low potential to support nesting birds within the existing building and mature London Plane trees.

25 The killing or injury of adult birds is highly unlikely as individuals can disperse from the demolition and construction zone. Therefore, the potential impacts of the demolition and construction works on birds includes the:

- Killing and injury of a birds' dependent young and/or eggs;
- Loss of potential nesting habitat; and
- Disturbance of nesting birds in surrounding areas.

26 The site has negligible potential to support all other notable and/or protected species due to the nature of the building, the lack of valuable habitats on site and is located in a highly urban setting with high levels of fragmentation and artificial lighting.

27 The current development proposals do not have any intention for tree removal or relocation as part of the Proposed Development. It is therefore considered unlikely that there will be any Arboricultural impacts as a result of the Proposed Development. In the event that any trees on or surrounding the site are to be impacted by the final design of the Proposed Development, these effects will be captured within an Arboricultural Impact Assessment (AIA) that will be submitted in support of the planning application.

Mitigation and Enhancement Measures

Mitigation Measures

28 In order to mitigate the risk of disturbing, injuring or killing nesting birds during the site clearance work, clearance and demolition works should take place outside of the nesting bird season (March–August inclusive). If this is not possible, clearance should only occur after a suitably qualified ecologist (SQE) has confirmed the absence of nesting birds, a maximum of 48hrs prior to site clearance.

29 Compensation for the loss of nesting bird opportunities should be included within the design, with bird boxes integrated into the fabric of the new buildings and native species including berry-bearing plants.

30 The evolving design of the Proposed Development include areas of new landscaping. This landscaping will provide compensatory areas of foraging, sheltering and nesting for a range of bird species, partially replacing the habitat lost. It has also been recommended to provide new nesting opportunities for priority bird species such as swift, house sparrow, black redstart and peregrine falcon, to be integrated within the buildings.

Enhancement Measures

31 Recommendations to enhance the biodiversity value of the site in accordance with national and local planning policies comprise: a sensitive lighting strategy, green roofs, green walls, SUDS, native tree and shrub planting, nectar-rich planting, invertebrate habitat features and provision of wildlife boxes including bird and bat boxes.

32 These ecological enhancement recommendations consider the site and surroundings and local and regional policy priorities. Enhancement recommendations include:

- A sensitive lighting strategy following best practice guidance produced by the Bat Conservation Trust (BCT) and Institute of Lighting Professionals;
- Intensive green roof planted with biodiverse and nectar-rich wildlife friendly herbaceous/shrub mix;
- Provision of extensive, substrate-based biodiverse roofs on all available flat roof spaces, which are compatible with PV arrays;
- SUDS features such as rain gardens and attenuation basins should be incorporated to provide ephemeral wetland habitats at ground level;
- Nectar-rich wildlife planting of known benefit to wildlife, at terrace and ground level within planters;
- Retention of existing trees as well as native street tree planting;
- Green walls using wire trellis and/or modular systems;
- Invertebrate habitat features including bee houses/log piles to be incorporated into the public realm areas and onto the extensive living roof;
- Bird boxes for swift, house sparrow, black redstart and peregrine falcon; and
- Bat boxes targeting crevices-dwelling species.

Conclusion

33 Data received from the desktop study and the PEA site walkover on 12th January 2023 have confirmed that the site has low potential to support nesting birds and negligible potential to support all other notable and/or protected species.

34 Mitigation actions have accordingly been recommended and included within the proposals to ensure any residual impacts are fully avoided or compensated for.

35 If the recommended mitigation, compensation and enhancement measures are implemented within the scheme, the overall development is predicted to have a beneficial impact on local biodiversity.

36 Based on the above, it is proposed to **scope out** an assessment of the Proposed Development's effects on ecology and biodiversity.

TRIUM

TOPIC SHEET

GEOENVIRONMENTAL (GROUND CONDITIONS, GROUNDWATER AND LAND TAKE AND SOILS)

Introduction

1 It is considered that significant effects relating to ground conditions are unlikely and as such, this topic is **scoped out** of the EIA. The following section provides a summary of the ground conditions, sensitive geoenvironmental receptors and the potential for land contamination at the site. The following review and summary have been provided by Arup.

Baseline Conditions

2 The site is located at 286 Euston Rd, London NW1 3DP (approximate National Grid Reference TQ 29192 82354) in the London Borough of Camden (LBC). It comprises an area of approximately 0.93 hectares occupied by Euston Tower and a small area of surrounding public realm. The area surrounding the site includes a mix of uses which are primarily residential and commercial with several hospital/university buildings.

3 Euston Tower is a 36-storey office building with retail use on the lower two floors and a single level basement. The basement extends beyond the building footprint to the west and north and is understood to provide a shared space with other buildings which remains in use.

4 The ground level across the site footprint is relatively flat at approximately +28.0m Above Ordnance Datum (AOD).

Site History

5 The history of the site and immediate surrounding area is summarised below:

- Pre-1746: the site was an undeveloped greenfield site;
- 1813 to 1875: the site had been developed with the majority occupied by terraced housing. Henry Street (changed to Seaton Street by 1896 and Seaton Place by 1953) to the north and Eden Street to the south ran east to west. The surrounding area remained largely residential;
- 1889 to 1957: the site became shops in the north and east and factories and warehouses (later a sheet metalworks) in the south and west. The surrounding area included various factories, a brass foundry, garage, laundry, printing works and an oil and lead works. By 1927 Warren Street station had been built further south beyond Euston Road;
- 1963: many of the buildings in the south and east of the site were vacant and areas to the south of the site had been cleared. The southern part of the site was subsequently cleared later the same year;
- 1966 to early 1970s: Construction of an underpass to the south of the site and Euston Centre on and around the site began in 1966. This included construction of Block A (Euston Tower) onsite which was completed in 1971. Euston Centre Block F to the west was also built between the late 1960s and early 1970s; and
- 1972 onwards: Construction of further buildings to the north took place. These were demolished between 2010 and 2012 (NEQ 10-20 Brock Street). Euston Centre Block F (offsite) was demolished in the 1990s. Euston Tower remains unchanged onsite.

Ground Conditions

6 The geology of the site, based on existing borehole records, published geological maps and a recent geotechnical foundation investigation (in 2022), is summarised below:

- The surface geology at the site consists of Langley Silt over River Terrace Deposits (RTD). The Langley Silt is an unproductive stratum while the RTD are designated a secondary A aquifer;
- Beneath this the site is underlain by a downward sequence of unproductive London Clay over Lambeth Group, Thanet Formation and Chalk. The Thanet Formation is designated as a secondary A aquifer while the Chalk is designated a principal aquifer within the wider London area. Boreholes near the site indicate a thickness of approximately 20m of London Clay, which will provide protection to the Thanet Formation and Chalk from downward migration of contamination; and
- The geotechnical foundation investigation comprised three 5m deep shafts and mined headings beneath the pile cap/basement slab. It confirmed the shallow geology and that the existing building is founded within the London Clay. Localised diesel contamination was identified beneath the basement within the London Clay in one of the three headings. The impacted area appeared to be highly localised and the majority of material was removed as part of the investigation works. Limited soil sampling was undertaken to identify the contamination, which confirmed that it was primarily diesel but the age and source of the contamination is unclear. It was encountered close to the existing diesel tank room but no obvious migration pathway through the substantial concrete slab was apparent.

Environmental Site Sensitivity

7 There are no active groundwater abstraction licences or discharge consents within 500m of the site. The nearest surface water feature is the boating lake in Regent's Park, which is over 800m from the site.

8 The site is not located in, and is not within 250m of, a sensitive area such as Areas of Outstanding Natural Beauty, Environmentally Sensitive Areas, Local Nature Reserves, Nitrate Sensitive Areas, Ramsar sites, sites of Special Scientific Interest, Special Areas of Conservation and Special Protection Areas or Green Belt.

Potential Contamination Sources

9 Onsite potential sources of contamination comprise:

- Made Ground related to previous phases of development. This will be limited by the existing basement and foundations which will have removed it within the building footprint;
- Historical light industrial uses including a cabinet factory, drug warehouse, laboratories and a sheet metalworks. The potential for contamination linked to these past uses to remain is limited by excavations for construction of the site-wide basement; and
- Current uses including chemical storage, diesel tanks and generators have the potential to release contamination to the subsurface. These are expected to be localised and limited to specific activities within the existing building. The substantial basement structure would be expected to contain all but the most extensive spills or releases.

10 Offsite potential sources of contamination comprise:

- Made Ground related to previous phases of development; and
- Nearby historical uses including a brass foundry, garage, laundry, printing works and an oil and lead works.

Development Context

11 The Proposed Development involves partial demolition of the building leaving the core and construction of a new structure over the original footprint extending to cover a larger floorplate. The larger floorplate is expected to need new foundations. The building will have a single level basement which will occupy most of the site area and include plant rooms, bicycle parking, showers and locker rooms. The ground level will primarily be for retail use with upper levels primarily comprising office space, event space and a canteen.

12 Human health and environmental receptors associated with the site and the Proposed Development include: groundworkers, site visitors and neighbours during construction, future site users (employees and maintenance workers) during operation, controlled waters (RTD) secondary A aquifer, Chalk principal aquifer) and building materials.

Conclusions

13 Baseline information indicates that site has a generally low potential for significant or widespread contamination considering its previous and current uses. A summary of potential contaminant linkages is presented in Table 1.

Table 1 Summary of Identified Potential Contaminant Linkages

Potential Contaminant linkages	Risk characterisation (without mitigation)
Risk of harm to human health during construction	Low to moderate
Risk of harm to human health during operation	Low
Risk of pollution to groundwater in the RTD secondary A aquifer	Moderate
Risk of pollution to groundwater in the Chalk principal aquifer	No contaminant linkage identified
Risk of pollution to surface water courses	No contaminant linkage identified
Risk of harm to building materials and services	Low to moderate
Risk of harm to new planting	No contaminant linkage identified

Potential Effects

14 There is the potential for ground contamination at the site related to historical uses but this is severely limited by the existing basement and foundations which have removed the Made Ground within the building footprint.

15 Potential effects related to ground conditions and contamination at the site, if contamination is present, could include:

- Work with contaminated soil and groundwater during ground works;
- Generation of potentially contaminated dusts on the site and at boundaries;
- Creation of preferential contamination migration pathways;
- Damage to building materials, services or new planting due to the presence of contamination; and
- Discovery of Unexploded Ordnance (UXO).

Discussion for Scoping Out

16 A Contamination Preliminary Risk Assessment (PRA) will be prepared to support the Planning Application. It will consider the history of the site based on historic mapping and other readily available environmental information, the environmental setting of the Proposed Development and proposed use of the site. The report will include a conceptual site model and preliminary risk assessment and provide recommendations for ground investigation. The report will also describe the results of a site visit undertaken to review the current use of the site as far as practical and identify evidence of potential sources of contamination sources onsite.

17 Data to inform the PRA will come from:

- A commercial environmental search report;
- Historical mapping, aerial photography and detailed fire insurance town plans;
- A site reconnaissance visit; and
- Review of other readily available records in the public domain which relate to the site.

18 Although the area has a history of potentially contaminative land uses, construction of the existing building and basement will have the Made Ground within the footprint of the building which limits the potential sources of historical contamination.

19 While some evidence of diesel contamination was identified beneath site, this was localised and constrained by the London Clay. The impacted material was removed as far as practicable during the foundation investigation and further ground investigation will be undertaken to characterise ground conditions at the site.

20 The potential effects can be mitigated by measures during demolition and construction, even if residual or other areas of contamination are present, because sufficient ground investigation will be undertaken to provide information on ground conditions to inform construction works. Specific contamination measures would only be required if soils are found to be extensively contaminated or if they contain asbestos. This would be established by pre-construction ground investigation. Specific gas protection measures would only be required if risk assessment of ground investigation results confirmed they were required.

21 The Proposed Development is not considered to give rise to significant effects from ground contamination. A discussion with respect to each sensitive receptor is provided below.

Construction Effects

Construction Workers and Site Neighbours

22 Demolition and construction works, including piling, excavation, spoil handling and disposal, will be undertaken in accordance with an approved Construction Environmental Management Plan (CEMP), to prevent pollution of ground and surface waters and to protect human health. A watching brief for any contamination encountered during construction will form part of the CEMP.

23 Regulations will be adhered to, and any potentially enhanced risks associated with contamination are expected to be managed by the undertaking of phased assessment and development of a remediation strategy under planning. This will ensure that exposure to contamination is minimised to an acceptable level which will prevent any significant adverse demolition and construction effects occurring.

24 Where proposed activities are likely to generate excess soil arisings as part of the demolition and construction works, the design will be informed by the requirements of the CL:AIRE Definition of Waste: Code of Practice[1]. While these considerations are not directly required to meet planning or undertake compliant EIA, early consideration of how excess soils can be managed is likely to lead to future programme and cost benefits at construction stage.

Groundwater

25 It is possible that contamination could be present in the RTD secondary A aquifer, although this is expected to be highly truncated by the existing onsite basement and in the local area from nearby buildings with basements. It will be investigated and assessed through ground investigation and tiered risk assessment. In addition, the Proposed Development includes a single storey basement across most of the site, providing a barrier to contamination migrating onto site within groundwater from offsite areas.

26 The principal Chalk aquifer lies at depth beneath the site; however, this is protected by a thick layer of London Clay (aquitard) which is classified as unproductive stratum. Piled foundations are anticipated to terminate in the London Clay and therefore no significant effects will be observed to the principal aquifer at depth. Should deep piled foundations be proposed which penetrate the London Clay, a Foundation Works Risk Assessment (FWRA) will be undertaken pursuant to a planning condition to assess potential risks to the Chalk principal aquifer.

Surface Water

27 The nearest surface water feature is over 800m from the site. This is a considerable distance and in the absence of a potential linkage, surface water is not considered as a plausible receptor.

[1] *CL:AIRE (2011), The Definition of Waste: Development Industry Code of Practice, version 2. CL:AIRE, London, March 2011. Available at: https://www.claire.co.uk/projects-and-initiatives/dow-cop/28-framework-and-guidance/111-dow-cop-main-document*

Building Materials

28 Concrete and building materials to be used in the ground will be appropriately specified based on the ground conditions following ground investigation considering the site-specific soil aggressivity. This will mitigate any effect on building materials from ground conditions and contamination.

Ecological Designations

29 There are no designated sensitive land uses within 250m of the site such as sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Areas of Outstanding Natural Beauty (AONB), Special Areas of Conservation (SAC), Special Protection Areas (SPA), RAMSAR sites or Local Nature Reserves (LNR). Therefore, there is no potential for likely significant effects on such receptors.

Geological Resources

30 There are no designated geological conservation resources at or near the site. On this basis, there is no potential for likely significant effects on geological conservation resources.

Operational Effects

Future Site Users

31 On completion of the Proposed Development, it is considered that there would not be the potential for any likely significant adverse operational effects on future users as a result of the use of the Proposed Development. Potentially contaminated Made Ground soils are not present due to the excavation of the existing basement. Any residual contamination beneath the existing basement may be removed during basement works as part of the Proposed Development or would be investigated and assessed through ground investigation and tiered risk assessment.

32 It is expected that areas of public realm are likely to be hard surfaced. If soft landscaping is included in the scheme, it will be appropriately designed and include provision for a layer of certified clean landscaping soils above any residual Made Ground. This reduces the significance of direct exposure pathways. Overall, the nature of the Proposed Development and its use does not present a significant contamination risk to human receptors.

Conclusion

33 The Proposed Development is not considered to give rise to significant effects from ground contamination. It is recognised that the proposed process of tiered assessment and the development of remediation/risk management strategies required to address planning conditions will be sufficient to prevent significant effects from ground contamination. On this basis, further consideration of Geoenvironmental aspects has been **scoped out** of the EIA.

TRIUM

TOPIC SHEET

HUMAN HEALTH

Introduction

1 As required under the EIA Regulations[1], the potential for significant effects on human health have been considered within this topic sheet for the EIA Scoping Report.

2 A number of key guidance documents relating to the consideration of health as part of EIA have been published since the inclusion of this topic in the EIA Regulations in 2017. These papers indicate that consideration of human health as a topic should be proportionate and, in most cases, can be **scoped out** of the EIA:

- Public Health England (July 2017)[2]: 'Scoping should usually result in most potential health issues (i.e. most determinants of health) being legitimately scoped-out of an EIA.';
- Institute of Environmental Management and Assessment (IEMA) (May 2017)[3]: 'The scoping of population and human health issues into EIA should focus on whether the potential impacts are likely to be significant.';
- International Association for Impact Assessment (IAIA) (December 2020)[4]: 'Scoping health should be proportionate. Health effects that are not likely to significantly affect population health should be 'scoped-out'.';
- IEMA (November 2022)[5]: 'Determining significance for human health.'; and
- IEMA (November 2022)[6]: 'Effective scoping of human health.'.

3 The IEMA (November 2022) 'Effective scoping of human health' guidelines stipulate that EIA scoping should be proportionate, meaning that it should remain focused on the likely and potentially significant effects on population health due to the project (noting this guidance was produced principally to help guide the assessment of Nationally Significant Infrastructure Projects), and, where all relevant wider determinants of health are scoped out, health as an EIA technical topic can be scoped out.

4 This guidance has been used to inform this topic sheet with the aim of 'scoping out' human health as an ES chapter, through a discussion of the identified wider determinants of health, using available scheme information, background knowledge and baseline data. A review of those health determinants relevant to the site location and the Proposed Development has been undertaken by Trium, and are set

[1] *The Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (as amended in 2018 and 2020).*
[2] *Public Health England (July 2017), Health and Environmental Impact Assessment: A Briefing for Public Health Teams in England*
[3] *IEMA (May 2017), Health in Environmental Impact Assessment – A Primer for a Proportionate Approach.*
[4] *IAIA (December 2020), Human health: Ensuring a high level of protection.*
[5] *IEMA (November 2022), Determining Significance for Human Health.*
[6] *IEMA (November 2022), Effective Scoping of Human Health.*

out in Table 1 along with a response as to how these relevant determinants are considered unlikely to be significantly affected by the Proposed Development.

5 Baseline data from Public Health England (PHE), namely from the PHE 'Fingertips' portal[7], has been used to obtain relevant data on health determinants for the London Borough of Camden (LBC) and, where possible, a local (ward) level.

6 Given the nature of the Proposed Development i.e., a commercial development (including life science uses) on an existing area of commercial land, a number of the health determinants detailed within the IEMA 'Effective scoping of human health' guidance are not applicable. Receptors introduced by the Proposed Development, i.e. workers, will require limited (if any) access to social infrastructure and would also not require consideration with regards to housing-related determinants (further justification on this point is provided in the socio-economics topic sheet of this EIA Scoping Report). As such, these determinants are not considered for the site and further discussion is not provided within Table 1.

Table 1 PHE Determinants of Health Relevant to the Proposed Development

Relevant Determinants of Health	Response in the Proposed Development/ Planning Application/ EIA
Risk Taking Behaviour	A Construction Method Statement (CMS) would be prepared by the Principal Contractor, and it would be the site manager's responsibility to ensure that all construction staff working on the site are sufficiently trained to reduce risks of accidents, injuries or unprofessional risk taking behaviour occurring during the demolition and construction works. In a similar vein, a Construction Environmental Management Plan (CEMP) will be prepared including measures to reduce the potential for environmental impacts to occur during the demolition and construction works. This will detail measures to ensure the safety of staff working on site, but also include measures for them to follow to reduce the risk to offsite human receptors. By ensuring that the demolition and construction workers follow the methods and measures contained within these documents, the potential for risk taking behaviour would be minimised and significant effects on this determinant of health are considered unlikely. In terms of operational workers, suitable health and safety guidance would be set out within an employee handbook (or similar) to reduce the risk of accidents taking place within the workplace. All staff on site would be suitably trained to ensure they can complete their jobs without any unnecessary risk. First aid trained staff would also be located on site for each shift to respond in case accidents do occur. With these measures in place, the potential for risk taking behaviours is considered to be suitably reduced to minimise the potential impacts to human health. Significant effects are therefore considered unlikely in relation to risk taking behaviour.
Transport Modes, Access and Connections	The Proposed Development will incorporate a number of measures to encourage the active travel of staff to and from their workplace. These measures will include: • A Travel Plan setting out measures to encourage staff and visitors to use sustainable modes of transport; • The provision of cycle parking in line with London Plan standards for a commercial development, with changing and shower facilities also provided; • Potential developer contributions towards public transport; • Provision of new pedestrian/cycle infrastructure as part of the Proposed Development; and • Provision of a Construction Logistics Plan (CLP)/CEMP. In addition, the predicted increases in construction traffic flows associated with the proposals are considerably below the Institute for Environmental Management and Assessment (IEMA) thresholds and accordingly is considered to warrant no further assessment. The Proposed Development is also located in proximity to Warren Street and Euston Square London Underground stations, which will help to encourage travel to site via public transport, instead of the use of private vehicles. Consequently, it is considered that the Proposed Development will not have a significant effect on transport modes, access and connections.
Community Safety	As the site has historically been limited to commercial uses and the Proposed Development comprises a commercial and life sciences development, it is considered that there will be no increase in negative impacts to Community Safety. Furthermore, due to the nature of life science developments, they require high levels of security to ensure there is no disruption to their operation and restricted materials are secure. This will help keep crime levels low on the site and may also help to improve security within the area surrounding the site. Therefore, the Proposed Development will not have a significant effect on community safety.
Community Identity, Culture, Resilience and Influence	As the site has historically been limited to commercial uses and the Proposed Development aligns with this with parts of the building (i.e. the core and basement) to be retained as part of the new proposals, , it is considered that there will be no change to Community Identity, Culture, Resilience and Influence. Commercial developments which include life science uses require high tech utilities, internet and other infrastructure in order to operate, which will result in enhanced infrastructure being introduced to the local area. There are also links with life sciences and the clustering effect with other businesses, attracting new companies and startup firms to the area, quite often as a result of the links with high quality infrastructure. This would help to support the growth of the local area and have a positive effect to the community and resilience of the local area. Therefore, the Proposed Development will not have a significant effect on community identity, culture, resilience and influence, albeit will result in positive effects to health.
Social Participation, Interaction and Support	As the site has historically been limited to commercial uses and the Proposed Development aligns with this with parts of the building (i.e. the core and basement) to be retained as part of the new proposals, it is considered that there will be no impacts to Social Participation, Interaction and Support, therefore, the Proposed Development will not have a significant effect on this determinant of health.
Economic Environment (see Socio-economics topic sheet for further information). – Education and Training	Consideration for the impacts of the Proposed Development on Education and Training will be included within the planning application. It is likely that the Proposed Development will provide opportunities for training and development, both during the demolition and construction works and once operational. It is therefore likely there would be positive impact to health as a result of this, by facilitating the provision of jobs and the potential upskilling of the current and future work force. Camden has a higher than average percentage of people with formal qualifications including those with NVQ4 or above (66% in LBC compared to 59% across London more generally) and therefore, while opportunities to improve training through the Proposed Development would be beneficial, it is unlikely that these effects would be significant.
Economic Environment (see Socio-economics topic sheet for further information). – Employment and Income	The Proposed Development will create jobs on site, both during the demolition and construction works and once the Proposed Development is operational. Levels of unemployment in Camden are broadly consistent with those across London (4.6%), with a claimant count percentage of 4.3% in December 2022; however, this is higher than across Great Britain more generally (3.6%). The provision of new employment opportunities can therefore have a positive impact on the local area. The employment opportunities are also likely to be highly qualitied and well-paid jobs. Significant effects to the employment and income determinant of health are, however, not considered likely.
Bio-physical Environment – Climate Change Mitigation and Adaptation	Commercial and life science developments are typically highly energy intensive due to their nature and so, as an industry, can be the cause of high greenhouse gas emissions through the required energy generation to support their use (albeit this is linked to the energy mix of the national grid, rather than specifically as a result of the scheme). However, the Proposed Development is likely to be powered largely by renewable energy sources and therefore would have limited associated greenhouse gas emissions. As a result of this, the Proposed Development is unlikely to have a significant effect to health as a result of its impact on climate change.
Bio-physical Environment – Air Quality	It is expected that there would be limited traffic associated with the Proposed Development, both during the demolition and construction works and once the Proposed Development is operational. During construction, the impacts from dust would be managed as far as possible through measures set out within a CEMP, which would help to reduce health impacts on nearby residential receptors. Once operational, there are likely to be emissions from the testing of emergency diesel generators; however, these would be located at a suitable distance from sensitive receptors and would be tested at times to avoid peaks in air pollution (i.e. during peak traffic periods). With these controls it is considered unlikely that there would be significant effects to air quality to impact on health.
Bio-physical Environment – Water Quality or Availability	The Proposed Development would not impact on water quality as it will not cause the release of pollutants to the water network. Measures would be in place (and controlled through a CEMP) during demolition and construction to ensure the risk of pollutant spillage is minimised as far as possible.

[7] *Public Health England (2022), Fingertips local authority health profiles – Newham. https://fingertips.phe.org.uk/profile/health-profiles/data#page/1/gid/1938132701/pat/6/par/E12000007/ati/102/are/E09000025/yrr/3/cid/4/tbm/1 (Accessed 300123)*

Relevant Determinants of Health		Response in the Proposed Development/ Planning Application/ EIA
		In terms of water availability, water efficient fittings would be installed to ensure water usage on site is reduced as far as possible. Given the nature of the Proposed Development, high levels of water usage are not expected. Therefore, effects to health from water quality and availability in relation to health are considered unlikely.
	Flood Risk	The Proposed Development is located within Flood Risk Zone 1, and is considered to be at low of risk of flooding from all sources. Suitable drainage systems (including SuDS) would be implemented once the site is operational to manage the flow of water off site to meet necessary standards. Due to the nature of the Proposed Development, it cannot be located within a location where there is a large flood risk and so the risk of flooding on the site is considered minimal. Therefore, effects to health from flood risk are considered unlikely.
	Land Quality	Historic ground investigations at the site have concluded that the site generally has a low potential of significant or widespread contamination. Any residual risks that need to be addressed during the demolition and construction works will be inherently mitigated as part of the scheme design and/or good practice. Therefore, the risk of impact to health from contamination is considered to be low.
	Noise and Vibration	Noise and vibration will be managed during the demolition and construction works through the use of good practice mitigation measures to reduce levels, as far as practicably possible, to be secured through a CEMP. This will help to reduce the potential for noise impacts to nearby sensitive receptors, ensuring there is limited potential for health impacts. Once operational, limited noise impacts are expected from the Proposed Development to nearby sensitive receptors, with regards to health. As with air quality, emergency generators will need regular testing which could create a noise source; however, these will either be located away from sensitive receptors and/or subject to suitable noise bunding and mitigation should the need for this be identified. Significant health impacts from noise are therefore considered unlikely. Vibration effects are also considered unlikely once the Proposed Development is operational. Due to the nature of the Proposed Development, noise is unlikely to impact on the users of the site once operational.
	Built Environment	The site is currently occupied by the unlisted Euston Tower building, which is approximately 37 storeys in height. The townscape to the north, east and west of the site, north of Euston Road is varied but largely post-war in character and includes the tall modern commercial quarter of Regent's Place, the post-war Regent's Park Estate and the ongoing redevelopment of Euston Station. To the south of Euston Road, the townscape is finer grained and more historic in character. The nearby residential land uses will therefore be used to seeing industrial and commercial buildings within their locality and so the Proposed Development would be in-keeping of this. Additionally, the Proposed Development will be well designed, and the site will be subject to landscaping and biodiversity enhancements, which would be positive for the local area. Based on this, the proposed changes to the built environment are considered unlikely to have significant effects to the health of the population in relation to the built environment.
	Wider Societal Infrastructure and Resources	The site has been identified as a preferred location for the Proposed Development due to the existing commercial nature of the area, along with the key public transport linkages that allow access to the site. As noted, these life science developments require high quality communication and IT infrastructure and also encourage development by attracting businesses into the local area (through a clustering effect), which can help support the wider growth aims within the borough and region. This can support the creation of jobs and provide income, which is a key health determinant. The Proposed Development would therefore have a positive impact on wider societal infrastructure and resources; however, not to a significant nature in EIA terms.

Conclusion

7 The relevant determinants of health have been considered in the above table and no significant effects on population health are anticipated as a result of the construction works and once the Proposed Development is operational. It is therefore considered proportionate for a further assessment of the Proposed Development on Human Health to be **scoped out** of the EIA.

TRIUM

TOPIC SHEET

Light Spill

Introduction

1 It is considered that there is unlikely to be significant effects relating to light spill to surrounding residential buildings as a result of the Proposed Development. This is primarily due to the scale of the existing Euston Tower building, which already produces a degree of light spill.

2 This topic is therefore **scoped out** of the EIA.

Baseline Conditions

3 The existing building will cause a degree of light spill to surrounding residential properties, including

- 20 Brock Street, Regent Square;
- 175 Drummond Street;
- 40-60 Hampsted Road;
- 295 Euston Road; and
- Warren Court.

4 These properties are identified in green in Figure 4 below.

5 Any effects of the Proposed Development are likely to be mitigated through considerate design (such as intelligent building features/lighting schemes). So as not to produce unacceptable levels of light spill, consideration will also be given to the effects of any external lighting.

6 However, in the event that an assessment is required, analysis of the likely effects of light spill will be made in areas where residential accommodation is in close proximity to the Proposed Development. If required, in order to demonstrate the extent of any effects, a detailed technical assessment will be undertaken once the proposed lighting system has been determined.

Figure 1 Sensitive Receptors for Light Spill

Discussion for Scoping Out

7 The existing building will cause a degree of light spill and any effects of the Proposed Development are likely to be mitigated through considerate design (such as intelligent building features/lighting schemes), so as not to produce unacceptable levels of light spill.

8 Notwithstanding this, when preparing the Proposed Development's Lighting Strategy (which may be conditioned as part of any future planning consent), consideration would be given to measures to maximise the effectiveness of lighting on-site whilst avoiding adverse impacts.

9 The assessment of light spillage effects arising from the Proposed Development has therefore been **scoped out** of the EIA.

TRIUM

TOPIC SHEET

PROJECT VULNERABILITY, MAJOR ACCIDENTS AND DISASTERS

Introduction

1 It is considered that significant effects relating to project vulnerability (major accidents and disasters) are unlikely as a result of the Proposed Development and, as such, this topic is **scoped out** of the EIA. Justification as to why significant effects are not considered likely is set out within this topic sheet.

2 With reference to Regulation 4(4) and Schedule 4 of the EIA Regulations, this topic sheet considers whether there are likely to be any *'significant effects arising from the vulnerability of the proposed development to major accidents or disasters'* on the environment or the project.

3 Paragraph 8 of Schedule 4 of the EIA Regulations 2017 (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 a major accident or a natural disaster has nevertheless been taken into consideration in order to ascertain the potential risks to future site users and surrounding human and environmental receptors.

4 Guidance available from Institute for Environmental Management and Assessment (IEMA) (Major Accidents and Disasters in EIA: A Primer[1]) provides the definitions of major accidents and disasters as follows:

- 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*".

5 As noted in the guidance, a development should first be screened to determine its potential to result in likely significant effects in the event of a major accident or natural disaster. 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?*
- *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?"*

[1] *IEMA, 2020, Major Accidents and Disasters in EIA: A Primer.*

6 In line with the above questions, given the intended scale and uses, it is considered that 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. As the Proposed Development has the potential to include laboratory enabled space, it is possible that hazardous substances will be present within these spaces. It is not yet known what the end use of the laboratory enabled space will be, however based on experience of schemes of a similar nature across London it is assumed that these spaces will comprise Category 2 laboratories[2]. Consequently, the relevant legislative and regulatory controls and best practice guidance applicable to the transport, storage and use of hazardous chemicals, gases and materials associated with the operation of Category 2 laboratories has been provided within this topic sheet. It is not expected that the end use of the Proposed Development would exceed the requirements of a Category 2 Laboratory, so the below legislation and controls are provided to cover the worst-case scenario. Compliance and adherence to the below would result in significant effects relating to major accidents and disasters as a result of the laboratory enabled space within the Proposed Development being very unlikely.

Legislative Controls

7 The Control of Substances Hazardous to Health Regulations (COSHH) 2002[3] sets out the relevant training and information required to work with such substances, control and mitigation measures and fail safes regarding the use and storage of hazardous materials for all laboratories in the United Kingdom and are governed by the Health and Safety Executive (HSE) and Advisory Committee on Dangerous Pathogens (ACDP).

8 As set out above, for the purpose of this topic sheet, it is assumed that the wet laboratories within the Proposed Development are intended as Category 2 laboratories and have been designed to meet Containment Level 2 requirements (also referred to as 'Category 2 labs'), in accordance with COSHH 2002. The ACDP guidance 'Management and operation of microbiological containment laboratories'[4] details the minimum containment measures required at Containment Level 2 labs and this will be followed in conjunction with the control measures specified in Schedule 3, of the COSHH Regulations 2002.

9 In addition to this guidance and subject to the end use of the laboratories the buildings may also be subject to The Genetically Modified Organisms (Contained Use) Regulations 2014[5] and Guidance For Licence Holders On The Containment And Control Of Specified Animal Pathogens 2015[6]. These documents provide minimum requirements relating to the design of the laboratories, the transport, storage, handling and use of associated chemicals and hazardous materials.

10 The use and storage of the anticipated hazardous substances will need to comply with all relevant health and safety legislation and standards such as guidance in the HSE and the British Compressed Gases Association (BCGA) and BCGA Code of Practice (CP) 30[7] (which provides further guidance on storage, maintenance, handling, filling and use). If regulated substances were to be present at sufficient levels (which is not considered at all likely given the volume and controlled quantities within Schedule 1 Hazardous substances and controlled quantities of the Planning (Hazardous Substances) Regulations 2015[8]), then additional consents may be required pursuant to the Planning (Hazardous Substances) Regulations 2015 or Control of Major Accident Hazards Regulations 1999[9].

Containment Level 2 ('Category 2') Laboratories

11 It is acknowledged that it is possible that chemicals or other regulated substances may be present on-site within the wet labs proposed as part of the Proposed Development. Based on other laboratories of this nature, these substances may include Nitrogen, Carbon Dioxide, Compressed Air and Oxygen. It should be noted that Nitrogen, Carbon Dioxide and Compressed Air, which are typically used in Category 1 laboratories, are not listed substances under The Planning (Hazardous Substances) Regulations 2015.

12 Contaminant Level 2 laboratories are likely to use small volumes of inflammable liquids (quantities are likely to be a few litres), and similarly small volumes of non-flammable gases are often associated with this level of laboratory. Inflammable gases are not usually associated with Containment Level 2 laboratories and are unlikely to be present on site.

Proposed Management Measures

13 Low volumes of chemicals are likely to be present on-site and the risks associated with these will be mitigated through building management and operation protocols. Namely this involves the storage of solvents and gases in external storage cages/drawers designed for 30 to 60 minute fire resistance (as required), these storage cages/drawers would be located in protected loading/servicing courtyards and would not be visible or accessible to members of the public.

14 Laboratories would use a strict decant policy with trained technicians accessing the stored chemicals via restricted ventilated lift access (controlled key access and sign in and out procedure) and decanting the required quantities of chemicals for use in the labs. Any decanted chemicals requiring storage in the laboratories would be stored in fireproof cabinets which would be actively ventilated in case of leakage. Laboratories and storage areas would also be fitted with gas alarms (operated 24/7) linked to high-speed active exhaust systems; in turn these would be fitted (as relevant) with filters to negate the risk of the exhaustion of chemicals. Tenants and the building operators would keep chemical inventories which would be shared with the London Fire Brigade.

15 In addition, any laboratory areas where chemicals and potentially hazardous substances are to be used, would be fitted with an appropriate air extraction system designed in accordance with all relevant regulations and guidance documents, the appropriate extraction and filter details can only be determined once the details of the occupants and their associated chemicals and chemical reactions are determined and hence this would be undertaken at the detailed design stage.

16 The use and storage of chemicals and regulated substances will therefore be appropriately managed through the established regulatory framework and the control measures implemented at the local and/or national government level.

17 The end-users of the buildings are not yet known, and the laboratories will be subject to further detailed design once these are confirmed. Once the building occupants are confirmed and the associated final use of the laboratories determined, if regulated substances will be present on-site, then the Proposed Development will comply with all regulations and guidance relating to the storage and use of such substances set out above.

Assessment of Effects

18 The Proposed Development intends to provide a mixed-use development, proving space for office, commercial, retail and laboratory enabled space (see the 'Description of Development' section in the main Scoping Report), and associated landscaping, public realm and pedestrian and cyclist connections. 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.

19 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*".

20 The London Resilience Partnership has developed the London Risk Register[10], 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

[2] *These laboratories are typically used for work with medium risk biological agents and hazards.*
[3] *His Majesty's Stationary Office (2002) The Control of Substances Hazardous to Health Regulations 2002*
[4] *ADCP (2018, amended 2019) Management and Operation of Microbiological Containment Laboratories*
[5] *His Majesty's Stationary Office (2014) The Genetically Modified Organisms (Contained Use) Regulations 2014*
[6] *Health and Safety Executive (2015) Guidance for Licence Holders on the Containment and Control of Specified Animal Pathogens*
[7] *BCGA (2019) CP30 The safe Use of Liquid Nitrogen Dewars. Revision 3: 2019*
[8] *His Majesty's Stationary Office (2015) The Planning (Hazardous Substances) Regulations 2015*
[9] *His Majesty's Stationary Office (1999) The Control of Major Accidents Hazards Regulations 1999*
[10] *London Resilience Partnership February 2022, London Risk Register. Accessible at https://www.london.gov.uk/what-we-do/fire-and-resilience/london-resilience-partnership/london-risk-register*

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 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.

21 Due to the nature and surroundings of the Proposed Development, many of the events listed in the London Risk 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 London Risk 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.

22 In some cases, this risk management process will be further supported with project-specific information and assessments which form part of the EIA and the planning process. This includes the requirement for a site-specific Flood Risk Assessment which will address the flood related risks as listed in the London Risk Register.

23 The major accidents or disasters listed in the London Risk Register that are considered relevant to the Proposed Development are outlined in Table 1 below.

Table 1 Major Accidents or Disasters Relevant to the Proposed Development

Categories / Description	LRP Risk Rating	Potential for Proposed Development to exacerbate effects on environmental receptors	Scoped in/out
Natural Hazards			
Human Diseases / Human Health Incidents: For Influenza and Emerging disease outbreaks (Pandemic).	High to Very High	The spread of human disease is more likely in areas with a higher population density. From the Covid-19 Pandemic, businesses have adapted to the measures required to reduce the spread of infectious human diseases. Government guidance shall be followed as appropriate to the circumstances to respond to and manage any potential further pandemic or outbreak of a new or emerging infectious disease. The risk management process is Government driven using legislative controls where necessary. Hospital and healthcare facilities in the local area will in either case be familiar with addressing the challenges around managing potential infectious disease outbreaks. There are suitable resources within the local area to respond to such an event. It is not considered that the vulnerability of the Proposed Development to these events would in any way worsen effects for any other nearby receptors.	Out
Flooding: Covering a range of scenarios including fluvial, surface water run-off and tidal flooding and combinations thereof.	High to Very High	The site is located within Flood Zone 1 (low risk). The risk of fluvial or tidal flooding to the site is considered negligible. EA mapping indicates that the site has a 'very low' surface water flood risk. Due to the scale of the Proposed Development, a Flood Risk Assessment (FRA) will be produced, which will form part of the planning application and will be summarised within the **ES Volume 1, Chapter 4: The Proposed Development**. On this basis, a separate. 'Water Resources and Flood Risk' impact assessment and ES chapter has been scoped out of (i.e. excluded from) the EIA, as significant effects are not considered likely. Any potential flood risks (including an allowance for climate change) identified as part of the FRA will be addressed by identifying suitable mitigation measures that will be embedded into the design of the Proposed Development. Similarly, a Drainage Strategy will ensure the Proposed Development complies with local and national guidance. On this basis, significant effects associated with flood risk and drainage are not considered likely.	Out
Severe Weather: Including drought, severe storms, low temperatures/heavy snow and heatwaves.	High	Water usage within the operational Proposed Development could contribute to the depletion of limited water resources in times of severe drought. This shall be addressed through the implementation of appropriate design and operational principles to ensure efficient use of water on site, in line with local planning policy. The Proposed Development would result in new site users which could potentially be affected by prolonged periods of excessive hot or cold weather, should it arise. The Proposed Development will be built to the latest Building Regulations requirements,	In (partially – relating to high wind speeds only)

Categories / Description	LRP Risk Rating	Potential for Proposed Development to exacerbate effects on environmental receptors	Scoped in/out
		and it is likely that internal thermal comfort will be managed through Mechanical Ventilation systems which offer a high degree of control. With regards to severe storms involving high wind speeds, the effects of the Proposed Development on the local wind microclimate will be assessed in the EIA. While the assessment will only account for predominant local wind conditions, any adjustments to scheme to mitigate effects on pedestrian safety and comfort criteria will contribute to reducing the vulnerability of the Proposed Development under more extreme wind conditions. In the majority of these severe weather scenarios it is considered the main risks to site users on the Proposed Development will be during the travel to and from the site. In such weather events it is assumed that employers will often respond to extreme weather forecasts and warnings by advising their employees not to travel to work. In any case, the Proposed Development will adhere to the latest Building and Health Safety Regulations to ensure site users are protected from external weather conditions.	
Structural Incidents: Relating to land movement.	Medium	The Proposed Development will be subject to the most up to date construction, renovation, maintenance and demolition standards. The site is not located near any geological features likely to be affected by landslides.	Out
Severe Space Weather: Relating to the effects of solar winds and its potential effects on power distribution networks, satellite services, aviation and other digital systems.	Very High	Due to the nature and wide scale of effects which could result from severe space weather, there are limited measures which could be put in place to limit the vulnerability of the Proposed Development to such events. It is not considered, however, that the vulnerability of the Proposed Development to these events would in any way worsen effects for any other nearby receptors.	Out
Man-Made Major Accidents and Incidents			
Major Industrial Accidents: Covering a range of scenarios involving explosions, fires and the release of a range of hazardous and combustible materials from industrial processes. Other scenarios considered include structural collapse of a man-made structures and technical failures in industrial facilities.	Low to High	There are a significant number of potential scenarios which are considered in the London Risk Register under this category. The majority of these scenarios are specific to industrial facilities and infrastructure which due to the intended use of the Proposed Development are not considered relevant. Of the scenarios considered, the ones relevant include localised fires and building collapse. These will be managed outside of the EIA process through a combination of legislative and industry guidance which mitigate the risk of fire and/or structural collapse causing a major accident in new developments within the urban environment. Legislative requirements include the 'The Construction (Design Management) Regulations 2015', which provide guidance on fire safety requirements for new buildings, while requirements under the Building Regulations and associated guidance relate to the structural safety and broader health and safety considerations for people in and around buildings. Compliance will also be achieved by adopting structural and fire engineered solutions where the size and scale of the development necessitates bespoke measures to address these risks.	Out
Major Transport Accidents: Considers a range of transport related accidents for different modes of transportation, including road, air, rail and sea.	Low to High	The Proposed Development is located adjacent to Hampstead Road (A400) and Euston Road (A501). As per the Daylight, Sunlight, Overshadowing, Solar Glare and Light Spill Topic Sheet, there is potential for solar glare effects to road users; however, mitigation measures to reduce these effects will be incorporated into the design of the Proposed Development. In the event of a major transport accident affecting the site, it is thought the Proposed Development would not exacerbate effects on nearby receptors. Tall building developments need to be assessed to determine if they pose a risk to air traffic. Due to the height of the Proposed Development and its location relative to the safeguarding zones for London's airports, it is considered the scheme does not pose any risk to air travel and this assessment has been scoped out of the EIA.	Out
Disruptive Industrial Action: Covering industrial action by workers in a range of public and other services industries.	Medium to High	It is anticipated that site users of the Proposed Development could be subject to the effects of industrial action in key services and emergency response sectors, but this will not be any more so than for other surrounding sites in the area. In no case is it anticipated that the effects of these events on nearby receptors would be magnified by any vulnerability of the Proposed Development.	Out

Categories / Description	LRP Risk Rating	Potential for Proposed Development to exacerbate effects on environmental receptors	Scoped in/out
Public and Crowd Events: Relating to the mass influx of non-resident British nationals and public disorder	Medium	Given the intended use for the site, it is not anticipated that the Proposed Development will cause an influx of non-resident British nationals and cause public disorder relating to the crowds associated with a public event.	Out
Malicious Attacks	High to Very High	The location of the Proposed Development and its intended use will make it unlikely to be specifically targeted by malicious attacks. The Proposed Development will also include measures for designing out crime. The Proposed Development is also located close to GP surgeries and hospitals, in the event of a malicious attack.	Out
Accidental Release of a Biological Substance/Large Toxic Chemical Release/Accidental Release of a Biological Pathogen	High	With regards to the inclusion of laboratory enabled space within the Proposed Development, it is acknowledged that it is possible that some chemicals or other regulated substances may be present on site. The Proposed Development will have to comply with all regulations and guidance relating to the storage and use of such substances. If regulated substances were present at sufficient levels (which is not considered at all likely given the volume and controlled quantities within the COSHH Regulations), then additional consents may be required pursuant to the Planning (Hazardous Substances) Regulations 2015 or Control of Major Accident Hazards Regulations 1999. The use and storage of chemicals and regulated substances will therefore be appropriately managed through the established regulatory framework and the control measures implemented at the local and/or national government level. In addition, any laboratory areas which confirm chemicals are to be used would be fitted with an appropriate air extraction system designed in accordance with all relevant regulations and guidance documents.	Out

24 When considering that the laboratory enabled spaces within the Proposed Development, these will be subject to the relevant Health and Safety legislation and guidance and (if necessary) specific additional consenting regimes, and that these uses have been considered within the events assessed in the London Risk Register, it is considered that the vulnerability of the Proposed Development to major accidents, hazards and natural disasters will be adequately managed throughout the lifetime of the project.

25 IEMA's guidance Major Accidents and Disasters in EIA specifically references that major accidents and/or disasters can be scoped out if it can be demonstrated that all possible major accidents and/or disasters are adequately covered elsewhere in the assessment or covered by existing design measures or compliance with legislation and best practice. As outlined above, the Proposed Development will be subject to a stringent set of regulations and guidance which control the design and mitigation of laboratories, through which any potential significant effects are mitigated. The ES for the Proposed Development will therefore not specifically consider the issue of major accidents and natural disasters any further in relation to the inclusion of laboratories within the Proposed Development, as they will be appropriately managed through the established regulatory framework and the control measures implemented at the local and/or national government level.

Conclusion

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

27 Therefore, project vulnerability to major accidents and natural disasters is **scoped out** of the EIA. An assessment of wind microclimate will be included as a separate chapter of the ES.

TRIUM

TOPIC SHEET

WASTE AND MATERIALS

Introduction

1 It is considered that significant effects relating to waste and materials are unlikely and as such this topic is **scoped out** of the EIA. Further detail is provided below.

Materials

Demolition and Construction

2 During demolition and construction, it is anticipated that materials for constructing the Proposed Development will be sourced from:

- The site, in terms of any 'waste for recovery'[1]; and
- Within the London Borough of Camden (LBC) and London.

3 In accordance with IEMA's guide to Materials and Waste in Environmental Impact Assessment[2], materials are considered to be sensitive receptors and include *"physical resources that are used across the lifecycle of a development. Examples include concrete, aggregate, asphalt, bricks, ballast, mortar, glass and timber."*

4 The key material components that the Proposed Development will likely be constructed from[3] include (but are not limited to):

- Concrete in substructures;
- Frame/upper floors in steel;
- Frame/upper floors in concrete;
- Façade cladding (e.g. stone, brick, tiles, metal, wood, concrete, glass, composite material);
- Glazing (glass);
- Roof finishes (e.g. asphalt, wood, metal, stone, clay, slate, glass and plastic, plastic liquid coatings);
- Internal walls (e.g. brick, timber, steel, plasterboard, timber, fibreboard, insulation);
- Ceilings (e.g. gypsum, plasterboard, metal, tiles, wood, drywall);
- Wall and floor finishes (e.g. carpet, linoleum / vinyl, wood, tiles, stone, concrete, drywall); and
- Hard and soft landscaping (e.g. soils, mulch, sands, stone paving slabs, wood, tarmac, stones and gravel etc.).

[1] *Defined by IEMA's guide to Materials and Waste in Environmental Impact Assessment (2020) as 'waste' materials that go through an acceptable recovery process, to lose their status as 'waste' and become materials for other uses.*
[2] *IEMA, (2020); IEMA guide to: Materials and Waste in Environmental Impact Assessment.*
[3] *Subject to ongoing design development*

Mitigation

5 IEMA's guide to Materials and Waste in Environmental Impact Assessment refers to different types of mitigation measures to prevent or reduce adverse effects relating to materials and waste:

- Primary mitigation measures: are *"an intrinsic part of the development, and do not require additional action to be taken"* [4]; for example, choosing to refurbish an existing building, rather than demolish it;
- Secondary mitigation measures: are "*foreseeable actions brought out by the environmental assessment process, and that have not previously been achieved through primary and tertiary mechanisms*"[5]; for example, the implementation of a Procurements Strategy or Construction Environmental Management Plan (CEMP) (or equivalent) or Site Waste Management Plan (SWMP); and
- Tertiary mitigation measures: are "*those that are in place with or without the iterative EIA process*" and include "*those that will be undertaken to meet existing legislative requirements, of those that are considered standard practices used to manage commonly occurring environmental effects*" [6]; for example, sending waste to active and permitted waste management sites, which have to adhere to the requirements of the Environmental Permitting Regulations[7], whereby carrying out certain types of activity (such as receiving waste for landfill) requires an active and permitted waste management site to hold an environmental permit to do so.

6 In view of the above, measures will be implemented to reduce the quantity of materials used during the construction of the Proposed Development. The key construction materials will be:

- Recovered from off-site sources (e.g. donor sites) as far as reasonably practicable;
- Sourced locally as far as reasonably practicable;
- In so far as reasonably practical, sourced in accordance with The Green Guide to Specification[8] to reduce the environmental impact of the construction of the Proposed Development by an informed and responsible selection of construction materials and components (for example, for the floors, roofs, walls, windows, insulation and landscaping of the Proposed Development);
- Reclaimed or recycled materials, where feasible, or from other low carbon sources, e.g. Electric arc furnace steel;
- Sourced via a defined Procurement Strategy, which will select materials with a percentage of recyclable content where feasible;
- Managed via the implementation of a CEMP (or equivalent), which will include measures such as:
  - A 'just-in-time' material delivery system to avoid materials being stockpiled and spoiled during bad weather;
  - Where feasible, a preference in favour of pre-manufactured and site assembled components;
  - Consideration of material quantity requirement to avoid over-ordering and generation of waste materials; and
  - Designated storage area for new building materials, to reduce the risk of damage / spoiling.

7 Measures such as the above shall be implemented pursuant to planning conditions; therefore, it is considered that significant adverse effects during the demolition and construction of the Proposed Development on materials would be unlikely.

8 On the basis of the above, it is proposed to scope out an assessment of demolition and construction effects on materials from the EIA; however, the ES will set out within **ES Volume 1, Chapter 5: Demolition and Construction**:

[4] *IEMA, (2020); IEMA guide to: Materials and Waste in Environmental Impact Assessment (page 19).*
[5] *IEMA, (2020); IEMA guide to: Materials and Waste in Environmental Impact Assessment (page 27).*
[6] *IEMA, (2020); IEMA guide to: Materials and Waste in Environmental Impact Assessment (page 20).*
[7] *The Environmental Permitting (England and Wales) Regulations 2016*
[8] *BRE, (2009); The Green Guide to Specification, Fourth Edition.*

- The approximate type and quantities/volumes of materials that are anticipated to be required for the construction of the Proposed Development;
- Details of the Procurement Strategy (if known);
- The sustainability credentials of materials (if known); and
- The commitment to undertaking the measures outlined above.

Operational Development

9 The materials anticipated to be required during the operation of the Proposed Development are expected to be primarily used for maintenance purposes. Given that: 1) the quantities of materials to be used would be far less than that used during demolition and construction of the Proposed Development; and 2) the scale and massing of the Proposed Development (and so the expected maintenance required) would be typical for a commercial/industrial development, it is considered that significant adverse effects on materials due to the ongoing operation/use of the Proposed Development would be unlikely.

10 On the basis of the above, it is proposed to scope out an assessment of operational effects on materials from the EIA.

Waste

Baseline Waste Context

11 The London Plan 2021 [9]provides waste apportionment targets and forecast arisings for LBC, detailed in Table 1 below.

Table 1 LBC Household (HH) and Commercial and Industrial (C&I) Apportionment Targets and Projections

Waste Capacity	Capacity / Apportionments (tonnes)	
	2021	2041
Camden Forecast Arisings	360,000	374,000
London Plan Apportionment (2021)	133,000	141,000

12 Though the LBC forecast arisings exceed the apportionment within the London Plan, the LBC are part of the North London Waste Authority (NLWA) who manage waste disposal on behalf of the London Boroughs of Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest.

13 The north London boroughs have pooled their apportionments and the North London Waste Plan (NLWP)[10] confirms they will meet this collectively through existing sites and land allocated within the NLWP.

14 The NLWA are constructing a new publicly owned Energy Recovery Facility (ERF) with an annual capacity of up to 700,000 tonnes, in addition to a new Resource Recovery Facility (RRF) with capacity to manage up to 135,000 tonnes of wood, plastic and metal every year.

Hazardous Waste

15 It is anticipated that low levels of hazardous waste would be generated as part of daily operations, to be managed on site in accordance with prevailing legislation for each material, determined by the specifics of its physical and chemical properties.

16 A specialist contractor would be appointed to collect and dispose of hazardous materials in accordance with all prevailing legislation and guidance.

[9] *GLA (2021) The London Plan 2021*
[10] *NLWA (2022) North London Waste Plan*

17 Table 2 below extracted from the NLWP summarises the management of hazardous waste within north London.

Table 2 Annual Hazardous Waste Treatment in North London (2016)

Waste Stream	Waste Arising (Tonnes)	Managed in North London (Tonnes)	Managed Elsewhere in London (Tonnes)	Exported to Landfill Outside London (Tonnes)	Exported to Other Facilities Outside London
Hazardous Waste	53,420	313	12,663	8,557	31,887

Demolition and Construction

18 During demolition and construction, it is anticipated that any waste for recovery or waste for disposal generated from the site would be directed to active and permitted waste management sites within the LBC or London.

19 In accordance with IEMA's guide to Materials and Waste in Environmental Impact Assessment[11], landfill capacity is considered to be a sensitive receptor. The types of waste (whether this be waste for recovery or waste for disposal) anticipated to be generated by the demolition and construction of the Proposed Development include:

- Concrete;
- Brick;
- Glass;
- Slate;
- Plastic and packaging;
- Mixed metals;
- Gypsum;
- Mixed demolition and construction waste;
- Canteen waste (e.g. foil, cardboard, plastic packaging, food waste etc.);
- Card and paper; and
- Hazardous waste (e.g. oils, paints, adhesives etc.).

Mitigation

20 As noted in the 'Materials' section of this topic sheet, different types of mitigation measures are available.

21 A CEMP (or equivalent) will be prepared and implemented throughout the demolition and construction works pursuant to a planning condition/s. The CEMP may be supported by a Site Waste Management Plan (SWMP) and Circular Economy Statement (CES) which would also be prepared and implemented throughout the demolition and construction works pursuant to a planning condition/s. Together, the measures defined within the CEMP and SWMP will minimise waste arising from construction materials; example management measures include but are not limited to:

- Avoiding the stockpiling of construction materials by use of 'just in time' material delivery systems;
- Preventing the overordering of construction materials by carrying out upfront cost analysis works; and
- Storing the construction materials in an appropriate location that will minimise damage to materials.

22 Further to the above, additional mitigation measures that will be implemented include, but are not limited to, the following:

- The Applicant is committed to re-using demolition and construction waste (for recovery) on-site. The approximate quantities of waste anticipated to be generated by the demolition and construction of the Proposed Development will be set out in the ES;
- Should hazardous or contaminated materials be identified, works in the area will temporarily stop, and the materials will be removed and disposed of in line with relevant legislation and guidance e.g. The Control of

[11] *IEMA, (2020); IEMA guide to: Materials and Waste in Environmental Impact Assessment.*

Asbestos at Work Regulation 2012 and Control of Substances Hazardous to Health Regulations (COSHH) 2002;

- The setting of waste reduction targets and waste re-use/recycling targets prior to commencing works on-site and monitoring of such targets throughout the duration of the demolition and construction works; and
- The implementation of waste segregation measures, whereby segregating the key/main waste streams, waste for recovery can be identified prior to leaving the site.

23 The LBC has sufficient capacity (when including land suitable for new waste facilities) to manage apportionment targets, and the enforcement of and adherence to mitigation measures that would be implemented pursuant to planning conditions, any additional waste generated from the demolition and construction of the Proposed Development will be unlikely to cause strain on the LBC's waste management facilities. Therefore, significant adverse effects on the local waste management infrastructure and landfill capacity, resulting from the waste expected to be generated during the demolition and construction of the Proposed Development, are considered unlikely.

24 On the basis of the above, it is proposed to scope out an assessment of the Proposed Development's demolition and construction effects on waste/landfill capacity; however, the ES will set out in **ES Volume 1, Chapter 5: Demolition and Construction**:

- The approximate type and quantities/volumes of demolition and construction waste that are expected to be generated by the Proposed Development;
- The percentage or volumetric target for re-use of demolition and construction waste (for recovery) on-site; and
- An outline of the waste aspects of the CEMP and/or SWMP (or equivalent).

Completed Development

25 During the operation of the Proposed Development, it is anticipated that any waste for recovery or waste for disposal generated from the site would be directed to active and permitted waste management sites within the NLWA or London.

26 The key waste materials expected to be generated by the operational Proposed Development include:

- Organic/compostable waste;
- Dry mixed recyclables;
- Paper and cardboard;
- Packaging wastes;
- Waste electrical and electronic equipment (WEEE) wastes;
- Bulky waste;
- Hazardous waste; and
- Residual waste.

27 All clinical waste producers have a legal 'duty of care' to ensure all wastes produced on their sites are responsibly managed and that safe systems[12] of work are in place for the collection, storage, handling, transportation and disposal of waste materials. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009, as amended, also place statutory 'duty of care' obligations on the waste producer as a 'consignor' of substances/articles classed as dangerous goods for the purposes of carriage on public roads and highways. An Operational Waste and Recycling Management Strategy will be prepared and submitted alongside the planning application, taking into account all of the waste streams generated as a result of the Proposed

[12] Department for Transport (DfT) (2009) The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009

Development, including clinical (infectious, sharps and chemically contaminated) domestic and recycling wastes and chemical wastes, although on a smaller scale. The Proposed Development will be designed in line with and managed in line (including the Operational Waste and Recycling Management Strategy), with the following policy and guidance:

- European Waste Framework Directive[13];
- The Waste (England and Wales) Regulations 2011[14], as amended;
- Waste Strategy for England 2018 – Our Waste, Our Resources: A Strategy for England[15];
- The London Plan 2021;
- The Mayor's Business Waste Strategy 2011[16];
- The Building Regulations 2010[17];
- British Standard 5906:2005 Waste Management in Buildings – Code of Practice[18]; and
- Health Technical Memorandum (HTM) 07-01[19].

Mitigation

28 The design of the Proposed Development will ensure there is sufficient storage and equipment/provisions (in accordance with the LBC requirements) in place to manage and direct the operational waste, expected to be generated by the Proposed Development, to the relevant storage areas provided. The design of the Proposed Development will also ensure there is sufficient space for the collection of waste to be relocated to the relevant active and permitted waste management sites.

29 In addition to the above, an Operational Waste Management Strategy (OWMS) (or equivalent) will be prepared and implemented as part of the Proposed Development, which will include information on the type and quantities/volumes of waste streams anticipated to be generated by the operational Proposed Development, along with how each waste stream will be managed. The strategy will also provide details on how waste will be reduced, minimised and recycled, where possible, in line with the Waste Hierarchy and the LBC's requirements.

30 Based on the research identifying that the LBC has sufficient capacity (as part of NLWA) to manage apportionment targets, and the enforcement of and adherence to mitigation (waste management) measures that would be implemented pursuant to planning conditions, any additional waste generated from the operational Proposed Development will be unlikely to cause strain on the NLWA's waste management facilities. Therefore, significant adverse effects on the local waste management infrastructure and landfill capacity, resulting from the waste expected to be generated during the operation of the Proposed Development, are considered unlikely.

31 On the basis of the above, it is proposed to scope out an assessment of the Proposed Development's operational effects on waste / landfill capacity; however, the ES will set out:

- The approximate type and quantities/volumes of operational waste that are expected to be generated by the operational Proposed Development; and
- A summary of the Operational Waste and Recycling Management Strategy prepared as part of the Planning Application.

[13] European Commission (2008) European Waste Framework Directive
[14] (2011) The Waste (England and Wales) Regulations 2011
[15] Department for Environment, Food and Rural Affairs (DEFRA) (2018) Our Waste, Our Resources: A Strategy for England
[16] (GLA) (2011) The Mayor's Business Waste Strategy
[17] HM Government (2010) The Building Regulations 2010
[18] British Standard (BS) (2005) 5906:2005 Waste Management in Buildings – Code of Practice
[19] Department of Health (DoH) (2013) Health Technical Memorandum (HTM) 07-01

TOPIC SHEET

WATER RESOURCES, DRAINAGE AND FLOOD RISK

Introduction

1 It is considered that significant effects relating to water resources, drainage and flood risk are unlikely and as such, this topic is **scoped out** of the EIA. The following sections outline:

- the site's baseline water resource conditions, identifying sensitive receptors and potential effects, concluding that significant effects are unlikely; and
- the scope of the Flood Risk Assessment (FRA) and Drainage Strategy (DS) report to be included in the planning submission for the Proposed Development.

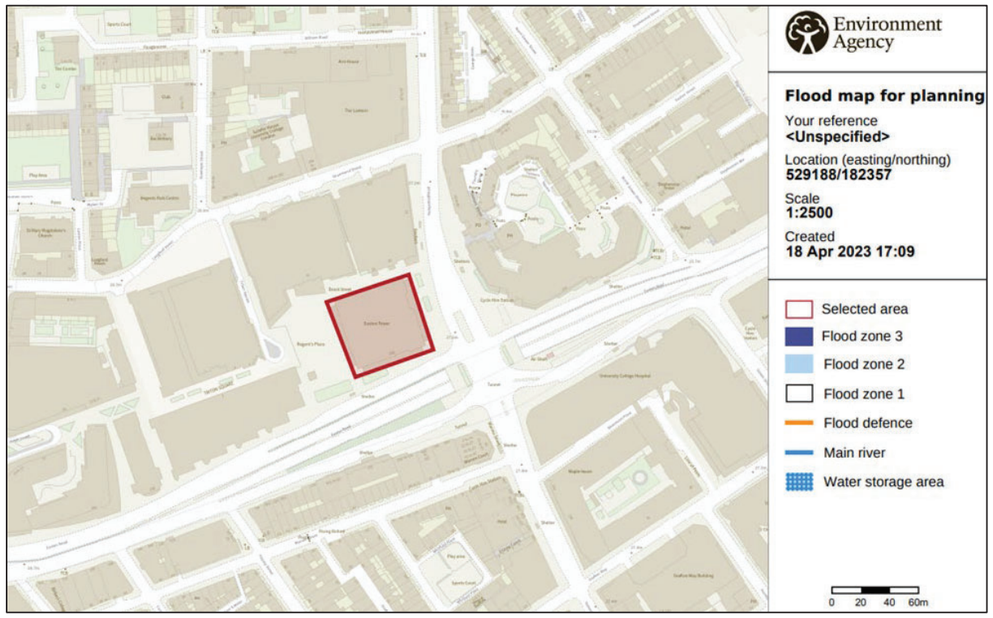
2 The following review and summary have been provided by Arup.

Baseline Conditions

Flood Risk, Surface Water and Hydrogeology

3 As shown in Figure 1 the site, in its entirety, is located in Flood Zone 1; Flood Zone 1 is land assessed as having a low risk of flooding from rivers and the sea, equivalent to a 0.1% Annual Exceedance Probability (AEP), AEP being the probability of an event occurring in any given year.

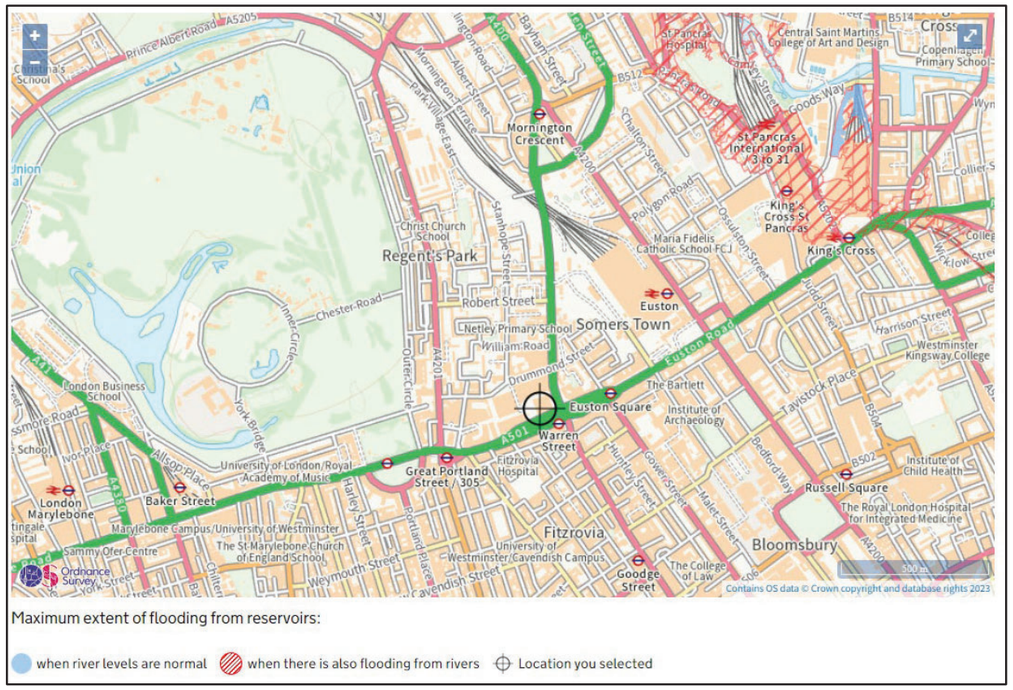
Figure 1 Flood Map for Planning (GOV.UK, 2023)



4 There are artificial surface water features present within the local area. The site is located 1.3km from Regent's Canal, and 900m from the Regent's Park Boating Lake. Regent's Canal is managed by the Canal & River Trust (CRT), whilst the boating lake sits within land managed by the London Borough of Camden (LBC).

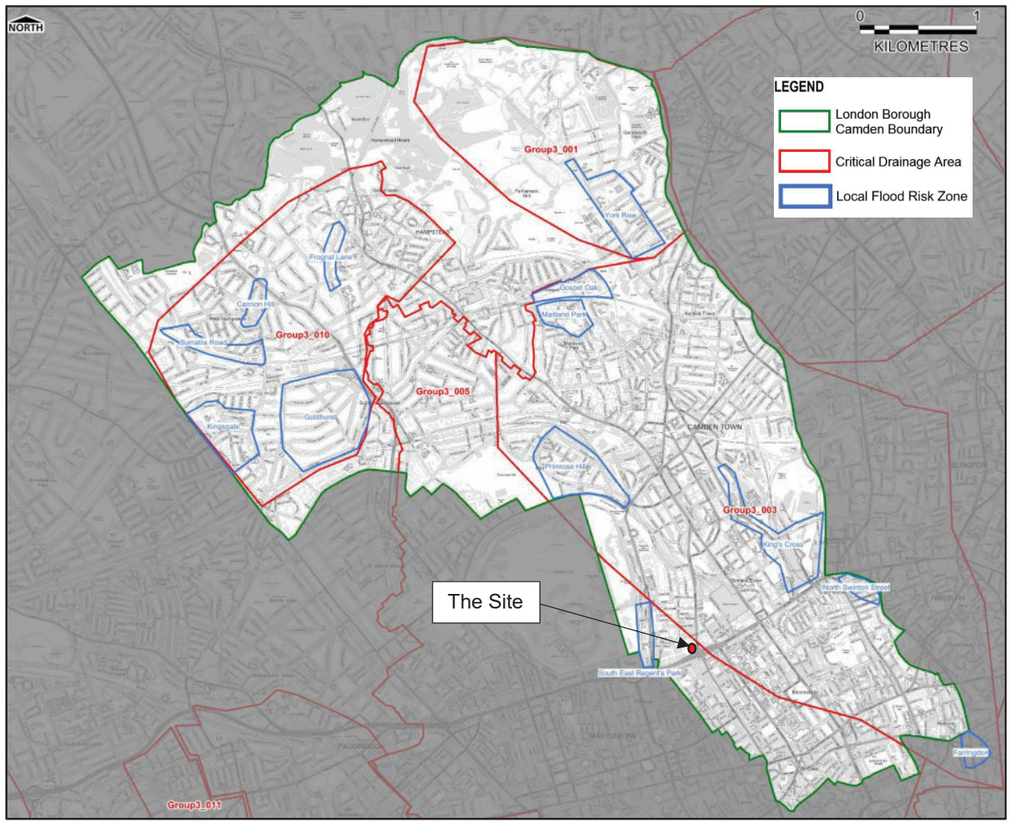
5 The Environment Agency's (EA) Long Term Flood Risk Mapping, shown in Figure 2, indicates that the site is not at risk of flooding from reservoirs. In general, this is not considered a significant flood risk anyway as flooding from this source is extremely unlikely to occur and there has been no loss of life in the UK as a result of it since 1925. All large reservoirs must be inspected and supervised by reservoir panel engineers. As the enforcement authority for the Reservoirs Act 1975 in England, the EA ensures that reservoirs are inspected regularly, and essential safety work is carried out.

Figure 2 EA Long Term Flood Risk Map – maximum extent of flooding from reservoirs (GOV.UK, 2023)



6 According to the LBC Strategic Flood Risk Assessment (SFRA)[1] the site is located within a Critical Drainage Area (CDA) (reference *Group3_005*) as shown on Figure 3. A CDA is defined as an area where multiple and interlinked sources of flood risk cause flooding during severe weather thereby affecting people, property or local infrastructure.

Figure 3 Critical Drainage Areas in the London Borough of Camden (LBC, 2014)



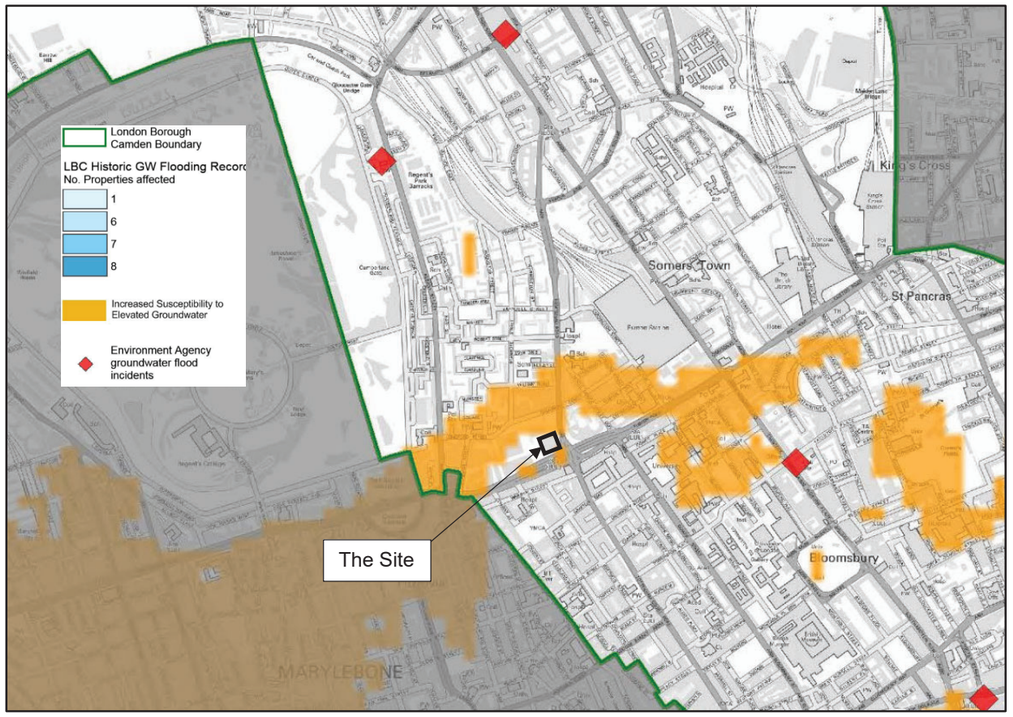
7 Despite this, the EA map of Flood Risk from Surface Water, shown in Figure 4, indicates that the site itself is at very low risk of flooding from surface water. “Very low risk” is classified as having less than 0.1% AEP. There is a low to high risk of surface water flooding along Euston Road to the south-west, and small isolated areas at low risk of flooding to the north-west of the site.

Figure 4 EA Flood Map for Surface Water (GOV.UK, 2023)

[1] *LBC, (2014); Camden Strategic Flood Risk Assessment*

8 According to the LBC SFRA, though the site itself does not have increased susceptibility to elevated groundwater, there are areas in close proximity that do, notably to the north (see Figure 5). It is worth acknowledging that there are no historic records of groundwater flooding of properties in the vicinity of the site, the nearest incident being recorded approximately 800m away in Bloomsbury. Ground Investigation data will be reviewed to establish the groundwater level on the site as part of the site-specific FRA.

Figure 5 Map of Increased Susceptibility to Elevated Groundwater (LBC, 2014)



9 According to the LBC SFRA, the site is underlain by the London Clay Formation, which is a non-aquifer or unproductive strata – i.e. bedrock with low permeability that has negligible significance for water supply or river base flow. Furthermore, the LBC SFRA does not identify the site as being located within a Groundwater Source Protection Zone (GSPZ), i.e. an area where there are likely to be risks posed to quality and/or quantity of groundwater abstracted.

Sewerage and Water Supply Infrastructure

10 The existing site and its environs are heavily urbanised. The Thames Water Utilities Limited (TWUL) asset records show that the site and the surrounding area is currently served by a network of public combined water sewers. The asset records indicate that the existing sewer network consists of primarily strategic combined sewers, with a 1372X864mm trunk combined sewer that runs northwards along Hampstead Road directly east of the site, and a 1143X762mm trunk combined sewer that runs eastwards along Euston Road directly south of the site. There are no dedicated surface water sewers, and both foul and surface water flows from the site discharge into the public combined sewer network.

11 According to the LBC SFRA there are no historic records of internal or external sewer flooding in the part of the Borough where the Site is located.

12 The TWUL asset records shows that the Site is served by a number of connections to the public potable water network, with 18-inch (c. 450mm) and 16-inch (c. 400mm) diameter trunk mains located in Euston Road and Hamstead Road respectively.

Discussion for Scoping Out

Flood Risk, Surface Water and Hydrogeology

13 Flood risk is regulated through the National Planning Policy Framework (NPPF), which outlines the need for a site-specific FRA to be produced for all sites located within Flood Zone 2 and 3, those larger than one hectare, or those with critical drainage problems.

14 Although the site area does not exceed one hectare and is not located in Flood Zones 2 or 3, a site-specific FRA is required for the Proposed Development due to its location within a CDA. The FRA will be carried out in line with the NPPF and accompanying Planning Policy Guidance (NPPG) and will assess flood risk to the Proposed Development from fluvial and tidal, pluvial, groundwater and artificial sources, including sewers and reservoirs. The FRA will demonstrate that the Proposed Development is safe for its lifetime and that it does not increase flood risk elsewhere.

15 The FRA will also include appropriate recommendations for flood risk mitigation measures, as well as demonstrating safe access / egress routes for the Proposed Development as required. The FRA will assess the residual risk of flooding assuming the implementation of such measures.

16 Due to potential alterations to the existing basement as part of the Proposed Development, it is considered necessary to confirm the groundwater level on the site so that risk of groundwater ingress at basement level can be adequately evaluated and, if necessary mitigated through the structural design. A Basement Impact Assessment (BIA) will be submitted in support of the planning application, which will include an assessment of the impact of the proposed basement on flood risk and water resources; however, as there is an existing basement on the site the likely effects are considered likely to be insignificant once any mitigation measures are implemented. Although the site is not located in a Source Protection Zone, the BIA will discuss mitigation measures with a view to maintaining groundwater quality. Refer to *Demolition and Construction Works* section for further commentary of relevance to groundwater protection measures.

17 As the site is located in a CDA it is considered particularly important to demonstrate that a drainage strategy has been developed that adequately caters for the discharge of surface water and foul flows from the Proposed Development. As part of the FRA to be submitted as part of the Planning Application, a surface water drainage strategy will be presented. The strategy will present the existing site condition with respect to drainage, commenting on topography, existing surface water flow routes and sewerage infrastructure.

18 With respect to surface water, the strategy will propose a limiting discharge rate, as well as identifying the means of discharge in line with the drainage hierarchy set out in the London Plan[2]. The strategy will give consideration to both the quantity and quality of surface water discharged and will include an appraisal of the feasibility of Sustainable Drainage Systems (SuDS) in line with current planning policy and industry best practice. The strategy will give an indicative attenuation volume to be provided to meet the proposed discharge rate, with the inclusion of an appropriate allowance for climate change.

19 Through a well informed and considered design process regarding flood risk and surface water drainage considerations, coupled with appropriate measures through the design to manage the residual flood risk at the site following redevelopment, no likely significant effects associated with flooding and surface water drainage are anticipated in line with London Plan Policies SI 12 and SI 13.

20 Policies SI 12 and SI 13 are Sustainable Infrastructure policies, covering flood risk management and sustainable drainage respectively. Policy SI 12 states that proposed developments “should ensure that flood risk is minimised and mitigated, and that residual risk is addressed” and that "buildings should be designed for quick recovery following a flood”. Policy SI 13 states that proposed developments “should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible … in line with the drainage hierarchy”. Furthermore, the drainage design should aim to increase water efficiency and lead to improvements in water quality.

21 A review of relevant national, regional and local planning policy and guidance will form part of the FRA.

Sewerage and Water Supply Infrastructure

22 A Utilities Assessment will be undertaken to determine the potable water demands and wastewater (foul drainage) flows for the Proposed Development. The existing local (private) infrastructure will be surveyed to confirm condition and capacity with a view to reusing where appropriate.

23 TWUL undertakes modelling of its sewer network to calculate network capacity and to determine which parts of the network are to be upgraded. Consultation will be undertaken with TWUL to understand the extent and capacity of the existing sewer system. During planning, a pre-development enquiry will be submitted to TWUL with expected peak flow rates for internal assessment by TWUL. TWUL will then undertake the appropriate

[2] *GLA, (2021); The London Plan*

modelling work to identify what is required to cater for the flows from the Proposed Development to the public sewer. If formal permission to connect is required, this would be secured via the Section 106 agreement for the site following any future planning consent. The assessment (undertaken by TWUL) would confirm the capacity of the local sewer network and details relating to the point of connection (if new), with the aim of identifying any requirement for works to upgrade the local sewer network (if required) which would be undertaken by TWUL.

24 Where there is existing capacity available in the local sewer network, it is considered the increased peak foul flows will not result in a significant effect on TWUL infrastructure local to the site. If it is determined that capacity within the local sewer network needs to be increased, then TWUL would undertake the appropriate upgrade works to support the development as part of their statutory obligations. Therefore, following these works, any likely effect would remain not significant.

25 TWUL also produces Water Resource Management Plans (WRMP), which set out forecasts for water supply and demand, and outline the strategy proposed to meet consumers' needs into the future. As part of the production of the WRMP, TWUL has considered the projected future growth within its defined catchment area (i.e., London), with forecasts based on underlying source data from Government census data, past trends, and local authorities' forecasts of future population growth. TWUL bases its forecasts on a combination of these sources to determine the most likely scenarios for growth. It is therefore considered that the likely effects of the Proposed Development on water demand have been accounted for strategically within the TWUL assessments.

26 Compared with the existing building, an increase in water demand and foul flows is expected as a result of the Proposed Development due to the increase in floor area. To inform the detailed design stage, consultation with TWUL may result in the need to carry out flow and pressure tests for daily demand estimations for the Proposed Development. This will assess the available capacity in the local supply network and determine whether any upgrades are required to support the Proposed Development. However, the anticipated increase in foul flows generated by the Proposed Development would be compensated in part by the expected reduction in the rate of surface water discharged to the sewer network as a result of the new surface water drainage strategy. Furthermore, smart metering, water-saving and recycling measures to reduce rates of water consumption and to maximise future-proofing will be evaluated at the next design stage in line with London Plan Policy SI5 and incorporated where appropriate. Measures, such as the installation of low-flow fittings and greywater reuse, will also achieve a reduction in the volume of wastewater generated, thereby reducing the overall magnitude of the impact of the Proposed Development on the public sewer network. Following the inclusion of these measures and due to the Thames Water Resource Management Plan, it is considered that sufficient measures will be in place for water demand to be met and so no likely significant effects are anticipated.

Demolition and Construction Works

27 A number of water resources and drainage mitigation measures shall be implemented throughout the construction phase to protect water resources, particularly relating to groundwater and drainage. These mitigation measures can be categorised as 'Pre-Commencement' measures, and measures implemented throughout the demolition and construction works themselves.

28 Pre-Commencement:

- Discharge arrangements into the foul water sewer will be agreed with TWUL;
- All existing utilities will be identified and marked before works commence, with the use of signs to warn of their presence;
- Silt settlement facilities and oil / petrol interceptors will be installed at relevant discharge points into the sewers (for surface water runoff and wastewater discharges); and
- An Emergency Response Plan (ERP) will be prepared, which will set out the procedure to be adopted in the event of a leak or spill.

29 During Enabling and Construction Works:

- Any damage to existing infrastructure would be immediately repaired;
- Any waste effluent will be tested and any water that may encounter contaminated materials or be identified as being contaminated, will be disposed of appropriately and, to the satisfaction of the EA and/or TW; and where necessary, disposed of at the correctly licensed facility by a licensed specialist contractor/s;
- Refuelling and delivery areas will be located away from the local sewer network drains;
- Wherever possible, plant and machinery will have drip trays beneath oil tanks/engines/gearboxes/hydraulics, which will be checked and emptied regularly via a licensed waste disposal operator;

- All liquids and solids of a potentially hazardous nature (e.g., diesel fuel, oils, and solvents) will be stored in designated locations with specific measures to prevent leakage and release of their contents, including the siting of storage areas away from surface water drains, on an impermeable base with an impermeable bund that has no outflow and is of adequate capacity to contain 110% of the contents in accordance with the EA's requirements. Any tanks storing more than 200 litres of oil onsite, will have secondary bunding. Onsite provisions will be made to contain a serious spill or leak through the use of booms, bunding and absorbent material in accordance with the ERP;
- All storage will be protected from vandalism and kept locked up when not in use;
- All relevant contractors will be required to investigate opportunities to sustainably manage the use of water, such as turning off taps when not in use, both on site and within site offices and the use of recycled water / a rainwater harvesting system for equipment such as wheel washes; and
- The water consumption throughout the enabling and construction works will be monitored, either through sub-metering or reading of utility bills, to allow comparison against best practice benchmarks and improvements to be made.

Conclusion

30 The site is located in Flood Zone 1 ('low risk' of flooding from rivers and the sea) and the other baseline conditions in relation to the water environment show that flood risks from most sources are low. Flood risk from elevated groundwater will be evaluated further upon the acquisition of site-specific Ground Investigation records. If groundwater is found to coincide with the proposed basement level, appropriate mitigation measures will be incorporated into the structural design.

31 No likely significant effects are anticipated to water resources throughout the construction phase following the implementation of various standard mitigation measures both during pre-commencement and throughout the construction works, as defined above.

32 In recognition of the site being located in a Critical Drainage Area, a site-specific FRA will be prepared to accompany the planning application.

33 The FRA will include a suitable surface water drainage strategy for the Proposed Development that will incorporate mitigation by design to comply with local and national planning policy to ensure there are no significant adverse impacts associated with surface water drainage from the Proposed Development.

34 TWUL will be consulted throughout the design process to ensure water supply and wastewater discharge requirements are assessed in full and the necessary technical/legal agreements are in place before construction and occupation.

35 Therefore, it is concluded that the Proposed Development is unlikely to result in significant effects associated with water resources and as such further assessment in respect of water resources can be **scoped out** of the EIA.

Annex F: Archaeological Desk Based Assessment

An Archaeological Desk Based Assessment has been submitted with the planning application as a standalone deliverable.

Annex G: Preliminary Ecological Appraisal

A Preliminary Ecological Appraisal has been submitted with the planning application as a standalone deliverable.

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Appendix: EIA Methodology

Annex 1: EIA Scoping Report

Annex 2: EIA Scoping Opinion

Annex 3: Cumulative Schemes List and Map

CBRE

Euston Tower EIA Scoping Report Review

Review of Euston Tower: Request for an EIA Scoping Opinion Report (Trium, August 2023)

CBRE

NOVEMBER 2023

Sustainability, Impact Assessment & Social Value

CBRE

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Euston Tower EIA Scoping Report Review

Contents

SUSTAINABILITY, IMPACT ASSESSMENT & SOCIAL VALUE | PROPRIETARY & CONFIDENTIAL INFORMATION
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1.Introduction

Background

1.1.1. The Sustainability, Impact Assessment & Social Value team at CBRE Limited ('CBRE') has been commissioned by the London Borough of Camden (LB Camden) to provide independent Environmental Impact Assessment (EIA) advice in relation to the proposed redevelopment of a site located at 286 Euston Road, within the London Borough of Camden (the 'proposed development').

1.1.2. In due course, British Land Property Management Limited ('the Applicant') will be submitting a full planning application for the proposed development to LB Camden for approval, with LB Camden being the determining authority.

1.1.3. The application site is approximately 0.88 hectare (ha) in area and currently consists of a ground plus 36-storey building with a basement in the east of the site and Regents Place Plaza in the west of the site. The building comprises retail floorspace at ground and first floor levels, with vacant office floorspace on the levels above. The basement comprises car and cycle parking and is connected to the wider Regents Campus basement, which also provides a servicing yard used by Euston Tower.

1.1.4. The proposals comprise the partial demolition of the existing building on-site, with the building's central core, basement and foundations to be retained, and the construction of a commercial-led development to deliver a total floorspace of approximately 80,000 sqm Gross Internal Area (GIA), comprising predominantly office and lab enabled floorspace (Use Class E) plus some Flexible Use Class E floorspace.

1.1.5. In line with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended in 2018 and 2020), the Applicant recognises the need for the proposed development to follow the full EIA process due to the scale of the proposed development in the context of the surrounding area (see Section 2 of this report). As such, the Applicant will be preparing an Environmental Statement (ES), which will be submitted in support of the planning application in due course. The Applicant has commissioned Trium as Lead EIA Consultant for the proposed development.

1.1.6. The purpose of this document is to report the outcome of CBRE's review of the EIA Scoping Report, prepared by Trium (dated August 2023), and provide commentary suitable for inclusion in LB Camden's EIA Scoping Opinion.

Structure of this Document

1.1.7. The remaining parts of this report are structured as follows:

- An assessment of regulatory compliance;
- Review of proposed EIA approach; and
- Summary and conclusions.

2. Regulatory compliance

The development in the context of the EIA regulations

2.1.1. The procedures for carrying out EIA for a development within the terrestrial environment are set out within the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended in 2018[1] and 2020[2]) - herein the 'EIA Regulations 2017'.

2.1.2. The proposed development is not Schedule 1 development, for which EIA would be mandatory. With reference to Schedule 2 development, the proposed development is of a type listed under Category 10(b) urban development projects (including the construction of shopping centres and car parks, sports stadiums, leisure centres and multiplex cinemas).

2.1.3. A development is considered to be Schedule 2 development if any part of it lies within a 'sensitive area' or if it meets or exceeds the relevant thresholds and criteria for that category of development, as detailed in the EIA Regulations 2017. For category 10(b) projects, these are as follows:

- The development includes more than 1 hectare of urban development which is not dwelling-house development; or
- The development includes more than 150 dwellings; or
- The overall area of the development exceeds 5 hectares.

2.1.4. As confirmed in the EIA Scoping Report, the proposed development does not fall within the classification of Schedule 2, 10(b) urban development projects as it does not exceed the above criteria, nor is the site located within a 'sensitive area' as defined by the EIA Regulations.

2.1.5. However, taking into account the scale of the development proposed and nature of the site and surrounding area, it is considered that there is the potential for significant environmental effects to arise. As such, the Applicant has proposed to undertake a voluntary EIA in accordance with the requirements of the EIA Regulations and submit an ES in due course, in conjunction with the planning application. CBRE agree with the proposed approach to submit an ES with the planning application. Commentary on the scope and methodology of the ES, as proposed within the EIA Scoping Report, is provided in Section 3 of this report.

EIA Scoping Compliance

Consultation

2.1.6. No responses have been received from the consultees in relation to this section of the EIA Scoping Report.

[1] The Town and Country Planning and Infrastructure Planning (Environmental Impact Assessment) (Amendment) Regulations 2018.
[2] The Town and Country Planning (Development Management Procedure, Listed Buildings and Environmental Impact Assessment) (England) (Coronavirus) (Amendment) Regulations 2020.

CBRE Review

2.1.7. Regulation 15(2)(a) of the EIA Regulations 2017, sets out what must be included in a Request for a Scoping Opinion. Table 2.1 sets out the EIA Scoping Report's compliance with the requirements of this Regulation.

Table 2.1
Review of the EIA Scoping Report in respect of the EIA Regulations

EIA Regulation Requirement	Requirement met in the EIA Scoping Report?
A plan sufficient to identify the land	Yes – Figure 1 provides an aerial imagery plan of the site location and Figure 2 provides the indicative redline planning application boundary. As noted in Figure 2's caption, the redline planning application boundary shown is indicative. This is noted;, should the boundary materially change for the planning application, the Applicant should consider re-scoping to ensure the EIA Scoping Report remains valid. It is also noted that a different site boundary is shown in a number of the technical topic sheets presented in Annex D and Annex E. The ES should ensure that the correct site boundary (i.e. the redline boundary being used for the purpose of the planning application) is included on all figures and is used to inform the assessment scope.
A brief description of the nature and purpose of the development, including its location and technical capacity	Yes – a brief description of the site and the nature of the proposed development are provided in *Site Location and Description* (paragraphs 14-18) and *The Proposed Development* (paragraphs 21-26) respectively. The EIA Scoping Report does not make it explicitly clear what the purpose of the proposed development is. It is noted that paragraph 22 refers to considerations that have fed into the design evolution process, including a feasibility study; however, no explanation has been provided as to why the development is needed and why alternative options (such as refurbishment) have not been considered further. This should be made explicitly clear in the ES in due course.
An explanation of the likely significant effects of the development on the environment	Yes – an explanation of the likely significant environmental effects of the development is provided in *Scope of The EIA – Environmental Topics*, *Annex D: Scoped In Topic Sheets* and *Annex E: Scoped Out Topic Sheets*.
Such other information or representations as the person making the request may wish to provide or make	Additional information such as the general EIA methodology has been included within the EIA Scoping Report (*Annex A: Approach to EIA Scoping and EIA Methodology*).

2.1.8. As set out in the table above, the EIA Scoping Report is broadly considered to meet the necessary regulatory requirements. However, further clarity on the purpose of the proposed development would be useful to provide context to the assessment methodologies proposed. It is also noted that the redline planning application boundary is shown as 'indicative' in the EIA Scoping Report. Should this materially change for the planning application, the Applicant should consider revisiting the EIA Scoping process to confirm that the scope and methodology set out in the EIA Scoping Report remains valid. The ES should also ensure that the correct redline boundary plan is included on all figures, including any figures in existing reports that are proposed to be submitted with the planning application.

3. Review of Proposed EIA Approach

Overview

3.1.1. The outcome of CBRE's review of the proposed EIA approach is set out in this chapter. The review takes into account comments provided by the consultees. Where an alternative approach has been recommended, this is clearly set out under the relevant topic heading.

3.1.2. In undertaking this review, CBRE have had regard to:

a) any information provided by the Applicant about the development;
b) the specific characteristics of the particular development;
c) the specific characteristics of development of the type concerned; and
d) the environmental features likely to be significantly affected by the development (Regulation 15(6)).

3.1.3. Responses from the following consultees have been taken into account in undertaking this review:

- Thames Water;
- Environment Agency (EA);
- Transport for London (TfL);
- Natural England (NE);
- Historic England (HE);
- Nature Conservation Officer at LB Camden;
- Contaminated Land Officer at LB Camden;
- Metropolitan Police;
- LBC Green Space;
- Inclusive Economy Project Officer at LB Camden;
- Sustainability Officer at LB Camden; and
- Members of the public, as specified in the relevant sections below.

3.1.4. The consultation responses are provided in full in Appendix A.

Introduction, Purpose of the Report, and Structure of the EIA Scoping Report

Consultation

3.1.5. No responses have been received from the consultees in relation to these sections of the EIA Scoping Report.

CBRE Review

3.1.6. These sections of the EIA Scoping Report provide a brief overview of the application site, the proposed development in the context of the EIA Regulations 2017, the purpose and structure of the EIA Scoping Report, and the relevant expertise or qualifications of Trium as the author of the EIA Scoping Report. The information provided here is generally considered acceptable. Comments on the acceptability of the proposed EIA scope itself are provided later in this report.

Site Location and Description and Environmental Context

Consultation

3.1.7. No responses have been received from the consultees in relation to these sections of the EIA Scoping Report.

CBRE Review

3.1.8. These sections of the EIA Scoping Report provide a helpful overview of the site and surrounding context, including key environmental features and designations, as listed in Table 2. The information provided here is generally considered to be acceptable; however the Applicant should consider the below comments when preparing the ES.

3.1.9. Paragraph 15 of the EIA Scoping Report confirms that the building comprises operational commercial properties at ground floor, with vacant office floorspace on the floors above; however, it would be useful to understand how long the office floorspace has been vacant for and how this has been used to inform the baseline position for the purpose of the EIA. Commentary relating to the baseline scenarios for each of the technical assessments is provided in the relevant sections later in this report, however, as a general comment, it is not always clear what the technical topics are considering as the existing baseline.

3.1.10. Table 2 lists the sensitive receptors for each environmental topic. However, based on a desk-based review of the surrounding area, this list is not considered to be comprehensive. In this regard, it is noted that Air Quality focuses on the University College Hospital and nearby residential receptors and Noise and Vibration focuses on just residential receptors. No mention has been given to the Radisson Hotel to the south of the site. In addition, the section on the Socio-Economics baseline conditions is limited to the provision of heath care within the study area (1km of the site) rather than providing a more holistic overview of the demographic and economic profile of the area. In preparing the ES, consideration should be given to all surrounding sensitive receptors and baseline conditions. Where sensitive receptors are proposed to be scoped out of a technical assessment, clear justification should be provided as to why significant effects are not considered likely.

3.1.11. There are some inconsistencies within the EIA Scoping Report when referring to the distance of Regents Park from the site. The Applicant should ensure the distances reported in the ES are correct and consistent throughout.

3.1.12. Figure 3 shows a Scheduled Monument is located approximately 500 m south west of the site, which has not been mentioned in Table 2 nor within the Townscape, Visual and Built Heritage Topic Sheet in Annex D. The Applicant should ensure that all sensitive receptors within the study area are considered within the ES.

The Proposed Development

Consultation

3.1.13. The following responses have been received from the consultees in relation to The Proposed Development section of the EIA Scoping Report:

- Inclusive Economy Project Officer at LB Camden.

CBRE Review

3.1.14. This section of the EIA Scoping Report sets out a brief description of the proposed development, including a high level overview of the maximum design parameters, including building heights and floorspace quanta. The energy strategy is also identified, as is the duration of the construction programme. The information provided here is generally considered acceptable; however, the below should be taken into account when preparing the ES.

3.1.15. Paragraph 21 sets out the quantum of floorspace proposed; however, the breakdown of floorspace does not add up to the total quantum of floorspace proposed (80,000 sqm GIA). It is assumed that the remaining floorspace comprises ancillary floorspace. This should be clarified in the ES.

3.1.16. It is understood that the proposed development will deliver laboratory enabled floorspace; however, no further information is provided in this section. Elsewhere in the EIA Scoping Report (see the Topic Sheet on Project Vulnerability, Major Accidents and Disasters, Annex E), the Applicant has confirmed that this will consist of 'wet' laboratory enabled floorspace and goes on to provide more information on what this would comprise and the likely substances associated with 'Category 2 Laboratories'. It would have been useful to have more information on the laboratory enabled floorspace in The Proposed Development section for the reader to have a more comprehensive understanding of the proposals when reviewing each of the topic sheets. Key information on the types of land uses proposed and their operation should be clearly set out within ES Chapter 4: The Proposed Development.

3.1.17. The proposed building height is provided in m Above Ordnance Datum (126 m AOD); however the existing building height described in the Introduction section (paragraph 22) is provided as the number of storeys (ground plus 36-storeys). To enable a like-for-like comparison and allow the reader of the ES to understand the height of the proposed development in the context of the existing building, the ES should clearly set out the existing and proposed heights using the same metric (i.e., m AOD).

3.1.18. In the response provided by the Inclusive Economy Project Officer at LB Camden on 5 October 2023, they would expect that the development would trigger the need for affordable workspace and have set out a number of ways in which this could be achieved. The proposed development ES chapter (Chapter 4) should clearly set out the quantum of affordable workspace and whether this meets policy requirements.

3.1.19. The Inclusive Economy Project Officer has also set out a number of expectations for the proposed development once operational to ensure that the scheme delivers local employment benefits in the long term. Whilst the ES is not intended to demonstrate policy compliance, the ES should confirm what the Applicant is committing to. Any commitments made should be considered as part of the Socio-Economics assessment.

3.1.20. The Inclusive Economy Project Officer at LB Camden has also set out a number of requirements that must be considered for the demolition and construction works, notably in respect of apprenticeships, work experience placements, local recruitment and local procurement. The demolition and construction ES chapter (Chapter 5) should clearly set out what the Applicant is committing to and whether this meets Camden's requirements, with reference to Camden's Planning Guidance on Employment Sites and Business Premises (January 2021).

Scope of the EIA

Consultation

3.1.21. No responses have been received from the consultees in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.22. This section of the EIA Scoping Report provides an overview of the Report in the context of the EIA Regulations 2017, the anticipated demolition and construction phasing, the scope of the EIA, and the format of the planning application, including the information which will inform the basis of the EIA. Commentary on the EIA Methodology, Cumulative Assessment and Technical Scopes, as set out within Annexes A, C, D & E respectively, is presented later in this report.

3.1.23. Paragraph 28 of the EIA Scoping Report sets out the contents of the EIA Scoping Report in accordance with Regulation 15 of the EIA Regulations. As noted in Table 2.1 of this report, the EIA Scoping Report does not make it explicitly clear what the purpose of the proposed development is. This should be made explicitly clear in the ES in due course.

3.1.24. Paragraph 31 states that "*whilst the demolition and construction phasing is still being developed, it is expected that all works will be completed prior to occupation of any aspect of the Proposed Development. It is therefore unlikely that there would be any introduced sensitive receptors requiring assessment. Should the phasing be altered to include early occupation during construction, this would be considered within the technical assessments where applicable*". CBRE agree with this approach.

Proposed Structure of the Environmental Statement

Consultation

3.1.25. No responses have been received from the consultees in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.26. This section sets out the proposed scope and structure of the ES, which will comprise the following:

- Volume 1: Main ES;
- Volume 2: Townscape, Visual and Built Heritage Assessment;
- Volume 3: Technical Appendices; and
- Non-Technical Summary (NTS).

3.1.27. The proposed structure is considered to be appropriate and it is acknowledged that a separate volume is often provided for the Townscape, Visual and Built Heritage Assessment due to the length of reporting and inclusion of visualisations.

Request for an EIA Scoping Opinion

Consultation

3.1.28. No responses have been received from the consultees in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.29. This section sets out the purpose of the EIA Scoping Report and invites LB Camden and consultees to provide their comments within the five-week period prescribed by the EIA Regulations. This is noted and based on receipt of the EIA Scoping Report on 04 August 2023, LB Camden must adopt their scoping opinion by 08 September 2023, unless agreed otherwise in writing with the Applicant.

Annex A: EIA Scoping and Environmental Statement Methodology

Consultation

3.1.30. The following responses have been received from the consultees in relation to Annex A of the EIA Scoping Report:

- Ursula Brown (member of the public, received 14 August 2023).

CBRE Review

3.1.31. Annex A of the EIA Scoping Report provides an overview of the approach to EIA scoping and the general EIA methodology and assessment approach, including the terminology and approach for determining effect significance.

Use of Competent Experts

3.1.32. This section summarises the relevant expertise of Trium as the author of the EIA Scoping Report and confirms that information on Trium's lead EIA practitioners, as well as the technical contributors to the EIA, will be included within the ES. This approach is in line with the requirements of the EIA Regulations 2017 and is considered acceptable.

EIA Purpose and Process

3.1.33. With reference to the requirements of Regulation 4 of the EIA Regulations 2017, this section lists the environmental topic areas that have been considered in respect of the potential for likely significant effects as a result of the demolition and construction stage and operational stage of the proposed development.

3.1.34. It is noted that no reference has been made to potential impacts relating to telecommunication interference. CBRE acknowledge that matters relating to telecommunication interference are typically dealt with by way of standard planning conditions and that, in line with Camden's Local Area Requirements for Planning Applications (2020), a standalone Telecommunications Report is anticipated to be submitted with the planning application. However, it would be useful if the EIA Scoping Report confirmed this and included a list of all the planning deliverables to be submitted with the planning application.

3.1.35. Based on the above, the list of environmental topic areas is considered to be comprehensive in line with the EIA Regulations 2017.

The Scoping Process

3.1.36. This section sets out the scoping process and purpose with reference to Regulation 15 of the EIA Regulations 2017.

3.1.37. Paragraph 12 confirms that "*the EIA Scoping Report (this document) and EIA Scoping Opinion will be appended to the ES, which will include a summary of any other consultation undertaken as part of the EIA process*." The Applicant should ensure that the ES clearly sets out how relevant comments made during the EIA Scoping Process and wider consultation process have been addressed within the ES. A summary of relevant consultee comments could, for example, be set out in ES Chapter 2: EIA Methodology and in the Methodology sections of the individual technical chapters, as appropriate.

EIA Methodology and Approach to Assessment of the Proposed Development

3.1.38. The EIA methodology and approach is discussed under a number of sub-topics, as set out in the following sections. Relevant EIA guidance is listed at the outset, although noting that this list is not exhaustive.

Baseline Conditions and Sensitive Receptors

3.1.39. These sections include an overview of how the baseline conditions and sensitive receptors have and will be determined.

3.1.40. The Baseline Conditions section confirms that some assessments (such as traffic and transport and air quality) will include a future baseline condition "*at the projected year of opening of the Proposed Development (if relevant a different future year appropriate/specific for the technical assessment may be used)*". The use of a future baseline year for certain topics is considered appropriate provided that clear justification is provided within the respective technical chapters. The Applicant may also want to consider using an interim future baseline year for some topics (such as traffic and transport, air quality and noise and vibration) for the demolition and construction stage assessment in order to capture the most intensive year of demolition and construction works in terms of the number of vehicle movements.

3.1.41. Paragraph 15 of the EIA Scoping Report confirms that the office floorspace is vacant; however, it would be useful to understand how long it has been vacant for and what has been considered as the baseline position for the purpose of the EIA. As discussed later in this report, the baseline position for each of the technical topic assessments has not been clearly set out.

Demolition and Construction Impact Assessments, Environmental Design Management Measures and Completed Development Impact Assessments

3.1.42. These sections provide an overview of the information that will form the basis of the demolition and construction stage and completed development stage impact assessments, including any 'embedded measures' which are inherent in the design and construction of the proposed development.

3.1.43. Paragraph 22 states that "*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*". The section on Environmental Design Management Measures then goes on to confirm what is defined as 'embedded mitigation' for the purpose of the ES, confirming that "*all embedded mitigation and enhancement measures will be described within the Proposed Development chapter of the ES with the rationale for the inclusion of the identified embedded measures and the associated commitment to implementing such measures clearly stated. In addition, mitigation and enhancement measures and any monitoring requirements will be summarised within ES Volume 1: Chapter 15: Environmental Management, Mitigation and Monitoring Schedule*". This approach is considered appropriate. In addition, each technical assessment should clearly set out what embedded mitigation measures have been relied upon to inform their assessment of effects. In respect of the environmental controls during the demolition and construction stage, only those standard measures (i.e., those that would occur with or without input from the EIA) should be considered as 'embedded mitigation'.

3.1.44. Paragraph 24 provides an overview of the information to be included should monitoring be required, noting that this would include the "*procedures regarding the monitoring of the relevant significant adverse effects, the types of parameters to be monitored and the monitoring duration*". The monitoring strategy should also define the procedures to be implemented should significant adverse effects be identified through the monitoring process to ensure their effective mitigation.

3.1.45. In respect of the completed development stage assessment, the EIA Scoping Report confirms that "*for assessing Use Class E, where confirmation on the end use within this use class cannot be provided, the EIA will assess the realistic worst-case end use within the Use Class E floorspace sought for approval, depending on the technical topic*". This approach is considered acceptable. The ES should clearly set out any assumptions that have been made to inform the respective technical topics.

Cumulative Effects Assessment

3.1.46. This section of the EIA Scoping Report sets out the inter-development cumulative effects assessment approach and the criteria used in identifying the cumulative schemes to be considered. The preliminary list of cumulative schemes for consideration within the EIA is presented in Annex C, for which commentary is provided in the relevant section of this report.

3.1.47. The criteria for selecting cumulative schemes is generally accepted, noting that the criteria have generally been based on the EIA screening thresholds for Category 10(a) industrial estate development projects or Category 10(b) urban development projects, which are considered to represent the vast majority of the projects in the surrounding area. However, the criteria does not give consideration to other projects outside of these categories. Of note and in line with the consultee comment provided by Ursula Brown, consideration should be given to Nationally Significant Infrastructure Projects (NSIPs) due to the proximity of Euston Station High Speed 2 (HS2) (refer to commentary on Annex C).

3.1.48. The criteria, as set out in paragraph 35, also includes "*Applications that have been submitted but not yet determined*". Under the EIA Regulations 2017, the requirement for considering cumulative schemes within the inter-development cumulative assessment is restricted to "*cumulation with other existing development and/or approved development"*. This omits the previous requirement to assess schemes that are 'reasonably foreseeable' under the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. Accordingly, while this conservative approach is welcomed, CBRE advise that applications that have been submitted but not yet determined should be included on an individual basis, in consultation with LB Camden, depending on the likelihood of them coming forward.

3.1.49. As stated in paragraph 37 of the EIA Scoping Report, the local authority and other consultees are invited to comment on the proposed cumulative schemes. CBRE agree with this approach and advise that the list should be reviewed during the preparation of the ES and up until the point of determination of the planning application.

3.1.50. Paragraph 38 states that "*each technical ES chapter will be clear on the cumulative schemes that have been considered within the cumulative effects assessment*". CBRE agree with this approach as long as clear justification is provided for any schemes which have been screened out.

Effect Interactions Assessment

3.1.51. This section sets out the intra-development cumulative effects assessment approach. CBRE generally agree with the assessment approach, including the proposed approach to exclude any negligible effects from the assessment of effect interactions.

3.1.52. Paragraph 42 states that "*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*". Whilst it is acknowledged that there is no established methodology for assessing intra-development cumulative effects, CBRE advise that a scale of effect is identified based on professional judgement as it is important that the regulatory authority has full sight of the scale and nature of significant effects when determining any application. Furthermore, it is important to identify the scale of effect when determining and presenting the effectiveness of any mitigation proposed. Refer to Schedule 4, Paragraph 7 of the EIA Regulations that states that the "*description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects… should explain the extent to which significant adverse effects on the environment are avoided, prevented, reduced or offset*".

Alternatives and Design Evolution

3.1.53. This section sets out the information to be included within the Alternatives and Design Evolution ES chapter to address the requirements of Schedule 4 of the EIA Regulations. CBRE consider this to be acceptable.

Determining Effect Significance – Terminology and Approach

3.1.54. This section of Annex A of the EIA Scoping Report sets out the terminology and approach for determining effect significance. The matrix approach is considered acceptable and in line with standard, recognised EIA practice.

Annex B: Planning Policy Context

Consultation

3.1.55. No responses have been received from the consultees in relation to Annex B of the EIA Scoping Report.

CBRE Review

3.1.56. Annex B of the EIA Scoping Report provides an overview of the national, regional and local policy context relevant to the EIA and where this will be presented in the ES. This approach is considered acceptable and CBRE encourage the use of appendices, as appropriate, where extensive policy detail may be required.

Annex C: Cumulative Schemes

Consultation

3.1.57. Responses have been received from the following consultees in relation to this section of the EIA Scoping Report:

- Ursula Brown, member of public.

CBRE Review

3.1.58. Annex C of the EIA Scoping Report presents the preliminary list of cumulative schemes, together with a figure showing their location relative to the site.

3.1.59. The level of detail set out in the table is useful. However, an additional column would be useful to confirm the approximate location and distance of the scheme in relation to the site. It is also noted that the final column of the table provides the scheme status "*as of February 2023*". Given that the EIA Scoping Report was formally submitted to LB Camden in August 2023 and the need to keep the list of cumulative schemes under constant review, it is expected that this is a typographical error that hasn't been updated. Clarification is sought in this regard and it is recommended that the Applicant undertakes further consultation with the LB Camden to agree on the list of schemes, confirm their status and the likelihood of them coming forward (see commentary on Annex A, Cumulative Effects Assessment).

3.1.60. According to the table, scheme 2a is partly built out with some plots still to be constructed. In line with the approach set out in paragraph 39 of Annex A, it is expected that each technical topic will give consideration as to whether this scheme will be factored into the baseline scenario assessment given that the majority of the scheme's built form will likely be present during the demolition and construction and operational stages of the proposed development. CBRE agree with this approach as long as each technical assessment provides clear justification as to how each cumulative scheme has been considered.

3.1.61. As per the comment received from Ursula Brown on 14 August 2023, High Speed 2 (HS2) and Euston Station have not been included within the cumulative schemes list. It is noted that the Transport Topic Note (Annex D) considers HS2 in the future baseline position; however, HS2 has not been mentioned elsewhere. Given the proximity and scale of the scheme, this should be included.

Annex D: Scoped In Topic Sheets

3.1.62. Annex D of the EIA Scoping Report sets out the topics that the Applicant is proposing to scope into the ES as discrete chapters. These are discussed below.

Air Quality

Consultation

3.1.63. Responses have been received from the following consultees in relation to this section of the EIA Scoping Report:

- TFL; and
- Sustainability Officer at LB Camden.

CBRE Review

3.1.64. This section sets out the proposed approach to the assessment of air quality effects.

3.1.65. It is noted that the section does not confirm which consultant team will be undertaking the technical assessment, as has been done for all other technical topics. Based on discussions with the Applicant, it is understood that this is an accidental omission and Air Quality Consultants are the consultant team who will be undertaking the assessment.

3.1.66. As confirmed in the Baseline Conditions section, the monitoring data from 2019 will be used within the air quality assessment unless appropriate 2022 monitoring data is published in time for the assessment to be undertaken. This is because of the impact of the COVID-19 pandemic on traffic volumes during 2022 and 2021, resulting in the air quality conditions during this period not being representative of the typical baseline environment. CBRE generally agree with this approach. If the 2022 monitoring data is published during the assessment process and prior to submission of the planning application, this data should be reviewed against the 2019 data to check if the latest data will have any implications to the overall results of the ES. Should there be any notable changes in baseline conditions, the Applicant should consider revisiting the assessment so that it captures the worst-case scenario.

3.1.67. The Applicant should also confirm what they consider to be the baseline scenario for the site in respect of vehicular movements (i.e., will the baseline scenario be based on a vacant site with no operational vehicular movements or will the baseline scenario consist of the vehicular movements prior to the site becoming vacant). As discussed in the Site Location and Description and Environmental Context section of the EIA Scoping Report, it would be useful to understand when the site became vacant. The baseline conditions for the traffic data used for the Transport, Air Quality and Noise and Vibration assessments should be clearly set out in the ES, with clear justification provided as to why the traffic data is considered to be representative of a conservative, yet reasonable baseline scenario.

3.1.68. The Applicant has confirmed that the sensitive receptors during the completed development stage will be identified to represent a range of exposure, focusing on worst-case locations where the air quality objectives (AQOs) apply. However, when listing the sensitive receptors relevant to the specific AQOs, no reference has been made to hotels, noting that the Radisson Hotel is located to the south of the site. In line with DEFRA's LAQM guidance, hotel receptors should be considered for the 1-hour mean AQO.

3.1.69. Paragraphs 20 and 23 present the assessment scenarios should the traffic from the proposed development exceed the IAQM screening criteria during the demolition and construction stage and operational stage, respectively. Three assessment scenarios have been proposed for both stages, with the proposed development considered in the third scenario, which looks at the impact of the proposed development against the existing baseline and cumulative schemes. As discussed in the below sections, the Traffic and Transport and Noise and Vibration technical scopes have not set out their assessment scenarios; however, it is understand the assessment scenarios comprise the following:

- Scenario 1: Existing Baseline;
- Scenario 2: Future Baseline (with TEMpro growth);
- Scenario 3: Future Baseline + Proposed Development; and
- Scenario 4: Future Baseline + Proposed Development + Cumulative Schemes.

3.1.70. Given that each of the topics are based on the same traffic data and to ensure consistency across the ES, CBRE would expect that the assessment scenarios for each technical topics to be the same, unless clear justification is provided otherwise. The ES should clearly set out the assessment scenarios for each topic, providing justification as to why this is considered to be representative of a reasonable, worst-case assessment.

3.1.71. The Applicant is proposing to scope out the assessment of emissions from fume cupboards associated with the potential lab enabled floorspace (Use Class E). This is on the basis that the proposed development will comply with regulations on the design and operation of fume cupboards. CBRE consider this approach to be acceptable subject to the ES providing sufficient information on the potential design of fume cupboards with reference to the relevant regulations.

3.1.72. TFL have stated that they expect significant impacts to vehicular traffic in relation to construction access and that the construction access proposals should be considered as part of the air quality and noise and vibration assessments in the EIA. CBRE agree that the Applicant should consider construction access when modelling air quality impacts from construction traffic. Paragraph 20 of Annex A confirms that the Demolition and Construction chapter (which will form the basis of the technical assessments) will include information on HGV routing and as such, it is assumed that the Applicant has already factored this within their assessment approach.

3.1.73. The Sustainability Officer at LB Camden have queried whether there will be a standalone Air Quality Assessment or whether Air Quality will just be considered within the EIA, noting that this would be acceptable as long as the EIA covers the requirements of a standalone AQA. A standalone Air Quality Assessment (AQA) is not included in the list of technical documents that will be submitted with the planning application (Paragraph 38 of the Main EIA Scoping Report). On the understanding that a standalone AQA is not being submitted, CBRE agree that the EIA should include the requirements for a standalone AQA, as listed in Camden's validation checklist[3]. However, upon review of the Air Quality Topic Sheet, CBRE understand that the assessment will include these requirements, specifically noting that the ES will include an air quality neutral assessment and an air quality positive statement.

3.1.74. CBRE advise that the Applicant should consult with LB Camden's EHO advisor in regard to key elements of the proposed methodology.

[3] London Borough of Camden, 2020. Camden's Local Area Requirements for Planning Applications. https://www.camden.gov.uk/documents/20142/12053822/LARs+2020+%28republished%29.pdf/ea1f2c0e-c643-0100-40c3-b1188a0badc3?t=1645193008819

3.1.75. Subject to the comments above, the proposed approach for the air quality assessment is considered acceptable.

Climate Change and Greenhouse Gases (GHG)

Consultation

3.1.76. No consultee responses have been provided to CBRE in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.77. This section sets out the proposed approach to the assessment of effects relating to climate change.

3.1.78. As confirmed in the Receptors section, the global climate is the receptor for the purpose of the GHG assessment. It is also noted that the sensitive receptors identified for the remaining ES technical topics will also be considered when looking at how future climate conditions may affect these sensitive receptors.

3.1.79. The Baseline Conditions section states that the baseline emissions will be calculated based on the current operation of the site in terms of transport and energy emissions. As per comments made on other topic scopes, it is not clear what is considered to represent the baseline position, noting that the building is currently vacant. The worst-case assumption whereby the baseline emissions are assumed to be zero may therefore be a reasonable baseline position. However, in informing this decision, the Applicant should consider other factors, such as how long the building has been vacant for, the potential for the building to be let in its existing condition etc. Based on paragraph 10, it is inferred that the Applicant will not be assessing the net emissions from the site and will consider all emissions emitted by the proposed development. The assessment approach should be clarified within the ES.

3.1.80. Subject to the comments above, the proposed approach for the climate change and GHG assessment is considered acceptable.

Daylight, Sunlight, Overshadowing and Solar Glare

Consultation

3.1.81. No consultee responses have been provided to CBRE in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.82. This section sets out the proposed approach to the assessment of effects relating to daylight, sunlight, overshadowing and solar glare.

3.1.83. Paragraph 5 in the Baseline Conditions section states that the Sun Hours on the Ground (SHOG) method will be used with regard to outdoor amenity areas within the site. Figure 2, which shows the areas of amenity space to be considered within the overshadowing assessment, also includes the amenity space within the site. The assessment should look at the impact of the proposed development on surrounding receptors. It is recommended that any outdoor amenity space within the site itself should be considered as part of the internal daylight, sunlight and overshadowing assessment in accordance with the BRE's 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice' 3rd Edition (BRE209) or similar, which is usually submitted as a standalone report to support the planning application. In this regard, it is noted that the incorrect redline boundary is shown in Figures 1-3, assuming that Figure 2 of the main EIA Scoping Report is correct. The ES should be based on the final redline boundary used for the planning application.

3.1.84. In respect of the amenity spaces to be considered within the overshadowing assessment, the area shown for Tolmer's Square is limited to the area of green space. CBRE consider that all amenity space should be assessed, including the hardstanding. Additionally, there are areas adjacent to Tolmer's Square which are not shown in Figure 2, namely Foundry Mews which wraps around the outside of Tolmer's Square, as well as George Mews to the north. The Applicant should give consideration to these areas in the ES, clearly setting out the extent of the study area.

3.1.85. Subject to the comments above, the proposed approach for the climate change and GHG assessment is considered acceptable.

Noise and Vibration

Consultation

3.1.86. Responses have been received from the following consultees in relation to this section of the EIA Scoping Report:

- TFL.

CBRE Review

3.1.87. This section sets out the proposed approach to the assessment of noise and vibration effects.

3.1.88. It is noted that Figure 1 shows the incorrect site boundary. The ES should ensure that the correct site boundary (i.e. the redline boundary being used for the purpose of the planning application) is included on all figures.

3.1.89. Table 1 includes two references to monitoring position 'P2' and no reference to 'P1'. It is assumed that this is a typographical error and the first line refers to 'P1'. It is also noted that Table 2 refers to the five unmanned monitoring positions as '1-5' rather than 'P1-P5', as referred to in Table 1. The Applicant should ensure that the monitoring positions referenced in the ES are accurate and that consistent terminology is used.

3.1.90. Whilst the assessment scenarios for noise and vibration have not been clearly laid out, it is assumed, based on paragraph 10, that there will be the following four scenarios for the completed development stage assessment:

- Scenario 1: Existing Baseline;
- Scenario 2: Future Baseline (with TEMpro growth);
- Scenario 3: Future Baseline + Proposed Development; and
- Scenario 4: Future Baseline + Proposed Development + Cumulative Schemes.

3.1.91. CBRE consider these assessment scenarios to be acceptable. However, it is noted that these assessment scenarios differ from those proposed in the Air Quality scope. As discussed in the Air Quality section above, CBRE consider that the assessment scenarios should be consistent between the traffic and transport, air quality and noise and vibration assessments, unless clear justification can otherwise be provided.

3.1.92. Figure 2 presents the existing and proposed sensitive receptors which could be affected by noise and vibration impacts from the proposed development. Given that there is no intervening structure between the site and the building between A and H along Triton Square, CBRE consider that this commercial building should also be considered as a sensitive receptor unless sufficient justification can be given for its exclusion.

3.1.93. The Potential Effects section sets out the technical scope of the noise and vibration assessment for both the demolition and construction stage and completed development stage. Whereas the proposed scope of the completed development stage assessment has been set out as a bullet point list, the demolition and construction stage scope is described more generally and states that the assessment will include "*demolition, construction activity and traffic*". However, as set out in the section on Non-Significant Effects to be Scoped out the EIA, demolition and construction traffic is proposed to be scoped out the assessment. Clarification is sought in this regard. It is also not clear whether the scope includes vibration impacts. As confirmed in the Proposed Development section of the EIA Scoping Report (paragraph 21), piling activities are expected and as such, the Applicant should consider scoping vibration impacts into the ES.

3.1.94. The proposed Methodology for the noise and vibration assessment is set out in paragraph 14. The general stages of the assessment process are noted (e.g. the identification of receptors; establishment of baseline conditions; assessment of effects); however, the order and scope of the assessment process is not entirely clear, noting that the "*predication and assessment of changes in noise levels*" only refers to operational plant noise. The Applicant should ensure that the ES presents the assessment methodology in a clear and methodical way.

3.1.95. The Cumulative Effects section states that the scope of the cumulative impact assessment will be "*in relation to demolition and construction as well as building services noise, and any other potential for new noise sources*". It is noted that this doesn't mention impacts associated with operational traffic. The cumulative assessment should cover the entire technical scope proposed for inclusion within the noise and vibration assessment, as agreed through the EIA Scoping process.

3.1.96. TFL have stated that they expect significant impacts to vehicular traffic in relation to construction access and that the construction access proposals should be considered as part of the air quality and noise and vibration assessments in the EIA. CBRE agree that the Applicant should consider construction access when modelling noise and vibration impacts from construction traffic. Paragraph 20 of Annex A confirms that the Demolition and Construction chapter, which will form the basis of the technical assessments, will include information on HGV routing and as such, it is assumed that the Applicant has already factored this within their assessment approach.

3.1.97. Subject to the comments above, the proposed approach to the Noise and Vibration ES chapter is considered acceptable. However, CBRE advise that the Applicant should consult with LB Camden's EHO advisor in regard to key elements of the proposed methodology.

Socio-Economics

Consultation

3.1.98. The following responses have been received from the consultees in relation to The Proposed Development section of the EIA Scoping Report:

- Inclusive Economy Project Officer at LB Camden.

CBRE Review

3.1.99. This section sets out the proposed approach to the assessment of effects relating to socio-economics.

3.1.100. The Introduction section (paragraphs 1-3) summarises the scope of the socio-economic assessment; however, no reference is made to potential impacts and effects during the demolition and construction stage. This is considered to be an accidental omission given that the Potential Effects section proposes to scope in impacts relating to demolition and construction.

3.1.101. In respect of the above, it is also noted that the Methodology section does not go into any detail on the methodology proposed for the demolition and construction stage assessment. The ES will need to clearly set out the scope and methodology of the assessment, having regard to all potential impacts during the demolition and construction and completed development stages.

3.1.102. It would be useful to understand what is being considered as the existing baseline. Paragraph 8 includes "*existing uses on-site*" as a likely receptor. Based on the Site Location and Description section in the main EIA Scoping Report, it is assumed that the existing users on-site refers to the operational commercial properties at ground and first floor levels, including cafes and shops. However, clarification is sought as to whether this also includes the office floorspace which is understood to be vacant. As per previous comments provided in respect of the baseline position, it would be useful to understand how long the office floorspace has been vacant for and whether or not this is temporary / permanent. If the former, the Applicant should consider including the office floorspace in the baseline position to ensure the assessment is conservative and robust.

3.1.103. As noted in Section 3, the Inclusive Economy Project Officer has also set out a number of expectations for the proposed development once operational to ensure that the scheme delivers local employment benefits in the long term. Whilst the ES is not intended to demonstrate policy compliance, the ES should confirm what the Applicant is committing to and any commitments being made should be considered as part of the Socio-Economics assessment.

3.1.104.

3.1.105. Subject to the comments above, the proposed approach to the Socio-Economics ES chapter is considered acceptable.

Townscape, Visual and Built Heritage Assessment

Consultation

3.1.106. No consultee responses have been provided to CBRE in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.107. This section sets out the proposed approach to the assessment of effects relating to townscape, visual and built heritage.

3.1.108. As discussed earlier in this report (see the commentary on the Site Location and Description and Environmental Context section), a Scheduled Monument is located approximately 500 m south west of the site, which has not been mentioned within the Townscape, Visual and Built Heritage Topic Sheet, nor shown in Figure 2. The Applicant should ensure that all sensitive receptors within the study area are considered within the ES.

3.1.109. Paragraph 15 confirms that the verified views will be selected in consultation with the LB of Camden. It would have been useful to include the proposed verified views within the EIA Scoping Report for relevant consultees to review and comment.

3.1.110. The assessment sequence set out for the Townscape and Visual and Built Heritage assessments, paragraphs 21 and 25 respectively, sets out that "*for effects that are moderate or major in scale also assess the nature (adverse, neutral or beneficial) of the effect*". CBRE advise that the nature of the effect should be considered for all potential effects. Based on discussions with the Applicant, this is understood to be a typographical error.

3.1.111. Subject to the comments above, the proposed approach to the Townscape, Visual and Built Heritage Assessment is considered acceptable.

Traffic and Transport

Consultation

3.1.112. Responses have been received from the following consultees in relation to this section of the EIA Scoping Report:

- TFL.

CBRE Review

3.1.113. This section sets out the proposed approach to the assessment of traffic and transport effects.

3.1.114. As mentioned earlier in the Air Quality and Noise and Vibration sections of this report, the Applicant has not clearly set out the baseline conditions for the site in respect of vehicular movements (i.e., will the baseline scenario be based on a vacant site with no operational vehicular movements or will the baseline scenario consist of the vehicular movements prior to the site becoming vacant). Based on the Scope of Assessment section (paragraphs 44 – 71), it is understood that the baseline scenario has factored in vehicle movements associated with the approximate 100 car parking spaces that currently exist on-site. The baseline conditions for the traffic data should be clearly set out in the ES, with clear justification provided as to why this is considered to be representative of a conservative, yet reasonable baseline scenario.

3.1.115. The Existing Baseline Data section refers to traffic surveys to be undertaken in April 2023. It is expected that these have now been completed and have been undertaken at an appropriate time (i.e. outside of school holidays). It is also noted that the assessment will use TFL traffic data from 2022. The Applicant should consider using 2023 data if available.

3.1.116. The Applicant has requested that TfL and LB Camden confirm which cumulative developments or highways schemes need to be considered as part of the future baseline scenario. CBRE agree with this approach and as part of this exercise, the Applicant, TfL and LB Camden should also discuss which cumulative developments and highway schemes are considered within the future baseline scenario and which are considered as part of the cumulative assessment scenario. In this regard, it is noted that High Speed 2 (HS2) is proposed to be considered as part of the future baseline, noting that "*services are expected to commence in the late 2020s*". Given that there have been multiple delays to HS2 and the opening date is now anticipated to be around 2035/2040, the Applicant, in consultation with TfL and LB Camden, should consider whether HS2 should be assessed within the cumulative schemes assessment.

3.1.117. As requested in TFL's response, a Construction Logistics Plan (CLP) should be included as part of the standalone Transport Assessment (TA). As stated in Paragraph 70 of the Transport Topic Sheet, it is understood that a CLP will be appended to the TA.

3.1.118. With respect to the above, it is noted that the traffic and transport assessment scenarios have not been clearly set out. However the Cumulative Effects section confirms that a cumulative effects scenario will be considered. The assessment scenarios should be clearly set out in the ES. As discussed in the Air Quality section of this report, we would typically expect the traffic and transport, air quality and noise and vibration assessments to be undertaken using the same assessment scenarios, as follows:

- Scenario 1: Existing Baseline;
- Scenario 2: Future Baseline (with TEMpro growth);
- Scenario 3: Future Baseline + Proposed Development; and
- Scenario 4: Future Baseline + Proposed Development + Cumulative Schemes.

3.1.119. With regards to the cumulative effects assessment, paragraph 73 states that the cumulative schemes considered will include "*those nearby developments which have planning permission (or committee resolution to grant consent)…*" and then goes on to confirm that the assessment will also be subject to TA scoping discussions. CBRE agree that the cumulative schemes should be agreed through the TA scoping process; however, the cumulative effects assessment should also be based on those schemes agreed through the EIA scoping process. In this regard, it is noted that the cumulative schemes criteria in paragraph 73 differs from that presented in the Cumulative Effects Assessment section in Annex A of the EIA Scoping Report. The ES should consider the list of cumulative schemes as agreed through the EIA scoping process, clearly setting out which schemes have been included/excluded, as well as where any additional schemes that have been considered, as identified through the TA scoping process.

3.1.120. Subject to the comments above, the proposed approach to the Traffic and Transport ES chapter is considered acceptable.

Wind Microclimate

Consultation

3.1.121. No consultee responses have been provided to CBRE in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.122. This section sets out the proposed approach to the assessment of wind microclimate effects.

3.1.123. The possible receptor locations to be considered within the wind microclimate assessment are presented in paragraph 7. It is noted that public terraces and balconies are considered as a potential on-site sensitive receptor but not an off-site sensitive receptor. The Applicant should also give consideration to any off-site balcony locations. The ES should make clear all possible receptor locations considered for the purpose of the wind microclimate assessment.

3.1.124. The Applicant is proposing to undertaken wind tunnel testing of the existing site, proposed development and cumulative schemes for the assessment configurations set out in paragraph 26. It is also noted that a high-level Computational Fluid Dynamic (CFD) simulation will be undertaken during the design process and to inform the probe locations for wind tunnel testing. CBRE consider this approach to be acceptable based on the scale of the development.

3.1.125. Subject to the comments above, the proposed approach to the Wind Microclimate ES chapter is considered acceptable.

Annex E: Scoped Out Topic Sheets

3.1.126. Annex E of the EIA Scoping Report sets out the topics that the Applicant is proposing to scope out of the ES as discrete chapters. These are discussed below.

Archaeology

Consultation

3.1.127. The following consultee responses have been provided to CBRE in relation to this section of the EIA Scoping Report:

– Historic England.

CBRE Review

3.1.128. The Applicant proposes to scope out an assessment of Archaeology from the ES. The justification for scoping this topic out is presented in paragraphs 14 to 17 and is based upon the following: the site not being an APA, the formation of the existing basement on-site will have likely removed any archaeological remains, and the fact that the previous watching brief on-site recorded no archaeological features. Paragraph 18 also confirms that, depending on the exact scale and nature of any excavation and basement works, an archaeological watching brief may be required and would be secured by planning condition.

3.1.129. Having considered the proposals and information held in in the Greater London Historic Environment Record (GLHER), Historic England agree that Archaeology should be scoped out of the ES.

3.1.130. It is noted that Paragraph 3 states that there are no Scheduled Monuments within the study area (a 500 m radius from the site). As discussed earlier in this report, Figure 3 of the main EIA Scoping Report shows a Scheduled Monument located approximately 500 m south west of the site.

3.1.131. Based on the above, CBRE are in agreement with the approach taken by the Applicant to scope Archaeology out of the ES.

Ecology and Biodiversity

Consultation

3.1.132. Responses have been received from the following consultees in relation to this section of the EIA Scoping Report:

– Natural England;
– Nature Conservation Officer at LB Camden; and
– Tree and Landscape Officer at LB Camden.

CBRE Review

3.1.133. The Applicant proposes to scope out an assessment of Ecology and Biodiversity from the ES. The justification for scoping this topic out is presented in paragraphs 18 to 27 and is based on the findings of a Preliminary Ecological Appraisal (PEA), as presented in Annex G of the EIA Scoping Report.

3.1.134. The site visit to inform the PEA was undertaken in January 2023, which confirmed the site currently comprises buildings and hardstanding, ruderal, scattered trees (London Plan and common lime), introduced shrub and modified grassland. Whilst there was no evidence of previous years' nests or use by peregrine falcons during the site visit, it has been acknowledged that the site visit was undertaken outside of the bird nesting season. Based on the presence of potential suitable habitat on-site, the site is therefore considered to have low potential to support nesting birds and standard measures have been proposed to mitigate the risk of disturbing, injuring or killing nesting birds during demolition and construction works. The site has negligible potential to support all other protected species.

3.1.135. A Biodiversity Net Gain (BNG) assessment will be undertaken for the proposed development and will be submitted as a standalone report to support the planning application. Whilst not explicitly stated, it has been assumed that a minimum 10% BNG will be achieved on-site, as referred to in Annex G of the EIA Scoping Report.

3.1.136. As the proposals are not expected to impact on any designated sites under their jurisdiction, Natural England have not provided any specific comments on the EIA Scoping Report but have set out their standard advice within an annex to their letter.

3.1.137. The Nature Conservation Officer at LB Camden confirmed they are in agreement with the Applicant's decision to scope Ecology out of the ES.

3.1.138. In respect to the proposals for native street tree planting, the Tree and Landscape Officer at LB Camden have confirmed that "*any planting on the highway will require a viability assessment to ensure it is possible and consultation with TfL as Euston Road and Hamstead Road are red routes*". The Applicant should factor in these comments in developing the landscaping proposals, which will inform the basis of the BNG assessment.

3.1.139. Based on the above, the proposed approach to scope out an assessment of Ecology and Biodiversity from the ES is considered acceptable.

Geoenvironmental

Consultation

3.1.140. Responses have been received from the following consultees in relation to this section of the EIA Scoping Report:

– Contaminated Land Officer at LB Camden.

CBRE Review

3.1.141. The Applicant proposes to scope out a Geoenvironmental assessment from the ES. The justification for scoping this topic out is presented in paragraphs 16 to 32.

3.1.142. The site is considered to have a generally low potential for significant or widespread contamination when considering the existing and historic uses on-site and in the surrounding area and the fact that any contaminated Made Ground will have been removed during the excavation of the existing basement.

3.1.143. Should contamination be present, the Applicant outlines a number of potential effects related to ground conditions and contamination at the site. As discussed in paragraphs 16 to 32, a Preliminary Risk Assessment (PRA) will be undertaken to support the planning application and will identify the need for further site investigation and any remediation/risk management strategies as required. The Applicant has also confirmed that demolition and construction works will be undertaken in accordance with an approved Construction Environmental Management Plan (CEMP), which will include a watching brief for any contamination encountered during construction.

3.1.144. It is noted that the piled foundations are not anticipated to extend beyond the London Clay. However, the Applicant have confirmed that should deep piled foundations extend down into the principal chalk aquifer, a Foundation Works Risk Assessment (FWRA) will be undertaken pursuant to a planning condition.

3.1.145. It is noted that the site description refers to a site area of approximately 0.93 hectares, which is larger than the area presented in the main EIA Scoping Report. Whilst it is appreciated that this is an approximate, it is noted that there are a few inconsistencies in the EIA Scoping Report in respect of the site boundary shown. All reports which are submitted to support the planning application should be prepared/amended to be based on the redline boundary for the purpose of the planning application.

3.1.146. The Contaminated Land Officer at LB Camden confirmed they are in agreement with the Applicant's decision to scope this topic out of the ES.

3.1.147. Based on the justification provided, CBRE are in agreement with the approach taken by the Applicant to scope Geoenvironmental out of the ES.

Human Health

Consultation

3.1.148. Responses have been received from the following consultees in relation to this section of the EIA Scoping Report:

– Metropolitan Police.

CBRE Review

3.1.149. The Applicant proposes to scope out an assessment of Human Health from the ES. The justification for scoping this topic out is presented in Table 1.

3.1.150. Table 1 describes the potential impacts that may arise as a result of the proposed development in connection with the individual health determinates. The justification for scoping out Human Health from the ES has focused on demonstrating that no significant impacts would arise. For the majority of determinants of health, the justification is noted and accepted. However, in respect of Air Quality and Noise and Vibration, CBRE do not agree with the comment that significant effects are not likely, 'with regards to health', noting that the metric for assessing air quality and noise and vibration are based on health objectives. In this regard, these technical topics have been scoped into the ES as discrete chapters based on the fact that there could be significant effects. CBRE believe that the justification for scoping out these topics from Human Health should instead be placed on the fact that human health impacts will already be captured as part of the Air Quality and Noise and Vibration assessments, and a discrete Human Health chapter is not required. Each relevant technical chapter in the ES should clearly identify the human health considerations that are relevant to their respective assessment and the EIA Methodology ES Chapter should outline the general approach taken.

3.1.151. The response from the Metropolitan Police highlights some initial concerns with regards to crime in the area and provides some recommendations to be factored in the design of the proposed development. The Applicant should consider these comments during the design development process and should include commentary with ES Chapter 3: Alternatives and Design Evolution and Chapter 4: Proposed Development as to how risks from crime and anti-social behaviour have been mitigated. As requested by the Metropolitan Police, Chapter 4: Proposed Development should also confirm that the proposed development will achieve Secured by Design certification for all stages, to be secured by a planning condition.

3.1.152. Subject to the above, CBRE are in agreement with the approach taken by the Applicant to scope Human Health out of the ES as a discrete chapter.

Light Spill

Consultation

3.1.153. No consultee responses have been provided to CBRE in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.154. The Applicant proposes to scope out an assessment of Light Spill from the ES. The justification for scoping this topic out is presented in paragraphs 7 to 9.

3.1.155. The justification provided is very brief and only focuses on residential receptors. While there are no apparent sensitive ecological receptors in the area, it would have been useful to confirm this.

3.1.156. Due to the scale and operation of the proposed development when compared to the existing building and the fact that considerate design features will be incorporated in the proposed development's design, CBRE agree that the proposed development will unlikely result in unacceptable levels of light spill.

3.1.157. In Paragraph 6 when it states "*in the event that an assessment is required*" it is unclear whether the 'assessment' is required for the planning application or whether it will be secured via an appropriately worded planning condition. Given that a Light Spill assessment is proposed to be scoped out of the ES, the Applicant should clarify any commitments being made and how these will be secured, such that the local authority has confidence that no significant effects will arise.

3.1.158. Subject to the above, CBRE are in agreement with the approach taken by the Applicant to scope Light Spill out of the ES.

Project Vulnerability, Major Accidents and Disasters

Consultation

3.1.159. No consultee responses have been provided to CBRE in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.160. The Applicant proposes to scope out an assessment of Project Vulnerability, Major Accidents and Disasters from the ES. The justification for scoping this topic out is presented in Table 1, which considers the major accidents and disasters listed in the London Risk Register which are relevant to the proposed development.

3.1.161. The proposed development would be unlikely to result in significant effects from most major accidents and natural disasters. The end use of the proposed laboratory space is not yet known; however, as mentioned in paragraph 6 and Table 1, the proposed development would comply with the relevant legislative and regulatory controls for laboratories, for which the proposed development is not expected to exceed the requirements of a Category 2 laboratory[4]. Paragraphs 13 to 17 set out the proposed mitigation measures which will be implemented in connection with the laboratory space such that the vulnerability of the proposed development to major accidents, hazards and natural disasters will be adequately managed throughout the lifetime of the project.

3.1.162. CBRE are in agreement with the approach taken by the Applicant to scope Project Vulnerability, Major Accidents and Disasters out of the ES.

Waste and Materials

Consultation

3.1.163. No consultee responses have been provided to CBRE in relation to this section of the EIA Scoping Report.

CBRE Review

3.1.164. The Applicant proposes to scope out an assessment of Waste and Materials from the ES. The justification for scoping out Materials and Waste is provided in paragraphs 2 to 10 and paragraphs 20 to 31, respectively.

3.1.165. Measures to be implemented during the demolition and construction stage to mitigate impacts relating to waste and materials will be set out within ES Chapter 5: Demolition and Construction and will be secured by condition. ES Chapter 5 will include an outline of the waste aspects of the CEMP, which "*may be supported by a Site Waste Management Plan (SWMP) and Circular Economy Statement (CES) which would also be prepared and implemented throughout the demolition and construction works pursuant to a planning condition/s*".

[4] His Majesty's Stationary Office (2002) The Control of Substances Hazardous to Health Regulations 2002

3.1.166. In respect of the completed development stage, an Operational Waste Management Strategy (OWMS) will be prepared and implemented as part of the proposed development, which will set out how each waste stream will be managed.

3.1.167. Subject to the above, CBRE are in agreement with the approach taken by the Applicant to scope Waste and Materials out of the ES provided that sufficient information is provided in the ES to demonstrate how waste and materials has been minimised.

Water Resources, Drainage and Flood Risk

Consultation

3.1.168. Responses have been received from the following consultees in relation to this section of the EIA Scoping Report:

- Thames Water; and
- Environment Agency.

CBRE Review

3.1.169. The Applicant proposes to scope out an assessment of Water Resources, Drainage and Flood Risk from the ES. The justification for scoping out this topic from the ES is provided in paragraphs 13 to 29.

3.1.170. The Applicant will be submitting the following standalone reports to accompany the planning application:

- Flood Risk Assessment (FRA), due to the site's location within a critical drainage area (CDA);
- Basement Impact Assessment (BIA); and
- Utilities Assessment.

3.1.171. As discussed in the Demolition and Construction Works section, the Applicant will also implement a number of pre-commencement measures and measures during the enabling and construction works to mitigate impacts to water resources. In this regard, paragraph 16 confirms that the BIA will discuss mitigation measures with a view to maintaining groundwater quality, referring the reader to the measures set out in Demolition and Construction Works section. However, this section does not appear to capture measures to address the potential for groundwater ingress during the demolition and construction stage. Due to the proximity of areas with increased susceptibility to elevated groundwater, CBRE would expect to see dewatering as a possible mitigation measure, if determined necessary through the BIA. CBRE consider the success of dewatering cannot be guaranteed and as such potential significant impacts associated with groundwater ingress cannot be ruled out. The findings of the BIA should be used to inform the inclusion of this topic within the ES and the details of any suitable mitigation measures should be presented in ES Chapter 5: Demolition and Construction.

3.1.172. As per previous comments made on the EIA Scoping Report, the redline boundary shown in Figure 1 is incorrect and does not capture the full extent of the site. The ES should be based on the final redline boundary used for the planning application.

3.1.173. Thames Water and the EA have not provided any specific comments on the EIA Scoping Report but have set out their standard advice within their letter.

3.1.174. Based on the above, the decision to scope this topic out of the ES should be reviewed upon receipt of the BIA and once the Applicant has further information on the extent of the basement works in relation to the groundwater level.

Annex F: Archaeological Desk Based Assessment

3.1.175. Annex F of the EIA Scoping Report comprises the Archaeological Desk Based Assessment (DBA) undertaken of the site in March 2023. The findings of the Archaeological DBA have been used to inform the proposed approach to scope Archaeology out of the ES, as presented within the topic sheet in Annex E of the EIA Scoping Report.

3.1.176. It is noted that the site description refers to a site area of approximately 0.93 hectares, which is larger than the area presented in the main EIA Scoping Report. Whilst it is appreciated that the site redline may not have been fixed at the time the DBA was undertaken, the Applicant should ensure all reports which accompany the planning application show the correct redline boundary.

3.1.177. As set out in Annex E of the EIA Scoping Report, mitigation may comprise an archaeological watching brief during the excavation and basement works. As confirmed in Annex F, any archaeological work would need to be undertaken in accordance with an approved written scheme of investigation.

3.1.178. Based on the findings presented in the Archaeological DBA, CBRE are in agreement with the Applicant's proposed approach to scope Archaeology out of the ES.

Annex G: Preliminary Ecological Appraisal

3.1.179. Annex G of the EIA Scoping Report comprises the Preliminary Ecological Appraisal (PEA) undertaken of the site early 2023. The findings of the PEA have been used to inform the proposed approach to scope Ecology and Biodiversity out of the ES, as presented within the topic sheet in Annex E of the EIA Scoping Report.

3.1.180. Based on the findings presented in the PEA, the proposed approach to scope out an assessment of Ecology and Biodiversity from the ES (as discussed earlier in this report) is considered acceptable.

4. Summary and Conclusions

4.1.1. The Sustainability, Impact Assessment & Social Value team at CBRE Limited ('CBRE') has been commissioned by the London Borough of Camden (LB Camden) to provide independent advice in relation to the Scoping Report for the proposed redevelopment of a site located at 286 Euston Road, within the London Borough of Camden.

4.1.2. The purpose of this document is to report the outcome of CBRE's review of the EIA Scoping Report, prepared by Trium (August 2023), and provide commentary suitable for inclusion in LB Camden's EIA Scoping Opinion.

4.1.3. The outcome of CBRE's review of the proposed EIA approach is set out in Chapters 2 and 3 of this report. The review takes into account comments provided by the statutory consultees. Where an alternative approach to the EIA has been recommended, this is clearly set out under each technical topic heading.

4.1.4. The EIA Scoping Report is broadly considered to meet the necessary regulatory requirements subject to the comments raised within this report.

Appendix A: Consultation Responses

From:
Sent: 09 August 2023 11:44
To: Planning Planning
Subject: 3rd Party Planning Application - 2023/3265P

London Borough of Camden
Camden Town Hall
Argyle Street
Euston Road
London
WC1H 8EQ

Our DTS Ref: 74810
Your Ref: 2023/3265P

9 August 2023

Dear Sir/Madam

Re: Euston Tower, 286 Euston Road, London, NW1 3DP

Waste Comments
.

Water Comments
Thank you for giving Thames Water the opportunity to comment on the above application. Thames Water are the statutory water and sewerage undertaker for the area and would like to make the following comments: The EIA Regulations 2017 set out in Schedule 4 that water and wastewater issues may need to be covered in an EIA. Thames Water considers the following issues should be considered and covered in either the EIA or planning application submission: 1. The developments demand for Sewage Treatment and network infrastructure both on and off site and can it be met. 2. The surface water drainage requirements and flood risk of the development both on and off site and can it be met. 3. The developments demand for water supply and network infrastructure both on and off site and can it be met. 4. Build – out/ phasing details to ensure infrastructure can be delivered ahead of occupation. 5. Any piling methodology and will it adversely affect neighbouring utility services. The developer can obtain information to support the EIA by visiting the Thames Water website https://www.thameswater.co.uk/developers/larger-scale-developments/planning-your-development/working-near-our-pipes

Yours faithfully
Development Planning Department

creating a better place

Environment Agency

Kate Henry
1 Pancras Square
London
N1C 4AG

Our ref: NE/2023/136065/01
Your ref: 2023/3265/P

Date: 11 August 2023

Dear Kate,

Euston Tower, 286 Euston Road, London, NW1 3DP

Request for scoping opinion under regulation 15 of the town and country planning environmental impact assessment (EIA) regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.

Thank you for consulting us on the above application on the 8th of August.

Environment Agency Position
Based on the information currently available, the development raises no environmental concerns for us. We do have the following advice for the applicant.

Water Resources
Increased water efficiency for all new developments potentially enables more growth with the same water resources.

We endorse the use of water efficiency measures especially in new developments. Use of technology that ensures efficient use of natural resources could support the environmental benefits of future proposals and could help attract investment to the area. Therefore, water efficient technology, fixtures and fittings should be considered as part of new developments.

Commercial/Industrial developments
We recommend that all new non-residential development of 1000sqm gross floor area or more should meet the BREEAM 'excellent' standards for water consumption.

We also recommend you contact Camden planning authority for more information.

Final comments
Thank you for contacting us regarding the above application. Our comments are based on our available records and the information submitted to us. Please quote our reference number in any future correspondence. Please provide us with a copy of the decision notice for our records. This would be greatly appreciated.

Cont/d..

Should you have any queries regarding this response, please contact me.

Yours sincerely,

Tanzin Ferdous
Planning Advisor, Hertfordshire and North London Sustainable Places
Email: HNLSustainablePlaces@environment-agency.gov.uk
Mobile: 07407828626

End

From: Location Enquiries <SMBLocationEnquiries@tfl.gov.uk>
Sent on: Wednesday, August 16, 2023 4:30:48 PM
To: Kate Henry <Kate.Henry@camden.gov.uk>
Subject: RE: Consultee letter for PlanningApplication Application: 2023/3265/P

Good afternoon Kate,

Application No: 2023/3265/P
Site address: Euston Tower 286 Euston Road London NW1 3DP
Proposal: Request for scoping opinion under Regulation 15 of the Town and Country Planning Environmental Impact Assessment (EIA) Regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.

Thank you for your consultation.

I can confirm that London Underground/DLR Infrastructure Protection has no comment to make on this planning application except that the developer should consider the potential of introducing new water paths around London Underground infrastructure or tunnel due to the proposal.

Further comments/conditions will be provided at full planning application stage.

This response is made as Railway Infrastructure Manager under the "Town and Country Planning (Development Management Procedure) Order 2015". It therefore relates only to railway engineering and safety matters. Other parts of TfL may have other comments in line with their own statutory responsibilities.

Kind regards,

Tom Li
Safeguarding Engineer (LU+DLR) | Infrastructure Protection
5 Endeavour Square | 7th Floor Zone B | Westfield Avenue | E20 1JN

-----Original Message-----
From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent: 08 August 2023 13:54
To: Location Enquiries <SMBLocationEnquiries@tfl.gov.uk>
Subject: Consultee letter for PlanningApplication Application: 2023/3265/P

Please find attached Consultee letter for PlanningApplication application 2023/3265/P

Y620361

Transport for London

planning@camden.gov.uk
London Borough of Islington
Planning Applications Team
Planning and Development
PO Box 3333
222 Upper Street
London N1 1YA

Transport for London
Crossrail 2
Safeguarding Manager
5 Endeavour Square
LONDON
E20 1JN

Phone: 020 3054 7018
www.TfL.gov.uk

18 August 2023
Crossrail 2 Ref: CR2-4777-2023

Dear Kate Henry,

2023/3265/P : Euston Tower, 286 Euston Road, London , NW1 3DP
Request for scoping opinion under Regulation 15 of the Town and Country Planning Environmental Impact Assessment (EIA) Regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.

Transport for London administers the Crossrail 2 Safeguarding Direction made by the Secretary of State for Transport on 24 March 2015.

Regarding your letter dated 08 August 2023, requesting the views of the Crossrail 2 Project Team on the above application. I confirm that the application relates to land within the limits of land subject to consultation by the Crossrail 2 Safeguarding Direction.

The site falls with the Limits of Safeguarding for Crossrail 2.

TfL has no comment to make from a Crossrail 2 perspective in response to the EIA scoping request. In the event future applications for planning permission are submitted to the Local Planning Authority which propose or imply works more than 3 metres below ground level, an increase in height or floor area for this site consultation on that application must include Transport for London to prevent planning permission being granted for development that might be prejudicial to the subsequent delivery of Crossrail2.

The latest project developments can be found on the Crossrail 2 website www.crossrail2.co.uk .

I hope this information is helpful, but if you require any further information or assistance then please feel free to contact a member of the Safeguarding Team by email to crossrail2@tfl.gov.uk .

Yours sincerely,

Michael Johnson
Safeguarding Manager

From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent on: Thursday, September 14, 2023 9:05:26 AM
To: Raby-Smith, Rebecca @ London SMC <Rebecca.RabySmith@cbre.com>
Subject: FW: 2023/3265/P; Euston Tower 286 Euston Road London; CMDN/20/30

External

FYI – response from TFL Spatial Planning.

--
Kate Henry
Principal Planning Officer

Telephone: 020 7974 3794

From: Michael Welch <MichaelWelch@tfl.gov.uk>
Sent: 13 September 2023 10:36
To: Kate Henry <Kate.Henry@camden.gov.uk>
Cc: Planning Planning <Planning@camden.gov.uk>
Subject: 2023/3265/P; Euston Tower 286 Euston Road London; CMDN/20/30

TfL Spatial planning reference: CMDN/20/30

Borough reference: 2023/3265/P

Location: Euston Tower 286 Euston Road London NW1 3DP

Proposal: Request for scoping opinion under Regulation 15 of the Town and Country Planning Environmental Impact Assessment (EIA) Regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.

Dear Kate

Thanks for consulting TfL on this application for which we have the following comments.
We note that Traffic and Transport are proposed to be scoped into the EIA, and there will be a Transport Assessment (TA) as a standalone planning deliverable. A Construction Logistics Plan should be included as part of this standalone planning deliverable.

We are currently engaging on the emerging proposals via our TfL Pre-application services. You can direct further inquiries about the site to the new case officer Mike Welch (mike.welch@tfl.gov.uk)

We expect significant impacts from construction access on pedestrians, cyclists, public transport passengers and vehicular traffic in the local area. Construction access proposals should therefore be considered as part of the air quality and noise and vibration assessments in the EIA. Cumulative future construction traffic flows on local roads including from HS2 at Euston interchange should also be assessed.

Aside from this the EIA Scoping Opinion document submitted is satisfactory and we have no detailed comments or objections.

Kind regards

Michael Welch | Area Planner (Spatial Planning) | TfL City Planning
Transport for London | 9th Floor, 5 Endeavour Square, Westfield Avenue, E20 1JN
Telephone number: ~~020 3054 4557 (auto 84557)~~
Email: michaelwelch@tfl.gov.uk

We have recently made changes to our pre-application service and charges, and introduced a new Initial Screening process. For more info please visit: https://tfl.gov.uk/info-for/urban-planning-and-construction/planning-applications/pre-application-services

Date: 14 August 2023
Our ref: 445320
Your ref: 2023/3265/P

Ms K Henry
London Borogh of Camden
Town Hall
Judd Street
London WC1H 9JE

BY EMAIL ONLY
planning@camden.gov.uk

Consultations
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 900

Dear Ms Henry

Environmental Impact Assessment Scoping consultation (Regulation 15 (4) of the Town and Country Planning EIA Regulations 2017): Request for scoping opinion under Regulation 15 of the Town and Country Planning Environmental Impact Assessment (EIA) Regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.
Location: Euston Tower 286 Euston Road London NW1 3DP

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in the consultation dated 08 August 2023 and received by Natural England on the same date.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

A robust assessment of environmental impacts and opportunities based on relevant and up to date environmental information should be undertaken prior to a decision on whether to grant planning permission. Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for the proposed development.

Further guidance is set out in Planning Practice Guidance on environmental assessment, natural environment and climate change.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

Please note that Natural England must be consulted on Environmental Statements.

Please send any new consultations or further information on this consultation to consultations@naturalengland.org.uk.

Yours sincerely

Mrs Sally Ireland
Consultations Team

Annex A – Natural England Advice on EIA Scoping

General Principles

Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, sets out the information that should be included in an Environmental Statement (ES) to assess impacts on the natural environment. This includes:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation etc.) resulting from the operation of the proposed development
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen
- A description of the aspects of the environment likely to be significantly affected by the development including biodiversity (for example fauna and flora), land, including land take, soil, water, air, climate (for example greenhouse gas emissions, impacts relevant to adaptation, cultural heritage and landscape and the interrelationship between the above factors
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium, and long term, permanent and temporary, positive, and negative effects. Effects should relate to the existence of the development, the use of natural resources (in particular land, soil, water and biodiversity) and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment
- A non-technical summary of the information
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information

Further guidance is set out in Planning Practice Guidance on environmental assessment and natural environment.

Cumulative and in-combination effects

The ES should fully consider the implications of the whole development proposal. This should include an assessment of all supporting infrastructure.

An impact assessment should identify, describe, and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment (subject to available information):

a. existing completed projects;
b. approved but uncompleted projects;
c. ongoing activities;
d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

Environmental data

Natural England is required to make available information it holds where requested to do so. National datasets held by Natural England are available at http://www.naturalengland.org.uk/publications/data/default.aspx.

Detailed information on the natural environment is available at www.magic.gov.uk.

Natural England's SSSI Impact Risk Zones are a GIS dataset which can be used to help identify the potential for the development to impact on a SSSI. The dataset and user guidance can be accessed from the Natural England Open Data Geoportal.

Natural England does not hold local information on local sites, local landscape character, priority habitats and species or protected species. Local environmental data should be obtained from the appropriate local bodies. This may include the local environmental records centre, the local wildlife trust, local geo-conservation group or other recording society.

Biodiversity and Geodiversity

General principles

The National Planning Policy Framework (paragraphs174-175 and 179-182) sets out how to take account of biodiversity and geodiversity interests in planning decisions. Further guidance is set out in Planning Practice Guidance on the natural environment.

The potential impact of the proposal upon sites and features of nature conservation interest and opportunities for nature recovery and biodiversity net gain should be included in the assessment.

Ecological Impact Assessment (EcIA) is the process of identifying, quantifying, and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal. Guidelines have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM).

Local planning authorities have a duty to have regard to conserving biodiversity as part of their decision making. Conserving biodiversity can include habitat restoration or enhancement. Further information is available here.

Designated nature conservation sites

International and European sites

European site conservation objectives are available at http://publications.naturalengland.org.uk/category/6490068894089216

The ES should thoroughly assess the potential for the proposal to affect nationally and internationally designated sites of nature conservation importance, including marine sites where relevant. European sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPA) fall within the scope of the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'). In addition paragraph 181 of the National Planning Policy Framework (NPPF) requires that potential SPAs, possible SAC, listed or proposed Ramsar sites, and any site identified or required as compensatory measures for adverse effects on habitat (European) sites, potential SPAs, possible SACs and listed or proposed Ramsar sites have the same protection as classified sites (NB. sites falling within the scope of regulation 8 of the Conservation of Habitats and Species Regulations 2017 are defined as 'habitats sites' in the NPPF). Under Regulation 63 of the Habitats Regulations, an appropriate assessment must be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site. The consideration of likely significant effects should include any functionally linked land outside the designated site. These areas may provide important habitat for mobile species populations that are qualifying features of the site, for example birds and bats. This can also include areas which have a critical function to a habitat feature within a designated site, for example by being linked hydrologically or geomorphologically.

Should a likely significant effect on a European/Internationally designated site be identified (either alone or in-combination) or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an appropriate assessment in addition to the consideration of impacts through the EIA process. Further guidance is set out in Planning Practice Guidance on appropriate assessment
https://www.gov.uk/guidance/appropriate-assessment

This should also take into account any agreed strategic mitigation solution that may be being developed or implemented in the area to address recreational disturbance, nutrients, or other impacts.

All queries in relation to the application of this methodology to specific applications or development of strategic solutions will be treated as pre-application advice and therefore subject to chargeable services.

Designated nature conservation sites

The proposal is unlikely to adversely impact any European or internationally designated nature conservation sites (including 'habitats sites' under the NPPF) or nationally designated sites (Sites of Special Scientific Interest, National Nature Reserves or Marine Conservation Zones).

Regionally and Locally Important Sites

The ES should consider any impacts upon local wildlife and geological sites, including local nature reserves. Local Sites are identified by the local wildlife trust, geoconservation group or other local group and protected under the NPPF (paragraph 174 and 175). The ES should set out proposals for mitigation of any impacts and if appropriate, compensation measures and opportunities for enhancement and improving connectivity with wider ecological networks. Contact the relevant local body for further information.

Protected Species

The conservation of species protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017
is explained in Part IV and Annex A of Government Circular 06/2005 *Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System.*

The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). Natural England does not hold comprehensive information regarding the locations of species protected by law. Records of protected species should be obtained from appropriate local biological record centres, nature conservation organisations and local groups. Consideration should be given to the wider context of the site, for example in terms of habitat linkages and protected species populations in the wider area.

The area likely to be affected by the development should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact

assessments and appropriate accompanying mitigation strategies included as part of the ES. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and, where necessary, licensed, consultants.

Natural England has adopted standing advice for protected species, which includes guidance on survey and mitigation measures . A separate protected species licence from Natural England or Defra may also be required.

District Level Licensing for Great Crested Newts

District level licensing (DLL) is a type of strategic mitigation licence for great crested newts (GCN) granted in certain areas at a local authority or wider scale. A DLL scheme for GCN may be in place at the location of the development site. If a DLL scheme is in place, developers can make a financial contribution to strategic, off-site habitat compensation instead of applying for a separate licence or carrying out individual detailed surveys. By demonstrating that DLL will be used, impacts on GCN can be scoped out of detailed assessment in the Environmental Statement.

Priority Habitats and Species

Priority Habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. Lists of priority habitats and species can be found here. Natural England does not routinely hold species data. Such data should be collected when impacts on priority habitats or species are considered likely.

Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land. Sites can be checked against the (draft) national Open Mosaic Habitat (OMH) inventory published by Natural England and freely available to download. Further information is also available here.

An appropriate level habitat survey should be carried out on the site, to identify any important habitats present. In addition, ornithological, botanical, and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present.

The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys)
- Additional surveys carried out as part of this proposal
- The habitats and species present
- The status of these habitats and species (e.g. whether priority species or habitat)
- The direct and indirect effects of the development upon those habitats and species
- Full details of any mitigation or compensation measures
- Opportunities for biodiversity net gain or other environmental enhancement

Ancient Woodland, ancient and veteran trees

The ES should assess the impacts of the proposal on any ancient woodland, ancient and veteran trees, and the scope to avoid and mitigate for adverse impacts. It should also consider opportunities for enhancement.

Natural England maintains the Ancient Woodland Inventory which can help identify ancient woodland. The wood pasture and parkland inventory sets out information on wood pasture and parkland.

The ancient tree inventory provides information on the location of ancient and veteran trees.

Natural England and the Forestry Commission have prepared standing advice on ancient woodland, ancient and veteran trees.

Biodiversity net gain

Paragraph 174 of the NPPF states that decisions should contribute to and enhance the natural and local environment by minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

Biodiversity Net Gain is additional to statutory requirements relating to designated nature conservation sites and protected species.

The ES should use an appropriate biodiversity metric such as Biodiversity Metric 3.0 together with ecological advice to calculate the change in biodiversity resulting from proposed development and demonstrate how proposals can achieve a net gain.
The metric should be used to:
• assess or audit the biodiversity unit value of land within the application area
• calculate the losses and gains in biodiversity unit value resulting from proposed development
• demonstrate that the required percentage biodiversity net gain will be achieved

Biodiversity Net Gain outcomes can be achieved on site, off-site or through a combination of both. On-site provision should be considered first. Delivery should create or enhance habitats of equal or higher value. When delivering net gain, opportunities should be sought to link delivery to relevant plans or strategies e.g. Green Infrastructure Strategies or Local Nature Recovery Strategies.

Opportunities for wider environmental gains should also be considered.

Landscape

Nationally Designated Landscapes

Public bodies have a duty to have regard to the statutory purposes of designation in carrying out their functions (under (section 11 A (2) of the National Parks and Access to the Countryside Act 1949 for National Parks and S85 of the Countryside and Rights of Way Act, 2000 for AONBs). Planning Practice Guidance confirms that this duty also applies to proposals outside the designated area but impacting on its natural beauty.

Consideration should be given to the direct and indirect effects on this designated landscape and in particular the effect upon its purpose for designation. The management plan for the designated landscape may also have relevant information that should be considered in the EIA.

The development site is within the Click here to enter text. Heritage Coast. Heritage Coasts are protected under paragraph 178 of the NPPF. The ES should set out the impacts on the Heritage Coast and opportunities for enhancement.

Landscape and visual impacts

The environmental assessment should refer to the relevant National Character Areas. Character area profiles set out descriptions of each landscape area and statements of environmental opportunity.

The ES should include a full assessment of the potential impacts of the development on local landscape character using landscape assessment methodologies. We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing, and understanding the ability of any location to accommodate change

and to make positive proposals for conserving, enhancing or regenerating character.

A landscape and visual impact assessment should also be carried out for the proposed development and surrounding area. Natural England recommends use of the methodology set out in *Guidelines for Landscape and Visual Impact Assessment 2013 (*(3rd edition) produced by the Landscape Institute and the Institute of Environmental Assessment and Management. For National Parks and AONBs, we advise that the assessment also includes effects on the 'special qualities' of the designated landscape, as set out in the statutory management plan for the area. These identify the particular landscape and related characteristics which underpin the natural beauty of the area and its designation status.

The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. This should include an assessment of the impacts of other proposals currently at scoping stage.

To ensure high quality development that responds to and enhances local landscape character and distinctiveness, the siting and design of the proposed development should reflect local characteristics and, wherever possible, use local materials. Account should be taken of local design policies, design codes and guides as well as guidance in the National Design Guide and National Model Design Code. The ES should set out the measures to be taken to ensure the development will deliver high standards of design and green infrastructure. It should also set out detail of layout alternatives, where appropriate, with a justification of the selected option in terms of landscape impact and benefit.

Heritage Landscapes

The ES should include an assessment of the impacts on any land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific, or historic interest. An up-to-date list is available at www.hmrc.gov.uk/heritage/lbsearch.htm.

Connecting People with nature

The ES should consider potential impacts on access land, common land, public rights of way and, where appropriate, the England Coast Path and coastal access routes and coastal margin in the vicinity of the development, in line with NPPF paragraph 100. It should assess the scope to mitigate for any adverse impacts. Rights of Way Improvement Plans (ROWIP) can be used to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

Measures to help people to better access the countryside for quiet enjoyment and opportunities to connect with nature should be considered. Such measures could include reinstating existing footpaths or the creation of new footpaths, cycleways, and bridleways. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Access to nature within the development site should also be considered, including the role that natural links have in connecting habitats and providing potential pathways for movements of species.

Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.

Soils and Agricultural Land Quality

Soils are a valuable, finite natural resource and should also be considered for the ecosystem services they provide, including for food production, water storage and flood mitigation, as a carbon store, reservoir of biodiversity and buffer against pollution. It is therefore important that the soil resources are protected and sustainably managed. Impacts from the development on soils and best and most versatile (BMV) agricultural land should be considered in line with paragraphs 174 and 175 of the NPPF. Further guidance is set out in the Natural England Guide to assessing development proposals on agricultural land.

As set out in paragraph 211 of the NPPF, new sites or extensions to sites for peat extraction should not be granted planning permission.

The following issues should be considered and, where appropriate, included as part of the Environmental Statement (ES):

- The degree to which soils would be disturbed or damaged as part of the development
- The extent to which agricultural land would be disturbed or lost as part of this development, including whether any best and most versatile (BMV) agricultural land would be impacted.

This may require a detailed Agricultural Land Classification (ALC) survey if one is not already available. For information on the availability of existing ALC information see www.magic.gov.uk.

- Where an ALC and soil survey of the land is required, this should normally be at a detailed level, e.g. one auger boring per hectare, (or more detailed for a small site) supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres. The survey data can inform suitable soil handling methods and appropriate reuse of the soil resource where required (e.g. agricultural reinstatement, habitat creation, landscaping, allotments and public open space).
- The ES should set out details of how any adverse impacts on BMV agricultural land can be minimised through site design/masterplan.
- The ES should set out details of how any adverse impacts on soils can be avoided or minimised and demonstrate how soils will be sustainably used and managed, including consideration in site design and master planning, and areas for green infrastructure or biodiversity net gain. The aim will be to minimise soil handling and maximise the sustainable use and management of the available soil to achieve successful after-uses and minimise off-site impacts.

Further information is available in the Defra Construction Code of Practice for the Sustainable Use of Soil on Development Sites and
The British Society of Soil Science Guidance Note Benefitting from Soil Management in Development and Construction.

Air Quality

Air quality in the UK has improved over recent decades but air pollution remains a significant issue. For example, approximately 85% of protected nature conservation sites are currently in exceedance of nitrogen levels where harm is expected (critical load) and approximately 87% of sites exceed the level of ammonia where harm is expected for lower plants (critical level of 1µg) [1].A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The Government's Clean Air Strategy also has a number of targets to reduce emissions including to reduce damaging deposition of reactive forms of nitrogen by 17% over England's protected priority sensitive habitats by 2030, to reduce emissions of ammonia against the 2005 baseline by 16% by 2030 and to reduce emissions of NOx and SO_2 against a 2005 baseline of 73% and 88% respectively by 2030. Shared Nitrogen Action Plans (SNAPs) have also been identified as a tool to

[1] Report: Trends Report 2020: Trends in critical load and critical level exceedances in the UK - Defra, UK

reduce environmental damage from air pollution.

The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly, or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The ES should take account of the risks of air pollution and how these can be managed or reduced. This should include taking account of any strategic solutions or SNAPs, which may be being developed or implemented to mitigate the impacts on air quality. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk).

Information on air pollution modelling, screening and assessment can be found on the following websites:

- SCAIL Combustion and SCAIL Agriculture - http://www.scail.ceh.ac.uk/
- Ammonia assessment for agricultural development https://www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit
- Environment Agency Screening Tool for industrial emissions https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit
- Defra Local Air Quality Management Area Tool (Industrial Emission Screening Tool) – England http://www.airqualityengland.co.uk/laqm

Water Quality

The planning system plays a key role in determining the location of developments which may give rise to water pollution, and hence planning decisions can have a significant impact on water quality, and land. The assessment should take account of the risks of water pollution and how these can be managed or reduced. A number of water dependent protected nature conservation sites have been identified as failing condition due to elevated nutrient levels and nutrient neutrality is consequently required to enable development to proceed without causing further damage to these sites. The ES needs to take account of any strategic solutions for nutrient neutrality or Diffuse Water Pollution Plans, which may be being developed or implemented to mitigate and address the impacts of elevated nutrient levels. Further information can be obtained from the Local Planning Authority.

Climate Change

The ES should identify how the development affects the ability of the natural environment (including habitats, species, and natural processes) to adapt to climate change, including its ability to provide adaptation for people. This should include impacts on the vulnerability or resilience of a natural feature (i.e. what's already there and affected) as well as impacts on how the environment can accommodate change for both nature and people, for example whether the development affects species ability to move and adapt. Nature-based solutions, such as providing green infrastructure on-site and in the surrounding area (e.g. to adapt to flooding, drought and heatwave events), habitat creation and peatland restoration, should be considered. The ES should set out the measures that will be adopted to address impacts.

Further information is available from the Committee on Climate Change's (CCC) Independent Assessment of UK Climate Risk, the National Adaptation Programme (NAP), the Climate Change Impacts Report Cards (biodiversity, infrastructure, water etc.) and the UKCP18 climate projections.

The Natural England and RSPB Climate Change Adaptation Manual (2020) provides extensive information on climate change impacts and adaptation for the natural environment and adaptation focussed nature-based solutions for people. It includes the Landscape Scale Climate Change Assessment Method that can help assess impacts and vulnerabilities on natural environment features and identify adaptation actions. Natural England's Nature Networks Evidence Handbook (2020) also provides extensive information on planning and delivering nature networks for people and biodiversity.

The ES should also identify how the development impacts the natural environment's ability to store and sequester greenhouse gases, in relation to climate change mitigation and the natural environment's contribution to achieving net zero by 2050. Natural England's Carbon Storage and Sequestration by Habitat report (2021) and the British Ecological Society's nature-based solutions report (2021) provide further information.

Contribution to local environmental initiatives and priorities

The ES should consider the contribution the development could make to relevant local environmental initiatives and priorities to enhance the environmental quality of the development and deliver wider environmental gains. This should include considering proposals set out in relevant local strategies or supplementary planning documents including landscape strategies, green infrastructure strategies, tree and woodland strategies, biodiversity strategies or biodiversity opportunity areas.

Historic England

Ms Kate Henry
London Borough of Camden
5 Pancras Square
London
N1C 4AG

Your Ref: 2023/3265/P
Our Ref: 215936

Contact:
Louise Davies
02079733740
louise.davies@historicengland.org.uk

2023-08-20

Dear Ms Henry,

TOWN & COUNTRY PLANNING ACT 1990 (AS AMENDED)
NATIONAL PLANNING POLICY FRAMEWORK 2021

Euston Tower 286 Euston Road London NW1 3DP

Request for scoping opinion under Regulation 15 of the Town and Country Planning Environmental Impact Assessment (EIA) Regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.

Recommend Archaeology Scoped OUT of EIA

Thank you for your consultation received on 2023-08-08.

The Greater London Archaeological Advisory Service (GLAAS) gives advice on archaeology and planning. Our advice follows the National Planning Policy Framework (NPPF) and the GLAAS Charter.

NPPF section 16 and the London Plan (2021 Policy HC1) make the conservation of archaeological interest a material planning consideration.

Having considered the proposals with reference to information held in the Greater London Historic Environment Record and/or made available in connection with this application, I conclude that the proposal is unlikely to have a significant effect on heritage assets of archaeological interest. I agree with the outcome of the Trium Scoping Opinion report (July 2023) that archaeology should be scoped out of the ES.

No further assessment or conditions are therefore necessary.

This response relates solely to archaeological considerations. If necessary, Historic England's Development Advice Team should be consulted separately regarding statutory matters.

Yours sincerely

Louise Davies

Archaeology Adviser
Greater London Archaeological Advisory Service
London and South East Region

Historic England, 4th Floor, Cannon Bridge House, 25 Dowgate Hill, London EC4R 2YA
Telephone 020 7973 3700 Facsimile 020 7973 3001
HistoricEngland.org.uk
Please note that Historic England operates an access to information policy.
Correspondence or information which you send us may therefore become publicly available.

Historic England

Ms Kate Henry
London Borough of Camden
Development Management
Town Hall
Judd Street
London
WC1H 9JE

Direct Dial: 020 7973 3762

Our ref: PL00793728

Your ref: 2023/3265/P

25 August 2023

Dear Ms Henry

RE. EUSTON TOWER, 286 EUSTON ROAD, LONDON NW1 3DP
ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SCOPING REPORT

Thank you for your letter of 8 August 2023 consulting us about the above EIA Scoping Report.

The existing tall building on the site appears in the setting of a number of designated heritage assets. The proposed scheme is still in development, but the total height is described as 'not materially taller' than the existing building; this does not preclude changes in bulk, massing, articulation or materiality. This development could therefore have an impact, which may be greater, reduced, or different in nature, upon designated heritage assets and their settings in the area around the site. In line with the advice in the National Planning Policy Framework (NPPF), we would expect the Environmental Statement to contain a thorough assessment of the likely effects which the proposed development might have upon those elements which contribute to the significance of these assets.

We would also expect the Environmental Statement to consider the potential impacts on non-designated features of historic, architectural, archaeological or artistic interest, since these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place. This information is available via the local authority Historic Environment Record (www.heritagegateway.org.uk) and relevant local authority staff.

We would strongly recommend that you involve the Heritage and Conservation Officer of the London Borough of Camden and the archaeological staff at Historic England's Greater London Archaeological Advisory Service in the development of this assessment. They are best placed to advise on: local historic environment issues and priorities; how the proposal can be tailored to avoid and minimise

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potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of heritage assets.

Given the height of the structure associated with the proposed development and the surrounding topography and urban context, this development will be visible across a large area and could, as a result, affect the significance of heritage assets at some distance from this site itself. We would expect the assessment to clearly demonstrate that the extent of the proposed study area is of the appropriate size to ensure that all heritage assets likely to be affected by this development have been included and can be properly assessed. It is important that the assessment is designed to ensure that all impacts are fully understood, potentially involving the use of section drawings and techniques such as photomontages.

The Townscape, Visual and Built Heritage Assessment Topic Sheet in Annex D explains that the impact on some heritage assets are expected to be similar that of the present building because the proposed new development is comparable in height to the existing building. Therefore, detailed assessments of impact on some heritage assets within the main 500m diameter study area are not proposed. This may be a proportionate approach, but will depend on the degree to which the development deviates in design, massing, and materiality, as well as height, from the current building. We are glad to note the inclusion of some sensitive heritage assets outside the primary study area, including Regent's Park, a Grade I Registered Park and Garden, and highly graded assets within it.

We are glad to note that Historic England's Good Practice Advice Note 3, 'The Setting of Heritage Assets' is noted in the scoping report as forming part of the basis for assessment of setting impacts. We recommend that Historic England's updated advice in 'Tall Buildings: Historic England Advice Note 4' (2022) also informs the assessment of the scheme and its impacts.

The Townscape and Visual Impact Assessment topic summary on page 9 of the report and the Townscape, Visual and Built Heritage Assessment Topic Sheet in Annex D refer to the development appearing in two LVMF Panoramas and one LVMF river prospect. It should be particularly noted that the development will appear - as does the current building - within the protected vista, and in part within the landmark viewing corridor, for LVMF view 2A.2 Parliament Hill to Westminster. Changes in massing or materiality could potentially have an impact on the prominence of the Palace of Westminster in this view, and this should be assessed in the Environmental Statement.

The assessment should also take account of the potential impact which associated activities (such as construction, servicing and maintenance, and associated traffic) might have upon perceptions, understanding and appreciation of the heritage

4TH FLOOR, CANNON BRIDGE HOUSE, 25 DOWGATE HILL, LONDON EC4R 2YA
Telephone 020 7973 3700
HistoricEngland.org.uk

Historic England is subject to both the Freedom of Information Act (2000) and Environmental Information Regulations (2004). Any Information held by the organisation can be requested for release under this legislation.

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assets in the area. The assessment should also consider, where appropriate, the likelihood of alterations to drainage patterns that might lead to *in situ* decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

These comments should be read alongside the separate correspondence from Historic England's Greater London Archaeological Advisory Service on the scoping out of archaeology from these proposals.

If you have any queries about any of the above, or would like to discuss anything further, please contact me.

Yours sincerely,

Kathy Clark
Inspector of Historic Buildings and Areas
Kathy.Clark@HistoricEngland.org.uk

cc:

Camden

Application ref: 2023/3265/P
Associated ref:
Contact: Kate Henry
Tel: 020 7974 3794
Email: Kate.Henry@camden.gov.uk
Date: 8 August 2023

Nature Conservation and Biodiversity (Statutory)
Protected Species Survey
5 Pancras Square
INTERNAL

Development Management
Regeneration and Planning
London Borough of Camden
Town Hall
Judd Street
London
WC1H 9JE

Phone: 020 7974 4444

planning@camden.gov.uk
www.camden.gov.uk/planning

Dear Sir/Madam

Town and Country Planning Act 1990 (as amended)
CONSULTATION

Address:
Euston Tower
286 Euston Road
London
NW1 3DP

The Proposed Work:
Request for scoping opinion under Regulation 15 of the Town and Country Planning Environmental Impact Assessment (EIA) Regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.

Click here to go to Planning Online Search and view the site plans and documentation. If you need printed copies please contact the Case Officer

If you wish to comment, please attach your report to the MVM record using DocGen within 21 days from the date of this letter.

In addition, do you know you can receive email alerts for planning and licensing applications as they happen in your local area? If you would like to receive these please register by going through the following steps.

1) Visit www.camden.gov.uk/planning
2) Scroll down the page and click on the link 'sign up for email alerts'
3) This page will provide you with the option to register your email address to receive email alerts for planning and licensing applications in your local area

Yours faithfully

Kate Henry
Supporting Communities Directorate

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1x response - Council....MSG

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From: Nature Conservation <NatureConservation@camden.gov.uk>
Sent on: Friday, August 11, 2023 11:09:37 AM
To: Kate Henry <Kate.Henry@camden.gov.uk>
Subject: FW: Consultee letter for PlanningApplication Application: 2023/3265/P

Follow up:

M3DDE78.DOC

Hi Kate,

I've had a look at this and agree that Ecology can be scoped out of the EIA.

Greg

-----Original Message-----
From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent: 08 August 2023 13:54
To: Nature Conservation <NatureConservation@camden.gov.uk>
Subject: Consultee letter for PlanningApplication Application: 2023/3265/P

Please find attached Consultee letter for PlanningApplication application 2023/3265/P

Y620361

From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent on: Thursday, September 21, 2023 10:59:43 AM
To: Raby-Smith, Rebecca @ London SMC <Rebecca.RabySmith@cbre.com>
Subject: FW: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P

External

Hi,

FYI, comments from Camden's Tree and Landscape Officer.

Kate Henry
Principal Planning Officer

Telephone: 020 7974 3794

From: Nick Bell <Nick.Bell@camden.gov.uk>
Sent: 21 September 2023 11:48
To: Kate Henry <Kate.Henry@camden.gov.uk>
Subject: RE: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P

Hi Kate,

Not a huge amount for me to comment on.

- The Ecology and Biodiversity topic assessment states the scheme will involve the "Retention of existing trees as well as native street tree planting;". Any planting on the highway will require a viability assessment to ensure it is possible and consultation with TfL as Euston Road and Hampstead Road are red routes.

Please let me know if you want more detail.

Thanks

Nick Bell
Tree and Landscape Officer

Telephone: 020 7974 5939
-----Original Message-----
From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent: 13 September 2023 09:52
To: Nick Bell <Nick.Bell@camden.gov.uk>
Subject: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P
Importance: High

Good morning,

The 5 week statutory period for adopting a scoping opinion has ended, but CBRE cannot complete their scoping review report until they have all consultee responses. Would you be able to provide a response within 7 days of this email?

I look forward to hearing from you.

Kate Henry
Principal Planning Officer

Telephone: 020 7974 3794

-----Original Message-----
From: Kate Henry
Sent: 08 August 2023 13:53
To: Nick Bell <Nick.Bell@camden.gov.uk>
Subject: Consultee letter for PlanningApplication Application: 2023/3265/P

Please find attached Consultee letter for PlanningApplication application 2023/3265/P

Y620361

From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent on: Thursday, September 21, 2023 10:59:43 AM
To: Raby-Smith, Rebecca @ London SMC <Rebecca.RabySmith@cbre.com>
Subject: FW: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P

External

Hi,

FYI, comments from Camden's Tree and Landscape Officer.

Kate Henry
Principal Planning Officer

Telephone: 020 7974 3794

From: Nick Bell <Nick.Bell@camden.gov.uk>
Sent: 21 September 2023 11:48
To: Kate Henry <Kate.Henry@camden.gov.uk>
Subject: RE: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P

Hi Kate,

Not a huge amount for me to comment on.

- The Ecology and Biodiversity topic assessment states the scheme will involve the "Retention of existing trees as well as native street tree planting;". Any planting on the highway will require a viability assessment to ensure it is possible and consultation with TfL as Euston Road and Hampstead Road are red routes.

Please let me know if you want more detail.

Thanks

Nick Bell
Tree and Landscape Officer

Telephone: 020 7974 5939
-----Original Message-----
From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent: 13 September 2023 09:52
To: Nick Bell <Nick.Bell@camden.gov.uk>
Subject: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P
Importance: High

Good morning,

The 5 week statutory period for adopting a scoping opinion has ended, but CBRE cannot complete their scoping review report until they have all consultee responses. Would you be able to provide a response within 7 days of this email?

I look forward to hearing from you.

Kate Henry
Principal Planning Officer

Telephone: 020 7974 3794

-----Original Message-----
From: Kate Henry
Sent: 08 August 2023 13:53
To: Nick Bell <Nick.Bell@camden.gov.uk>
Subject: Consultee letter for PlanningApplication Application: 2023/3265/P

Please find attached Consultee letter for PlanningApplication application 2023/3265/P

Y620361

ENVIRONMENTAL HEALTH
SUPPORTING COMMUNITIES

To:	Kate Henry
From:	Melanie Lipsham (Acting Contaminated Land Officer)
Date:	21/09/2023
Address:	Euston Tower 286 Euston Road London NW1 3DP
Proposal:	Request for scoping opinion under Regulation 15 of the Town and Country Planning Environmental Impact Assessment (EIA) Regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.
Reference:	2023/3265/P
Key Points:	Scoping Request – agree contaminated land assessment to accompany the proposed planning application.

ENVIRONEMTAL HEALTH OBERVATIONS

PART 1
The following documents were reviewed in preparation of the comments below:

- TRIUM Euston Tower Request for an EIA Scoping Opinion, July 2023

Summary
The site is currently occupied by Euston Tower. It is understood the proposed development includes demolition of the majority of the existing structure on-site, with retention and re-use of the central core elements, basement and foundations, and the construction of a new mixed-use development including office floorspace, laboratory enabled and flexible retail floorspace.

Historically, our records indicate unknown industrial land uses, a garage, printing works, oil and colour storage, hatters and cabinet makers were all present on/in the vicinity of the site.

According to our contaminated land risk characterisation, land on which the former industrial processes/activities were carried out is considered to represent a low to medium risk of contamination. It is possible that such land could exhibit significantly elevated contaminant levels with the potential to cause harm, although the Council has no present evidence that confirms that there are contamination issues affecting the application site other than former potentially contaminative land-uses in the vicinity of the site.

The Scoping Request confirms geoenvironmental impacts have been scoped out of the ES (i.e., considered unlikely to result in significant effects on the environment). It is agreed the development is not considered to pose an unacceptable risk, given the site is proposed for commercial end use, with a basement beneath the site. However, the scope does indicate a Phase 1 Ground Conditions Report will be submitted as a standalone planning deliverable as part of the Planning Application, and hence a risk assessment should be completed as part of this report (given the potentially contaminative land uses in the vicinity of the site) and submitted to the LA for approval at that stage.

We will comment on the full planning application when it is submitted, and review the phase I report when available.

Sincerely,

Melanie Lipsham MESci C.WEM (Acting Contaminated Land Officer, LB Camden)

METROPOLITAN POLICE

Kate Henry
Regeneration and Planning
London Borough of **Camden** 2nd Floor,
5 Pancras Square

Design Out Crime Office
North West DOCO Office,
Ruislip Police Station,
The Oaks,
Ruislip,
HA4 7LE
Telephone: 0208 7333703
Email:
DOCOMailbox.NW@met.pnn.police.uk
www.met.police.uk
Your ref: 2023/3265/P
Our ref: NW 7547
(18/09/2023)

Good morning,

Thank you for allowing me to comment on the **request for scoping opinion under Regulation 15 of the Town and Country Planning Environmental Impact Assessment (EIA) Regulations 2017, for proposed development involving the partial demolition of the existing building (retention of central core, basement and foundations) and erection of a 32 storey building (mixed use including office floorspace, lab-enabled floorspace and flexible retail floorspace), alterations to existing basement, improvements to public realm surrounding the building.**

I have not had a previous meeting with the applicant or architects in relation to this proposed development, as such my comments will be general to the area as befits a scoping opinion.

Should permission be granted for this development, I would ask for buildings to obtain Secured by Design certification via early engagement, for the following reasons.

Crime trends:

The proposed location makes up the South East corner of Regents Place. Euston Tower is bordered by Euston Road to the South and Hampstead Road to the East. It is in close proximity to Euston station as well as the tube stations of Warren Street and Euston Square. There is a higher than average street population around this area which can often experience higher rates of ASB and crime. Regents Place has an independent security team which works 24/7. The team are effective in reducing the crime rate and levels of antisocial behaviour both of which are material considerations for this proposal, as seen from current crime figures. This area comes under the ward of Regents Park. The top reported crimes for this ward for the Month of July 2023 (taken from the police UK website were antisocial behaviour, violence and sexual offences, other theft and theft from person. Other offences of note for this ward include public order, shoplifting and drugs.

Top reported crimes

Most commonly reported crimes during Jul 2023

Anti-social behaviour	88
Violence and sexual offences	54
Other theft	46
Theft from the person	36

The graphic above is for the most commonly reported crimes for Haverstock ward. The figures have been taken from the Police UK website. The theme of the crimes are consistent on a month by month basis going back to 2022.

The location is just to the North of Warren Street station where I conducted a visual audit within the last two (2) years regarding antisocial behaviour around rough sleeping, street drinking, littering and public urination. Regent's place also houses high profile companies that can be susceptible to other forms of crime and disorder. Ensuring the site has good natural surveillance and legitimate activity will be vital to ensure an antisocial element does not take hold. A secure by design condition can assist in supporting this.

Crime and ASB as material considerations for this site:

The scoping report makes several references to potential receptors which may be impacted by the proposed development and may need to be considered as part of the assessment. Two of the receptors are directly relevant to crime and disorder: Socio-economics and Health. Crime and disorder are relevant considerations and need to be addressed. In socio-economic terms, the current crime trends in this area can have a negative impact upon the quality of life for both residents and businesses and could continue to do so for future residents and workers on this proposed site. The health impact assessment needs to be viewed but crime reduction and community safety should be an important determinant to health. In effect, a safe development with low rates of crime and ASB will also have a healthier and happier community which will be less worried about crime and the fear of crime and will not be exposed to its side effects.

Initial concerns from the site:

There are several concerns for this proposed outline.

- Separation of public realm, commercial and office/lab space will be key (within the building). There should be no areas of crossover that could lead to potential conflict.
- Landscaping to provide clear access routes with excellent lines of sight. Visibility lowers the fear of crime. There should be no opportunities for concealment which could increase the risk of robbery, burglary and theft. Concealment also includes the stashing of weapons, drugs and other illicit items.
- Lighting will also be important within this development and externally should meet BS 5489-1 2020. Any lighting need to complement the existing or any proposed CCTV system

Other considerations:

- Compartmentation will be key to mitigating the risk of anti-social behaviour and acquisitive/opportunistic crime. Drugs are also a key issue for the borough of Camden and the

development must not become a kindly habitat for gangs to enter and take control. It is noted that this area has the added benefit of a security team that patrols the environs and actively monitors CCTV.

- With the possibility of lab space it must be acknowledged that (dependant on the company and lab usage) protests may occur. Consider an area for this to be facilitated which will have the least impact upon other buildings/businesses as well as road users and pedestrians.
- There is already a large night time economy for the borough of Camden and this could overspill into the new development

Similar developments within Camden:

Mount Pleasant, Morrison's Chalk Farm, Agar Grove and Bacton Low Rise). All have benefited from the advice of Met Police design out crime officers and achieved Secured by Design certification. The proposed site should be no different and should be conditioned to achieve SBD certification. (The above developments are focused around residential but also have mixed uses).

I therefore propose that crime and disorder are material considerations for this site as described within the scoping report. These concerns can be allayed by the council agreeing to a condition for the development to achieve Secured by Design certification for all phases prior to occupation including residential, commercial and educational areas, to be maintained in line with SBD certification thereafter. This will require ongoing engagement at an early stage of each phase between the designing out crime officer and the development team.

The NPPF and Camden's own local guidance can support this proposal:

Section 91 of the NPPF states:

Planning policies and decisions should aim to achieve healthy, inclusive and safe places which..

> b) *are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion – for example through the use of clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas;…..*"

Section 127 of the NPPF further adds:

Planning policies and decisions should ensure that developments..

> f) *create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users, and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience …..*"

Taken from the Camden Supplementary Guide to Design (January 2021 revision)

- *The Council requires that developments demonstrate that they have been designed to contribute to community safety and security.*
- *Security features must be fully considered and incorporated at an early stage in the design process.*
- *Designing-against crime features, safe access and security measures must complement other design considerations and be considered as part of a holistic approach to designing and maintaining safer environments for all.*
- *Better designed environments support safer and healthier communities.*
- *Consideration will be given to the impact of measures on the surrounding area to ensure that there is not displacement of activity into surrounding neighbourhoods.*
- *Safer environments support healthier communities.*

In accordance with Local Plan Policy C5 Safety and Security, the Council will require applicants to demonstrate that all impacts of their proposal on crime and community safety have been considered and addressed. Applicants should be able to demonstrate that they have consulted Met Police Designing Out Crime Officer (details of which can be found at www.securedbydesign.com) and that proposals take into account the advice given and achieve Secured by Design certification, where appropriate.

Policy C5 Safety and security (From the Camden Local Plan)

The Council will aim to make Camden a safer place. We will:

- *(a) work with our partners including the Camden Community Safety Partnership to tackle crime, fear of crime and antisocial behaviour;*
- *(b) Require developments to demonstrate that they have incorporated design principles which contribute to community safety and security, particularly in wards with relatively high levels of crime, such as Holborn and Covent Garden, Camden Town with Primrose Hill and Bloomsbury;*
- *(c) Require appropriate security and community safety measures in buildings, spaces and the transport system;*
- *(d) Promote safer streets and public areas;*
- *(e) Address the cumulative impact of food, drink and entertainment uses, particularly in Camden Town, Central London and other centres and ensure Camden's businesses and organisations providing food, drink and entertainment uses take responsibility for reducing the opportunities for crime through effective management and design; and*
- *(f) Promote the development of pedestrian friendly spaces.*

We strongly encourage security features to be incorporated into a scheme from the beginning of the design process and complement other key design considerations. Internal security measures are preferred. Further information on designing safer environments is set out in our supplementary planning document Camden Planning Guidance on design.

It is important to take a proactive approach at an early stage to reduce risks and opportunities for crime and ASB to occur, rather than relying on reactive measures such as

CCTV, which should only be used as part of a package of measures to reduce crime. Incorporating designing out crime features into a development should complement other key design considerations and high quality architecture and design should still be achieved.

Considering good design early in the design process will lead to a better quality development overall.

The design of streets, public areas and the spaces between buildings needs to be accessible, safe and uncluttered. Careful consideration needs to be given to the design and location of any street furniture or equipment in order to ensure that they do not obscure public views or create spaces that would encourage antisocial behaviour. The use of the site and layout should also be carefully considered as these can also have a major impact on community safety.

From the Camden local plan;

" Camden's food, drink and licensed entertainment premises contribute to the attractiveness and vibrancy of the borough but, where there is a concentration of late night activity, there can also be problems such as noise and disturbance, littering, antisocial behaviour, crime and violence. The cumulative impact of these uses will therefore be assessed in line with our town centre policies, particularly Policy TC4 Town centre uses and Policy A1 Managing the impact of development. The Council will also take into consideration any concerns raised from stakeholders within adjoining areas beyond Camden's boundaries. Alcohol related crime and late night disorder have been identified as significant issues, particularly within Camden Town and the Seven Dials area of Central

London. Camden's Statement of Licensing Policy sets out the Council's approach to licensing and special licensing policies apply to these areas."

From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent on: Tuesday, September 19, 2023 8:53:37 AM
To: Raby-Smith, Rebecca @ London SMC <Rebecca.RabySmith@cbre.com>
Subject: FW: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P (LBC Green spaces)

External

FYI

Kate Henry
Principal Planning Officer

Telephone: 020 7974 3794
-----Original Message-----
From: Joe Lewis <Joe.Lewis@camden.gov.uk>
Sent: 18 September 2023 12:18
To: Kate Henry <Kate.Henry@camden.gov.uk>
Cc: Greenspace Improvements <greenspaceimprovements@camden.gov.uk>; Andrew Hinchley <Andrew.Hinchley@camden.gov.uk>; David Houghton <David.Houghton@Camden.gov.uk>; Greg Hitchcock <Greg.Hitchcock@camden.gov.uk>
Subject: RE: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P

Hi Kate,

Thank you for your email.

LBC Green Space have no comments on the EIA scoping for the 286 Euston Road application. We look forward to commenting on the full planning application when it is submitted. If you have any questions about green space in relation to this application then do get back in contact.

Kind regards

--
Joe Lewis
Green Space Development Manager

Telephone: 02079743536

-----Original Message-----
From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent: 13 September 2023 10:02
To: Greenspace Improvements <greenspaceimprovements@camden.gov.uk>; Andrew Hinchley <Andrew.Hinchley@camden.gov.uk>; David Houghton <David.Houghton@Camden.gov.uk>
Subject: REMINDER FW: Consultee letter for PlanningApplication Application: 2023/3265/P
Importance: High

Good morning,

The 5 week statutory period for adopting a scoping opinion has ended, but CBRE cannot complete their scoping review report until they have all consultee responses. Would you be able to provide a response within 7 days of this email?

I look forward to hearing from you.

Kate Henry
Principal Planning Officer

Telephone: 020 7974 3794

-----Original Message-----
From: Kate Henry
Sent: 08 August 2023 13:57
To: Greenspace Improvements <greenspaceimprovements@camden.gov.uk>
Subject: Consultee letter for PlanningApplication Application: 2023/3265/P

Please find attached Consultee letter for PlanningApplication application 2023/3265/P

Y620361

From: Tebraiz Shahzad <Tebraiz.Shahzad@camden.gov.uk>
Sent on: Thursday, October 5, 2023 2:29:19 PM
To: Kate Henry <Kate.Henry@camden.gov.uk>
Subject: RE: REMINDER FW: Consultee letter for Planning Application: 2023/3265/P

Hi Kate.

I apologise for the delay and for any inconvenience caused.

Please see my comments below. Thanks for giving us the opportunity to comment on this. It's an exciting development. I know British Land have been transforming the area and have spoken to them in the past about are Evening and Night Time Economy Strategy.

AWS

On their scoping opinion document on the U Drive, it states ***Approximately 63,500m2 (GIA) of office and lab enabled (Use Class E) floorspace*** . I'm not sure how much this is in a net uplift but would expect to secure a portion of this as affordable works space (an uplift of more than 1k sqm net floor space triggers AWS, I'm assuming this development would, please let me know). This could be one of several ways:

- 20% of the workspace to be provided at 50% of comparable market values
- An element of the floor space to be offered to an affordable workspace provider (to be approved by the Council) at a peppercorn rent (i.e. a very small or token rent); or
- 20% of the desks in the open workspace (hot-desking) area to be offered at 50% of market value

This space could possibly be appropriate for use within the Knowledge Quarter as the area is within very close proximity. This is also a popular area for SMEs and Start –Ups. It would be good to find out in time who the occupiers may be and plans for how the AWS would be managed or operated.

Actually with proposed lab space, offering some of this as Affordable Workspace (below market rate rent) could be ideal as its within reach of the Knowledge Quarter and they're in need of lab space.

Obviously we can discuss this

Construction Phase:

Apprenticeships - as the build cost for this scheme will exceed £3 million the applicant must recruit **1 construction apprentice paid at least London Living Wage per £3million of build costs and pay the council a support fee of £1,700 per apprentice as per section 63 of the Employment sites and business premises CPG.** Recruitment of construction apprentices should be conducted through the Council's King's Cross Construction Skills Centre. Once we have the exact build cost, we can determine the number of apprentices.

Construction Work Experience Placements - The applicant should provide **a number of construction work placement opportunities** (this is one placement per 500sq m of non-residential floor space and one per 20 housing units built) of not less than 2 weeks each, to be undertaken over the course of the development, to be recruited through the Council's King's Cross Construction Skills Centre, as per section 69 of the Employment sites and business premises CPG. Once we know what the net increase in work floor space, we can work this out.

Local Recruitment – our standard local recruitment target is **20%.**The applicant should work with the Kings Cross Construction Skills Centre to recruit to vacancies, advertising with us for no less than a week before the roles are advertised more widely.

Local Procurement – The applicant must also sign up to the **Camden Local Procurement Code**, as per section 61 of the Employment sites and business premises CPG. Our local procurement code sets a target of **10%** of the total value of the construction contract.

End Use / Occupation Phase Opportunities:

Sections 72-75 of the CPG set out our expectations about employment in the completed development

We will want to secure a specific number of end use apprenticeships through the S106 agreement. Especially with a

The developer should also confirm their commitment to ensuring the site offers local employment benefits in the long term by

- Joining the Council's Inclusive Business Network and promoting this and good employment practice to occupiers
- Working with Camden Learning/STEAM on school engagement, especially for the lab space but the office space as well.
- Working with their occupiers to offer work experience placements
- Working with Good Work Camden/the Council's Inclusive Economy Service to recruit to vacancies locally
- Work with Good Work Camden/the Council's Inclusive Economy Service to offer specific opportunities to those furthest from the labour market, possibly through supported employment initiatives
- For the amenities space/shared on the lower level at 6300m2 some direct benefits/use for local residents (possibly free or at a large discount).

Section 73 provides for a Section 106 contribution to be used by the Inclusive Economy service to support employment and training activities and local procurement initiatives. This contribution would be calculated as follows :

Net increase in floorspace (sq m GIA) / 12sqm [space requirement per full time employee] = full time jobs created Full time jobs created x 21% [% of Camden residents who work in Camden] x 35% [% of employees requiring training] x £3,995 [£ per employee requiring training.

Once we know what the net increase in floorspace , I can make the calculation.

Happy to further discuss this. I apologise for the delay.

Kind Regards.

Tebraiz Shahzad
Inclusive Economy Project Officer
Economic Development
London Borough of Camden

Telephone: 020 7974 1987

Web: camden.gov.uk
5 Pancras Square
5 Pancras Square
London N1C 4AG

From: Kate Henry <Kate.Henry@camden.gov.uk>
Sent on: Friday, November 3, 2023 9:48:27 AM
To: Raby-Smith, Rebecca @ London SMC <Rebecca.RabySmith@cbre.com>
Subject: FW: 2023/3265/P - Euston Tower request for scoping opinion

External

FYI (comments from the Sustainability Officer)

--
Kate Henry
Principal Planning Officer

Telephone: 020 7974 3794

From: Christopher Winters <Christopher.Winters@camden.gov.uk>
Sent: 02 November 2023 19:08
To: Kate Henry <Kate.Henry@camden.gov.uk>
Cc: Katherine Frost <Katherine.Frost@camden.gov.uk>
Subject: 2023/3265/P - Euston Tower request for scoping opinion

Hi Kate,

Further to discussion with Katherine the areas scoped into the EIA in combination with the standalone planning deliverables appear to be adequate. There has already been extensive pre-app engagement in consideration of the relevant issues with this development.

One query I would like to raise is whether there will be a standalone Air Quality Assessment or will Air Quality just be considered within the EIA? I think it would be acceptable if the Air Quality section of the EIA covers all the same bases we would expect in a standalone AQA but it would be good to have further clarity on the applicants intentions in this respect.

To confirm the inclusion of the following chapters highlighted in green will be particularly relevant from the perspective of the sustainability team:

- Chapter 1. Introduction;
- Chapter 2. EIA Methodology;
- Chapter 3. Alternatives and Design Evolution;
- Chapter 4. The Proposed Development;
- Chapter 5. Demolition and Construction;
- Chapter 6. Socio-economics;
- Chapter 7. Traffic and Transport;
- Chapter 8. Air Quality;
- Chapter 9. Noise and Vibration;
- Chapter 10. Daylight, Sunlight, Overshadowing, and Solar Glare;
- Chapter 11. Wind Microclimate;
- Chapter 12. Climate Change and Greenhouse Gases;
- Chapter 13. Effect Interactions;
- Chapter 14. Likely Significant Effects and Conclusions;
- Chapter 15. Environmental Management, Mitigation and Monitoring Schedule;

In addition the outlined supporting planning documents will also be of interest to the sustainability team:

• Energy Strategy (Standalone Planning Deliverable);
• Sustainability Strategy (Standalone Planning Deliverable);
• Circular Economy Statement (Standalone Planning Deliverable);
• Flood Risk Assessment (Standalone Planning Deliverable);
• Sustainable Drainage Strategy (Standalone Planning Deliverable);
• Utilities and Foul Sewage Assessment (Standalone Planning Deliverable); and
• Whole Life Carbon Assessment (Standalone Planning Deliverable)

All the best,
Chris

Christopher Winters
Sustainability Officer (Planning)
Supporting Communities
London Borough of Camden

Web: camden.gov.uk

5 Pancras Square
London N1C 4AG

Please consider the environment before printing this email.

Application No:	Consultees Name:	Received:	Comment:	Response:
2023/3265/P	Ursula Brown	14/08/2023 09:11:20	OBJNOT	Annex C Cumulative Schemes does not mention HS2 which is by far the biggest and most disruptive development in the local area. This must be scoped in. The whole document is completely meaningless without it.

Total: 4

Appendix: EIA Methodology

Annex 1: EIA Scoping Report

Annex 2: EIA Scoping Opinion

Annex 3: Cumulative Schemes List and Map

Euston Tower – Cumulative Schemes List

The Cumulative Schemes that will be considered within the ES are typically located within a 1km radius from the site, as this spatial extent is considered appropriate for determining cumulative effects in this locality but schemes located outside this which are considered relevant are included for completeness.

Generally, the schemes to be included within a cumulative effects assessment will either have:

- Full planning consent, proposed schemes pending a decision, or a resolution to grant consent; and
- Produce an uplift of more than 10,000 m^2 (Gross External Area (GEA)) of mixed-use floorspace, or over 150 residential units; or
- Are office to residential conversions (granted under the General Permitted Development Order) giving rise to over 150 residential units.

Table 1 sets out the Cumulative Schemes to be assessed within the EIA.

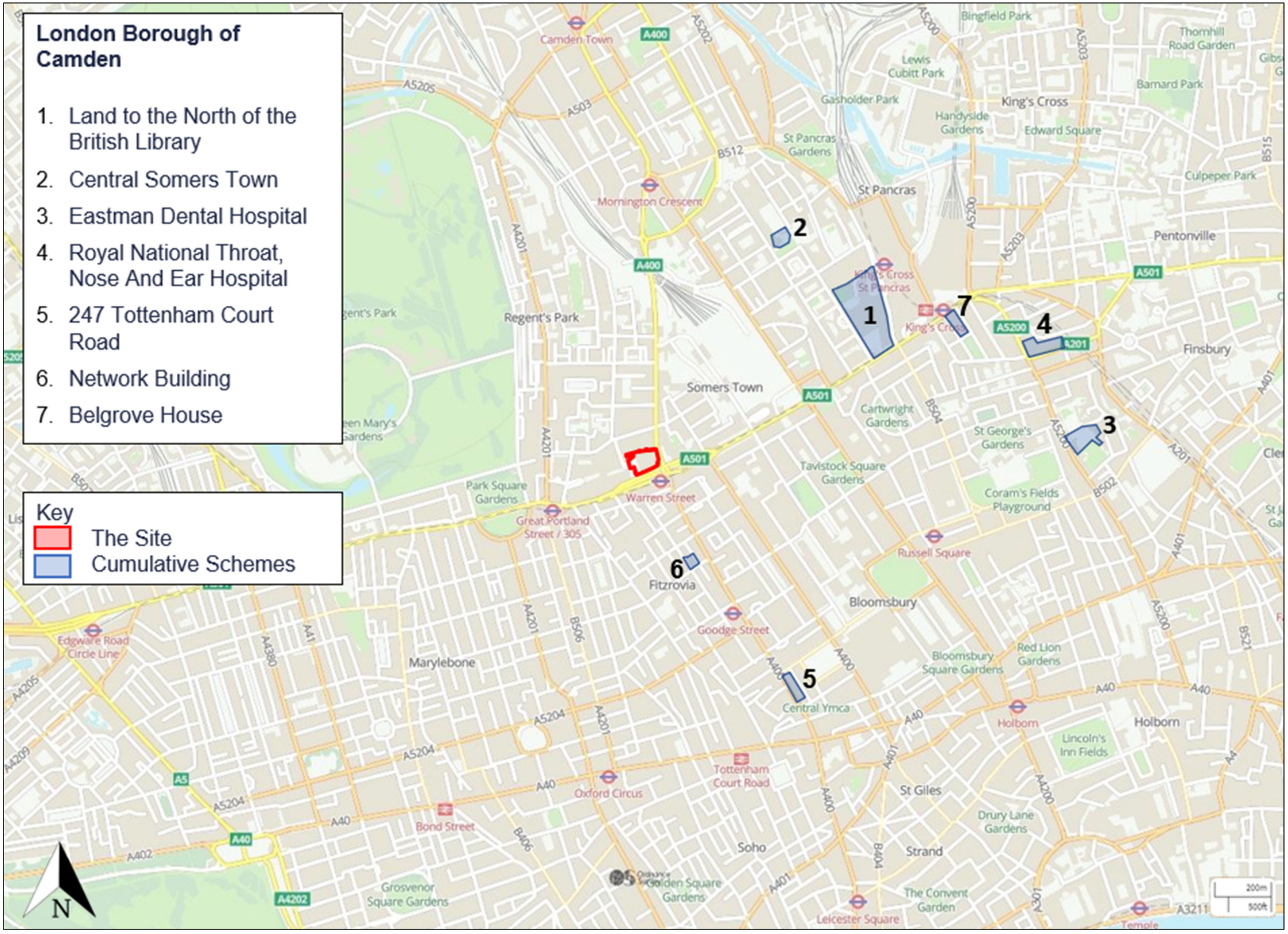
Table 1 List of Cumulative Schemes

ID	Site Name	Description	App Ref	Distance from Site	Status as of December 2023
1	Land to the North of the British Library 96 Euston Road London NW1 2DB	Demolition of the British Library Centre for Conservation, alterations to the British Library and erection of a new building of 12 above-ground storeys and two basement levels for use as library, galleries, learning, business and events spaces (Class F1) and retail and commercial spaces (Class E); provision of internal and external public spaces, landscaping and a community garden; improvement works adjacent to Dangoor Walk; provision of cycle and car parking and servicing facilities including new crossovers; provision of Crossrail 2 infrastructure; means of access; and associated works.	2022/1041/P	1km east	Resolution to grant approval at Planning Committee on 30 January 2023
2a	Central Somers Town Covering Land At Polygon Road Open Space, Edith Neville Primary School 174 Ossulston Street And Purchese Street Open Space, London, NW1 1EE (Brill Place)	Demolition of existing buildings and the provision of approximately 2,190sq.m replacement school (Use Class D1); approximately 1,765sq.m of community facilities (Use Class D1); approximately 207sq.m of flexible Use Class A1/A2/A3/D1 floorspace and 136 residential units (Use Class C3) over 7 buildings ranging from 3 to 25 storeys in height comprising: Plot 1: Community uses at ground floor (Use Class D1) (approximately 1,554sq.m) Plot 1: Community uses at ground floor (Use Class D1) (approximately 1,554sq.m) to including demolition of existing buildings and the provision of approximately 2,190sq.m replacement school (Use Class D1); approximately 1,765sq.m of 2community facilities (Use Class D1); approximately 207sq.m of flexible Use Class A31/A2/A3/D1 floorspace and 136 residential units (Use Class C3) over 7 buildings ranging from 3 to 25 storeys in height comprising: Plot 1: Community uses at ground floor (Use Class D1) (approximately 1,554sq.m) to include a children's nursery and community play facility with 10no. residential units above; Plot 2: 35 residential units over flexible A1/A2/A3/D1 floorspace at ground level (approximately 137sq.m); Plot 3: Extension of Grade II listed terrace to provide 3no. dwellings; Plot 4: Replacement school (Use Class D1) ; Plot 5: 20no. residential units over a replacement community hall (Use Class D1) (approximately 211sq.m); Plot 6: 14no. residential units; and Plot 7: 54no. residential units over flexible A1/A2/A3/D1 floorspace at ground level (approximately 70sq.m). Provision of 11,765 sqm of public open space along with associated highways works and landscaping. Namely, to include amendments to architectural design, building footprint, internal layouts, quantum of residential units, structural column positions and the energy strategy, in relation to Plot 7, Central Somers Town.	2015/2704/P	890m north-east	Approved on 14 October 2016 Partly built out with some plots still to be constructed.
2b		Variation of conditions 2 (approved drawings), 3 (approved documents), 15 (quantum of housing, plot 7) and 80 (cycle parking, plot 7) of planning permission reference 2015/2704/P dated 14/10/2016 for Demolition of existing buildings and the provision of approximately 2,190sq.m replacement school (Use Class D1); approximately 1,765sq.m of community facilities (Use Class D1); approximately 207sq.m of flexible Use Class A1/A2/A3/D1 floorspace and 136 residential units (Use Class C3) over 7 buildings ranging from 3 to 25 storeys in height comprising: Plot 1: Community uses at ground floor (Use Class D1) (approximately 1,554sq.m) to including demolition of existing buildings and the provision of approximately 2,190sq.m replacement school (Use Class D1); approximately 1,765sq.m of 2community facilities (Use Class D1); approximately 207sq.m of flexible Use Class A31/A2/A3/D1 floorspace and 136 residential units (Use Class C3) over 7 buildings ranging from 3 to 25 storeys in height comprising: Plot 1: Community uses at ground floor (Use Class D1) (approximately 1,554sq.m) to include a children's nursery and community play facility with 10no. residential units above; Plot 2: 35 residential units over flexible A1/A2/A3/D1 floorspace at ground level (approximately 137sq.m); Plot 3: Extension of Grade II listed terrace to provide 3no. dwellings; Plot 4: Replacement school (Use Class D1) ; Plot 5: 20no. residential units over a replacement community hall (Use Class D1) (approximately 211sq.m); Plot 6: 14no. residential units; and Plot 7: 54no. residential units over flexible A1/A2/A3/D1 floorspace at ground level (approximately 70sq.m). Provision of 11,765 sqm of public open space along with associated highways works and landscaping. Namely, to include amendments to architectural design, building footprint, internal layouts, quantum of residential units, structural column positions and the energy strategy, in relation to Plot 7, Central Somers Town.	2019/5882/P		Approved on 14 October 2016
2c		Minor Material Amendment (Section 73) to facilitate change of wording to Condition 137 granted under planning permission reference 2015/2704/P dated 14/10/2016, amended by application 2019/5882/P dated 01/07/2020	2020/4631/P		Approved on 23 April 2021

ID	Site Name	Description	App Ref	Distance from Site	Status as of December 2023
2d		Minor Material Amendment (Section 73) to amend Condition 2 (Approved Drawings), Condition 3 (Design and Access Statement), Condition 18 (Play Space), Condition 26 (Obscure Glazing – Plot 5), Condition 27 (Obscure Glazing – Plot 6) and Condition 82 (Cycle Parking – Public Open Space) of Ref. 2020/4631/P dated 23/04/2021 to planning permission reference 2015/2704/P dated 14/10/2016, amended by application 2019/5882/P dated 01/07/2020 and 2020/4631/P dated 23/04/2021 and 2022/2659/P dated 18/07/2022	2022/2855/P		Approved 24 November 2022
3a	Eastman Dental Hospital Site and Buildings (including the former Royal Free Hospital the Eastman Dental Clinic and the Levy Wing) WC1X 8LD	Partial redevelopment of the site, including to the former Royal Free Hospital (Plot 1); Eastman Dental Clinic (Plot 2); Levy Wing (Plot 3); Frances Gardner House and the Riddell Memorial Fountain within the courtyard of the former Royal Free Hospital, to create approximately 23,861sqm of medical research, outpatient facility and academic (Use Class D1) floorspace. Former Royal Free Hospital: demolition of the New, Sussex and Victoria Wings (with retention of the Alexandra Wing); single storey extensions and reinstatement of southern pediment on Alexandra Wing; erection of five storey building (plus two storeys of plant and two storeys of basement) to the rear of the Alexandra Wing, including plant, terraces, flues, to provide a dementia and neurology research facility. Eastman Dental Clinic: alterations to the listed building including the part rebuilding of the northern façade and new entrance; replacement windows; new plant; works to the courtyard and associated external and internal alterations associated with its conversion to education use. Levy Wing: substantial demolition of the building and erection of a part 4, part 7 storey building (plus two storey basement, including plant and external amenity spaces), to provide education space. Frances Gardner House: installation of photovoltaic panels on the roof and landscaping works to the courtyard. Riddell Memorial Fountain: relocation of the listed fountain from the courtyard of the former Royal Free Hospital to the courtyard of the Eastman Dental Clinic. Associated landscaping arrangements including the creation of a new public square, other public spaces and routes, and pedestrian connections to Gray's Inn Road, St Andrew's Gardens, Cubitt Street and Langton Close. Associated transport and servicing arrangements including cycle parking, parking and a new servicing ram	2018/5715/P	1.5km east	Approved subject to a Section 106 legal agreement on 10 March 2020
3b		Variation of Condition 2 (Approved Plans) granted under Planning Application reference 2019/2879/P dated 10/03/20 (for: Partial redevelopment of the site to create medical research, outpatient facility and academic floorspace); CHANGES include an extension to the Plot 1 basement and amended ground floor plan to include vent.	2020/4919/P		Application registered on 23 October 2020
3c		Variation of Condition 2 (Approved Plans) granted under Planing Application reference 2019/2879/P dated 10/03/20 (for: Partial redevelopment of the site to create medical research, outpatient facility and academic floorspace); CHANGES include rear and front extensions to the basement of Plot 1; significant extension of the Plot 3 basement at both level B1 and level B2 to provide two lecture theatres (net additional 852sqm GIA floorspace); additional plant and servicing equipment. This application is accompanied by an addendum to the original Environmental Statement.	2020/5791/P		Approved subject to S106 Legal Agreement on 21 June 2021
3d		Variation of Condition 2 (Approved Plans) granted under Planning Application reference 2019/2879/P dated 10/03/20 (for: Partial redevelopment of the site to create medical research, outpatient facility and academic floorspace); CHANGES include amendments to Plot 1 (former Royal Free Hospital Building) to amend the lecture theatre east facade; east facade updates (locations of doors); north west corner facade (change of detailing); facade level changes; firefighting lift; Alexandra Wing demolition and construction methodology. This application is accompanied by an addendum to the original Environmental Statement.	2021/1809/P		Submitted on 24 October 2022. Pending determination.
4	Royal National Throat, Nose And Ear Hospital Site 330 Grays Inn Road (and fronting Swinton Street and Wicklow Street) London WC1X 8DA	Redevelopment of the former Royal National Throat, Nose and Ear Hospital site, comprising: Retention of 330 Gray's Inn Road and a two storey extension above for use as hotel (5 above ground storeys in total), demolition of all other buildings, the erection of a part 13 part 9 storey building plus upper and lower ground floors (maximum height of 15 storeys) for use as a hotel (including a cafe and restaurant); covered courtyard; external terraces; erection of a 7 storey building plus upper and lower ground floors (maximum height of 9 storeys) for use as office (for consultation purposes only: 13,275sqm office space) together with terraces; erection of a 10 storey building plus upper and lower ground floors (maximum height of 12 storeys) for use as residential (44 units and 748sqm affordable workspace, for consultation purposes only) on Wicklow Street and office space at lower ground and basement floors; erection of a 5 storey building plus upper and lower ground floors (maximum height of 7 storeys) for use as residential (32 units, for consultation purposes only) on Swinton Street and associated residential amenity space; together with a gymnasium; new basement; rooftop and basement plant; servicing; cycle storage and facilities; refuse storage; landscaping and other ancillary and associated works (for consultation purposes only the development includes 9,427sqm of hotel floorspace (182 rooms)).	2020/5593/P	1.4km east	Approved on 20 July 2022
5	247 Tottenham Court Road, London, W1T 7HH; 3 Bayley Street, London, WC1B 3HA; 1 Morwell Street, London, WC1B 3AR; 2-3 Morwell Street, London, WC1B 3AR; and 4 Morwell Street, London, W1T 7QT.	Demolition of 247 Tottenham Court Road, 3 Bayley Street, 1 Morwell Street, 2-3 Morwell Street and 4 Morwell Street and the erection of a mixed use office led development comprising ground plus five storey building for office (Class B1) use, flexible uses at ground and basement (Class A1/A2/A3/B1/D1/D2), residential (Class C3) use, basement excavation, provision of roof terraces, roof level plant equipment and enclosures, cycle parking, public realm and other associated works.	2020/3583/P	960m south	Approved on 30 July 2021
6a	Network Building (95-100 Tottenham Court Road) 76-80 Whitfield Street and 88 Whitfield Street London W1T 4TP	Outline application for demolition of office building (95-100 TCR & 76-80 Whitfield St) and 7 flats (88 Whitfield Street) and construction of a new building to provide for a maximum of 17746 sqm (GIA) of 'commercial business and service' floorspace (use Class E) along with details of access, scale and landscaping and other works incidental to the application. Details of layout and appearance are reserved. CONSULTATION NOTE: Application is linked to redevelopment of 14-19 Tottenham Mews (ref 2020/5633/P) and Reserved Matters details for office building (ref 2020/5631/P) and Reserved Matters details for lab-enabled building (ref 2020/5638/P).	2020/5624/P	410m south	Approved on 12 April 2022
6b		Reserved Matters details of layout and appearance for a building with lab-enabled use comprising one basement level, ground floor and seven upper floors, and details required by conditions 4 (Basement Impact Assessment), 5 (Energy details), 6 (Design and access statement), 7 (Cycle facilities) and 37 (Waste & recycling), associated servicing and all necessary enabling works, associated with planning application reference 2020/5624/P [for the demolition of office building (95-100 TCR & 76-80 Whitfield St) and 7 flats (88 Whitfield Street) and construction of a new building to provide for a maximum of 17746 sqm (GIA) of 'commercial business and service' floorspace (use Class E) along with details of access, scale and landscaping and other works incidental to the application']. CONSULTATION NOTE: Application is linked to an application for outline planning permission (ref 2020/5624/P) which is currently under assessment.	2020/5638/P		Approved on 14 April 2022

ID	Site Name	Description	App Ref	Distance from Site	Status as of December 2023
6c		Reserved Matters details of layout and appearance for an office building comprising one basement level, ground floor and eight upper floors, and details required by conditions 4 (Basement Impact Assessment), 5 (Energy details), 6 (Design and access statement), 7 (Cycle facilities) and 37 (Waste & recycling), associated servicing and all necessary enabling works, associated with planning application reference 2020/5624/P [for the demolition of office building (95-100 TCR & 76-80 Whitfield St) and 7 flats (88 Whitfield Street) and construction of a new building to provide for a maximum of 17746 sqm (GIA) of 'commercial business and service' floorspace (use Class E) along with details of access, scale and landscaping and other works incidental to the application']. CONSULTATION NOTE : Application is linked to an application for outline planning permission (ref 2020/5624/P) which is currently under assessment.	2020/5631/P		Approved on April 2022
7	Belgrove House	Redevelopment of Belgrove House as a part 5 part 10 storey building plus 2 basement levels for use as office and research and laboratory floorspace; with café, flexible retail and office floorspace at ground floor; an auditorium at basement; incorporating step free entrance to Kings Cross Underground station in place of two entrance boxes along Euston Road; together with terraces at fourth and fifth floor levels, servicing, cycle storage and facilities, refuse storage and other ancillary and associated works.	2020/3881/P	1.2km east	Approved on April 2022

Figure 1 **Map of Cumulative Schemes**



Appendix: Socio-Economics

Annex 1: Planning Policy Context

Appendix: Socio-Economics

Annex 1: Planning Policy Context

KEY LEGISLATION, POLICY AND GUIDANCE CONSIDERATIONS

National Planning Guidance

The National Planning Policy Framework (NPPF) (2023)[1]

A1.1 The National Planning Policy Framework (NPPF) was published by the Ministry of Housing, Communities and Local Government (MHCLG) in 2021. It sets out the Government's planning policies for England and how these are expected to be applied.

A1.2 At the heart of the NPPF is a 'presumption in favour of sustainable development'. It articulates the Government's vision for how the planning system should operate, and identifies three interdependent roles for the planning system, to be pursued in mutually supportive ways:

- An economic role – ensuring that the right amount of land is available at the right time and place in order to support growth, innovation and improved productivity;
- A social role – providing a sufficient number and range of homes, accessible services, and open space in a well-designed and safe built environment, to meet the needs of present and future generations and to support communities' health, social and cultural well-being; and,
- An environmental role – contributing to protecting and enhancing our natural, built and historic environment.

A1.3 The policy framework set out within Chapter 6 'Building a strong, competitive economy' and Chapter 8 'Promoting healthy and safe communities' is of greatest relevance to this socio-economic assessment.

Planning Practice Guidance (2022)[2]

A1.4 The Planning Practice Guidance (PPG) sets out technical guidance, which provides further detail on the policies, set out within the NPPF. The PPG highlights the need for local authorities to identify economic and housing needs in their areas in order to plan effectively.

A1.5 It also recognises that good quality design is an integral part of ensuring that development responds in a practical and creative way to both the function and amenity of a place, as it can affect a range of economic, social and environmental objectives. Good design is considered to have the potential to deliver a number of planning objectives including, but not limited to, safe, connected and efficient streets; crime prevention; security measures; access and inclusion; and cohesive and vibrant neighbourhoods.

Regional Planning Guidance

The London Plan 2021 (2021)[3]

A1.6 The latest London Plan was adopted in March 2021 and replaces the 2016 London Plan.

A1.7 The London Plan is underpinned by the aim of achieving 'good growth' which is socially and economically inclusive and environmentally sustainable, and helps to build strong and inclusive communities.

A1.8 Policy GG1 'Building strong and inclusive communities' sets out requirements that planning:

- Ensures London generates a wide range of economic and other opportunities;
- Provides access to good quality community spaces, services and amenities;
- Ensure streets and public spaces are designed to allow communities to thrive; and,
- Promotes town centres that provide opportunities for building relationships.

A1.9 Policy GG2 'Making the best use of land' sets out a range of measures supporting development of successful, mixed-use places, particularly in areas close to transport, and existing town centres.

A1.10 Policy GG3 'Creating a healthy city' encourages development that promotes healthy lives, uses the Healthy Streets Approach, and improves access to green spaces.

A1.11 Policy D8 'Public realm' requires development proposals to deliver safe, accessible, inclusive, attractive, well-connected, easy to understand, service and maintain public realm.

A1.12 Policy H1 'Increasing housing supply' sets out ten-year housing targets for each London borough (2019/20-2028/29), with LBH's target set as 17,820 new homes.

A1.13 Policies S1-S7 set out policies with respect to social infrastructure including healthcare, education facilities, open space and play space, and requires boroughs to plan to ensure social infrastructure meets the needs of London's diverse communities.

A1.14 Policy E11 'Skills and opportunities for all' encourages development proposals that support employment, skills development, apprenticeships and other education and training opportunities in both the construction and end-use phases.

Local Planning Guidance

Our Camden Plan (2017)[4]

A1.15 The Camden Plan is Camden Borough Council's response to the Camden 2025 vision. It sets out how the Council will achieve this vision throughout 2018 to 2022, and it includes key priorities across five themes including homes and housing; strong growth and access to jobs; safe, strong and open communities; clean, vibrant and sustainable places; and healthy, independent lives. In doing so, it provides a framework for how the Council will operate and interact with partner organisations to build a happier, healthier, more resilient and more sustainable Borough.

Camden Local Plan (2017)[5]

A1.16 Camden Borough Council's Local Plan, like The London Plan, sets out the spatial vision and development requirements of the London Borough of Camden from 2016 to 2031. It replaced the Borough's Core Strategy and Development Policies, adopted in 2010, and provides actionable objectives for the Council and partner organisations to deliver economic growth and its benefits, reduce inequalities, and secure sustainable neighbourhoods.

A1.17 Particular policies contained with the Local Plan which are of relevance to this assessment include:

- Policy E1 – Economic development;
- Policy E2 – Employment premises and sites;
- Policy A1 – Managing the impact of development; and
- Policy A2 – Open space.

Camden Planning Guidance: Public Open Space (2021)[6]

A1.18 This supplementary planning guidance (SPG) provides a framework for the assessment and delivery of public open and play space within the Borough. It outlines the requirements developments must fulfil regarding their obligations to provide open and play space, depending on the size and nature of the scheme, including how much space should be provided, where it should be provided, and what form it should take, and how it should be managed.

A1.19 The Guidance also includes a justification for the use of additional payments in lieu of direct provisions for such spaces, as a means of bridging the funding gap between obtained and required funds for such infrastructure,

[1] *MHCLG (2023). National Planning Policy Framework.*
[2] *MHCLG (Live Document). Planning Practice Guidance [online]. Available at: http://planningguidance.communities.gov.uk/.*
[3] *Greater London Authority (GLA) (2021). The London Plan 2021.*
[4] *London Borough of Camden (LBC) (2017). Our Camden Plan.*
[5] *LBC (2017). Camden Local Plan.*
[6] *LBC (2021). Camden Planning Guidance: Public open space.*

facilities and services. These payments may include Community Infrastructure Levies (CIL) or Section 106 agreements.

Camden Planning Guidance: Employment Sites & Business Premises (2021)[7]

A1.20 This SPG provides a framework for the assessment and delivery of commercial space within the Borough, including protecting existing suitable space, providing additional quality and affordable space, and ensuring that future commercial space is of varied sizes and types to support a flexible market. The SPG also outlines the ways in which Section 106 agreements will be used to secure local training and employment opportunities, to support the local workforce.

Other Relevant Standards and Guidance

A1.21 Standards and guidance which have informed this chapter include:

- The Homes and Community Agency (HCA) Employment Density Guide, 3rd edition (2015); and
- The HCA Additionality Guide, 4th Edition (2014).

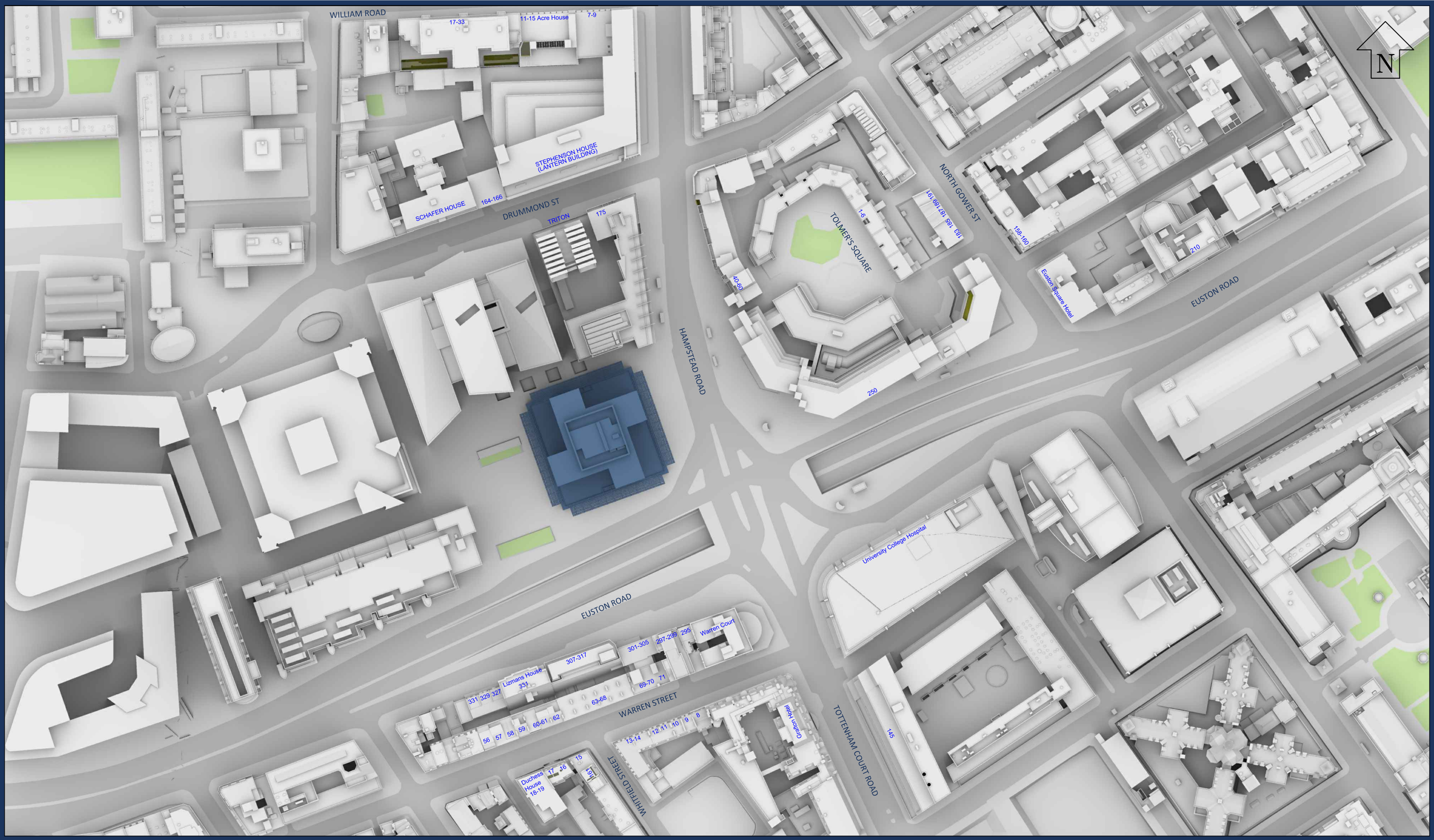
[7] *LBC (2021). Camden Planning Guidance: Public open space.*

Appendix: Daylight, Sunlight, Overshadowing and Solar Glare

Annex 1: Drawings
Annex 2: Daylight and Sunlight Results for Neighbouring Buildings
Annex 3: Without Balconies Daylight and Sunlight Results for Neighbouring Buildings
Annex 4: Overshadowing (Sun on Ground)
Annex 5: Solar Glare Assessment
Annex 6: Window Maps

Appendix: Daylight, Sunlight, Overshadowing and Solar Glare

Annex 1 - Drawings



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key: Existing Buildings
Proposed Scheme

Project: Euston Tower,
London

Title: Plan View
Existing Buildings

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	1:1600	NOV 23	P2193/16A	13

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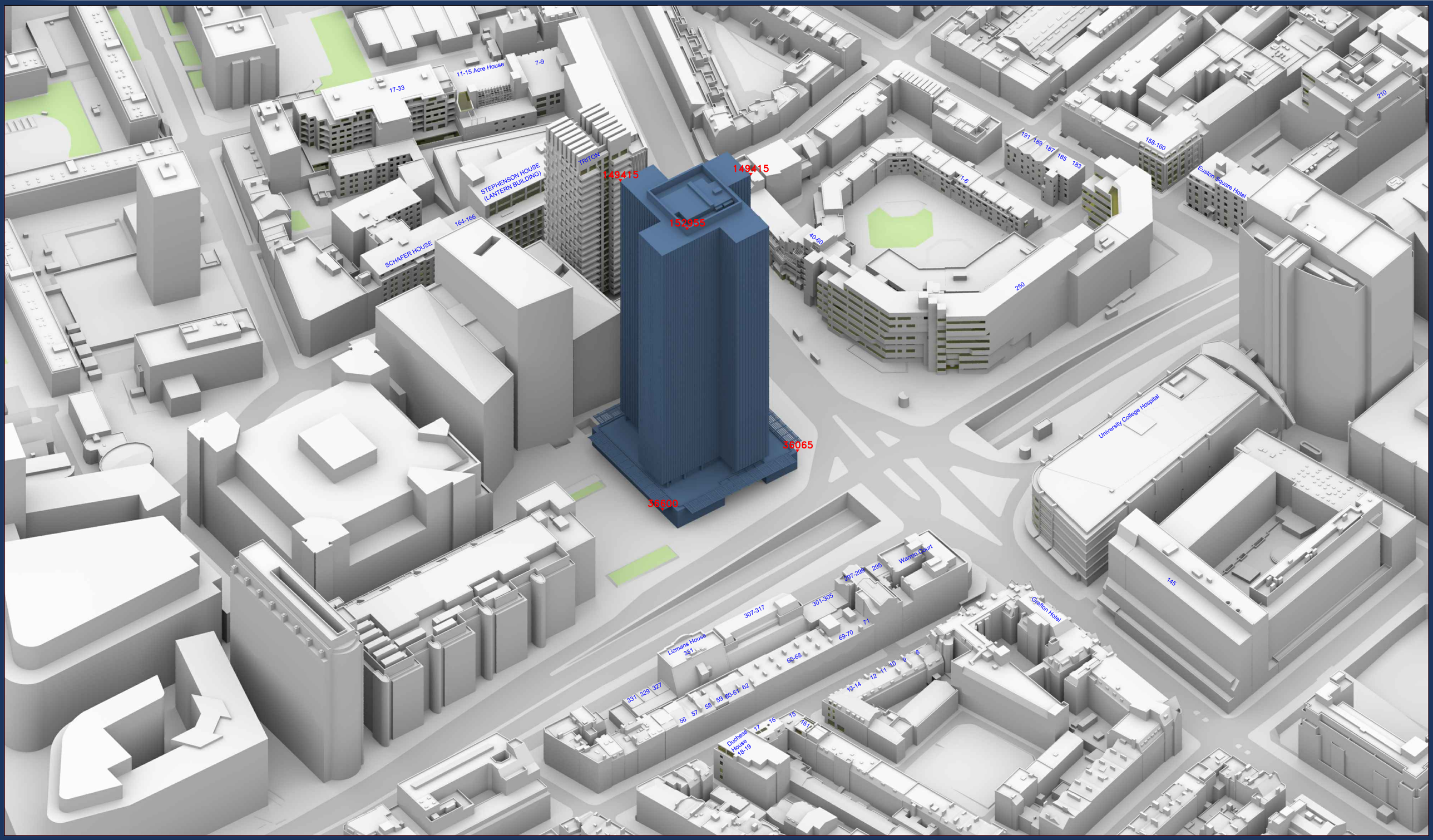

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key: Existing Buildings
Proposed Scheme

All Heights in mm AOD

Project: Euston Tower,
London

Title: 3D View
Existing Buildings

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS	NOV 23	P2193/17A	13

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Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key: Existing Buildings
Proposed Scheme

All Heights in mm AOD

Project: Euston Tower,
London

Title: 3D View
Existing Buildings

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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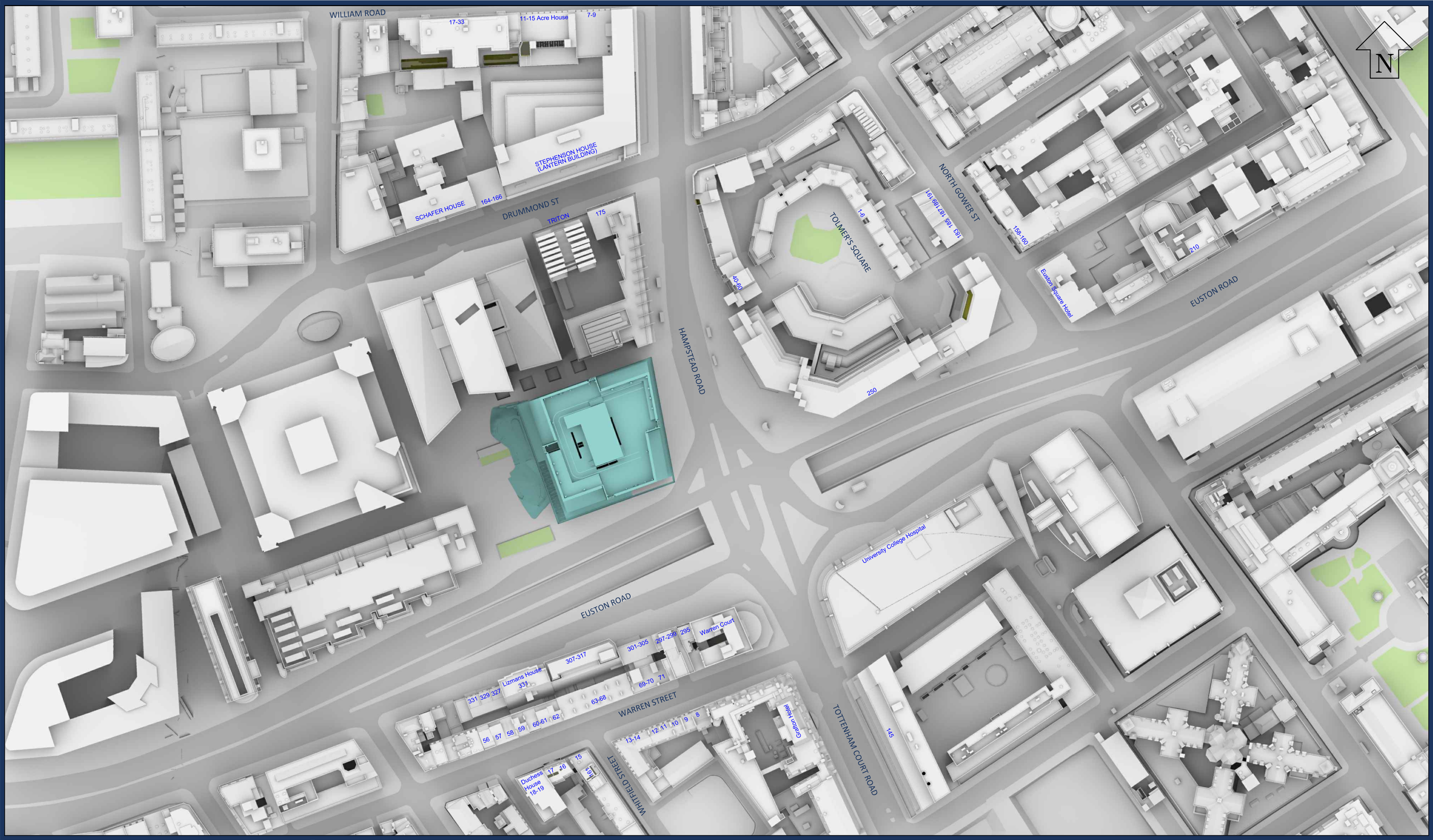

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key: Existing Buildings
Proposed Scheme

Project: Euston Tower,
London

Title: Plan View
Proposed Frozen Scheme Received 260923

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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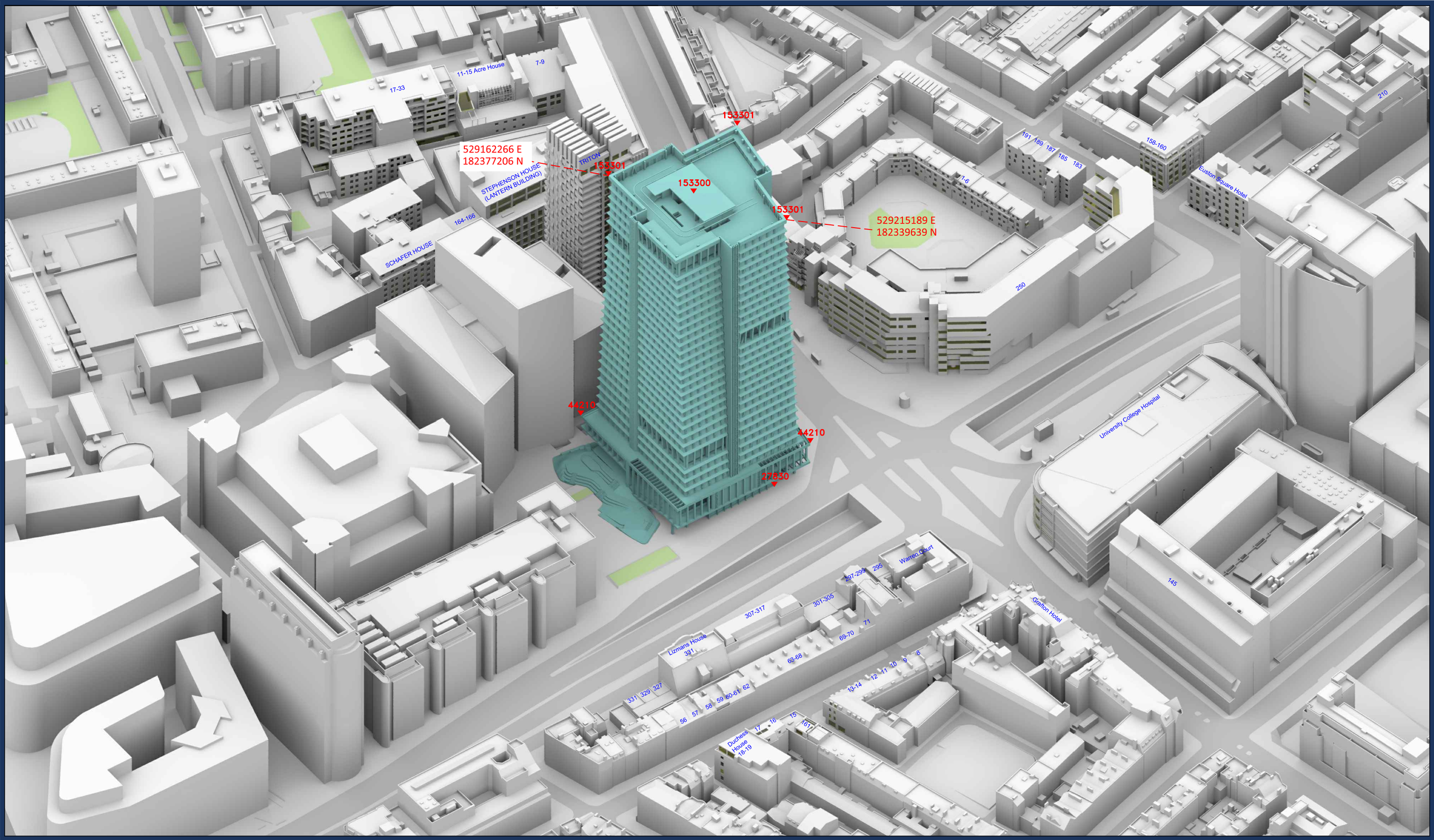

Sources: Plowman Craven
Point Cloud Data
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Site Photos

Local Planning Authority

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Proposed Info (received 26/09/2023)
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Key: Existing Buildings
Proposed Scheme

All Heights in mm AOD

Project: Euston Tower,
London

Title: 3D View
Proposed Frozen Scheme Received 260923

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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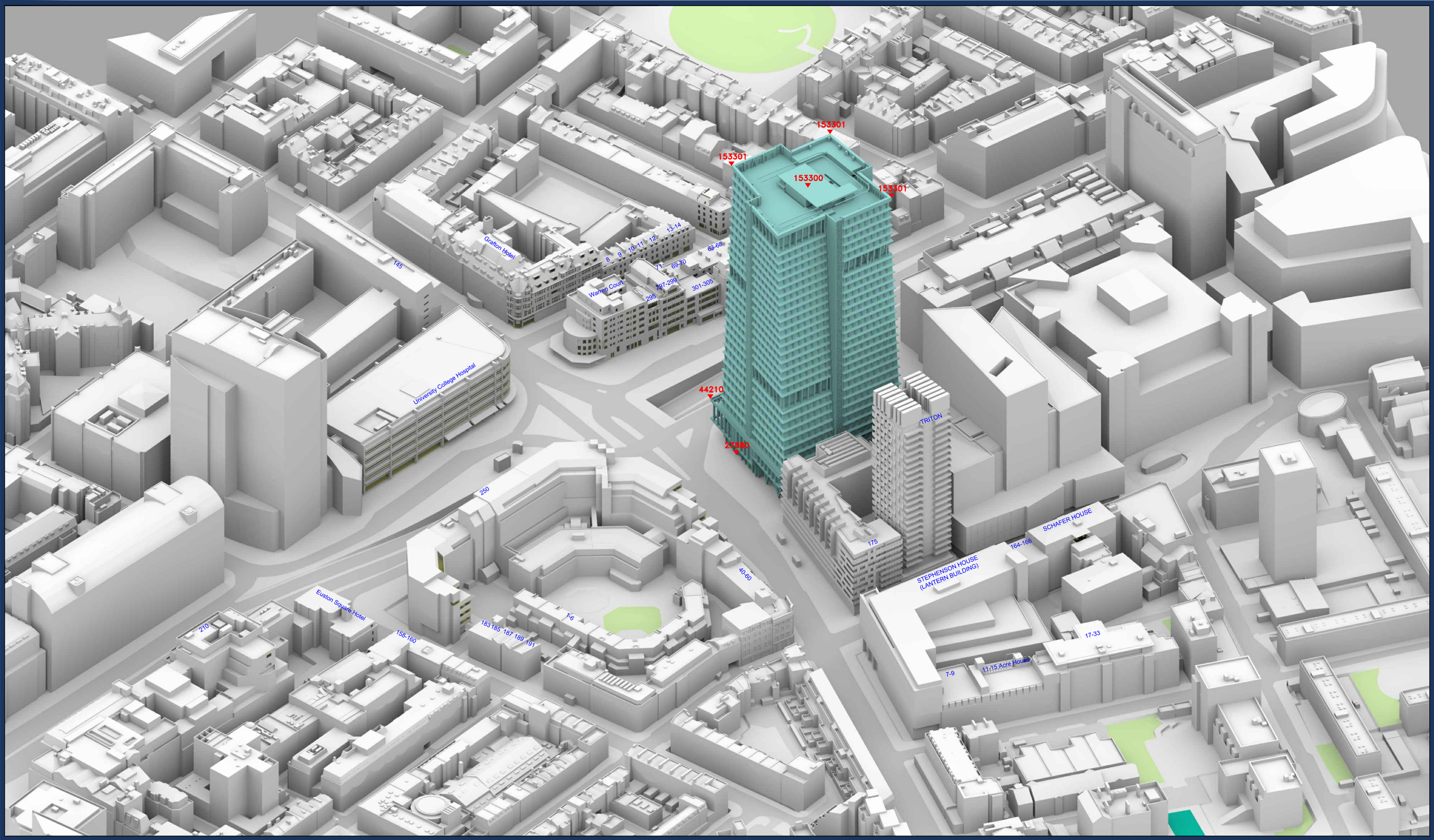

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key: Existing Buildings
Proposed Scheme

All Heights in mm AOD

Project: Euston Tower,
London

Title: 3D View
Proposed Frozen Scheme Received 260923

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS	NOV 23	P2193/30A	13

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Annex 1 - Drawings

Appendix: Daylight, Sunlight, Overshadowing and Solar Glare

Annex 2 – Daylight and Sunlight Results

DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
17 to 33 William Road						
R1/111	LD	W1/111	17.0	17.0	0.0	0.1
R2/111	KITCHEN?	W2/111	6.6	6.6	0.0	0.0
R3/111	BEDROOM	W3/111	5.5	5.5	0.0	0.0
R3/111	BEDROOM	W4/111	12.5	12.5	0.0	0.1
R4/111	LD	W5/111	5.4	5.3	0.1	2.4
R5/111	LD	W6/111	7.0	6.9	0.1	1.7
R5/111	LD	W7/111	6.1	6.0	0.1	1.3
R6/111	BEDROOM	W8/111	19.6	19.6	0.1	0.4
R7/111	BEDROOM	W9/111	19.1	19.1	0.1	0.5
R8/111	LD	W10/111	5.2	5.1	0.1	1.7
R10/111	LD	W12/111	7.1	7.0	0.1	1.8
R10/111	LD	W13/111	14.6	14.4	0.1	0.9
R11/111	LD	W14/111	10.3	10.3	0.0	0.4
R12/111	BEDROOM	W17/111	18.7	18.6	0.1	0.5
R13/111	BEDROOM	W16/111	17.3	17.2	0.1	0.5
R14/111	BEDROOM	W15/111	16.1	16.0	0.1	0.6
R15/111	LD	W19/111	4.7	4.6	0.1	2.6
R15/111	LD	W20/111	3.4	3.3	0.1	3.8
R16/111	LD	W18/111	4.1	4.1	0.0	0.0
R1/112	LD	W1/112	19.2	19.1	0.0	0.1
R2/112	KITCHEN?	W2/112	7.8	7.8	0.0	0.0

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R3/112	BEDROOM	W3/112	6.1	6.1	0.0	0.0
R3/112	BEDROOM	W4/112	13.7	13.7	0.0	0.1
R4/112	LD	W5/112	6.4	6.2	0.2	2.4
R5/112	LD	W6/112	8.4	8.3	0.1	1.7
R5/112	LD	W7/112	7.3	7.2	0.1	1.2
R6/112	BEDROOM	W8/112	22.4	22.2	0.1	0.5
R7/112	BEDROOM	W9/112	23.1	23.0	0.1	0.5
R8/112	LD	W11/112	6.1	6.0	0.1	1.8
R9/112	BEDROOM	W10/112	22.5	22.3	0.2	0.9
R10/112	LD	W12/112	8.3	8.1	0.2	2.0
R10/112	LD	W13/112	15.8	15.6	0.1	0.8
R11/112	LD	W14/112	12.3	12.2	0.1	0.5
R12/112	BEDROOM	W17/112	24.2	24.0	0.2	0.6
R13/112	BEDROOM	W16/112	23.5	23.3	0.1	0.6
R14/112	BEDROOM	W15/112	22.4	22.2	0.1	0.6
R15/112	LD	W19/112	9.0	8.8	0.1	1.3
R15/112	LD	W20/112	6.5	6.4	0.1	2.2
R16/112	LD	W18/112	7.8	7.8	0.0	0.0
R1/113	LD	W1/113	21.6	21.6	0.0	0.1
R2/113	KITCHEN?	W2/113	8.7	8.7	0.0	0.0
R3/113	BEDROOM	W3/113	6.7	6.7	0.0	0.0
R3/113	BEDROOM	W4/113	14.8	14.8	0.0	0.1
R4/113	LD	W5/113	7.1	6.9	0.2	2.3

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R5/113	LD	W6/113	9.3	9.2	0.2	1.7
R5/113	LD	W7/113	8.0	7.9	0.1	1.0
R6/113	BEDROOM	W8/113	24.4	24.2	0.1	0.6
R7/113	BEDROOM	W9/113	25.4	25.2	0.1	0.5
R8/113	LD	W11/113	6.7	6.5	0.1	2.0
R9/113	BEDROOM	W10/113	25.2	25.0	0.2	0.9
R10/113	LD	W12/113	9.6	9.5	0.2	1.9
R10/113	LD	W13/113	17.2	17.0	0.1	0.7
R11/113	LD	W14/113	13.4	13.3	0.1	0.4
R12/113	BEDROOM	W17/113	26.1	25.9	0.2	0.6
R13/113	BEDROOM	W16/113	25.6	25.4	0.2	0.6
R14/113	BEDROOM	W15/113	24.5	24.3	0.1	0.5
R15/113	LD	W19/113	10.1	10.0	0.1	1.2
R15/113	LD	W20/113	7.2	7.1	0.1	1.9
R16/113	LD	W18/113	8.8	8.8	0.0	0.0
R1/114	LD	W1/114	24.6	24.5	0.0	0.0
R2/114	KITCHEN?	W2/114	9.6	9.6	0.0	0.0
R3/114	BEDROOM	W3/114	7.2	7.2	0.0	0.0
R3/114	BEDROOM	W4/114	16.1	16.0	0.0	0.1
R4/114	LD	W5/114	8.0	7.8	0.2	2.3
R5/114	LD	W6/114	10.4	10.2	0.2	1.6
R5/114	LD	W7/114	8.8	8.7	0.1	1.0

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R6/114	BEDROOM	W8/114	26.1	26.0	0.2	0.6
R7/114	BEDROOM	W9/114	27.1	27.0	0.2	0.6
R8/114	LD	W11/114	8.1	7.8	0.3	3.6
R9/114	BEDROOM	W10/114	27.9	27.6	0.3	0.9
R10/114	LD	W12/114	11.7	11.6	0.2	1.5
R10/114	LD	W13/114	19.2	19.1	0.1	0.7
R11/114	LD	W14/114	14.6	14.5	0.1	0.5
R12/114	BEDROOM	W17/114	27.2	27.1	0.2	0.6
R13/114	BEDROOM	W16/114	26.8	26.6	0.1	0.5
R14/114	BEDROOM	W15/114	25.8	25.7	0.1	0.5
R15/114	LD	W19/114	10.7	10.6	0.1	1.1
R15/114	LD	W20/114	7.7	7.6	0.1	1.8
R16/114	LD	W18/114	9.5	9.5	0.0	0.0
R1/115	LD	W1/115	28.5	28.4	0.0	0.1
R2/115	KITCHEN?	W2/115	10.8	10.8	0.0	0.0
R3/115	BEDROOM	W3/115	6.9	6.9	0.0	0.0
R3/115	BEDROOM	W4/115	18.4	18.4	0.0	0.1
R4/115	LD	W5/115	3.9	3.8	0.2	4.3
R5/115	LD	W6/115	5.5	5.3	0.2	3.1
R5/115	LD	W7/115	4.6	4.5	0.1	1.5
R6/115	BEDROOM	W8/115	27.4	27.4	0.1	0.3
R7/115	BEDROOM	W9/115	27.8	27.7	0.1	0.5
R7/115	BEDROOM	W15/115	28.2	28.1	0.2	0.6

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R8/115	LD	W11/115	26.3	25.9	0.4	1.4
R9/115	BEDROOM	W10/115	28.7	28.4	0.3	0.9
R10/115	LD	W12/115	21.0	20.8	0.2	0.9
R10/115	LD	W13/115	23.8	23.7	0.1	0.5
R11/115	LD	W14/115	23.8	23.7	0.1	0.6
R12/115	BEDROOM	W21/115	27.9	27.7	0.2	0.5
R13/115	BEDROOM	W17/115	27.2	27.1	0.2	0.6
R13/115	BEDROOM	W22/115	27.6	27.4	0.1	0.5
R14/115	BEDROOM	W16/115	26.8	26.7	0.1	0.5
R15/115	LD	W19/115	21.5	21.4	0.1	0.7
R15/115	LD	W20/115	16.4	16.3	0.2	0.9
R16/115	LD	W18/115	18.3	18.3	0.0	0.2
R1/116	LKD	W1/116	22.1	22.1	0.0	0.0
R2/116	BEDROOM?	W2/116	9.8	9.7	0.1	1.1
R3/116	BEDROOM?	W3/116	13.3	13.1	0.2	1.4
R4/116	LKD?	W4/116	20.7	20.5	0.2	0.7
R4/116	LKD?	W5/116	22.5	22.5	0.0	0.0

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R1/120		W1/120	5.9	5.9	0.0	0.0
R2/120		W2/120	8.1	8.1	0.0	0.0
R3/120		W3/120	8.5	8.5	0.0	0.0
R4/120		W4/120	12.8	12.7	0.1	0.9

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R4/120		W5/120	10.8	10.5	0.2	2.0
R5/120		W6/120	14.4	14.3	0.1	0.4
R5/120		W7/120	14.9	14.9	0.0	0.1
R6/120		W8/120	15.9	15.9	0.0	0.0
R6/120		W9/120	16.4	16.4	0.0	0.0
R7/120		W10/120	17.2	17.2	0.0	0.0
R1/121		W1/121	8.0	8.0	0.0	0.0
R2/121		W2/121	10.9	10.9	0.0	0.0
R3/121		W3/121	11.4	11.4	0.0	0.0
R4/121		W4/121	15.7	15.6	0.2	1.0
R4/121		W5/121	13.3	13.1	0.2	1.7
R5/121		W6/121	17.2	17.2	0.1	0.3
R5/121		W7/121	17.8	17.8	0.0	0.1
R6/121		W8/121	18.6	18.6	0.0	0.0
R6/121		W9/121	19.0	19.0	0.0	0.2
R7/121		W10/121	19.7	19.6	0.1	0.5
R1/122		W1/122	13.1	13.1	0.0	0.0
R2/122		W2/122	16.6	16.6	0.0	0.0
R3/122		W3/122	16.2	16.2	0.0	0.0
R4/122		W4/122	19.3	19.1	0.2	0.9
R4/122		W5/122	16.8	16.6	0.2	1.4
R5/122		W6/122	20.4	20.2	0.1	0.6
R5/122		W7/122	20.8	20.6	0.2	0.8
R6/122		W8/122	21.3	21.1	0.2	0.8

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R6/122		W9/122	21.6	21.4	0.2	0.8
R7/122		W10/122	22.0	21.9	0.2	0.8
R1/123		W1/123	21.2	21.0	0.2	0.7
R2/123		W2/123	22.6	22.5	0.2	0.7
R3/123		W3/123	21.1	20.9	0.2	0.8
R4/123		W4/123	22.6	22.4	0.2	0.8
R4/123		W5/123	20.3	20.0	0.2	1.2
R5/123		W6/123	22.6	22.4	0.2	0.7
R5/123		W7/123	22.8	22.6	0.2	1.0
R6/123		W8/123	23.1	22.9	0.2	1.0
R6/123		W9/123	23.3	23.1	0.2	0.7
R7/123		W10/123	23.7	23.5	0.2	0.8
R1/180	LKD	W1/180	5.7	5.7	0.0	0.0
R2/180	BEDROOM	W2/180	5.4	5.4	0.0	0.0
R3/180	BEDROOM	W3/180	5.1	5.1	0.0	0.0
R4/180	BEDROOM	W4/180	4.4	4.4	0.0	0.0
R5/180	BEDROOM	W5/180	3.9	3.9	0.0	0.0
R6/180	BEDROOM	W6/180	2.8	2.8	0.0	0.0
R1/181	LKD	W1/181	7.1	7.1	0.0	0.0
R2/181	BEDROOM	W2/181	6.8	6.8	0.0	0.0
R3/181	BEDROOM	W3/181	6.4	6.4	0.0	0.0
R4/181	BEDROOM	W4/181	5.4	5.4	0.0	0.0

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R5/181	BEDROOM	W5/181	4.7	4.7	0.0	0.0
R6/181	BEDROOM	W6/181	3.3	3.3	0.0	0.0
R1/182	LKD	W1/182	9.1	9.1	0.0	0.3
R2/182	BEDROOM	W2/182	8.6	8.6	0.0	0.2
R3/182	BEDROOM	W3/182	8.1	8.1	0.0	0.2
R4/182	BEDROOM	W4/182	6.7	6.7	0.0	0.0
R5/182	BEDROOM	W5/182	5.8	5.8	0.0	0.0
R6/182	BEDROOM	W6/182	3.8	3.8	0.0	0.0
R1/183	LKD	W1/183	11.4	11.1	0.3	2.3
R2/183	BEDROOM	W2/183	10.9	10.7	0.2	1.7
R3/183	BEDROOM	W3/183	10.4	10.2	0.2	1.4
R4/183	BEDROOM	W4/183	8.6	8.5	0.1	1.0
R5/183	BEDROOM	W5/183	7.3	7.2	0.1	1.2
R6/183	BEDROOM	W6/183	4.5	4.5	0.0	0.0
R1/184	LKD	W1/184	13.5	13.3	0.3	2.0
R2/184	BEDROOM	W2/184	13.3	13.0	0.3	2.0
R3/184	BEDROOM	W3/184	12.8	12.6	0.3	2.2
R4/184	BEDROOM	W4/184	10.9	10.6	0.3	2.7
R5/184	BEDROOM	W5/184	9.2	8.9	0.3	3.5
R6/184	BEDROOM	W6/184	5.6	5.6	0.0	0.7

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R1/185	LKD	W1/185	16.0	15.7	0.3	1.7
R2/185	BEDROOM	W2/185	16.1	15.8	0.3	1.7
R3/185	BEDROOM	W3/185	16.0	15.7	0.3	2.1
R4/185	BEDROOM	W4/185	14.5	14.1	0.4	2.4
R5/185	BEDROOM	W5/185	12.9	12.5	0.4	3.1
R6/185	BEDROOM	W6/185	8.3	8.2	0.1	1.1
R1/186	LKD	W1/186	18.3	18.0	0.3	1.5
R2/186	BEDROOM	W2/186	18.8	18.5	0.3	1.5
R3/186	BEDROOM	W3/186	19.1	18.7	0.4	2.0
R4/186	BEDROOM	W4/186	19.1	18.7	0.4	2.1
R5/186	BEDROOM	W5/186	18.6	18.1	0.5	2.6
R6/186	BEDROOM	W6/186	15.9	15.4	0.5	3.2
R1/211	LKD	W1/211	10.2	10.1	0.1	1.1
R2/211	BEDROOM	W2/211	10.0	9.9	0.1	1.4
R3/211	BEDROOM	W3/211	9.9	9.7	0.2	1.6
R4/211	BEDROOM	W4/211	9.6	9.5	0.2	2.0
R5/211	BEDROOM	W5/211	9.5	9.2	0.2	2.3
R6/211	BEDROOM	W6/211	9.2	8.9	0.2	2.6
R7/211	BEDROOM	W7/211	9.1	8.7	0.4	4.0
R8/211	BEDROOM	W8/211	9.2	8.9	0.4	4.1

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EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R9/211	BEDROOM	W9/211	9.2	8.8	0.4	4.1
R10/211	BEDROOM	W10/211	9.0	8.7	0.3	3.7
R11/211	BEDROOM	W211/211	8.9	8.5	0.3	3.7
R12/211	LKD	W12/211	8.8	8.4	0.4	4.5
R1/212	LKD	W1/212	11.2	11.0	0.2	1.3
R2/212	BEDROOM	W2/212	10.9	10.7	0.2	1.6
R3/212	BEDROOM	W3/212	10.7	10.5	0.2	1.8
R4/212	BEDROOM	W4/212	10.4	10.2	0.2	2.2
R5/212	BEDROOM	W5/212	10.2	9.9	0.3	2.5
R6/212	BEDROOM	W6/212	10.0	9.7	0.3	2.9
R7/212	BEDROOM	W7/212	9.8	9.4	0.4	4.3
R8/212	BEDROOM	W8/212	9.9	9.4	0.4	4.4
R9/212	BEDROOM	W9/212	9.8	9.4	0.4	4.4
R10/212	BEDROOM	W10/212	9.6	9.2	0.4	4.3
R11/212	BEDROOM	W11/212	9.5	9.1	0.4	4.4
R12/212	LKD	W212/212	9.5	9.0	0.5	5.3
R1/213	LKD	W1/213	12.1	11.9	0.2	1.6
R2/213	BEDROOM	W2/213	11.7	11.5	0.2	1.8
R3/213	BEDROOM	W3/213	11.5	11.3	0.2	2.0
R4/213	BEDROOM	W4/213	11.2	10.9	0.3	2.4

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R5/213	BEDROOM	W5/213	11.0	10.7	0.3	2.7
R6/213	BEDROOM	W6/213	10.7	10.4	0.3	3.2
R7/213	BEDROOM	W7/213	10.5	10.0	0.5	4.6
R8/213	BEDROOM	W8/213	10.6	10.1	0.5	4.6
R9/213	BEDROOM	W9/213	10.5	10.0	0.5	4.7
R10/213	BEDROOM	W10/213	10.3	9.8	0.5	4.8
R11/213	BEDROOM	W11/213	10.2	9.7	0.5	4.9
R12/213	LKD	W12/213	10.2	9.6	0.6	6.1
R1/214	LKD	W1/214	13.1	12.9	0.2	1.8
R2/214	BEDROOM	W2/214	12.7	12.4	0.3	2.0
R3/214	BEDROOM	W3/214	12.5	12.2	0.3	2.2
R4/214	BEDROOM	W4/214	12.1	11.8	0.3	2.7
R5/214	BEDROOM	W5/214	11.8	11.5	0.4	3.0
R6/214	BEDROOM	W6/214	11.5	11.1	0.4	3.5
R7/214	BEDROOM	W7/214	11.2	10.7	0.6	4.9
R8/214	BEDROOM	W8/214	11.3	10.8	0.6	4.9
R9/214	BEDROOM	W9/214	11.2	10.6	0.6	5.0
R10/214	BEDROOM	W10/214	11.0	10.5	0.6	5.2
R11/214	BEDROOM	W11/214	10.9	10.3	0.6	5.4
R12/214	LKD	W12/214	10.9	10.2	0.7	6.4

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R1/215	LKD	W1/215	14.2	13.9	0.3	2.0
R2/215	BEDROOM	W2/215	13.8	13.5	0.3	2.2
R3/215	BEDROOM	W3/215	13.5	13.2	0.3	2.5
R4/215	BEDROOM	W4/215	13.1	12.7	0.4	2.8
R5/215	BEDROOM	W5/215	12.8	12.4	0.4	3.3
R6/215	BEDROOM	W6/215	12.4	11.9	0.5	3.7
R7/215	BEDROOM	W7/215	12.1	11.4	0.6	5.1
R8/215	BEDROOM	W8/215	12.1	11.5	0.6	5.2
R9/215	BEDROOM	W9/215	12.0	11.4	0.6	5.3
R10/215	BEDROOM	W10/215	11.8	11.2	0.6	5.4
R11/215	BEDROOM	W11/215	11.7	11.0	0.7	5.8
R12/215	LKD	W12/215	11.7	10.9	0.8	6.6
R1/216	LKD	W1/216	15.4	15.1	0.3	2.1
R2/216	BEDROOM	W2/216	15.0	14.6	0.4	2.4
R3/216	BEDROOM	W3/216	14.7	14.3	0.4	2.8
R4/216	BEDROOM	W4/216	14.1	13.7	0.4	3.1
R5/216	BEDROOM	W5/216	13.9	13.4	0.5	3.5
R6/216	BEDROOM	W6/216	13.4	12.9	0.5	4.0
R7/216	BEDROOM	W7/216	13.0	12.3	0.7	5.5
R8/216	BEDROOM	W8/216	13.0	12.3	0.7	5.4

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R9/216	BEDROOM	W9/216	12.9	12.2	0.7	5.7
R10/216	BEDROOM	W10/216	12.7	12.0	0.7	5.8
R11/216	BEDROOM	W11/216	12.6	11.8	0.8	6.3
R12/216	LKD	W12/216	12.5	11.6	0.9	6.8
R1/217	KD	W1/217	16.1	15.6	0.5	2.9
R2/217	BEDROOM	W2/217	15.3	14.9	0.5	3.0
R3/217	BEDROOM	W3/217	14.5	13.9	0.6	4.0
R4/217	BEDROOM	W4/217	13.9	13.2	0.7	4.8
R5/217	BEDROOM	W5/217	13.3	12.5	0.8	6.1
R6/217	BEDROOM	W6/217	13.1	12.3	0.8	6.4
R7/217	BEDROOM	W7/217	12.7	11.9	0.9	6.7
R8/217	KD	W8/217	12.6	11.6	1.0	7.8
164-166 Drummond Street						
R1/40	LIVINGROOM	W1/40	7.7	7.5	0.2	3.0
R1/40	LIVINGROOM	W2/40	7.6	7.4	0.2	2.5
R1/40	LIVINGROOM	W3/40	7.6	7.4	0.2	2.5
R2/40	BEDROOM	W4/40	7.5	7.3	0.2	2.7
R2/40	BEDROOM	W5/40	7.5	7.3	0.2	2.5
R2/40	BEDROOM	W6/40	7.2	7.0	0.2	2.5
R1/41	BEDROOM	W1/41	8.6	8.2	0.4	5.0
R1/41	BEDROOM	W2/41	8.6	8.2	0.4	5.1
R1/41	BEDROOM	W3/41	8.5	8.1	0.4	4.3
R2/41	LIVINGROOM	W4/41	8.4	8.1	0.3	4.0

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R2/41	LIVINGROOM	W5/41	8.3	8.1	0.3	3.1
R2/41	LIVINGROOM	W6/41	8.3	8.0	0.3	3.0
R3/41	LIVINGROOM	W7/41	8.2	8.0	0.2	2.9
R3/41	LIVINGROOM	W8/41	8.2	7.9	0.2	2.8
R3/41	LIVINGROOM	W9/41	7.8	7.6	0.2	2.8
R1/42	BEDROOM	W1/42	9.4	8.8	0.6	5.9
R1/42	BEDROOM	W2/42	9.4	8.8	0.6	5.9
R1/42	BEDROOM	W3/42	9.2	8.8	0.5	5.0
R2/42	LIVINGROOM	W4/42	9.1	8.7	0.4	4.6
R2/42	LIVINGROOM	W5/42	9.0	8.7	0.3	3.4
R2/42	LIVINGROOM	W6/42	9.0	8.7	0.3	3.2
R3/42	LIVINGROOM	W7/42	8.9	8.6	0.3	3.1
R3/42	LIVINGROOM	W8/42	8.9	8.6	0.3	3.1
R3/42	LIVINGROOM	W9/42	8.5	8.3	0.3	2.9
R1/43	BEDROOM	W1/43	10.2	9.5	0.7	6.9
R1/43	BEDROOM	W2/43	10.2	9.5	0.7	6.9
R1/43	BEDROOM	W3/43	10.0	9.5	0.6	5.6
R2/43	LIVINGROOM	W4/43	9.9	9.4	0.5	5.2
R2/43	LIVINGROOM	W5/43	9.7	9.4	0.4	3.7
R2/43	LIVINGROOM	W6/43	9.7	9.3	0.4	3.6
R3/43	LIVINGROOM	W7/43	9.7	9.4	0.3	3.3
R3/43	LIVINGROOM	W8/43	9.6	9.3	0.3	3.3
R3/43	LIVINGROOM	W9/43	9.3	9.0	0.3	3.2
R1/44	BEDROOM	W1/44	11.0	10.2	0.8	7.3
R1/44	BEDROOM	W2/44	11.0	10.2	0.8	7.1
R1/44	BEDROOM	W3/44	10.8	10.2	0.6	5.7
R2/44	LIVINGROOM	W4/44	10.7	10.1	0.6	5.2
R2/44	LIVINGROOM	W5/44	10.5	10.1	0.4	3.7
R2/44	LIVINGROOM	W6/44	10.5	10.1	0.4	3.6
R3/44	LIVINGROOM	W7/44	10.5	10.1	0.3	3.3

DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R3/44	LIVINGROOM	W8/44	10.4	10.1	0.3	3.3
R3/44	LIVINGROOM	W9/44	10.1	9.8	0.3	3.2
R1/45	BEDROOM	W1/45	11.9	11.0	0.9	7.5
R1/45	BEDROOM	W2/45	11.8	11.0	0.8	7.0
R1/45	BEDROOM	W3/45	11.6	11.0	0.6	5.5
R2/45	LIVINGROOM	W4/45	11.5	10.9	0.6	5.0
R2/45	LIVINGROOM	W5/45	11.3	10.9	0.4	3.7
R2/45	LIVINGROOM	W6/45	11.3	10.9	0.4	3.5
R3/45	LIVINGROOM	W7/45	11.3	10.9	0.4	3.1
R3/45	LIVINGROOM	W8/45	11.2	10.9	0.4	3.2
R3/45	LIVINGROOM	W9/45	10.9	10.6	0.4	3.2

175 Drummond Street

R1/51	BEDROOM	W1/51	3.4	2.7	0.8	22.2
R2/51	BEDROOM	W2/51	2.7	2.0	0.7	27.4
R1/52	BEDROOM	W1/52	4.1	3.2	0.9	21.2
R2/52	BEDROOM	W2/52	3.2	2.3	0.9	26.7
R1/53	BEDROOM	W1/53	5.0	4.0	1.0	19.7
R2/53	BEDROOM	W2/53	3.8	2.8	1.0	25.8
R1/54	BEDROOM	W1/54	6.2	5.0	1.1	18.0
R2/54	BEDROOM	W2/54	4.7	3.5	1.1	24.1
R1/55	BEDROOM	W1/55	7.8	6.5	1.2	15.9
R2/55	BEDROOM	W2/55	5.9	4.6	1.3	21.7
R1/56	BEDROOM	W1/56	10.0	8.6	1.4	13.7
R2/56	BEDROOM	W2/56	7.7	6.2	1.4	18.7

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/57	BEDROOM	W1/57	13.2	11.7	1.5	11.4
R2/57	BEDROOM	W2/57	10.6	9.0	1.6	15.1
Triton Building						
R1/1103	BEDROOM	W1/1103	2.5	2.5	0.0	0.0
R2/1103	LKD	W2/1103	3.2	3.2	0.0	0.0
R2/1103	LKD	W3/1103	3.2	3.2	0.0	0.0
R2/1103	LKD	W4/1103	0.0	0.0	0.0	0.0
R3/1103	BEDROOM	W5/1103	0.0	0.0	0.0	0.0
R4/1103	BEDROOM	W6/1103	5.2	3.7	1.5	29.2
R5/1103	LKD	W7/1103	6.4	5.2	1.2	18.5
R6/1103	BEDROOM	W8/1103	0.0	0.0	0.0	0.0
R7/1103	LKD	W9/1103	0.0	0.0	0.0	0.0
R7/1103	LKD	W10/1103	0.8	0.8	0.0	0.0
R7/1103	LKD	W11/1103	2.4	2.4	0.0	0.0
R8/1103	BEDROOM	W12/1103	5.3	5.3	0.0	0.0
R1/1104	BEDROOM	W1/1104	3.3	3.3	0.0	0.0
R2/1104	LKD	W2/1104	5.2	5.2	0.0	0.0
R2/1104	LKD	W3/1104	5.4	5.4	0.0	0.0
R2/1104	LKD	W4/1104	0.0	0.0	0.0	0.0
R3/1104	BEDROOM	W5/1104	0.0	0.0	0.0	0.0
R4/1104	BEDROOM	W6/1104	6.0	4.2	1.8	29.9
R5/1104	LKD	W7/1104	7.5	6.1	1.4	18.4
R6/1104	BEDROOM	W8/1104	0.0	0.0	0.0	0.0

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R7/1104	LKD	W9/1104	0.0	0.0	0.0	0.0
R7/1104	LKD	W10/1104	1.8	1.8	0.0	0.0
R7/1104	LKD	W11/1104	2.7	2.7	0.0	0.0
R8/1104	BEDROOM	W12/1104	7.6	7.6	0.0	0.0
R1/1105	BEDROOM	W1/1105	5.4	5.4	0.0	0.0
R2/1105	LKD	W2/1105	7.8	7.8	0.0	0.0
R2/1105	LKD	W3/1105	8.3	8.3	0.0	0.0
R2/1105	LKD	W4/1105	0.0	0.0	0.0	0.0
R3/1105	BEDROOM	W5/1105	0.0	0.0	0.0	0.0
R4/1105	BEDROOM	W6/1105	6.9	4.7	2.1	31.0
R5/1105	LKD	W7/1105	8.8	7.1	1.6	18.7
R6/1105	BEDROOM	W8/1105	0.2	0.2	0.0	0.0
R7/1105	LKD	W9/1105	0.0	0.0	0.0	0.0
R7/1105	LKD	W10/1105	2.1	2.1	0.0	0.0
R7/1105	LKD	W11/1105	4.5	4.5	0.0	0.0
R8/1105	BEDROOM	W12/1105	11.4	11.4	0.0	0.0
R1/1106	BEDROOM	W1/1106	9.2	9.2	0.0	0.0
R2/1106	LKD	W2/1106	12.9	12.9	0.0	0.0
R2/1106	LKD	W3/1106	13.0	13.0	0.0	0.0
R2/1106	LKD	W4/1106	0.7	0.5	0.2	28.4
R3/1106	BEDROOM	W5/1106	0.7	0.5	0.2	27.1
R4/1106	BEDROOM	W6/1106	7.8	5.3	2.5	31.9
R5/1106	LKD	W7/1106	10.1	8.2	1.9	18.9
R6/1106	BEDROOM	W8/1106	1.3	1.1	0.2	14.5

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R7/1106	LKD	W9/1106	0.6	0.4	0.2	31.3
R7/1106	LKD	W10/1106	3.0	3.0	0.0	0.0
R7/1106	LKD	W11/1106	4.2	4.2	0.0	0.0
R8/1106	BEDROOM	W12/1106	11.1	11.1	0.0	0.0
R1/1107	BEDROOM	W1/1107	15.3	15.3	0.0	0.0
R2/1107	LKD	W2/1107	19.3	19.3	0.0	0.0
R2/1107	LKD	W3/1107	19.9	19.9	0.0	0.0
R2/1107	LKD	W4/1107	2.1	1.5	0.6	27.5
R3/1107	BEDROOM	W5/1107	2.1	1.6	0.5	25.7
R4/1107	BEDROOM	W6/1107	9.1	6.2	2.9	31.7
R5/1107	LKD	W7/1107	11.5	9.3	2.2	19.3
R6/1107	BEDROOM	W8/1107	2.7	2.2	0.5	19.1
R7/1107	LKD	W9/1107	1.7	1.2	0.5	31.5
R7/1107	LKD	W10/1107	4.1	4.1	0.0	0.2
R7/1107	LKD	W11/1107	6.5	6.5	0.0	0.0
R8/1107	BEDROOM	W12/1107	13.1	13.1	0.0	0.0
R1/1108	BEDROOM	W1/1108	27.2	27.2	0.0	0.0
R1/1108	BEDROOM	W2/1108	27.9	27.9	0.0	0.0
R2/1108	LKD	W3/1108	28.7	28.7	0.0	0.0
R2/1108	LKD	W4/1108	27.9	27.9	0.0	0.0
R2/1108	LKD	W5/1108	4.9	3.9	1.0	20.6
R2/1108	LKD	W6/1108	4.0	3.0	1.0	24.7
R3/1108	BEDROOM	W7/1108	10.8	7.5	3.3	30.7
R4/1108	BEDROOM	W8/1108	12.7	10.2	2.5	19.8
R5/1108	LKD	W9/1108	3.9	3.0	0.9	22.2

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R5/1108	LKD	W10/1108	2.8	1.9	0.9	30.9
R5/1108	LKD	W11/1108	6.1	6.1	0.0	0.0
R5/1108	LKD	W12/1108	7.5	7.5	0.1	0.7
R6/1108	BEDROOM	W13/1108	9.0	9.0	0.0	0.0
R6/1108	BEDROOM	W14/1108	14.0	13.9	0.1	0.4
R1/1109	BEDROOM	W1/1109	34.0	34.0	0.0	0.0
R1/1109	BEDROOM	W2/1109	33.3	33.3	0.0	0.0
R2/1109	LKD	W3/1109	33.9	33.9	0.0	0.0
R2/1109	LKD	W4/1109	33.9	33.9	0.0	0.0
R2/1109	LKD	W5/1109	7.3	5.8	1.4	19.7
R2/1109	LKD	W6/1109	5.9	4.5	1.4	24.2
R3/1109	BEDROOM	W7/1109	12.4	8.6	3.7	30.3
R4/1109	BEDROOM	W8/1109	14.0	11.2	2.8	20.3
R5/1109	LKD	W9/1109	5.2	3.8	1.3	26.0
R5/1109	LKD	W10/1109	3.8	2.5	1.2	32.8
R5/1109	LKD	W11/1109	10.0	9.9	0.1	1.3
R5/1109	LKD	W12/1109	11.9	11.8	0.0	0.3
R6/1109	BEDROOM	W13/1109	13.0	12.9	0.2	1.3
R6/1109	BEDROOM	W14/1109	17.3	17.3	0.0	0.2
R1/1110	BEDROOM	W1/1110	35.2	35.1	0.0	0.0
R1/1110	BEDROOM	W2/1110	34.8	34.8	0.0	0.0
R2/1110	LKD	W3/1110	35.3	35.3	0.0	0.0
R2/1110	LKD	W4/1110	34.5	34.5	0.0	0.0
R2/1110	LKD	W5/1110	8.4	6.6	1.8	21.6
R2/1110	LKD	W6/1110	7.1	5.3	1.8	25.9
R3/1110	BEDROOM	W7/1110	13.7	9.6	4.1	30.1
R4/1110	BEDROOM	W8/1110	15.1	11.8	3.3	21.6
R5/1110	LKD	W9/1110	6.4	4.6	1.8	28.4

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R5/1110	LKD	W10/1110	4.8	3.1	1.7	36.0
R5/1110	LKD	W11/1110	13.5	13.4	0.2	1.2
R5/1110	LKD	W12/1110	14.6	14.4	0.2	1.4
R6/1110	BEDROOM	W13/1110	15.4	15.3	0.1	0.8
R6/1110	BEDROOM	W14/1110	18.9	18.8	0.2	1.0
R1/1111	BEDROOM	W1/1111	34.8	34.8	0.0	0.0
R1/1111	BEDROOM	W2/1111	34.1	34.0	0.0	0.0
R2/1111	LKD	W3/1111	34.6	34.6	0.0	0.0
R2/1111	LKD	W4/1111	34.6	34.6	0.0	0.0
R2/1111	LKD	W5/1111	8.8	6.9	2.0	22.2
R2/1111	LKD	W6/1111	7.6	5.6	2.0	26.3
R3/1111	BEDROOM	W7/1111	14.4	10.1	4.3	29.6
R4/1111	BEDROOM	W8/1111	15.8	12.3	3.4	21.8
R5/1111	LKD	W9/1111	7.1	5.0	2.1	29.1
R5/1111	LKD	W10/1111	5.7	3.7	2.0	35.4
R5/1111	LKD	W11/1111	17.9	17.6	0.3	1.8
R5/1111	LKD	W12/1111	19.5	19.3	0.2	1.2
R6/1111	BEDROOM	W13/1111	19.9	19.6	0.3	1.7
R6/1111	BEDROOM	W14/1111	22.2	22.0	0.2	0.9
R1/1112	BEDROOM	W1/1112	35.3	35.3	0.0	0.0
R1/1112	BEDROOM	W2/1112	35.0	35.0	0.0	0.0
R2/1112	LKD	W3/1112	35.5	35.5	0.0	0.0
R2/1112	LKD	W4/1112	34.7	34.7	0.0	0.0
R2/1112	LKD	W5/1112	9.1	7.1	2.0	22.4
R2/1112	LKD	W6/1112	7.9	5.8	2.1	26.4
R3/1112	BEDROOM	W7/1112	15.0	10.7	4.4	29.0
R4/1112	BEDROOM	W8/1112	16.3	12.7	3.6	21.9
R5/1112	LKD	W9/1112	7.6	5.4	2.2	29.3

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R5/1112	LKD	W10/1112	6.4	4.2	2.3	34.9
R5/1112	LKD	W11/1112	20.9	20.6	0.4	1.8
R5/1112	LKD	W12/1112	21.9	21.5	0.4	1.8
R6/1112	BEDROOM	W13/1112	22.2	21.9	0.3	1.4
R6/1112	BEDROOM	W14/1112	23.8	23.5	0.3	1.3
R1/1113	BEDROOM	W1/1113	34.9	34.9	0.0	0.0
R1/1113	BEDROOM	W2/1113	34.2	34.2	0.0	0.0
R2/1113	LKD	W3/1113	34.7	34.7	0.0	0.0
R2/1113	LKD	W4/1113	34.8	34.8	0.0	0.0
R2/1113	LKD	W5/1113	9.3	7.2	2.1	22.6
R2/1113	LKD	W6/1113	8.1	6.0	2.2	26.4
R3/1113	BEDROOM	W7/1113	15.6	11.2	4.4	28.3
R4/1113	BEDROOM	W8/1113	16.7	13.1	3.6	21.7
R5/1113	BEDROOM	W9/1113	7.9	5.6	2.3	29.4
R6/1113	LKD	W10/1113	6.8	4.5	2.4	34.8
R6/1113	LKD	W11/1113	22.4	21.9	0.5	2.1
R6/1113	LKD	W12/1113	23.8	23.5	0.4	1.5
R6/1113	LKD	W13/1113	24.0	23.6	0.4	1.8
R7/1113	BEDROOM	W14/1113	25.4	25.1	0.3	1.0
R1/1114	BEDROOM	W1/1114	35.4	35.4	0.0	0.0
R1/1114	BEDROOM	W2/1114	35.1	35.1	0.0	0.0
R2/1114	LKD	W3/1114	35.6	35.6	0.0	0.0
R2/1114	LKD	W4/1114	34.8	34.8	0.0	0.0
R2/1114	LKD	W5/1114	9.4	7.3	2.1	22.2
R2/1114	LKD	W6/1114	8.3	6.2	2.1	25.6
R3/1114	BEDROOM	W7/1114	15.9	11.5	4.4	27.4
R4/1114	BEDROOM	W8/1114	16.9	13.3	3.6	21.4

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R5/1114	BEDROOM	W9/1114	8.0	5.7	2.3	29.0
R6/1114	LKD	W10/1114	6.9	4.5	2.3	34.0
R6/1114	LKD	W11/1114	23.5	23.1	0.4	1.7
R6/1114	LKD	W12/1114	24.3	23.9	0.4	1.7
R6/1114	LKD	W13/1114	24.5	24.2	0.3	1.3
R7/1114	BEDROOM	W14/1114	26.0	25.7	0.3	1.2
R1/1115	BEDROOM	W1/1115	35.0	35.0	0.0	0.0
R1/1115	BEDROOM	W2/1115	34.3	34.3	0.0	0.0
R2/1115	LKD	W3/1115	34.8	34.8	0.0	0.0
R2/1115	LKD	W4/1115	34.9	34.9	0.0	0.0
R2/1115	LKD	W5/1115	9.4	7.3	2.1	22.1
R2/1115	LKD	W6/1115	8.6	6.5	2.1	24.5
R3/1115	BEDROOM	W7/1115	16.2	11.9	4.3	26.6
R4/1115	BEDROOM	W8/1115	17.1	13.5	3.6	21.1
R5/1115	BEDROOM	W9/1115	8.0	5.7	2.3	28.7
R6/1115	LKD	W10/1115	6.9	4.6	2.3	33.4
R6/1115	LKD	W11/1115	25.1	24.7	0.4	1.8
R6/1115	LKD	W12/1115	26.4	26.1	0.3	1.2
R6/1115	LKD	W13/1115	26.5	26.1	0.4	1.5
R7/1115	BEDROOM	W14/1115	27.7	27.5	0.3	0.9
R1/1116	BEDROOM	W1/1116	35.5	35.5	0.0	0.0
R1/1116	BEDROOM	W2/1116	35.2	35.2	0.0	0.0
R2/1116	LKD	W3/1116	35.7	35.7	0.0	0.0
R2/1116	LKD	W4/1116	34.9	34.9	0.0	0.0
R2/1116	LKD	W5/1116	9.5	7.4	2.1	21.7
R2/1116	LKD	W6/1116	8.8	6.7	2.1	23.6
R3/1116	BEDROOM	W7/1116	16.5	12.3	4.3	25.7

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R4/1116	BEDROOM	W8/1116	17.3	13.7	3.6	20.7
R5/1116	BEDROOM	W9/1116	8.0	5.8	2.3	28.1
R6/1116	LKD	W10/1116	6.9	4.7	2.3	32.8
R6/1116	LKD	W11/1116	26.5	26.1	0.4	1.4
R6/1116	LKD	W12/1116	27.2	26.8	0.4	1.4
R6/1116	LKD	W13/1116	27.2	26.9	0.3	1.1
R7/1116	BEDROOM	W14/1116	28.5	28.2	0.3	1.1
R1/1117	BEDROOM	W1/1117	35.2	35.2	0.0	0.0
R1/1117	BEDROOM	W2/1117	34.6	34.6	0.0	0.0
R2/1117	LKD	W3/1117	35.1	35.1	0.0	0.0
R2/1117	LKD	W5/1117	9.5	7.5	2.0	21.2
R2/1117	LKD	W6/1117	9.1	7.0	2.1	22.7
R3/1117	BEDROOM	W7/1117	16.9	12.7	4.2	24.8
R4/1117	BEDROOM	W8/1117	17.5	14.0	3.5	20.2
R5/1117	BEDROOM	W9/1117	8.2	5.9	2.2	27.2
R6/1117	LKD	W10/1117	7.4	5.1	2.2	30.4
R6/1117	LKD	W11/1117	28.3	27.8	0.4	1.5
R6/1117	LKD	W12/1117	29.4	29.1	0.3	1.1
R6/1117	LKD	W13/1117	29.3	28.9	0.4	1.3
R7/1117	BEDROOM	W14/1117	30.4	30.1	0.2	0.8
R1/1118	BEDROOM	W1/1118	35.7	35.7	0.0	0.0
R1/1118	BEDROOM	W2/1118	35.4	35.4	0.0	0.0
R2/1118	LKD	W3/1118	35.9	35.9	0.0	0.0
R2/1118	LKD	W4/1118	35.2	35.2	0.0	0.0
R2/1118	LKD	W5/1118	9.7	7.7	2.0	20.7
R2/1118	LKD	W6/1118	9.3	7.3	2.0	21.8

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R3/1118	BEDROOM	W7/1118	17.3	13.2	4.1	23.8
R4/1118	BEDROOM	W8/1118	17.8	14.3	3.5	19.7
R5/1118	BEDROOM	W9/1118	8.4	6.2	2.2	26.3
R6/1118	LKD	W10/1118	7.7	5.5	2.2	28.6
R6/1118	LKD	W11/1118	29.9	29.5	0.3	1.1
R6/1118	LKD	W12/1118	30.3	29.9	0.4	1.3
R6/1118	LKD	W13/1118	30.3	30.1	0.3	0.9
R7/1118	BEDROOM	W14/1118	31.2	30.9	0.3	0.9
R1/1119	LKD	W1/1119	36.2	36.2	0.0	0.0
R1/1119	LKD	W2/1119	35.7	35.7	0.0	0.0
R1/1119	LKD	W3/1119	36.1	36.1	0.0	0.0
R1/1119	LKD	W4/1119	36.1	36.1	0.0	0.0
R1/1119	LKD	W5/1119	11.0	8.8	2.2	19.8
R1/1119	LKD	W6/1119	10.7	8.5	2.2	20.6
R2/1119	BEDROOM	W7/1119	18.0	13.9	4.1	22.7
R3/1119	BEDROOM	W8/1119	18.4	14.9	3.5	19.1
R4/1119	BEDROOM	W9/1119	9.7	7.3	2.4	24.5
R4/1119	BEDROOM	W10/1119	9.4	7.0	2.4	25.5
R4/1119	BEDROOM	W11/1119	32.3	31.9	0.4	1.3
R4/1119	BEDROOM	W12/1119	33.1	32.7	0.3	1.0
R5/1119	BEDROOM	W13/1119	33.0	32.6	0.4	1.2
R5/1119	BEDROOM	W14/1119	33.6	33.4	0.2	0.7
R1/1120	LKD	W1/1120	36.4	36.4	0.0	0.0
R1/1120	LKD	W2/1120	36.2	36.2	0.0	0.0
R1/1120	LKD	W3/1120	36.5	36.5	0.0	0.0
R1/1120	LKD	W4/1120	36.0	36.0	0.0	0.0
R1/1120	LKD	W5/1120	11.2	9.1	2.2	19.1
R1/1120	LKD	W6/1120	10.9	8.7	2.2	19.8
R2/1120	BEDROOM	W7/1120	18.5	14.5	4.0	21.6

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R3/1120	BEDROOM	W8/1120	18.9	15.4	3.5	18.4
R4/1120	BEDROOM	W9/1120	10.1	7.8	2.4	23.2
R4/1120	BEDROOM	W10/1120	9.8	7.4	2.4	24.1
R4/1120	BEDROOM	W11/1120	33.7	33.3	0.4	1.0
R4/1120	BEDROOM	W12/1120	34.1	33.7	0.4	1.1
R5/1120	BEDROOM	W13/1120	33.7	33.4	0.3	0.9
R5/1120	BEDROOM	W14/1120	34.6	34.4	0.3	0.8
R1/1121	LKD	W1/1121	36.5	36.5	0.0	0.0
R1/1121	LKD	W2/1121	36.0	36.0	0.0	0.0
R1/1121	LKD	W3/1121	36.4	36.4	0.0	0.0
R1/1121	LKD	W4/1121	36.4	36.4	0.0	0.0
R1/1121	LKD	W5/1121	12.1	9.9	2.2	18.4
R1/1121	LKD	W6/1121	11.8	9.6	2.2	19.0
R2/1121	BEDROOM	W7/1121	19.3	15.4	3.9	20.4
R3/1121	BEDROOM	W8/1121	19.5	16.1	3.4	17.6
R4/1121	BEDROOM	W9/1121	11.2	8.7	2.4	21.8
R4/1121	BEDROOM	W10/1121	11.0	8.6	2.4	22.1
R4/1121	BEDROOM	W11/1121	35.3	34.9	0.4	1.0
R4/1121	BEDROOM	W12/1121	35.7	35.3	0.3	0.9
R5/1121	BEDROOM	W13/1121	35.6	35.3	0.3	0.9
R5/1121	BEDROOM	W14/1121	35.8	35.6	0.2	0.6
R1/1122	LIVINGROOM	W1/1122	35.2	35.2	0.0	0.0
R1/1122	LIVINGROOM	W2/1122	34.7	34.7	0.0	0.0
R1/1122	LIVINGROOM	W3/1122	35.4	35.4	0.0	0.0
R1/1122	LIVINGROOM	W4/1122	34.4	34.4	0.0	0.0
R1/1122	LIVINGROOM	W5/1122	11.5	9.4	2.1	18.4
R1/1122	LIVINGROOM	W6/1122	11.6	9.4	2.1	18.5
R2/1122	LIVINGROOM	W7/1122	20.1	16.2	3.9	19.2
R2/1122	LIVINGROOM	W8/1122	20.2	16.8	3.4	16.7

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R3/1122	DINING	W9/1122	11.0	8.7	2.3	20.9
R3/1122	DINING	W10/1122	10.4	8.1	2.3	22.1
R3/1122	DINING	W11/1122	34.1	33.9	0.3	0.8
R3/1122	DINING	W12/1122	34.0	33.6	0.4	1.1
R4/1122	KITCHEN	W13/1122	34.0	33.8	0.2	0.6
R4/1122	KITCHEN	W14/1122	34.2	33.9	0.3	0.8
R1/1123	BEDROOM	W1/1123	36.6	36.5	0.0	0.0
R1/1123	BEDROOM	W2/1123	36.4	36.4	0.0	0.0
R2/1123	BEDROOM	W3/1123	36.6	36.6	0.0	0.1
R2/1123	BEDROOM	W4/1123	36.8	36.8	0.0	0.0
R2/1123	BEDROOM	W5/1123	11.3	9.3	2.0	17.5
R2/1123	BEDROOM	W6/1123	11.1	9.1	2.0	18.0
R3/1123	BEDROOM	W7/1123	21.7	17.9	3.8	17.5
R3/1123	BEDROOM	W8/1123	21.7	18.4	3.3	15.2
R4/1123	BEDROOM	W9/1123	10.7	8.5	2.2	20.1
R4/1123	BEDROOM	W10/1123	10.5	8.4	2.1	20.4
R4/1123	BEDROOM	W11/1123	35.3	35.0	0.4	1.0
R4/1123	BEDROOM	W12/1123	35.9	35.7	0.3	0.8
R5/1123	BEDROOM	W13/1123	35.5	35.2	0.3	0.9
R5/1123	BEDROOM	W14/1123	35.9	35.7	0.2	0.5
R1/1124	LIVINGROOM	W1/1124	29.8	29.8	0.0	0.0
R1/1124	LIVINGROOM	W2/1124	33.8	33.8	0.0	0.0
R1/1124	LIVINGROOM	W3/1124	32.7	32.7	0.0	0.1
R1/1124	LIVINGROOM	W4/1124	32.8	32.8	0.1	0.2
R1/1124	LIVINGROOM	W5/1124	31.9	28.3	3.6	11.3
R1/1124	LIVINGROOM	W6/1124	31.5	27.8	3.7	11.7
R2/1124	LIVINGROOM	W7/1124	26.6	22.8	3.7	14.0
R2/1124	LIVINGROOM	W8/1124	25.7	22.0	3.7	14.2
R3/1124	DINING	W9/1124	30.9	27.0	3.9	12.6
R3/1124	DINING	W10/1124	30.8	27.0	3.9	12.5
R3/1124	DINING	W11/1124	38.7	38.3	0.4	1.1

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R3/1124	DINING	W12/1124	38.6	38.2	0.4	1.0
R4/1124	KITCHEN	W13/1124	38.7	38.4	0.4	1.0
R4/1124	KITCHEN	W14/1124	38.6	38.3	0.3	0.7
40-60 Hampstead Road						
R1/241	ASSUMED	W1/241	1.0	0.7	0.4	36.3
R2/241	ASSUMED	W2/241	0.0	0.0	0.0	0.0
R3/241	ASSUMED	W3/241	0.0	0.0	0.0	0.0
R4/241	ASSUMED	W4/241	0.0	0.0	0.0	0.0
R5/241	ASSUMED	W5/241	5.8	5.8	0.0	0.2
R7/241	ASSUMED	W17/241	7.4	7.0	0.4	5.8
R8/241	ASSUMED	W16/241	7.3	6.8	0.5	6.5
R9/241	ASSUMED	W15/241	6.7	6.6	0.1	1.8
R10/241	ASSUMED	W14/241	6.7	6.1	0.5	7.9
R11/241	ASSUMED	W13/241	7.1	6.6	0.5	6.8
R12/241	ASSUMED	W12/241	6.3	6.2	0.1	1.7
R13/241	ASSUMED	W11/241	6.6	6.1	0.6	8.6
R14/241	ASSUMED	W10/241	6.9	6.4	0.5	7.8
R15/241	ASSUMED	W9/241	6.2	6.0	0.2	2.9
R16/241	ASSUMED	W6/241	6.3	5.6	0.6	9.8
R17/241	ASSUMED	W8/241	7.2	6.6	0.7	9.0
R18/241	ASSUMED	W7/241	6.3	6.0	0.3	4.8

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R1/242	ASSUMED	W1/242	0.8	0.5	0.3	36.4
R2/242	ASSUMED	W2/242	0.0	0.0	0.0	50.0
R3/242	ASSUMED	W3/242	0.1	0.0	0.1	100.0
R4/242	ASSUMED	W4/242	0.0	0.0	0.0	0.0
R5/242	ASSUMED	W5/242	8.1	8.1	0.0	0.1
R6/242	ASSUMED	W18/242	0.2	0.1	0.1	47.4
R8/242	ASSUMED	W14/242	0.0	0.0	0.0	0.0
R9/242	ASSUMED	W13/242	0.0	0.0	0.0	0.0
R11/242	ASSUMED	W17/242	0.0	0.0	0.0	100.0
R12/242	ASSUMED	W16/242	0.1	0.0	0.0	80.0
R14/242	ASSUMED	W11/242	0.0	0.0	0.0	0.0
R15/242	ASSUMED	W12/242	0.0	0.0	0.0	0.0
R17/242	ASSUMED	W15/242	0.0	0.0	0.0	100.0
R1/243	ASSUMED	W1/243	7.8	7.1	0.7	8.5
R2/243	ASSUMED	W2/243	0.1	0.0	0.0	57.1
R3/243	ASSUMED	W3/243	0.1	0.0	0.1	100.0
R4/243	ASSUMED	W4/243	0.0	0.0	0.0	0.0
R5/243	ASSUMED	W5/243	11.6	11.6	0.0	0.1
R6/243	ASSUMED	W13/243	5.3	5.0	0.3	6.2
R9/243	ASSUMED	W11/243	8.4	7.7	0.7	7.9

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R10/243	ASSUMED	W12/243	9.2	8.9	0.3	3.1
R13/243	ASSUMED	W10/243	9.1	8.8	0.3	3.4
R1/244	ASSUMED	W1/244	17.3	15.6	1.7	9.7
R2/244	ASSUMED	W2/244	0.2	0.1	0.1	50.0
R3/244	ASSUMED	W3/244	0.1	0.0	0.1	100.0
R4/244	ASSUMED	W4/244	0.0	0.0	0.0	0.0
R5/244	ASSUMED	W5/244	16.0	15.9	0.0	0.1
R7/244	ASSUMED	W13/244	18.7	17.6	1.2	6.2
R9/244	ASSUMED	W12/244	19.0	18.0	1.0	5.1
R10/244	ASSUMED	W11/244	19.5	18.5	1.1	5.4
R13/244	ASSUMED	W10/244	19.8	19.1	0.8	3.8
R1/245	ASSUMED	W1/245	18.1	16.5	1.6	8.6
R2/245	ASSUMED	W2/245	13.4	12.0	1.3	9.9
R3/245	ASSUMED	W3/245	13.2	12.2	1.0	7.2
R4/245	ASSUMED	W4/245	0.0	0.0	0.0	0.0
R5/245	ASSUMED	W5/245	18.4	18.4	0.0	0.1
R6/245	ASSMUED	W6/245	20.0	18.7	1.2	6.2
R6/245	ASSMUED	W7/245	33.3	33.3	0.0	0.0
R1/246	ASSUMED	W1/246	32.7	32.7	0.0	0.0
R1/246	ASSUMED	W2/246	20.6	18.9	1.7	8.3
R2/246	ASSUMED	W3/246	18.6	16.9	1.6	8.8

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Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R3/246	ASSUMED	W4/246	16.4	15.2	1.2	7.1
R4/246	ASSUMED	W5/246	0.0	0.0	0.0	0.0
R5/246	ASSUMED	W6/246	21.7	21.6	0.1	0.4
R1/247	ASSUMED	W1/247	16.3	15.2	1.2	7.3
1-6 Tolmers Square						
R1/10	SSUMED_LIVINGROO	W1/10	19.2	18.6	0.7	3.5
R1/10	SSUMED_LIVINGROO	W2/10	18.7	18.0	0.7	3.6
R1/10	SSUMED_LIVINGROO	W3/10	19.8	19.1	0.7	3.5
R1/10	SSUMED_LIVINGROO	W4/10	18.9	18.2	0.7	3.7
R2/10	SSUMED_LIVINGROO	W5/10	22.7	22.2	0.6	2.5
R2/10	SSUMED_LIVINGROO	W6/10	21.7	21.1	0.6	2.7
R2/10	SSUMED_LIVINGROO	W7/10	23.0	22.3	0.7	3.1
R2/10	SSUMED_LIVINGROO	W8/10	22.3	21.6	0.7	3.2
R3/10	SSUMED_LIVINGROO	W9/10	23.6	22.9	0.7	3.1
R3/10	SSUMED_LIVINGROO	W10/10	22.8	22.0	0.8	3.3
R3/10	SSUMED_LIVINGROO	W11/10	23.6	22.9	0.7	2.8
R3/10	SSUMED_LIVINGROO	W12/10	22.4	21.7	0.7	3.1
R4/10	ASSUMED	W13/10	24.4	23.6	0.7	2.9
R5/10	SSUMED_LIVINGROO	W14/10	24.3	23.6	0.7	2.9
R5/10	SSUMED_LIVINGROO	W15/10	23.4	22.7	0.7	3.0
R5/10	SSUMED_LIVINGROO	W16/10	24.3	23.6	0.7	2.8
R5/10	SSUMED_LIVINGROO	W17/10	23.1	22.4	0.7	2.9
R6/10	SSUMED_LIVINGROO	W18/10	24.1	23.5	0.6	2.4
R7/10	SSUMED_LIVINGROO	W19/10	23.6	22.9	0.7	3.0
R8/10	SSUMED_LIVINGROO	W20/10	20.3	19.6	0.7	3.5
R9/10	ASSUMED	W21/10	21.7	21.0	0.7	3.0

POINT 2

DAYLIGHT ANALYSIS
EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R10/10	ASSUMED	W22/10	21.8	21.1	0.7	3.2
R1/11	ASSUMED_BEDROOM	W1/11	21.6	20.9	0.7	3.3
R2/11	ASSUMED_BEDROOM	W2/11	21.3	20.7	0.6	2.6
R3/11	ASSUMED_BEDROOM	W3/11	22.9	22.1	0.8	3.3
R4/11	ASSUMED_BEDROOM	W4/11	24.1	23.5	0.6	2.6
R5/11	ASSUMED_BEDROOM	W5/11	24.6	23.8	0.8	3.3
R6/11	ASSUMED_BEDROOM	W6/11	23.6	23.0	0.7	2.8
R7/11	ASSUMED_BEDROOM	W7/11	23.9	23.2	0.8	3.2
R8/11	ASSUMED_BEDROOM	W8/11	25.1	24.4	0.7	2.7
R8/11	ASSUMED_BEDROOM	W9/11	25.2	24.5	0.7	2.9
R9/11	ASSUMED_BEDROOM	W10/11	25.3	24.6	0.8	3.0
R10/11	ASSUMED_BEDROOM	W11/11	24.3	23.5	0.7	3.0
R11/11	ASSUMED	W12/11	25.0	24.3	0.7	3.0
R12/11	ASSUMED_BEDROOM	W13/11	24.2	23.5	0.7	3.0
R13/11	ASSUMED_BEDROOM	W14/11	25.2	24.6	0.6	2.3
R14/11	ASSUMED_BEDROOM	W15/11	25.1	24.4	0.7	2.9
R15/11	ASSUMED_BEDROOM	W16/11	23.6	22.8	0.7	3.0
R16/11	ASSUMED_BEDROOM	W17/11	22.2	21.5	0.8	3.5
R17/11	ASSUMED_BEDROOM	W18/11	21.8	21.1	0.7	3.3
R18/11	ASSUMED_BEDROOM	W19/11	22.5	21.8	0.7	3.1

DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R19/11	ASSUMED_BEDROOM	W20/11	22.7	22.1	0.6	2.7
R20/11	ASSUMED_BEDROOM	W21/11	22.7	22.1	0.7	2.9
R21/11	ASSUMED_BEDROOM	W22/11	22.9	22.1	0.8	3.3
R1/12	RECEPTION	W1/12	13.6	13.6	0.0	0.0
R1/12	RECEPTION	W2/12	20.0	19.9	0.0	0.1
R1/12	RECEPTION	W3/12	11.1	10.7	0.4	3.9
R1/12	RECEPTION	W4/12	23.8	23.1	0.8	3.1
R1/12	RECEPTION	W5/12	1.4	1.4	0.0	0.0
R1/12	RECEPTION	W6/12	0.7	0.6	0.1	17.8
R2/12	RECEPTION	W7/12	0.3	0.2	0.1	33.3
R2/12	RECEPTION	W8/12	0.4	0.4	0.0	7.9
R2/12	RECEPTION	W9/12	22.3	21.6	0.7	2.9
R3/12	RECEPTION	W10/12	22.7	21.9	0.8	3.6
R3/12	RECEPTION	W11/12	1.0	1.0	0.0	0.0
R3/12	RECEPTION	W12/12	0.4	0.3	0.1	20.9
R4/12	RECEPTION	W13/12	0.5	0.4	0.1	21.7
R4/12	RECEPTION	W14/12	0.6	0.5	0.0	5.3
R4/12	RECEPTION	W15/12	23.3	22.5	0.8	3.3
R5/12	RECEPTION	W16/12	23.5	22.7	0.8	3.3
R5/12	RECEPTION	W17/12	0.8	0.8	0.0	0.0
R5/12	RECEPTION	W18/12	0.4	0.3	0.1	25.0
R6/12	ASSUMED	W19/12	13.2	12.5	0.8	5.7
R7/12	RECEPTION	W20/12	0.0	0.0	0.0	25.0
R7/12	RECEPTION	W21/12	1.4	1.3	0.1	5.9
R7/12	RECEPTION	W22/12	23.6	23.0	0.6	2.6
R8/12	RECEPTION	W23/12	23.6	22.9	0.8	3.2
R8/12	RECEPTION	W24/12	1.8	1.8	0.0	0.0
R8/12	RECEPTION	W25/12	0.1	0.1	0.0	7.7
R9/12	RECEPTION	W26/12	0.1	0.1	0.0	40.0

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R9/12	RECEPTION	W27/12	1.5	1.4	0.1	7.3
R9/12	RECEPTION	W28/12	21.7	20.9	0.8	3.5
R10/12	RECEPTION	W29/12	1.1	0.9	0.2	17.0
R10/12	RECEPTION	W30/12	0.6	0.6	0.0	5.1
R11/12	RECEPTION	W31/12	0.6	0.6	0.0	5.2
R11/12	RECEPTION	W32/12	1.9	1.9	0.0	0.0
R1/13	BEDROOM	W1/13	25.5	24.7	0.8	3.1
R2/13	BEDROOM	W2/13	25.6	25.0	0.6	2.3
R3/13	BEDROOM	W3/13	26.3	25.5	0.8	3.1
R4/13	BEDROOM	W4/13	26.4	25.7	0.7	2.5
R5/13	BEDROOM	W5/13	26.8	26.0	0.9	3.2
R6/13	BEDROOM	W6/13	26.9	26.2	0.7	2.6
R7/13	BEDROOM	W7/13	27.2	26.4	0.8	2.9
R8/13	BEDROOM	W8/13	27.3	26.5	0.8	2.9
R9/13	BEDROOM	W9/13	27.5	26.7	0.8	2.9
R10/13	BEDROOM	W10/13	27.6	26.8	0.8	2.9
R11/13	ASSUMED	W11/13	15.3	14.6	0.7	4.8
R12/13	BEDROOM	W12/13	27.8	27.0	0.8	2.8
R13/13	BEDROOM	W13/13	27.7	27.1	0.6	2.3
R14/13	BEDROOM	W14/13	28.0	27.2	0.8	2.8
R15/13	BEDROOM	W15/13	28.0	27.3	0.8	2.7
R16/13	BEDROOM	W16/13	28.0	27.2	0.8	2.9

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R17/13	BEDROOM	W17/13	27.6	26.8	0.8	2.9
R18/13	ASSUMED_BEDROOM	W18/13	27.9	27.1	0.8	2.8
R19/13	ASSUMED_BEDROOM	W19/13	27.8	27.1	0.7	2.5
183 NORTH GOWER STREET						
R1/740		W1/740	16.4	16.0	0.4	2.2
R2/740		W2/740	4.0	4.0	0.0	0.0
R3/740		W4/740	12.6	12.6	0.0	0.0
R4/740		W3/740	6.0	6.0	0.0	0.0
R1/741		W1/741	18.1	17.7	0.4	2.3
R2/741		W2/741	4.9	4.9	0.0	0.0
R3/741		W4/741	15.0	15.0	0.0	0.1
R4/741		W3/741	6.5	6.5	0.0	0.0
R1/742		W1/742	20.2	19.7	0.5	2.2
R2/742		W2/742	6.6	6.6	0.0	0.0
R3/742		W4/742	18.4	18.3	0.0	0.1
R4/742		W3/742	7.3	7.3	0.0	0.0
R1/743		W1/743	23.2	22.7	0.5	2.0
R4/743		W2/743	8.6	8.6	0.0	0.0
R1/794		W1/794	10.5	10.5	0.0	0.0
R2/794		W2/794	28.0	27.4	0.6	2.3

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
Warren Court, Euston Road						
R1/201	STUDIO	W1/201	25.9	24.1	1.8	6.8
R1/201	STUDIO	W19/201	1.1	1.1	0.0	0.0
R2/201	STUDIO	W2/201	26.1	24.3	1.8	6.8
R2/201	STUDIO	W3/201	26.1	24.3	1.8	6.8
R3/201	KITCHEN	W4/201	26.2	24.3	1.9	7.4
R5/201	BEDROOM	W7/201	26.5	24.6	1.9	7.2
R5/201	BEDROOM	W8/201	26.4	24.5	1.9	7.2
R6/201	LKD	W9/201	26.5	24.7	1.9	7.1
R6/201	LKD	W10/201	24.0	24.0	0.0	0.1
R7/201	BEDROOM	W11/201	21.4	20.4	1.0	4.7
R7/201	BEDROOM	W12/201	26.8	25.4	1.4	5.1
R8/201	BEDROOM	W13/201	28.8	27.8	1.0	3.3
R8/201	BEDROOM	W14/201	29.5	28.9	0.5	1.8
R11/201	KITCHEN	W18/201	0.8	0.8	0.0	0.0
R1/202	KD	W1/202	26.5	24.7	1.8	6.8
R2/202	STUDIO	W2/202	26.7	24.9	1.8	6.8
R2/202	STUDIO	W3/202	26.7	24.9	1.8	6.8
R3/202	KITCHEN	W4/202	26.8	24.8	2.0	7.4
R6/202	KITCHEN	W8/202	27.0	25.1	1.9	7.1
R7/202	STUDIO	W9/202	27.2	25.3	1.9	7.0
R7/202	STUDIO	W10/202	26.3	26.3	0.0	0.1
R8/202	RECEPTION	W11/202	22.0	20.9	1.0	4.7
R8/202	RECEPTION	W12/202	27.5	26.1	1.4	5.1
R8/202	RECEPTION	W13/202	29.5	28.6	1.0	3.3

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R11/202	KITCHEN	W17/202	2.2	2.2	0.0	0.0
R1/203	RECEPTION	W1/203	27.1	25.2	1.9	6.8
R2/203	STUDIO	W2/203	27.3	25.4	1.8	6.8
R2/203	STUDIO	W3/203	27.3	25.5	1.9	6.8
R3/203	KITCHEN	W4/203	27.4	25.4	2.0	7.4
R6/203	KITCHEN	W8/203	27.6	25.7	2.0	7.1
R7/203	STUDIO	W9/203	27.8	25.8	2.0	7.1
R7/203	STUDIO	W10/203	31.5	31.5	0.0	0.1
R10/203	KITCHEN	W14/203	6.5	6.5	0.0	0.0
R11/203	BEDROOM	W15/203	7.2	7.2	0.0	0.0
R1/204	RECEPTION	W1/204	27.7	25.8	1.9	6.8
R2/204	STUDIO	W2/204	27.8	25.9	1.9	6.7
R2/204	STUDIO	W3/204	27.9	26.0	1.9	6.9
R3/204	KITCHEN	W4/204	27.9	25.9	2.1	7.4
R6/204	KITCHEN	W8/204	28.2	26.2	2.0	7.1
R7/204	STUDIO	W9/204	28.4	26.4	2.0	7.0
R7/204	STUDIO	W10/204	32.8	32.7	0.0	0.1
R10/204	KITCHEN	W14/204	12.4	11.9	0.5	4.0
R11/204	BEDROOM	W15/204	14.6	14.1	0.5	3.2
R1/205	RECEPTION	W1/205	28.2	26.3	1.9	6.8
R2/205	STUDIO	W2/205	28.3	26.4	1.9	6.8
R2/205	STUDIO	W3/205	28.4	26.5	1.9	6.8

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R3/205	KITCHEN	W4/205	28.5	26.4	2.1	7.4
R6/205	KITCHEN	W8/205	28.7	26.7	2.0	7.0
R7/205	STUDIO	W9/205	28.9	26.9	2.0	7.0
R7/205	STUDIO	W10/205	34.5	34.5	0.0	0.1
R10/205	KITCHEN	W14/205	21.8	20.4	1.4	6.2
R11/205	BEDROOM	W15/205	23.2	21.9	1.3	5.5
R2/206	BEDROOM	W2/206	20.1	19.0	1.1	5.6
R2/206	BEDROOM	W3/206	35.6	35.6	0.0	0.1

301-305 Euston Road & 69-70 Warren Street

R5/483	SSUMED_HALF_DEPT	W7/483	17.7	16.6	1.1	6.2
R1/484	ASSUMED	W1/484	24.0	22.3	1.7	6.9

Lizmans House, 321 Euston Road

R1/431	ASSUMED	W1/431	18.6	17.7	0.9	4.7
R2/431	LD	W2/431	19.0	18.1	1.0	5.1
R3/431	BEDROOM	W3/431	22.1	21.1	1.1	4.8
R4/431	BEDROOM	W4/431	22.4	21.2	1.2	5.1
R5/431	ASSUMED	W5/431	22.4	21.3	1.1	5.0
R6/431	ASSUMED	W6/431	19.6	18.4	1.2	6.1
R7/431	ASSUMED	W7/431	1.7	1.5	0.1	8.3
R1/432	ASSUMED	W1/432	19.6	18.7	0.9	4.5
R2/432	LD	W2/432	20.1	19.1	1.0	4.9

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R3/432	BEDROOM	W3/432	23.2	22.1	1.1	4.7
R4/432	BEDROOM	W4/432	23.4	22.2	1.2	5.0
R5/432	ASSUMED	W5/432	23.4	22.3	1.1	4.8
R6/432	ASSUMED	W6/432	20.5	19.3	1.2	5.9
R7/432	ASSUMED	W7/432	2.1	1.9	0.2	7.7
R1/433	ASSUMED	W1/433	20.7	19.8	0.9	4.3
R2/433	LD	W2/433	21.1	20.1	1.0	4.7
R3/433	BEDROOM	W3/433	24.2	23.1	1.1	4.5
R4/433	BEDROOM	W4/433	24.4	23.2	1.2	4.8
R5/433	ASSUMED	W5/433	24.4	23.3	1.1	4.6
R6/433	ASSUMED	W6/433	21.3	20.1	1.2	5.7
R7/433	ASSUMED	W7/433	2.5	2.3	0.2	6.4
R1/434	ASSUMED	W1/434	21.8	20.9	0.9	4.1
R2/434	ASSUMED	W2/434	22.2	21.2	1.0	4.5
R3/434	ASSUMED	W3/434	25.3	24.2	1.1	4.4
R4/434	ASSUMED	W4/434	25.4	24.2	1.2	4.6
R5/434	ASSUMED	W5/434	25.4	24.2	1.1	4.5
R6/434	ASSUMED	W6/434	22.3	21.1	1.2	5.5
R7/434	ASSUMED	W7/434	3.0	2.8	0.2	5.7
R1/435	ASSUMED	W1/435	22.9	22.0	0.9	3.9

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R2/435	LD	W2/435	23.2	22.2	1.0	4.3
R3/435	BEDROOM	W3/435	26.2	25.1	1.1	4.2
R4/435	BEDROOM	W4/435	26.3	25.2	1.2	4.5
R5/435	BEDROOM	W5/435	26.3	25.1	1.1	4.3
R6/435	ASSUMED	W6/435	23.3	22.1	1.2	5.3
R7/435	ASSUMED	W7/435	3.5	3.3	0.2	5.1
R1/436	ASSUMED	W1/436	25.6	24.7	0.9	3.5
R2/436	ASSUMED	W2/436	25.6	24.6	1.0	3.9
R3/436	ASSUMED	W3/436	26.6	25.5	1.1	4.2
R4/436	ASSUMED	W4/436	26.9	25.7	1.2	4.4
R5/436	ASSUMED	W5/436	26.6	25.4	1.1	4.3
R6/436	ASSUMED	W6/436	25.6	24.4	1.2	4.8
R7/436	ASSUMED	W7/436	19.1	17.8	1.3	6.7
56 Warren Street (Assumed windows)						
R2/631	KITCHEN	W2/631	16.8	16.5	0.2	1.4
R2/632	KITCHEN	W2/632	24.1	23.6	0.4	1.8
R2/633	KITCHEN	W2/633	25.6	25.1	0.5	1.9
57 Warren Street (Assumed windows)						
R1/621	BEDROOM	W1/621	14.7	14.7	0.0	0.0
R1/621	BEDROOM	W2/621	15.3	15.2	0.1	0.8
R1/622	LIVINGROOM	W1/622	23.3	23.1	0.1	0.6

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/622	LIVINGROOM	W2/622	24.2	23.7	0.5	2.0
R1/623	BEDROOM	W2/623	25.6	25.1	0.6	2.2
R2/623	BEDROOM	W1/623	25.1	24.7	0.4	1.4
58 Warren Street (Assumed windows)						
R1/611	ASSUMED_BEDROOM	W1/611	13.8	13.8	0.0	0.0
R1/611	ASSUMED_BEDROOM	W2/611	15.0	15.0	0.0	0.0
R1/612	SSUMED_LIVINGROO	W1/612	19.9	19.8	0.1	0.6
R1/612	SSUMED_LIVINGROO	W2/612	21.8	21.7	0.1	0.5
R1/613	ASSUMED_BEDROOM	W2/613	23.9	23.7	0.3	1.2
R2/613	ASSUMED_BEDROOM	W1/613	22.3	22.0	0.3	1.3
59 Warren Street						
R1/161	STUDIO	W1/161	8.3	8.3	0.0	0.0
R1/161	STUDIO	W2/161	10.5	10.5	0.0	0.0
R1/162	LIVINGROOM	W1/162	12.5	12.4	0.1	1.0
R1/162	LIVINGROOM	W2/162	16.0	15.8	0.1	0.8
R1/163	BEDROOM	W1/163	16.5	16.2	0.3	1.9
R2/163	BEDROOM	W2/163	19.3	18.9	0.3	1.8
R1/164	ASSUMED	W1/164	24.8	24.2	0.6	2.3
R1/164	ASSUMED	W2/164	16.4	15.8	0.7	4.1
60-61 Warren Street						
R1/151	BEDROOM	W1/151	6.6	6.6	0.0	0.0
R1/151	BEDROOM	W2/151	6.4	6.4	0.0	0.0
R2/151	BEDROOM	W3/151	6.4	6.4	0.0	0.0

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R3/151	KITCHEN	W4/151	7.0	7.0	0.0	0.0
R1/152	BEDROOM	W1/152	10.3	10.1	0.2	2.0
R2/152	BEDROOM	W2/152	9.7	9.5	0.2	2.0
R3/152	BEDROOM	W3/152	9.5	9.4	0.1	0.6
R4/152	KITCHEN	W4/152	10.6	10.6	0.0	0.0
R1/153	ASSUMED	W1/153	14.6	14.2	0.4	2.7
R2/153	ASSUMED	W2/153	14.0	13.6	0.4	2.6
R3/153	ASSUMED	W3/153	14.1	13.7	0.3	2.3
R4/153	ASSUMED	W4/153	14.9	14.7	0.3	1.8
R1/154	ASSUMED	W1/154	18.4	17.5	0.9	4.9
R1/154	ASSUMED	W2/154	20.4	19.7	0.8	3.7
R1/154	ASSUMED	W3/154	19.7	18.9	0.7	3.7
62 Warren Street						
R1/140	BEDROOM	W1/140	5.1	5.1	0.0	0.0
R1/140	BEDROOM	W2/140	5.0	5.0	0.0	0.0
R1/140	BEDROOM	W3/140	4.7	4.7	0.0	0.0
R1/141	LIVINGROOM	W1/141	7.3	7.3	0.0	0.3
R1/141	LIVINGROOM	W2/141	7.0	7.0	0.0	0.0
R1/142	LIVINGROOM	W1/142	11.2	10.9	0.3	3.0
R1/142	LIVINGROOM	W2/142	10.9	10.6	0.3	2.4
R1/143	BEDROOM	W1/143	15.1	14.6	0.5	3.1
R2/143	BEDROOM	W2/143	15.0	14.6	0.4	2.9
R1/144	ASSUMED	W1/144	23.0	22.5	0.5	2.1
R1/144	ASSUMED	W2/144	9.4	8.9	0.5	4.8

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
63-68 Warren Street						
R1/129	BEDROOM	W1/129	3.1	3.1	0.0	0.0
R2/129	BEDROOM	W2/129	3.2	3.2	0.0	0.0
R1/130	ASSUMED	W1/130	3.5	3.5	0.0	0.0
R1/130	ASSUMED	W2/130	4.3	4.3	0.0	0.0
R2/130	ASSUMED	W3/130	4.9	4.9	0.0	0.0
R2/130	ASSUMED	W4/130	5.3	5.3	0.0	0.0
R3/130	ASSUMED	W5/130	5.8	5.8	0.0	0.0
R3/130	ASSUMED	W6/130	6.1	6.1	0.0	0.0
R4/130	ASSUMED	W7/130	6.3	6.3	0.0	0.0
R4/130	ASSUMED	W8/130	6.2	6.2	0.0	0.0
R5/130	KD	W9/130	6.0	6.0	0.0	0.0
R5/130	KD	W10/130	5.8	5.8	0.0	0.0
R6/130	KD	W11/130	5.7	5.7	0.0	0.0
R6/130	KD	W12/130	5.4	5.4	0.0	0.0
R1/131	ASSUMED	W1/131	5.5	5.5	0.0	0.0
R1/131	ASSUMED	W2/131	6.6	6.5	0.0	0.5
R2/131	ASSUMED	W3/131	7.2	7.2	0.0	0.0
R2/131	ASSUMED	W4/131	7.7	7.7	0.0	0.0
R3/131	ASSUMED	W5/131	8.3	8.3	0.0	0.1
R3/131	ASSUMED	W6/131	8.6	8.6	0.1	0.6
R4/131	ASSUMED	W7/131	8.8	8.7	0.1	1.5
R4/131	ASSUMED	W8/131	8.7	8.6	0.1	1.5
R5/131	BEDROOM	W9/131	8.5	8.4	0.1	1.1
R7/131	BEDROOM	W11/131	8.0	7.9	0.1	1.1

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DAYLIGHT ANALYSIS
EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/132	ASSUMED	W1/132	10.5	10.2	0.3	2.5
R1/132	ASSUMED	W2/132	11.2	10.8	0.4	3.5
R2/132	ASSUMED	W3/132	11.5	11.4	0.1	0.5
R2/132	ASSUMED	W4/132	11.9	11.8	0.0	0.3
R3/132	ASSUMED	W5/132	12.4	12.1	0.2	1.8
R3/132	ASSUMED	W6/132	12.5	12.2	0.3	2.4
R4/132	ASSUMED	W7/132	12.6	12.1	0.4	3.3
R4/132	ASSUMED	W8/132	12.4	12.0	0.4	3.2
R5/132	KD	W9/132	12.3	11.9	0.4	3.1
R5/132	KD	W10/132	12.2	11.8	0.4	3.1
R5/132	KD	W11/132	12.0	11.6	0.4	3.3
R6/132	KD	W12/132	11.7	11.3	0.4	3.3
R6/132	KD	W13/132	11.5	11.1	0.4	3.2
R6/132	KD	W14/132	11.4	11.0	0.4	3.2
R1/133	ASSUMED	W1/133	16.0	15.1	0.9	5.7
R1/133	ASSUMED	W2/133	16.3	15.3	1.0	6.2
R2/133	ASSUMED	W3/133	15.8	15.4	0.4	2.7
R2/133	ASSUMED	W4/133	15.9	15.5	0.4	2.5
R3/133	ASSUMED	W5/133	16.0	15.6	0.4	2.5
R3/133	ASSUMED	W6/133	16.0	15.6	0.4	2.5
R4/133	ASSUMED	W7/133	16.1	15.5	0.6	3.7
R4/133	ASSUMED	W8/133	16.0	15.5	0.5	3.2
R5/133	BEDROOM	W9/133	15.9	15.4	0.5	3.3
R5/133	BEDROOM	W10/133	15.8	15.3	0.5	3.3
R5/133	BEDROOM	W11/133	15.7	15.1	0.6	3.6
R6/133	BEDROOM	W12/133	15.4	14.8	0.6	3.6
R6/133	BEDROOM	W13/133	15.1	14.6	0.5	3.4
R6/133	BEDROOM	W14/133	15.0	14.5	0.5	3.2

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
71 Warren Street						
R1/171	ASSUMED	W1/171	1.6	1.6	0.0	0.0
R1/172	ASSUMED	W1/172	4.3	4.1	0.3	6.5
R1/173	ASSUMED	W1/173	14.1	13.6	0.5	3.3
9 Warren Street						
R2/1041	KITCHEN	W2/1041	19.0	18.6	0.3	1.7
10 Warren Street						
R2/1031	KITCHEN	W2/1031	19.4	18.9	0.5	2.5
11 Warren Street						
R2/1021	KITCHEN	W2/1021	20.1	19.6	0.5	2.5
12 Warren Street						
R2/1011	KITCHEN	W2/1011	21.1	20.6	0.6	2.7
13-14 Warren Street & 118-120 Whitfield Street						
R1/1001	ASSUMED	W1/1001	22.4	22.4	0.0	0.0
R1/1001	ASSUMED	W2/1001	23.1	23.1	0.0	0.0
R1/1001	ASSUMED	W3/1001	22.9	22.3	0.6	2.8
R1/1001	ASSUMED	W4/1001	22.8	22.1	0.7	3.2
R2/1001	ASSUMED	W5/1001	22.5	22.0	0.6	2.5
R2/1001	ASSUMED	W6/1001	22.4	21.9	0.6	2.6
R3/1001	ASSUMED	W7/1001	22.2	21.7	0.6	2.6
R3/1001	ASSUMED	W8/1001	22.1	21.4	0.6	2.9
R1/1002	ASSUMED	W1/1002	28.0	28.0	0.0	0.0

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/1002	ASSUMED	W2/1002	28.4	28.4	0.0	0.0
R1/1002	ASSUMED	W3/1002	26.2	25.4	0.8	3.1
R1/1002	ASSUMED	W4/1002	26.2	25.3	0.9	3.5
R2/1002	ASSUMED	W5/1002	25.8	25.1	0.7	2.7
R2/1002	ASSUMED	W6/1002	25.7	25.0	0.7	2.8
R3/1002	ASSUMED	W7/1002	25.5	24.8	0.7	2.8
R3/1002	ASSUMED	W8/1002	25.3	24.5	0.8	3.2
R1/1003	ASSUMED	W1/1003	33.2	33.2	0.0	0.0
R1/1003	ASSUMED	W2/1003	33.3	33.3	0.0	0.0
R1/1003	ASSUMED	W3/1003	28.3	27.3	1.0	3.5
R1/1003	ASSUMED	W4/1003	28.2	27.2	0.9	3.3
R2/1003	ASSUMED	W5/1003	28.0	27.2	0.8	2.8
R2/1003	ASSUMED	W6/1003	28.0	27.0	1.0	3.7
R3/1003	ASSUMED	W7/1003	27.8	26.8	0.9	3.3
R3/1003	ASSUMED	W8/1003	27.6	26.6	1.1	3.8
15 Warren Street & 161 Whitfield Street						
R1/1502	ASSUMED_RESI	W1/1502	29.8	29.2	0.6	1.8
R2/1502	ASSUMED_RESI	W2/1502	29.7	29.1	0.6	2.0
R2/1502	ASSUMED_RESI	W3/1502	27.0	26.3	0.7	2.6
R3/1502	ASSUMED_RESI	W4/1502	27.3	26.5	0.8	2.9
R1/1503	ASSUMED_RESI	W1/1503	32.0	31.4	0.6	1.9
R2/1503	ASSUMED_RESI	W2/1503	31.8	31.2	0.6	2.0
R2/1503	ASSUMED_RESI	W3/1503	28.6	27.9	0.8	2.7
R3/1503	ASSUMED_RESI	W4/1503	28.9	28.0	0.9	2.9
R1/1601	ASSUMED	W1/1601	23.9	23.5	0.4	1.8
R2/1601	ASSUMED	W2/1601	24.4	23.8	0.5	2.2

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Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/1602	ASSUMED	W1/1602	29.0	28.6	0.5	1.7
R2/1602	ASSUMED	W2/1602	29.2	28.6	0.6	2.1
R1/1603	LIVINGROOM	W1/1603	32.2	31.7	0.5	1.6
R1/1603	LIVINGROOM	W2/1603	32.1	31.5	0.7	2.1
R1/1604	UNKNOWN	W6/1604	93.8	93.3	0.5	0.5
R3/1604	UNKNOWN	W2/1604	97.2	96.7	0.5	0.5
R3/1604	UNKNOWN	W3/1604	26.3	26.1	0.2	0.8
R3/1604	UNKNOWN	W4/1604	30.3	30.3	0.0	0.0
R3/1604	UNKNOWN	W5/1604	96.6	96.1	0.5	0.5

16 Warren Street

R1/1709	BEDROOM_ASSUMED	W1/1709	13.9	13.7	0.3	1.8
R2/1710	BEDROOM_ASSUMED	W2/1710	21.3	20.9	0.4	2.0
R2/1710	BEDROOM_ASSUMED	W3/1710	21.4	20.9	0.5	2.1
R1/1711	ASSUMED	W1/1711	24.8	24.2	0.6	2.4
R1/1711	ASSUMED	W2/1711	24.8	24.3	0.6	2.3
R1/1711	ASSUMED	W3/1711	24.9	24.3	0.6	2.3
R1/1712	ASSUMED	W1/1712	27.6	26.9	0.7	2.7
R1/1712	ASSUMED	W2/1712	27.7	27.0	0.7	2.6
R1/1712	ASSUMED	W3/1712	27.7	27.0	0.7	2.6
R1/1713	BEDROOM	W1/1713	29.3	28.5	0.8	2.8
R1/1713	BEDROOM	W2/1713	29.3	28.5	0.8	2.7
R1/1713	BEDROOM	W3/1713	29.3	28.5	0.8	2.7
R1/1714	LKD	W1/1714	37.1	37.1	0.0	0.0
R1/1714	LKD	W2/1714	30.7	29.9	0.9	2.9
R1/1714	LKD	W3/1714	30.7	29.8	0.8	2.7
R1/1714	LKD	W4/1714	97.5	96.9	0.5	0.5

17 Warren Street

POINT 2

DAYLIGHT ANALYSIS
EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/1719	BEDROOM_ASSUMED	W1/1719	14.6	14.4	0.1	0.9
R1/1720	BEDROOM_ASSUMED	W1/1720	21.5	21.1	0.4	1.9
R1/1720	BEDROOM_ASSUMED	W2/1720	21.5	21.1	0.5	2.2
R1/1721	ASSUMED	W1/1721	25.3	24.7	0.6	2.3
R1/1721	ASSUMED	W2/1721	25.5	24.8	0.7	2.6
R1/1721	ASSUMED	W3/1721	25.4	24.8	0.6	2.2
R1/1722	ASSUMED	W1/1722	28.0	27.3	0.7	2.5
R1/1722	ASSUMED	W2/1722	28.2	27.4	0.8	2.9
R1/1722	ASSUMED	W3/1722	28.1	27.4	0.7	2.4
R1/1723	BEDROOM	W1/1723	29.5	28.7	0.8	2.6
R2/1723	BEDROOM	W2/1723	29.6	28.8	0.9	2.9
R2/1723	BEDROOM	W3/1723	29.5	28.8	0.7	2.5
R1/1724	LKD	W1/1724	97.1	96.6	0.5	0.5
R1/1724	LKD	W2/1724	30.7	29.9	0.8	2.6
R1/1724	LKD	W3/1724	31.4	31.4	0.0	0.0
R1/1724	LKD	W4/1724	91.9	91.5	0.5	0.5
R1/1724	LKD	W5/1724	30.4	29.5	0.9	3.0

Duchess House, 18-19 Warren Street

R1/1731	ASSUMED	W1/1731	25.1	24.6	0.5	2.1
R1/1731	ASSUMED	W2/1731	25.0	24.5	0.5	2.1
R2/1731	LKD	W3/1731	25.0	24.5	0.5	2.0
R2/1731	LKD	W4/1731	24.8	24.3	0.5	2.0
R2/1731	LKD	W5/1731	20.2	20.2	0.0	0.0
R1/1732	ASSUMED	W1/1732	28.4	27.7	0.6	2.2
R1/1732	ASSUMED	W2/1732	28.4	27.8	0.6	2.2
R2/1732	LKD	W3/1732	28.5	27.9	0.6	2.1
R2/1732	LKD	W4/1732	28.4	27.8	0.6	2.0
R2/1732	LKD	W5/1732	26.9	26.9	0.0	0.0

DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R1/1733	ASSUMED	W1/1733	29.8	29.1	0.7	2.3
R1/1733	ASSUMED	W2/1733	29.8	29.1	0.7	2.3
R2/1733	ASSUMED	W3/1733	29.8	29.1	0.6	2.1
R2/1733	ASSUMED	W4/1733	29.8	29.2	0.6	2.0
R2/1733	ASSUMED	W5/1733	33.7	33.7	0.0	0.0
R1/1734	BEDROOM	W1/1734	30.6	29.9	0.7	2.3
R2/1734	BEDROOM	W2/1734	30.7	30.1	0.7	2.1
R3/1734	BEDROOM	W3/1734	30.8	30.1	0.7	2.4
R3/1734	BEDROOM	W4/1734	36.6	36.6	0.0	0.0
R3/1734	BEDROOM	W5/1734	35.5	35.5	0.0	0.0

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

			NSL			
Room	Room Use	Whole Room sq ft	Existing sq ft	Proposed sq ft	Loss sq ft	%Loss
17 to 33 William Road						
R1/111	LD	145.6	111.8	111.8	0.0	0.0
R2/111	KITCHEN?	117.1	69.1	69.1	0.0	0.0
R3/111	BEDROOM	142.5	83.6	83.6	0.0	0.0
R4/111	LD	251.4	103.9	103.9	0.0	0.0
R5/111	LD	275.2	114.6	114.6	0.0	0.0
R6/111	BEDROOM	178.7	121.9	121.2	0.7	0.6
R7/111	BEDROOM	178.7	118.7	118.7	0.0	0.0
R8/111	LD	184.7	79.1	79.1	0.0	0.0
R10/111	LD	244.0	176.8	176.8	0.0	0.0
R11/111	LD	212.4	124.9	124.9	0.0	0.0
R12/111	BEDROOM	80.6	65.8	65.8	0.0	0.0
R13/111	BEDROOM	59.9	47.2	47.2	0.0	0.0
R14/111	BEDROOM	143.2	53.4	53.4	0.0	0.0
R15/111	LD	239.1	59.1	58.8	0.2	0.3
R16/111	LD	230.1	46.9	46.9	0.0	0.0
R1/112	LD	145.6	142.3	142.3	0.0	0.0
R2/112	KITCHEN?	117.1	104.2	104.2	0.0	0.0
R3/112	BEDROOM	142.5	114.0	114.0	0.0	0.0
R4/112	LD	251.4	137.0	137.0	0.0	0.0
R5/112	LD	275.2	150.9	150.5	0.4	0.3
R6/112	BEDROOM	118.0	88.5	86.9	1.5	1.7
R7/112	BEDROOM	114.8	87.4	87.4	0.0	0.0
R8/112	LD	184.7	97.2	95.2	2.0	2.1
R9/112	BEDROOM	119.9	91.0	90.9	0.1	0.1
R10/112	LD	244.0	181.7	181.7	0.0	0.0
R11/112	LD	212.4	135.5	135.5	0.0	0.0
R12/112	BEDROOM	80.6	79.7	79.7	0.0	0.0
R13/112	BEDROOM	59.9	59.5	59.5	0.0	0.0
R14/112	BEDROOM	143.2	125.3	125.3	0.0	0.0
R15/112	LD	239.1	202.2	202.2	0.0	0.0
R16/112	LD	230.1	169.3	169.0	0.3	0.2
R1/113	LD	145.6	142.4	142.4	0.0	0.0
R2/113	KITCHEN?	117.1	114.7	114.7	0.0	0.0
R3/113	BEDROOM	142.5	123.4	123.4	0.0	0.0
R4/113	LD	251.4	161.0	161.0	0.0	0.0
R5/113	LD	275.2	174.6	174.6	0.0	0.0
R6/113	BEDROOM	118.0	103.1	99.2	3.9	3.8
R7/113	BEDROOM	114.8	101.6	101.5	0.2	0.2

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R8/113	LD	184.7	121.1	116.0	5.0	4.1
R9/113	BEDROOM	119.9	106.9	105.8	1.0	0.9
R10/113	LD	244.0	183.9	183.9	0.0	0.0
R11/113	LD	212.4	137.6	137.6	0.0	0.0
R12/113	BEDROOM	80.6	79.6	79.6	0.0	0.0
R13/113	BEDROOM	59.9	59.6	59.6	0.0	0.0
R14/113	BEDROOM	143.2	135.1	135.1	0.0	0.0
R15/113	LD	239.1	213.7	213.3	0.4	0.2
R16/113	LD	230.1	180.3	180.0	0.3	0.2
R1/114	LD	145.6	142.4	142.4	0.0	0.0
R2/114	KITCHEN?	117.1	115.3	115.3	0.0	0.0
R3/114	BEDROOM	142.5	124.9	124.9	0.0	0.0
R4/114	LD	251.4	193.9	193.9	0.0	0.0
R5/114	LD	275.2	203.7	203.5	0.2	0.1
R6/114	BEDROOM	118.0	116.0	113.8	2.2	1.9
R7/114	BEDROOM	114.8	114.8	114.8	0.0	0.0
R8/114	LD	184.7	171.6	170.4	1.3	0.8
R9/114	BEDROOM	119.9	119.6	119.6	0.0	0.0
R10/114	LD	244.0	189.1	189.1	0.0	0.0
R11/114	LD	212.4	145.2	145.2	0.0	0.0
R12/114	BEDROOM	80.6	79.8	79.8	0.0	0.0
R13/114	BEDROOM	59.9	59.6	59.6	0.0	0.0
R14/114	BEDROOM	143.2	140.8	140.8	0.0	0.0
R15/114	LD	239.1	224.5	224.5	0.0	0.0
R16/114	LD	230.1	194.5	194.0	0.5	0.3
R1/115	LD	145.6	142.4	142.4	0.0	0.0
R2/115	KITCHEN?	117.1	115.8	115.8	0.0	0.0
R3/115	BEDROOM	142.5	126.3	126.3	0.0	0.0
R4/115	LD	251.4	182.1	182.1	0.0	0.0
R5/115	LD	275.2	190.8	190.8	0.0	0.0
R6/115	BEDROOM	118.0	115.9	115.9	0.0	0.0
R7/115	BEDROOM	114.8	111.1	111.1	0.1	0.1
R8/115	LD	184.7	181.8	181.8	0.0	0.0
R9/115	BEDROOM	119.9	118.8	118.8	0.0	0.0
R10/115	LD	244.0	196.5	196.5	0.0	0.0
R11/115	LD	212.4	168.5	168.5	0.0	0.0
R12/115	BEDROOM	80.6	80.2	80.2	0.0	0.0
R13/115	BEDROOM	59.9	59.0	59.0	0.0	0.0
R14/115	BEDROOM	143.2	143.1	143.1	0.0	0.0
R15/115	LD	239.1	234.7	234.7	0.0	0.0

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NSL ANALYSIS
EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R16/115	LD	230.1	221.4	221.4	0.0	0.0
R1/116	LKD	404.2	400.0	398.1	1.9	0.5
R2/116	BEDROOM?	176.5	173.8	173.8	0.0	0.0
R3/116	BEDROOM?	192.2	190.6	190.6	0.0	0.0
R4/116	LKD?	418.6	414.7	414.7	0.0	0.0
Schafer House, University College						
R1/120		125.8	23.9	23.9	0.0	0.0
R2/120		99.8	22.4	22.4	0.0	0.0
R3/120		137.4	33.5	33.5	0.0	0.0
R4/120		217.7	101.1	99.9	1.2	1.2
R5/120		229.8	96.4	95.7	0.7	0.7
R6/120		223.7	103.1	103.1	0.0	0.0
R7/120		136.8	62.2	62.2	0.0	0.0
R1/121		125.8	30.4	30.4	0.0	0.0
R2/121		99.8	29.6	29.6	0.0	0.0
R3/121		137.4	41.7	41.7	0.0	0.0
R4/121		217.7	124.8	121.1	3.7	3.0
R5/121		229.8	110.2	110.2	0.0	0.0
R6/121		223.7	121.6	121.4	0.2	0.2
R7/121		136.8	71.4	71.4	0.0	0.0
R1/122		125.8	46.1	46.1	0.0	0.0
R2/122		99.8	43.5	43.5	0.1	0.2
R3/122		137.4	61.7	60.9	0.8	1.3
R4/122		217.7	146.5	142.5	4.0	2.7
R5/122		229.8	131.2	131.2	0.0	0.0
R6/122		223.7	146.5	146.5	0.0	0.0
R7/122		136.8	83.1	83.1	0.0	0.0
R1/123		125.8	94.1	93.8	0.3	0.3
R2/123		99.8	75.3	75.0	0.3	0.4
R3/123		137.4	87.3	86.5	0.9	1.0
R4/123		217.7	158.3	156.8	1.6	1.0
R5/123		229.8	148.0	148.0	0.0	0.0
R6/123		223.7	162.6	162.6	0.0	0.0
R7/123		136.8	95.3	95.0	0.2	0.2
R1/180	LKD	164.1	16.9	16.9	0.0	0.0
R2/180	BEDROOM	108.2	14.4	14.4	0.0	0.0
R3/180	BEDROOM	107.8	17.2	17.2	0.0	0.0
R4/180	BEDROOM	108.7	13.0	13.0	0.0	0.0

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R5/180	BEDROOM	106.5	14.1	14.1	0.0	0.0
R6/180	BEDROOM	107.9	13.8	13.8	0.0	0.0
R1/181	LKD	164.1	20.7	20.7	0.0	0.0
R2/181	BEDROOM	108.2	18.7	18.1	0.6	3.2
R3/181	BEDROOM	107.8	22.7	21.9	0.8	3.5
R4/181	BEDROOM	108.7	14.9	14.9	0.0	0.0
R5/181	BEDROOM	106.5	19.3	19.3	0.0	0.0
R6/181	BEDROOM	109.5	18.0	18.0	0.0	0.0
R1/182	LKD	164.1	26.4	26.4	0.0	0.0
R2/182	BEDROOM	108.2	22.9	21.8	1.1	4.8
R3/182	BEDROOM	107.8	27.9	25.6	2.2	7.9
R4/182	BEDROOM	108.7	17.9	17.9	0.0	0.0
R5/182	BEDROOM	106.5	25.1	25.1	0.0	0.0
R6/182	BEDROOM	109.5	21.7	21.7	0.0	0.0
R1/183	LKD	164.1	34.8	33.1	1.8	5.2
R2/183	BEDROOM	108.2	27.8	26.8	1.0	3.6
R3/183	BEDROOM	107.8	31.3	29.6	1.7	5.4
R4/183	BEDROOM	108.7	22.9	22.9	0.0	0.0
R5/183	BEDROOM	106.5	30.6	30.3	0.2	0.7
R6/183	BEDROOM	109.5	26.1	24.8	1.3	5.0
R1/184	LKD	164.1	47.0	45.9	1.1	2.3
R2/184	BEDROOM	108.2	41.2	40.9	0.3	0.7
R3/184	BEDROOM	107.8	42.4	38.6	3.7	8.7
R4/184	BEDROOM	108.7	33.3	32.2	1.1	3.3
R5/184	BEDROOM	106.5	40.3	37.9	2.4	6.0
R6/184	BEDROOM	109.5	31.7	28.7	3.0	9.5
R1/185	LKD	164.1	62.7	61.0	1.7	2.7
R2/185	BEDROOM	108.2	59.7	59.4	0.3	0.5
R3/185	BEDROOM	107.8	59.4	52.1	7.2	12.1
R4/185	BEDROOM	108.7	57.4	54.3	3.0	5.2
R5/185	BEDROOM	106.5	59.8	48.9	11.0	18.4
R6/185	BEDROOM	109.5	45.6	35.3	10.3	22.6
R1/186	LKD	164.1	73.9	72.9	1.0	1.4
R2/186	BEDROOM	108.2	78.8	78.7	0.1	0.1
R3/186	BEDROOM	107.8	76.8	67.9	8.9	11.6
R4/186	BEDROOM	108.7	83.5	78.0	5.5	6.6
R5/186	BEDROOM	106.5	86.3	67.2	19.1	22.1
R6/186	BEDROOM	109.5	78.6	57.7	20.8	26.5
R1/211	LKD	187.8	30.3	28.9	1.4	4.6
R2/211	BEDROOM	108.2	24.1	22.5	1.6	6.6

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R3/211	BEDROOM	108.3	26.8	26.2	0.6	2.2
R4/211	BEDROOM	108.2	23.1	22.9	0.2	0.9
R5/211	BEDROOM	108.1	25.6	25.1	0.5	2.0
R6/211	BEDROOM	108.4	25.9	25.1	0.7	2.7
R7/211	BEDROOM	108.3	28.9	26.3	2.6	9.0
R8/211	BEDROOM	108.1	25.5	25.2	0.3	1.2
R9/211	BEDROOM	108.3	27.2	27.1	0.1	0.4
R10/211	BEDROOM	108.3	25.4	25.2	0.2	0.8
R11/211	BEDROOM	108.2	26.3	26.3	0.0	0.0
R12/211	LKD	184.0	32.5	28.1	4.3	13.2
R1/212	LKD	187.8	28.5	27.0	1.5	5.3
R2/212	BEDROOM	108.2	21.9	20.6	1.3	5.9
R3/212	BEDROOM	108.3	24.7	24.3	0.5	2.0
R4/212	BEDROOM	108.2	20.9	20.8	0.1	0.5
R5/212	BEDROOM	108.1	23.6	23.5	0.1	0.4
R6/212	BEDROOM	108.4	23.7	23.3	0.4	1.7
R7/212	BEDROOM	108.3	24.4	24.0	0.5	2.0
R8/212	BEDROOM	108.1	22.2	22.2	0.0	0.0
R9/212	BEDROOM	108.3	24.5	24.5	0.0	0.0
R10/212	BEDROOM	108.3	24.6	24.6	0.0	0.0
R11/212	BEDROOM	108.2	24.2	24.2	0.0	0.0
R12/212	LKD	184.0	33.5	26.5	7.0	20.9
R1/213	LKD	187.8	31.3	29.9	1.4	4.5
R2/213	BEDROOM	108.2	24.5	23.1	1.3	5.3
R3/213	BEDROOM	108.3	26.7	26.1	0.6	2.2
R4/213	BEDROOM	108.2	23.8	23.5	0.2	0.8
R5/213	BEDROOM	108.1	25.8	25.3	0.5	1.9
R6/213	BEDROOM	108.4	26.2	25.6	0.7	2.7
R7/213	BEDROOM	108.3	26.3	25.3	1.0	3.8
R8/213	BEDROOM	108.1	25.8	25.8	0.0	0.0
R9/213	BEDROOM	108.3	28.0	28.0	0.0	0.0
R10/213	BEDROOM	108.3	28.0	28.0	0.0	0.0
R11/213	BEDROOM	108.2	27.3	27.3	0.0	0.0
R12/213	LKD	184.0	37.7	28.8	8.9	23.6
R1/214	LKD	187.8	35.1	33.2	1.9	5.4
R2/214	BEDROOM	108.2	28.3	26.5	1.8	6.4
R3/214	BEDROOM	108.3	30.0	29.1	1.0	3.3
R4/214	BEDROOM	108.2	27.3	26.7	0.6	2.2
R5/214	BEDROOM	108.1	28.7	28.0	0.7	2.4
R6/214	BEDROOM	108.4	29.4	28.5	0.9	3.1

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R7/214	BEDROOM	108.3	29.2	28.1	1.1	3.8
R8/214	BEDROOM	108.1	30.1	30.1	0.0	0.0
R9/214	BEDROOM	108.3	32.1	32.0	0.0	0.0
R10/214	BEDROOM	108.3	31.7	31.7	0.0	0.0
R11/214	BEDROOM	108.2	31.3	31.3	0.0	0.0
R12/214	LKD	184.0	40.3	34.3	5.9	14.6
R1/215	LKD	187.8	37.8	36.4	1.4	3.7
R2/215	BEDROOM	108.2	32.3	30.1	2.3	7.1
R3/215	BEDROOM	108.3	32.9	31.7	1.2	3.6
R4/215	BEDROOM	108.2	31.0	29.8	1.2	3.9
R5/215	BEDROOM	108.1	31.2	30.0	1.1	3.5
R6/215	BEDROOM	108.4	32.2	30.7	1.5	4.7
R7/215	BEDROOM	108.3	32.3	30.9	1.3	4.0
R8/215	BEDROOM	108.1	35.7	35.6	0.2	0.6
R9/215	BEDROOM	108.3	36.1	36.1	0.0	0.0
R10/215	BEDROOM	108.3	37.2	37.2	0.0	0.0
R11/215	BEDROOM	108.2	35.4	35.4	0.0	0.0
R12/215	LKD	184.0	42.3	38.3	4.0	9.5
R1/216	LKD	187.8	40.9	39.5	1.4	3.4
R2/216	BEDROOM	108.2	36.3	33.0	3.3	9.1
R3/216	BEDROOM	108.3	35.3	34.0	1.4	4.0
R4/216	BEDROOM	108.2	34.5	32.7	1.7	4.9
R5/216	BEDROOM	108.1	33.2	31.9	1.4	4.2
R6/216	BEDROOM	108.4	36.0	34.2	1.8	5.0
R7/216	BEDROOM	108.3	36.5	34.6	1.9	5.2
R8/216	BEDROOM	108.1	42.4	42.0	0.4	0.9
R9/216	BEDROOM	108.3	42.0	42.0	0.0	0.0
R10/216	BEDROOM	108.3	43.7	43.7	0.0	0.0
R11/216	BEDROOM	108.2	40.8	40.8	0.0	0.0
R12/216	LKD	184.0	46.0	41.6	4.4	9.6
R1/217	KD	134.4	56.5	55.0	1.6	2.8
R2/217	BEDROOM	201.0	81.6	78.5	3.1	3.8
R3/217	BEDROOM	192.5	69.9	66.8	3.1	4.4
R4/217	BEDROOM	157.0	59.7	56.5	3.2	5.4
R5/217	BEDROOM	171.5	63.9	60.6	3.3	5.2
R6/217	BEDROOM	207.0	88.9	88.7	0.2	0.2
R7/217	BEDROOM	180.7	80.0	78.8	1.2	1.5
R8/217	KD	136.6	77.6	49.8	27.8	35.8

164-166 Drummond Street

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R1/40	LIVINGROOM	296.4	60.8	56.9	3.9	6.4
R2/40	BEDROOM	221.1	55.8	55.8	0.0	0.0
R1/41	BEDROOM	182.0	79.9	57.6	22.3	27.9
R2/41	LIVINGROOM	252.4	66.2	60.5	5.6	8.5
R3/41	LIVINGROOM	218.0	57.4	57.4	0.0	0.0
R1/42	BEDROOM	182.0	97.1	62.0	35.2	36.3
R2/42	LIVINGROOM	252.4	72.7	65.8	6.9	9.5
R3/42	LIVINGROOM	218.0	63.8	63.8	0.0	0.0
R1/43	BEDROOM	182.0	128.9	68.3	60.6	47.0
R2/43	LIVINGROOM	252.4	79.8	74.1	5.7	7.1
R3/43	LIVINGROOM	218.0	71.3	71.2	0.1	0.1
R1/44	BEDROOM	182.0	138.7	76.0	62.8	45.3
R2/44	LIVINGROOM	252.4	86.7	81.6	5.2	6.0
R3/44	LIVINGROOM	218.0	81.9	81.7	0.2	0.2
R1/45	BEDROOM	182.0	142.6	85.4	57.2	40.1
R2/45	LIVINGROOM	252.4	98.8	92.0	6.8	6.9
R3/45	LIVINGROOM	218.0	91.8	91.3	0.5	0.5

175 Drummond Street

R1/51	BEDROOM	160.5	33.3	30.5	2.7	8.1
R2/51	BEDROOM	115.9	41.3	22.8	18.5	44.8
R1/52	BEDROOM	160.5	41.6	38.0	3.6	8.7
R2/52	BEDROOM	115.9	52.4	27.5	24.9	47.5
R1/53	BEDROOM	160.5	51.1	46.7	4.4	8.6
R2/53	BEDROOM	115.9	58.5	33.0	25.5	43.6
R1/54	BEDROOM	160.5	65.1	59.6	5.5	8.4
R2/54	BEDROOM	115.9	70.8	40.8	30.0	42.4
R1/55	BEDROOM	160.5	85.6	77.1	8.5	9.9
R2/55	BEDROOM	115.9	87.3	53.8	33.6	38.5
R1/56	BEDROOM	160.5	108.9	95.6	13.3	12.2
R2/56	BEDROOM	115.9	95.4	75.1	20.3	21.3
R1/57	BEDROOM	160.5	111.1	95.9	15.2	13.7
R2/57	BEDROOM	115.9	95.7	75.9	19.8	20.7

Triton Building

R1/1103	BEDROOM	111.0	5.0	5.0	0.0	0.0
R2/1103	LKD	243.9	10.0	10.0	0.0	0.0

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R3/1103	BEDROOM	97.4	1.0	0.9	0.1	10.0
R4/1103	BEDROOM	66.1	39.3	35.2	4.1	10.4
R5/1103	LKD	222.0	41.2	36.7	4.6	11.2
R6/1103	BEDROOM	103.0	7.2	7.2	0.0	0.0
R7/1103	LKD	249.1	22.5	22.5	0.0	0.0
R8/1103	BEDROOM	106.8	24.9	24.9	0.0	0.0
R1/1104	BEDROOM	111.0	8.6	8.6	0.0	0.0
R2/1104	LKD	243.9	22.7	22.7	0.0	0.0
R3/1104	BEDROOM	97.4	1.5	1.3	0.2	13.3
R4/1104	BEDROOM	66.1	47.2	41.9	5.3	11.2
R5/1104	LKD	222.0	48.8	44.2	4.6	9.4
R6/1104	BEDROOM	103.0	14.2	14.0	0.2	1.4
R7/1104	LKD	249.1	77.9	77.9	0.0	0.0
R8/1104	BEDROOM	106.8	64.4	64.4	0.0	0.0
R1/1105	BEDROOM	111.0	14.4	14.4	0.0	0.0
R2/1105	LKD	243.9	45.3	45.3	0.1	0.2
R3/1105	BEDROOM	97.4	7.6	7.0	0.6	7.9
R4/1105	BEDROOM	66.1	56.7	48.9	7.8	13.8
R5/1105	LKD	222.0	59.0	52.5	6.5	11.0
R6/1105	BEDROOM	103.0	29.1	28.7	0.4	1.4
R7/1105	LKD	249.1	80.2	80.2	0.0	0.0
R8/1105	BEDROOM	106.8	76.7	76.7	0.0	0.0
R1/1106	BEDROOM	111.0	22.5	22.5	0.0	0.0
R2/1106	LKD	243.9	103.4	102.9	0.5	0.5
R3/1106	BEDROOM	97.4	29.5	28.3	1.1	3.7
R4/1106	BEDROOM	66.1	62.7	53.5	9.2	14.7
R5/1106	LKD	222.0	72.8	61.9	10.8	14.8
R6/1106	BEDROOM	103.0	51.8	50.6	1.2	2.3
R7/1106	LKD	249.1	88.0	88.0	0.0	0.0
R8/1106	BEDROOM	106.8	76.4	76.4	0.0	0.0
R1/1107	BEDROOM	111.0	49.4	49.4	0.0	0.0
R2/1107	LKD	243.9	186.8	185.5	1.4	0.7
R3/1107	BEDROOM	97.4	72.2	69.3	2.9	4.0
R4/1107	BEDROOM	66.1	64.9	56.1	8.7	13.4
R5/1107	LKD	222.0	91.9	73.5	18.4	20.0
R6/1107	BEDROOM	103.0	73.3	68.6	4.7	6.4
R7/1107	LKD	249.1	92.0	92.0	0.0	0.0
R8/1107	BEDROOM	106.8	76.7	76.7	0.0	0.0
R1/1108	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1108	LKD	384.4	364.6	364.2	0.4	0.1

NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R3/1108	BEDROOM	121.8	115.5	95.2	20.3	17.6
R4/1108	BEDROOM	121.8	84.4	72.2	12.2	14.5
R5/1108	LKD	384.4	286.7	269.2	17.5	6.1
R6/1108	BEDROOM	152.0	117.5	117.5	0.0	0.0
R1/1109	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1109	LKD	384.4	377.4	372.9	4.5	1.2
R3/1109	BEDROOM	121.8	116.8	100.4	16.4	14.0
R4/1109	BEDROOM	121.8	84.4	72.3	12.1	14.3
R5/1109	LKD	384.4	326.5	303.7	22.7	7.0
R6/1109	BEDROOM	152.0	120.1	120.1	0.0	0.0
R1/1110	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1110	LKD	384.4	378.9	373.6	5.3	1.4
R3/1110	BEDROOM	121.8	116.8	100.9	15.9	13.6
R4/1110	BEDROOM	121.8	86.5	72.4	14.1	16.3
R5/1110	LKD	384.4	334.0	312.2	21.8	6.5
R6/1110	BEDROOM	152.0	122.1	122.1	0.0	0.0
R1/1111	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1111	LKD	384.4	381.4	376.6	4.8	1.3
R3/1111	BEDROOM	121.8	116.8	100.9	15.9	13.6
R4/1111	BEDROOM	121.8	95.0	79.9	15.0	15.8
R5/1111	LKD	384.4	362.1	341.6	20.5	5.7
R6/1111	BEDROOM	152.0	133.5	133.5	0.0	0.0
R1/1112	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1112	LKD	384.4	381.4	377.4	4.0	1.0
R3/1112	BEDROOM	121.8	116.8	101.1	15.7	13.4
R4/1112	BEDROOM	121.8	95.0	80.1	14.9	15.7
R5/1112	LKD	384.4	369.4	360.9	8.4	2.3
R6/1112	BEDROOM	152.0	133.1	133.1	0.0	0.0
R1/1113	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1113	LKD	397.8	393.9	388.4	5.5	1.4
R3/1113	BEDROOM	96.0	94.9	83.1	11.8	12.4
R4/1113	BEDROOM	108.0	93.8	73.6	20.2	21.5
R5/1113	BEDROOM	100.6	99.3	99.1	0.3	0.3
R6/1113	LKD	249.2	249.1	247.8	1.3	0.5
R7/1113	BEDROOM	96.4	89.4	89.4	0.0	0.0
R1/1114	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1114	LKD	397.8	393.9	388.4	5.5	1.4
R3/1114	BEDROOM	96.0	94.9	83.1	11.8	12.4
R4/1114	BEDROOM	108.0	93.8	73.9	19.9	21.2
R5/1114	BEDROOM	100.6	99.3	99.2	0.1	0.1

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R6/1114	LKD	249.2	249.1	247.5	1.6	0.6
R7/1114	BEDROOM	96.4	89.9	89.9	0.0	0.0
R1/1115	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1115	LKD	397.8	393.9	388.4	5.5	1.4
R3/1115	BEDROOM	96.0	94.9	83.1	11.8	12.4
R4/1115	BEDROOM	108.0	93.8	73.9	19.9	21.2
R5/1115	BEDROOM	100.6	99.3	99.2	0.1	0.1
R6/1115	LKD	249.2	249.1	248.7	0.4	0.2
R7/1115	BEDROOM	96.4	90.7	90.7	0.0	0.0
R1/1116	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1116	LKD	397.8	394.1	388.6	5.5	1.4
R3/1116	BEDROOM	96.0	94.9	83.4	11.5	12.1
R4/1116	BEDROOM	108.0	93.8	73.8	20.0	21.3
R5/1116	BEDROOM	100.6	99.4	99.3	0.1	0.1
R6/1116	LKD	249.2	249.1	248.5	0.6	0.2
R7/1116	BEDROOM	96.4	91.8	91.8	0.0	0.0
R1/1117	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1117	LKD	397.8	394.1	388.6	5.5	1.4
R3/1117	BEDROOM	96.0	94.9	83.5	11.4	12.0
R4/1117	BEDROOM	108.0	93.8	73.8	19.9	21.2
R5/1117	BEDROOM	100.6	99.4	99.3	0.1	0.1
R6/1117	LKD	249.2	249.1	248.8	0.3	0.1
R7/1117	BEDROOM	96.4	92.0	92.0	0.0	0.0
R1/1118	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1118	LKD	397.8	394.2	388.7	5.5	1.4
R3/1118	BEDROOM	96.0	94.9	83.5	11.4	12.0
R4/1118	BEDROOM	108.0	93.8	74.3	19.5	20.8
R5/1118	BEDROOM	100.6	99.5	99.4	0.1	0.1
R6/1118	LKD	249.2	249.1	248.7	0.5	0.2
R7/1118	BEDROOM	96.4	92.4	92.4	0.0	0.0
R1/1119	LKD	673.6	673.5	673.0	0.5	0.1
R2/1119	BEDROOM	91.7	89.8	79.6	10.2	11.4
R3/1119	BEDROOM	102.3	97.2	84.9	12.3	12.7
R4/1119	BEDROOM	217.7	214.5	214.3	0.2	0.1
R5/1119	BEDROOM	159.7	157.1	157.1	0.0	0.0
R1/1120	LKD	673.6	673.5	673.0	0.5	0.1
R2/1120	BEDROOM	91.7	89.8	79.6	10.2	11.4
R3/1120	BEDROOM	102.3	97.2	85.0	12.2	12.6
R4/1120	BEDROOM	217.7	214.5	214.3	0.2	0.1
R5/1120	BEDROOM	159.7	157.1	157.1	0.0	0.0

NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R1/1121	LKD	673.6	673.5	673.0	0.5	0.1
R2/1121	BEDROOM	91.7	89.8	79.8	10.0	11.1
R3/1121	BEDROOM	102.3	97.2	85.2	12.1	12.4
R4/1121	BEDROOM	217.7	214.5	214.3	0.2	0.1
R5/1121	BEDROOM	159.7	157.1	157.1	0.0	0.0
R1/1122	LIVINGROOM	673.6	673.5	673.0	0.5	0.1
R2/1122	LIVINGROOM	226.6	225.2	225.2	0.0	0.0
R3/1122	DINING	356.2	355.8	355.8	0.0	0.0
R4/1122	KITCHEN	191.7	186.0	186.0	0.0	0.0
R1/1123	BEDROOM	133.4	130.8	130.8	0.0	0.0
R2/1123	BEDROOM	406.6	393.6	393.6	0.0	0.0
R3/1123	BEDROOM	178.9	176.4	165.4	11.1	6.3
R4/1123	BEDROOM	226.9	223.7	223.2	0.5	0.2
R5/1123	BEDROOM	131.6	129.0	129.0	0.0	0.0
R1/1124	LIVINGROOM	627.3	627.2	626.7	0.5	0.1
R2/1124	LIVINGROOM	188.9	187.5	187.5	0.0	0.0
R3/1124	DINING	387.4	387.0	387.0	0.0	0.0
R4/1124	KITCHEN	168.2	164.9	164.6	0.2	0.1

40-60 Hampstead Road

R1/241	ASSUMED	149.4	16.1	13.2	2.9	18.0
R2/241	ASSUMED	89.6	0.0	0.0	0.0	0.0
R3/241	ASSUMED	146.8	2.2	0.0	2.2	100.0
R4/241	ASSUMED	186.9	0.0	0.0	0.0	0.0
R5/241	ASSUMED	119.0	17.8	17.8	0.0	0.0
R7/241	ASSUMED	134.7	36.1	33.8	2.3	6.4
R8/241	ASSUMED	79.9	18.4	16.7	1.7	9.2
R9/241	ASSUMED	98.8	31.3	31.3	0.0	0.0
R10/241	ASSUMED	103.6	18.7	14.8	4.0	21.4
R11/241	ASSUMED	80.3	19.2	18.7	0.4	2.1
R12/241	ASSUMED	133.1	34.7	34.7	0.1	0.3
R13/241	ASSUMED	138.1	28.6	27.0	1.6	5.6
R14/241	ASSUMED	80.4	16.9	16.7	0.3	1.8
R15/241	ASSUMED	98.5	22.0	22.0	0.0	0.0
R16/241	ASSUMED	103.4	20.1	18.2	1.8	9.0
R17/241	ASSUMED	80.2	18.2	17.6	0.6	3.3
R18/241	ASSUMED	134.3	29.6	27.7	2.0	6.8
R1/242	ASSUMED	168.8	29.5	24.7	4.9	16.6
R2/242	ASSUMED	89.6	0.1	0.0	0.1	100.0

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R3/242	ASSUMED	146.8	5.2	0.0	5.2	100.0
R4/242	ASSUMED	186.9	0.0	0.0	0.0	0.0
R5/242	ASSUMED	119.0	21.8	21.8	0.0	0.0
R6/242	ASSUMED	162.2	12.6	8.7	3.9	31.0
R8/242	ASSUMED	86.4	0.0	0.0	0.0	0.0
R9/242	ASSUMED	83.0	0.0	0.0	0.0	0.0
R11/242	ASSUMED	163.5	2.5	0.0	2.5	100.0
R12/242	ASSUMED	159.9	7.6	4.6	2.9	38.2
R14/242	ASSUMED	86.1	0.0	0.0	0.0	0.0
R15/242	ASSUMED	81.1	0.3	0.3	0.0	0.0
R17/242	ASSUMED	161.0	10.9	10.7	0.2	1.8
R1/243	ASSUMED	174.4	86.1	80.6	5.5	6.4
R2/243	ASSUMED	89.6	0.1	0.0	0.1	100.0
R3/243	ASSUMED	146.8	10.3	4.8	5.5	53.4
R4/243	ASSUMED	186.9	0.0	0.0	0.0	0.0
R5/243	ASSUMED	119.0	29.5	29.5	0.0	0.0
R6/243	ASSUMED	156.2	69.2	65.0	4.2	6.1
R9/243	ASSUMED	159.9	69.7	65.7	4.0	5.7
R10/243	ASSUMED	163.5	74.2	72.6	1.6	2.2
R13/243	ASSUMED	161.0	93.4	93.0	0.4	0.4
R1/244	ASSUMED	177.2	98.9	93.8	5.1	5.2
R2/244	ASSUMED	89.6	0.7	0.0	0.7	100.0
R3/244	ASSUMED	146.8	16.5	11.1	5.4	32.7
R4/244	ASSUMED	186.9	0.0	0.0	0.0	0.0
R5/244	ASSUMED	119.0	58.6	58.6	0.0	0.0
R7/244	ASSUMED	132.1	73.7	70.5	3.2	4.3
R9/244	ASSUMED	173.1	95.2	94.5	0.7	0.7
R10/244	ASSUMED	159.9	82.8	78.8	3.9	4.7
R13/244	ASSUMED	161.0	101.1	100.6	0.5	0.5
R1/245	ASSUMED	149.4	76.7	68.9	7.7	10.0
R2/245	ASSUMED	89.6	56.3	50.1	6.1	10.8
R3/245	ASSUMED	146.8	94.3	88.6	5.7	6.0
R4/245	ASSUMED	186.9	0.0	0.0	0.0	0.0
R5/245	ASSUMED	119.0	70.5	70.5	0.0	0.0
R6/245	ASSMUED	75.4	75.3	75.3	0.0	0.0
R1/246	ASSUMED	149.4	109.6	109.6	0.0	0.0
R2/246	ASSUMED	89.6	61.0	54.5	6.5	10.7
R3/246	ASSUMED	146.8	111.9	109.1	2.9	2.6
R4/246	ASSUMED	186.9	14.4	13.5	0.9	6.3
R5/246	ASSUMED	119.0	88.8	88.8	0.0	0.0

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R1/247	ASSUMED	120.9	77.1	70.5	6.6	8.6
1-6 Tolmers Square						
R1/10	ASSUMED_LIVINGROOM	162.1	133.5	126.6	6.9	5.2
R2/10	ASSUMED_LIVINGROOM	162.1	129.9	127.5	2.4	1.8
R3/10	ASSUMED_LIVINGROOM	162.1	147.8	146.9	0.9	0.6
R4/10	ASSUMED	85.4	79.8	78.1	1.7	2.1
R5/10	ASSUMED_LIVINGROOM	162.1	148.9	148.1	0.8	0.5
R6/10	ASSUMED_LIVINGROOM	162.1	137.9	137.8	0.1	0.1
R7/10	ASSUMED_LIVINGROOM	162.1	153.8	153.3	0.4	0.3
R8/10	ASSUMED_LIVINGROOM	213.9	187.4	182.2	5.2	2.8
R9/10	ASSUMED	103.7	90.2	87.6	2.6	2.9
R10/10	ASSUMED	103.8	95.2	93.8	1.3	1.4
R1/11	ASSUMED_BEDROOM	134.8	109.5	102.4	7.2	6.6
R2/11	ASSUMED_BEDROOM	71.9	69.5	66.4	3.1	4.5
R3/11	ASSUMED_BEDROOM	71.9	69.8	67.2	2.6	3.7
R4/11	ASSUMED_BEDROOM	134.8	110.4	108.0	2.4	2.2
R5/11	ASSUMED_BEDROOM	134.8	116.6	115.2	1.4	1.2
R6/11	ASSUMED_BEDROOM	71.9	68.9	67.1	1.8	2.6
R7/11	ASSUMED_BEDROOM	71.9	68.4	66.8	1.5	2.2
R8/11	ASSUMED_BEDROOM	134.8	121.0	120.3	0.7	0.6
R9/11	ASSUMED_BEDROOM	134.8	114.2	112.0	2.2	1.9
R10/11	ASSUMED_BEDROOM	71.9	68.3	67.6	0.7	1.0
R11/11	ASSUMED	78.8	72.0	70.9	1.2	1.7
R12/11	ASSUMED_BEDROOM	71.9	66.6	64.7	1.9	2.9
R13/11	ASSUMED_BEDROOM	134.8	111.5	108.2	3.2	2.9
R14/11	ASSUMED_BEDROOM	134.8	113.8	111.3	2.6	2.3
R15/11	ASSUMED_BEDROOM	71.9	69.3	67.6	1.8	2.6
R16/11	ASSUMED_BEDROOM	71.9	66.3	64.8	1.4	2.1
R17/11	ASSUMED_BEDROOM	188.8	157.3	150.4	6.9	4.4
R18/11	ASSUMED_BEDROOM	133.3	93.8	89.2	4.6	4.9
R19/11	ASSUMED_BEDROOM	64.0	62.4	62.4	0.0	0.0
R20/11	ASSUMED_BEDROOM	59.8	58.1	57.7	0.4	0.7
R21/11	ASSUMED_BEDROOM	124.1	110.9	110.9	0.0	0.0
R1/12	RECEPTION	194.0	184.5	180.4	4.1	2.2
R2/12	RECEPTION	186.9	177.5	174.0	3.4	1.9
R3/12	RECEPTION	186.8	178.6	177.6	0.9	0.5
R4/12	RECEPTION	186.6	176.2	172.1	4.1	2.3
R5/12	RECEPTION	169.3	158.6	153.1	5.4	3.4

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R6/12	ASSUMED	77.9	68.2	66.9	1.4	2.1
R7/12	RECEPTION	186.6	166.1	162.5	3.7	2.2
R8/12	RECEPTION	186.8	174.8	172.7	2.1	1.2
R9/12	RECEPTION	253.7	224.1	216.1	8.0	3.6
R10/12	RECEPTION	151.4	103.2	93.0	10.2	9.9
R11/12	RECEPTION	150.9	117.5	117.5	0.0	0.0
R1/13	BEDROOM	164.3	131.2	124.7	6.5	5.0
R2/13	BEDROOM	65.2	63.2	62.4	0.9	1.4
R3/13	BEDROOM	65.2	63.3	63.1	0.3	0.5
R4/13	BEDROOM	139.9	118.4	113.2	5.2	4.4
R5/13	BEDROOM	140.0	118.1	114.0	4.1	3.5
R6/13	BEDROOM	65.2	63.3	62.9	0.4	0.6
R7/13	BEDROOM	65.2	62.9	62.0	0.9	1.4
R8/13	BEDROOM	156.9	123.8	119.1	4.7	3.8
R9/13	BEDROOM	140.0	116.9	111.6	5.2	4.4
R10/13	BEDROOM	73.3	70.4	69.1	1.3	1.8
R11/13	ASSUMED	66.2	60.2	59.4	0.8	1.3
R12/13	BEDROOM	48.7	46.1	45.8	0.2	0.4
R13/13	BEDROOM	156.9	124.4	120.8	3.6	2.9
R14/13	BEDROOM	140.0	107.8	105.9	1.9	1.8
R15/13	BEDROOM	73.3	69.8	68.1	1.8	2.6
R16/13	BEDROOM	48.7	47.8	47.5	0.2	0.4
R17/13	BEDROOM	156.9	130.3	128.2	2.1	1.6
R18/13	ASSUMED_BEDROOM	101.4	96.6	94.8	1.8	1.9
R19/13	ASSUMED_BEDROOM	93.1	85.5	84.1	1.4	1.6
183 NORTH GOWER STREET						
R1/740		102.3	81.4	81.4	0.0	0.0
R2/740		17.7	8.2	8.2	0.0	0.0
R3/740		61.1	37.5	37.5	0.0	0.0
R4/740		59.3	28.0	28.0	0.0	0.0
R1/741		102.3	79.1	79.1	0.0	0.0
R2/741		17.7	9.1	9.1	0.0	0.0
R3/741		61.1	48.5	48.5	0.0	0.0
R4/741		59.3	32.2	32.2	0.0	0.0
R1/742		102.3	86.0	86.0	0.0	0.0
R2/742		17.7	10.8	10.8	0.0	0.0
R3/742		61.1	44.9	44.9	0.0	0.0
R4/742		59.3	35.5	35.5	0.0	0.0

NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R1/743		102.3	90.0	90.0	0.0	0.0
R4/743		59.3	37.3	37.3	0.0	0.0
R1/794		17.7	14.8	14.8	0.0	0.0
R2/794		61.1	53.3	53.3	0.0	0.0
Warren Court, Euston Road						
R1/201	STUDIO	477.6	368.9	349.9	19.1	5.2
R2/201	STUDIO	175.7	172.4	169.8	2.5	1.5
R3/201	KITCHEN	35.1	33.1	33.1	0.0	0.0
R5/201	BEDROOM	134.9	131.3	127.9	3.4	2.6
R6/201	LKD	209.4	171.6	165.4	6.3	3.7
R7/201	BEDROOM	129.7	127.6	127.6	0.0	0.0
R8/201	BEDROOM	114.1	113.5	113.5	0.0	0.0
R11/201	KITCHEN	50.3	0.0	0.0	0.0	0.0
R1/202	KD	315.5	290.1	273.9	16.2	5.6
R2/202	STUDIO	175.7	172.4	170.5	1.9	1.1
R3/202	KITCHEN	35.1	33.1	33.1	0.0	0.0
R6/202	KITCHEN	55.9	44.9	39.6	5.3	11.8
R7/202	STUDIO	237.4	185.4	180.0	5.5	3.0
R8/202	RECEPTION	201.7	199.5	199.3	0.3	0.2
R11/202	KITCHEN	50.3	5.6	5.6	0.0	0.0
R1/203	RECEPTION	238.3	229.2	219.5	9.7	4.2
R2/203	STUDIO	175.7	171.5	169.5	1.9	1.1
R3/203	KITCHEN	35.1	33.1	33.1	0.0	0.0
R6/203	KITCHEN	55.9	44.9	39.8	5.0	11.1
R7/203	STUDIO	232.6	226.1	225.7	0.4	0.2
R10/203	KITCHEN	50.3	9.6	9.6	0.0	0.0
R11/203	BEDROOM	121.6	39.1	39.1	0.0	0.0
R1/204	RECEPTION	238.3	230.3	220.6	9.8	4.3
R2/204	STUDIO	175.7	172.4	170.5	1.9	1.1
R3/204	KITCHEN	35.1	33.2	33.2	0.0	0.0
R6/204	KITCHEN	55.9	44.9	39.8	5.0	11.1
R7/204	STUDIO	232.6	227.0	225.8	1.1	0.5
R10/204	KITCHEN	50.3	24.9	24.9	0.0	0.0
R11/204	BEDROOM	121.6	65.0	65.0	0.0	0.0
R1/205	RECEPTION	238.3	230.3	220.5	9.9	4.3
R2/205	STUDIO	175.7	172.4	170.0	2.4	1.4
R3/205	KITCHEN	35.1	33.1	33.1	0.0	0.0
R6/205	KITCHEN	55.9	44.9	39.0	5.8	12.9

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R7/205	STUDIO	232.6	227.0	225.7	1.2	0.5
R10/205	KITCHEN	50.3	47.4	44.9	2.5	5.3
R11/205	BEDROOM	121.6	118.4	115.9	2.5	2.1
R2/206	BEDROOM	136.0	128.7	128.7	0.0	0.0
301-305 Euston Road & 69-70 Warren Street						
R5/483	ASSUMED_HALF_DEPTH	281.0	246.4	236.0	10.4	4.2
R1/484	ASSUMED	119.1	100.5	98.2	2.3	2.3
Lizmans House, 321 Euston Road						
R1/431	ASSUMED	147.4	118.4	118.4	0.0	0.0
R2/431	LD	162.6	124.8	124.8	0.0	0.0
R3/431	BEDROOM	52.0	50.5	50.5	0.0	0.0
R4/431	BEDROOM	126.0	111.4	110.5	0.9	0.8
R5/431	ASSUMED	97.7	79.7	79.4	0.3	0.4
R6/431	ASSUMED	148.7	136.7	136.7	0.0	0.0
R7/431	ASSUMED	149.3	96.7	96.5	0.2	0.2
R1/432	ASSUMED	147.4	123.7	123.7	0.0	0.0
R2/432	LD	162.6	132.1	132.1	0.0	0.0
R3/432	BEDROOM	52.0	50.6	50.6	0.0	0.0
R4/432	BEDROOM	126.0	114.7	113.8	0.9	0.8
R5/432	ASSUMED	97.7	84.3	83.9	0.4	0.5
R6/432	ASSUMED	148.7	141.9	141.9	0.0	0.0
R7/432	ASSUMED	149.3	109.6	109.4	0.2	0.2
R1/433	ASSUMED	147.4	134.3	134.3	0.0	0.0
R2/433	LD	162.6	147.1	147.1	0.0	0.0
R3/433	BEDROOM	52.0	50.6	50.6	0.0	0.0
R4/433	BEDROOM	126.0	119.6	118.8	0.9	0.8
R5/433	ASSUMED	97.7	92.1	91.7	0.4	0.4
R6/433	ASSUMED	148.7	145.9	145.9	0.0	0.0
R7/433	ASSUMED	149.3	119.4	119.1	0.3	0.3
R1/434	ASSUMED	147.4	144.8	144.8	0.0	0.0
R2/434	ASSUMED	151.6	150.4	150.4	0.0	0.0
R3/434	ASSUMED	100.6	98.2	98.2	0.0	0.0
R4/434	ASSUMED	132.9	130.5	130.1	0.4	0.3
R5/434	ASSUMED	97.7	96.2	95.8	0.4	0.4
R6/434	ASSUMED	148.7	148.1	148.1	0.0	0.0
R7/434	ASSUMED	149.3	130.4	130.1	0.4	0.3

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NSL ANALYSIS

EUSTON TOWER, LONDON
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Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R1/435	ASSUMED	147.4	146.6	146.6	0.0	0.0
R2/435	LD	202.5	184.2	184.2	0.0	0.0
R3/435	BEDROOM	65.3	62.6	62.5	0.1	0.2
R4/435	BEDROOM	56.1	55.1	55.1	0.0	0.0
R5/435	BEDROOM	102.3	93.7	90.0	3.7	3.9
R6/435	ASSUMED	148.7	148.2	148.2	0.0	0.0
R7/435	ASSUMED	149.3	141.9	141.5	0.4	0.3
R1/436	ASSUMED	147.4	146.9	146.9	0.0	0.0
R2/436	ASSUMED	151.6	150.9	150.9	0.0	0.0
R3/436	ASSUMED	100.6	99.0	99.0	0.0	0.0
R4/436	ASSUMED	132.9	130.9	130.5	0.4	0.3
R5/436	ASSUMED	97.7	96.4	96.0	0.4	0.4
R6/436	ASSUMED	148.7	148.2	148.2	0.0	0.0
R7/436	ASSUMED	149.3	148.5	148.5	0.0	0.0
56 Warren Street (Assumed windows)						
R2/631	KITCHEN	114.1	97.3	97.3	0.1	0.1
R2/632	KITCHEN	114.1	103.2	102.7	0.5	0.5
R2/633	KITCHEN	114.1	70.3	69.4	0.9	1.3
57 Warren Street (Assumed windows)						
R1/621	BEDROOM	266.4	183.0	182.7	0.3	0.2
R1/622	LIVINGROOM	334.6	228.5	227.8	0.7	0.3
R1/623	BEDROOM	110.3	65.9	64.9	1.0	1.5
R2/623	BEDROOM	136.2	65.5	65.0	0.4	0.6
58 Warren Street (Assumed windows)						
R1/611	ASSUMED_BEDROOM	259.8	177.6	177.6	0.0	0.0
R1/612	ASSUMED_LIVINGROOM	325.9	220.0	219.8	0.1	0.0
R1/613	ASSUMED_BEDROOM	102.9	59.6	59.6	0.0	0.0
R2/613	ASSUMED_BEDROOM	135.5	63.0	63.0	0.0	0.0
59 Warren Street						
R1/161	STUDIO	244.8	134.8	134.8	0.0	0.0
R1/162	LIVINGROOM	266.4	128.2	127.9	0.3	0.2
R1/163	BEDROOM	114.3	29.3	29.1	0.3	1.0

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NSL ANALYSIS

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Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R2/163	BEDROOM	81.2	35.4	35.1	0.3	0.8
R1/164	ASSUMED	65.0	63.3	63.3	0.0	0.0
60-61 Warren Street						
R1/151	BEDROOM	158.8	65.2	65.2	0.0	0.0
R2/151	BEDROOM	124.6	30.1	30.1	0.0	0.0
R3/151	KITCHEN	75.8	18.7	18.7	0.0	0.0
R1/152	BEDROOM	83.4	24.7	24.4	0.3	1.2
R2/152	BEDROOM	72.0	21.6	21.6	0.0	0.0
R3/152	BEDROOM	124.6	27.6	27.3	0.3	1.1
R4/152	KITCHEN	75.8	18.0	18.0	0.0	0.0
R1/153	ASSUMED	83.4	22.1	22.1	0.0	0.0
R2/153	ASSUMED	72.0	19.2	19.2	0.0	0.0
R3/153	ASSUMED	124.6	24.5	24.2	0.3	1.2
R4/153	ASSUMED	75.8	15.2	15.2	0.0	0.0
R1/154	ASSUMED	225.3	138.3	136.3	2.0	1.4
62 Warren Street						
R1/140	BEDROOM	156.3	38.6	38.6	0.0	0.0
R1/141	LIVINGROOM	158.4	50.6	50.1	0.5	1.0
R1/142	LIVINGROOM	265.6	48.1	47.6	0.5	1.0
R1/143	BEDROOM	104.8	22.0	22.0	0.0	0.0
R2/143	BEDROOM	76.2	15.1	14.8	0.3	2.0
R1/144	ASSUMED	58.3	54.6	52.0	2.6	4.8
63-68 Warren Street						
R1/129	BEDROOM	107.4	4.4	4.4	0.0	0.0
R2/129	BEDROOM	104.9	4.1	4.1	0.0	0.0
R1/130	ASSUMED	223.2	31.7	31.7	0.0	0.0
R2/130	ASSUMED	233.8	38.2	38.2	0.0	0.0
R3/130	ASSUMED	249.0	40.2	40.2	0.0	0.0
R4/130	ASSUMED	248.4	41.4	41.4	0.0	0.0
R5/130	KD	167.5	24.3	24.3	0.0	0.0
R6/130	KD	167.5	22.9	22.9	0.0	0.0
R1/131	ASSUMED	223.2	62.4	60.2	2.2	3.5
R2/131	ASSUMED	233.8	64.9	64.9	0.0	0.0
R3/131	ASSUMED	249.0	71.1	70.2	0.9	1.3

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NSL ANALYSIS

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Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R4/131	ASSUMED	248.4	71.2	71.2	0.0	0.0
R5/131	BEDROOM	93.1	25.5	25.5	0.0	0.0
R7/131	BEDROOM	92.4	25.7	25.7	0.0	0.0
R1/132	ASSUMED	223.2	79.7	75.7	4.0	5.0
R2/132	ASSUMED	233.8	87.0	87.0	0.0	0.0
R3/132	ASSUMED	249.0	86.8	86.8	0.0	0.0
R4/132	ASSUMED	248.4	78.8	78.6	0.2	0.3
R5/132	KD	185.3	69.7	69.7	0.0	0.0
R6/132	KD	184.2	67.6	66.9	0.7	1.0
R1/133	ASSUMED	223.2	135.9	125.4	10.4	7.7
R2/133	ASSUMED	233.8	102.8	102.8	0.0	0.0
R3/133	ASSUMED	249.0	78.3	78.1	0.2	0.3
R4/133	ASSUMED	248.4	66.8	65.9	1.0	1.5
R5/133	BEDROOM	159.7	63.6	63.6	0.0	0.0
R6/133	BEDROOM	159.9	61.8	61.6	0.2	0.3
71 Warren Street						
R1/171	ASSUMED	235.1	9.9	9.9	0.0	0.0
R1/172	ASSUMED	235.1	24.4	23.7	0.6	2.5
R1/173	ASSUMED	235.1	88.9	86.4	2.6	2.9
9 Warren Street						
R2/1041	KITCHEN	92.2	69.0	68.6	0.4	0.6
10 Warren Street						
R2/1031	KITCHEN	92.2	74.9	72.7	2.2	2.9
11 Warren Street						
R2/1021	KITCHEN	92.2	83.8	79.8	4.0	4.8
12 Warren Street						
R2/1011	KITCHEN	92.2	86.4	83.6	2.7	3.1
13-14 Warren Street & 118-120 Whitfield Street						

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	Loss sq ft	%Loss
R1/1001	ASSUMED	317.0	302.5	302.5	0.0	0.0
R2/1001	ASSUMED	214.0	184.3	181.8	2.5	1.4
R3/1001	ASSUMED	198.7	169.8	167.2	2.5	1.5
R1/1002	ASSUMED	317.0	308.5	308.3	0.2	0.1
R2/1002	ASSUMED	214.0	204.1	200.0	4.1	2.0
R3/1002	ASSUMED	198.7	185.8	182.7	3.1	1.7
R1/1003	ASSUMED	271.5	245.0	243.6	1.3	0.5
R2/1003	ASSUMED	199.6	177.6	177.1	0.4	0.2
R3/1003	ASSUMED	180.6	163.0	158.9	4.1	2.5
15 Warren Street & 161 Whitfield Street						
R1/1502	ASSUMED_RESI	143.6	137.1	137.0	0.1	0.1
R2/1502	ASSUMED_RESI	115.3	114.4	114.4	0.0	0.0
R3/1502	ASSUMED_RESI	127.0	119.2	118.3	0.9	0.8
R1/1503	ASSUMED_RESI	143.6	137.0	136.8	0.2	0.1
R2/1503	ASSUMED_RESI	115.3	114.4	114.4	0.0	0.0
R3/1503	ASSUMED_RESI	127.0	118.4	117.3	1.1	0.9
R1/1601	ASSUMED	112.3	90.0	90.0	0.0	0.0
R2/1601	ASSUMED	93.4	81.8	81.8	0.0	0.0
R1/1602	ASSUMED	112.3	110.1	110.1	0.1	0.1
R2/1602	ASSUMED	93.4	92.3	92.3	0.0	0.0
R1/1603	LIVINGROOM	206.8	203.1	202.9	0.2	0.1
R1/1604	UNKNOWN	37.2	35.4	35.4	0.0	0.0
R3/1604	UNKNOWN	210.6	209.9	209.9	0.0	0.0
16 Warren Street						
R1/1709	BEDROOM_ASSUMED	143.0	73.8	73.8	0.0	0.0
R2/1710	BEDROOM_ASSUMED	143.0	106.0	106.0	0.0	0.0
R1/1711	ASSUMED	202.5	201.1	201.1	0.0	0.0
R1/1712	ASSUMED	202.5	201.1	201.1	0.0	0.0
R1/1713	BEDROOM	202.5	199.5	199.5	0.0	0.0
R1/1714	LKD	253.9	253.9	253.9	0.0	0.0
17 Warren Street						
R1/1719	BEDROOM_ASSUMED	180.5	91.1	91.1	0.0	0.0
R1/1720	BEDROOM_ASSUMED	180.5	112.1	112.1	0.0	0.0
R1/1721	ASSUMED	237.7	235.0	235.0	0.0	0.0

NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	Loss sq ft	%Loss
R1/1722	ASSUMED	237.7	235.0	235.0	0.0	0.0
R1/1723	BEDROOM	173.2	171.7	171.7	0.0	0.0
R2/1723	BEDROOM	102.2	100.8	100.8	0.0	0.0
R1/1724	LKD	368.9	368.9	368.9	0.0	0.0
Duchess House, 18-19 Warren Street						
R1/1731	ASSUMED	226.7	223.8	223.8	0.0	0.0
R2/1731	LKD	205.8	205.3	205.3	0.0	0.0
R1/1732	ASSUMED	226.7	223.8	223.8	0.0	0.0
R2/1732	LKD	205.8	205.4	205.4	0.0	0.0
R1/1733	ASSUMED	226.7	223.8	223.8	0.0	0.0
R2/1733	ASSUMED	219.6	219.2	219.2	0.0	0.0
R1/1734	BEDROOM	183.6	183.6	183.6	0.0	0.0
R2/1734	BEDROOM	147.0	147.0	147.0	0.0	0.0
R3/1734	BEDROOM	273.6	273.6	273.6	0.0	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
17 to 33 William Road														
R4/111	W5/111	LD	3	8	3	8	0.0	0.0	3	8	3	8	0.0	0.0
R5/111	W6/111	LD	6	13	5	12	16.7	7.7						
R5/111	W7/111	LD	8	15	7	14	12.5	6.7	9	18	8	17	11.1	5.6
R8/111	W10/111	LD	6	9	6	9	0.0	0.0	6	9	6	9	0.0	0.0
R10/111	W12/111	LD	8	14	8	14	0.0	0.0						
R10/111	W13/111	LD	11	30	11	30	0.0	0.0	11	30	11	30	0.0	0.0
R11/111	W14/111	LD	9	21	9	21	0.0	0.0	9	21	9	21	0.0	0.0
R15/111	W19/111	LD	4	8	4	8	0.0	0.0						
R15/111	W20/111	LD	3	5	3	5	0.0	0.0	4	8	4	8	0.0	0.0
R16/111	W18/111	LD	4	8	4	8	0.0	0.0	4	8	4	8	0.0	0.0
R4/112	W5/112	LD	4	10	4	10	0.0	0.0	4	10	4	10	0.0	0.0
R5/112	W6/112	LD	8	16	7	15	12.5	6.3						
R5/112	W7/112	LD	9	16	8	15	11.1	6.3	11	21	10	20	9.1	4.8
R8/112	W11/112	LD	6	10	6	10	0.0	0.0	6	10	6	10	0.0	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R10/112	W12/112	LD	8	14	8	14	0.0	0.0						
R10/112	W13/112	LD	11	30	11	30	0.0	0.0	11	30	11	30	0.0	0.0
R11/112	W14/112	LD	12	26	12	26	0.0	0.0	12	26	12	26	0.0	0.0
R15/112	W19/112	LD	12	17	12	17	0.0	0.0						
R15/112	W20/112	LD	9	12	9	12	0.0	0.0	12	17	12	17	0.0	0.0
R16/112	W18/112	LD	11	16	11	16	0.0	0.0	11	16	11	16	0.0	0.0
R4/113	W5/113	LD	6	14	6	14	0.0	0.0	6	14	6	14	0.0	0.0
R5/113	W6/113	LD	8	16	7	15	12.5	6.3						
R5/113	W7/113	LD	9	16	8	15	11.1	6.3	11	21	10	20	9.1	4.8
R8/113	W11/113	LD	8	12	8	12	0.0	0.0	8	12	8	12	0.0	0.0
R10/113	W12/113	LD	8	18	8	18	0.0	0.0						
R10/113	W13/113	LD	12	34	11	33	8.3	2.9	12	34	11	33	8.3	2.9
R11/113	W14/113	LD	13	31	13	31	0.0	0.0	13	31	13	31	0.0	0.0
R15/113	W19/113	LD	14	19	14	19	0.0	0.0						
R15/113	W20/113	LD	10	14	10	14	0.0	0.0	15	21	15	21	0.0	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R16/113	W18/113	LD	13	18	13	18	0.0	0.0	13	18	13	18	0.0	0.0
R4/114	W5/114	LD	6	14	6	14	0.0	0.0	6	14	6	14	0.0	0.0
R5/114	W6/114	LD	9	18	8	17	11.1	5.6						
R5/114	W7/114	LD	9	16	8	15	11.1	6.3	12	23	11	22	8.3	4.3
R8/114	W11/114	LD	9	14	8	13	11.1	7.1	9	14	8	13	11.1	7.1
R10/114	W12/114	LD	11	24	11	24	0.0	0.0						
R10/114	W13/114	LD	13	42	12	41	7.7	2.4	13	42	12	41	7.7	2.4
R11/114	W14/114	LD	13	33	13	33	0.0	0.0	13	33	13	33	0.0	0.0
R15/114	W19/114	LD	16	22	16	22	0.0	0.0						
R15/114	W20/114	LD	11	15	11	15	0.0	0.0	16	23	16	23	0.0	0.0
R16/114	W18/114	LD	15	20	15	20	0.0	0.0	15	20	15	20	0.0	0.0
R4/115	W5/115	LD	7	7	7	7	0.0	0.0	7	7	7	7	0.0	0.0
R5/115	W6/115	LD	10	10	9	9	10.0	10.0						
R5/115	W7/115	LD	8	8	7	7	12.5	12.5	11	11	10	10	9.1	9.1

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APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R8/115	W11/115	LD	16	59	15	58	6.3	1.7	16	59	15	58	6.3	1.7
R10/115	W12/115	LD	12	42	12	42	0.0	0.0						
R10/115	W13/115	LD	13	50	12	49	7.7	2.0	13	50	12	49	7.7	2.0
R11/115	W14/115	LD	16	54	16	54	0.0	0.0	16	54	16	54	0.0	0.0
R15/115	W19/115	LD	16	47	16	47	0.0	0.0						
R15/115	W20/115	LD	11	37	11	37	0.0	0.0	16	53	16	53	0.0	0.0
R16/115	W18/115	LD	17	43	16	42	5.9	2.3	17	43	16	42	5.9	2.3
R4/116	W4/116	LKD?	20	46	18	44	10.0	4.3						
R4/116	W5/116	LKD?	0	18	0	18	-	0.0	20	63	18	61	10.0	3.2
Schafer House, University College														
R1/120	W1/120		1	13	1	13	0.0	0.0	1	13	1	13	0.0	0.0
R2/120	W2/120		1	17	1	17	0.0	0.0	1	17	1	17	0.0	0.0
R3/120	W3/120		0	15	0	15	-	0.0	0	15	0	15	-	0.0
R4/120	W4/120		2	27	2	27	0.0	0.0						
R4/120	W5/120		0	19	0	19	-	0.0	2	30	2	30	0.0	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R5/120	W6/120		2	36	2	36	0.0	0.0						
R5/120	W7/120		2	38	2	38	0.0	0.0	2	38	2	38	0.0	0.0
R6/120	W8/120		2	43	2	43	0.0	0.0						
R6/120	W9/120		2	46	2	46	0.0	0.0	2	46	2	46	0.0	0.0
R7/120	W10/120		4	49	4	49	0.0	0.0	4	49	4	49	0.0	0.0
R1/121	W1/121		1	18	1	18	0.0	0.0	1	18	1	18	0.0	0.0
R2/121	W2/121		1	22	1	22	0.0	0.0	1	22	1	22	0.0	0.0
R3/121	W3/121		1	21	1	21	0.0	0.0	1	21	1	21	0.0	0.0
R4/121	W4/121		3	35	3	35	0.0	0.0						
R4/121	W5/121		1	29	1	29	0.0	0.0	4	40	4	40	0.0	0.0
R5/121	W6/121		2	44	2	43	0.0	2.3						
R5/121	W7/121		3	48	3	48	0.0	0.0	3	49	3	48	0.0	2.0
R6/121	W8/121		3	52	3	52	0.0	0.0						
R6/121	W9/121		3	52	3	52	0.0	0.0	3	53	3	53	0.0	0.0
R7/121	W10/121		4	52	4	52	0.0	0.0	4	52	4	52	0.0	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R1/122	W1/122		2	28	2	28	0.0	0.0	2	28	2	28	0.0	0.0
R2/122	W2/122		4	39	4	39	0.0	0.0	4	39	4	39	0.0	0.0
R3/122	W3/122		5	40	5	40	0.0	0.0	5	40	5	40	0.0	0.0
R4/122	W4/122		7	49	7	49	0.0	0.0						
R4/122	W5/122		3	39	3	39	0.0	0.0	7	51	7	51	0.0	0.0
R5/122	W6/122		5	55	5	54	0.0	1.8						
R5/122	W7/122		6	57	6	56	0.0	1.8	6	57	6	56	0.0	1.8
R6/122	W8/122		7	58	7	57	0.0	1.7						
R6/122	W9/122		7	59	7	58	0.0	1.7	7	59	7	58	0.0	1.7
R7/122	W10/122		8	60	8	59	0.0	1.7	8	60	8	59	0.0	1.7
R1/123	W1/123		8	51	8	51	0.0	0.0	8	51	8	51	0.0	0.0
R2/123	W2/123		10	62	10	62	0.0	0.0	10	62	10	62	0.0	0.0
R3/123	W3/123		9	57	9	57	0.0	0.0	9	57	9	57	0.0	0.0
R4/123	W4/123		10	62	10	62	0.0	0.0						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R4/123	W5/123		8	50	8	50	0.0	0.0	10	62	10	62	0.0	0.0
R5/123	W6/123		8	60	8	59	0.0	1.7						
R5/123	W7/123		8	59	8	58	0.0	1.7	8	60	8	59	0.0	1.7
R6/123	W8/123		9	60	9	59	0.0	1.7						
R6/123	W9/123		9	62	9	61	0.0	1.6	9	62	9	61	0.0	1.6
R7/123	W10/123		9	61	9	60	0.0	1.6	9	61	9	60	0.0	1.6
R1/180	W1/180	LKD	0	6	0	6	-	0.0	0	6	0	6	-	0.0
R1/181	W1/181	LKD	0	10	0	10	-	0.0	0	10	0	10	-	0.0
R1/182	W1/182	LKD	0	16	0	16	-	0.0	0	16	0	16	-	0.0
R1/183	W1/183	LKD	0	26	0	25	-	3.8	0	26	0	25	-	3.8
R1/184	W1/184	LKD	1	33	1	32	0.0	3.0	1	33	1	32	0.0	3.0
R1/185	W1/185	LKD	3	38	3	38	0.0	0.0	3	38	3	38	0.0	0.0
R1/186	W1/186	LKD	10	49	10	49	0.0	0.0	10	49	10	49	0.0	0.0
R1/211	W1/211	LKD	4	32	4	32	0.0	0.0	4	32	4	32	0.0	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R12/211	W12/211	LKD	4	29	4	27	0.0	6.9	4	29	4	27	0.0	6.9
R1/212	W1/212	LKD	5	35	5	35	0.0	0.0	5	35	5	35	0.0	0.0
R12/212	W212/212	LKD	4	30	4	29	0.0	3.3	4	30	4	29	0.0	3.3
R1/213	W1/213	LKD	5	37	5	37	0.0	0.0	5	37	5	37	0.0	0.0
R12/213	W12/213	LKD	4	32	4	32	0.0	0.0	4	32	4	32	0.0	0.0
R1/214	W1/214	LKD	6	38	6	38	0.0	0.0	6	38	6	38	0.0	0.0
R12/214	W12/214	LKD	4	36	4	35	0.0	2.8	4	36	4	35	0.0	2.8
R1/215	W1/215	LKD	7	42	7	41	0.0	2.4	7	42	7	41	0.0	2.4
R12/215	W12/215	LKD	4	37	4	35	0.0	5.4	4	37	4	35	0.0	5.4
R1/216	W1/216	LKD	7	46	7	45	0.0	2.2	7	46	7	45	0.0	2.2
R12/216	W12/216	LKD	5	40	5	37	0.0	7.5	5	40	5	37	0.0	7.5
R1/217	W1/217	KD	7	44	7	43	0.0	2.3	7	44	7	43	0.0	2.3

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window						Room					
			Existing		Proposed		Winter %Loss	Annual %Loss	Existing		Proposed		Winter %Loss	Annual %Loss
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R8/217	W8/217	KD	4	38	4	35	0.0	7.9	4	38	4	35	0.0	7.9
164-166 Drummond Street														
R1/40	W1/40	LIVINGROOM	3	27	3	26	0.0	3.7						
R1/40	W2/40	LIVINGROOM	3	28	3	27	0.0	3.6						
R1/40	W3/40	LIVINGROOM	3	28	3	27	0.0	3.6	3	29	3	28	0.0	3.4
R2/41	W4/41	LIVINGROOM	3	29	3	28	0.0	3.4						
R2/41	W5/41	LIVINGROOM	3	29	3	28	0.0	3.4						
R2/41	W6/41	LIVINGROOM	3	29	3	28	0.0	3.4	3	30	3	29	0.0	3.3
R3/41	W7/41	LIVINGROOM	3	29	3	28	0.0	3.4						
R3/41	W8/41	LIVINGROOM	3	26	3	25	0.0	3.8						
R3/41	W9/41	LIVINGROOM	3	23	3	22	0.0	4.3	3	29	3	28	0.0	3.4
R2/42	W4/42	LIVINGROOM	3	32	3	31	0.0	3.1						
R2/42	W5/42	LIVINGROOM	3	32	3	31	0.0	3.1						
R2/42	W6/42	LIVINGROOM	3	31	3	31	0.0	0.0	3	33	3	32	0.0	3.0
R3/42	W7/42	LIVINGROOM	3	31	3	31	0.0	0.0						
R3/42	W8/42	LIVINGROOM	3	28	3	28	0.0	0.0						
R3/42	W9/42	LIVINGROOM	3	27	3	27	0.0	0.0	3	32	3	32	0.0	0.0
R2/43	W4/43	LIVINGROOM	3	32	3	31	0.0	3.1						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/43	W5/43	LIVINGROOM	3	33	3	32	0.0	3.0						
R2/43	W6/43	LIVINGROOM	3	32	3	32	0.0	0.0	3	33	3	32	0.0	3.0
R3/43	W7/43	LIVINGROOM	3	32	3	32	0.0	0.0						
R3/43	W8/43	LIVINGROOM	3	30	3	30	0.0	0.0						
R3/43	W9/43	LIVINGROOM	3	29	3	29	0.0	0.0	3	35	3	35	0.0	0.0
R2/44	W4/44	LIVINGROOM	3	34	3	33	0.0	2.9						
R2/44	W5/44	LIVINGROOM	4	37	3	35	25.0	5.4						
R2/44	W6/44	LIVINGROOM	3	34	3	33	0.0	2.9	4	37	3	35	25.0	5.4
R3/44	W7/44	LIVINGROOM	3	35	3	35	0.0	0.0						
R3/44	W8/44	LIVINGROOM	3	32	3	32	0.0	0.0						
R3/44	W9/44	LIVINGROOM	3	30	3	30	0.0	0.0	3	35	3	35	0.0	0.0
R2/45	W4/45	LIVINGROOM	3	35	3	33	0.0	5.7						
R2/45	W5/45	LIVINGROOM	4	38	3	35	25.0	7.9						
R2/45	W6/45	LIVINGROOM	3	37	3	36	0.0	2.7	4	40	3	37	25.0	7.5
R3/45	W7/45	LIVINGROOM	3	36	3	36	0.0	0.0						
R3/45	W8/45	LIVINGROOM	3	33	3	33	0.0	0.0						
R3/45	W9/45	LIVINGROOM	3	31	3	31	0.0	0.0	3	36	3	36	0.0	0.0

Triton Building

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1103	W2/1103	LKD	0	2	0	2	-	0.0						
R2/1103	W3/1103	LKD	0	0	0	0	-	-						
R2/1103	W4/1103	LKD	0	0	0	0	-	-	0	2	0	2	-	0.0
R5/1103	W7/1103	LKD	0	12	0	9	-	25.0	0	12	0	9	-	25.0
R7/1103	W9/1103	LKD	0	0	0	0	-	-						
R7/1103	W10/1103	LKD	0	0	0	0	-	-						
R7/1103	W11/1103	LKD	0	0	0	0	-	-	0	0	0	0	-	-
R2/1104	W2/1104	LKD	0	1	0	1	-	0.0						
R2/1104	W3/1104	LKD	0	4	0	4	-	0.0						
R2/1104	W4/1104	LKD	0	0	0	0	-	-	0	4	0	4	-	0.0
R5/1104	W7/1104	LKD	0	16	0	13	-	18.8	0	16	0	13	-	18.8
R7/1104	W9/1104	LKD	0	0	0	0	-	-						
R7/1104	W10/1104	LKD	0	0	0	0	-	-						
R7/1104	W11/1104	LKD	0	1	0	1	-	0.0	0	1	0	1	-	0.0
R2/1105	W2/1105	LKD	0	7	0	7	-	0.0						
R2/1105	W3/1105	LKD	0	5	0	5	-	0.0						
R2/1105	W4/1105	LKD	0	0	0	0	-	-	0	7	0	7	-	0.0
R5/1105	W7/1105	LKD	0	20	0	16	-	20.0	0	20	0	16	-	20.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R7/1105	W9/1105	LKD	0	0	0	0	-	-						
R7/1105	W10/1105	LKD	0	0	0	0	-	-						
R7/1105	W11/1105	LKD	0	0	0	0	-	-	0	0	0	0	-	-
R2/1106	W2/1106	LKD	0	6	0	6	-	0.0						
R2/1106	W3/1106	LKD	0	9	0	9	-	0.0						
R2/1106	W4/1106	LKD	1	1	0	0	100.0	100.0	1	11	0	10	100.0	9.1
R5/1106	W7/1106	LKD	1	21	1	17	0.0	19.0	1	21	1	17	0.0	19.0
R7/1106	W9/1106	LKD	1	2	1	2	0.0	0.0						
R7/1106	W10/1106	LKD	0	0	0	0	-	-						
R7/1106	W11/1106	LKD	0	2	0	2	-	0.0	1	4	1	4	0.0	0.0
R2/1107	W2/1107	LKD	3	21	3	21	0.0	0.0						
R2/1107	W3/1107	LKD	3	17	3	17	0.0	0.0						
R2/1107	W4/1107	LKD	3	3	2	2	33.3	33.3	4	22	3	21	25.0	4.5
R5/1107	W7/1107	LKD	3	24	3	20	0.0	16.7	3	24	3	20	0.0	16.7
R7/1107	W9/1107	LKD	3	4	2	3	33.3	25.0						
R7/1107	W10/1107	LKD	0	3	0	3	-	0.0						
R7/1107	W11/1107	LKD	0	2	0	2	-	0.0	3	7	2	6	33.3	14.3

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window						Room					
			Existing		Proposed		Winter %Loss	Annual %Loss	Existing		Proposed		Winter %Loss	Annual %Loss
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1108	W3/1108	LKD	4	23	4	23	0.0	0.0						
R2/1108	W4/1108	LKD	4	27	4	27	0.0	0.0						
R2/1108	W5/1108	LKD	6	11	4	9	33.3	18.2						
R2/1108	W6/1108	LKD	7	8	4	5	42.9	37.5	7	30	4	27	42.9	10.0
R5/1108	W9/1108	LKD	4	7	3	6	25.0	14.3						
R5/1108	W10/1108	LKD	4	5	2	3	50.0	40.0						
R5/1108	W11/1108	LKD	0	3	0	3	-	0.0						
R5/1108	W12/1108	LKD	0	6	0	6	-	0.0	4	13	3	12	25.0	7.7
R2/1109	W3/1109	LKD	5	30	5	30	0.0	0.0						
R2/1109	W4/1109	LKD	5	28	5	28	0.0	0.0						
R2/1109	W5/1109	LKD	8	14	6	12	25.0	14.3						
R2/1109	W6/1109	LKD	8	9	5	6	37.5	33.3	9	34	6	31	33.3	8.8
R5/1109	W9/1109	LKD	4	7	3	6	25.0	14.3						
R5/1109	W10/1109	LKD	4	5	2	3	50.0	40.0						
R5/1109	W11/1109	LKD	1	9	1	9	0.0	0.0						
R5/1109	W12/1109	LKD	1	8	1	8	0.0	0.0	5	17	4	16	20.0	5.9
R2/1110	W3/1110	LKD	5	26	5	26	0.0	0.0						
R2/1110	W4/1110	LKD	5	30	5	30	0.0	0.0						
R2/1110	W5/1110	LKD	8	14	6	12	25.0	14.3						
R2/1110	W6/1110	LKD	9	10	6	7	33.3	30.0	9	34	6	31	33.3	8.8

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window						Room					
			Existing		Proposed		Winter %Loss	Annual %Loss	Existing		Proposed		Winter %Loss	Annual %Loss
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R5/1110	W9/1110	LKD	7	10	5	8	28.6	20.0						
R5/1110	W10/1110	LKD	6	7	4	5	33.3	28.6						
R5/1110	W11/1110	LKD	2	10	2	10	0.0	0.0						
R5/1110	W12/1110	LKD	2	13	2	13	0.0	0.0	9	23	7	21	22.2	8.7
R2/1111	W3/1111	LKD	5	30	5	30	0.0	0.0						
R2/1111	W4/1111	LKD	5	28	5	28	0.0	0.0						
R2/1111	W5/1111	LKD	8	14	6	12	25.0	14.3						
R2/1111	W6/1111	LKD	9	10	6	7	33.3	30.0	9	34	6	31	33.3	8.8
R5/1111	W9/1111	LKD	9	12	7	10	22.2	16.7						
R5/1111	W10/1111	LKD	8	9	5	6	37.5	33.3						
R5/1111	W11/1111	LKD	5	23	4	22	20.0	4.3						
R5/1111	W12/1111	LKD	5	22	5	22	0.0	0.0	11	33	10	32	9.1	3.0
R2/1112	W3/1112	LKD	5	26	5	26	0.0	0.0						
R2/1112	W4/1112	LKD	5	30	5	30	0.0	0.0						
R2/1112	W5/1112	LKD	8	14	5	11	37.5	21.4						
R2/1112	W6/1112	LKD	9	10	6	7	33.3	30.0	9	34	6	31	33.3	8.8
R5/1112	W9/1112	LKD	9	12	7	10	22.2	16.7						
R5/1112	W10/1112	LKD	8	9	5	6	37.5	33.3						
R5/1112	W11/1112	LKD	5	26	4	25	20.0	3.8						
R5/1112	W12/1112	LKD	5	29	5	29	0.0	0.0	11	38	10	37	9.1	2.6

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1113	W3/1113	LKD	5	30	5	30	0.0	0.0						
R2/1113	W4/1113	LKD	5	28	5	28	0.0	0.0						
R2/1113	W5/1113	LKD	8	14	6	12	25.0	14.3						
R2/1113	W6/1113	LKD	9	10	6	7	33.3	30.0	9	34	6	31	33.3	8.8
R6/1113	W10/1113	LKD	9	10	6	7	33.3	30.0						
R6/1113	W11/1113	LKD	5	29	4	28	20.0	3.4						
R6/1113	W12/1113	LKD	6	30	6	30	0.0	0.0						
R6/1113	W13/1113	LKD	5	35	5	35	0.0	0.0	12	43	10	41	16.7	4.7
R2/1114	W3/1114	LKD	6	27	6	27	0.0	0.0						
R2/1114	W4/1114	LKD	5	30	5	30	0.0	0.0						
R2/1114	W5/1114	LKD	8	14	6	12	25.0	14.3						
R2/1114	W6/1114	LKD	9	10	6	7	33.3	30.0	10	35	7	32	30.0	8.6
R6/1114	W10/1114	LKD	9	10	6	7	33.3	30.0						
R6/1114	W11/1114	LKD	6	31	6	31	0.0	0.0						
R6/1114	W12/1114	LKD	6	35	6	35	0.0	0.0						
R6/1114	W13/1114	LKD	5	31	5	31	0.0	0.0	12	42	10	40	16.7	4.8
R2/1115	W3/1115	LKD	6	31	6	31	0.0	0.0						
R2/1115	W4/1115	LKD	6	29	6	29	0.0	0.0						
R2/1115	W5/1115	LKD	9	15	7	13	22.2	13.3						
R2/1115	W6/1115	LKD	11	12	8	9	27.3	25.0	11	36	8	33	27.3	8.3

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R6/1115	W10/1115	LKD	9	10	6	7	33.3	30.0						
R6/1115	W11/1115	LKD	7	36	7	36	0.0	0.0						
R6/1115	W12/1115	LKD	7	35	7	35	0.0	0.0						
R6/1115	W13/1115	LKD	7	39	7	39	0.0	0.0	13	46	11	44	15.4	4.3
R2/1116	W3/1116	LKD	6	27	6	27	0.0	0.0						
R2/1116	W4/1116	LKD	6	31	6	31	0.0	0.0						
R2/1116	W5/1116	LKD	9	15	7	13	22.2	13.3						
R2/1116	W6/1116	LKD	12	13	9	10	25.0	23.1	12	37	9	34	25.0	8.1
R6/1116	W10/1116	LKD	9	10	6	7	33.3	30.0						
R6/1116	W11/1116	LKD	7	36	7	36	0.0	0.0						
R6/1116	W12/1116	LKD	8	40	8	40	0.0	0.0						
R6/1116	W13/1116	LKD	8	37	8	37	0.0	0.0	14	47	12	45	14.3	4.3
R2/1117	W3/1117	LKD	6	31	6	31	0.0	0.0						
R2/1117	W4/1117	LKD	6	29	6	29	0.0	0.0						
R2/1117	W5/1117	LKD	9	15	7	13	22.2	13.3						
R2/1117	W6/1117	LKD	12	13	9	10	25.0	23.1	12	37	9	34	25.0	8.1
R6/1117	W10/1117	LKD	10	12	7	9	30.0	25.0						
R6/1117	W11/1117	LKD	8	40	7	39	12.5	2.5						
R6/1117	W12/1117	LKD	8	38	8	38	0.0	0.0						
R6/1117	W13/1117	LKD	9	43	9	43	0.0	0.0	15	50	13	48	13.3	4.0

SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1118	W3/1118	LKD	6	27	6	27	0.0	0.0						
R2/1118	W4/1118	LKD	6	31	6	31	0.0	0.0						
R2/1118	W5/1118	LKD	9	15	7	13	22.2	13.3						
R2/1118	W6/1118	LKD	13	14	10	11	23.1	21.4	13	38	10	35	23.1	7.9
R6/1118	W10/1118	LKD	11	13	8	10	27.3	23.1						
R6/1118	W11/1118	LKD	10	40	10	40	0.0	0.0						
R6/1118	W12/1118	LKD	10	43	10	43	0.0	0.0						
R6/1118	W13/1118	LKD	11	41	11	41	0.0	0.0	17	51	15	49	11.8	3.9
R1/1119	W1/1119	LKD	6	32	6	32	0.0	0.0						
R1/1119	W2/1119	LKD	6	29	6	29	0.0	0.0						
R1/1119	W3/1119	LKD	6	32	6	32	0.0	0.0						
R1/1119	W4/1119	LKD	6	30	6	30	0.0	0.0						
R1/1119	W5/1119	LKD	11	18	9	16	18.2	11.1						
R1/1119	W6/1119	LKD	14	16	10	12	28.6	25.0	14	41	11	38	21.4	7.3
R1/1120	W1/1120	LKD	7	29	7	29	0.0	0.0						
R1/1120	W2/1120	LKD	6	32	6	32	0.0	0.0						
R1/1120	W3/1120	LKD	7	29	7	29	0.0	0.0						
R1/1120	W4/1120	LKD	6	31	6	31	0.0	0.0						
R1/1120	W5/1120	LKD	12	19	10	17	16.7	10.5						
R1/1120	W6/1120	LKD	15	17	11	13	26.7	23.5	15	42	13	40	13.3	4.8
R1/1121	W1/1121	LKD	6	32	6	32	0.0	0.0						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R1/1121	W2/1121	LKD	7	31	7	31	0.0	0.0						
R1/1121	W3/1121	LKD	6	32	6	32	0.0	0.0						
R1/1121	W4/1121	LKD	7	32	7	32	0.0	0.0						
R1/1121	W5/1121	LKD	13	21	11	19	15.4	9.5						
R1/1121	W6/1121	LKD	16	19	12	15	25.0	21.1	16	43	14	41	12.5	4.7
R1/1122	W1/1122	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1122	W2/1122	LIVINGROOM	6	31	6	31	0.0	0.0						
R1/1122	W3/1122	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1122	W4/1122	LIVINGROOM	6	31	6	31	0.0	0.0						
R1/1122	W5/1122	LIVINGROOM	13	19	11	17	15.4	10.5						
R1/1122	W6/1122	LIVINGROOM	16	18	12	14	25.0	22.2	16	42	13	39	18.8	7.1
R2/1122	W7/1122	LIVINGROOM	13	37	10	31	23.1	16.2						
R2/1122	W8/1122	LIVINGROOM	9	36	8	33	11.1	8.3	14	51	12	46	14.3	9.8
R3/1122	W9/1122	DINING	15	20	12	17	20.0	15.0						
R3/1122	W10/1122	DINING	17	19	14	16	17.6	15.8						
R3/1122	W11/1122	DINING	15	43	15	43	0.0	0.0						
R3/1122	W12/1122	DINING	15	48	15	47	0.0	2.1	21	59	20	57	4.8	3.4
R1/1124	W1/1124	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1124	W2/1124	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1124	W3/1124	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1124	W4/1124	LIVINGROOM	8	26	7	25	12.5	3.8						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window						Room					
			Existing		Proposed		Winter %Loss	Annual %Loss	Existing		Proposed		Winter %Loss	Annual %Loss
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R1/1124	W5/1124	LIVINGROOM	19	75	17	70	10.5	6.7						
R1/1124	W6/1124	LIVINGROOM	20	77	16	69	20.0	10.4	20	78	18	73	10.0	6.4
R2/1124	W7/1124	LIVINGROOM	17	58	15	53	11.8	8.6						
R2/1124	W8/1124	LIVINGROOM	12	53	10	49	16.7	7.5	17	67	15	62	11.8	7.5
R3/1124	W9/1124	DINING	21	77	17	70	19.0	9.1						
R3/1124	W10/1124	DINING	21	76	18	71	14.3	6.6						
R3/1124	W11/1124	DINING	15	52	15	52	0.0	0.0						
R3/1124	W12/1124	DINING	15	52	15	51	0.0	1.9	21	89	20	87	4.8	2.2
40-60 Hampstead Road														
R1/241	W1/241	ASSUMED	2	2	2	2	0.0	0.0	2	2	2	2	0.0	0.0
R2/241	W2/241	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R3/241	W3/241	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R4/241	W4/241	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R5/241	W5/241	ASSUMED	0	4	0	4	-	0.0	0	4	0	4	-	0.0
R7/241	W17/241	ASSUMED	2	9	1	6	50.0	33.3	2	9	1	6	50.0	33.3

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R8/241	W16/241	ASSUMED	1	8	1	7	0.0	12.5	1	8	1	7	0.0	12.5
R9/241	W15/241	ASSUMED	0	7	0	6	-	14.3	0	7	0	6	-	14.3
R10/241	W14/241	ASSUMED	2	9	2	9	0.0	0.0	2	9	2	9	0.0	0.0
R11/241	W13/241	ASSUMED	3	9	2	8	33.3	11.1	3	9	2	8	33.3	11.1
R12/241	W12/241	ASSUMED	0	7	0	6	-	14.3	0	7	0	6	-	14.3
R13/241	W11/241	ASSUMED	4	10	2	6	50.0	40.0	4	10	2	6	50.0	40.0
R14/241	W10/241	ASSUMED	3	10	1	7	66.7	30.0	3	10	1	7	66.7	30.0
R15/241	W9/241	ASSUMED	0	6	0	6	-	0.0	0	6	0	6	-	0.0
R16/241	W6/241	ASSUMED	4	11	2	8	50.0	27.3	4	11	2	8	50.0	27.3
R17/241	W8/241	ASSUMED	4	10	2	7	50.0	30.0	4	10	2	7	50.0	30.0
R18/241	W7/241	ASSUMED	0	5	0	5	-	0.0	0	5	0	5	-	0.0
R1/242	W1/242	ASSUMED	1	1	1	1	0.0	0.0	1	1	1	1	0.0	0.0
R2/242	W2/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R3/242	W3/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R4/242	W4/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R5/242	W5/242	ASSUMED	0	9	0	9	-	0.0	0	9	0	9	-	0.0
R6/242	W18/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R8/242	W14/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R9/242	W13/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R11/242	W17/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R12/242	W16/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R14/242	W11/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R15/242	W12/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R17/242	W15/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R1/243	W1/243	ASSUMED	0	5	0	5	-	0.0	0	5	0	5	-	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/243	W2/243	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R3/243	W3/243	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R4/243	W4/243	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R5/243	W5/243	ASSUMED	0	22	0	22	-	0.0	0	22	0	22	-	0.0
R6/243	W13/243	ASSUMED	5	12	4	11	20.0	8.3	5	12	4	11	20.0	8.3
R9/243	W11/243	ASSUMED	3	9	2	8	33.3	11.1	3	9	2	8	33.3	11.1
R10/243	W12/243	ASSUMED	0	7	0	6	-	14.3	0	7	0	6	-	14.3
R13/243	W10/243	ASSUMED	0	9	0	8	-	11.1	0	9	0	8	-	11.1
R1/244	W1/244	ASSUMED	5	26	5	24	0.0	7.7	5	26	5	24	0.0	7.7
R2/244	W2/244	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R3/244	W3/244	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R4/244	W4/244	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R5/244	W5/244	ASSUMED	1	31	1	31	0.0	0.0	1	31	1	31	0.0	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R7/244	W13/244	ASSUMED	9	27	8	24	11.1	11.1	9	27	8	24	11.1	11.1
R9/244	W12/244	ASSUMED	7	26	5	22	28.6	15.4	7	26	5	22	28.6	15.4
R10/244	W11/244	ASSUMED	11	30	9	25	18.2	16.7	11	30	9	25	18.2	16.7
R13/244	W10/244	ASSUMED	5	25	5	23	0.0	8.0	5	25	5	23	0.0	8.0
R1/245	W1/245	ASSUMED	4	26	4	23	0.0	11.5	4	26	4	23	0.0	11.5
R2/245	W2/245	ASSUMED	2	16	1	14	50.0	12.5	2	16	1	14	50.0	12.5
R3/245	W3/245	ASSUMED	0	15	0	14	-	6.7	0	15	0	14	-	6.7
R4/245	W4/245	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R5/245	W5/245	ASSUMED	2	34	2	34	0.0	0.0	2	34	2	34	0.0	0.0
R6/245	W6/245	ASSMUED	10	30	8	25	20.0	16.7						
R6/245	W7/245	ASSMUED	0	2	0	2	-	0.0	10	30	8	25	20.0	16.7
R1/246	W1/246	ASSUMED	0	7	0	7	-	0.0						
R1/246	W2/246	ASSUMED	11	36	11	34	0.0	5.6	11	37	11	35	0.0	5.4

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APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/246	W3/246	ASSUMED	9	30	8	28	11.1	6.7	9	30	8	28	11.1	6.7
R3/246	W4/246	ASSUMED	1	19	1	18	0.0	5.3	1	19	1	18	0.0	5.3
R4/246	W5/246	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R5/246	W6/246	ASSUMED	6	43	6	43	0.0	0.0	6	43	6	43	0.0	0.0
R1/247	W1/247	ASSUMED	9	29	9	29	0.0	0.0	9	29	9	29	0.0	0.0
1-6 Tolmers Square														
R1/10	W1/10	ASSUMED_LIVINGROOM	1	27	1	25	0.0	7.4						
R1/10	W2/10	ASSUMED_LIVINGROOM	1	27	1	25	0.0	7.4						
R1/10	W3/10	ASSUMED_LIVINGROOM	1	30	1	28	0.0	6.7						
R1/10	W4/10	ASSUMED_LIVINGROOM	1	27	1	25	0.0	7.4	1	31	1	29	0.0	6.5
R2/10	W5/10	ASSUMED_LIVINGROOM	3	35	3	33	0.0	5.7						
R2/10	W6/10	ASSUMED_LIVINGROOM	5	34	5	32	0.0	5.9						
R2/10	W7/10	ASSUMED_LIVINGROOM	3	36	3	34	0.0	5.6						
R2/10	W8/10	ASSUMED_LIVINGROOM	6	35	6	33	0.0	5.7	6	39	6	37	0.0	5.1
R3/10	W9/10	ASSUMED_LIVINGROOM	5	38	5	35	0.0	7.9						
R3/10	W10/10	ASSUMED_LIVINGROOM	6	36	5	32	16.7	11.1						
R3/10	W11/10	ASSUMED_LIVINGROOM	5	39	5	37	0.0	5.1						

SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R3/10	W12/10	ASSUMED_LIVINGROOM	6	37	5	33	16.7	10.8	6	41	5	38	16.7	7.3
R4/10	W13/10	ASSUMED	9	42	9	42	0.0	0.0	9	42	9	42	0.0	0.0
R5/10	W14/10	ASSUMED_LIVINGROOM	8	39	8	39	0.0	0.0						
R5/10	W15/10	ASSUMED_LIVINGROOM	8	37	8	37	0.0	0.0						
R5/10	W16/10	ASSUMED_LIVINGROOM	9	41	9	40	0.0	2.4						
R5/10	W17/10	ASSUMED_LIVINGROOM	8	38	8	37	0.0	2.6	9	43	9	43	0.0	0.0
R6/10	W18/10	ASSUMED_LIVINGROOM	10	42	10	39	0.0	7.1	10	42	10	39	0.0	7.1
R7/10	W19/10	ASSUMED_LIVINGROOM	11	42	11	41	0.0	2.4	11	42	11	41	0.0	2.4
R8/10	W20/10	ASSUMED_LIVINGROOM	12	39	12	38	0.0	2.6	12	39	12	38	0.0	2.6
R9/10	W21/10	ASSUMED	12	42	12	41	0.0	2.4	12	42	12	41	0.0	2.4
R10/10	W22/10	ASSUMED	11	45	11	45	0.0	0.0	11	45	11	45	0.0	0.0
R1/12	W1/12	RECEPTION	0	18	0	18	-	0.0						
R1/12	W2/12	RECEPTION	6	50	6	50	0.0	0.0						
R1/12	W3/12	RECEPTION	4	29	4	29	0.0	0.0						
R1/12	W4/12	RECEPTION	4	37	4	36	0.0	2.7						
R1/12	W5/12	RECEPTION	0	6	0	5	-	16.7						
R1/12	W6/12	RECEPTION	1	2	1	1	0.0	50.0	7	60	7	59	0.0	1.7

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/12	W7/12	RECEPTION	0	1	0	1	-	0.0						
R2/12	W8/12	RECEPTION	1	1	1	1	0.0	0.0						
R2/12	W9/12	RECEPTION	8	36	8	34	0.0	5.6	8	36	8	34	0.0	5.6
R3/12	W10/12	RECEPTION	9	38	8	34	11.1	10.5						
R3/12	W11/12	RECEPTION	1	6	1	6	0.0	0.0						
R3/12	W12/12	RECEPTION	2	2	2	2	0.0	0.0	10	40	9	37	10.0	7.5
R4/12	W13/12	RECEPTION	1	1	1	1	0.0	0.0						
R4/12	W14/12	RECEPTION	1	1	1	1	0.0	0.0						
R4/12	W15/12	RECEPTION	9	38	9	38	0.0	0.0	9	38	9	38	0.0	0.0
R5/12	W16/12	RECEPTION	11	40	10	39	9.1	2.5						
R5/12	W17/12	RECEPTION	0	3	0	3	-	0.0						
R5/12	W18/12	RECEPTION	1	1	0	0	100.0	100.0	11	40	10	39	9.1	2.5
R6/12	W19/12	ASSUMED	1	18	1	16	0.0	11.1	1	18	1	16	0.0	11.1
R7/12	W20/12	RECEPTION	0	0	0	0	-	-						
R7/12	W21/12	RECEPTION	3	3	3	3	0.0	0.0						
R7/12	W22/12	RECEPTION	11	40	11	37	0.0	7.5	11	40	11	37	0.0	7.5
R8/12	W23/12	RECEPTION	11	39	11	38	0.0	2.6						
R8/12	W24/12	RECEPTION	0	6	0	6	-	0.0						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window						Room					
			Existing		Proposed		Winter %Loss	Annual %Loss	Existing		Proposed		Winter %Loss	Annual %Loss
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R8/12	W25/12	RECEPTION	0	0	0	0	-	-	11	39	11	38	0.0	2.6
R9/12	W26/12	RECEPTION	0	0	0	0	-	-						
R9/12	W27/12	RECEPTION	4	4	4	4	0.0	0.0						
R9/12	W28/12	RECEPTION	12	38	12	37	0.0	2.6	12	38	12	37	0.0	2.6
R10/12	W29/12	RECEPTION	5	6	5	6	0.0	0.0						
R10/12	W30/12	RECEPTION	2	2	2	2	0.0	0.0	6	7	6	7	0.0	0.0
R11/12	W31/12	RECEPTION	2	2	2	2	0.0	0.0						
R11/12	W32/12	RECEPTION	9	9	9	9	0.0	0.0	10	10	10	10	0.0	0.0
R11/13	W11/13	ASSUMED	0	23	0	21	-	8.7	0	23	0	21	-	8.7
183 NORTH GOWER STREET														
R1/740	W1/740		7	35	7	35	0.0	0.0	7	35	7	35	0.0	0.0
R2/740	W2/740		0	5	0	5	-	0.0	0	5	0	5	-	0.0
R3/740	W4/740		5	30	5	29	0.0	3.3	5	30	5	29	0.0	3.3
R4/740	W3/740		5	21	5	21	0.0	0.0	5	21	5	21	0.0	0.0
R1/741	W1/741		7	38	7	37	0.0	2.6	7	38	7	37	0.0	2.6

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/741	W2/741		0	7	0	7	-	0.0	0	7	0	7	-	0.0
R3/741	W4/741		8	36	8	35	0.0	2.8	8	36	8	35	0.0	2.8
R4/741	W3/741		6	23	6	23	0.0	0.0	6	23	6	23	0.0	0.0
R1/742	W1/742		10	42	10	41	0.0	2.4	10	42	10	41	0.0	2.4
R2/742	W2/742		1	10	1	10	0.0	0.0	1	10	1	10	0.0	0.0
R3/742	W4/742		10	40	10	39	0.0	2.5	10	40	10	39	0.0	2.5
R4/742	W3/742		7	25	7	25	0.0	0.0	7	25	7	25	0.0	0.0
R1/743	W1/743		11	44	11	43	0.0	2.3	11	44	11	43	0.0	2.3
R4/743	W2/743		9	27	9	27	0.0	0.0	9	27	9	27	0.0	0.0
R1/794	W1/794		1	16	1	16	0.0	0.0	1	16	1	16	0.0	0.0
R2/794	W2/794		13	52	12	50	7.7	3.8	13	52	12	50	7.7	3.8

13-14 Warren Street & 118-120 Whitfield Street

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R1/1001	W1/1001	ASSUMED	12	45	12	45	0.0	0.0						
R1/1001	W2/1001	ASSUMED	12	47	12	47	0.0	0.0						
R1/1001	W3/1001	ASSUMED	1	9	1	9	0.0	0.0						
R1/1001	W4/1001	ASSUMED	1	9	1	9	0.0	0.0	13	51	13	51	0.0	0.0
R1/1002	W1/1002	ASSUMED	16	56	16	56	0.0	0.0						
R1/1002	W2/1002	ASSUMED	16	56	16	56	0.0	0.0						
R1/1002	W3/1002	ASSUMED	1	10	1	10	0.0	0.0						
R1/1002	W4/1002	ASSUMED	1	10	1	10	0.0	0.0	17	58	17	58	0.0	0.0
R1/1003	W1/1003	ASSUMED	19	60	19	60	0.0	0.0						
R1/1003	W2/1003	ASSUMED	20	61	20	61	0.0	0.0						
R1/1003	W3/1003	ASSUMED	1	10	1	10	0.0	0.0						
R1/1003	W4/1003	ASSUMED	1	10	1	10	0.0	0.0	21	62	21	62	0.0	0.0

15 Warren Street & 161 Whitfield Street

R1/1604	W6/1604	UNKNOWN	16	80	16	80	0.0	0.0	16	80	16	80	0.0	0.0
R3/1604	W2/1604	UNKNOWN	27	93	27	93	0.0	0.0						
R3/1604	W3/1604	UNKNOWN	0	10	0	10	-	0.0						
R3/1604	W4/1604	UNKNOWN	20	57	20	57	0.0	0.0						
R3/1604	W5/1604	UNKNOWN	27	93	27	93	0.0	0.0	28	94	28	94	0.0	0.0

16 Warren Street

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R1/1714	W1/1714	LKD	26	80	26	80	0.0	0.0						
R1/1714	W2/1714	LKD	0	11	0	11	-	0.0						
R1/1714	W3/1714	LKD	0	11	0	11	-	0.0						
R1/1714	W4/1714	LKD	28	95	28	95	0.0	0.0	28	95	28	95	0.0	0.0
17 Warren Street														
R1/1724	W1/1724	LKD	26	92	26	92	0.0	0.0						
R1/1724	W2/1724	LKD	0	10	0	10	-	0.0						
R1/1724	W3/1724	LKD	18	65	18	65	0.0	0.0						
R1/1724	W4/1724	LKD	17	74	17	74	0.0	0.0						
R1/1724	W5/1724	LKD	0	6	0	6	-	0.0	26	93	26	93	0.0	0.0
Duchess House, 18-19 Warren Street														
R2/1731	W3/1731	LKD	0	9	0	9	-	0.0						
R2/1731	W4/1731	LKD	0	9	0	9	-	0.0						
R2/1731	W5/1731	LKD	15	38	15	38	0.0	0.0	15	45	15	45	0.0	0.0
R2/1732	W3/1732	LKD	1	10	1	10	0.0	0.0						
R2/1732	W4/1732	LKD	1	10	1	10	0.0	0.0						
R2/1732	W5/1732	LKD	17	51	17	51	0.0	0.0	18	56	18	56	0.0	0.0
R2/1733	W3/1733	ASSUMED	1	11	1	11	0.0	0.0						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1733	W4/1733	ASSUMED	1	11	1	11	0.0	0.0						
R2/1733	W5/1733	ASSUMED	22	63	22	63	0.0	0.0	23	64	23	64	0.0	0.0

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Appendix: Daylight, Sunlight, Overshadowing and Solar Glare

Annex 3 – Without Balconies Results

DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
Schafer House, University College						
R1/120		W1/120	5.85	5.85	0.00	0.00
R2/120		W2/120	8.14	8.14	0.00	0.00
R3/120		W3/120	8.46	8.46	0.00	0.00
R4/120		W4/120	12.83	12.71	0.12	0.94
R4/120		W5/120	10.76	10.54	0.22	2.04
R5/120		W6/120	14.36	14.30	0.06	0.42
R5/120		W7/120	14.94	14.93	0.01	0.07
R6/120		W8/120	15.89	15.89	0.00	0.00
R6/120		W9/120	16.39	16.39	0.00	0.00
R7/120		W10/120	17.16	17.16	0.00	0.00
R1/121		W1/121	8.00	8.00	0.00	0.00
R2/121		W2/121	10.93	10.93	0.00	0.00
R3/121		W3/121	11.42	11.42	0.00	0.00
R4/121		W4/121	15.72	15.56	0.16	1.02
R4/121		W5/121	13.31	13.08	0.23	1.73
R5/121		W6/121	17.22	17.16	0.06	0.35
R5/121		W7/121	17.79	17.78	0.01	0.06
R6/121		W8/121	18.60	18.60	0.00	0.00
R6/121		W9/121	19.03	19.00	0.03	0.16
R7/121		W10/121	19.69	19.59	0.10	0.51
R1/122		W1/122	13.05	13.05	0.00	0.00
R2/122		W2/122	16.57	16.57	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R3/122		W3/122	16.22	16.22	0.00	0.00
R4/122		W4/122	19.28	19.11	0.17	0.88
R4/122		W5/122	16.81	16.58	0.23	1.37
R5/122		W6/122	20.36	20.24	0.12	0.59
R5/122		W7/122	20.79	20.63	0.16	0.77
R6/122		W8/122	21.32	21.14	0.18	0.84
R6/122		W9/122	21.60	21.44	0.16	0.74
R7/122		W10/122	22.05	21.88	0.17	0.77
R1/123		W1/123	21.17	21.02	0.15	0.71
R2/123		W2/123	22.63	22.48	0.15	0.66
R3/123		W3/123	21.11	20.96	0.15	0.71
R4/123		W4/123	22.57	22.40	0.17	0.75
R4/123		W5/123	20.29	20.05	0.24	1.18
R5/123		W6/123	22.57	22.41	0.16	0.71
R5/123		W7/123	22.82	22.60	0.22	0.96
R6/123		W8/123	23.14	22.92	0.22	0.95
R6/123		W9/123	23.30	23.14	0.16	0.69
R7/123		W10/123	23.70	23.52	0.18	0.76
R1/217		W1/217	16.22	15.75	0.47	2.90
R2/217		W2/217	15.46	14.99	0.47	3.04
R3/217		W3/217	14.60	14.02	0.58	3.97
R4/217		W4/217	13.99	13.33	0.66	4.72

Triton Building

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R1/1103	BEDROOM	W1/1103	2.47	2.47	0.00	0.00
R2/1103	LKD	W2/1103	3.19	3.19	0.00	0.00
R2/1103	LKD	W3/1103	3.18	3.18	0.00	0.00
R2/1103	LKD	W4/1103	8.60	7.12	1.48	17.21
R3/1103	BEDROOM	W5/1103	9.18	7.69	1.49	16.23
R4/1103	BEDROOM	W6/1103	8.30	6.79	1.51	18.19
R5/1103	LKD	W7/1103	8.71	7.29	1.42	16.30
R6/1103	BEDROOM	W8/1103	8.71	7.32	1.39	15.96
R7/1103	LKD	W9/1103	8.08	6.79	1.29	15.97
R7/1103	LKD	W10/1103	0.82	0.82	0.00	0.00
R7/1103	LKD	W11/1103	2.44	2.44	0.00	0.00
R8/1103	BEDROOM	W12/1103	5.30	5.30	0.00	0.00
R1/1104	BEDROOM	W1/1104	3.25	3.25	0.00	0.00
R2/1104	LKD	W2/1104	5.21	5.21	0.00	0.00
R2/1104	LKD	W3/1104	5.37	5.37	0.00	0.00
R2/1104	LKD	W4/1104	10.35	8.59	1.76	17.00
R3/1104	BEDROOM	W5/1104	10.96	9.20	1.76	16.06
R4/1104	BEDROOM	W6/1104	9.82	8.03	1.79	18.23
R5/1104	LKD	W7/1104	10.27	8.57	1.70	16.55
R6/1104	BEDROOM	W8/1104	10.27	8.59	1.68	16.36
R7/1104	LKD	W9/1104	9.43	7.87	1.56	16.54
R7/1104	LKD	W10/1104	1.81	1.81	0.00	0.00
R7/1104	LKD	W11/1104	2.73	2.73	0.00	0.00
R8/1104	BEDROOM	W12/1104	7.62	7.62	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R1/1105	BEDROOM	W1/1105	5.43	5.43	0.00	0.00
R2/1105	LKD	W2/1105	7.79	7.79	0.00	0.00
R2/1105	LKD	W3/1105	8.25	8.25	0.00	0.00
R2/1105	LKD	W4/1105	12.51	10.42	2.09	16.71
R3/1105	BEDROOM	W5/1105	13.04	10.96	2.08	15.95
R4/1105	BEDROOM	W6/1105	11.48	9.36	2.12	18.47
R5/1105	LKD	W7/1105	12.05	10.02	2.03	16.85
R6/1105	BEDROOM	W8/1105	12.07	10.06	2.01	16.65
R7/1105	LKD	W9/1105	10.99	9.10	1.89	17.20
R7/1105	LKD	W10/1105	2.06	2.06	0.00	0.00
R7/1105	LKD	W11/1105	4.54	4.54	0.00	0.00
R8/1105	BEDROOM	W12/1105	11.37	11.37	0.00	0.00
R1/1106	BEDROOM	W1/1106	9.16	9.16	0.00	0.00
R2/1106	LKD	W2/1106	12.91	12.91	0.00	0.00
R2/1106	LKD	W3/1106	13.04	13.04	0.00	0.00
R2/1106	LKD	W4/1106	15.11	12.66	2.45	16.21
R3/1106	BEDROOM	W5/1106	15.44	12.98	2.46	15.93
R4/1106	BEDROOM	W6/1106	13.25	10.76	2.49	18.79
R5/1106	LKD	W7/1106	14.00	11.61	2.39	17.07
R6/1106	BEDROOM	W8/1106	14.14	11.74	2.40	16.97
R7/1106	LKD	W9/1106	12.78	10.51	2.27	17.76
R7/1106	LKD	W10/1106	2.96	2.96	0.00	0.00
R7/1106	LKD	W11/1106	4.16	4.16	0.00	0.00
R8/1106	BEDROOM	W12/1106	11.11	11.11	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R1/1107	BEDROOM	W1/1107	15.33	15.33	0.00	0.00
R2/1107	LKD	W2/1107	19.27	19.27	0.00	0.00
R2/1107	LKD	W3/1107	19.85	19.85	0.00	0.00
R2/1107	LKD	W4/1107	18.15	15.30	2.85	15.70
R3/1107	BEDROOM	W5/1107	18.09	15.23	2.86	15.81
R4/1107	BEDROOM	W6/1107	15.16	12.26	2.90	19.13
R5/1107	LKD	W7/1107	16.04	13.24	2.80	17.46
R6/1107	BEDROOM	W8/1107	16.40	13.57	2.83	17.26
R7/1107	LKD	W9/1107	14.78	12.08	2.70	18.27
R7/1107	LKD	W10/1107	4.12	4.11	0.01	0.24
R7/1107	LKD	W11/1107	6.46	6.46	0.00	0.00
R8/1107	BEDROOM	W12/1107	13.07	13.07	0.00	0.00
R1/1108	BEDROOM	W1/1108	27.22	27.21	0.01	0.04
R1/1108	BEDROOM	W2/1108	27.90	27.90	0.00	0.00
R2/1108	LKD	W3/1108	28.68	28.68	0.00	0.00
R2/1108	LKD	W4/1108	27.94	27.94	0.00	0.00
R2/1108	LKD	W5/1108	21.39	18.14	3.25	15.19
R2/1108	LKD	W6/1108	20.75	17.46	3.29	15.86
R3/1108	BEDROOM	W7/1108	16.95	13.63	3.32	19.59
R4/1108	BEDROOM	W8/1108	17.90	14.69	3.21	17.93
R5/1108	LKD	W9/1108	18.35	15.05	3.30	17.98
R5/1108	LKD	W10/1108	16.96	13.79	3.17	18.69
R5/1108	LKD	W11/1108	6.11	6.11	0.00	0.00
R5/1108	LKD	W12/1108	7.50	7.45	0.05	0.67
R6/1108	BEDROOM	W13/1108	8.99	8.99	0.00	0.00
R6/1108	BEDROOM	W14/1108	13.95	13.89	0.06	0.43

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/1109	BEDROOM	W1/1109	34.04	34.04	0.00	0.00
R1/1109	BEDROOM	W2/1109	33.33	33.33	0.00	0.00
R2/1109	LKD	W3/1109	33.93	33.93	0.00	0.00
R2/1109	LKD	W4/1109	33.92	33.92	0.00	0.00
R2/1109	LKD	W5/1109	24.09	20.42	3.67	15.23
R2/1109	LKD	W6/1109	23.02	19.30	3.72	16.16
R3/1109	BEDROOM	W7/1109	18.60	14.86	3.74	20.11
R4/1109	BEDROOM	W8/1109	19.67	16.04	3.63	18.45
R5/1109	LKD	W9/1109	20.23	16.46	3.77	18.64
R5/1109	LKD	W10/1109	19.03	15.36	3.67	19.29
R5/1109	LKD	W11/1109	9.98	9.85	0.13	1.30
R5/1109	LKD	W12/1109	11.86	11.82	0.04	0.34
R6/1109	BEDROOM	W13/1109	13.02	12.85	0.17	1.31
R6/1109	BEDROOM	W14/1109	17.29	17.26	0.03	0.17
R1/1110	BEDROOM	W1/1110	35.15	35.14	0.01	0.03
R1/1110	BEDROOM	W2/1110	34.79	34.79	0.00	0.00
R2/1110	LKD	W3/1110	35.31	35.30	0.01	0.03
R2/1110	LKD	W4/1110	34.53	34.53	0.00	0.00
R2/1110	LKD	W5/1110	25.49	21.46	4.03	15.81
R2/1110	LKD	W6/1110	24.45	20.36	4.09	16.73
R3/1110	BEDROOM	W7/1110	19.99	15.87	4.12	20.61
R4/1110	BEDROOM	W8/1110	21.04	17.01	4.03	19.15
R5/1110	LKD	W9/1110	21.85	17.63	4.22	19.31
R5/1110	LKD	W10/1110	20.74	16.59	4.15	20.01
R5/1110	LKD	W11/1110	13.52	13.36	0.16	1.18
R5/1110	LKD	W12/1110	14.59	14.38	0.21	1.44
R6/1110	BEDROOM	W13/1110	15.40	15.27	0.13	0.84
R6/1110	BEDROOM	W14/1110	18.94	18.75	0.19	1.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/1111	BEDROOM	W1/1111	34.76	34.76	0.00	0.00
R1/1111	BEDROOM	W2/1111	34.05	34.04	0.01	0.03
R2/1111	LKD	W3/1111	34.60	34.60	0.00	0.00
R2/1111	LKD	W4/1111	34.63	34.63	0.00	0.00
R2/1111	LKD	W5/1111	26.16	22.02	4.14	15.83
R2/1111	LKD	W6/1111	25.22	20.99	4.23	16.77
R3/1111	BEDROOM	W7/1111	20.80	16.53	4.27	20.53
R4/1111	BEDROOM	W8/1111	21.81	17.62	4.19	19.21
R5/1111	LKD	W9/1111	22.90	18.47	4.43	19.34
R5/1111	LKD	W10/1111	22.00	17.60	4.40	20.00
R5/1111	LKD	W11/1111	17.90	17.57	0.33	1.84
R5/1111	LKD	W12/1111	19.51	19.27	0.24	1.23
R6/1111	BEDROOM	W13/1111	19.92	19.58	0.34	1.71
R6/1111	BEDROOM	W14/1111	22.17	21.98	0.19	0.86
R1/1112	BEDROOM	W1/1112	35.31	35.30	0.01	0.03
R1/1112	BEDROOM	W2/1112	34.95	34.95	0.00	0.00
R2/1112	LKD	W3/1112	35.47	35.46	0.01	0.03
R2/1112	LKD	W4/1112	34.69	34.69	0.00	0.00
R2/1112	LKD	W5/1112	26.72	22.54	4.18	15.64
R2/1112	LKD	W6/1112	25.86	21.57	4.29	16.59
R3/1112	BEDROOM	W7/1112	21.48	17.13	4.35	20.25
R4/1112	BEDROOM	W8/1112	22.45	18.16	4.29	19.11
R5/1112	LKD	W9/1112	23.82	19.25	4.57	19.19
R5/1112	LKD	W10/1112	23.15	18.55	4.60	19.87
R5/1112	LKD	W11/1112	20.94	20.56	0.38	1.81
R5/1112	LKD	W12/1112	21.85	21.45	0.40	1.83
R6/1112	BEDROOM	W13/1112	22.16	21.85	0.31	1.40
R6/1112	BEDROOM	W14/1112	23.79	23.47	0.32	1.35

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R1/1113	BEDROOM	W1/1113	34.90	34.90	0.00	0.00
R1/1113	BEDROOM	W2/1113	34.19	34.19	0.00	0.00
R2/1113	LKD	W3/1113	34.74	34.74	0.00	0.00
R2/1113	LKD	W4/1113	34.78	34.77	0.01	0.03
R2/1113	LKD	W5/1113	27.26	23.04	4.22	15.48
R2/1113	LKD	W6/1113	26.45	22.12	4.33	16.37
R3/1113	BEDROOM	W7/1113	22.10	17.69	4.41	19.95
R4/1113	BEDROOM	W8/1113	22.97	18.62	4.35	18.94
R5/1113	BEDROOM	W9/1113	24.58	19.93	4.65	18.92
R6/1113	LKD	W10/1113	23.99	19.31	4.68	19.51
R6/1113	LKD	W11/1113	22.38	21.92	0.46	2.06
R6/1113	LKD	W12/1113	23.80	23.45	0.35	1.47
R6/1113	LKD	W13/1113	24.00	23.56	0.44	1.83
R7/1113	BEDROOM	W14/1113	25.38	25.12	0.26	1.02
R1/1114	BEDROOM	W1/1114	35.42	35.41	0.01	0.03
R1/1114	BEDROOM	W2/1114	35.07	35.07	0.00	0.00
R2/1114	LKD	W3/1114	35.59	35.58	0.01	0.03
R2/1114	LKD	W4/1114	34.81	34.81	0.00	0.00
R2/1114	LKD	W5/1114	27.64	23.46	4.18	15.12
R2/1114	LKD	W6/1114	26.86	22.57	4.29	15.97
R3/1114	BEDROOM	W7/1114	22.52	18.16	4.36	19.36
R4/1114	BEDROOM	W8/1114	23.25	18.96	4.29	18.45
R5/1114	BEDROOM	W9/1114	25.08	20.50	4.58	18.26
R6/1114	LKD	W10/1114	24.53	19.91	4.62	18.83
R6/1114	LKD	W11/1114	23.52	23.13	0.39	1.66
R6/1114	LKD	W12/1114	24.33	23.91	0.42	1.73
R6/1114	LKD	W13/1114	24.51	24.19	0.32	1.31

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R7/1114	BEDROOM	W14/1114	26.00	25.68	0.32	1.23
R1/1115	BEDROOM	W1/1115	34.98	34.98	0.00	0.00
R1/1115	BEDROOM	W2/1115	34.28	34.28	0.00	0.00
R2/1115	LKD	W3/1115	34.83	34.83	0.00	0.00
R2/1115	LKD	W4/1115	34.86	34.86	0.00	0.00
R2/1115	LKD	W5/1115	28.02	23.88	4.14	14.78
R2/1115	LKD	W6/1115	27.28	23.03	4.25	15.58
R3/1115	BEDROOM	W7/1115	22.97	18.66	4.31	18.76
R4/1115	BEDROOM	W8/1115	23.56	19.31	4.25	18.04
R5/1115	BEDROOM	W9/1115	25.62	21.09	4.53	17.68
R6/1115	LKD	W10/1115	25.10	20.56	4.54	18.09
R6/1115	LKD	W11/1115	25.11	24.67	0.44	1.75
R6/1115	LKD	W12/1115	26.43	26.10	0.33	1.25
R6/1115	LKD	W13/1115	26.49	26.08	0.41	1.55
R7/1115	BEDROOM	W14/1115	27.73	27.48	0.25	0.90
R1/1116	BEDROOM	W1/1116	35.49	35.48	0.01	0.03
R1/1116	BEDROOM	W2/1116	35.15	35.15	0.00	0.00
R2/1116	LKD	W3/1116	35.67	35.66	0.01	0.03
R2/1116	LKD	W4/1116	34.89	34.89	0.00	0.00
R2/1116	LKD	W5/1116	28.42	24.32	4.10	14.43
R2/1116	LKD	W6/1116	27.71	23.52	4.19	15.12
R3/1116	BEDROOM	W7/1116	23.43	19.18	4.25	18.14
R4/1116	BEDROOM	W8/1116	23.87	19.68	4.19	17.55
R5/1116	BEDROOM	W9/1116	26.18	21.71	4.47	17.07
R6/1116	LKD	W10/1116	25.72	21.24	4.48	17.42
R6/1116	LKD	W11/1116	26.47	26.11	0.36	1.36
R6/1116	LKD	W12/1116	27.16	26.78	0.38	1.40

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R6/1116	LKD	W13/1116	27.19	26.89	0.30	1.10
R7/1116	BEDROOM	W14/1116	28.52	28.22	0.30	1.05
R1/1117	BEDROOM	W1/1117	35.16	35.16	0.00	0.00
R1/1117	BEDROOM	W2/1117	34.58	34.58	0.00	0.00
R2/1117	LKD	W3/1117	35.05	35.05	0.00	0.00
R2/1117	LKD	W4/1117	35.12	35.12	0.00	0.00
R2/1117	LKD	W5/1117	28.84	24.78	4.06	14.08
R2/1117	LKD	W6/1117	28.17	24.03	4.14	14.70
R3/1117	BEDROOM	W7/1117	23.92	19.72	4.20	17.56
R4/1117	BEDROOM	W8/1117	24.21	20.08	4.13	17.06
R5/1117	BEDROOM	W9/1117	26.78	22.37	4.41	16.47
R6/1117	LKD	W10/1117	26.37	21.96	4.41	16.72
R6/1117	LKD	W11/1117	28.25	27.84	0.41	1.45
R6/1117	LKD	W12/1117	29.43	29.12	0.31	1.05
R6/1117	LKD	W13/1117	29.31	28.94	0.37	1.26
R7/1117	BEDROOM	W14/1117	30.37	30.14	0.23	0.76
R1/1118	BEDROOM	W1/1118	35.71	35.71	0.00	0.00
R1/1118	BEDROOM	W2/1118	35.37	35.37	0.00	0.00
R2/1118	LKD	W3/1118	35.90	35.89	0.01	0.03
R2/1118	LKD	W4/1118	35.15	35.15	0.00	0.00
R2/1118	LKD	W5/1118	29.27	25.26	4.01	13.70
R2/1118	LKD	W6/1118	28.63	24.56	4.07	14.22
R3/1118	BEDROOM	W7/1118	24.42	20.28	4.14	16.95
R4/1118	BEDROOM	W8/1118	24.56	20.49	4.07	16.57
R5/1118	BEDROOM	W9/1118	27.39	23.04	4.35	15.88
R6/1118	LKD	W10/1118	27.05	22.71	4.34	16.04

DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R6/1118	LKD	W11/1118	29.86	29.52	0.34	1.14
R6/1118	LKD	W12/1118	30.28	29.89	0.39	1.29
R6/1118	LKD	W13/1118	30.33	30.06	0.27	0.89
R7/1118	BEDROOM	W14/1118	31.22	30.93	0.29	0.93
R1/1119	LKD	W1/1119	36.15	36.15	0.00	0.00
R1/1119	LKD	W2/1119	35.65	35.65	0.00	0.00
R1/1119	LKD	W3/1119	36.05	36.05	0.00	0.00
R1/1119	LKD	W4/1119	36.06	36.06	0.00	0.00
R1/1119	LKD	W5/1119	29.71	25.76	3.95	13.30
R1/1119	LKD	W6/1119	29.11	25.10	4.01	13.78
R2/1119	BEDROOM	W7/1119	24.94	20.86	4.08	16.36
R3/1119	BEDROOM	W8/1119	24.93	20.92	4.01	16.09
R4/1119	BEDROOM	W9/1119	28.02	23.73	4.29	15.31
R4/1119	BEDROOM	W10/1119	27.75	23.47	4.28	15.42
R4/1119	BEDROOM	W11/1119	32.29	31.87	0.42	1.30
R4/1119	BEDROOM	W12/1119	33.07	32.74	0.33	1.00
R5/1119	BEDROOM	W13/1119	32.98	32.60	0.38	1.15
R5/1119	BEDROOM	W14/1119	33.64	33.40	0.24	0.71
R1/1120	LKD	W1/1120	36.36	36.36	0.00	0.00
R1/1120	LKD	W2/1120	36.15	36.15	0.00	0.00
R1/1120	LKD	W3/1120	36.50	36.49	0.01	0.03
R1/1120	LKD	W4/1120	35.96	35.96	0.00	0.00
R1/1120	LKD	W5/1120	30.18	26.29	3.89	12.89
R1/1120	LKD	W6/1120	29.63	25.68	3.95	13.33
R2/1120	BEDROOM	W7/1120	25.48	21.48	4.00	15.70
R3/1120	BEDROOM	W8/1120	25.33	21.38	3.95	15.59
R4/1120	BEDROOM	W9/1120	28.68	24.46	4.22	14.71
R4/1120	BEDROOM	W10/1120	28.48	24.28	4.20	14.75
R4/1120	BEDROOM	W11/1120	33.68	33.33	0.35	1.04
R4/1120	BEDROOM	W12/1120	34.08	33.72	0.36	1.06

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R5/1120	BEDROOM	W13/1120	33.72	33.43	0.29	0.86
R5/1120	BEDROOM	W14/1120	34.62	34.35	0.27	0.78
R1/1121	LKD	W1/1121	36.54	36.54	0.00	0.00
R1/1121	LKD	W2/1121	35.98	35.98	0.00	0.00
R1/1121	LKD	W3/1121	36.43	36.43	0.00	0.00
R1/1121	LKD	W4/1121	36.39	36.39	0.00	0.00
R1/1121	LKD	W5/1121	30.66	26.84	3.82	12.46
R1/1121	LKD	W6/1121	30.15	26.26	3.89	12.90
R2/1121	BEDROOM	W7/1121	26.03	22.10	3.93	15.10
R3/1121	BEDROOM	W8/1121	25.75	21.87	3.88	15.07
R4/1121	BEDROOM	W9/1121	29.35	25.20	4.15	14.14
R4/1121	BEDROOM	W10/1121	29.21	25.09	4.12	14.10
R4/1121	BEDROOM	W11/1121	35.26	34.91	0.35	0.99
R4/1121	BEDROOM	W12/1121	35.66	35.33	0.33	0.93
R5/1121	BEDROOM	W13/1121	35.63	35.30	0.33	0.93
R5/1121	BEDROOM	W14/1121	35.81	35.58	0.23	0.64
R1/1122	LIVINGROOM	W1/1122	35.16	35.15	0.01	0.03
R1/1122	LIVINGROOM	W2/1122	34.71	34.71	0.00	0.00
R1/1122	LIVINGROOM	W3/1122	35.41	35.40	0.01	0.03
R1/1122	LIVINGROOM	W4/1122	34.43	34.43	0.00	0.00
R1/1122	LIVINGROOM	W5/1122	31.14	27.40	3.74	12.01
R1/1122	LIVINGROOM	W6/1122	30.67	26.85	3.82	12.46
R2/1122	LIVINGROOM	W7/1122	26.58	22.72	3.86	14.52
R2/1122	LIVINGROOM	W8/1122	26.19	22.39	3.80	14.51
R3/1122	DINING	W9/1122	29.99	25.93	4.06	13.54
R3/1122	DINING	W10/1122	29.89	25.86	4.03	13.48
R3/1122	DINING	W11/1122	34.12	33.85	0.27	0.79
R3/1122	DINING	W12/1122	34.01	33.64	0.37	1.09
R4/1122	KITCHEN	W13/1122	34.00	33.78	0.22	0.65
R4/1122	KITCHEN	W14/1122	34.20	33.93	0.27	0.79

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R1/1123	BEDROOM	W1/1123	36.55	36.54	0.01	0.03
R1/1123	BEDROOM	W2/1123	36.44	36.44	0.00	0.00
R2/1123	BEDROOM	W3/1123	36.57	36.55	0.02	0.05
R2/1123	BEDROOM	W4/1123	36.81	36.79	0.02	0.05
R2/1123	BEDROOM	W5/1123	31.57	27.90	3.67	11.62
R2/1123	BEDROOM	W6/1123	31.12	27.37	3.75	12.05
R3/1123	BEDROOM	W7/1123	27.01	23.22	3.79	14.03
R3/1123	BEDROOM	W8/1123	26.58	22.86	3.72	14.00
R4/1123	BEDROOM	W9/1123	30.50	26.52	3.98	13.05
R4/1123	BEDROOM	W10/1123	30.41	26.47	3.94	12.96
R4/1123	BEDROOM	W11/1123	35.34	34.99	0.35	0.99
R4/1123	BEDROOM	W12/1123	35.93	35.66	0.27	0.75
R5/1123	BEDROOM	W13/1123	35.49	35.17	0.32	0.90
R5/1123	BEDROOM	W14/1123	35.93	35.74	0.19	0.53
R1/1124	LIVINGROOM	W1/1124	29.84	29.84	0.00	0.00
R1/1124	LIVINGROOM	W2/1124	33.78	33.77	0.01	0.03
R1/1124	LIVINGROOM	W3/1124	32.69	32.67	0.02	0.06
R1/1124	LIVINGROOM	W4/1124	32.84	32.78	0.06	0.18
R1/1124	LIVINGROOM	W5/1124	31.93	28.33	3.60	11.27
R1/1124	LIVINGROOM	W6/1124	31.49	27.81	3.68	11.69
R2/1124	LIVINGROOM	W7/1124	26.55	22.84	3.71	13.97
R2/1124	LIVINGROOM	W8/1124	25.66	22.01	3.65	14.22
R3/1124	DINING	W9/1124	30.89	27.01	3.88	12.56
R3/1124	DINING	W10/1124	30.80	26.95	3.85	12.50
R3/1124	DINING	W11/1124	38.74	38.31	0.43	1.11
R3/1124	DINING	W12/1124	38.64	38.24	0.40	1.04
R4/1124	KITCHEN	W13/1124	38.72	38.35	0.37	0.96
R4/1124	KITCHEN	W14/1124	38.60	38.32	0.28	0.73

40-60 Hampstead Road

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R1/241	ASSUMED	W1/241	14.66	13.10	1.56	10.64
R2/241	ASSUMED	W2/241	11.90	10.41	1.49	12.52
R3/241	ASSUMED	W3/241	9.83	9.10	0.73	7.43
R4/241	ASSUMED	W4/241	7.89	7.68	0.21	2.66
R5/241	ASSUMED	W5/241	5.82	5.81	0.01	0.17
R7/241	ASSUMED	W17/241	13.75	13.00	0.75	5.45
R8/241	ASSUMED	W16/241	14.25	13.44	0.81	5.68
R9/241	ASSUMED	W15/241	13.19	12.94	0.25	1.90
R10/241	ASSUMED	W14/241	12.86	11.96	0.90	7.00
R11/241	ASSUMED	W13/241	14.18	13.34	0.84	5.92
R12/241	ASSUMED	W12/241	12.80	12.49	0.31	2.42
R13/241	ASSUMED	W11/241	12.88	11.90	0.98	7.61
R14/241	ASSUMED	W10/241	13.76	12.83	0.93	6.76
R15/241	ASSUMED	W9/241	12.36	11.97	0.39	3.16
R16/241	ASSUMED	W6/241	12.38	11.36	1.02	8.24
R17/241	ASSUMED	W8/241	14.31	13.23	1.08	7.55
R18/241	ASSUMED	W7/241	13.58	12.83	0.75	5.52
R1/242	ASSUMED	W1/242	16.29	14.69	1.60	9.82
R2/242	ASSUMED	W2/242	12.80	11.29	1.51	11.80
R3/242	ASSUMED	W3/242	10.71	9.88	0.83	7.75

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R4/242	ASSUMED	W4/242	8.46	8.25	0.21	2.48
R5/242	ASSUMED	W5/242	8.10	8.09	0.01	0.12
R6/242	ASSUMED	W18/242	15.30	14.21	1.09	7.12
R8/242	ASSUMED	W14/242	0.28	0.25	0.03	10.71
R9/242	ASSUMED	W13/242	0.40	0.40	0.00	0.00
R11/242	ASSUMED	W17/242	14.01	13.12	0.89	6.35
R12/242	ASSUMED	W16/242	14.06	13.22	0.84	5.97
R14/242	ASSUMED	W11/242	0.71	0.71	0.00	0.00
R15/242	ASSUMED	W12/242	1.37	1.37	0.00	0.00
R17/242	ASSUMED	W15/242	9.81	9.17	0.64	6.52
R1/243	ASSUMED	W1/243	17.32	15.68	1.64	9.47
R2/243	ASSUMED	W2/243	13.73	12.19	1.54	11.22
R3/243	ASSUMED	W3/243	11.59	10.75	0.84	7.25
R4/243	ASSUMED	W4/243	9.06	8.83	0.23	2.54
R5/243	ASSUMED	W5/243	11.59	11.58	0.01	0.09
R6/243	ASSUMED	W13/243	9.68	9.01	0.67	6.92
R9/243	ASSUMED	W11/243	10.32	9.67	0.65	6.30
R10/243	ASSUMED	W12/243	10.33	9.74	0.59	5.71
R13/243	ASSUMED	W10/243	9.87	9.34	0.53	5.37
R1/244	ASSUMED	W1/244	18.38	16.71	1.67	9.09

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Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R2/244	ASSUMED	W2/244	14.80	13.23	1.57	10.61
R3/244	ASSUMED	W3/244	12.62	11.76	0.86	6.81
R4/244	ASSUMED	W4/244	9.76	9.50	0.26	2.66
R5/244	ASSUMED	W5/244	15.95	15.93	0.02	0.13
R7/244	ASSUMED	W13/244	18.84	17.68	1.16	6.16
R9/244	ASSUMED	W12/244	19.27	18.31	0.96	4.98
R10/244	ASSUMED	W11/244	19.77	18.72	1.05	5.31
R13/244	ASSUMED	W10/244	20.15	19.40	0.75	3.72
R1/245	ASSUMED	W1/245	19.45	17.71	1.74	8.95
R2/245	ASSUMED	W2/245	16.24	14.64	1.60	9.85
R3/245	ASSUMED	W3/245	14.08	13.13	0.95	6.75
R4/245	ASSUMED	W4/245	10.87	10.52	0.35	3.22
R5/245	ASSUMED	W5/245	18.37	18.35	0.02	0.11
R6/245	ASSMUED	W6/245	20.11	18.87	1.24	6.17
R6/245	ASSMUED	W7/245	33.38	33.38	0.00	0.00
R1/246	ASSUMED	W1/246	32.82	32.82	0.00	0.00
R1/246	ASSUMED	W2/246	20.79	19.07	1.72	8.27
R2/246	ASSUMED	W3/246	18.72	17.08	1.64	8.76
R3/246	ASSUMED	W4/246	16.65	15.48	1.17	7.03
R4/246	ASSUMED	W5/246	13.44	12.72	0.72	5.36
R5/246	ASSUMED	W6/246	21.68	21.60	0.08	0.37

POINT 2

DAYLIGHT ANALYSIS
EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	DAYLIGHT Proposed VSC	Loss	%Loss
R1/247	ASSUMED	W1/247	18.59	17.27	1.32	7.10
1-6 Tolmers Square						
R1/10	SSUMED_LIVINGROO	W1/10	19.25	18.59	0.66	3.43
R1/10	SSUMED_LIVINGROO	W2/10	18.66	17.99	0.67	3.59
R1/10	SSUMED_LIVINGROO	W3/10	19.86	19.17	0.69	3.47
R1/10	SSUMED_LIVINGROO	W4/10	18.96	18.26	0.70	3.69
R2/10	SSUMED_LIVINGROO	W5/10	22.76	22.19	0.57	2.50
R2/10	SSUMED_LIVINGROO	W6/10	21.70	21.13	0.57	2.63
R2/10	SSUMED_LIVINGROO	W7/10	23.10	22.39	0.71	3.07
R2/10	SSUMED_LIVINGROO	W8/10	22.37	21.65	0.72	3.22
R3/10	SSUMED_LIVINGROO	W9/10	23.68	22.93	0.75	3.17
R3/10	SSUMED_LIVINGROO	W10/10	22.80	22.04	0.76	3.33
R3/10	SSUMED_LIVINGROO	W11/10	23.66	22.98	0.68	2.87
R3/10	SSUMED_LIVINGROO	W12/10	22.48	21.79	0.69	3.07
R4/10	ASSUMED	W13/10	24.39	23.68	0.71	2.91
R5/10	SSUMED_LIVINGROO	W14/10	24.33	23.63	0.70	2.88
R5/10	SSUMED_LIVINGROO	W15/10	23.47	22.76	0.71	3.03
R5/10	SSUMED_LIVINGROO	W16/10	24.31	23.64	0.67	2.76
R5/10	SSUMED_LIVINGROO	W17/10	23.14	22.46	0.68	2.94
R6/10	SSUMED_LIVINGROO	W18/10	24.10	23.53	0.57	2.37
R7/10	SSUMED_LIVINGROO	W19/10	23.67	22.97	0.70	2.96
R8/10	SSUMED_LIVINGROO	W20/10	20.36	19.66	0.70	3.44
R9/10	ASSUMED	W21/10	21.73	21.07	0.66	3.04
R10/10	ASSUMED	W22/10	21.78	21.08	0.70	3.21
R1/11	ASSUMED_BEDROOM	W1/11	21.67	20.95	0.72	3.32
R2/11	ASSUMED_BEDROOM	W2/11	22.66	22.10	0.56	2.47

DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R3/11	ASSUMED_BEDROOM	W3/11	24.05	23.30	0.75	3.12
R4/11	ASSUMED_BEDROOM	W4/11	24.18	23.56	0.62	2.56
R5/11	ASSUMED_BEDROOM	W5/11	24.70	23.89	0.81	3.28
R6/11	ASSUMED_BEDROOM	W6/11	24.86	24.21	0.65	2.61
R7/11	ASSUMED_BEDROOM	W7/11	25.15	24.39	0.76	3.02
R8/11	ASSUMED_BEDROOM	W8/11	25.23	24.55	0.68	2.70
R8/11	ASSUMED_BEDROOM	W9/11	25.29	24.54	0.75	2.97
R9/11	ASSUMED_BEDROOM	W10/11	25.42	24.67	0.75	2.95
R10/11	ASSUMED_BEDROOM	W11/11	25.51	24.79	0.72	2.82
R11/11	ASSUMED	W12/11	25.11	24.37	0.74	2.95
R12/11	ASSUMED_BEDROOM	W13/11	24.23	23.51	0.72	2.97
R13/11	ASSUMED_BEDROOM	W14/11	25.31	24.73	0.58	2.29
R14/11	ASSUMED_BEDROOM	W15/11	25.17	24.46	0.71	2.82
R15/11	ASSUMED_BEDROOM	W16/11	24.84	24.12	0.72	2.90
R16/11	ASSUMED_BEDROOM	W17/11	23.57	22.80	0.77	3.27
R17/11	ASSUMED_BEDROOM	W18/11	21.96	21.23	0.73	3.32
R18/11	ASSUMED_BEDROOM	W19/11	22.80	22.11	0.69	3.03
R19/11	ASSUMED_BEDROOM	W20/11	23.72	23.11	0.61	2.57
R20/11	ASSUMED_BEDROOM	W21/11	23.74	23.09	0.65	2.74
R21/11	ASSUMED_BEDROOM	W22/11	23.08	22.34	0.74	3.21
R1/12	RECEPTION	W1/12	13.58	13.58	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

			DAYLIGHT			
Room	Room Use	Window	Existing VSC	Proposed VSC	Loss	%Loss
R1/12	RECEPTION	W2/12	19.95	19.93	0.02	0.10
R1/12	RECEPTION	W3/12	11.08	10.65	0.43	3.88
R1/12	RECEPTION	W4/12	23.85	23.10	0.75	3.14
R1/12	RECEPTION	W5/12	1.39	1.39	0.00	0.00
R1/12	RECEPTION	W6/12	24.23	23.62	0.61	2.52
R2/12	RECEPTION	W7/12	20.04	19.27	0.77	3.84
R2/12	RECEPTION	W8/12	0.38	0.35	0.03	7.89
R2/12	RECEPTION	W9/12	22.29	21.64	0.65	2.92
R3/12	RECEPTION	W10/12	22.78	21.94	0.84	3.69
R3/12	RECEPTION	W11/12	1.03	1.03	0.00	0.00
R3/12	RECEPTION	W12/12	20.68	19.99	0.69	3.34
R4/12	RECEPTION	W13/12	21.02	20.24	0.78	3.71
R4/12	RECEPTION	W14/12	0.57	0.54	0.03	5.26
R4/12	RECEPTION	W15/12	23.35	22.58	0.77	3.30
R5/12	RECEPTION	W16/12	23.50	22.72	0.78	3.32
R5/12	RECEPTION	W17/12	0.86	0.85	0.01	1.16
R5/12	RECEPTION	W18/12	21.28	20.50	0.78	3.67
R6/12	ASSUMED	W19/12	13.25	12.50	0.75	5.66
R7/12	RECEPTION	W20/12	21.93	21.18	0.75	3.42
R7/12	RECEPTION	W21/12	1.36	1.28	0.08	5.88
R7/12	RECEPTION	W22/12	23.72	23.11	0.61	2.57
R8/12	RECEPTION	W23/12	23.68	22.93	0.75	3.17
R8/12	RECEPTION	W24/12	1.85	1.85	0.00	0.00
R8/12	RECEPTION	W25/12	21.58	20.83	0.75	3.48
R9/12	RECEPTION	W26/12	20.98	20.19	0.79	3.77
R9/12	RECEPTION	W27/12	1.51	1.40	0.11	7.28
R9/12	RECEPTION	W28/12	21.83	21.06	0.77	3.53
R10/12	RECEPTION	W29/12	1.06	0.88	0.18	16.98
R10/12	RECEPTION	W30/12	22.77	22.02	0.75	3.29
R11/12	RECEPTION	W31/12	23.00	22.32	0.68	2.96

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing VSC	Proposed VSC	Loss	%Loss
R11/12	RECEPTION	W32/12	1.90	1.90	0.00	0.00
R1/13	BEDROOM	W1/13	25.50	24.72	0.78	3.06
R2/13	BEDROOM	W2/13	25.62	25.02	0.60	2.34
R3/13	BEDROOM	W3/13	26.30	25.49	0.81	3.08
R4/13	BEDROOM	W4/13	26.42	25.75	0.67	2.54
R5/13	BEDROOM	W5/13	26.88	26.01	0.87	3.24
R6/13	BEDROOM	W6/13	26.92	26.22	0.70	2.60
R7/13	BEDROOM	W7/13	27.24	26.44	0.80	2.94
R8/13	BEDROOM	W8/13	27.35	26.55	0.80	2.93
R9/13	BEDROOM	W9/13	27.55	26.74	0.81	2.94
R10/13	BEDROOM	W10/13	27.61	26.83	0.78	2.83
R11/13	ASSUMED	W11/13	15.33	14.60	0.73	4.76
R12/13	BEDROOM	W12/13	27.85	27.06	0.79	2.84
R13/13	BEDROOM	W13/13	27.83	27.20	0.63	2.26
R14/13	BEDROOM	W14/13	28.05	27.27	0.78	2.78
R15/13	BEDROOM	W15/13	28.06	27.29	0.77	2.74
R16/13	BEDROOM	W16/13	28.14	27.32	0.82	2.91
R17/13	BEDROOM	W17/13	27.75	26.96	0.79	2.85
R18/13	ASSUMED_BEDROOM	W18/13	27.91	27.13	0.78	2.79
R19/13	ASSUMED_BEDROOM	W19/13	27.83	27.13	0.70	2.52

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Window	DAYLIGHT Existing ADF	Existing Total	Proposed ADF	Proposed Total	Total Loss	%Loss
Schafer House, University College								
R1/120		W1/120	0.39	0.39	0.39	0.39	0.00	0.00
R2/120		W2/120	0.58	0.58	0.58	0.58	0.00	0.00
R3/120		W3/120	0.50	0.50	0.50	0.50	0.00	0.00
R4/120		W4/120	0.48		0.48			
R4/120		W5/120	0.43	0.91	0.42	0.90	0.01	1.10
R5/120		W6/120	0.48		0.47			
R5/120		W7/120	0.48	0.96	0.48	0.96	0.00	0.21
R6/120		W8/120	0.52		0.52			
R6/120		W9/120	0.53	1.04	0.53	1.04	0.00	0.00
R7/120		W10/120	1.02	1.02	1.02	1.02	0.00	0.00
R1/121		W1/121	0.50	0.50	0.50	0.50	0.00	0.00
R2/121		W2/121	0.72	0.72	0.72	0.72	0.00	0.00
R3/121		W3/121	0.61	0.61	0.61	0.61	0.00	0.00
R4/121		W4/121	0.54		0.54			
R4/121		W5/121	0.48	1.03	0.48	1.02	0.01	0.97
R5/121		W6/121	0.53		0.53			
R5/121		W7/121	0.54	1.08	0.54	1.08	0.00	0.19
R6/121		W8/121	0.57		0.57			
R6/121		W9/121	0.58	1.15	0.58	1.15	0.00	0.26
R7/121		W10/121	1.12	1.12	1.12	1.12	0.01	0.45
R1/122		W1/122	0.70	0.70	0.70	0.70	0.00	0.00
R2/122		W2/122	0.94	0.94	0.94	0.94	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R3/122		W3/122	0.76	0.76	0.76	0.76	0.00	0.13
R4/122		W4/122	0.61		0.61			
R4/122		W5/122	0.56	1.17	0.55	1.16	0.01	0.86
R5/122		W6/122	0.59		0.59			
R5/122		W7/122	0.60	1.20	0.60	1.19	0.01	0.59
R6/122		W8/122	0.63		0.62			
R6/122		W9/122	0.63	1.26	0.63	1.25	0.01	0.71
R7/122		W10/122	1.21	1.21	1.21	1.21	0.01	0.66
R1/123		W1/123	0.78	0.78	0.77	0.77	0.00	0.52
R2/123		W2/123	0.92	0.92	0.91	0.91	0.00	0.44
R3/123		W3/123	0.72	0.72	0.72	0.72	0.00	0.55
R4/123		W4/123	0.56		0.55			
R4/123		W5/123	0.52	1.08	0.51	1.07	0.01	0.65
R5/123		W6/123	0.53		0.53			
R5/123		W7/123	0.53	1.06	0.53	1.06	0.01	0.66
R6/123		W8/123	0.55		0.55			
R6/123		W9/123	0.56	1.11	0.55	1.10	0.01	0.54
R7/123		W10/123	1.05	1.05	1.04	1.04	0.01	0.67
R1/217		W1/217	0.76	0.76	0.73	0.73	0.02	3.17
R2/217		W2/217	0.57	0.57	0.55	0.55	0.02	3.48
R3/217		W3/217	0.56	0.56	0.53	0.53	0.03	4.67
R4/217		W4/217	0.62	0.62	0.58	0.58	0.04	6.01

Triton Building

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/1103	BEDROOM	W1/1103	0.00	0.00	0.00	0.00	0.00	-
R2/1103	LKD	W2/1103	0.00		0.00			
R2/1103	LKD	W3/1103	0.00		0.00			
R2/1103	LKD	W4/1103	1.09	1.09	0.98	0.98	0.12	10.63
R3/1103	BEDROOM	W5/1103	2.25	2.25	2.03	2.03	0.22	9.94
R4/1103	BEDROOM	W6/1103	2.09	2.09	1.86	1.86	0.23	11.20
R5/1103	LKD	W7/1103	0.88	0.88	0.79	0.79	0.09	10.27
R6/1103	BEDROOM	W8/1103	2.10	2.10	1.90	1.90	0.21	9.74
R7/1103	LKD	W9/1103	1.06		0.95			
R7/1103	LKD	W10/1103	0.00		0.00			
R7/1103	LKD	W11/1103	0.02	1.08	0.02	0.97	0.11	9.86
R8/1103	BEDROOM	W12/1103	0.24	0.24	0.24	0.24	0.00	0.00
R1/1104	BEDROOM	W1/1104	0.00	0.00	0.00	0.00	0.00	-
R2/1104	LKD	W2/1104	0.00		0.00			
R2/1104	LKD	W3/1104	0.00		0.00			
R2/1104	LKD	W4/1104	1.21	1.21	1.09	1.09	0.13	10.46
R3/1104	BEDROOM	W5/1104	2.50	2.50	2.25	2.25	0.25	9.89
R4/1104	BEDROOM	W6/1104	2.29	2.29	2.03	2.03	0.26	11.33
R5/1104	LKD	W7/1104	0.96	0.96	0.86	0.86	0.10	10.50
R6/1104	BEDROOM	W8/1104	2.31	2.31	2.08	2.08	0.23	9.99
R7/1104	LKD	W9/1104	1.15		1.03			
R7/1104	LKD	W10/1104	0.00		0.00			
R7/1104	LKD	W11/1104	0.09	1.25	0.09	1.13	0.12	9.70
R8/1104	BEDROOM	W12/1104	0.41	0.41	0.41	0.41	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/1105	BEDROOM	W1/1105	0.12	0.12	0.12	0.12	0.00	0.00
R2/1105	LKD	W2/1105	0.03		0.03			
R2/1105	LKD	W3/1105	0.06		0.06			
R2/1105	LKD	W4/1105	1.36	1.45	1.22	1.31	0.14	9.66
R3/1105	BEDROOM	W5/1105	2.77	2.77	2.49	2.49	0.28	9.94
R4/1105	BEDROOM	W6/1105	2.50	2.50	2.21	2.21	0.29	11.63
R5/1105	LKD	W7/1105	1.05	1.05	0.94	0.94	0.11	10.73
R6/1105	BEDROOM	W8/1105	2.54	2.54	2.28	2.28	0.26	10.27
R7/1105	LKD	W9/1105	1.26		1.12			
R7/1105	LKD	W10/1105	0.06		0.06			
R7/1105	LKD	W11/1105	0.07	1.39	0.07	1.25	0.14	9.87
R8/1105	BEDROOM	W12/1105	0.59	0.59	0.59	0.59	0.00	0.00
R1/1106	BEDROOM	W1/1106	0.25	0.25	0.25	0.25	0.00	0.00
R2/1106	LKD	W2/1106	0.24		0.24			
R2/1106	LKD	W3/1106	0.21		0.21			
R2/1106	LKD	W4/1106	1.52	1.97	1.36	1.81	0.16	7.88
R3/1106	BEDROOM	W5/1106	3.06	3.06	2.76	2.76	0.31	10.00
R4/1106	BEDROOM	W6/1106	2.71	2.71	2.39	2.39	0.33	11.98
R5/1106	LKD	W7/1106	1.15	1.15	1.02	1.02	0.13	11.05
R6/1106	BEDROOM	W8/1106	2.79	2.79	2.49	2.49	0.30	10.58
R7/1106	LKD	W9/1106	1.38		1.22			
R7/1106	LKD	W10/1106	0.00		0.00			
R7/1106	LKD	W11/1106	0.11	1.49	0.11	1.33	0.16	10.56
R8/1106	BEDROOM	W12/1106	0.56	0.56	0.56	0.56	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/1107	BEDROOM	W1/1107	0.50	0.50	0.50	0.50	0.00	0.00
R2/1107	LKD	W2/1107	0.38		0.38			
R2/1107	LKD	W3/1107	0.37		0.37			
R2/1107	LKD	W4/1107	1.70	2.45	1.53	2.28	0.17	7.02
R3/1107	BEDROOM	W5/1107	3.38	3.38	3.03	3.03	0.34	10.16
R4/1107	BEDROOM	W6/1107	2.93	2.93	2.57	2.57	0.36	12.35
R5/1107	LKD	W7/1107	1.25	1.25	1.10	1.10	0.14	11.49
R6/1107	BEDROOM	W8/1107	3.05	3.05	2.71	2.71	0.33	10.97
R7/1107	LKD	W9/1107	1.50		1.32			
R7/1107	LKD	W10/1107	0.06		0.06			
R7/1107	LKD	W11/1107	0.08	1.64	0.08	1.46	0.18	10.89
R8/1107	BEDROOM	W12/1107	0.61	0.61	0.61	0.61	0.00	0.00
R1/1108	BEDROOM	W1/1108	0.66		0.66			
R1/1108	BEDROOM	W2/1108	0.59	1.25	0.59	1.25	0.00	0.00
R2/1108	LKD	W3/1108	0.38		0.38			
R2/1108	LKD	W4/1108	0.34		0.34			
R2/1108	LKD	W5/1108	1.25		1.12			
R2/1108	LKD	W6/1108	1.25	3.22	1.12	2.96	0.26	7.95
R3/1108	BEDROOM	W7/1108	1.89	1.89	1.64	1.64	0.24	12.88
R4/1108	BEDROOM	W8/1108	1.97	1.97	1.74	1.74	0.24	12.01
R5/1108	LKD	W9/1108	1.15		1.01			
R5/1108	LKD	W10/1108	1.10		0.96			
R5/1108	LKD	W11/1108	0.00		0.00			
R5/1108	LKD	W12/1108	0.08	2.33	0.08	2.06	0.27	11.65
R6/1108	BEDROOM	W13/1108	0.15		0.15			
R6/1108	BEDROOM	W14/1108	0.40	0.54	0.40	0.54	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/1109	BEDROOM	W1/1109	0.80		0.80			
R1/1109	BEDROOM	W2/1109	0.69	1.49	0.69	1.49	0.00	0.00
R2/1109	LKD	W3/1109	0.44		0.44			
R2/1109	LKD	W4/1109	0.40		0.40			
R2/1109	LKD	W5/1109	1.35		1.21			
R2/1109	LKD	W6/1109	1.34	3.53	1.19	3.24	0.29	8.13
R3/1109	BEDROOM	W7/1109	2.00	2.00	1.73	1.73	0.27	13.37
R4/1109	BEDROOM	W8/1109	2.09	2.09	1.83	1.83	0.26	12.58
R5/1109	LKD	W9/1109	1.22		1.07			
R5/1109	LKD	W10/1109	1.18		1.03			
R5/1109	LKD	W11/1109	0.04		0.04			
R5/1109	LKD	W12/1109	0.08	2.52	0.08	2.22	0.30	12.07
R6/1109	BEDROOM	W13/1109	0.20		0.20			
R6/1109	BEDROOM	W14/1109	0.43	0.63	0.43	0.63	0.00	0.00
R1/1110	BEDROOM	W1/1110	0.83		0.83			
R1/1110	BEDROOM	W2/1110	0.72	1.55	0.72	1.55	0.00	0.00
R2/1110	LKD	W3/1110	0.46		0.46			
R2/1110	LKD	W4/1110	0.41		0.41			
R2/1110	LKD	W5/1110	1.40		1.25			
R2/1110	LKD	W6/1110	1.39	3.67	1.23	3.35	0.32	8.62
R3/1110	BEDROOM	W7/1110	2.09	2.09	1.80	1.80	0.29	13.86
R4/1110	BEDROOM	W8/1110	2.18	2.18	1.89	1.89	0.29	13.24
R5/1110	LKD	W9/1110	1.28		1.12			
R5/1110	LKD	W10/1110	1.25		1.07			
R5/1110	LKD	W11/1110	0.12		0.12			
R5/1110	LKD	W12/1110	0.13	2.78	0.13	2.44	0.34	12.14
R6/1110	BEDROOM	W13/1110	0.27		0.27			
R6/1110	BEDROOM	W14/1110	0.43	0.70	0.43	0.70	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/1111	BEDROOM	W1/1111	0.82		0.82			
R1/1111	BEDROOM	W2/1111	0.70	1.52	0.70	1.52	0.00	0.00
R2/1111	LKD	W3/1111	0.45		0.45			
R2/1111	LKD	W4/1111	0.41		0.41			
R2/1111	LKD	W5/1111	1.43		1.27			
R2/1111	LKD	W6/1111	1.42	3.71	1.25	3.38	0.32	8.74
R3/1111	BEDROOM	W7/1111	2.14	2.14	1.85	1.85	0.30	13.85
R4/1111	BEDROOM	W8/1111	2.23	2.23	1.93	1.93	0.30	13.41
R5/1111	LKD	W9/1111	1.32		1.15			
R5/1111	LKD	W10/1111	1.29		1.11			
R5/1111	LKD	W11/1111	0.20		0.20			
R5/1111	LKD	W12/1111	0.24	3.05	0.24	2.70	0.35	11.58
R6/1111	BEDROOM	W13/1111	0.40		0.40			
R6/1111	BEDROOM	W14/1111	0.54	0.94	0.54	0.94	0.00	0.00
R1/1112	BEDROOM	W1/1112	0.83		0.83			
R1/1112	BEDROOM	W2/1112	0.73	1.56	0.73	1.56	0.00	0.00
R2/1112	LKD	W3/1112	0.46		0.46			
R2/1112	LKD	W4/1112	0.42		0.42			
R2/1112	LKD	W5/1112	1.45		1.29			
R2/1112	LKD	W6/1112	1.44	3.77	1.28	3.44	0.33	8.72
R3/1112	BEDROOM	W7/1112	2.19	2.19	1.89	1.89	0.30	13.74
R4/1112	BEDROOM	W8/1112	2.27	2.27	1.97	1.97	0.31	13.47
R5/1112	LKD	W9/1112	1.36		1.18			
R5/1112	LKD	W10/1112	1.34		1.15			
R5/1112	LKD	W11/1112	0.24		0.24			
R5/1112	LKD	W12/1112	0.27	3.20	0.27	2.83	0.37	11.48
R6/1112	BEDROOM	W13/1112	0.45		0.45			
R6/1112	BEDROOM	W14/1112	0.57	1.01	0.57	1.01	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/1113	BEDROOM	W1/1113	0.85		0.85			
R1/1113	BEDROOM	W2/1113	0.72	1.57	0.72	1.57	0.00	0.00
R2/1113	LKD	W3/1113	0.44		0.44			
R2/1113	LKD	W4/1113	0.40		0.40			
R2/1113	LKD	W5/1113	1.43		1.27			
R2/1113	LKD	W6/1113	1.43	3.69	1.26	3.37	0.32	8.75
R3/1113	BEDROOM	W7/1113	2.86	2.86	2.47	2.47	0.39	13.57
R4/1113	BEDROOM	W8/1113	2.66	2.66	2.30	2.30	0.36	13.44
R5/1113	BEDROOM	W9/1113	3.99	3.99	3.47	3.47	0.52	12.98
R6/1113	LKD	W10/1113	2.03		1.75			
R6/1113	LKD	W11/1113	0.40		0.40			
R6/1113	LKD	W12/1113	0.45		0.45			
R6/1113	LKD	W13/1113	0.39	3.27	0.39	2.98	0.29	8.75
R7/1113	BEDROOM	W14/1113	0.92	0.92	0.92	0.92	0.00	0.00
R1/1114	BEDROOM	W1/1114	0.86		0.86			
R1/1114	BEDROOM	W2/1114	0.75	1.61	0.75	1.61	0.00	0.00
R2/1114	LKD	W3/1114	0.45		0.45			
R2/1114	LKD	W4/1114	0.41		0.41			
R2/1114	LKD	W5/1114	1.44		1.28			
R2/1114	LKD	W6/1114	1.44	3.74	1.28	3.42	0.32	8.59
R3/1114	BEDROOM	W7/1114	2.90	2.90	2.51	2.51	0.38	13.20
R4/1114	BEDROOM	W8/1114	2.68	2.68	2.32	2.32	0.35	13.20
R5/1114	BEDROOM	W9/1114	4.05	4.05	3.54	3.54	0.51	12.65
R6/1114	LKD	W10/1114	2.07		1.78			
R6/1114	LKD	W11/1114	0.41		0.41			
R6/1114	LKD	W12/1114	0.45		0.45			
R6/1114	LKD	W13/1114	0.39	3.32	0.39	3.04	0.28	8.50

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R7/1114	BEDROOM	W14/1114	0.94	0.94	0.94	0.94	0.00	0.00
R1/1115	BEDROOM	W1/1115	0.85		0.85			
R1/1115	BEDROOM	W2/1115	0.72	1.57	0.72	1.57	0.00	0.00
R2/1115	LKD	W3/1115	0.44		0.44			
R2/1115	LKD	W4/1115	0.40		0.40			
R2/1115	LKD	W5/1115	1.46		1.30			
R2/1115	LKD	W6/1115	1.46	3.76	1.30	3.44	0.32	8.47
R3/1115	BEDROOM	W7/1115	2.93	2.93	2.56	2.56	0.38	12.88
R4/1115	BEDROOM	W8/1115	2.70	2.70	2.35	2.35	0.35	12.95
R5/1115	BEDROOM	W9/1115	4.11	4.11	3.60	3.60	0.51	12.32
R6/1115	LKD	W10/1115	2.10		1.82			
R6/1115	LKD	W11/1115	0.46		0.46			
R6/1115	LKD	W12/1115	0.50		0.50			
R6/1115	LKD	W13/1115	0.44	3.51	0.44	3.23	0.28	7.93
R7/1115	BEDROOM	W14/1115	1.01	1.01	1.01	1.01	0.00	0.00
R1/1116	BEDROOM	W1/1116	0.86		0.86			
R1/1116	BEDROOM	W2/1116	0.75	1.61	0.75	1.61	0.00	0.00
R2/1116	LKD	W3/1116	0.45		0.45			
R2/1116	LKD	W4/1116	0.41		0.41			
R2/1116	LKD	W5/1116	1.47		1.32			
R2/1116	LKD	W6/1116	1.47	3.80	1.31	3.49	0.32	8.31
R3/1116	BEDROOM	W7/1116	2.97	2.97	2.60	2.60	0.37	12.51
R4/1116	BEDROOM	W8/1116	2.72	2.72	2.37	2.37	0.34	12.67
R5/1116	BEDROOM	W9/1116	4.17	4.17	3.67	3.67	0.50	11.99
R6/1116	LKD	W10/1116	2.14		1.86			
R6/1116	LKD	W11/1116	0.48		0.48			
R6/1116	LKD	W12/1116	0.52		0.52			

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R6/1116	LKD	W13/1116	0.44	3.58	0.44	3.31	0.27	7.65
R7/1116	BEDROOM	W14/1116	1.05	1.05	1.05	1.05	0.00	0.00
R1/1117	BEDROOM	W1/1117	0.85		0.85			
R1/1117	BEDROOM	W2/1117	0.73	1.58	0.73	1.58	0.00	0.00
R2/1117	LKD	W3/1117	0.44		0.44			
R2/1117	LKD	W4/1117	0.41		0.41			
R2/1117	LKD	W5/1117	1.49		1.33			
R2/1117	LKD	W6/1117	1.49	3.83	1.33	3.51	0.31	8.16
R3/1117	BEDROOM	W7/1117	3.02	3.02	2.65	2.65	0.37	12.14
R4/1117	BEDROOM	W8/1117	2.74	2.74	2.40	2.40	0.34	12.35
R5/1117	BEDROOM	W9/1117	4.24	4.24	3.74	3.74	0.50	11.68
R6/1117	LKD	W10/1117	2.17		1.90			
R6/1117	LKD	W11/1117	0.53		0.53			
R6/1117	LKD	W12/1117	0.57		0.57			
R6/1117	LKD	W13/1117	0.50	3.77	0.50	3.50	0.27	7.16
R7/1117	BEDROOM	W14/1117	1.12	1.12	1.12	1.12	0.00	0.00
R1/1118	BEDROOM	W1/1118	0.87		0.87			
R1/1118	BEDROOM	W2/1118	0.75	1.62	0.75	1.62	0.00	0.00
R2/1118	LKD	W3/1118	0.46		0.46			
R2/1118	LKD	W4/1118	0.41		0.41			
R2/1118	LKD	W5/1118	1.50		1.35			
R2/1118	LKD	W6/1118	1.51	3.88	1.35	3.57	0.31	8.00
R3/1118	BEDROOM	W7/1118	3.06	3.06	2.70	2.70	0.36	11.81
R4/1118	BEDROOM	W8/1118	2.76	2.76	2.43	2.43	0.33	12.07
R5/1118	BEDROOM	W9/1118	4.31	4.31	3.82	3.82	0.49	11.37
R6/1118	LKD	W10/1118	2.21		1.95			

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DAYLIGHT ANALYSIS
EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R6/1118	LKD	W11/1118	0.56		0.56			
R6/1118	LKD	W12/1118	0.59		0.59			
R6/1118	LKD	W13/1118	0.51	3.86	0.51	3.60	0.27	6.94
R7/1118	BEDROOM	W14/1118	1.16	1.16	1.16	1.16	0.00	0.00
R1/1119	LKD	W1/1119	0.33		0.33			
R1/1119	LKD	W2/1119	0.28		0.28			
R1/1119	LKD	W3/1119	0.35		0.35			
R1/1119	LKD	W4/1119	0.32		0.32			
R1/1119	LKD	W5/1119	1.10		0.99			
R1/1119	LKD	W6/1119	1.11	3.48	1.00	3.26	0.22	6.37
R2/1119	BEDROOM	W7/1119	3.33	3.33	2.95	2.95	0.38	11.44
R3/1119	BEDROOM	W8/1119	3.11	3.11	2.74	2.74	0.37	11.77
R4/1119	BEDROOM	W9/1119	2.26		2.01			
R4/1119	BEDROOM	W10/1119	2.26		2.00			
R4/1119	BEDROOM	W11/1119	0.65		0.65			
R4/1119	BEDROOM	W12/1119	0.69	5.86	0.69	5.35	0.52	8.79
R5/1119	BEDROOM	W13/1119	0.85		0.85			
R5/1119	BEDROOM	W14/1119	0.97	1.82	0.97	1.82	0.00	0.00
R1/1120	LKD	W1/1120	0.33		0.33			
R1/1120	LKD	W2/1120	0.29		0.29			
R1/1120	LKD	W3/1120	0.35		0.35			
R1/1120	LKD	W4/1120	0.32		0.32			
R1/1120	LKD	W5/1120	1.12		1.01			
R1/1120	LKD	W6/1120	1.12	3.53	1.01	3.31	0.22	6.26
R2/1120	BEDROOM	W7/1120	3.38	3.38	3.01	3.01	0.38	11.09
R3/1120	BEDROOM	W8/1120	3.14	3.14	2.78	2.78	0.36	11.52
R4/1120	BEDROOM	W9/1120	2.30		2.05			
R4/1120	BEDROOM	W10/1120	2.31		2.05			
R4/1120	BEDROOM	W11/1120	0.68		0.68			
R4/1120	BEDROOM	W12/1120	0.70	5.98	0.70	5.47	0.51	8.52

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R5/1120	BEDROOM	W13/1120	0.86		0.86			
R5/1120	BEDROOM	W14/1120	0.99	1.85	0.99	1.85	0.00	0.00
R1/1121	LKD	W1/1121	0.34		0.34			
R1/1121	LKD	W2/1121	0.29		0.29			
R1/1121	LKD	W3/1121	0.36		0.36			
R1/1121	LKD	W4/1121	0.33		0.33			
R1/1121	LKD	W5/1121	1.13		1.02			
R1/1121	LKD	W6/1121	1.14	3.59	1.03	3.37	0.22	6.11
R2/1121	BEDROOM	W7/1121	3.43	3.43	3.06	3.06	0.37	10.73
R3/1121	BEDROOM	W8/1121	3.17	3.17	2.82	2.82	0.36	11.18
R4/1121	BEDROOM	W9/1121	2.34		2.10			
R4/1121	BEDROOM	W10/1121	2.35		2.09			
R4/1121	BEDROOM	W11/1121	0.72		0.72			
R4/1121	BEDROOM	W12/1121	0.76	6.17	0.76	5.67	0.50	8.16
R5/1121	BEDROOM	W13/1121	0.94		0.94			
R5/1121	BEDROOM	W14/1121	1.05	1.99	1.05	1.99	0.00	0.00
R1/1122	LIVINGROOM	W1/1122	0.29		0.29			
R1/1122	LIVINGROOM	W2/1122	0.25		0.25			
R1/1122	LIVINGROOM	W3/1122	0.31		0.31			
R1/1122	LIVINGROOM	W4/1122	0.28		0.28			
R1/1122	LIVINGROOM	W5/1122	1.15		1.04			
R1/1122	LIVINGROOM	W6/1122	1.15	3.44	1.05	3.22	0.22	6.26
R2/1122	LIVINGROOM	W7/1122	1.86		1.66			
R2/1122	LIVINGROOM	W8/1122	1.83	3.68	1.63	3.29	0.39	10.64
R3/1122	DINING	W9/1122	1.89		1.70			
R3/1122	DINING	W10/1122	1.90		1.70			
R3/1122	DINING	W11/1122	0.50		0.50			
R3/1122	DINING	W12/1122	0.51	4.81	0.51	4.42	0.40	8.23
R4/1122	KITCHEN	W13/1122	0.69		0.69			
R4/1122	KITCHEN	W14/1122	0.79	1.48	0.79	1.48	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/1123	BEDROOM	W1/1123	1.14		1.14			
R1/1123	BEDROOM	W2/1123	1.01	2.16	1.01	2.16	0.00	0.00
R2/1123	BEDROOM	W3/1123	0.45		0.45			
R2/1123	BEDROOM	W4/1123	0.42		0.42			
R2/1123	BEDROOM	W5/1123	1.48		1.35			
R2/1123	BEDROOM	W6/1123	1.50	3.85	1.36	3.58	0.27	7.06
R3/1123	BEDROOM	W7/1123	1.99		1.79			
R3/1123	BEDROOM	W8/1123	1.96	3.95	1.75	3.54	0.41	10.33
R4/1123	BEDROOM	W9/1123	2.37		2.13			
R4/1123	BEDROOM	W10/1123	2.38		2.13			
R4/1123	BEDROOM	W11/1123	0.68		0.68			
R4/1123	BEDROOM	W12/1123	0.72	6.15	0.72	5.67	0.48	7.82
R5/1123	BEDROOM	W13/1123	1.02		1.02			
R5/1123	BEDROOM	W14/1123	1.15	2.17	1.15	2.17	0.00	0.00
R1/1124	LIVINGROOM	W1/1124	0.32		0.32			
R1/1124	LIVINGROOM	W2/1124	0.31		0.31			
R1/1124	LIVINGROOM	W3/1124	0.37		0.37			
R1/1124	LIVINGROOM	W4/1124	0.34		0.34			
R1/1124	LIVINGROOM	W5/1124	1.22		1.11			
R1/1124	LIVINGROOM	W6/1124	1.23	3.79	1.12	3.57	0.22	5.78
R2/1124	LIVINGROOM	W7/1124	2.01		1.80			
R2/1124	LIVINGROOM	W8/1124	1.92	3.93	1.71	3.51	0.42	10.78
R3/1124	DINING	W9/1124	1.82		1.65			
R3/1124	DINING	W10/1124	1.83		1.65			
R3/1124	DINING	W11/1124	0.61		0.61			
R3/1124	DINING	W12/1124	0.62	4.88	0.62	4.53	0.36	7.35
R4/1124	KITCHEN	W13/1124	1.00		1.00			
R4/1124	KITCHEN	W14/1124	1.09	2.09	1.09	2.09	0.00	0.00

40-60 Hampstead Road

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/241	ASSUMED	W1/241	0.57	0.57	0.52	0.52	0.05	8.42
R2/241	ASSUMED	W2/241	0.15	0.15	0.13	0.13	0.02	13.16
R3/241	ASSUMED	W3/241	0.43	0.43	0.42	0.42	0.02	4.15
R4/241	ASSUMED	W4/241	0.08	0.08	0.08	0.08	0.00	2.38
R5/241	ASSUMED	W5/241	0.36	0.36	0.36	0.36	0.00	0.00
R7/241	ASSUMED	W17/241	0.57	0.57	0.56	0.56	0.01	1.59
R8/241	ASSUMED	W16/241	0.65	0.65	0.64	0.64	0.01	1.54
R9/241	ASSUMED	W15/241	0.57	0.57	0.56	0.56	0.01	1.23
R10/241	ASSUMED	W14/241	0.50	0.50	0.49	0.49	0.01	2.00
R11/241	ASSUMED	W13/241	0.62	0.62	0.61	0.61	0.01	1.61
R12/241	ASSUMED	W12/241	0.57	0.57	0.56	0.56	0.01	1.59
R13/241	ASSUMED	W11/241	0.51	0.51	0.49	0.49	0.02	3.53
R14/241	ASSUMED	W10/241	0.60	0.60	0.59	0.59	0.01	1.83
R15/241	ASSUMED	W9/241	0.53	0.53	0.52	0.52	0.01	1.70
R16/241	ASSUMED	W6/241	0.47	0.47	0.46	0.46	0.01	2.76
R17/241	ASSUMED	W8/241	0.59	0.59	0.57	0.57	0.01	2.22
R18/241	ASSUMED	W7/241	0.54	0.54	0.53	0.53	0.02	3.49
R1/242	ASSUMED	W1/242	0.55	0.55	0.51	0.51	0.04	7.94
R2/242	ASSUMED	W2/242	0.17	0.17	0.15	0.15	0.02	11.52
R3/242	ASSUMED	W3/242	0.46	0.46	0.44	0.44	0.02	4.15

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R4/242	ASSUMED	W4/242	0.09	0.09	0.09	0.09	0.00	2.20
R5/242	ASSUMED	W5/242	0.41	0.41	0.41	0.41	0.00	0.00
R6/242	ASSUMED	W18/242	0.54	0.54	0.52	0.52	0.03	4.79
R8/242	ASSUMED	W14/242	0.00	0.00	0.00	0.00	0.00	-
R9/242	ASSUMED	W13/242	0.01	0.01	0.01	0.01	0.00	0.00
R11/242	ASSUMED	W17/242	0.53	0.53	0.51	0.51	0.02	4.15
R12/242	ASSUMED	W16/242	0.53	0.53	0.51	0.51	0.02	3.77
R14/242	ASSUMED	W11/242	0.00	0.00	0.00	0.00	0.00	-
R15/242	ASSUMED	W12/242	0.06	0.06	0.06	0.06	0.00	0.00
R17/242	ASSUMED	W15/242	0.42	0.42	0.40	0.40	0.02	4.96
R1/243	ASSUMED	W1/243	0.56	0.56	0.52	0.52	0.04	7.65
R2/243	ASSUMED	W2/243	0.18	0.18	0.16	0.16	0.02	10.80
R3/243	ASSUMED	W3/243	0.48	0.48	0.46	0.46	0.02	4.37
R4/243	ASSUMED	W4/243	0.10	0.10	0.10	0.10	0.00	2.06
R5/243	ASSUMED	W5/243	0.54	0.54	0.54	0.54	0.00	0.00
R6/243	ASSUMED	W13/243	0.41	0.41	0.39	0.39	0.02	4.67
R9/243	ASSUMED	W11/243	0.43	0.43	0.41	0.41	0.01	3.29
R10/243	ASSUMED	W12/243	0.42	0.42	0.40	0.40	0.02	3.85
R13/243	ASSUMED	W10/243	0.41	0.41	0.40	0.40	0.01	1.48
R1/244	ASSUMED	W1/244	0.58	0.58	0.54	0.54	0.04	7.44

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R2/244	ASSUMED	W2/244	0.19	0.19	0.17	0.17	0.02	9.73
R3/244	ASSUMED	W3/244	0.51	0.51	0.48	0.48	0.02	4.74
R4/244	ASSUMED	W4/244	0.10	0.10	0.10	0.10	0.00	1.96
R5/244	ASSUMED	W5/244	0.75	0.75	0.75	0.75	0.00	0.00
R7/244	ASSUMED	W13/244	0.70	0.70	0.67	0.67	0.03	4.32
R9/244	ASSUMED	W12/244	0.60	0.60	0.58	0.58	0.02	3.36
R10/244	ASSUMED	W11/244	0.64	0.64	0.62	0.62	0.02	3.75
R13/244	ASSUMED	W10/244	0.66	0.66	0.64	0.64	0.02	2.29
R1/245	ASSUMED	W1/245	0.30	0.30	0.27	0.27	0.03	9.76
R2/245	ASSUMED	W2/245	0.19	0.19	0.17	0.17	0.02	9.52
R3/245	ASSUMED	W3/245	0.53	0.53	0.50	0.50	0.03	5.47
R4/245	ASSUMED	W4/245	0.11	0.11	0.10	0.10	0.00	2.86
R5/245	ASSUMED	W5/245	0.81	0.81	0.81	0.81	0.00	0.00
R6/245	ASSMUED	W6/245	0.96		0.92			
R6/245	ASSMUED	W7/245	0.28	1.24	0.28	1.20	0.04	3.23
R1/246	ASSUMED	W1/246	0.22		0.22			
R1/246	ASSUMED	W2/246	0.67	0.89	0.62	0.84	0.05	5.30
R2/246	ASSUMED	W3/246	0.47	0.47	0.43	0.43	0.04	8.80
R3/246	ASSUMED	W4/246	0.60	0.60	0.56	0.56	0.04	6.17
R4/246	ASSUMED	W5/246	0.11	0.11	0.11	0.11	0.00	1.87
R5/246	ASSUMED	W6/246	0.89	0.89	0.89	0.89	0.00	0.00

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/247	ASSUMED	W1/247	0.18	0.18	0.17	0.17	0.01	5.11
1-6 Tolmers Square								
R1/10	SSUMED_LIVINGROOI	W1/10	0.31		0.30			
R1/10	SSUMED_LIVINGROOI	W2/10	0.01		0.01			
R1/10	SSUMED_LIVINGROOI	W3/10	0.31		0.31			
R1/10	SSUMED_LIVINGROOI	W4/10	0.02	0.65	0.02	0.63	0.02	3.08
R2/10	SSUMED_LIVINGROOI	W5/10	0.35		0.34			
R2/10	SSUMED_LIVINGROOI	W6/10	0.02		0.02			
R2/10	SSUMED_LIVINGROOI	W7/10	0.35		0.34			
R2/10	SSUMED_LIVINGROOI	W8/10	0.01	0.74	0.01	0.72	0.02	2.45
R3/10	SSUMED_LIVINGROOI	W9/10	0.36		0.35			
R3/10	SSUMED_LIVINGROOI	W10/10	0.01		0.01			
R3/10	SSUMED_LIVINGROOI	W11/10	0.36		0.35			
R3/10	SSUMED_LIVINGROOI	W12/10	0.02	0.75	0.02	0.73	0.02	2.79
R4/10	ASSUMED	W13/10	0.95	0.95	0.93	0.93	0.02	2.42
R5/10	SSUMED_LIVINGROOI	W14/10	0.37		0.36			
R5/10	SSUMED_LIVINGROOI	W15/10	0.01		0.01			
R5/10	SSUMED_LIVINGROOI	W16/10	0.37		0.36			
R5/10	SSUMED_LIVINGROOI	W17/10	0.03	0.77	0.02	0.75	0.02	2.73
R6/10	SSUMED_LIVINGROOI	W18/10	1.40	1.40	1.38	1.38	0.03	1.78
R7/10	SSUMED_LIVINGROOI	W19/10	1.38	1.38	1.35	1.35	0.03	2.17
R8/10	SSUMED_LIVINGROOI	W20/10	1.04	1.04	1.01	1.01	0.03	2.51
R9/10	ASSUMED	W21/10	0.75	0.75	0.73	0.73	0.02	2.41
R10/10	ASSUMED	W22/10	0.74	0.74	0.72	0.72	0.02	2.43
R1/11	ASSUMED_BEDROOM	W1/11	0.89	0.89	0.86	0.86	0.02	2.60
R2/11	ASSUMED_BEDROOM	W2/11	1.09	1.09	1.06	1.06	0.02	2.03

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R3/11	ASSUMED_BEDROOM	W3/11	1.14	1.14	1.11	1.11	0.03	2.63
R4/11	ASSUMED_BEDROOM	W4/11	0.97	0.97	0.95	0.95	0.02	2.48
R5/11	ASSUMED_BEDROOM	W5/11	0.98	0.98	0.95	0.95	0.03	2.56
R6/11	ASSUMED_BEDROOM	W6/11	1.16	1.16	1.14	1.14	0.03	2.15
R7/11	ASSUMED_BEDROOM	W7/11	1.17	1.17	1.14	1.14	0.03	2.48
R8/11	ASSUMED_BEDROOM	W8/11	0.55		0.54			
R8/11	ASSUMED_BEDROOM	W9/11	0.80	1.35	0.78	1.31	0.03	2.45
R9/11	ASSUMED_BEDROOM	W10/11	0.95	0.95	0.93	0.93	0.02	2.42
R10/11	ASSUMED_BEDROOM	W11/11	1.23	1.23	1.20	1.20	0.03	2.44
R11/11	ASSUMED	W12/11	0.86	0.86	0.84	0.84	0.02	2.43
R12/11	ASSUMED_BEDROOM	W13/11	0.95	0.95	0.92	0.92	0.03	2.96
R13/11	ASSUMED_BEDROOM	W14/11	0.94	0.94	0.92	0.92	0.02	1.92
R14/11	ASSUMED_BEDROOM	W15/11	0.94	0.94	0.91	0.91	0.02	2.35
R15/11	ASSUMED_BEDROOM	W16/11	1.06	1.06	1.04	1.04	0.03	2.45
R16/11	ASSUMED_BEDROOM	W17/11	1.04	1.04	1.02	1.02	0.03	2.68
R17/11	ASSUMED_BEDROOM	W18/11	0.69	0.69	0.67	0.67	0.02	2.62
R18/11	ASSUMED_BEDROOM	W19/11	0.47	0.47	0.46	0.46	0.01	2.53
R19/11	ASSUMED_BEDROOM	W20/11	1.28	1.28	1.26	1.26	0.03	1.95
R20/11	ASSUMED_BEDROOM	W21/11	1.31	1.31	1.28	1.28	0.03	2.15
R21/11	ASSUMED_BEDROOM	W22/11	0.51	0.51	0.50	0.50	0.01	2.54
R1/12	RECEPTION	W1/12	0.15		0.15			

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DAYLIGHT ANALYSIS
EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R1/12	RECEPTION	W2/12	0.86		0.86			
R1/12	RECEPTION	W3/12	0.13		0.13			
R1/12	RECEPTION	W4/12	0.86		0.84			
R1/12	RECEPTION	W5/12	0.12		0.12			
R1/12	RECEPTION	W6/12	0.43	2.55	0.43	2.52	0.03	1.33
R2/12	RECEPTION	W7/12	0.34		0.33			
R2/12	RECEPTION	W8/12	0.03		0.03			
R2/12	RECEPTION	W9/12	0.74	1.11	0.72	1.07	0.04	3.26
R3/12	RECEPTION	W10/12	0.75		0.72			
R3/12	RECEPTION	W11/12	0.12		0.12			
R3/12	RECEPTION	W12/12	0.35	1.21	0.34	1.18	0.04	3.21
R4/12	RECEPTION	W13/12	0.35		0.34			
R4/12	RECEPTION	W14/12	0.05		0.05			
R4/12	RECEPTION	W15/12	0.76	1.17	0.74	1.13	0.04	3.00
R5/12	RECEPTION	W16/12	0.82		0.80			
R5/12	RECEPTION	W17/12	0.12		0.12			
R5/12	RECEPTION	W18/12	0.38	1.32	0.36	1.28	0.04	2.96
R6/12	ASSUMED	W19/12	0.65	0.65	0.62	0.62	0.03	4.01
R7/12	RECEPTION	W20/12	0.37		0.35			
R7/12	RECEPTION	W21/12	0.12		0.12			
R7/12	RECEPTION	W22/12	0.69	1.18	0.68	1.15	0.03	2.38
R8/12	RECEPTION	W23/12	0.69		0.67			
R8/12	RECEPTION	W24/12	0.16		0.16			
R8/12	RECEPTION	W25/12	0.37	1.22	0.36	1.18	0.03	2.63
R9/12	RECEPTION	W26/12	0.29		0.28			
R9/12	RECEPTION	W27/12	0.11		0.11			
R9/12	RECEPTION	W28/12	0.53	0.93	0.52	0.90	0.03	2.81
R10/12	RECEPTION	W29/12	0.11		0.11			
R10/12	RECEPTION	W30/12	0.90	1.01	0.87	0.98	0.03	3.17
R11/12	RECEPTION	W31/12	0.88		0.86			

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DAYLIGHT ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

DAYLIGHT

Room	Room Use	Window	Existing		Proposed		Total Loss	%Loss
			ADF	Total	ADF	Total		
R11/12	RECEPTION	W32/12	0.13	1.01	0.13	0.99	0.02	2.27
R1/13	BEDROOM	W1/13	0.63	0.63	0.61	0.61	0.02	2.55
R2/13	BEDROOM	W2/13	0.92	0.92	0.90	0.90	0.02	2.07
R3/13	BEDROOM	W3/13	0.93	0.93	0.91	0.91	0.03	2.68
R4/13	BEDROOM	W4/13	0.71	0.71	0.69	0.69	0.02	2.54
R5/13	BEDROOM	W5/13	0.71	0.71	0.69	0.69	0.02	2.66
R6/13	BEDROOM	W6/13	0.95	0.95	0.93	0.93	0.02	2.32
R7/13	BEDROOM	W7/13	0.95	0.95	0.93	0.93	0.02	2.52
R8/13	BEDROOM	W8/13	0.68	0.68	0.66	0.66	0.02	2.37
R9/13	BEDROOM	W9/13	0.72	0.72	0.71	0.71	0.02	2.49
R10/13	BEDROOM	W10/13	0.89	0.89	0.87	0.87	0.02	2.57
R11/13	ASSUMED	W11/13	0.63	0.63	0.61	0.61	0.02	3.15
R12/13	BEDROOM	W12/13	1.14	1.14	1.11	1.11	0.03	2.55
R13/13	BEDROOM	W13/13	0.68	0.68	0.67	0.67	0.01	1.90
R14/13	BEDROOM	W14/13	0.73	0.73	0.72	0.72	0.02	2.32
R15/13	BEDROOM	W15/13	0.90	0.90	0.88	0.88	0.02	2.43
R16/13	BEDROOM	W16/13	1.15	1.15	1.12	1.12	0.03	2.60
R17/13	BEDROOM	W17/13	0.69	0.69	0.67	0.67	0.02	2.32
R18/13	ASSUMED_BEDROOM	W18/13	0.95	0.95	0.93	0.93	0.02	1.90
R19/13	ASSUMED_BEDROOM	W19/13	1.01	1.01	0.99	0.99	0.02	2.09

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

NSL

Room	Room Use	Whole Room sq ft	Existing sq ft	Proposed sq ft	Loss sq ft	%Loss
Schafer House, University College						
R1/120		125.8	23.9	23.9	0.0	0.0
R2/120		99.8	22.4	22.4	0.0	0.0
R3/120		137.4	33.5	33.5	0.0	0.0
R4/120		217.7	101.1	99.9	1.2	1.2
R5/120		229.8	96.4	95.7	0.7	0.7
R6/120		223.7	103.1	103.1	0.0	0.0
R7/120		136.8	62.2	62.2	0.0	0.0
R1/121		125.8	30.4	30.4	0.0	0.0
R2/121		99.8	29.6	29.6	0.0	0.0
R3/121		137.4	41.7	41.7	0.0	0.0
R4/121		217.7	124.8	121.1	3.7	3.0
R5/121		229.8	110.2	110.2	0.0	0.0
R6/121		223.7	121.7	121.5	0.2	0.2
R7/121		136.8	71.4	71.4	0.0	0.0
R1/122		125.8	46.1	46.1	0.0	0.0
R2/122		99.8	43.5	43.5	0.1	0.2
R3/122		137.4	61.7	60.9	0.8	1.3
R4/122		217.7	146.5	142.5	4.0	2.7
R5/122		229.8	131.2	131.2	0.0	0.0
R6/122		223.7	146.5	146.5	0.0	0.0
R7/122		136.8	83.1	83.1	0.0	0.0
R1/123		125.8	94.1	93.8	0.3	0.3
R2/123		99.8	75.3	75.0	0.3	0.4
R3/123		137.4	87.3	86.5	0.9	1.0
R4/123		217.7	158.3	156.8	1.6	1.0
R5/123		229.8	148.0	148.0	0.0	0.0
R6/123		223.7	162.6	162.6	0.0	0.0
R7/123		136.8	95.3	95.0	0.2	0.2
R1/217		146.3	56.4	54.9	1.5	2.7
R2/217		201.0	81.6	78.5	3.1	3.8
R3/217		192.5	69.9	66.8	3.1	4.4
R4/217		157.0	59.7	56.5	3.2	5.4
Triton Building						
R1/1103	BEDROOM	111.0	5.0	5.0	0.0	0.0
R2/1103	LKD	243.9	61.0	58.7	2.3	3.8
R3/1103	BEDROOM	97.4	49.5	48.5	1.0	2.0

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R4/1103	BEDROOM	66.1	39.6	36.6	3.0	7.6
R5/1103	LKD	222.0	41.9	38.3	3.5	8.4
R6/1103	BEDROOM	103.0	47.5	44.6	2.9	6.1
R7/1103	LKD	249.1	62.9	60.0	2.9	4.6
R8/1103	BEDROOM	106.8	24.9	24.9	0.0	0.0
R1/1104	BEDROOM	111.0	8.6	8.6	0.0	0.0
R2/1104	LKD	243.9	79.5	77.1	2.4	3.0
R3/1104	BEDROOM	97.4	58.6	57.1	1.5	2.6
R4/1104	BEDROOM	66.1	47.5	43.7	3.8	8.0
R5/1104	LKD	222.0	49.5	45.4	4.1	8.3
R6/1104	BEDROOM	103.0	56.5	52.2	4.3	7.6
R7/1104	LKD	249.1	91.2	90.3	0.9	1.0
R8/1104	BEDROOM	106.8	64.4	64.4	0.0	0.0
R1/1105	BEDROOM	111.0	14.4	14.4	0.0	0.0
R2/1105	LKD	243.9	102.0	101.8	0.1	0.1
R3/1105	BEDROOM	97.4	73.5	70.9	2.6	3.5
R4/1105	BEDROOM	66.1	57.8	53.2	4.6	8.0
R5/1105	LKD	222.0	60.1	54.2	5.8	9.7
R6/1105	BEDROOM	103.0	68.0	62.8	5.2	7.6
R7/1105	LKD	249.1	92.6	91.7	0.9	1.0
R8/1105	BEDROOM	106.8	76.7	76.7	0.0	0.0
R1/1106	BEDROOM	111.0	22.5	22.5	0.0	0.0
R2/1106	LKD	243.9	148.8	148.4	0.4	0.3
R3/1106	BEDROOM	97.4	91.0	86.3	4.7	5.2
R4/1106	BEDROOM	66.1	62.9	57.3	5.7	9.1
R5/1106	LKD	222.0	75.1	65.4	9.7	12.9
R6/1106	BEDROOM	103.0	87.8	78.9	8.8	10.0
R7/1106	LKD	249.1	101.0	99.4	1.6	1.6
R8/1106	BEDROOM	106.8	76.4	76.4	0.0	0.0
R1/1107	BEDROOM	111.0	49.4	49.4	0.0	0.0
R2/1107	LKD	243.9	208.9	208.5	0.4	0.2
R3/1107	BEDROOM	97.4	93.6	88.2	5.3	5.7
R4/1107	BEDROOM	66.1	65.1	60.3	4.9	7.5
R5/1107	LKD	222.0	97.5	79.0	18.5	19.0
R6/1107	BEDROOM	103.0	94.6	84.4	10.2	10.8
R7/1107	LKD	249.1	113.5	99.8	13.7	12.1
R8/1107	BEDROOM	106.8	76.7	76.7	0.0	0.0
R1/1108	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1108	LKD	384.4	378.7	373.1	5.6	1.5
R3/1108	BEDROOM	121.8	115.6	98.8	16.8	14.5

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R4/1108	BEDROOM	121.8	92.7	79.6	13.1	14.1
R5/1108	LKD	384.4	335.2	316.6	18.6	5.5
R6/1108	BEDROOM	152.0	117.5	117.5	0.0	0.0
R1/1109	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1109	LKD	384.4	379.6	374.8	4.8	1.3
R3/1109	BEDROOM	121.8	116.8	100.9	15.9	13.6
R4/1109	BEDROOM	121.8	95.1	80.6	14.5	15.2
R5/1109	LKD	384.4	342.5	324.3	18.2	5.3
R6/1109	BEDROOM	152.0	120.1	120.1	0.0	0.0
R1/1110	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1110	LKD	384.4	380.8	375.6	5.2	1.4
R3/1110	BEDROOM	121.8	116.9	101.5	15.4	13.2
R4/1110	BEDROOM	121.8	95.3	81.0	14.3	15.0
R5/1110	LKD	384.4	355.8	335.8	20.0	5.6
R6/1110	BEDROOM	152.0	122.1	122.1	0.0	0.0
R1/1111	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1111	LKD	384.4	381.8	377.7	4.1	1.1
R3/1111	BEDROOM	121.8	117.0	101.6	15.4	13.2
R4/1111	BEDROOM	121.8	95.3	81.2	14.2	14.9
R5/1111	LKD	384.4	369.3	359.4	9.9	2.7
R6/1111	BEDROOM	152.0	133.5	133.5	0.0	0.0
R1/1112	BEDROOM	152.0	149.2	149.2	0.0	0.0
R2/1112	LKD	384.4	381.8	377.8	4.0	1.0
R3/1112	BEDROOM	121.8	117.0	101.6	15.4	13.2
R4/1112	BEDROOM	121.8	95.3	81.9	13.4	14.1
R5/1112	LKD	384.4	369.4	361.7	7.7	2.1
R6/1112	BEDROOM	152.0	133.1	133.1	0.0	0.0
R1/1113	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1113	LKD	397.8	394.3	388.8	5.5	1.4
R3/1113	BEDROOM	96.0	95.0	83.4	11.6	12.2
R4/1113	BEDROOM	108.0	93.8	74.8	19.0	20.3
R5/1113	BEDROOM	100.6	99.6	99.5	0.1	0.1
R6/1113	LKD	249.2	249.1	247.8	1.3	0.5
R7/1113	BEDROOM	96.4	89.4	89.4	0.0	0.0
R1/1114	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1114	LKD	397.8	394.3	388.8	5.5	1.4
R3/1114	BEDROOM	96.0	95.0	83.4	11.6	12.2
R4/1114	BEDROOM	108.0	93.8	75.0	18.8	20.0
R5/1114	BEDROOM	100.6	99.6	99.5	0.1	0.1
R6/1114	LKD	249.2	249.1	247.5	1.6	0.6

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	Loss sq ft	%Loss
R7/1114	BEDROOM	96.4	89.9	89.9	0.0	0.0
R1/1115	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1115	LKD	397.8	394.3	388.8	5.5	1.4
R3/1115	BEDROOM	96.0	95.0	83.6	11.4	12.0
R4/1115	BEDROOM	108.0	93.8	75.2	18.7	19.9
R5/1115	BEDROOM	100.6	99.6	99.5	0.1	0.1
R6/1115	LKD	249.2	249.1	248.7	0.4	0.2
R7/1115	BEDROOM	96.4	90.7	90.7	0.0	0.0
R1/1116	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1116	LKD	397.8	394.3	388.8	5.5	1.4
R3/1116	BEDROOM	96.0	95.0	83.6	11.3	11.9
R4/1116	BEDROOM	108.0	93.8	75.1	18.7	19.9
R5/1116	BEDROOM	100.6	99.6	99.5	0.1	0.1
R6/1116	LKD	249.2	249.1	248.5	0.6	0.2
R7/1116	BEDROOM	96.4	91.8	91.8	0.0	0.0
R1/1117	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1117	LKD	397.8	394.3	388.8	5.5	1.4
R3/1117	BEDROOM	96.0	95.0	83.7	11.3	11.9
R4/1117	BEDROOM	108.0	93.8	75.9	18.0	19.2
R5/1117	BEDROOM	100.6	99.6	99.6	0.0	0.0
R6/1117	LKD	249.2	249.1	248.8	0.3	0.1
R7/1117	BEDROOM	96.4	92.0	92.0	0.0	0.0
R1/1118	BEDROOM	155.0	152.2	152.2	0.0	0.0
R2/1118	LKD	397.8	394.3	389.3	5.1	1.3
R3/1118	BEDROOM	96.0	95.0	84.2	10.8	11.4
R4/1118	BEDROOM	108.0	93.8	76.2	17.6	18.8
R5/1118	BEDROOM	100.6	99.6	99.6	0.0	0.0
R6/1118	LKD	249.2	249.1	248.7	0.5	0.2
R7/1118	BEDROOM	96.4	92.4	92.4	0.0	0.0
R1/1119	LKD	673.6	673.5	673.0	0.5	0.1
R2/1119	BEDROOM	91.7	89.8	79.9	9.9	11.0
R3/1119	BEDROOM	102.3	97.2	85.3	11.9	12.2
R4/1119	BEDROOM	217.7	214.5	214.3	0.2	0.1
R5/1119	BEDROOM	159.7	157.1	157.1	0.0	0.0
R1/1120	LKD	673.6	673.5	673.0	0.5	0.1
R2/1120	BEDROOM	91.7	89.8	79.9	9.9	11.0
R3/1120	BEDROOM	102.3	97.2	85.6	11.6	11.9
R4/1120	BEDROOM	217.7	214.5	214.3	0.2	0.1
R5/1120	BEDROOM	159.7	157.1	157.1	0.0	0.0
R1/1121	LKD	673.6	673.5	673.0	0.5	0.1

NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	Loss sq ft	%Loss
R2/1121	BEDROOM	91.7	89.8	80.1	9.7	10.8
R3/1121	BEDROOM	102.3	97.2	86.3	10.9	11.2
R4/1121	BEDROOM	217.7	214.5	214.3	0.2	0.1
R5/1121	BEDROOM	159.7	157.1	157.1	0.0	0.0
R1/1122	LIVINGROOM	673.6	673.5	673.0	0.5	0.1
R2/1122	LIVINGROOM	226.6	225.2	225.2	0.0	0.0
R3/1122	DINING	356.2	355.8	355.8	0.0	0.0
R4/1122	KITCHEN	191.7	186.0	186.0	0.0	0.0
R1/1123	BEDROOM	133.4	130.8	130.8	0.0	0.0
R2/1123	BEDROOM	406.6	393.6	393.6	0.0	0.0
R3/1123	BEDROOM	178.9	176.4	165.5	10.9	6.2
R4/1123	BEDROOM	226.9	223.7	223.3	0.4	0.2
R5/1123	BEDROOM	131.6	129.0	129.0	0.0	0.0
R1/1124	LIVINGROOM	627.3	627.2	626.7	0.5	0.1
R2/1124	LIVINGROOM	188.9	187.5	187.5	0.0	0.0
R3/1124	DINING	387.4	387.0	387.0	0.0	0.0
R4/1124	KITCHEN	168.2	164.9	164.6	0.2	0.1

40-60 Hampstead Road

R1/241	ASSUMED	149.4	52.9	51.6	1.3	2.5
R2/241	ASSUMED	89.6	40.1	34.1	6.0	15.0
R3/241	ASSUMED	146.8	52.7	47.1	5.5	10.4
R4/241	ASSUMED	186.9	33.7	33.6	0.1	0.3
R5/241	ASSUMED	119.0	17.8	17.8	0.0	0.0
R7/241	ASSUMED	134.7	41.2	38.9	2.3	5.6
R8/241	ASSUMED	79.9	23.1	21.6	1.5	6.5
R9/241	ASSUMED	98.8	35.7	35.7	0.0	0.0
R10/241	ASSUMED	103.6	24.6	22.3	2.3	9.3
R11/241	ASSUMED	80.3	23.5	23.5	0.0	0.0
R12/241	ASSUMED	133.1	42.4	41.5	0.9	2.1
R13/241	ASSUMED	138.1	34.7	33.1	1.6	4.6
R14/241	ASSUMED	80.4	23.0	22.1	0.9	3.9
R15/241	ASSUMED	98.5	27.6	27.6	0.0	0.0
R16/241	ASSUMED	103.4	25.5	23.9	1.6	6.3
R17/241	ASSUMED	80.2	24.0	24.0	0.0	0.0
R18/241	ASSUMED	134.3	38.6	37.4	1.2	3.1
R1/242	ASSUMED	168.8	74.2	70.3	3.9	5.3
R2/242	ASSUMED	89.6	44.4	37.9	6.5	14.6
R3/242	ASSUMED	146.8	61.0	54.3	6.7	11.0

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R4/242	ASSUMED	186.9	41.5	41.1	0.4	1.0
R5/242	ASSUMED	119.0	21.8	21.8	0.0	0.0
R6/242	ASSUMED	162.2	63.6	60.4	3.2	5.0
R8/242	ASSUMED	86.4	8.5	8.5	0.0	0.0
R9/242	ASSUMED	83.0	9.5	9.5	0.0	0.0
R11/242	ASSUMED	163.5	66.0	64.9	1.1	1.7
R12/242	ASSUMED	159.9	59.4	56.9	2.5	4.2
R14/242	ASSUMED	86.1	12.2	12.2	0.0	0.0
R15/242	ASSUMED	81.1	10.6	10.6	0.0	0.0
R17/242	ASSUMED	161.0	70.0	69.0	1.1	1.6
R1/243	ASSUMED	174.4	87.2	82.0	5.2	6.0
R2/243	ASSUMED	89.6	48.7	41.6	7.2	14.8
R3/243	ASSUMED	146.8	69.1	63.0	6.1	8.8
R4/243	ASSUMED	186.9	48.6	48.2	0.4	0.8
R5/243	ASSUMED	119.0	29.5	29.5	0.0	0.0
R6/243	ASSUMED	156.2	70.4	66.8	3.6	5.1
R9/243	ASSUMED	159.9	71.0	67.2	3.8	5.4
R10/243	ASSUMED	163.5	77.7	76.7	1.0	1.3
R13/243	ASSUMED	161.0	94.8	93.2	1.6	1.7
R1/244	ASSUMED	177.2	99.2	94.1	5.1	5.1
R2/244	ASSUMED	89.6	54.0	47.4	6.6	12.2
R3/244	ASSUMED	146.8	82.1	75.6	6.5	7.9
R4/244	ASSUMED	186.9	57.3	56.4	0.8	1.4
R5/244	ASSUMED	119.0	58.6	58.6	0.0	0.0
R7/244	ASSUMED	132.1	74.0	70.8	3.2	4.3
R9/244	ASSUMED	173.1	95.4	94.7	0.7	0.7
R10/244	ASSUMED	159.9	84.4	80.4	3.9	4.6
R13/244	ASSUMED	161.0	102.0	101.5	0.5	0.5
R1/245	ASSUMED	149.4	76.8	69.0	7.7	10.0
R2/245	ASSUMED	89.6	56.3	50.1	6.1	10.8
R3/245	ASSUMED	146.8	95.0	89.3	5.7	6.0
R4/245	ASSUMED	186.9	70.7	69.4	1.3	1.8
R5/245	ASSUMED	119.0	70.5	70.5	0.0	0.0
R6/245	ASSMUED	75.4	75.3	75.3	0.0	0.0
R1/246	ASSUMED	149.4	109.6	109.6	0.0	0.0
R2/246	ASSUMED	89.6	61.0	54.5	6.5	10.7
R3/246	ASSUMED	146.8	112.0	109.1	2.9	2.6
R4/246	ASSUMED	186.9	77.6	76.1	1.5	1.9
R5/246	ASSUMED	119.0	88.8	88.8	0.0	0.0
R1/247	ASSUMED	120.9	77.1	70.6	6.5	8.4

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
1-6 Tolmers Square						
R1/10	ASSUMED_LIVINGROOM	162.1	133.5	126.6	6.9	5.2
R2/10	ASSUMED_LIVINGROOM	162.1	129.9	127.5	2.4	1.8
R3/10	ASSUMED_LIVINGROOM	162.1	147.8	146.9	0.9	0.6
R4/10	ASSUMED	85.4	79.8	78.1	1.7	2.1
R5/10	ASSUMED_LIVINGROOM	162.1	149.3	148.5	0.8	0.5
R6/10	ASSUMED_LIVINGROOM	162.1	137.9	137.8	0.1	0.1
R7/10	ASSUMED_LIVINGROOM	162.1	153.9	153.5	0.4	0.3
R8/10	ASSUMED_LIVINGROOM	213.9	187.4	182.2	5.2	2.8
R9/10	ASSUMED	103.7	90.2	87.6	2.6	2.9
R10/10	ASSUMED	103.8	95.2	93.8	1.3	1.4
R1/11	ASSUMED_BEDROOM	134.8	109.5	102.4	7.2	6.6
R2/11	ASSUMED_BEDROOM	71.9	69.6	66.5	3.1	4.5
R3/11	ASSUMED_BEDROOM	71.9	69.8	67.2	2.6	3.7
R4/11	ASSUMED_BEDROOM	134.8	110.4	108.0	2.4	2.2
R5/11	ASSUMED_BEDROOM	134.8	116.6	115.2	1.4	1.2
R6/11	ASSUMED_BEDROOM	71.9	68.9	67.1	1.8	2.6
R7/11	ASSUMED_BEDROOM	71.9	68.4	66.8	1.5	2.2
R8/11	ASSUMED_BEDROOM	134.8	121.0	120.3	0.7	0.6
R9/11	ASSUMED_BEDROOM	134.8	114.2	112.0	2.2	1.9
R10/11	ASSUMED_BEDROOM	71.9	68.3	67.6	0.7	1.0
R11/11	ASSUMED	78.8	72.0	70.9	1.2	1.7
R12/11	ASSUMED_BEDROOM	71.9	66.6	64.7	1.9	2.9
R13/11	ASSUMED_BEDROOM	134.8	111.5	108.2	3.2	2.9
R14/11	ASSUMED_BEDROOM	134.8	113.8	111.3	2.6	2.3
R15/11	ASSUMED_BEDROOM	71.9	69.5	67.9	1.7	2.4
R16/11	ASSUMED_BEDROOM	71.9	66.4	64.9	1.4	2.1
R17/11	ASSUMED_BEDROOM	188.8	157.3	150.4	6.9	4.4
R18/11	ASSUMED_BEDROOM	133.3	94.0	89.4	4.6	4.9
R19/11	ASSUMED_BEDROOM	64.0	62.5	62.5	0.0	0.0
R20/11	ASSUMED_BEDROOM	59.8	58.2	57.9	0.4	0.7
R21/11	ASSUMED_BEDROOM	124.1	110.9	110.9	0.0	0.0
R1/12	RECEPTION	194.0	184.5	180.4	4.1	2.2
R2/12	RECEPTION	186.9	177.5	174.0	3.4	1.9
R3/12	RECEPTION	186.8	178.6	177.6	0.9	0.5
R4/12	RECEPTION	186.6	176.2	172.1	4.1	2.3
R5/12	RECEPTION	169.3	158.6	153.7	4.9	3.1
R6/12	ASSUMED	77.9	68.2	66.9	1.4	2.1

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NSL ANALYSIS

EUSTON TOWER, LONDON
EXISTING VS PROPOSED 260923__WOB

Room	Room Use	Whole Room sq ft	NSL Existing sq ft	NSL Proposed sq ft	NSL Loss sq ft	NSL %Loss
R7/12	RECEPTION	186.6	166.2	162.5	3.7	2.2
R8/12	RECEPTION	186.8	174.8	172.7	2.1	1.2
R9/12	RECEPTION	253.7	224.5	216.6	7.9	3.5
R10/12	RECEPTION	151.4	103.6	93.4	10.2	9.8
R11/12	RECEPTION	150.9	117.5	117.5	0.0	0.0
R1/13	BEDROOM	164.3	131.2	124.7	6.5	5.0
R2/13	BEDROOM	65.2	63.2	62.4	0.9	1.4
R3/13	BEDROOM	65.2	63.3	63.1	0.3	0.5
R4/13	BEDROOM	139.9	118.4	113.2	5.2	4.4
R5/13	BEDROOM	140.0	118.1	114.0	4.1	3.5
R6/13	BEDROOM	65.2	63.3	62.9	0.4	0.6
R7/13	BEDROOM	65.2	62.9	62.0	0.9	1.4
R8/13	BEDROOM	156.9	123.8	119.1	4.7	3.8
R9/13	BEDROOM	140.0	116.9	111.6	5.2	4.4
R10/13	BEDROOM	73.3	70.4	69.1	1.3	1.8
R11/13	ASSUMED	66.2	60.2	59.4	0.8	1.3
R12/13	BEDROOM	48.7	46.1	45.8	0.2	0.4
R13/13	BEDROOM	156.9	124.4	120.8	3.6	2.9
R14/13	BEDROOM	140.0	107.9	106.1	1.9	1.8
R15/13	BEDROOM	73.3	69.8	68.1	1.8	2.6
R16/13	BEDROOM	48.7	47.8	47.5	0.2	0.4
R17/13	BEDROOM	156.9	131.1	129.0	2.1	1.6
R18/13	ASSUMED_BEDROOM	101.4	96.6	94.8	1.8	1.9
R19/13	ASSUMED_BEDROOM	93.1	86.7	85.3	1.4	1.6

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
Schafer House, University College														
R1/120	W1/120		1	13	1	13	0.0	0.0	1	13	1	13	0.0	0.0
R2/120	W2/120		1	17	1	17	0.0	0.0	1	17	1	17	0.0	0.0
R3/120	W3/120		0	15	0	15	-	0.0	0	15	0	15	-	0.0
R4/120	W4/120		2	27	2	27	0.0	0.0						
R4/120	W5/120		0	19	0	19	-	0.0	2	30	2	30	0.0	0.0
R5/120	W6/120		2	36	2	36	0.0	0.0						
R5/120	W7/120		2	38	2	38	0.0	0.0	2	38	2	38	0.0	0.0
R6/120	W8/120		2	43	2	43	0.0	0.0						
R6/120	W9/120		2	46	2	46	0.0	0.0	2	46	2	46	0.0	0.0
R7/120	W10/120		4	49	4	49	0.0	0.0	4	49	4	49	0.0	0.0
R1/121	W1/121		1	18	1	18	0.0	0.0	1	18	1	18	0.0	0.0
R2/121	W2/121		1	22	1	22	0.0	0.0	1	22	1	22	0.0	0.0
R3/121	W3/121		1	21	1	21	0.0	0.0	1	21	1	21	0.0	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R4/121	W4/121		3	35	3	35	0.0	0.0						
R4/121	W5/121		1	29	1	29	0.0	0.0	4	40	4	40	0.0	0.0
R5/121	W6/121		2	44	2	43	0.0	2.3						
R5/121	W7/121		3	48	3	48	0.0	0.0	3	49	3	48	0.0	2.0
R6/121	W8/121		3	52	3	52	0.0	0.0						
R6/121	W9/121		3	52	3	52	0.0	0.0	3	53	3	53	0.0	0.0
R7/121	W10/121		4	52	4	52	0.0	0.0	4	52	4	52	0.0	0.0
R1/122	W1/122		2	28	2	28	0.0	0.0	2	28	2	28	0.0	0.0
R2/122	W2/122		4	39	4	39	0.0	0.0	4	39	4	39	0.0	0.0
R3/122	W3/122		5	40	5	40	0.0	0.0	5	40	5	40	0.0	0.0
R4/122	W4/122		7	51	7	51	0.0	0.0						
R4/122	W5/122		3	39	3	39	0.0	0.0	7	53	7	53	0.0	0.0
R5/122	W6/122		5	55	5	54	0.0	1.8						
R5/122	W7/122		6	57	6	56	0.0	1.8	6	57	6	56	0.0	1.8
R6/122	W8/122		7	58	7	57	0.0	1.7						
R6/122	W9/122		7	59	7	58	0.0	1.7	7	59	7	58	0.0	1.7

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R7/122	W10/122		8	60	8	59	0.0	1.7	8	60	8	59	0.0	1.7
R1/123	W1/123		8	51	8	51	0.0	0.0	8	51	8	51	0.0	0.0
R2/123	W2/123		10	62	10	62	0.0	0.0	10	62	10	62	0.0	0.0
R3/123	W3/123		9	57	9	57	0.0	0.0	9	57	9	57	0.0	0.0
R4/123	W4/123		10	62	10	62	0.0	0.0						
R4/123	W5/123		8	50	8	50	0.0	0.0	10	62	10	62	0.0	0.0
R5/123	W6/123		8	60	8	59	0.0	1.7						
R5/123	W7/123		8	59	8	58	0.0	1.7	8	60	8	59	0.0	1.7
R6/123	W8/123		9	60	9	59	0.0	1.7						
R6/123	W9/123		9	62	9	61	0.0	1.6	9	62	9	61	0.0	1.6
R7/123	W10/123		9	61	9	60	0.0	1.6	9	61	9	60	0.0	1.6
Triton Building														
R2/1103	W2/1103	LKD	0	2	0	2	-	0.0						
R2/1103	W3/1103	LKD	0	0	0	0	-	-						
R2/1103	W4/1103	LKD	0	16	0	14	-	12.5	0	16	0	14	-	12.5

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R5/1103	W7/1103	LKD	0	14	0	11	-	21.4	0	14	0	11	-	21.4
R7/1103	W9/1103	LKD	0	14	0	11	-	21.4						
R7/1103	W10/1103	LKD	0	0	0	0	-	-						
R7/1103	W11/1103	LKD	0	0	0	0	-	-	0	14	0	11	-	21.4
R2/1104	W2/1104	LKD	0	1	0	1	-	0.0						
R2/1104	W3/1104	LKD	0	4	0	4	-	0.0						
R2/1104	W4/1104	LKD	0	19	0	15	-	21.1	0	19	0	15	-	21.1
R5/1104	W7/1104	LKD	0	19	0	16	-	15.8	0	19	0	16	-	15.8
R7/1104	W9/1104	LKD	0	19	0	15	-	21.1						
R7/1104	W10/1104	LKD	0	0	0	0	-	-						
R7/1104	W11/1104	LKD	0	1	0	1	-	0.0	0	19	0	15	-	21.1
R2/1105	W2/1105	LKD	0	7	0	7	-	0.0						
R2/1105	W3/1105	LKD	0	5	0	5	-	0.0						
R2/1105	W4/1105	LKD	1	26	0	21	100.0	19.2	1	26	0	21	100.0	19.2
R5/1105	W7/1105	LKD	0	25	0	21	-	16.0	0	25	0	21	-	16.0
R7/1105	W9/1105	LKD	0	25	0	19	-	24.0						
R7/1105	W10/1105	LKD	0	0	0	0	-	-						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R7/1105	W11/1105	LKD	0	0	0	0	-	-	0	25	0	19	-	24.0
R2/1106	W2/1106	LKD	0	6	0	6	-	0.0						
R2/1106	W3/1106	LKD	0	9	0	9	-	0.0						
R2/1106	W4/1106	LKD	3	34	2	29	33.3	14.7	3	34	2	29	33.3	14.7
R5/1106	W7/1106	LKD	1	28	1	24	0.0	14.3	1	28	1	24	0.0	14.3
R7/1106	W9/1106	LKD	1	30	1	23	0.0	23.3						
R7/1106	W10/1106	LKD	0	0	0	0	-	-						
R7/1106	W11/1106	LKD	0	2	0	2	-	0.0	1	30	1	23	0.0	23.3
R2/1107	W2/1107	LKD	3	21	3	21	0.0	0.0						
R2/1107	W3/1107	LKD	3	17	3	17	0.0	0.0						
R2/1107	W4/1107	LKD	6	42	5	36	16.7	14.3	7	44	6	38	14.3	13.6
R5/1107	W7/1107	LKD	3	33	3	29	0.0	12.1	3	33	3	29	0.0	12.1
R7/1107	W9/1107	LKD	3	37	2	29	33.3	21.6						
R7/1107	W10/1107	LKD	0	3	0	3	-	0.0						
R7/1107	W11/1107	LKD	0	2	0	2	-	0.0	3	37	2	29	33.3	21.6
R2/1108	W3/1108	LKD	4	23	4	23	0.0	0.0						
R2/1108	W4/1108	LKD	4	27	4	27	0.0	0.0						
R2/1108	W5/1108	LKD	9	51	6	45	33.3	11.8						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1108	W6/1108	LKD	10	50	6	44	40.0	12.0	10	52	6	45	40.0	13.5
R5/1108	W9/1108	LKD	6	44	3	36	50.0	18.2						
R5/1108	W10/1108	LKD	5	41	2	31	60.0	24.4						
R5/1108	W11/1108	LKD	0	3	0	3	-	0.0						
R5/1108	W12/1108	LKD	0	6	0	6	-	0.0	6	46	3	39	50.0	15.2
R2/1109	W3/1109	LKD	5	30	5	30	0.0	0.0						
R2/1109	W4/1109	LKD	6	29	6	29	0.0	0.0						
R2/1109	W5/1109	LKD	11	58	8	50	27.3	13.8						
R2/1109	W6/1109	LKD	11	54	7	46	36.4	14.8	12	60	9	53	25.0	11.7
R5/1109	W9/1109	LKD	6	47	3	38	50.0	19.1						
R5/1109	W10/1109	LKD	6	47	2	34	66.7	27.7						
R5/1109	W11/1109	LKD	1	9	1	9	0.0	0.0						
R5/1109	W12/1109	LKD	1	8	1	8	0.0	0.0	6	49	4	42	33.3	14.3
R2/1110	W3/1110	LKD	5	26	5	26	0.0	0.0						
R2/1110	W4/1110	LKD	5	30	5	30	0.0	0.0						
R2/1110	W5/1110	LKD	11	59	9	52	18.2	11.9						
R2/1110	W6/1110	LKD	12	58	8	50	33.3	13.8	12	61	9	54	25.0	11.5
R5/1110	W9/1110	LKD	9	52	5	41	44.4	21.2						
R5/1110	W10/1110	LKD	8	50	4	37	50.0	26.0						
R5/1110	W11/1110	LKD	2	10	2	10	0.0	0.0						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R5/1110	W12/1110	LKD	2	13	2	13	0.0	0.0	9	54	7	46	22.2	14.8
R2/1111	W3/1111	LKD	5	30	5	30	0.0	0.0						
R2/1111	W4/1111	LKD	6	29	6	29	0.0	0.0						
R2/1111	W5/1111	LKD	11	59	9	53	18.2	10.2						
R2/1111	W6/1111	LKD	12	58	8	50	33.3	13.8	12	61	10	55	16.7	9.8
R5/1111	W9/1111	LKD	11	55	7	44	36.4	20.0						
R5/1111	W10/1111	LKD	10	55	5	41	50.0	25.5						
R5/1111	W11/1111	LKD	5	23	4	22	20.0	4.3						
R5/1111	W12/1111	LKD	5	22	5	22	0.0	0.0	11	63	10	56	9.1	11.1
R2/1112	W3/1112	LKD	5	26	5	26	0.0	0.0						
R2/1112	W4/1112	LKD	5	30	5	30	0.0	0.0						
R2/1112	W5/1112	LKD	11	61	8	52	27.3	14.8						
R2/1112	W6/1112	LKD	12	58	8	51	33.3	12.1	12	63	9	55	25.0	12.7
R5/1112	W9/1112	LKD	12	57	8	47	33.3	17.5						
R5/1112	W10/1112	LKD	10	56	5	41	50.0	26.8						
R5/1112	W11/1112	LKD	5	26	4	25	20.0	3.8						
R5/1112	W12/1112	LKD	5	29	5	29	0.0	0.0	12	68	11	61	8.3	10.3
R2/1113	W3/1113	LKD	5	30	5	30	0.0	0.0						
R2/1113	W4/1113	LKD	6	29	5	28	16.7	3.4						
R2/1113	W5/1113	LKD	11	62	8	56	27.3	9.7						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1113	W6/1113	LKD	12	59	8	54	33.3	8.5	12	64	8	57	33.3	10.9
R6/1113	W10/1113	LKD	12	61	7	49	41.7	19.7						
R6/1113	W11/1113	LKD	5	29	4	28	20.0	3.4						
R6/1113	W12/1113	LKD	6	30	6	30	0.0	0.0						
R6/1113	W13/1113	LKD	5	35	5	35	0.0	0.0	12	72	10	64	16.7	11.1
R2/1114	W3/1114	LKD	6	27	6	27	0.0	0.0						
R2/1114	W4/1114	LKD	5	30	5	30	0.0	0.0						
R2/1114	W5/1114	LKD	12	63	10	58	16.7	7.9						
R2/1114	W6/1114	LKD	12	61	8	55	33.3	9.8	14	66	11	60	21.4	9.1
R6/1114	W10/1114	LKD	12	62	8	50	33.3	19.4						
R6/1114	W11/1114	LKD	6	31	6	31	0.0	0.0						
R6/1114	W12/1114	LKD	6	35	6	35	0.0	0.0						
R6/1114	W13/1114	LKD	5	31	5	31	0.0	0.0	12	73	10	63	16.7	13.7
R2/1115	W3/1115	LKD	6	31	6	31	0.0	0.0						
R2/1115	W4/1115	LKD	7	30	7	30	0.0	0.0						
R2/1115	W5/1115	LKD	13	64	11	59	15.4	7.8						
R2/1115	W6/1115	LKD	14	63	10	57	28.6	9.5	14	66	12	61	14.3	7.6
R6/1115	W10/1115	LKD	13	63	9	52	30.8	17.5						
R6/1115	W11/1115	LKD	7	36	7	36	0.0	0.0						
R6/1115	W12/1115	LKD	7	35	7	35	0.0	0.0						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R6/1115	W13/1115	LKD	7	39	7	39	0.0	0.0	13	75	11	67	15.4	10.7
R2/1116	W3/1116	LKD	6	27	6	27	0.0	0.0						
R2/1116	W4/1116	LKD	6	31	6	31	0.0	0.0						
R2/1116	W5/1116	LKD	14	66	12	61	14.3	7.6						
R2/1116	W6/1116	LKD	15	66	11	59	26.7	10.6	15	68	12	62	20.0	8.8
R6/1116	W10/1116	LKD	14	66	10	55	28.6	16.7						
R6/1116	W11/1116	LKD	7	36	7	36	0.0	0.0						
R6/1116	W12/1116	LKD	8	40	8	40	0.0	0.0						
R6/1116	W13/1116	LKD	8	37	8	37	0.0	0.0	14	78	12	69	14.3	11.5
R2/1117	W3/1117	LKD	6	31	6	31	0.0	0.0						
R2/1117	W4/1117	LKD	7	30	6	29	14.3	3.3						
R2/1117	W5/1117	LKD	14	67	12	61	14.3	9.0						
R2/1117	W6/1117	LKD	15	67	11	59	26.7	11.9	15	69	12	62	20.0	10.1
R6/1117	W10/1117	LKD	14	66	11	56	21.4	15.2						
R6/1117	W11/1117	LKD	8	40	7	39	12.5	2.5						
R6/1117	W12/1117	LKD	8	38	8	38	0.0	0.0						
R6/1117	W13/1117	LKD	9	43	9	43	0.0	0.0	15	80	13	72	13.3	10.0
R2/1118	W3/1118	LKD	6	27	6	27	0.0	0.0						
R2/1118	W4/1118	LKD	6	31	6	31	0.0	0.0						
R2/1118	W5/1118	LKD	16	70	13	64	18.8	8.6						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1118	W6/1118	LKD	17	70	13	63	23.5	10.0	17	72	13	65	23.5	9.7
R6/1118	W10/1118	LKD	16	70	12	60	25.0	14.3						
R6/1118	W11/1118	LKD	10	40	10	40	0.0	0.0						
R6/1118	W12/1118	LKD	10	43	10	43	0.0	0.0						
R6/1118	W13/1118	LKD	11	41	11	41	0.0	0.0	17	83	15	75	11.8	9.6
R1/1119	W1/1119	LKD	6	32	6	32	0.0	0.0						
R1/1119	W2/1119	LKD	6	29	6	29	0.0	0.0						
R1/1119	W3/1119	LKD	6	32	6	32	0.0	0.0						
R1/1119	W4/1119	LKD	6	30	6	30	0.0	0.0						
R1/1119	W5/1119	LKD	16	70	14	65	12.5	7.1						
R1/1119	W6/1119	LKD	17	70	13	63	23.5	10.0	17	72	14	66	17.6	8.3
R1/1120	W1/1120	LKD	7	29	7	29	0.0	0.0						
R1/1120	W2/1120	LKD	6	32	6	32	0.0	0.0						
R1/1120	W3/1120	LKD	7	29	7	29	0.0	0.0						
R1/1120	W4/1120	LKD	6	31	6	31	0.0	0.0						
R1/1120	W5/1120	LKD	18	72	16	68	11.1	5.6						
R1/1120	W6/1120	LKD	19	72	15	66	21.1	8.3	19	74	17	70	10.5	5.4
R1/1121	W1/1121	LKD	6	32	6	32	0.0	0.0						
R1/1121	W2/1121	LKD	7	31	7	31	0.0	0.0						
R1/1121	W3/1121	LKD	6	32	6	32	0.0	0.0						
R1/1121	W4/1121	LKD	7	32	7	32	0.0	0.0						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R1/1121	W5/1121	LKD	19	74	17	70	10.5	5.4						
R1/1121	W6/1121	LKD	20	74	16	68	20.0	8.1	20	76	18	72	10.0	5.3
R1/1122	W1/1122	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1122	W2/1122	LIVINGROOM	6	31	6	31	0.0	0.0						
R1/1122	W3/1122	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1122	W4/1122	LIVINGROOM	6	31	6	31	0.0	0.0						
R1/1122	W5/1122	LIVINGROOM	19	74	17	70	10.5	5.4						
R1/1122	W6/1122	LIVINGROOM	20	74	16	68	20.0	8.1	20	76	17	71	15.0	6.6
R2/1122	W7/1122	LIVINGROOM	17	58	14	52	17.6	10.3						
R2/1122	W8/1122	LIVINGROOM	12	51	11	48	8.3	5.9	17	67	16	63	5.9	6.0
R3/1122	W9/1122	DINING	21	75	17	67	19.0	10.7						
R3/1122	W10/1122	DINING	21	76	18	67	14.3	11.8						
R3/1122	W11/1122	DINING	15	43	15	43	0.0	0.0						
R3/1122	W12/1122	DINING	15	48	15	47	0.0	2.1	21	88	20	83	4.8	5.7
R1/1124	W1/1124	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1124	W2/1124	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1124	W3/1124	LIVINGROOM	6	26	6	26	0.0	0.0						
R1/1124	W4/1124	LIVINGROOM	8	26	7	25	12.5	3.8						
R1/1124	W5/1124	LIVINGROOM	19	75	17	70	10.5	6.7						
R1/1124	W6/1124	LIVINGROOM	20	77	16	69	20.0	10.4	20	78	18	73	10.0	6.4

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window						Room					
			Existing		Proposed		Winter %Loss	Annual %Loss	Existing		Proposed		Winter %Loss	Annual %Loss
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/1124	W7/1124	LIVINGROOM	17	58	15	53	11.8	8.6						
R2/1124	W8/1124	LIVINGROOM	12	53	10	49	16.7	7.5	17	67	15	62	11.8	7.5
R3/1124	W9/1124	DINING	21	77	17	70	19.0	9.1						
R3/1124	W10/1124	DINING	21	76	18	71	14.3	6.6						
R3/1124	W11/1124	DINING	15	52	15	52	0.0	0.0						
R3/1124	W12/1124	DINING	15	52	15	51	0.0	1.9	21	89	20	87	4.8	2.2

40-60 Hampstead Road

R1/241	W1/241	ASSUMED	6	21	6	19	0.0	9.5	6	21	6	19	0.0	9.5
R2/241	W2/241	ASSUMED	3	10	2	8	33.3	20.0	3	10	2	8	33.3	20.0
R3/241	W3/241	ASSUMED	0	5	0	4	-	20.0	0	5	0	4	-	20.0
R4/241	W4/241	ASSUMED	0	4	0	4	-	0.0	0	4	0	4	-	0.0
R5/241	W5/241	ASSUMED	0	4	0	4	-	0.0	0	4	0	4	-	0.0
R7/241	W17/241	ASSUMED	3	18	2	14	33.3	22.2	3	18	2	14	33.3	22.2
R8/241	W16/241	ASSUMED	2	16	2	15	0.0	6.3	2	16	2	15	0.0	6.3
R9/241	W15/241	ASSUMED	0	7	0	6	-	14.3	0	7	0	6	-	14.3

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R10/241	W14/241	ASSUMED	3	18	3	17	0.0	5.6	3	18	3	17	0.0	5.6
R11/241	W13/241	ASSUMED	4	17	3	15	25.0	11.8	4	17	3	15	25.0	11.8
R12/241	W12/241	ASSUMED	0	9	0	7	-	22.2	0	9	0	7	-	22.2
R13/241	W11/241	ASSUMED	5	18	3	13	40.0	27.8	5	18	3	13	40.0	27.8
R14/241	W10/241	ASSUMED	4	17	2	13	50.0	23.5	4	17	2	13	50.0	23.5
R15/241	W9/241	ASSUMED	0	6	0	6	-	0.0	0	6	0	6	-	0.0
R16/241	W6/241	ASSUMED	10	26	8	21	20.0	19.2	10	26	8	21	20.0	19.2
R17/241	W8/241	ASSUMED	9	24	7	19	22.2	20.8	9	24	7	19	22.2	20.8
R18/241	W7/241	ASSUMED	1	15	1	13	0.0	13.3	1	15	1	13	0.0	13.3
R1/242	W1/242	ASSUMED	6	23	6	21	0.0	8.7	6	23	6	21	0.0	8.7
R2/242	W2/242	ASSUMED	3	11	2	9	33.3	18.2	3	11	2	9	33.3	18.2
R3/242	W3/242	ASSUMED	0	7	0	6	-	14.3	0	7	0	6	-	14.3

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R4/242	W4/242	ASSUMED	0	5	0	5	-	0.0	0	5	0	5	-	0.0
R5/242	W5/242	ASSUMED	0	9	0	9	-	0.0	0	9	0	9	-	0.0
R6/242	W18/242	ASSUMED	8	23	7	20	12.5	13.0	8	23	7	20	12.5	13.0
R8/242	W14/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R9/242	W13/242	ASSUMED	0	0	0	0	-	-	0	0	0	0	-	-
R11/242	W17/242	ASSUMED	8	22	6	18	25.0	18.2	8	22	6	18	25.0	18.2
R12/242	W16/242	ASSUMED	5	18	3	15	40.0	16.7	5	18	3	15	40.0	16.7
R14/242	W11/242	ASSUMED	0	1	0	1	-	0.0	0	1	0	1	-	0.0
R15/242	W12/242	ASSUMED	0	2	0	2	-	0.0	0	2	0	2	-	0.0
R17/242	W15/242	ASSUMED	6	19	6	17	0.0	10.5	6	19	6	17	0.0	10.5
R1/243	W1/243	ASSUMED	6	25	6	24	0.0	4.0	6	25	6	24	0.0	4.0
R2/243	W2/243	ASSUMED	3	15	2	13	33.3	13.3	3	15	2	13	33.3	13.3
R3/243	W3/243	ASSUMED	0	7	0	7	-	0.0	0	7	0	7	-	0.0

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R4/243	W4/243	ASSUMED	0	6	0	6	-	0.0	0	6	0	6	-	0.0
R5/243	W5/243	ASSUMED	0	22	0	22	-	0.0	0	22	0	22	-	0.0
R6/243	W13/243	ASSUMED	6	14	5	13	16.7	7.1	6	14	5	13	16.7	7.1
R9/243	W11/243	ASSUMED	4	12	3	11	25.0	8.3	4	12	3	11	25.0	8.3
R10/243	W12/243	ASSUMED	2	9	1	7	50.0	22.2	2	9	1	7	50.0	22.2
R13/243	W10/243	ASSUMED	1	10	1	9	0.0	10.0	1	10	1	9	0.0	10.0
R1/244	W1/244	ASSUMED	6	29	6	27	0.0	6.9	6	29	6	27	0.0	6.9
R2/244	W2/244	ASSUMED	3	19	2	17	33.3	10.5	3	19	2	17	33.3	10.5
R3/244	W3/244	ASSUMED	0	14	0	14	-	0.0	0	14	0	14	-	0.0
R4/244	W4/244	ASSUMED	0	7	0	7	-	0.0	0	7	0	7	-	0.0
R5/244	W5/244	ASSUMED	1	31	1	31	0.0	0.0	1	31	1	31	0.0	0.0
R7/244	W13/244	ASSUMED	9	27	8	24	11.1	11.1	9	27	8	24	11.1	11.1

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R9/244	W12/244	ASSUMED	7	26	5	22	28.6	15.4	7	26	5	22	28.6	15.4
R10/244	W11/244	ASSUMED	11	32	9	27	18.2	15.6	11	32	9	27	18.2	15.6
R13/244	W10/244	ASSUMED	5	25	5	23	0.0	8.0	5	25	5	23	0.0	8.0
R1/245	W1/245	ASSUMED	6	29	6	26	0.0	10.3	6	29	6	26	0.0	10.3
R2/245	W2/245	ASSUMED	3	24	2	22	33.3	8.3	3	24	2	22	33.3	8.3
R3/245	W3/245	ASSUMED	0	19	0	18	-	5.3	0	19	0	18	-	5.3
R4/245	W4/245	ASSUMED	0	7	0	7	-	0.0	0	7	0	7	-	0.0
R5/245	W5/245	ASSUMED	2	34	2	34	0.0	0.0	2	34	2	34	0.0	0.0
R6/245	W6/245	ASSMUED	10	30	8	25	20.0	16.7						
R6/245	W7/245	ASSMUED	0	2	0	2	-	0.0	10	30	8	25	20.0	16.7
R1/246	W1/246	ASSUMED	0	7	0	7	-	0.0						
R1/246	W2/246	ASSUMED	11	36	11	34	0.0	5.6	11	37	11	35	0.0	5.4
R2/246	W3/246	ASSUMED	9	31	8	29	11.1	6.5	9	31	8	29	11.1	6.5
R3/246	W4/246	ASSUMED	2	25	2	24	0.0	4.0	2	25	2	24	0.0	4.0

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APSH

Room	Window	Room Use	Window						Room					
			Existing		Proposed		Winter %Loss	Annual %Loss	Existing		Proposed		Winter %Loss	Annual %Loss
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R4/246	W5/246	ASSUMED	1	19	1	19	0.0	0.0	1	19	1	19	0.0	0.0
R5/246	W6/246	ASSUMED	6	43	6	43	0.0	0.0	6	43	6	43	0.0	0.0
R1/247	W1/247	ASSUMED	9	32	9	32	0.0	0.0	9	32	9	32	0.0	0.0

1-6 Tolmers Square

R1/10	W1/10	ASSUMED_LIVINGROOM	1	27	1	25	0.0	7.4						
R1/10	W2/10	ASSUMED_LIVINGROOM	1	27	1	25	0.0	7.4						
R1/10	W3/10	ASSUMED_LIVINGROOM	1	30	1	28	0.0	6.7						
R1/10	W4/10	ASSUMED_LIVINGROOM	1	27	1	25	0.0	7.4	1	31	1	29	0.0	6.5
R2/10	W5/10	ASSUMED_LIVINGROOM	3	35	3	33	0.0	5.7						
R2/10	W6/10	ASSUMED_LIVINGROOM	5	34	5	32	0.0	5.9						
R2/10	W7/10	ASSUMED_LIVINGROOM	3	36	3	34	0.0	5.6						
R2/10	W8/10	ASSUMED_LIVINGROOM	6	35	6	33	0.0	5.7	6	39	6	37	0.0	5.1
R3/10	W9/10	ASSUMED_LIVINGROOM	5	38	5	35	0.0	7.9						
R3/10	W10/10	ASSUMED_LIVINGROOM	6	36	5	32	16.7	11.1						
R3/10	W11/10	ASSUMED_LIVINGROOM	5	40	5	38	0.0	5.0						
R3/10	W12/10	ASSUMED_LIVINGROOM	6	37	5	33	16.7	10.8	6	41	5	38	16.7	7.3
R4/10	W13/10	ASSUMED	9	42	9	42	0.0	0.0	9	42	9	42	0.0	0.0

SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window						Room					
			Existing		Proposed		Winter %Loss	Annual %Loss	Existing		Proposed		Winter %Loss	Annual %Loss
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R5/10	W14/10	ASSUMED_LIVINGROOM	8	39	8	39	0.0	0.0						
R5/10	W15/10	ASSUMED_LIVINGROOM	8	37	8	37	0.0	0.0						
R5/10	W16/10	ASSUMED_LIVINGROOM	9	41	9	40	0.0	2.4						
R5/10	W17/10	ASSUMED_LIVINGROOM	8	38	8	37	0.0	2.6	9	43	9	43	0.0	0.0
R6/10	W18/10	ASSUMED_LIVINGROOM	10	43	10	40	0.0	7.0	10	43	10	40	0.0	7.0
R7/10	W19/10	ASSUMED_LIVINGROOM	11	42	11	41	0.0	2.4	11	42	11	41	0.0	2.4
R8/10	W20/10	ASSUMED_LIVINGROOM	12	39	12	38	0.0	2.6	12	39	12	38	0.0	2.6
R9/10	W21/10	ASSUMED	12	42	12	41	0.0	2.4	12	42	12	41	0.0	2.4
R10/10	W22/10	ASSUMED	11	45	11	45	0.0	0.0	11	45	11	45	0.0	0.0
R1/12	W1/12	RECEPTION	0	18	0	18	-	0.0						
R1/12	W2/12	RECEPTION	6	50	6	50	0.0	0.0						
R1/12	W3/12	RECEPTION	4	29	4	29	0.0	0.0						
R1/12	W4/12	RECEPTION	4	37	4	36	0.0	2.7						
R1/12	W5/12	RECEPTION	0	6	0	5	-	16.7						
R1/12	W6/12	RECEPTION	8	42	7	39	12.5	7.1	9	62	9	61	0.0	1.6
R2/12	W7/12	RECEPTION	7	32	6	30	14.3	6.3						
R2/12	W8/12	RECEPTION	1	1	1	1	0.0	0.0						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R2/12	W9/12	RECEPTION	8	36	8	34	0.0	5.6	9	37	8	35	11.1	5.4
R3/12	W10/12	RECEPTION	9	38	8	34	11.1	10.5						
R3/12	W11/12	RECEPTION	1	6	1	6	0.0	0.0						
R3/12	W12/12	RECEPTION	10	37	9	35	10.0	5.4	10	40	9	38	10.0	5.0
R4/12	W13/12	RECEPTION	8	35	8	34	0.0	2.9						
R4/12	W14/12	RECEPTION	1	1	1	1	0.0	0.0						
R4/12	W15/12	RECEPTION	9	38	9	38	0.0	0.0	9	39	9	38	0.0	2.6
R5/12	W16/12	RECEPTION	11	40	10	39	9.1	2.5						
R5/12	W17/12	RECEPTION	0	3	0	3	-	0.0						
R5/12	W18/12	RECEPTION	11	36	10	34	9.1	5.6	11	40	10	39	9.1	2.5
R6/12	W19/12	ASSUMED	1	18	1	16	0.0	11.1	1	18	1	16	0.0	11.1
R7/12	W20/12	RECEPTION	10	36	10	34	0.0	5.6						
R7/12	W21/12	RECEPTION	3	3	3	3	0.0	0.0						
R7/12	W22/12	RECEPTION	11	40	11	37	0.0	7.5	11	41	11	38	0.0	7.3
R8/12	W23/12	RECEPTION	11	39	11	38	0.0	2.6						
R8/12	W24/12	RECEPTION	0	6	0	6	-	0.0						
R8/12	W25/12	RECEPTION	11	36	11	35	0.0	2.8	11	39	11	38	0.0	2.6
R9/12	W26/12	RECEPTION	11	34	11	33	0.0	2.9						

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SUNLIGHT ANALYSIS

EUSTON TOWER, LONDON

EXISTING VS PROPOSED 260923__WOB

APSH

Room	Window	Room Use	Window				Winter %Loss	Annual %Loss	Room				Winter %Loss	Annual %Loss
			Existing		Proposed				Existing		Proposed			
			Winter APSH	Annual APSH	Winter APSH	Annual APSH			Winter APSH	Annual APSH	Winter APSH	Annual APSH		
R9/12	W27/12	RECEPTION	4	4	4	4	0.0	0.0						
R9/12	W28/12	RECEPTION	12	38	12	37	0.0	2.6	12	38	12	37	0.0	2.6
R10/12	W29/12	RECEPTION	5	6	5	6	0.0	0.0						
R10/12	W30/12	RECEPTION	15	52	15	51	0.0	1.9	15	52	15	51	0.0	1.9
R11/12	W31/12	RECEPTION	16	54	16	53	0.0	1.9						
R11/12	W32/12	RECEPTION	9	9	9	9	0.0	0.0	16	54	16	53	0.0	1.9
R11/13	W11/13	ASSUMED	0	23	0	21	-	8.7	0	23	0	21	-	8.7

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Appendix: Daylight, Sunlight, Overshadowing and Solar Glare

Annex 4 – Overshadowing Results

Appendix: Traffic and Transport

Annex 1: Policy and Guidance Context

Appendix: Traffic and Transport

Annex 1: Policy and Guidance Context

LEGISLATIVE AND PLANNING POLICY CONTEXT

The proposals contained within the Planning Application have been developed with regard to the documents referred to below and the polices and guidance contained therein.

National

- NPPF (2023)[1] - The National Planning Policy Framework (NPPF) was last updated in September 2023. It sets out the Government's planning policies for England and has a presumption in favour of sustainable development (Paragraph 11). The NPPF promotes sustainable transport noting that transport issues should be considered at the earliest stages of development proposals.
- The Proposed Development supports the NPPF through:
  - Its location in an area with good access and connections to the transport network;
  - Promoting sustainable transport by providing attractive pedestrian spaces, a "car-free" approach and the provision of significant cycle parking provisions; and
  - Not having significant adverse impacts on the transport network or highways safety.

Regional

- London Plan (2021)[2] - The London is part of the statutory development plan. It aims to ensure that London's transport is easy, safe, and convenient for everyone and actively encourages walking and cycling. The proposed development has been reviewed against relevant London Plan policies in the associated Transport Assessment.
- The Mayor's Transport Strategy (2018)[3] - The Mayor's Transport Strategy (MTS) was published in March 2018 and sets out the Mayor's policies and proposals to reshape transport in London over the next 25 years. The central aim of the MTS is for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041.
- Three key themes are at the heart of the strategy:
  1. Healthy Streets and healthy people
  2. A good public transport experience
  3. New homes and jobs
- The MTS sets out Good Growth principles for the delivery of new homes and jobs that use transport to:
  - Create high-density, mixed-use places; and
  - Unlock growth potential in underdeveloped parts of the city
  - The proposed development would deliver the transport principles of Good Growth through:
  - Providing development in a location with good access to public transport. The site has a PTAL of 2/3 (good) and is located next to Lea Bridge Station;
  - Providing high-density and mixed-use development in an appropriate location within an Allocated Site. As it is built and occupied, there will be more local facilities and amenities, which will mean shorter journeys can be made on foot to key destinations;
  - Facilities that will encourage walking and cycling such as wide footways and significant numbers of short-stay and long-stay cycle parking;
  - A "car-free" approach with wheelchair accessible car parking only;
  - Inclusive and accessible design enabling access for everyone travelling to and from the development; and
  - Promoting efficient freight through a Delivery and Servicing Plan, which will be secured by planning condition.
- London Borough of Camden Local Plan (2017)[4] - The Council formally adopted the Local Plan in 2017, with the document setting out the vision for shaping the future of the Borough until the period 2031. The Local Plan builds on the principles of the London Plan and seeks to promote sustainable transport. A detailed review of the Local Plan policies in relation to the Proposed Development is included within the Transport Assessment that will accompany the planning application.

Guidance

- Healthy Streets Transport Assessment Recommended Contents and Chapters (2019)[5]
- Active Travel Zone Assessments[6]
- Travel Plan Guidance[7]
- Delivery and Servicing Plan Guidance (2020)[8]
- Construction Logistic Planning Guidance[9]

[1] *Ministry of Housing, Communities & Local Government, 2023*
[2] *Mayor of London, The London Plan, The Spatial Development Strategy for Greater London, 2021.*
[3] *Greater London Authority March 2018*
[4] *London Borough of Camden Local Plan (2017)*
[5] *Transport for London https://content.tfl.gov.uk/healthy-streets-ta-format.pdf .*
[6] *Transport for London https://content.tfl.gov.uk/atz-assessment-instructions.pdf*
[7] *Transport for London https://content.tfl.gov.uk/what-a-travel-plan-should-contain.pdf*
[8] *Transport for London December 2020 http://planning.data.tfl.gov.uk/delivery-and-servicing-plan-guidance.pdf*
[9] *Transport for London http://content.tfl.gov.uk/construction-logistics-plan-guidance.pdf*

Appendix: Air Quality

Annex 1: Glossary
Annex 2: Legislative and Planning Policy Context
Annex 3: Construction Dust Assessment Procedure
Annex 4: EPUK & IAQM Planning for Air Quality Guidance
Annex 5: Professional Experience
Annex 6: Modelling Methodology
Annex 7: No Improvement Scenario
Annex 8: London Vehicle Fleet Projections
Annex 9: Preliminary Air Quality Assessment
Annex 10: Air Quality Positive Statement
Annex 11: Construction Mitigation
Annex 12: References

Appendix: Air Quality

Euston Tower, Camden
Volume 3, Appendix:
Air Quality

November 2023

Experts in air quality
management & assessment

Document Control

Client	British Land Property Management Limited	**Principal Contact**	Henry Brittlebank (Trium Environmental LLP)

Job Number	J10/14095/10

Report Prepared By:	George Chousos and Julia Burnell

Document Status and Review Schedule

Report No.	Date	Status	Reviewed by
J10/14095/10/2/F1	24 November 2023	Final	Guido Pellizzaro (Technical Director)

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1 Appendices

A1 Glossary

AADT	Annual Average Daily Traffic
AQAL	Air Quality Assessment Level
AQC	Air Quality Consultants
AQMA	Air Quality Management Area
AURN	Automatic Urban and Rural Network
CAZ	Clean Air Zone
CEMP	Construction Environmental Management Plan
CPG	Camden Planning Guidance
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DMP	Dust Management Plan
EPUK	Environmental Protection UK
EU	European Union
EV	Electric Vehicle
Exceedance	A period of time when the concentration of a pollutant is greater than the appropriate air quality objective. This applies to specified locations with relevant exposure
Focus Area	Location that not only exceeds the annual mean limit value for NO_2 but also has a high level of human exposure
GLA	Greater London Authority
HDV	Heavy Duty Vehicles (> 3.5 tonnes)
HMSO	Her Majesty's Stationery Office
IAQM	Institute of Air Quality Management
JAQU	Joint Air Quality Unit
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LBC	London Borough of Camden
LDV	Light Duty Vehicles (<3.5 tonnes)
LEZ	Low Emission Zone

µg/m^3	Micrograms per cubic metre
NO_2	Nitrogen dioxide
NPPF	National Planning Policy Framework
NRMM	Non-road Mobile Machinery
OEP	Office for Environmental Protection
Objectives	A nationally defined set of health-based concentrations for nine pollutants, seven of which are incorporated in Regulations, setting out the extent to which the standards should be achieved by a defined date. There are also vegetation-based objectives for sulphur dioxide and nitrogen oxides
OLEV	Office for Low Emission Vehicles
PM_{10}	Small airborne particles, more specifically particulate matter less than 10 micrometres in aerodynamic diameter
$PM_{2.5}$	Small airborne particles less than 2.5 micrometres in aerodynamic diameter
PPG	Planning Practice Guidance
RDE	Real Driving Emissions
SPG	Supplementary Planning Guidance
Standards	A nationally defined set of concentrations for nine pollutants below which health effects do not occur or are minimal
TEB	Transport Emissions Benchmark
TfL	Transport for London
ULEZ	Ultra Low Emission Zone

Appendix: Air Quality

A2 Legislative and Planning Policy Context

A2.1 All European legislation referred to in this report is written into UK law and remains in place.

Air Quality Strategy 2007

A2.2 The Air Quality Strategy (Defra, 2007) published by the Department for Environment, Food, and Rural Affairs (Defra) and Devolved Administrations, provides the policy framework for air quality management and assessment in the UK. It provides air quality standards and objectives for key air pollutants, which are designed to protect human health and the environment. It also sets out how the different sectors: industry, transport and local government, can contribute to achieving the air quality objectives. Local authorities are seen to play a particularly important role. The strategy describes the Local Air Quality Management (LAQM) regime that has been established, whereby every authority has to carry out regular reviews and assessments of air quality in its area to identify whether the objectives have been, or will be, achieved at relevant locations, by the applicable date. If this is not the case, the authority must declare an Air Quality Management Area (AQMA) and prepare an Action Plan which identifies appropriate measures that will be introduced in pursuit of the objectives.

Air Quality Strategy 2023

A2.3 The Air Quality Strategy: Framework for Local Authority Delivery 2023 (Defra, 2023a) sets out the strategic air quality framework for local authorities and other Air Quality Partners in England. It sets out their powers and responsibilities, and actions the government expects them to take. It does not replace other air quality guidance documents relevant to local authorities.

Clean Air Strategy 2019

A2.4 The Clean Air Strategy (Defra, 2019) sets out a wide range of actions by which the Government will seek to reduce pollutant emissions and improve air quality. Actions are targeted at four main sources of emissions: Transport, Domestic, Farming and Industry. At this stage, there is no straightforward way to take account of the expected future benefits to air quality within this assessment.

Reducing Emissions from Road Transport: Road to Zero Strategy

A2.5 The Office for Low Emission Vehicles (OLEV) and Department for Transport (DfT) published a Policy Paper (DfT, 2018) in July 2018 outlining how the government will support the transition to zero tailpipe emission road transport and reduce tailpipe emissions from conventional vehicles during the transition. This paper affirms the Government's pledge to end the sale of new conventional petrol and diesel cars and vans by 2040, and states that the Government expects the majority of new cars and vans sold to be 100% zero tailpipe emission and all new cars and vans to have significant zero tailpipe emission capability by this year, and that by 2050 almost every car and van should have

zero tailpipe emissions. It states that the Government wants to see at least 50%, and as many as 70%, of new car sales, and up to 40% of new van sales, being ultra-low emission by 2030.

A2.6 The paper sets out a number of measures by which Government will support this transition but is clear that Government expects this transition to be industry and consumer led. The Government has since announced that the phase-out date for the sale of new petrol and diesel cars and vans will be brought forward to 2030 and that all new cars and vans must be fully zero emission at the tailpipe from 2035. If these ambitions are realised, then road traffic-related NOx emissions can be expected to reduce significantly over the coming decades.

Environment Act 2021

A2.7 The UK's new legal framework for protection of the natural environment, the Environment Act (2021) passed into UK law in November 2021. The Act gives the Government the power to set long-term, legally binding environmental targets. It also establishes an Office for Environmental Protection (OEP), responsible for holding the Government to account and ensuring compliance with these targets.

A2.8 The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 (SI 2023 No. 96) sets two new targets for future concentrations of $PM_{2.5}$. These targets are described in Chapter 9: Air Quality.

Environmental Improvement Plan 2023

A2.9 Defra published its 25 Year Environment Plan in 2018 (Defra, 2018b). The Environment Act (2021) requires Defra to review this Plan at least every five years. The Environmental Improvement Plan 2023 (Defra, 2023b) is the first revision. This outlines the progress made since 2018 and adds detail to the goals defined in the 2018 Plan, including that of achieving clean air.

A2.10 The Environmental Improvement Plan 2023 sets out the new air quality targets which have been set for concentrations of $PM_{2.5}$. These targets, which are described in Chapter 9: Air Quality, include the long-term targets in the Statutory Instrument described in Paragraph A2.8, and interim targets to be achieved by 2028.

A2.11 The 2023 Plan outlines the role of local authorities in helping it meet both its targets and existing commitments. It also outlines the respective roles of industry, agricultural sectors, and the Department for Transport in providing the coordinated action required to meet both its new, and pre-existing targets and commitments.

Planning Policy

National Policies

A2.12 The National Planning Policy Framework (NPPF) (2023) sets out planning policy for England. It states that the purpose of the planning system is to contribute to the achievement of sustainable development, and that the planning system has three overarching objectives, one of which (Paragraph 8c) is an environmental objective:

"to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy".

A2.13 To prevent unacceptable risks from air pollution, Paragraph 174 of the NPPF states that:

"Planning policies and decisions should contribute to and enhance the natural and local environment by…preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air quality".

A2.14 Paragraph 185 states:

"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development".

A2.15 More specifically, on air quality, Paragraph 186 makes clear that:

"Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan".

A2.16 The NPPF is supported by Planning Practice Guidance (PPG) (Ministry of Housing, Communities & Local Government, 2019), which includes guiding principles on how planning can take account of the impacts of new development on air quality. The PPG states that:

"Defra carries out an annual national assessment of air quality using modelling and monitoring to determine compliance with Limit Values. It is important that the potential impact of new development on air quality is taken into account where the national assessment indicates that relevant limits have been exceeded or are near the limit, or where the need for emissions reductions has been identified".

A2.17 Regarding plan-making, the PPG states:

"It is important to take into account air quality management areas, Clean Air Zones and other areas including sensitive habitats or designated sites of importance for biodiversity where there could be specific requirements or limitations on new development because of air quality".

A2.18 The role of the local authorities through the LAQM regime is covered, with the PPG stating that a local authority Air Quality Action Plan *"identifies measures that will be introduced in pursuit of the objectives and can have implications for planning"*. In addition, the PPG makes clear that *"Odour and dust can also be a planning concern, for example, because of the effect on local amenity"*.

A2.19 Regarding the need for an air quality assessment, the PPG states that:

"Whether air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to have an adverse effect on air quality in areas where it is already known to be poor, particularly if it could affect the implementation of air quality strategies and action plans and/or breach legal obligations (including those relating to the conservation of habitats and species). Air quality may also be a material consideration if the proposed development would be particularly sensitive to poor air quality in its vicinity".

A2.20 The PPG sets out the information that may be required in an air quality assessment, making clear that:

"Assessments need to be proportionate to the nature and scale of development proposed and the potential impacts (taking into account existing air quality conditions), and because of this are likely to be locationally specific".

A2.21 The PPG also provides guidance on options for mitigating air quality impacts, as well as examples of the types of measures to be considered. It makes clear that:

"Mitigation options will need to be locationally specific, will depend on the proposed development and need to be proportionate to the likely impact. It is important that local planning authorities work with applicants to consider appropriate mitigation so as to ensure new development is appropriate for its location and unacceptable risks are prevented".

London-Specific Policies

The London Plan

A2.22 The London Plan (GLA, 2021a) sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years. The key policy relating to air quality is Policy SI 1 on *Improving air quality*, Part B1 of which sets out three key requirements for developments:

"Development proposals should not:

a) lead to further deterioration of existing poor air quality

b) create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits

c) create unacceptable risk of high levels of exposure to poor air quality".

A2.23 The Policy then details how developments should meet these requirements, stating:

"In order to meet the requirements in Part 1, as a minimum:

a) development proposals must be at least Air Quality Neutral

b) development proposals should use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality in preference to post-design or retro-fitted mitigation measures

c) major development proposals must be submitted with an Air Quality Assessment. Air quality assessments should show how the development will meet the requirements of B1

d) development proposals in Air Quality Focus Areas or that are likely to be used by large numbers of people particularly vulnerable to poor air quality, such as children or older people should demonstrate that design measures have been used to minimise exposure".

A2.24 Part C of the Policy introduces the concept of Air Quality Positive for large-scale development, stating:

"Masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment should consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach. To achieve this a statement should be submitted demonstrating:

1) how proposals have considered ways to maximise benefits to local air quality, and

2) what measures or design features will be put in place to reduce exposure to pollution, and how they will achieve this."

A2.25 Regarding construction and demolition impacts, Part D of Policy SI 1 of the London Plan states:

"In order to reduce the impact on air quality during the construction and demolition phase development proposals must demonstrate how they plan to comply with the Non-Road Mobile Machinery Low Emission Zone and reduce emissions from the demolition and construction of buildings following best practice guidance".

A2.26 Part E of Policy SI 1 states the following regarding mitigation and offsetting of emissions:

"Development proposals should ensure that where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is done on-site. Where it can be demonstrated that emissions cannot be further reduced by on-site measures, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated within the area affected by the development".

A2.27 The explanatory text around Policy SI 1 of the London Plan states the following with regard to assessment criteria:

"The Mayor is committed to making air quality in London the best of any major world city, which means not only achieving compliance with legal limits for Nitrogen Dioxide as soon as possible and maintaining compliance where it is already achieved, but also achieving World Health Organisation targets for other pollutants such as Particulate Matter.

The aim of this policy is to ensure that new developments are designed and built, as far as is possible, to improve local air quality and reduce the extent to which the public are exposed to poor air quality. This means that new developments, as a minimum, must not cause new exceedances of legal air quality standards, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits. Where limit values are already met, or are predicted to be met at the time of completion, new developments must endeavour to maintain the best ambient air quality compatible with sustainable development principles.

Where this policy refers to 'existing poor air quality' this should be taken to include areas where legal limits for any pollutant, or World Health Organisation targets for Particulate Matter, are already exceeded and areas where current pollution levels are within 5 per cent of these limits"[1].

Design-led Approach

[1] The London Plan was developed based on a World Health Organisation guideline for $PM_{2.5}$ of 10 µg/m^3 (see Paragraph A2.33).

A2.28 Policy D3 on optimising site capacity through the design-led approach states that *"development proposals should…help prevent or mitigate the impacts of noise and poor air quality"*. The explanatory text around this Policy states the following:

"Measures to design out exposure to poor air quality and noise from both external and internal sources should be integral to development proposals and be considered early in the design process. Characteristics that increase pollutant or noise levels, such as poorly-located emission sources, street canyons and noise sources should also be designed out wherever possible. Optimising site layout and building design can also reduce the risk of overheating as well as minimising carbon emissions by reducing energy demand".

Development Plans

A2.29 Policy SI 1 of the London Plan (GLA, 2021a) states the following regarding strategic development plans:

"Development Plans, through relevant strategic, site-specific and area-based policies, should seek opportunities to identify and deliver further improvements to air quality and should not reduce air quality benefits that result from the Mayor's or boroughs' activities to improve air quality."

Preliminary Air Quality Assessment

A2.30 The London Plan sets out expectations around the consideration of air quality in the design of all major developments:

"For major developments, a preliminary Air Quality Assessment should be carried out before designing the development to inform the design process. The aim of a preliminary assessment is to assess:

- *The most significant sources of pollution in the area*
- *Constraints imposed on the site by poor air quality*
- *Appropriate land uses for the site*
- *Appropriate design measures that could be implemented to ensure that development reduces exposure and improves air quality.*

Further assessments should then be carried out as the design evolves to ensure that impacts from emissions are prevented or minimised as far as possible, and to fully quantify the expected effect of any proposed mitigation measures, including the cumulative effect where other nearby developments are also underway or likely to come forward".

Air Quality Positive

A2.31 The London Plan explains what is meant by 'Air Quality Positive' in the explanatory text around Policy SI 1:

"An air quality positive approach is linked to other policies in the London Plan, such as Healthy Streets, energy masterplanning and green infrastructure. One of the keys to delivering this will be to draw existing good practice together in a holistic fashion, at an early stage in the process, to ensure that the development team can identify which options deliver the greatest improvement to air quality. Large schemes, subject to Environmental Impact Assessment, commonly have project and design teams representing a range of expertise, that can feed in to the development of a statement to set out how air quality can be improved across the proposed area of the development.

Single-site schemes, including referable schemes, are often constrained by pre-existing urban form and structure, transport and heat networks. These constraints may limit their ability to consider how to actively improve local air quality. By contrast, large schemes, particularly masterplans, usually have more flexibility to consider how new buildings, amenity and public spaces, transport and heat networks are deployed across the area and will therefore have greater opportunities to improve air quality and reduce exposure through the careful choice of design and infrastructure solutions. Delivery of an air quality positive approach will be project specific and will rely on the opportunities on site or in the surrounding area to improve air quality.

Statements for large-scale development proposals, prepared in response to Part C of this policy, should set out:

- *How air quality is intended to be analysed and opportunities for its improvement identified as part of the design process.*
- *How air quality improvements have informed the design choices made about layout and distribution of buildings, amenity spaces and infrastructure.*
- *What steps will be taken to promote the uptake and use of sustainable and zero-emission modes of transport beyond minimum requirements. This may include specific measures in transport plans or delivery against Healthy Streets indicators.*
- *How air pollutant emissions from the buildings or associated energy centres can be reduced beyond the minimum requirements set out in Part B of this policy. This may include specific measures in heating masterplans or working with existing heat network providers to reduce or eliminate energy centre emissions.*
- *How specific measures that are identified to deliver air quality improvements will be evaluated and secured, including whether more detailed design specifications will be required so that the final development meets the desired performance".*

Electric Vehicle Charging

A2.32 To support the uptake of zero tailpipe emission vehicles, Policy T6.1 of the London Plan states:

"All residential car parking spaces must provide infrastructure for electric or Ultra-Low Emission vehicles. At least 20 per cent of spaces should have active charging facilities, with passive provision for all remaining spaces".

London Environment Strategy

A2.33 The London Environment Strategy was published in May 2018 (GLA, 2018a). The strategy considers air quality in Chapter 4; the Mayor's main objective is to create a "*zero emission London by 2050*". Policy 4.2.1 aims to "*reduce emissions from London's road transport network by phasing out fossil fuelled vehicles, prioritising action on diesel, and enabling Londoners to switch to more sustainable forms of transport*". The strategy sets a target to achieve, by 2030, the guideline value for PM2.5 which was set by the World Health Organisation (WHO) in 2005. An implementation plan for the strategy has also been published which sets out what the Mayor will do between 2018 and 2023 to help achieve the ambitions in the strategy.

A2.34 The air quality chapter of the London Environment Strategy sets out three main objectives, each of which is supported by sub-policies and proposals. The Objectives and their sub-policies are set out below:

"Objective 4.1: Support and empower London and its communities, particularly the most disadvantaged and those in priority locations, to reduce their exposure to poor air quality.

- *Policy 4.1.1 Make sure that London and its communities, particularly the most disadvantaged and those in priority locations, are empowered to reduce their exposure to poor air quality*
- *Policy 4.1.2 Improve the understanding of air quality health impacts to better target policies and action*

Objective 4.2: Achieve legal compliance with UK and EU limits as soon as possible, including by mobilising action from London Boroughs, government and other partners

- *Policy 4.2.1 Reduce emissions from London's road transport network by phasing out fossil fuelled vehicles, prioritising action on diesel, and enabling Londoners to switch to more sustainable forms of transport*
- *Policy 4.2.2 Reduce emissions from non-road transport sources, including by phasing out fossil fuels*
- *Policy 4.2.3 Reduce emissions from non-transport sources, including by phasing out fossil fuels*

- *Policy 4.2.4 The Mayor will work with the government, the London boroughs and other partners to accelerate the achievement of legal limits in Greater London and improve air quality*
- *Policy 4.2.5 The Mayor will work with other cities (here and internationally), global city and industry networks to share best practice, lead action and support evidence based steps to improve air quality*

Objective 4.3: Establish and achieve new, tighter air quality targets for a cleaner London by transitioning to a zero emission London by 2050, meeting world health organization health-based guidelines for air quality

- *Policy 4.3.1 The Mayor will establish new targets for $PM_{2.5}$ and other pollutants where needed. The Mayor will seek to meet these targets as soon as possible, working with government and other partners*
- *Policy 4.3.2 The Mayor will encourage the take up of ultra low and zero emission technologies to make sure London's entire transport system is zero emission by 2050 to further reduce levels of pollution and achieve WHO air quality guidelines*
- *Policy 4.3.3 Phase out the use of fossil fuels to heat, cool and maintain London's buildings, homes and urban spaces, and reduce the impact of building emissions on air quality*
- *Policy 4.3.4 Work to reduce exposure to indoor air pollutants in the home, schools, workplace and other enclosed spaces"*

A2.35 While the policies targeting transport sources are significant, there are less obvious ones that will also require significant change. In particular, the aim to phase out fossil-fuels from building heating and cooling and from NRMM will demand a dramatic transition.

Low Emission Zone

A2.36 The Low Emission Zone (LEZ) was implemented as a key measure to improve air quality in Greater London. It entails charges for vehicles entering Greater London not meeting certain emissions criteria, and affects diesel-engined lorries, buses, coaches, large vans, minibuses and other specialist vehicles derived from lorries and vans. Since 1 March 2021, a standard of Euro VI has applied for HGVs, buses and coaches, while a standard of Euro 3 has applied for large vans, minibuses and other specialist diesel vehicles since 2012.

Ultra Low Emission Zone

A2.37 London's Ultra Low Emission Zone (ULEZ) was introduced on 8 April 2019. The ULEZ currently operates 24 hours a day, 7 days a week and covers the entire area within the North and South Circular roads. All cars, motorcycles, vans and minibuses are required to meet exhaust emission

standards (ULEZ standards) or pay an additional daily charge to travel within the zone. The ULEZ standards are Euro 3 for motorcycles, Euro 4 for petrol cars, vans and minibuses and Euro 6 for diesel cars, vans and minibuses. The ULEZ does not include any requirements relating to heavy vehicle (HGV, coach and bus) emissions, as these are addressed by the amendments to the LEZ described in Paragraph A2.36.

A2.38 The ULEZ was expanded across all London boroughs on the 29th August 2023 and includes the emissions standards set out in Paragraph A2.37.

Other Measures

A2.39 Since 2018, all taxis presented for licencing for the first time had to be zero emission capable (ZEC). This means they must be able to travel a certain distance in a mode which produces no air pollutants, and all private hire vehicles (PHVs) presented for licensing for the first time had to meet Euro 6 emissions standards. Since January 2020, all newly manufactured PHVs presented for licensing for the first time had to be ZEC (with a minimum zero emission range of 10 miles). The Mayor's aim is that the entire taxi and PHV fleet will be made up of ZEC vehicles by 2033.

A2.40 The Mayor has also proposed to make sure that TfL leads by example by cleaning up its bus fleet, implementing the following measures:

- TfL will procure only hybrid or zero emission double-decker buses from 2018;
- a commitment to providing 3,100 double decker hybrid buses by 2019 and 300 zero emission single-deck buses in central London by 2020;
- introducing 12 Low Emission Bus Zones by 2020;
- investing £50m in Bus Priority Schemes across London to reduce engine idling; and
- retrofitting older buses to reduce emissions (selective catalytic reduction (SCR) technology has already been fitted to 1,800 buses, cutting their NOx emissions by around 88%).

Mayor's Transport Strategy

A2.41 The Mayor's Transport Strategy (GLA, 2018b) sets out the Mayor's policies and proposals to reshape transport in London over the next two decades. The Strategy focuses on reducing car dependency and increasing active sustainable travel, with the aim of improving air quality and creating healthier streets. It notes that development proposals should "*be designed so that walking and cycling are the most appealing choices for getting around locally*".

GLA SPG: The Control of Dust and Emissions During Construction and Demolition

A2.42 The Greater London Authority's (GLA's) Supplementary Planning Guidance (SPG) on The Control of Dust and Emissions During Construction and Demolition (GLA, 2014) outlines a risk assessment based approach to considering the potential for dust generation from a construction site, and sets

out what mitigation measures should be implemented to minimise the risk of construction dust impacts, dependent on the outcomes of the risk assessment. This guidance is largely based on the Institute of Air Quality Management's (IAQM's) guidance (IAQM, 2016), and it states that "*the latest version of the IAQM Guidance should be used*".

Air Quality Focus Areas

A2.43 The GLA has identified 160 air quality Focus Areas in London. These are locations that not only exceed the annual mean limit value for nitrogen dioxide, but also have high levels of human exposure. They do not represent an exhaustive list of London's air quality hotspot locations, but locations where the GLA believes the problem to be most acute. They are also areas where the GLA considers there to be the most potential for air quality improvements and are, therefore, where the GLA and Transport for London (TfL) will focus actions to improve air quality. The proposed development is located within the *'Marylebone Road from Marble Arch / Euston / King's Cross Junction'* air quality Focus Area.

Local Policies

A2.44 The Camden Local Plan was adopted in 2017. The Plan sets out the Council's planning policies, covering the period from 2016-2031, and replaces the Core Strategy and Development Policies planning documents (adopted in 2010).

A2.45 Policy A1 on managing the impact of development states that "The Council will seek to protect the quality of life of occupiers and neighbours" and will "seek to ensure that the amenity of communities, occupiers and neighbours is protected […] and require mitigation measures where necessary. Factors that will be considered include odour, fumes and dust".

A2.46 Policy CC4 on Air Quality states that:

"*The Council will ensure that the impact of development on air quality is mitigated and ensure that exposure to poor air quality is reduced in the borough.*

The Council will take into account the impact of air quality when assessing development proposals, through the consideration of both the exposure of occupants to air pollution and the effect of the development on air quality. Consideration must be taken to the actions identified in the Council's Air Quality Action Plan.

Air Quality Assessments (AQA) are required where development is likely to expose residents to high levels of air pollution. Where the AQA shows that a development would cause harm to air quality, the Council will not grant permissions unless measures are adopted to mitigate the impact. Similarly, developments that introduce sensitive receptors (i.e. housing, schools) in locations of poor air quality will not be acceptable unless designed to mitigate the impact.

Development that involves significant demolition, construction or earthworks will also be required to assess the risk of dust and emission impacts in an AQA and include appropriate mitigation measures to be secured in a Construction Management Plan."

A2.47 To support Policy CC4, the new Local Plan also includes Policy T2 which requires "*all new developments in the borough to be car-free*".

A2.48 Policy D1 Design, has implications to air quality as well:

"*The Council will seek to secure high quality design in development. The Council will require that development […]*

c. is sustainable in design and construction, incorporating best practice in resource management and climate change mitigation and adaptation;

h. promotes health;

The Council will resist development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions…"

A2.49 The plan elaborates that design can impact on air quality and health:

"*The way an area is designed and managed can have a significant impact on people's quality of life, health and wellbeing. Planning has a key role in promoting good physical and mental health by creating streets, spaces and buildings which allow and encourage healthy lifestyles. Architecture and urban design can affect human health through […] air quality [...]. The Council will require applicants to consider how development will contribute to improving health*."

A2.50 To support the Camden Local Plan, the Council has published a Camden Planning Guidance (CPG) document, specifically pertaining to air quality, which forms a Supplementary Planning Document (SPD). The CPG states that:

- "*All developments are to protect future occupants from exposure to poor air quality; and*
- *All developments are to limit their impact on local air quality and be at least air quality neutral*."

A2.51 The CPG describes air quality in the borough and measures to minimise emissions. The CPG references the WHO guideline targets for NO_2, PM_{10} and $PM_{2.5}$ of 40 µg/m^3, 20 µg/m^3 and 10 µg/m^3 respectively which Camden aims to achieve by 2030. The SPD also states that "*For the determination of planning applications and appraisal of Construction Management Plans, consideration must be paid to uncertainty in NO_2 data, therefore 38µg/m^3 (the 40µg/m^3 WHO limit less 5%) shall be taken as the limit for this pollutant*".

A2.52 The SPD outlines when an air quality assessment should be undertaken and what the assessment should cover. With respect to dispersion modelling, the SPD states that "*Modelling should not predict improvements to future years (future vehicle emissions or future background concentrations)*."

Building Standards

A2.53 Part F(1) of Schedule 1 of the Building Regulations 2010 as amended June 2022 (Ministry of Housing, Communities & Local Government, 2022) places a duty on building owners, or those responsible for relevant building work[2], to ensure adequate ventilation is provided to building occupants.

A2.54 Approved Document F (HM Government, 2021a), which accompanies the Building Regulations, explains that care should be taken to minimise entry of external air pollutants. Specific steps should be taken to manage ventilation intakes where the building is near to a significant source of emissions, or if local ambient concentrations exceed values set in the Air Quality Standards Regulations 2010 (see Chapter 9: Air Quality). These steps include maximising the distance between emission source and air intake, considering likely dispersion patterns, and considering the timing of pollution releases when designing the ventilation system.

A2.55 Part S(1) of Schedule 1, and Regulation 44D, of the Building Regulations 2010 (Ministry of Housing, Communities & Local Government, 2022) define a requirement for the provision of infrastructure for charging electric vehicles. Precise requirements are explained further within Approved Document S (HM Government, 2021b) and depend on the overall number of parking spaces provided and the average financial cost of installation.

A2.56 Compliance with the Building Regulations is not required for planning approval, but it is assumed that the Regulations will be complied with in the completed development.

Air Quality Action Plans

National Air Quality Plan

A2.57 Defra has produced an Air Quality Plan to tackle roadside nitrogen dioxide concentrations in the UK (Defra, 2017); a supplement to the 2017 Plan (Defra, 2018a) was published in October 2018 and sets out the steps Government is taking in relation to a further 33 local authorities where shorter-term exceedances of the limit value were identified. Alongside a package of national measures, the 2017 Plan and the 2018 Supplement require those identified English Local Authorities (or the GLA in the case of London Authorities) to produce local action plans and/or feasibility studies. These plans and feasibility studies must have regard to measures to achieve the statutory limit values within the shortest possible time, which may include the implementation of a Clean Air Zone (CAZ). There

[2] Building work is a legal term for work covered by the Building Regulations. With limited exemptions, the Regulations apply to all significant building work, including erecting or extending a building.

is currently no straightforward way to take account of the effects of the 2017 Plan or 2018 Supplement in the modelling undertaken for this assessment; however, consideration has been given to whether there is currently, or is likely to be in the future, a limit value exceedance in the vicinity of the proposed development. This assessment has principally been carried out in relation to the air quality objectives, rather than the limit values that are the focus of the Air Quality Plan.

Local Air Quality Action Plan

A2.58 LBC's combined Clean Air Strategy and Clean Air Action Plan (CAAP) (LBC, 2022) sets out the strategic objectives for improving air quality in the borough between 2019 and 2034 and the actions that will be undertaken between 2023 and 2026 to support the strategic objectives.

A2.59 One of the Clean Air Strategy's key commitments is "achieving the most stringent evidence-based air quality targets available, in as short a timeframe as possible. Currently, these are the World Health Organization's (WHO) air quality guidelines, published in 2021" of 10 $\mu g/m^3$ for NO_2 by 2034, 15 $\mu g/m^3$ for PM_{10} by 2030 and 5 $\mu g/m^3$ for $PM_{2.5}$ by 2034. These are more stringent than those published in the Air Quality CPG, which are based on the previous WHO guidelines but are recommended for use "for the determination of planning applications and appraisal of Construction Management Plans" (LBC, 2021).

A2.60 The Clean Air Action Plan contains 36 *'Clean Air Outcomes'* to help improve air quality and protect health in Camden. The Plan sets out seven themes, around which a number of actions have been developed in order to improve local air quality:

- reducing construction emissions;
- reducing building emissions;
- reducing transport emissions;
- supporting communities and schools;
- indirect emissions and lobbying;
- public health and awareness; and
- indoor air quality and occupational exposure.

Appendix: Air Quality

Annex 1: Glossary
Annex 2: Legislative and Planning Policy Context
Annex 3: Construction Dust Assessment Procedure
Annex 4: EPUK & IAQM Planning for Air Quality Guidance
Annex 5: Professional Experience
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A3 Construction Dust Assessment Procedure

A3.1 The criteria developed by IAQM (2016), upon which the GLA's guidance is based, divide the activities on construction sites into four types to reflect their different potential impacts. These are:

- demolition;
- earthworks;
- construction; and
- trackout.

A3.2 It is noted that whilst there is a new version of the guidance, this has not been used or referenced due to the inconsistencies and errors in the latest version. The IAQM have confirmed a new version will be published which addressed these errors. At the time of writing the corrected IAQM guidance has not been published and as such the 2016 Guidance has been used.

A3.3 The assessment procedure includes the four steps summarised below:

STEP 1: Screen the Need for a Detailed Assessment

A3.4 An assessment is required where there is a human receptor within 350 m of the boundary of the site and/or within 50 m of the route(s) used by construction vehicles on the public highway, up to 500 m from the site entrance(s), or where there is an ecological receptor within 50 m of the boundary of the site and/or within 50 m of the route(s) used by construction vehicles on the public highway, up to 500 m from the site entrance(s).

A3.5 Where the need for a more detailed assessment is screened out, it can be concluded that the level of risk is *negligible* and that any effects will be 'not significant'. No mitigation measures beyond those required by legislation will be required.

STEP 2: Assess the Risk of Dust Impacts

A3.6 A site is allocated to a risk category based on two factors:

- the scale and nature of the works, which determines the potential dust emission magnitude (Step 2A); and
- the sensitivity of the area to dust effects (Step 2B).

A3.7 These two factors are combined in Step 2C, which is to determine the risk of dust impacts with no mitigation applied. The risk categories assigned to the site may be different for each of the four potential sources of dust (demolition, earthworks, construction and trackout).

Step 2A – Define the Potential Dust Emission Magnitude

A3.8 Dust emission magnitude is defined as either 'Small', 'Medium', or 'Large'. The IAQM guidance explains that this classification should be based on professional judgement, but provides the examples in Table A3.1.

Table A3.1: Examples of How the Dust Emission Magnitude Class May be Defined

Class	Examples
Demolition	
Large	Total building volume >50,000 m^3, potentially dusty construction material (e.g. concrete), on site crushing and screening, demolition activities >20 m above ground level
Medium	Total building volume 20,000 m^3 – 50,000 m^3, potentially dusty construction material, demolition activities 10-20 m above ground level
Small	Total building volume <20,000 m^3, construction material with low potential for dust release (e.g. metal cladding or timber), demolition activities <10 m above ground, demolition during wetter months
Earthworks	
Large	Total site area >10,000 m^2, potentially dusty soil type (e.g. clay, which will be prone to suspension when dry to due small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >8 m in height, total material moved >100,000 tonnes
Medium	Total site area 2,500 m^2 – 10,000 m^2, moderately dusty soil type (e.g. silt), 5-10 heavy earth moving vehicles active at any one time, formation of bunds 4 m – 8 m in height, total material moved 20,000 tonnes – 100,000 tonnes
Small	Total site area <2,500 m^2, soil type with large grain size (e.g. sand), <5 heavy earth moving vehicles active at any one time, formation of bunds <4 m in height, total material moved <20,000 tonnes, earthworks during wetter months
Construction	
Large	Total building volume >100,000 m^3, piling, on site concrete batching; sandblasting
Medium	Total building volume 25,000 m^3 – 100,000 m^3, potentially dusty construction material (e.g. concrete), piling, on site concrete batching
Small	Total building volume <25,000 m^3, construction material with low potential for dust release (e.g. metal cladding or timber)
Trackout [a]	
Large	>50 HDV (>3.5t) outward movements in any one day, potentially dusty surface material (e.g. high clay content), unpaved road length >100 m
Medium	10-50 HDV (>3.5t) outward movements in any one day, moderately dusty surface material (e.g. high clay content), unpaved road length 50 m – 100 m
Small	<10 HDV (>3.5t) outward movements in any one day, surface material with low potential for dust release, unpaved road length <50 m

[a] These numbers are for vehicles that leave the site after moving over unpaved ground.

Step 2B – Define the Sensitivity of the Area

A3.9 The sensitivity of the area is defined taking account of a number of factors:

- the specific sensitivities of receptors in the area;

- the proximity and number of those receptors;
- in the case of PM_{10}, the local background concentration; and
- site-specific factors, such as whether there are natural shelters to reduce the risk of wind-blown dust.

A3.10 The first requirement is to determine the specific sensitivities of local receptors. The IAQM guidance recommends that this should be based on professional judgment, taking account of the principles in Table A3.2. These receptor sensitivities are then used in the matrices set out in

A3.11 Table A3.3, Table A3.4 and Table A3.5 to determine the sensitivity of the area. Finally, the sensitivity of the area is considered in relation to any other site-specific factors, such as the presence of natural shelters etc., and any required adjustments to the defined sensitivities are made.

Step 2C – Define the Risk of Impacts

A3.12 The dust emission magnitude determined at Step 2A is combined with the sensitivity of the area determined at Step 2B to determine the *risk* of impacts with no mitigation applied. The IAQM guidance provides the matrix in Table A3.6 as a method of assigning the level of risk for each activity.

STEP 3: Determine Site-specific Mitigation Requirements

A3.13 The IAQM guidance provides a suite of recommended and desirable mitigation measures which are organised according to whether the outcome of Step 2 indicates a low, medium, or high risk. The list provided in the IAQM guidance has been used as the basis for the requirements set out in Appendix A11.

STEP 4: Determine Significant Effects

A3.14 The IAQM guidance does not provide a method for assessing the significance of effects before mitigation and advises that pre-mitigation significance should not be determined. With appropriate mitigation in place, the IAQM guidance is clear that the residual effect will normally be 'not significant'.

A3.15 The IAQM guidance recognises that, even with a rigorous dust management plan in place, it is not possible to guarantee that the dust mitigation measures will be effective all of the time, for instance under adverse weather conditions. The local community may therefore experience occasional, short-term dust annoyance. The scale of this would not normally be considered sufficient to change the conclusion that the effects will be 'not significant'.

Table A3.2: Principles to be Used When Defining Receptor Sensitivities

Class	Principles	Examples
Sensitivities of People to Dust Soiling Effects		
High	users can reasonably expect enjoyment of a high level of amenity; or the appearance, aesthetics or value of their property would be diminished by soiling; and the people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land	dwellings, museum and other culturally important collections, medium and long term car parks and car showrooms
Medium	users would expect to enjoy a reasonable level of amenity, but would not reasonably expect to enjoy the same level of amenity as in their home; or the appearance, aesthetics or value of their property could be diminished by soiling; or the people or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land	parks and places of work
Low	the enjoyment of amenity would not reasonably be expected; or there is property that would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling; or there is transient exposure, where the people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land	playing fields, farmland (unless commercially-sensitive horticultural), footpaths, short term car parks and roads
Sensitivities of People to the Health Effects of PM_{10}		
High	locations where members of the public may be exposed for eight hours or more in a day	residential properties, hospitals, schools and residential care homes
Medium	locations where the people exposed are workers, and where individuals may be exposed for eight hours or more in a day.	may include office and shop workers, but will generally not include workers occupationally exposed to PM_{10}
Low	locations where human exposure is transient	public footpaths, playing fields, parks and shopping streets
Sensitivities of Receptors to Ecological Effects		
High	locations with an international or national designation and the designated features may be affected by dust soiling; or locations where there is a community of a particularly dust sensitive species	Special Areas of Conservation with dust sensitive features
Medium	locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown; or locations with a national designation where the features may be affected by dust deposition	Sites of Special Scientific Interest with dust sensitive features
Low	locations with a local designation where the features may be affected by dust deposition	Local Nature Reserves with dust sensitive features

Table A3.3: Sensitivity of the Area to Dust Soiling Effects on People and Property [3]

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		<20	<50	<100	<350
High	>100	High	High	Medium	Low
	10-100	High	Medium	Low	Low
	1-10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

[3] For demolition, earthworks and construction, distances are taken either from the dust source or from the boundary of the site. For trackout, distances are measured from the sides of roads used by construction traffic. Without mitigation, trackout may occur from roads up to 500 m from sites with a *large* dust emission magnitude for trackout, 200 m from sites with a *medium* dust emission magnitude and 50 m from sites with a *small* dust emission magnitude, as measured from the site exit. The impact declines with distance from the site, and it is only necessary to consider trackout impacts up to 50 m from the edge of the road.

Table A3.4: Sensitivity of the Area to Human Health Effects [3]

Receptor Sensitivity	Annual Mean PM_{10}	Number of Receptors	Distance from the Source (m)				
			<20	<50	<100	<200	<350
High	>32 µg/m³	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	28-32 µg/m³	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	24-28 µg/m³	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<24 µg/m³	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium	>32 µg/m³	>10	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	28-32 µg/m³	>10	Medium	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	24-28 µg/m³	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	<24 µg/m³	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Low	-	>1	Low	Low	Low	Low	Low

Table A3.5: Sensitivity of the Area to Ecological Effects [3]

Receptor Sensitivity	Distance from the Source (m)	
	<20	<50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

Table A3.6: Defining the Risk of Dust Impacts

Sensitivity of the Area	Dust Emission Magnitude		
	Large	Medium	Small
Demolition			
High	High Risk	Medium Risk	Medium Risk
Medium	High Risk	Medium Risk	Low Risk
Low	Medium Risk	Low Risk	Negligible
Earthworks			
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible
Construction			
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible
Trackout			
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Low Risk	Negligible
Low	Low Risk	Low Risk	Negligible

Appendix: Air Quality

A4 EPUK & IAQM Planning for Air Quality Guidance

A4.1 The guidance issued by Environmental Protection UK (EPUK) and the IAQM (Moorcroft and Barrowcliffe et al, 2017) is comprehensive in its explanation of the place of air quality in the planning regime. Key sections of the guidance not already mentioned above are set out below.

Air Quality as a Material Consideration

"Any air quality issue that relates to land use and its development is capable of being a material planning consideration. The weight, however, given to air quality in making a planning application decision, in addition to the policies in the local plan, will depend on such factors as:

- *the severity of the impacts on air quality;*
- *the air quality in the area surrounding the proposed development;*
- *the likely use of the development, i.e. the length of time people are likely to be exposed at that location; and*
- *the positive benefits provided through other material considerations".*

Recommended Best Practice

A4.2 The guidance goes into detail on how all development proposals can and should adopt good design principles that reduce emissions and contribute to better air quality management. It states:

"The basic concept is that good practice to reduce emissions and exposure is incorporated into all developments at the outset, at a scale commensurate with the emissions".

A4.3 The guidance sets out a number of good practice principles that should be applied to all developments that:

- include 10 or more dwellings;
- where the number of dwellings is not known, residential development is carried out on a site of more than 0.5 ha;
- provide more than 1,000 m^2 of commercial floorspace;
- are carried out on land of 1 ha or more.

A4.4 The good practice principles are that:

- New developments should not contravene the Council's Air Quality Action Plan, or render any of the measures unworkable;
- Wherever possible, new developments should not create a new "street canyon", as this inhibits pollution dispersion;

- Delivering sustainable development should be the key theme of any application;
- New development should be designed to minimise public exposure to pollution sources, e.g. by locating habitable rooms away from busy roads;
- The provision of at least 1 Electric Vehicle (EV) "rapid charge" point per 10 residential dwellings and/or 1000 m^2 of commercial floorspace. Where on-site parking is provided for residential dwellings, EV charging points for each parking space should be made available;
- Where development generates significant additional traffic, provision of a detailed travel plan (with provision to measure its implementation and effect) which sets out measures to encourage sustainable means of transport (public, cycling and walking) via subsidised or free-ticketing, improved links to bus stops, improved infrastructure and layouts to improve accessibility and safety;
- All gas-fired boilers to meet a minimum standard of <40 mgNOx/kWh;
- Where emissions are likely to impact on an AQMA, all gas-fired CHP plant to meet a minimum emissions standard of:
  - Spark ignition engine: 250 mgNOx/Nm^3;
  - Compression ignition engine: 400 mgNOx/Nm^3;
  - Gas turbine: 50 mgNOx/Nm^3.
- A presumption should be to use natural gas-fired installations. Where biomass is proposed within an urban area it is to meet minimum emissions standards of 275 mgNOx/Nm^3 and 25 mgPM/Nm^3.

A4.5 The guidance also outlines that offsetting emissions might be used as a mitigation measure for a proposed development. However, it states that:

"It is important that obligations to include offsetting are proportional to the nature and scale of development proposed and the level of concern about air quality; such offsetting can be based on a quantification of the emissions associated with the development. These emissions can be assigned a value, based on the "damage cost approach" used by Defra, and then applied as an indicator of the level of offsetting required, or as a financial obligation on the developer. Unless some form of benchmarking is applied, it is impractical to include building emissions in this approach, but if the boiler and CHP emissions are consistent with the standards as described above then this is not essential".

A4.6 The guidance offers a widely used approach for quantifying costs associated with pollutant emissions from transport. It also outlines the following typical measures that may be considered to offset emissions, stating that measures to offset emissions may also be applied as post assessment mitigation:

- Support and promotion of car clubs;
- Contributions to low emission vehicle refuelling infrastructure;
- Provision of incentives for the uptake of low emission vehicles;
- Financial support to low emission public transport options; and
- Improvements to cycling and walking infrastructures.

Screening

Impacts of the Local Area on the Development

"There may be a requirement to carry out an air quality assessment for the impacts of the local area's emissions on the proposed development itself, to assess the exposure that residents or users might experience. This will need to be a matter of judgement and should take into account:

- *the background and future baseline air quality and whether this will be likely to approach or exceed the values set by air quality objectives;*
- *the presence and location of Air Quality Management Areas as an indicator of local hotspots where the air quality objectives may be exceeded;*
- *the presence of a heavily trafficked road, with emissions that could give rise to sufficiently high concentrations of pollutants (in particular nitrogen dioxide), that would cause unacceptably high exposure for users of the new development; and*
- *the presence of a source of odour and/or dust that may affect amenity for future occupants of the development".*

Impacts of the Development on the Local Area

A4.7 The guidance sets out two stages of screening criteria that can be used to identify whether a detailed air quality assessment is required, in terms of the impact of the development on the local area. The first stage is that you should proceed to the second stage if any of the following apply:

- 10 or more residential units or a site area of more than 0.5 ha residential use; and/or
- more than 1,000 m^2 of floor space for all other uses or a site area greater than 1 ha.

A4.8 Coupled with any of the following:

- the development has more than 10 parking spaces; and/or
- the development will have a centralised energy facility or other centralised combustion process.

A4.9 If the above do not apply then the development can be screened out as not requiring a detailed air quality assessment of the impact of the development on the local area. If they do apply then you proceed to stage 2, which sets out indicative criteria for requiring an air quality assessment. The stage 2 criteria relating to vehicle emissions are set out below:

- the development will lead to a change in LDV flows of more than 100 AADT within or adjacent to an AQMA or more than 500 AADT elsewhere;
- the development will lead to a change in HDV flows of more than 25 AADT within or adjacent to an AQMA or more than 100 AADT elsewhere;
- the development will lead to a realigning of roads (i.e. changing the proximity of receptors to traffic lanes) where the change is 5m or more and the road is within an AQMA;
- the development will introduce a new junction or remove an existing junction near to relevant receptors, and the junction will cause traffic to significantly change vehicle acceleration/deceleration, e.g. traffic lights or roundabouts;
- the development will introduce or change a bus station where bus flows will change by more than 25 AADT within or adjacent to an AQMA or more than 100 AADT elsewhere; and
- the development will have an underground car park with more than 100 movements per day (total in and out) with an extraction system that exhausts within 20 m of a relevant receptor.

A4.10 The criteria are more stringent where the traffic impacts may arise on roads where concentrations are close to the objective. The presence of an AQMA is taken to indicate the possibility of being close to the objective, but where whole authority AQMAs are present and it is known that the affected roads have concentrations below 90% of the objective, the less stringent criteria are likely to be more appropriate.

A4.11 Should none of the above apply then the development can be screened out as not requiring a detailed air quality assessment of the impact of the development on the local area, provided that professional judgement is applied; the guidance importantly states the following:

"The criteria provided are precautionary and should be treated as indicative. They are intended to function as a sensitive 'trigger' for initiating an assessment in cases where there is a possibility of significant effects arising on local air quality. This possibility will, self-evidently, not be realised in many cases. The criteria should not be applied rigidly; in some instances, it may be appropriate to amend them on the basis of professional judgement, bearing in mind that the objective is to identify situations where there is a possibility of a significant effect on local air quality".

A4.12 Even if a development cannot be screened out, the guidance is clear that a detailed assessment is not necessarily required:

"The use of a Simple Assessment may be appropriate, where it will clearly suffice for the purposes of reaching a conclusion on the significance of effects on local air quality. The principle underlying this guidance is that any assessment should provide enough evidence that will lead to a sound conclusion on the presence, or otherwise, of a significant effect on local air quality. A Simple Assessment will be appropriate, if it can provide this evidence. Similarly, it may be possible to conduct a quantitative assessment that does not require the use of a dispersion model run on a computer".

A4.13 The guidance also outlines what the content of the air quality assessment should include, and this has been adhered to in the production of this chapter.

Assessment of Significance

A4.14 There is no official guidance in the UK in relation to development control on how to describe the nature of air quality impacts, nor how to assess their significance. The approach within the EPUK/IAQM guidance has, therefore, been used in this assessment. This approach involves a two stage process:

- a qualitative or quantitative description of the impacts on local air quality arising from the development; and
- a judgement on the overall significance of the effects of any impacts.

A4.15 The guidance recommends that the assessment of significance should be based on professional judgement, with the overall air quality impact of the development described as either 'significant' or 'not significant'. In drawing this conclusion, the following factors should be taken into account:

- the existing and future air quality in the absence of the development;
- the extent of current and future population exposure to the impacts;
- the influence and validity of any assumptions adopted when undertaking the prediction of impacts;
- the potential for cumulative impacts and, in such circumstances, several impacts that are described as '*slight*' individually could, taken together, be regarded as having a significant effect for the purposes of air quality management in an area, especially where it is proving difficult to reduce concentrations of a pollutant. Conversely, a '*moderate*' or '*substantial*' impact may not have a significant effect if it is confined to a very small area and where it is not obviously the cause of harm to human health; and
- the judgement on significance relates to the consequences of the impacts; will they have an effect on human health that could be considered as significant? In the majority of cases, the impacts from an individual development will be insufficiently large to result in

measurable changes in health outcomes that could be regarded as significant by health care professionals.

A4.16 The guidance is clear that other factors may be relevant in individual cases. It also states that the effect on the residents of any new development where the air quality is such that an air quality objective is not met will be judged as significant. For people working at new developments in this situation, the same will not be true as occupational exposure standards are different, although any assessment may wish to draw attention to the undesirability of the exposure.

A4.17 A judgement of the significance should be made by a competent professional who is suitably qualified. A summary of the professional experience of the staff contributing to this assessment is provided in Appendix A5.

Appendix: Air Quality

A5 Professional Experience

Guido Pellizzaro, BSc (Hons) MIAQM MIEnvSc PIEMA

Mr Pellizzaro is a Technical Director with AQC, with more than 15 years' experience in the field of air quality management and assessment. His main experience relates to managing and delivering air quality assessments for major planning applications and EIA development. He is a Member of the Institution of Environmental Sciences and of the Institute of Air Quality Management, and a Practitioner of the Institute of Environmental Management and Assessment.

Julia Burnell, MEnvSci (Hons) MIEnvSc MIAQM

Miss Burnell is a Senior Consultant with AQC with over seven years' experience in the field of air quality. She has experience of undertaking a range of air quality assessments for power, transportation, and mixed-use development projects both in the UK and internationally. She is also experienced at preparing environmental permit applications for medium combustion plant/specified generator sites and has commissioned and maintained numerous ambient air quality monitoring surveys. Prior to her work with AQC, Julia completed an MEnvSci (Hons) in Environmental Science (four-year integrated master's). She is a Member of both the Institute of Air Quality Management and the Institution of Environmental Sciences.

George Chousos, BSc MSc AMIEnvSc AMIAQM

Mr Chousos is a Consultant with AQC, having joined in May 2019. Prior to joining AQC, he completed an MSc in Air Pollution Management and Control at the University of Birmingham, specialising in air pollution control technologies and management, and data processing using R. He also holds a degree in Environmental Geoscience from the University of Cardiff, where he undertook a year in industry working in the field of photo-catalytic technology. Since joining AQC, George has been gaining experience in undertaking air quality assessments, both qualitatively and using atmospheric dispersion modelling, to accompany planning and permitting applications. Projects have ranged in scale, from small scale residential development to Environmental Impact Assessments (EIAs). The assessments have considered the effects on both human health and ecological habitats. George also has experience completing construction dust risk assessments, Air Quality Neutral assessments, Local Authority Annual Status Reports (ASRs), as well as odour assessments.

Appendix: Air Quality

A6 Modelling Methodology

Model Inputs

A6.1 Predictions have been carried out using the ADMS-Roads dispersion model (v5). The model requires the user to provide various input data, including emissions from each section of road and the road characteristics (including road width, street canyon width, street canyon height and porosity, where applicable). Vehicle emissions have been calculated based on vehicle flow, composition and speed data using the EFT (Version 11.0) published by Defra (2023c). Model input parameters are summarised in Table A6.1 and, where considered necessary, discussed further below.

Table A6.1: Summary of Model Inputs

Model Parameter	Value Used
Terrain Effects Modelled?	No
Variable Surface Roughness File Used?	No
Urban Canopy Flow Used?	Yes
Advanced Street Canyons Modelled?	Yes
Noise Barriers Modelled?	No
Meteorological Monitoring Site	London City
Meteorological Data Year	2022
Dispersion Site Surface Roughness Length (m)	1.5
Dispersion Site Minimum MO Length (m)	100
Met Site Surface Roughness Length (m)	0.2
Met Site Minimum MO Length (m)	75
Gradients?	No

A6.2 AADT flows and the proportions of HDVs for the future year scenarios, for the majority of the modelled road network, have been provided by Velocity Transport Ltd, who have undertaken the transport assessment work for the Proposed Development. In addition, 2019 AADT flows, and the proportions of HDVs, for Albany Street have been taken from the London Atmospheric Emissions Inventory (LAEI) (GLA, 2021b). The LAEI flows have been subsequently factored forwards to the assessment years of 2022 and 2030 using growth factors, 1.0369 and 1.1128 respectively, derived using the TEMPro System v7.2 (DfT, 2017).

A6.3 Traffic speeds have been estimated based on professional judgement, taking account of the LAEI modelled speeds, road layout, speed limits and the proximity to a junction. The traffic data used in this assessment are summarised in Table A6.2 and Table A6.3, for the operational and construction phase respectively. Diurnal and monthly flow profiles for the traffic have been derived from the national profiles published by DfT (2020).

A6.4 Velocity Transport Ltd have confirmed that the baseline traffic scenario (2022) has been based on a vacant site, with only a small number of operational vehicles associated with the retail uses currently operating within the tower.

Table A6.2: Summary of Traffic Data used in the Assessment – Operational Phase

Road Link	2022		2030 (Without Scheme)		2030 (With Scheme)	
	AADT	%HDV	AADT	%HDV	AADT	%HDV
Hamstead Road	12,680	14.5	12,710	14.5	12,809	14.4
Euston Road (underpass)	41,501	2.4	41,700	2.5	41,720	2.5
Euston Road off-slip (EB)	8,983	8.9	8,998	8.9	9,027	8.9
Euston Road on-slip (WB)	5,922	12.9	5,937	12.9	5,967	12.9
Euston Road on-slip (EB)	5,056	16.4	5,071	16.4	5,071	16.4
Euston Road off-slip (WB)	7,687	13.7	7,702	13.7	7,742	13.7
Tottenham Court Road	7,514	10.6	7,604	10.7	7,643	10.6
Drummond Street	3,032	6.0	3,032	6.0	3,132	6.1
Longford Street	3,263	7.0	3,263	7.0	3,383	7.0
Albany Street (north of junction)	10,943	11.9	11,744	11.9	11,744	11.9
Albany Street (south of junction)	14,050	9.8	15,078	9.8	15,078	9.8

Table A6.3: Summary of Traffic Data used in the Assessment – Construction Phase

Road Link	2025 (Without Scheme)		2025 (With Scheme)	
	AADT	%HDV	AADT	%HDV
Hamstead Road	12,710	14.5	12,737	14.6
Euston Road (underpass)	41,700	2.5	41,727	2.6
Euston Road off-slip (EB)	8,998	8.9	9,025	9.2
Euston Road on-slip (WB)	5,937	12.9	5,964	13.3
Euston Road on-slip (EB)	5,071	16.4	5,098	16.8
Euston Road off-slip (WB)	7,702	13.7	7,729	14.0
Tottenham Court Road	7,604	10.7	7,631	11.0
Drummond Street	3,032	6.0	3,059	6.9
Longford Street	3,263	7.0	3,290	7.7
Albany Street (north of junction)	11,800	11.9	11,827	12.1
Albany Street (south of junction)	15,150	9.8	15,177	9.9
Marylebone Road	56,635	4.6	56,662	4.7

A6.5 Figure A6.1 and Figure A6.2 show the road network included within the model, for the operational and construction phases respectively, along with the speed at which each link was modelled.

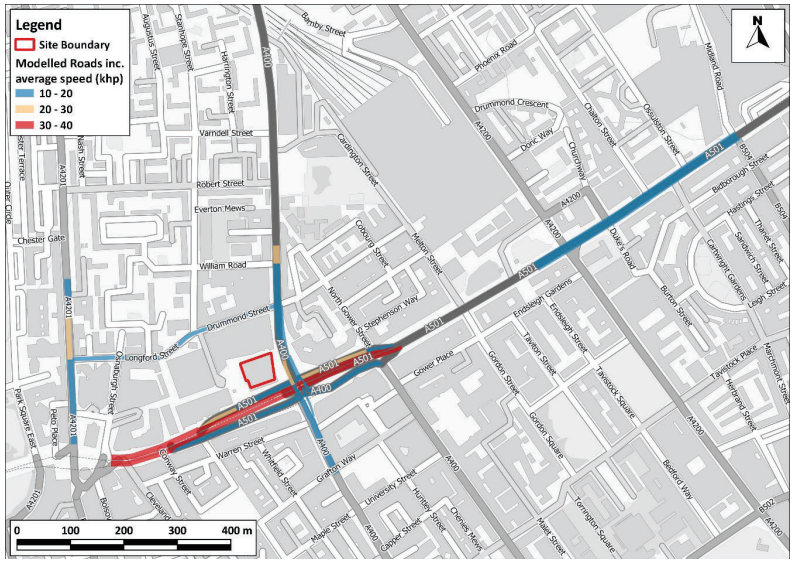

Figure A6.1: Modelled Road Network & Speed – Operational Phase

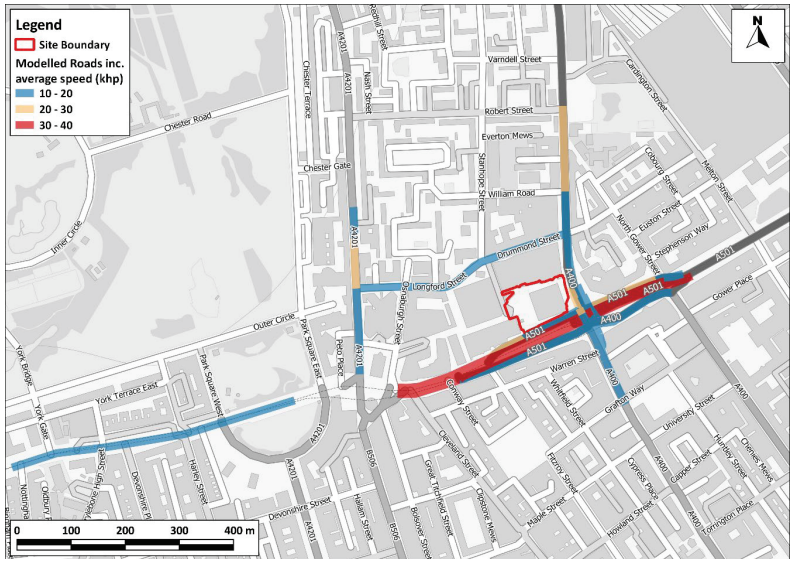

Figure A6.2: Modelled Road Network & Speed – Construction Phase

A6.6 For the purposes of modelling, it has been assumed that sections of Longford Street, Marylebone Road and Hamstead Road are within canyons formed by the existing buildings. These roads have a number of canyon-like features, which reduce dispersion of traffic emissions, and can lead to concentrations of pollutants being higher here than they would be in areas with greater dispersion. They have, therefore, been modelled as street canyons using ADMS-Roads' advanced canyon module, with appropriate input parameters determined from plans, on-site measurements, local mapping and photographs. The advanced canyon module has been used along with the urban canopy flow module, the input data for which have been published by Cambridge Environmental Research Consultants (CERC, 2016), who developed the ADMS models. The modelled canyons are shown in Figure A6.3.

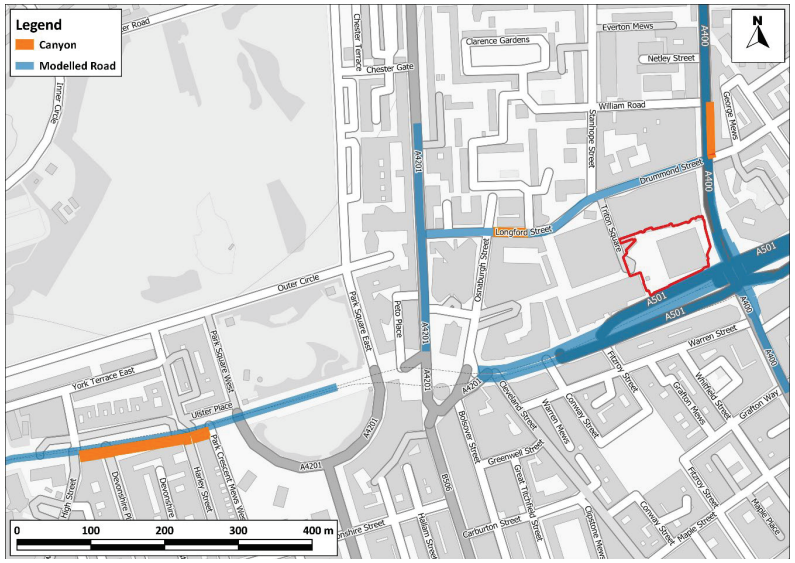

Figure A6.3: Modelled Canyons

A6.7 Hourly sequential meteorological data in sectors of 10 degrees from London City for 2019 have been used in the model. The London City meteorological monitoring station is located at London City Airport, approximately 15 km to the east of the Proposed Development. Both the application site and the London City meteorological monitoring station are located in the Greater London Area where they will be influenced by the effects of inland meteorology over urban topography. The topography of the model domain is similar to that around the meteorological monitoring station and measurements from this site are considered to provide the most robust basis to predict meteorology within the model domain. A wind rose for the site for the year 2019 is provided in Figure A6.4. Raw data were provided by the Met Office and processed by AQC for use in ADMS.

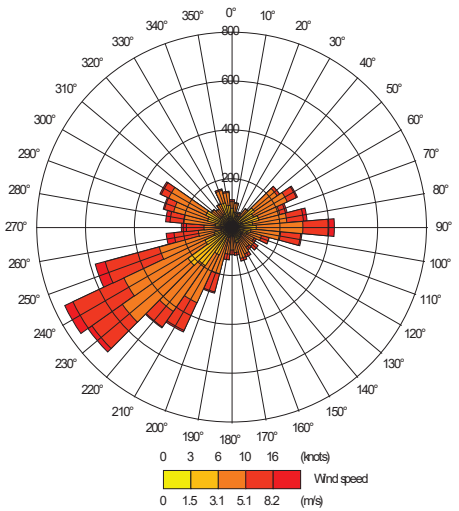

Figure A6.4: Wind Rose

Model Verification

A6.8 Evidence collected over many years has shown that, in most urban areas, dispersion modelling relying upon Defra's EFT has tended to systematically under-predict roadside nitrogen dioxide concentrations. To account for this, it is necessary to adjust the model against local measurements. The model has been run to predict annual mean nitrogen dioxide concentrations during 2022 at the 'CD9' automatic monitoring station. This site has been selected because it is located on the same road (Euston Road (A502)) as the Proposed Development and is considered to be the most representative of conditions found at the site.

Nitrogen Dioxide

A6.9 Most nitrogen dioxide (NO_2) is produced in the atmosphere by reaction of nitric oxide (NO) with ozone. It is therefore most appropriate to verify the model in terms of primary pollutant emissions of nitrogen oxides (NOx = NO + NO_2). The model has been run to predict the annual mean NOx concentrations during 2019 at diffusion tube automatic monitoring site 'CD9'. Concentrations have been modelled at 2.5 m, the height of the monitor.

A6.10 The model output of road-NOx (i.e., the component of total NOx coming from road traffic) has been compared with the 'measured' road-NOx. Measured road-NOx has been calculated from the measured NO_2 concentration and the predicted background NO_2 concentration using the NOx from NO_2 calculator (Version 8.1) available on the Defra LAQM Support website (Defra, 2023c).

A6.11 An adjustment factor has been determined as the ratio of the 'measured' road contribution and the model derived road contribution. This factor has then been applied to the modelled road-NOx concentration for each receptor to provide adjusted modelled road-NOx concentrations. The total nitrogen dioxide concentrations have then been determined by combining the adjusted modelled road-NOx concentrations with the predicted background NO_2 concentration within the NOx to NO_2 calculator (Defra, 2023c).

A6.12 The data used to calculate the adjustment factor are provided below:

- Measured NO_2 : 45.0 µg/m^3
- Background NO_2 : 35.4 µg/m^3
- 'Measured' road-NOx (using NOx from NO_2 calculator): 22.3 µg/m^3
- Modelled road-NOx = 21.2 µg/m^3
- Road-NOx adjustment factor: 22.3/21.2 = **1.0522**[4]

A6.13 The factor implies that the unadjusted model is marginally under-predicting the road-NOx contribution. This is a common experience with this and most other road traffic emissions dispersion models.

PM_{10} and $PM_{2.5}$

A6.14 The approach described above for NOx and nitrogen dioxide determines the road increment of concentrations by subtracting the predicted local background from the roadside measurements. This works well for NOx because the differences between roadside and background concentrations typically represent a large proportion of the total measured value. The same is not true for PM_{10} and $PM_{2.5}$ concentrations, which are dominated by non-road emissions, even at the roadside. In practice, the influence of a local road on concentrations can often be smaller than the uncertainty in the mapped background concentration. As an example of this, 31% of all roadside and kerbside sites in London which measured $PM_{2.5}$ in 2019 with >75% data capture, recorded an annual mean concentration lower than the equivalent Defra mapped background value. Using measured background concentrations does not provide any significant benefit, owing largely to the spatial resolution of available measurements, but also because of measurement uncertainty. For example, hourly-mean $PM_{2.5}$ concentrations measured at roadside sites are often lower than those measured at nearby urban background sites, while concentrations at urban background sites are often lower than those measured at rural sites.

[4] Based on un-rounded values.

A6.15 For these reasons, it is not appropriate to calculate the annual mean road-increment to PM_{10} and $PM_{2.5}$ concentrations by subtracting either the mapped background or a local measured background concentration. This, in turn, means that the approach to model adjustment which is described for NOx and NO_2 is not appropriate for PM_{10} and $PM_{2.5}$. Historically, many studies have derived a model adjustment factor for NOx and applied this to PM_{10} and $PM_{2.5}$. This is also not appropriate, since there is no reason to expect the same bias in emissions of NOx, PM_{10} and $PM_{2.5}$.

A6.16 While there is very strong evidence that EFT-based models have consistently under-predicted road-NOx concentrations in urban areas, there is no equivalent evidence for PM_{10} and $PM_{2.5}$. There is currently no strong basis for applying any adjustment to the model outputs. Predicted concentrations of PM_{10} and $PM_{2.5}$ have thus not been adjusted.

Post-processing

A6.17 The model predicts road-NOx concentrations at each receptor location. These concentrations have been adjusted using the adjustment factor set out above, which, along with the background NO_2, has been processed through the NOx to NO_2 calculator available on the Defra LAQM Support website (Defra, 2023c). The traffic mix within the calculator has been set to “All London UK traffic”, which is considered suitable for the study area. The calculator predicts the component of NO_2 based on the adjusted road-NOx and the background NO_2.

Appendix: Air Quality

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A7 No Improvement Scenario

A7.1 As required by LBC, a no improvement scenario has been undertaken which considers concentrations at the proposed earliest year of operation (2030) and for the peak construction year scenario (2025) assuming no improvement in emission factors or background concentrations from the base year, i.e., using 2022 emission factors and background concentrations with the respective 2030 operational traffic data and 2025 construction traffic data.

Existing Receptors

Operational Phase

Baseline and Future Baseline Dispersion Model Results

A7.2 Baseline concentrations of NO_2, PM_{10} and $PM_{2.5}$, when considering a no improvement scenario, have been modelled at the two existing receptor locations and are set in Table A7.1 and Table A7.2.

Table A7.1: Modelled Annual Mean Baseline Concentrations of NO_2 at Existing Receptors (µg/m³) Assuming 2022 Emission Factors

Receptor	2022 Baseline	2030 Without Proposed Development
E1	32.7	32.6
E2	36.8	36.7
Objective	40 / 38 [a]	

[a] 38 µg/m³ is the LBC Air Quality CPG target for annual mean NO_2

Table A7.2: Modelled Annual Mean Baseline Concentrations of PM_{10} and $PM_{2.5}$ at Existing Receptors (µg/m³) Assuming 2022 Emission Factors

Receptor	PM_{10}		$PM_{2.5}$	
	2022 Baseline	2030 Without Proposed Development	2022 Baseline	2030 Without Proposed Development
E1	19.3	19.3	12.3	12.3
E2	19.4	19.4	12.4	12.4
Objective	32 [a] / 20 [b]		20 [c] /10 [d]	

[a] While the annual mean PM_{10} objective is 40 µg/m³, 32 µg/m³ is the annual mean concentration above which an exceedance of the 24-hour mean PM_{10} objective is possible, as outlined in LAQM.TG (Defra, 2022). A value of 32 µg/m³ is thus used as a proxy to determine the likelihood of exceedance of the 24-hour mean PM_{10} objective, as recommended in EPUK & IAQM guidance (Moorcroft and Barrowcliffe et al, 2017).

[b] 20 µg/m³ is the LBC Air Quality CPG target for annual mean PM_{10}; there is no requirement to meet this until 2026.

[c] The 20 µg/m³ $PM_{2.5}$ objective, which was to be met by 2020, is not in Regulations and there is no requirement for local authorities to meet it.

[d] 10 µg/m³ is the GLA target and the LBC Air Quality CPG target for annual mean $PM_{2.5}$; again, there is no requirement for local authorities to meet this until 2030. Exceedances of this target are shown in *italic*.

A7.3 As shown in Table A7.1, the predicted annual mean concentrations of NO_2 are below the objective and the LBC Air Quality CPG target at both receptors and are also below 60 µg/m³, indicating an exceedance of the 1-hour mean NO_2 objective is unlikely.

A7.4 As shown in Table A7.2, the predicted annual mean concentrations of PM_{10} and $PM_{2.5}$ are below the objective in both years at both receptors. The annual mean PM_{10} concentrations are also below the LBC Air Quality CPG criteria and below 32 µg/m³ so it is unlikely that the 24-hour mean PM_{10} objective will be exceeded.

A7.5 The annual mean concentrations of $PM_{2.5}$ exceed the GLA target/ LBC Air Quality CPG target in all years; however, exceedances of the guideline are common, and their nationwide achievement is very unlikely to be possible before 2030, especially in London.

Detailed Assessment of Development-Generated Road Traffic Emissions

A7.6 Future baseline concentrations of NO_2, PM_{10} and $PM_{2.5}$, when considering a no improvement scenario, in 2030 have been modelled at the two existing receptor locations and are set in Table A7.3 and Table A7.4.

Table A7.3: Predicted Impacts on Annual Mean NO_2 Concentrations in 2030 Assuming 2022 Emission Factors (µg/m³)

Receptor	Without Proposed Development	With Proposed Development	% Change [a]	Impact Descriptor
E1	32.6	32.7	0	Negligible
E2	36.7	36.8	0	Negligible
Objective	40 / 38 [b]		-	-

[a] % changes are relative to the objective and have been rounded to the nearest whole number.

[b] 38 µg/m³ is the LBC Air Quality CPG target for annual mean NO_2

Table A7.4: Predicted Impacts on Annual Mean PM_{10} and $PM_{2.5}$ Concentrations in 2030 Assuming 2022 Emission Factors (µg/m³)

Receptor	Annual Mean PM_{10} (µg/m³)				Annual Mean $PM_{2.5}$ (µg/m³)			
	Without Proposed Development	With Proposed Development	% Change [a]	Impact Descriptor	Without Proposed Development	With Proposed Development	% Change [a]	Impact Descriptor
E1	19.3	19.3	0	Negligible	12.3	12.3	0	Negligible
E2	19.4	19.4	0	Negligible	12.4	12.4	0	Negligible
Criterion	32 [b] / 20 [c]		-	-	20 [d]		-	-

[a] % changes are relative to the criterion and have been rounded to the nearest whole number.

[b] While the annual mean PM_{10} objective is 40 µg/m³, 32 µg/m³ is the annual mean concentration above which an exceedance of the 24-hour mean PM_{10} objective is possible, as outlined in LAQM.TG22 (Defra, 2022). A value of 32 µg/m³ is thus used as a proxy to determine the likelihood of exceedance of the 24-hour mean PM_{10} objective, as recommended in EPUK & IAQM guidance (Moorcroft and Barrowcliffe et al, 2017).

[c] 20 µg/m³ is the LBC Air Quality CPG target for annual mean PM_{10}; there is no requirement to meet this until 2026.

[d] The $PM_{2.5}$ objective, which was to be met by 2020, is not in Regulations and there is no requirement for local authorities to meet it.

A7.7 As shown in Table A7.3 the annual mean NO_2 concentrations for the no improvement scenario are below the objective and the LBC Air Quality CPG criteria at both receptors, with and without the Proposed Development. Furthermore, as the annual mean NO_2 concentrations are below 60 µg/m³, it is unlikely that the 1-hour mean NO_2 objective will be exceeded.

A7.8 The percentage change in concentrations, relative to the air quality objective (when rounded), is predicted to be zero. Using the matrix in Table 8.3 of the ES Chapter, this impact is described as negligible, and the effects are permanent, direct, long-term 'not significant' at the local level.

A7.9 Table A7.4 show the annual mean PM_{10} and $PM_{2.5}$ concentrations for the no improvement scenario are well below the respective objectives and the LBC Air Quality CPG criteria for PM_{10} at both receptors, with or without the Proposed Development. Furthermore, as the annual mean PM_{10} concentrations are below 32 µg/m³, it is unlikely that the 24-hour mean PM_{10} objective will be exceeded. The long-term average concentration at both receptors in assessment year is 75% or less of AQAL.

A7.10 Table A7.5 presents the same $PM_{2.5}$ concentrations as Table A7.4 but assesses the impacts against the GLA target for this pollutant (which is the same as the LBC Air Quality CPG criteria).

Table A7.5: Assessment of Annual Mean $PM_{2.5}$ Concentrations in 2030 against the GLA Target Assuming 2022 Emission Factors (µg/m³)

Receptor	Annual Mean $PM_{2.5}$ (µg/m³)			
	Without Scheme	With Scheme	% Change [a]	Impact Descriptor
E1	12.3	12.3	0	Negligible
E2	12.4	12.4	0	Negligible
GLA Target/Air Quality CPG criteria	10		-	-

[a] % changes are relative to the objective and have been rounded to the nearest whole number.

A7.11 The annual mean concentrations of $PM_{2.5}$ for the no improvement scenario exceed the GLA target and the LBC Air Quality CPG criteria with and without the Proposed Development; using the matrix in Table 8.3 in the ES Chapter, the impact is described as Negligible. The GLA aims to achieve the target for $PM_{2.5}$ of 10 µg/m³ by 2030. Exceedances of the target, however, are common and based on Defra's background maps, their achievement is very unlikely to be possible before 2030. As such, it is unsurprising that there are exceedances for both 'with Proposed Development' and 'without Proposed Development' scenarios.

Construction Phase

Baseline and Future Baseline Dispersion Model Results

A7.12 Baseline concentrations of NO_2, PM_{10} and $PM_{2.5}$, when considering a no improvement construction scenario, have been modelled at the four existing receptor locations and are set in Table A7.1 and Table A7.2.

Table A7.6: Modelled Annual Mean Baseline Concentrations of NO_2 at Existing Receptors Assuming 2022 Emission Factors (µg/m³)

Receptor	2022 Baseline	2025 Without Proposed Development
E3	29.9	**40.7**
E4	29.9	**43.8**
E5	29.9	39.7
E6	39.5	**42.5**
Objective	40 / 38 [a]	

[a] 38 µg/m³ is the LBC Air Quality CPG target for annual mean NO_2

Table A7.7: Modelled Annual Mean Baseline Concentrations of PM_{10} and $PM_{2.5}$ at Existing Receptors Assuming 2022 Emission Factors (µg/m³)

Receptor	PM_{10}		$PM_{2.5}$	
	2022 Baseline	2025 Without Proposed Development	2022 Baseline	2025 Without Proposed Development
E3	18.6	21.0	11.9	13.3
E4	18.6	21.8	11.9	13.8
E5	18.6	20.8	11.9	13.2
E6	19.8	20.3	12.6	12.9
Objective	32 [a] / 20 [b]		20 [c] /10 [d]	

[a] While the annual mean PM_{10} objective is 40 µg/m³, 32 µg/m³ is the annual mean concentration above which an exceedance of the 24-hour mean PM_{10} objective is possible, as outlined in LAQM.TG (Defra, 2022). A value of 32 µg/m³ is thus used as a proxy to determine the likelihood of exceedance of the 24-hour mean PM_{10} objective, as recommended in EPUK & IAQM guidance (Moorcroft and Barrowcliffe et al, 2017).

[b] 20 µg/m³ is the LBC Air Quality CPG target for annual mean PM_{10}; there is no requirement to meet this until 2026.

[c] The 20 µg/m³ $PM_{2.5}$ objective, which was to be met by 2020, is not in Regulations and there is no requirement for local authorities to meet it.

[d] 10 µg/m³ is the GLA target and the LBC Air Quality CPG target for annual mean $PM_{2.5}$; again, there is no requirement for local authorities to meet this until 2030. Exceedances of this target are shown in *italic*.

A7.13 As shown in Table A7.1, the predicted annual mean concentrations of NO_2 are above the objective and the LBC Air Quality CPG target at three of the receptors (E3, E4 and E6) in 2025 for the no improvement construction scenario; however, they are all below 60 µg/m³, indicating an exceedance of the 1-hour mean NO_2 objective is unlikely.

A7.14 As shown in Table A7.2, the predicted annual mean concentrations of PM_{10} and $PM_{2.5}$ are below the objective in both years at all receptors. The annual mean PM_{10} concentrations are above the LBC Air Quality CPG criteria for all receptors in 2025 but below 32 µg/m³ so it is unlikely that the 24-hour mean PM_{10} objective will be exceeded.

A7.15 The annual mean concentrations of $PM_{2.5}$ exceed the GLA target/ LBC Air Quality CPG target in all years for the no improvement construction scenario; however, exceedances of the guideline are common, and their nationwide achievement is very unlikely to be possible before 2030, especially in London.

Detailed Assessment of Development-Generated Road Traffic Emissions

A7.16 Future baseline concentrations of NO_2, PM_{10} and $PM_{2.5}$, when considering a no improvement construction scenario, in 2025 have been modelled at the four existing receptor locations and are set in Table A7.3 and Table A7.4.

Table A7.8: Predicted Impacts on Annual Mean NO_2 Concentrations in 2025 Assuming 2022 Emission Factors (µg/m³)

Receptor	Without Proposed Development	With Proposed Development	% Change [a]	Impact Descriptor
E3	**40.7**	**40.8**	0	Negligible
E4	**43.8**	**43.8**	0	Negligible
E5	39.7	39.7	0	Negligible
E6	**42.5**	**42.6**	0	Negligible
Objective	40 / 38 [b]		-	-

[a] % changes are relative to the objective and have been rounded to the nearest whole number.

[b] 38 µg/m³ is the LBC Air Quality CPG target for annual mean NO_2

Table A7.9: Predicted Impacts on Annual Mean PM_{10} and $PM_{2.5}$ Concentrations in 2025 Assuming 2022 Emission Factors (µg/m³)

Receptor	Annual Mean PM_{10} (µg/m³)				Annual Mean $PM_{2.5}$ (µg/m³)			
	Without Proposed Development	With Proposed Development	% Change [a]	Impact Descriptor	Without Proposed Development	With Proposed Development	% Change [a]	Impact Descriptor
E3	21.0	21.1	0	Negligible	13.3	13.3	0	Negligible
E4	21.8	21.8	0	Negligible	13.8	13.8	0	Negligible
E5	20.8	20.8	0	Negligible	13.2	13.2	0	Negligible
E6	20.3	20.3	0	Negligible	12.9	12.9	0	Negligible
Criterion	32 [b] / 20 [c]		-	-	20 [d]		-	-

[a] % changes are relative to the criterion and have been rounded to the nearest whole number.

[b] While the annual mean PM_{10} objective is 40 µg/m³, 32 µg/m³ is the annual mean concentration above which an exceedance of the 24-hour mean PM_{10} objective is possible, as outlined in LAQM.TG22 (Defra, 2022). A value of 32 µg/m³ is thus used as a proxy to determine the likelihood of exceedance of the 24-hour mean PM_{10} objective, as recommended in EPUK & IAQM guidance (Moorcroft and Barrowcliffe et al, 2017).

[c] 20 µg/m³ is the LBC Air Quality CPG target for annual mean PM_{10}; there is no requirement to meet this until 2026.

[d] The $PM_{2.5}$ objective, which was to be met by 2020, is not in Regulations and there is no requirement for local authorities to meet it.

A7.17 As shown in Table A7.3 the annual mean NO_2 concentrations for the no improvement construction scenario are above the objective and the LBC Air Quality CPG criteria at three receptors (E3, E4 and E6), with and without the Proposed Development. However, as the annual mean NO_2 concentrations are below 60 µg/m^3, it is unlikely that the 1-hour mean NO_2 objective will be exceeded.

A7.18 The percentage change in concentrations, relative to the air quality objective (when rounded), is predicted to be zero. Using the matrix in Table 8.3 of the ES Chapter, this impact is therefore described as negligible, and the effects are permanent, direct, long-term 'not significant' at the local level.

A7.19 Table A7.4 show the annual mean PM_{10} and $PM_{2.5}$ concentrations for the no improvement construction scenario are well below the respective objectives; however, they are above the LBC Air Quality CPG criteria for PM_{10} at all receptors, with or without the Proposed Development. However, as the annual mean PM_{10} concentrations are below 32 µg/m^3, it is unlikely that the 24-hour mean PM_{10} objective will be exceeded. The long-term average concentration at all receptors in assessment year is 75% or less of AQAL.

A7.20 Table A7.5 presents the same $PM_{2.5}$ concentrations as Table A7.4 but assesses the impacts against the GLA target for this pollutant (which is the same as the LBC Air Quality CPG criteria).

Table A7.10: Assessment of Annual Mean $PM_{2.5}$ Concentrations in 2025 against the GLA Target Assuming 2022 Emission Factors (µg/m^3)

Receptor	Annual Mean $PM_{2.5}$ (µg/m^3)			
	Without Scheme	With Scheme	% Change [a]	Impact Descriptor
E3	13.3	13.3	0	Negligible
E4	13.8	13.8	0	Negligible
E5	13.2	13.2	0	Negligible
E6	12.9	12.9	0	Negligible
GLA Target/Air Quality CPG criteria	10		-	-

[a] % changes are relative to the objective and have been rounded to the nearest whole number.

A7.21 The annual mean concentrations of $PM_{2.5}$ for the no improvement construction scenario exceed the GLA target and the LBC Air Quality CPG criteria with and without the Proposed Development; using the matrix in Table 8.3 in the ES Chapter, the impact is described as Negligible. The GLA aims to achieve the target for $PM_{2.5}$ of 10 µg/m^3 by 2030. Exceedances of the target, however, are common and based on Defra's background maps, their achievement is very unlikely to be possible before

2030. As such, it is unsurprising that there are exceedances for both 'with Proposed Development' and 'without Proposed Development' scenarios.

Proposed Receptors

A7.22 Predicted air quality conditions for future retail users of the Proposed Development in 2030 for the no improvement operation phase scenario, taking account of emissions from the adjacent road network, are set out in Table A7.11. The maximum modelled annual mean NO_2 concentration within the Proposed Development is 42.3 µg/m^3. As concentrations are less than 60 µg/m^3, there are unlikely to be exceedances of the 1-hour mean objective at these locations.

Table A7.11: Predicted 1-hour Mean Concentrations of NO_2 in 2030 for New Receptors in the Proposed Development Assuming 2022 Emission Factors (µg/m^3)

Receptor	NO_2
D1	38.7
D2	42.3
D3	40.1
D4	37.1
Objective / Criterion	60[a]

[a] Measurements across the UK have shown that the 1-hour nitrogen dioxide objective is unlikely to be exceeded at roadside locations where the annual mean concentration is below 60 µg/m^3.

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A8 London Vehicle Fleet Projections

A8.1 TfL has published an Integrated Impact Assessment (Jacobs, 2017) setting out the impacts of the changes to the LEZ and ULEZ described in Paragraphs A2.36 and A2.37. The assessment predicts that the changes will reduce overall NOx emissions from vehicles in London by 28% in 2021 (32% in Inner London and 27% in Outer London) and by 21% in 2025 (24% in Inner London and 21% in Outer London). The percentage reduction reduces with time due to the natural turnover of the fleet that would have occurred regardless of the introduction of the proposed changes. The proposed changes will not significantly affect emissions in Central London, where the ULEZ will already be implemented, but concentrations here will still reduce due to the lower emissions in surrounding areas.

A8.2 The report projects that the changes will reduce exposure to exceedances of the annual mean nitrogen dioxide objective by 40% and 21% in Central London in 2021 and 2025, respectively; by 4% and 0% in Inner London in 2021 and 2025, respectively; and by 23% and 27% in Outer London in 2021 and 2025, respectively, when compared to the baseline scenario.

A8.3 The changes are not projected to have a significant effect on PM_{10} and $PM_{2.5}$ concentrations, although a small reduction is predicted.

A8.4 AQC's report on the performance of Defra's EFT (AQC, 2020) also highlighted that the EFT's assumptions regarding future fleet composition in London and across the UK may be over-pessimistic in terms of NOx emissions (and no changes to the fleet mix within London were made between versions 9 and 10 of the EFT). The future fleet projection derived from the EFT for Outer London, for example, shows a very small reduction in the proportion of diesel cars between 2016 and 2030, and a very limited uptake of electric cars. The AQC report highlights that this contrasts with the expectations of many observers, as well as the most recent trends publicised by the media. When considered alongside the future requirements of the LEZ and ULEZ, these future fleet projections seem all the more unrealistic (i.e., worst-case in terms of emissions), as the changes to the LEZ and ULEZ would reasonably be expected to significantly increase the uptake of lower emissions vehicles in London.

A8.5 The changes to the LEZ and ULEZ announced by the Mayor of London in June 2018 are not reflected in Defra's latest EFT and thus have not been considered in this assessment. The potentially over-pessimistic fleet projections built into the EFT have not been addressed in this report either. Paragraphs A8.1 and A8.2 highlight that the changes to the LEZ and ULEZ will result in significant reductions in vehicle nitrogen oxides emissions and resultant nitrogen dioxide concentrations. The changes might reasonably also be expected to expedite the uptake of cleaner vehicles well beyond that projected in the EFT's fleet projections for London. As such, while the results presented in this report represent a reasonably conservative reflection of likely concentrations and impacts in the absence of the changes to the LEZ and ULEZ, they almost certainly represent an unrealistically worst-case assessment of likely concentrations and impacts bearing in mind the implementation of these changes.

Air Quality Appendices

Appendix: Air Quality

A9 Preliminary Air Quality Assessment

A9.1 This Preliminary Air Quality Assessment was undertaken in May 2023, in order to provide design advice as part of the Air Quality Positive approach required by Policy SI 1 of the London Plan. The most up to date and accurate air quality assessment is presented in ES Volume 1, Chapter 8: Air Quality.

Preliminary Air Quality Assessment:

Euston Tower, Camden

May 2023

Experts in air quality management & assessment

Document Control

Client	British Land Property Management Ltd.		

Job Number	J10/14095A/10

Report Prepared By:	George Chousos and Julia Burnell

Document Status and Review Schedule

Report No.	Date	Status	Reviewed by
J10/14095A/10/1/F1	4 May 2023	Final	Martin Peirce (Associate Director)

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1 Introduction

1.1 This report provides a preliminary air quality assessment, as required by the Greater London Authority's (GLA's) London Plan (GLA, 2021a), for the proposed development at Euston Tower in the London Borough of Camden (LB of Camden) (hereafter referred to as the 'proposed development'). The proposed development comprises the partial demolition of the existing building on-site, with the building's central core, basement and foundations to be retained, and the construction of a commercial-led development designed to accommodate office, dry laboratory enabled floorspace, retail and flexible commercial space.

1.2 Policy SI 1 of the London Plan specifically states *"development proposals should use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality in preference to post-design or retro-fitted mitigation measures".*

1.3 This preliminary air quality assessment has thus been undertaken to identify any constraints to the proposed development in terms of air quality, and to allow for air quality design principles to be included within the design of the proposed development. The aim of the preliminary assessment is to assess:

- the most significant sources of pollution in the area;
- constraints imposed on the site by poor air quality;
- appropriate land uses for the site; and
- appropriate design measures that could be implemented to ensure that the proposed development reduces exposure and improves air quality.

1.4 The Government has established a set of air quality standards and objectives to protect human health. The 'standards' are set as concentrations below which effects are unlikely even in sensitive population groups, or below which risks to public health would be exceedingly small. The objectives for use by local authorities are prescribed within the Air Quality (England) Regulations (2000) and the Air Quality (England) (Amendment) Regulations (2002).

1.5 The UK-wide objectives for nitrogen dioxide and PM_{10} were to have been achieved by 2005 and 2004 respectively and continue to apply in all future years thereafter. Measurements across the UK have shown that the 1-hour nitrogen dioxide objective is unlikely to be exceeded at roadside locations where the annual mean concentration is below 60 µg/m^3 (Defra, 2022e).

1.6 The objectives apply at locations where members of the public are likely to be regularly present and are likely to be exposed over the averaging period of the objective. The GLA explains where these objectives will apply in London (GLA, 2019). The annual mean objectives for nitrogen dioxide and PM_{10} are considered to apply at the façades of residential properties, schools, hospitals and care homes etc., the gardens of residential properties, school playgrounds and the grounds of hospitals and care homes. Meanwhile, the annual mean objectives do not apply at the "*building facades of offices or other places of work where members of the public do not have regular access*". The 24-hour mean objective for PM_{10} is considered to apply at the same locations as the annual mean objective, as well as at hotels. The 1-hour mean objective for nitrogen dioxide applies wherever members of the public might regularly spend 1-hour or more, including outdoor eating locations and pavements of busy shopping streets.

1.7 For $PM_{2.5}$, the objective set by Defra for local authorities is to work toward reducing concentrations without setting any specific numerical value. In the absence of a numerical objective, it is convention to assess local air quality impacts against the limit value, originally set at 25 µg/m^3 and currently set at 20 µg/m^3.

1.8 Defra has also recently set two new targets, and two new interim targets, for $PM_{2.5}$ concentrations in England. One set of targets focuses on absolute concentrations. The long-term target is to achieve an annual mean $PM_{2.5}$ concentration of 10 µg/m^3 by the end of 2040, with the interim target being a value of 12 µg/m^3 by the start of 2028[1]. The second set of targets relate to reducing overall population exposure to $PM_{2.5}$. By the end of 2040, overall population exposure to $PM_{2.5}$ should be reduced by 35% compared with 2018 levels, with the interim target being a reduction of 22% by the start of 2028.

1.9 The GLA has set a target to achieve an annual mean $PM_{2.5}$ concentration of 10 µg/m^3 by 2030. This target was derived from an air quality guideline set by the World Health Organisation (WHO) in 2005. In 2021, WHO updated its guidelines, but the London Environment Strategy (GLA, 2018) considers the 2005 guideline of 10 µg/m^3. The guideline is not currently in UK regulations and there is no explicit requirement to assess against it.

1.10 The relevant air quality criteria for this assessment are provided in Table 1.

[1] Meaning that it will be assessed using measurements from 2027. The 2040 target will be assessed using measurements from 2040. National targets are assessed against concentrations expressed to the nearest whole number, for example a concentration of 10.4 µg/m^3 would not exceed the 10 µg/m^3 target.

Table 1: Air Quality Criteria for Nitrogen Dioxide (NO_2), PM_{10} and $PM_{2.5}$

Pollutant	Time Period	Objective
NO_2	1-hour Mean	200 µg/m^3 not to be exceeded more than 18 times a year
	Annual Mean	40 µg/m^3
PM_{10}	24-hour Mean	50 µg/m^3 not to be exceeded more than 35 times a year
	Annual Mean	40 µg/m^3
$PM_{2.5}$	Annual Mean	20 µg/m^3 [a]
	Annual Mean	10 µg/m^3 by 2030
	Annual Mean	12 µg/m^3 before 2028 [b]
	Annual Mean	10 µg/m^3 by 2040 [b]

[a] There is no numerical $PM_{2.5}$ objective for local authorities. Convention is to assess against the UK limit value which is currently 20 µg/m^3.

[b] Expressed to the nearest whole number. Defra has explained in the 2023 Environmental Improvement Plan (Defra, 2023a) that local authority responsibilities in relation to these targets relate to controlling emissions and not determining concentrations.

2 Baseline Air Quality

2.1 The proposed development is located within the borough-wide Camden Air Quality Management Area (AQMA) declared by LB of Camden for exceedances of the annual mean nitrogen dioxide and 24-hour particulate matter (PM_{10}) objectives. The proposed development is also located within one of the GLA's Air Quality Focus Areas (*Marylebone Road from Marble Arch / Euston / King's Cross Junction*), as shown in Figure 1; these are locations with high levels of human exposure where the annual mean limit value for nitrogen dioxide is exceeded.

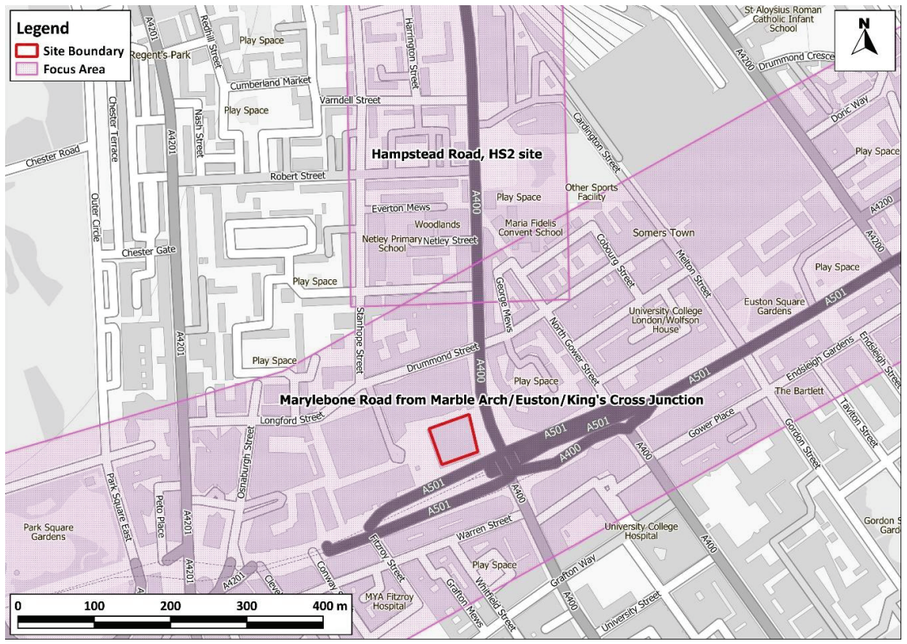

Figure 1: Indicative Site Boundary (May 2023), AQMAs and Focus Areas

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2.2 A search of the UK Pollutant Release and Transfer Register website (Defra, 2023b) has not identified any significant industrial or waste management sources that are likely to affect the proposed development, in terms of air quality.

Local Air Quality Monitoring

2.3 LB of Camden currently operates five automatic monitoring stations within its area, with three monitoring stations located within 1.5 km of the site ('BL0', 'CD9' and 'KGX'). All three stations monitor PM_{10} while BL0 and CD9 also monitor NO_2 and $PM_{2.5}$ concentrations. LB of Camden also operates a network of nitrogen dioxide monitoring sites using diffusion tubes prepared and analysed by Gradko International Ltd (using the 50% TEA in acetone method), with eight diffusion tube monitoring sites located within 1.5 km of the site. In addition, Westminster City Council (WCC) operates eleven automatic monitoring stations, with three stations also located within 1.5 km of the site ('Marylebone Road', 'Cavendish Square' and 'Oxford Street East').

2.4 Annual mean results for the years 2015 to 2021 are summarised in Table 2, while results relating to the 1-hour mean objective are summarised in Table 3. The locations of the monitoring sites are

displayed in Figure 2. The monitoring data for Camden have been taken from LB of Camden's 2021 Annual Status Report (LB of Camden, 2022) and for Westminster they have been taken from WCC's ASR for 2020 (Westminster City Council, 2021).

2.5 While 2020 and 2021 results have been presented for completeness, they are not relied upon in any way as they will not be representative of 'typical' air quality conditions due to the impact of the Covid-19 pandemic on traffic volumes and thus pollutant concentrations.

Table 2: Summary of Annual Mean NO_2 Monitoring (2015 – 2021) (µg/m^3) [a, b]

ID	Site Type	Location	2015	2016	2017	2018	2019	2020	2021
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	**48**	**42**	38	36	32	28	27
CD9	Roadside	Euston Road	**90**	**88**	**83**	**82** [c]	**70**	**43**	**48**
Marylebone Road	Kerbside	-	**88**	**87**	**84**	**85**	**63**	**44**	**-**
Cavendish Square	Roadside	-	-	-	-	**64**	**50**	32	**-**
Oxford Street East	Roadside	-	-	-	-	**76**	**51**	35	**-**
CA4A	Kerbside	Euston Road	-	-	-	-	**70.7**	**53.7**	**57.1** [c]
CA6	Urban Background	St George's Gardens (prev. "Wakefield Gardens")	35.8	31.3	34.8 [c]	26.7	25.2	- [d]	- [d]
CA10	Urban Background	Tavistock Gardens	**44.6**	39.7	**46.2** [c]	35.4	33.9	26.8	22.3 [c]
CA11	Kerbside	Tottenham Court Road	**85.6**	**83.6**	**74.0** [c]	**65.8**	**62.6**	**43.3**	**44.4** [c]
CA20A	Roadside	Brill Place	-	-	-	-	**44.1**	**43.9**	34.5 [c]
CA28	Urban Background	St George's Gardens East	-	-	-	-	28.3	22.5	17.4 [c]
CA29	Roadside	Endsleigh Gardens	-	-	-	-	**49.5**	35.3	34.5 [c]
Objective			**40**						

[a] Exceedances are shown in **bold.**

[b] Exceedances of the 60 µg/m^3 proxy value, indicating a potential exceedance of the 1-hour mean NO_2 objective, are shown in ***bold and underlined***.

[c] Data capture for the monitoring period was less than 75%, and as such the results were annualised in accordance with LLAQM Technical Guidance.

[d] The monitor was decommissioned in 2020.

Table 3: Number of Hours With NO_2 Concentrations Above 200 µg/m^3 [a]

Site ID	Site Type	Location	2015	2016	2017	2018	2019	2020	2021
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	0	0	0	0	0	0	0
CD9	Roadside	Euston Road	**54**	**39**	**25**	18	7	0	1
Marylebone Road	Kerbside	-	**56**	**49**	**38**	29	0	0	-
Cavendish Road	Roadside	-	**-**	**-**	**-**	0	0	0	-
Oxford Street Road	Roadside	-	**-**	**-**	**-**	11	5	0	-
Objective			**18**						

[a] Exceedances of the objectives are shown in **bold**.

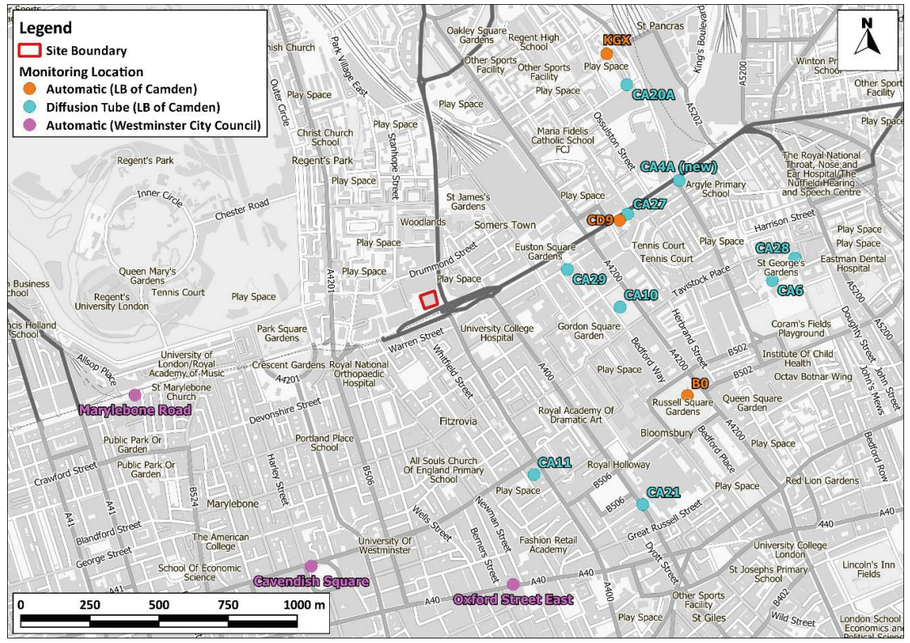

Figure 2: Monitoring Locations and the Indicative Site Boundary (May 2023)

2.6 As shown in Table 2, exceedances of the annual mean nitrogen dioxide objective occurred at all the kerbside and roadside locations within 1.5 km of the Proposed Development between 2015 and 2021, with the exception of 'Cavendish Square' and 'Oxford Street East' in 2020 and 'CA29' in 2020 and 2021. Concentrations of more than 60 µg/m^3 were also measured at five sites (three of which are located on the A501), indicating potential exceedances of the 1-hour mean objective. However, as shown in Table 3, all automatic monitoring sites recorded concentrations below this level in 2019, including the 'CD9' and 'Marylebone Road' automatic monitors which, despite measuring concentrations above 60 µg/m^3, have not measured any exceedances of the 1-hour mean objective since 2017. There was an overall downward trend in nitrogen dioxide concentrations between 2015 and 2019.

2.7 The LB of Camden also measures PM_{10} and $PM_{2.5}$ concentrations at 'BL0' and 'CD9' automatic stations, and only PM_{10} concentrations at 'KGX'; WCC measures PM_{10} concentrations at all aforementioned stations, and 'Marylebone Road' monitor also measures $PM_{2.5}$ concentrations. Annual mean results for the years 2015 to 2021 are summarised in Table 4, while results relating to the daily mean objective are summarised in Table 5. Exceedances of the objectives are shown in bold.

Table 4: Summary of Annual Mean PM_{10} and $PM_{2.5}$ Monitoring (2015-2021) (µg/m^3)

Site ID	Site Type	Location	2015	2016	2017	2018	2019	2020	2021
PM_{10}									
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	22	20	19	17	18	16	16
CD9	Roadside	Euston Road	28	24	20	21	22	18	19
KGX	Urban Background / Industrial	Coopers Lane	-	-	-	15	15	13	13 [a]
Marylebone Road	Kerbside	-	30	29	27	26	24	-	-
Cavendish Square	Roadside	-	-	-	-	28	25	17	-
Oxford Street East	Roadside	-	-	-	-	28	24	22	-
Objective			**40**						
$PM_{2.5}$									
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	11	12	13	10	11	9	9
CD9	Roadside	Euston Road	17	17	14	15	14	11	11
Marylebone Road	Kerbside	-	16	16	15	16	14	9	-
Objective/GLA target			**20/10 [b]**						

[a] Data capture for the monitoring period was less than 75%, and as such the result was annualised according to the LLAQM Technical Guidance.

[a] The 20 µg/m^3 $PM_{2.5}$ objective, which was to be met by 2020, is not in Regulations and there is no requirement for local authorities to meet it. 10 µg/m^3 is the GLA target for annual mean $PM_{2.5}$; again, there is no requirement for local authorities to meet this.

Table 5: Number of Days With PM_{10} Concentrations Above 50 µg/m³

Site ID	Site Type	Location	2015	2016	2017	2018	2019	2020	2021
BL0	Urban Background	London Bloomsbury (Russell Square Gardens)	6	9	6	1	9	4	0
CD9	Roadside	Euston Road	5	10	3	2	8	2	2
KGX	Urban Background / Industrial	Coopers Lane	-	-	-	1	5	1	0
Marylebone Road	Kerbside	-	13	15	12	5	11	-	-
Cavendish Road	Roadside	-	-	-	-	3	10	0	-
Oxford Street Road	Roadside	-	-	-	-	1	0	6	-
Objective			**35**						

2.8 As shown in Table 4 and Table 5, the measured annual mean and 24-hour mean PM_{10} concentrations were below their respective objectives in all years presented. PM_{10} concentrations at the proposed development are, therefore, likely to also be below the objectives. In addition, $PM_{2.5}$ concentrations were also below the objective in all years presented. However, $PM_{2.5}$ concentrations exceed the GLA target value at the 'BL0' and 'Marylebone Road' monitoring stations between 2015 and 2019 and at 'CD9' monitoring station in all years presented, which is common across much of London. The nationwide achievement is very unlikely to be possible before 2030, especially in London (Defra, 2019).

3 LAEI Mapped Concentrations

3.1 Modelled annual mean nitrogen dioxide concentrations presented in the London Atmospheric Emissions Inventory (LAEI) database (GLA, 2021b) in the vicinity of the proposed development are shown in Figure 3. The maximum modelled annual mean concentration in 2019 within the proposed development site boundary (located in the southeast corner of the site) is 65.6 µg/m³, which is above both the annual mean objective of 40 µg/m³ and the proxy concentration of 60 µg/m³ (see Paragraph 1.5), indicating that an exceedance of the 1-hour mean objective might be likely.

3.2 The maximum 2019 annual mean PM_{10} and $PM_{2.5}$ concentrations within the site boundary are 30.8 µg/m³ and 15.6 µg/m³, respectively, which are below the relevant objectives. However, the annual mean $PM_{2.5}$ concentration is above the GLA $PM_{2.5}$ target of 10 µg/m³.

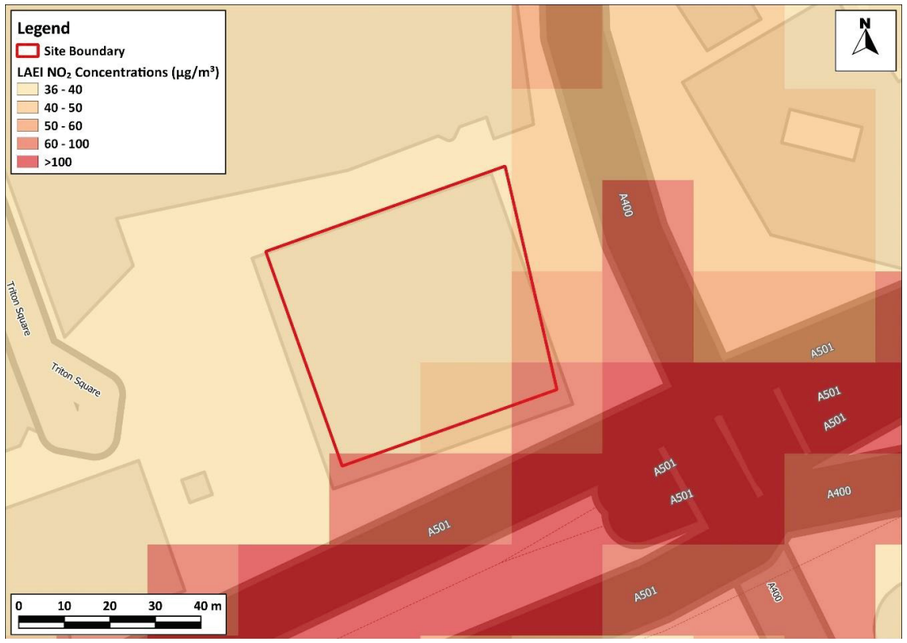

Figure 3: LAEI modelled 2019 NO_2 concentrations with Indicative Site Boundary (May 2023)

4 Proposed Development Emissions

4.1 The site currently comprises the existing Euston Tower building and is bounded by: Brock Street and commercial properties to the north, Hampstead Road (A400) to the east, Euston Road (A501) to the south and commercial properties to the west.

4.2 The trip generation of the proposed development is currently unknown. However, the proposed development has just three blue-badge vehicle parking spaces, and it is anticipated that the proposed development will not generate more than 100 Light Duty Vehicle (LDV) trips, as an Annual Average Daily Traffic (AADT) flow rate, or 25 Heavy Duty Vehicle (HDV) AADT trips on the local road network once operational; on this basis the air quality impacts from development-generated road traffic emissions can be considered to be 'not significant'. Should these thresholds be

exceeded, then detailed dispersion modelling of road traffic emissions will need to be undertaken to determine the impact of these emissions upon existing sensitive receptors in the surrounding area.

4.3 The proposed development will be provided with heat and hot water via an all-electric solution, which includes Air Source Heat Pumps (ASHPs); as such, there will be no associated point-source emissions. A life safety generator is currently being considered. When details of any other plant to be installed at the site are available, the emissions will be initially screened against IAQM guidance, in combination with their proposed location, operating profile and dispersion parameters, to identify whether the impacts from the plant will be significant.

4.4 The proposed development will include an allocation for fume cupboards to allow potential end users operating research and development type activities to occupy some of the development. Although the use of such facilities requires extraction of air, there are tight regulations on the design and operation of fume cupboards. Any such end users will need to ensure that all activities meet the requirements of various British Standards (e.g., BSEN 14175) and Health and Safety Executive (HSE)/Control of Substances Hazardous to Health (COSHH) standards for all substances handled. Any residual emissions will need to be appropriately minimised using filtration where necessary. Given the strict regulations on the operation of fume cupboards, there can be a high level of confidence that provided the air extraction system is appropriately designed, that significant air quality effects will be avoided.

5 Site Suitability

5.1 The retail floorspace and any publicly accessible elements of the proposed development represent relevant exposure to the 1-hour mean nitrogen dioxide objective only. In contrast, the office and lab floorspaces are not considered relevant sensitive receptors to the air quality objectives as they are places of work where a member of the public would not have access (see Paragraph 1.6).

5.2 As shown in Table 2, measured annual mean nitrogen dioxide concentrations at roadside monitoring site ‘CD9’ and kerbside monitoring site ‘Marylebone Road’, both located on the A501 (the same road the proposed development is located on), have remained above the objective for all years between 2015 and 2021. Concentrations until 2019 also exceeded 60 µg/m^3, indicating a potential exceedance of the 1-hour mean objective. However, as shown in Table 3, both automatic monitoring stations have not measured an exceedance of the 1-hour objective since 2017, indicating that it is unlikely that the 1-hour mean objective will be exceeded at the retail and publicly accessible elements of the proposed development by the time it is operational. Nonetheless, this will be assessed and confirmed within the Environmental Statement (ES) Chapter.

5.3 Measures to reduce pollutant emissions from road traffic are principally being delivered in the longer term by the introduction of more stringent emissions standards, largely via European legislation (which is written into UK law), as well as the implementation of the Low Emission Zone (LEZ) and

Ultra Low Emission Zone (ULEZ), and the implementation of the London Environment Strategy (GLA, 2018).

5.4 Best practice design methods are set out in Section 6 to mitigate the impacts of emissions from road traffic on future users of the proposed development.

6 Air Quality Design Principles

6.1 The following design principles to reduce exposure to air pollution and improve air quality will be considered, and, where possible, may be incorporated within the design of the proposed development:

- ensuring that any ventilation air intakes, where proposed, are distanced appropriately from sources of air pollution;
- the exhaust flue of the proposed life-safety generator should be located at the highest point within the proposed development (i.e., at Level 31 (roof level)) to ensure adequate dispersion and minimise the impact of emissions upon surrounding sensitive properties, as well as minimising the impact upon the proposed development itself;
- maximise access to public transport options, prioritisation of cycle parking, as well as cycle and walking routes (mainly via the south-eastern corner of Hampstead Road, the southwestern corner of Euston Road and the Regent’s Place public realm), to minimise private car trips to and from the site;
- provision of cycle storage facilities at basement level, which are easily accessible either by a bike ramp accessed in the southwest corner of the building or via a set of steps and a lift located to the east of the building, as well as provision of showers / changing facilities for commercial uses to enable staff to cycle to work;
- incorporating the Healthy Streets Approach into the scheme to reduce the need to travel, or to promote sustainable transport opportunities; and,
- limiting car parking provision to only three blue-badge car parking spaces, which will all be provided with electric vehicle charging capabilities, in line with the London Plan requirements.

7 Conclusions

7.1 The proposed development is located within the borough-wide Camden AQMA, as well as one of the GLA’s air quality Focus Areas.

7.2 Baseline conditions show pollutant concentrations in the vicinity of the proposed development were above the annual and 1-hour mean nitrogen dioxide objectives in 2019, but below the respective objectives for PM_{10} and $PM_{2.5}$. Based on the likely users of the proposed development, the only relevant objective is the 1-hour mean nitrogen dioxide objective, and local, long-term monitoring has shown that there have been no exceedances of this objective since 2018 along A501 (where both the automatic monitors and proposed development are located). Concentrations are expected to reduce in future years through the implementation of stringent vehicle emission standards, reduced background pollutant concentrations and the uptake of zero emission vehicles within the fleet. It is therefore expected that future users will experience acceptable air quality in the anticipated year of opening, but this will be confirmed within the ES Chapter.

7.3 The trip generation of the proposed development is expected to be below published thresholds, and the impact of additional road traffic emissions will not, therefore, be significant. Further assessment of road traffic emissions will, however, be undertaken if the thresholds are exceeded, to determine the air quality impacts upon sensitive land-uses in the surrounding area, utilising detailed dispersion modelling.

7.4 The proposed development will be provided with heat and hot water via an all-electric solution, which includes Air Source Heat Pumps (ASHPs); as such, there will be no associated point-source emissions. A life safety generator is currently being considered for incorporation within the proposed development, the impacts of which will be considered within the ES Chapter based on information available.

7.5 A list of design principles to reduce exposure to air pollution has been provided, which should be considered and incorporated within the design of the proposed development.

8 References

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9 Glossary

AADT	Annual Average Daily Traffic
AQMA	Air Quality Management Area
ASR	Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
Exceedance	A period of time when the concentration of a pollutant is greater than the appropriate air quality objective. This applies to specified locations with relevant exposure
Focus Area	Location that not only exceeds the EU annual mean limit value for NO_2 but also has a high level of human exposure
GLA	Greater London Authority
µg/m^3	Microgrammes per cubic metre
NO_2	Nitrogen dioxide
Objectives	A nationally defined set of health-based concentrations for nine pollutants, seven of which are incorporated in Regulations, setting out the extent to which the standards should be achieved by a defined date. There are also vegetation-based objectives for sulphur dioxide and nitrogen oxides
PM_{10}	Small airborne particles, more specifically particulate matter less than 10 micrometres in aerodynamic diameter
$PM_{2.5}$	Small airborne particles less than 2.5 micrometres in aerodynamic diameter
Standards	A nationally defined set of concentrations for nine pollutants below which health effects do not occur or are minimal
TEA	Triethanolamine – used to absorb nitrogen dioxide
WHO	World Health Organisation

10 Appendices

A1 Professional Experience

Martin Peirce, BSc (Hons), MSc, MIEncSci, MIAQM

Mr Peirce has some thirty years' experience in environmental modelling and assessment, most relating to air quality and carbon and greenhouse gases (GHGs). He has extensive experience in the calculation of emissions to air and compiling emission inventories, for both local air quality assessments and carbon footprinting. For air quality, he also has extensive expertise in modelling the atmospheric dispersion of pollutants for comparison against regulatory limits and for assessment of health and environmental impacts. He has prepared assessments in support of Environmental Impact Assessments (EIA), permit applications and planning applications (under both Town and Country Planning Act (TCPA) and Development Consent Order (DCO) regimes). He has particular experience in modelling aviation and transport sources, non-road mobile machinery, construction and industrial sources.

Julia Burnell, MEnvSci (Hons) MIEnvSc MIAQM

Miss Burnell is a Senior Consultant with AQC with over seven years' experience in the field of air quality. She has experience of undertaking a range of air quality assessments for power, transportation, and mixed-use development projects both in the UK and internationally. She is also experienced at preparing environmental permit applications for medium combustion plant/specified generator sites and has commissioned and maintained numerous ambient air quality monitoring surveys. Prior to her work with AQC, Julia completed an MEnvSci (Hons) in Environmental Science (four-year integrated master's). She is a Member of both the Institute of Air Quality Management and the Institution of Environmental Sciences.

George Chousos, BSc MSc AMIEnvSc AMIAQM

Mr Chousos is a Consultant with AQC, having joined in May 2019. Prior to joining AQC, he completed an MSc in Air Pollution Management and Control at the University of Birmingham, specialising in air pollution control technologies and management, and data processing using R. He also holds a degree in Environmental Geoscience from the University of Cardiff, where he undertook a year in industry working in the field of photo-catalytic technology. He is now gaining experience in the field of air quality monitoring and assessment.

Appendix: Air Quality

Annex 1: Glossary
Annex 2: Legislative and Planning Policy Context
Annex 3: Construction Dust Assessment Procedure
Annex 4: EPUK & IAQM Planning for Air Quality Guidance
Annex 5: Professional Experience
Annex 6: Modelling Methodology
Annex 7: No Improvement Scenario
Annex 8: London Vehicle Fleet Projections
Annex 9: Preliminary Air Quality Assessment
Annex 10: Air Quality Positive Statement
Annex 11: Construction Mitigation
Annex 12: References

A10 Air Quality Positive Statement

Introduction

A10.1 The Proposed Development involves the:

"Redevelopment of Euston Tower, including the partial retention (retention of existing core, foundations and basement), disassembly, reuse and extension of the existing building, to provide a 32-storey building for use as offices and research and development floorspace (Class E(g)) and office, retail, café and restaurant space (Class E) and learning and community space (Class F) at ground, first and second floors, and associated external terraces. Provision of public realm enhancements, including new landscaping, and provision of new publicly accessible steps and ramp. Provision of short and long-stay cycle storage, servicing, refuse storage, plant and other ancillary and associated works."

A10.2 The Proposed Development will include only two blue-badge car parking spaces and will utilise an all-electric energy strategy for the provision of heating and hot water (ASHP systems, alongside PVs). There are also two options under consideration for emergency power provision to incorporate either a life safety generator and future tenant generator (Option 1) or Dual Utility Supplies (Option 2), for emergency purposes. It is not currently known which option will be included within the Proposed Development's design, but once details become available, the air quality positive statement will be updated accordingly.

Constraints and Opportunities

A10.3 The air quality objectives apply only at the retail spaces within the Proposed Development; however, they are only of relevant exposure to the 1-hour nitrogen dioxide objective. The Proposed Development will not generate any significant emissions once operational from road traffic. The predicted impact at the existing, and proposed, sensitive receptors, taking account the road traffic emissions, are all negligible and the annual mean concentrations are below the relevant objectives both with and without the Proposed Development.

A10.4 The Site itself is in a well-connected location for public transport providing a wide range of transport services, including buses and London Underground and national rail services from Euston Square and Warren Street stations.

A10.5 Table A10.1 details the measures that have been adopted within the design of the Proposed Development.

Table A10.1: Measures Adopted

Measure	Summary of the Measure	Reason for Undertaking Measure	Expected Benefits	Assessment and Reporting			How Will This Measure be Secured?
				Methods	Quantitative	Qualitative	
Better Design and Reducing Exposure							
Locations of sensitive land uses	The proposed masterplan has been designed to reduce exposure to emissions, including only receptors that are sensitive to the 1-hour NO_2 objective and locating these most sensitive receptors (i.e., the retail floorspace) approximately 14 m away from the nearest road.	To reduce exposure for future users.	Future users will experience acceptable air quality.	Air quality assessment shows air quality is acceptable for future users.	Y	N	Secured through approved plans
Building Emissions							
Energy Strategy	The energy strategy is all electric (ASHPs and PVs). High energy efficient building fabric will be utilised to reduce carbon emissions and energy demand through good practice design measures.	The Energy Strategy sets out the rationale for the measures.	The selected option will meet the carbon emission targets set by the London Plan. Reduced NOx emissions.	Energy Assessment	N	Y	Delivery is subject to s106 agreement.
Transport Emissions							
Pedestrian and Cycle Access	The Proposed Development will provide cycle and pedestrian access and include cycle parking that meets the requirements of Policy T5 of the London Plan	To encourage users and residents to travel using sustainable modes of transport.	Reduced emissions associated with increased walking and cycling, in particular for short journeys.	Framework Travel Plan	N	Y	Transport infrastructure secured by approved plans or conditions

Car Parking	The Proposed Development will be 'car-free'. This will discourage the use of private cars and encourage the use of existing public transport options.	To facilitate a move towards car free lifestyle and promote the future use of local public transport provisions.	The lack of car parking provision will reduce the number of private car trips during the operation of the Proposed Development and therefore vehicle tailpipe emissions.	Framework Travel Plan	N	Y	Transport infrastructure secured by approved plans or conditions

Appendix: Air Quality

A11 Construction Mitigation

A11.1 Table A11.1 presents a set of best-practice measures from the GLA guidance (GLA, 2014) that should be incorporated into the specification for the works. These measures should be written into a Dust Management Plan. Some of the measures may only be necessary during specific phases of work, or during activities with a high potential to produce dust, and the list should be refined and expanded upon in liaison with the construction contractor when producing the Dust Management Plan.

Table A11.1: Best-Practice Mitigation Measures Recommended for the Works

Measure	Desirable	Highly Recommended
Site Management		
Develop and implement a stakeholder communications plan that includes community engagement before work commences on site		✓
Develop a Dust Management Plan (DMP)		✓
Display the name and contact details of person(s) accountable for air quality pollutant emissions and dust issues on the site boundary		✓
Display the head or regional office contact information		✓
Record and respond to all dust and air quality pollutant emissions complaints		✓
Make a complaints log available to the local authority when asked		✓
Carry out regular site inspections to monitor compliance with air quality and dust control procedures, record inspection results, and make an inspection log available to the Local Authority when asked		✓
Increase the frequency of site inspections by those accountable for dust and air quality pollutant emissions issues when activities with a high potential to produce dust and emissions are being carried out and during prolonged dry or windy conditions		✓
Record any exceptional incidents that cause dust and air quality pollutant emissions, either on or off the site, and ensure that the action taken to resolve the situation is recorded in the log book		✓
Preparing and Maintaining the Site		
Plan the site layout so that machinery and dust-causing activities are located away from receptors, as far as is possible		✓
Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site		✓
Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period		✓
Install green walls, screens or other green infrastructure to minimise the impact of dust and pollution	✓	
Avoid site runoff of water or mud		✓

Keep site fencing, barriers and scaffolding clean using wet methods		✓
Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below		✓
Cover, seed, or fence stockpiles to prevent wind whipping		✓
Carry out regular dust soiling checks of buildings within 100 m of site boundary and provide cleaning if necessary	✓	
Put in place real-time dust and air quality pollutant monitors across the site and ensure they are checked regularly		✓
Agree monitoring locations with the Local Authority		✓
Where possible, commence baseline monitoring at least three months before work begins		✓
Operating Vehicle/Machinery and Sustainable Travel		
Ensure all on-road vehicles comply with the requirements of the London LEZ (and ULEZ)		✓
Ensure all Non-road Mobile Machinery (NRMM) comply with London's NRMM emission standards. Currently, NRMM used on any site within Greater London are required to meet Stage IIIB of EU Directive 97/68/EC (The European Parliament and the Council of the European Union, 1997) and its subsequent amendments as a minimum, while NRMM used on any site within the Central Activity Zone, Canary Wharf or one of London's Opportunity Areas are required to meet Stage IV of the Directive as a minimum. The proposed development is within an area where this stricter requirement applies. From January 2025, NRMM used anywhere in London will be required to meet stage IV, while from January 2030 the stage V standard will apply. From January 2040 only zero emission machinery will be allowed.		✓
Ensure all vehicles switch off engines when stationary – no idling vehicles		✓
Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery-powered equipment where practicable		✓
Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate)	✓	
Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials		✓
Implement a Travel Plan that supports and encourages sustainable staff travel (public transport, cycling, walking, and car-sharing)		✓
Operations		
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems		✓
Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate		✓
Use enclosed chutes, conveyors and covered skips		✓

Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate		✓
Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods		✓
Waste Management		
Reuse and recycle waste to reduce dust from waste materials		✓
Avoid bonfires and burning of waste materials		✓
Measures Specific to Demolition		
Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust)	✓	
Ensure water suppression is used during demolition operations.		✓
Avoid explosive blasting, using appropriate manual or mechanical alternatives		✓
Bag and remove any biological debris or damp down such material before demolition		✓
Measures Specific to Earthworks		
Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable	✓	
Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable	✓	
Only remove the cover from small areas during work, not all at once	✓	
Measures Specific to Construction		
Avoid scabbling (roughening of concrete surfaces), if possible	✓	
Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place		✓
Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery	✓	
For smaller supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust	✓	
Measures Specific to Trackout		
Regularly use a water-assisted dust sweeper on the access and local roads, as necessary, to remove any material tracked out of the site		✓
Avoid dry sweeping of large areas		✓
Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport		✓
Access gates should be located at least 10 m from receptors, where possible		✓
Apply dust suppressants to locations where a large volume of vehicles enter and exit the construction site	✓	

Appendix: Air Quality

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Appendix: Noise and Vibration

Annex 1: Acoustic Terminology
Annex 2: Environmental Noise Survey Report
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Appendix: Noise and Vibration

Annex 1: Acoustic Terminology

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ANNEX 1 – ACOUSTIC TERMINOLOGY

The acoustic terms used in the ES Chapter are defined as follows:

dB — Decibel - Used as a measurement of sound level. Decibels are not an absolute unit of measurement but an expression of ratio between two quantities expressed in logarithmic form. The relationships between Decibel levels do not work in the same way that non-logarithmic (linear) numbers work (e.g. 30dB + 30dB = 33dB, not 60dB).

dBA — The human ear is more susceptible to mid-frequency noise than the high and low frequencies. The 'A'-weighting scale approximates this response and allows sound levels to be expressed as an overall single figure value in dBA. The $_A$ subscript is applied to an acoustical parameter to indicate the stated noise level is A-weighted

It should be noted that levels in dBA do not have a linear relationship to each other; for similar noises, a change in noise level of 10dBA represents a doubling or halving of subjective loudness. A change of 3dBA is just perceptible.

$L_{90,T}$ — L_{90} is the noise level exceeded for 90% of the period *T* (i.e. the quietest 10% of the measurement) and is often used to describe the background noise level.

$L_{eq,T}$ — $L_{eq,T}$ is the equivalent continuous sound pressure level. It is an average of the total sound energy measured over a specified time period, *T*.

L_{max} — L_{max} is the maximum sound pressure level recorded over the period stated. L_{max} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the L_{eq} noise level.

L_p — Sound Pressure Level (SPL) is the sound pressure relative to a standard reference pressure of 2×10^{-5} Pa. This level varies for a given source according to a number of factors (including but not limited to: distance from the source; positioning; screening and meteorological effects).

L_w — Sound Power Level (SWL) is the total amount of sound energy inherent in a particular sound source, independent of its environment. It is a logarithmic measure of the sound power in comparison to a specified reference level (usually 10^{-12} W).

Vibration Units

The vibratory motion of a surface can be described by either:

(a) displacement (m),

(b) velocity (m/s), or

(c) acceleration (m/s^2).

Furthermore the vibration magnitude can be quantified in several ways:

peak to peak : This value gives the total excursion of the oscillation about the zero datum. The unit is often used where the vibratory displacement of a component is critical for maximum stress or mechanical clearance calculations.

peak : This value gives the maximum excursion of the oscillation above or below the zero datum. This value is useful for indicating the level of short duration shocks.

r.m.s : This value gives the root mean square of the time history over a specific time interval (time constant). This value is useful for indicating the energy content of the vibration.

dB : Decibel quantities are often encountered. A reference level of 10^{-6} m/s^2 r.m.s is typically used for acceleration.

Vibration Dose Value (V.D.V) ($m/s^{1.75}$)

This value assesses both the magnitude of vibration and its duration. Where possible the vibration dose value should be determined over the full exposure to vibration. It is often estimated from the frequency weighted r.m.s value of the acceleration and its duration and is then referred to as e.V.D.V.

Peak Particle Velocity (PPV)

The maximum value of the amplitude of the vibration velocity time-domain signal that refers to the movement within the ground of molecular particles and not surface movement. The displacement value in mm refers to the movement of particles at the surface (surface movement).

Appendix: Noise and Vibration

Annex 1: Acoustic Terminology

Annex 2: Environmental Noise Survey Report

Annex 3: Noise Modelling Assumptions

Euston Tower
Regents Place
London

Environmental Noise Survey Report

29605/ENS1

16 November 2023

For:
British Land Property Management Limited
10 South Crescent
Bloomsbury
London
WC1E 7BD

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Environmental Noise Survey Report 29605/ENS1

Document Control

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Hann Tucker Associates

Environmental Noise Survey Report
29605/ENS1

Contents

Attachments

1.0 Introduction

Hann Tucker Associates Limited (Hann Tucker) has been commissioned by British Land Property Management Limited to undertake a environmental noise survey for a site on Euston Road in the London Borough of Camden.

The proposals are for redevelopment of Euston Tower, including the partial retention (retention of existing core, foundations and basement), disassembly, reuse and extension of the existing building, to provide a 32-storey building for use as offices and research and development floorspace (Class E(g)) and office, retail, café and restaurant space (Class E) and learning and community space (Class F) at ground, first and second floors, and associated external terraces.

Our survey methodology and findings are presented herein.

2.0 Objectives

To inspect the site to familiarise ourselves with its layout and surroundings in order to identify suitable accessible locations for environmental noise measurements.

To establish by means of an unmanned noise survey the existing $L_{Amax,}$ L_{Aeq} and L_{A90} environmental noise levels at up to 5No. secure and accessible on-site positions, using fully computerised noise monitoring equipment.

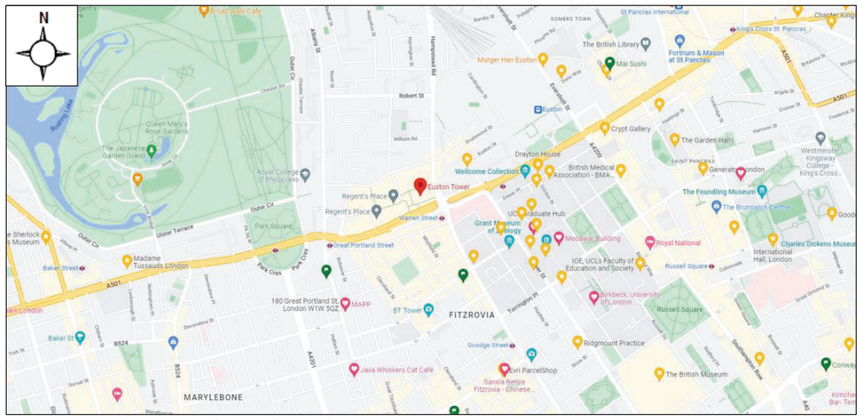
To establish by means of manned critical period noise measurements the existing daytime $L_{Amax,}$ L_{Aeq} and L_{A90} environmental noise levels, along with relevant octave band sound spectra, at suitable street level locations around the site.

To set noise emission limits from the development with reference to the requirements of the Local Authority and/or the application of BS 4142: 2014 and to minimise the possibility of noise nuisance to neighbours.

3.0 Site Description

3.1 Location

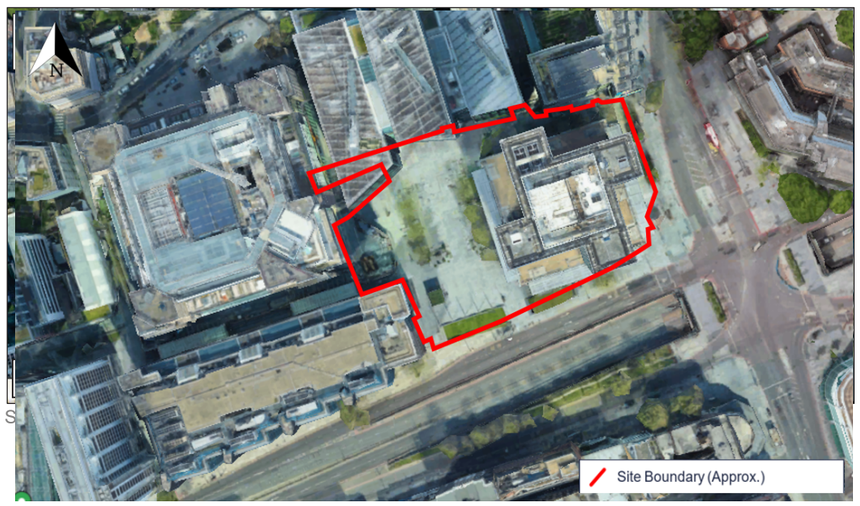
The site is located at 286 Euston Rd, London NW1 3DP. The location is shown in the Location Map below. The site falls within the jurisdiction of London Borough of Camden.

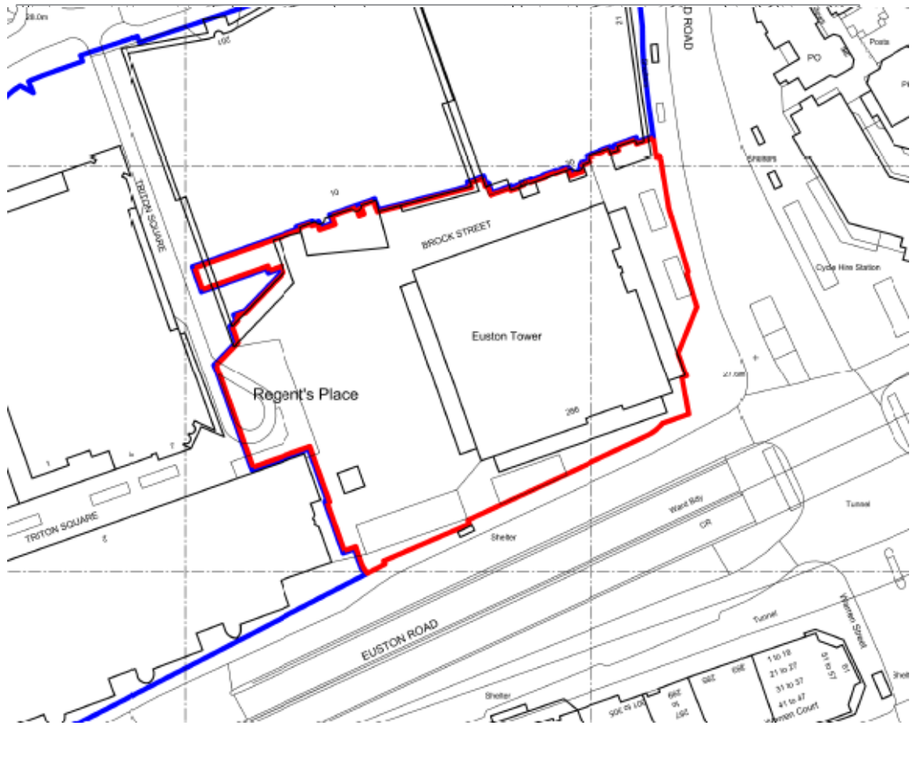


Location Map (Map Data ©2022 Google)

3.2 Description

The site is situated within a mixture of dwellings, offices and hospitals. The site is bound by Euston Road (A501) to the south, Hampstead Road to the east, Brock Street to the north, and Regent's Plaza to the west. The site is shown in the Site Plans below and overleaf.





4.0 Acoustic Terminology

For an explanation of the acoustic terminology used in this report please refer to Appendix A enclosed.

5.0 Acoustic Standards and Guidelines

5.1 Noise Policy Statement for England

The Noise Policy Sttement for England (NPSE) was published in March 2010 (i.e. before the NPPF). The NPSE is the overarching statement of noise policy for England and applies to all forms of noise other than occupational noise, setting out the long term vision of Government noise policy which is to:

"Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development."

"Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

- *avoid significant adverse impacts on health and quality of life;*
- *mitigate and minimise adverse impacts on health and quality of life; and*
- *where possible, contribute to the improvement of health and quality of life."*

The Explanatory Note to the NPSE has three concepts for the assessment of noise in this country:

NOEL – No Observed Effect Level
This is the level below which no effect can be detected and below which there is no detectable effect on health and quality of life due to noise.

LOAEL – Lowest Observable Adverse Effect Level
This is the level above which adverse effects on health and quality of life can be detected.

SOAEL – Significant Observed Adverse Effect Level
This is the level above which significant adverse effects on health and quality of life occur.

None of these three levels are defined numerically and for the SOAEL the NPSE makes it clear that the noise level is likely to vary depending upon the noise source, the receptor and the time of day/day of the week, etc. The need for more research to investigate what may represent an SOAEL for noise is acknowledged in the NPSE and the NPSE asserts that not stating specific SOAEL levels provides policy flexibility in the period until there is further evidence and guidance.

The NPSE concludes by explaining in a little more detail how the LOAEL and SOAEL relate to the three NPSE noise policy aims listed above. It starts with the aim of avoiding significant adverse effects on health and quality of life, then addresses the situation where the noise impact falls between the LOAEL and the SOAEL when *"all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development."* The final aim envisages pro-active management of noise to improve health and quality of life, again taking into account the guiding principles of sustainable development which include the need to minimise travel distance between housing and employment uses in an area.

5.2 National Planning Policy Framework (NPPF)

The following paragraphs are from the NPPF (published Sept 2023):

185. Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;

b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.

187. Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed."

Paragraph 185 also references the Noise Policy Statement for England (NPSE). This document does not refer to specific noise levels but instead sets out three aims:

- "Avoid significant adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.
- Mitigate and minimise adverse impacts on health and quality of life from environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development.
- Where possible, contribute to the improvement of health and quality of life through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development."

5.3 Planning Practice Guidance on Noise

Planning Practice Guidance (PPG) under the NPPF has been published by the Government as a web based resource at http://planningguidance.planningportal.gov.uk/blog/guidance/. This includes specific guidance on Noise although, like the NPPF and NPSE the PPG does not provide any quantitative advice. It seeks to illustrate a range of effect levels in terms of examples of outcomes as set out in the following table:

Perception	Examples of Outcomes	Increasing effect level	Action
Not noticeable	No effect	No Observed Effect	No specific measures required
Noticeable and not intrusive	Noise can be heard, but does not cause any change in behaviour or attitude. Can slightly affect the acoustic character of the area but not such that there is a perceived change in the quality of life.	No Observed Adverse Effect	No specific measures required
		Lowest Observed Adverse Effect Level	
Noticeable and intrusive	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance.	Observed Adverse Effect	Mitigate and reduce to a minimum
		Significant Observed Adverse Effect Level	
Noticeable and disruptive	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	Significant Observed Adverse Effect	Avoid
Noticeable and very disruptive	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable hard, e.g. auditory and non-auditory.	Unacceptable Adverse Effect	Prevent

5.4 Local Authority Requirements

The site lies within the jurisdiction of London Borough of Camden. Camden's planning policy for controlling atmospheric noise emissions from building service plant is detailed in Appendix 3 of Camden Local Plan (adopted in July 2017). See below extraction from the Camden Local Plan.

"A relevant standard or guidance document should be referenced when determining values for LOAEL and SOAEL for non-anonymous noise. Where appropriate and within the scope of the document it is expected that British Standard 4142:2014 'Methods for rating and assessing industrial and commercial sound' (BS 4142) will be used. For such cases a 'Rating Level' of 10 dB below background (15dB if tonal components are present) should be considered as the design criterion).

Table C: Noise levels applicable to proposed industrial and commercial developments (including plant and machinery)

Existing Noise sensitive receptor	Assessment Location	Design Period	LOAEL (Green)	LOAEL to SOAEL (Amber)	SOAL (Red)
Dwellings**	Garden used for main amenity (free field) and Outside living or dining or bedroom window (façade)	Day	'Rating level' 10dB* below background	'Rating level' between 9dB below and 5dB above background	'Rating level' greater than 5dB above background
Dwellings**	Outside bedroom window (façade)	Night	'Rating level' 10dB* below background and no events exceeding 57dBL_{Amax}	'Rating level' between 9dB below and 5dB above background or noise events between 57dB and 88dB L_{Amax}	'Rating level' greater than 5dB above background and/or events exceeding 88dBL_{Amax}

**10dB should be increased to 15dB if the noise contains audible tonal elements. (day and night). However, if it can be demonstrated that there is no significant difference in the character of the residual background noise and the specific noise from the proposed development then this reduction may not be required. In addition, a frequency analysis (to include, the use of Noise Rating (NR) curves or other criteria curves) for the assessment of tonal or low frequency noise may be required.*

***levels given are for dwellings, however, levels are use specific and different levels will apply dependent on the use of the premises.*

"The periods in Table C correspond to 0700 hours to 2300 hours for the day and 2300 hours to 0700 hours for the night. The Council will take into account the likely times of occupation for types of development and will be amended according to the times of operation of the establishment under consideration."

"There are certain smaller pieces of equipment on commercial premises, such as extract ventilation, air conditioning units and condensers, where achievement of the rating levels (ordinarily determined by a BS:4142 assessment) may not afford the necessary protection. In these cases, the Council will generally also require a NR curve specification of NR35 or below,

dependant on the room (based upon measured or predicted Leq,5mins noise levels in octave bands) 1 metre from the façade of affected premises, where the noise sensitive premise is located in a quiet background area."

Section 6.100 of the Camden Local Plan (2017) also sets out requirements for controlling atmosphere noise emissions from emergency building services plant as follows:

"Emergency equipment such as generators which are only to be used for short periods of time will be required to meet the noise criteria of no more than 10dB above the background level (L90 15 minutes). During standby periods, emergency equipment will be required to meet the usual criteria for plant and machinery. Conditions to this effect may be imposed in instances where emergency equipment forms part of the application."

5.5 BS 4142:2014 + A1:2019

When setting plant noise emission criteria reference is commonly made to BS 4142:2014 "*Methods for rating and assessing industrial and commercial sound".*

The procedure contained in BS 4142:2014 provides an assessment of the likely effects of sound on people when comparing the specific noise levels from the source with representative background noise levels. Where the noise contains "a tone, impulse or other characteristic" then various corrections can be added to the specific (source) noise level to obtain the "rating level".

BS 4142 states that: *"The significance of sound of an industrial and/or commercial nature depends upon both the margin by which the rating level of the specific sound source exceeds the background sound level and the context in which the sound occurs". An estimation of the impact of the specific noise can be obtained by the difference of the rating noise level and the background noise level and considering the following:*

• *"Typically, the greater this difference, the greater the magnitude of the impact."*

• *"A difference of around +10dB or more is likely to be an indication of a significant adverse impact, depending on the context."*

• *"A difference of around +5dB is likely to be an indication of an adverse impact, depending on the context."*

• *"The lower the rating level is relative to the measured background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context."*

The determination of the "rating level" and the "background level" are both open to interpretation, depending on the context.

In summary it is not possible to set plant noise emission criteria purely on the basis of BS 4142:2014+A1:2019. It is reasonable to infer from the above, however, that a difference of around -5dB corresponds to "No Observed Effect Level" as defined in the Noise Policy Statement for England. It is also reasonable to infer from the above that if the plant noise rating level does not exceed the existing background noise level outside any noise sensitive residential window then the plant noise is of "low impact".

5.6 World Health Organisation Guidelines on Community Noise

BS8233:2014 is based upon the current World Health Organisation (WHO) guidance "*Guidelines on Community Noise".* A summary of the noise guidelines relevant to the proposed scheme is presented in the table below.

Residential Environment	Critical Health Effect(s)	L_{Aeq}	L_{AFmax}	Time Base
Outdoor living area	Serious annoyance, daytime and evening	55	-	07:00-23:00
	Moderate annoyance, daytime and evening	50	-	07:00-23:00
Dwelling, indoors	Speech intelligibility and moderate annoyance, daytime and evening	35	-	07:00-23:00
Inside bedrooms	Sleep disturbance, night-time	30	45	23:00-07:00
Outside bedrooms	Sleep disturbance, window open (outdoor values)	45	60	23:00-07:00

These WHO guidelines are based, in almost all cases, on the lower threshold below which the occurrence rates of any particular effect can be assumed to be negligible.

5.7 British Standard BS8233: 2014

British Standard 8233: 2014 "Guidance on sound insulation and noise reduction for buildings" provides guidance for the control of noise in and around buildings.

BS8233:2014 Section 7.7.2 titled “Internal ambient noise levels for dwellings” states:

“In general for steady external noise sources, it is desirable that internal ambient noise levels do not exceed the following guideline values:

Activity	*Location*	*Desirable Internal Ambient Criteria*	
		07:00 - 23:00	*23:00 - 07:00*
Resting	*Living Rooms*	*35 dB $L_{Aeq,16hour}$*	-
Dining	*Dining Room/Area*	*40 dB $L_{Aeq,16hour}$*	-
Sleeping (Daytime Resting)	*Bedroom*	*35 dB $L_{Aeq,16hour}$*	*30 dB $L_{Aeq,8hour}$*

5.8 Statutory Noise Nuisance

There is no quantitative definition of statutory noise nuisance. It is generally accepted however, that if the plant noise level is at least 5dB (or 10dB if tonal) below the minimum background $L_{90(15minutes)}$ at 1m from the nearest noise sensitive residential window, then the risk of a statutory noise nuisance is avoided. By adopting this as a design criterion the guidance contained in BS 4142:2014 should also be complied with.

6.0 Methodology

The survey was undertaken by Xiaoyi Li MSc BA(Hons) AMIOA, Bo Ding PhD, MSc, MIOA and assisted by Stavros Tagios MSc.

6.1 Unmanned Survey

6.1.1 Procedure

Fully automated environmental noise monitoring was undertaken from approximately 11:00 hours on 8th November 2022 for a period of 5-8 days.

Due to the nature of the survey (i.e unmanned) it is impossible to comment on the conditions throughout the survey. While we were on site the wind conditions were breezy. The sky was generally cloudy. There was moderate rainfall. We understand that throughout the survey period the conditions were similar or calmer/clearer. These conditions are considered suitable to obtain representative results.

Measurements were taken continuously of the A-weighted (dBA) L_{90}, L_{eq} and L_{max} sound pressure levels over 15-minute periods.

6.1.2 Instrumentation

The instrumentation used during the survey is presented in the table below:

Pos	Description	Manufacturer	Type	Serial Number	Calibration
1	Type 1 Data Logging Sound Level Meter	Larson Davis	824	3839	Calibration on 05/07/2022
	Type 1 ½" Condenser Microphone	PCB	377B02	106753	Calibration on 05/07/2022
	Preamp	Larson Davis	PRM902	880	Calibration on 05/07/2022
2	Type 1 Data Logging Sound Level Meter	Larson Davis	824	3053	Calibration on 09/08/2022
	Preamp	Larson Davis	PRM902	4157	Calibration on 09/08/2022
	Type 1 ½" Condenser Microphone	PCB	377B07	107417	Calibration on 09/08/2022
3	Type 1 Data Logging Sound Level Meter	Larson Davis	824	3155	Calibration on 12/08/2022
	Type 1 ½" Condenser Microphone	PCB	377B02	107427	Calibration on 12/08/2022
	Preamp	Larson Davis	PRM902	4154	Calibration on 12/08/2022
4	Type 1 Data Logging Sound Level Meter	Larson Davis	824	3700	Calibration on 07/07/2022
	Type 1 ½" Condenser Microphone	PCB	377B02	135744	Calibration on 07/07/2022
	Preamp	PCB	PRM902	4812	Calibration on 07/07/2022
5	Type 1 Data Logging Sound Level Meter	Larson Davis	824	3541	Calibration on 05/11/2021
	Type 1 ½" Condenser Microphone	PCB	377B02	107842	Calibration on 05/11/2021
	Preamp	Larson Davis	PRM902	4199	Calibration on 05/11/2021
-	Type 1 Calibrator	Bruel & Kjaer	4230	1558535	Calibration on 25/07/2022

Each sound level meter, including the extension cable, was calibrated prior to and on completion of the survey. No significant changes were found to have occurred (no more than 0.1 dB).

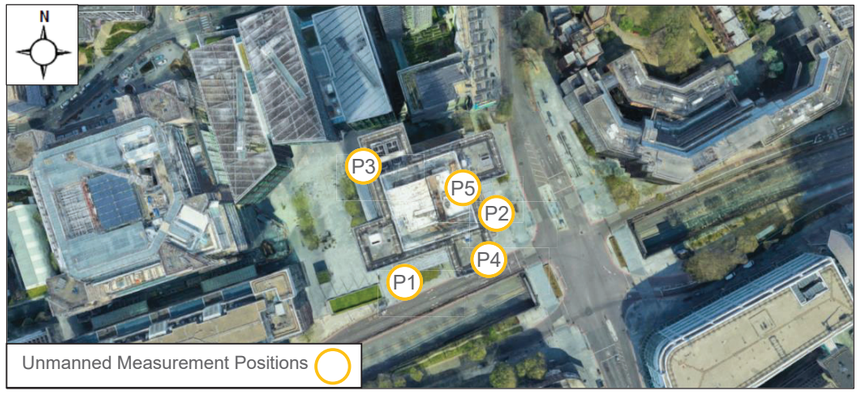
Each sound level meter was located in an environmental case with the microphone connected to the sound level meter via an extension cable. Each microphone was fitted with a windshield.

6.1.3 Measurement Positions

The noise level measurements were undertaken at 5No. positions as described in the table below.

Position No	Description
1	The sound level meter was placed on the podium roof. The microphone was attached to a pole fixed along the podium roof edge overlooking Euston Road (A501), approximately 15m from roadside and 8m above ground level.
2	The sound level meter was placed on the podium roof. The microphone was attached to a pole fixed along the podium roof edge overlooking the road junction, approximately 14m from Euston Road, 16m from Hampstead Road and 8m above ground level.
3	The sound level meter was placed on the podium roof. The microphone was attached to a pole fixed along the podium roof edge overlooking Regent's Plaza and Brock Street (pedestrians only/no motor vehicles), approximately 63m from Euston Road, 70m from Hampstead Road and 8m above ground level.
4	The sound level meter was placed on the tower roof. The microphone was attached to a pole fixed along the tower roof edge overlooking nearby road network, approximately 120m above ground level and 1.5m above the roof.
5	The sound level meter was placed on Level 11 East Staircase. The microphone was attached to a pole extruding a window overlooking nearby road network, approximately 40m above ground level and 1m from façade.

The positions are shown on the plan overleaf.



Site Plan Showing Unmanned Measurement Positions (Map Data © 2022 Google)

6.2 Manned Survey

6.2.1 Procedure

Fully manned environmental noise monitoring was undertaken from approximately 13:00 hours to 15:00 hours on Tuesday 8th November 2022.

During the survey period the wind conditions were breezy. The sky was generally cloudy. There was light rainfall between approximately 13:00 hours and 15:00 hours during the survey. Road surfaces were wet throughout the majority of the survey period.

Measurements were taken of the A-weighted (dBA) L_{90}, L_{eq} and L_{max} sound pressure levels over periods of not less than 10-15 minutes in each hour. Atypical noises were excluded as far as reasonably possible. The noise levels measured are therefore assumed to be representative of the noise climate during the hour in which the measurements were taken.

In addition, at each position typical L_{90}, L_{eq} and L_{max} octave band spectra (from 63Hz to 8kHz) were taken for a daytime period in order to gain a more detailed description of the prevailing noise climate.

6.2.2 Measurement Positions

The noise level measurements were undertaken at 2No. position around the development site. The measurement positions are described in the table below.

Position No	Description
M1	The sound level meter was hand-held. The microphone was positioned approximately 1.5m above ground level and 3m from Euston Road (A501).
M2	The sound level meter was hand-held. The microphone was positioned approximately 1.5m above ground level and 6m from Hampstead Road.

The manned measurements positions are shown on the plan below.

Site Plan Showing Manned Measurement Positions (Map Data © 2022 Google)

6.2.3 Instrumentation

The instrumentation used during the manned survey is presented in the table below:

Description	Manufacturer	Type	Serial Number	Calibration
Type 1 ½" Condenser Microphone	ACO Pacific	7052E	71752	Calibration on 08/08/2022
Type 1 Preamp	Bruel & Kjaer	ZC0032	27782	Calibration on 08/08/2022
Type 1 Data Logging Sound Level Meter	Bruel & Kjaer	2250	3025254	Calibration on 08/08/2022
SLM Calibrator	Bruel & Kjaer	4231	2308993	Calibration on 04/08/2022

The sound level meter was hand-held and was fitted with a Brüel and Kjær microphone windshield.

The sound level meter was calibrated prior to and on completion of the survey. No significant change was found to have occurred (no more than 0.1dB).

7.0 Results

7.1 Results of Unmanned Survey

The results have been plotted on Time History Graphs 29605/TH1 to 29605/TH5 enclosed presenting the 15 minute A-weighted (dBA) L_{90}, L_{eq} and L_{max} levels at each measurement position throughout the duration of the survey.

The following table presents the lowest measured L_{A90} background noise levels during the survey:

Position	Lowest Measured L_{A90} Background Noise Level (dB re 2 x 10^{-5} Pa)		
	Daytime (07:00 – 23:00) Hours	Night-time (23:00 – 07:00) Hours	24 Hours
1	59	53	53
2	53	47	47
3	51	47	47
4	52	51	51
5	58	55	55

The following table presents the measured $L_{Aeq,T}$ noise levels during the survey:

Position	Measured $L_{Aeq,T}$ Noise Level (dB re 2 x 10^{-5} Pa)	
	Daytime (07:00 – 23:00) Hours, $L_{Aeq,16hr}$	Night-time (23:00 – 07:00) Hours, $L_{Aeq,8hr}$
1	68	67
2	66	63
3	62	57
4	60	57
5	70	67

7.2 Results of Manned Survey

The fully manned survey measurements A-weighted (dBA) L_{90}, L_{eq} and L_{max} sound levels are recorded below.

Position	Time	Sound Levels dBA		
		L_{90}	L_{eq}	L_{max}
M1	13:00 to 13:15 hours	63	69	81

Position	Time	Sound Levels dBA		
		L_{90}	L_{eq}	L_{max}
M2	14:45 to 14:55 hours	66	71	85

8.0 Discussion Of Noise Climate

During the periods we were on site the dominant noise sources were noted to be continuous road traffic on Euston Road (A501) and Hampstead Road. This included regular buses and heavy goods vehicles (HGVs).

Regular acceleration of road vehicles was noted as they accelerated from the traffic lights on Euston Road (A501) and Hampstead Road.

Passing conversing pedestrians was also noted during the attended measurements at street level.

9.0 Plant Noise Emission Criteria

Building services plant external noise emission levels will need to comply with local planning/environmental authority requirements and statutory noise nuisance legislation.

On the basis of the aforementioned Local Authority's requirements and the results of the environmental noise survey, we propose that the following plant noise emission criteria be achieved at 1 metre from the nearest noise sensitive residential/UCLH windows.

Pos.	Noise Sensitive Receptors	BS 4142 Rating Level Limit (dBA)		
		Daytime (07:00 – 23:00 hours)	Night-time (23:00 – 07:00 hours)	24 hours
1	Lizman House, Warren Court	49	43	43
2	UCLH, 175 Drummond St	43	37	37
3	20 Brock St	41	37	37
4	177 Drummond St	42	41	41
5	-	48	45	45

The above criteria are to be achieved with all of the proposed plant operating simultaneously.

If plant contains tonal or impulsive characteristics the external design criteria should be reduced by 5dBA.

It should be noted that the above are subject to the final approval of the Local Authority.

For life safety standby plant, only used in emergencies and occasional testing - e.g. smoke extract fans and life safety generators - relaxations of the internal and external criteria are normally acceptable but should comply with local authority and occupational requirements and must not interfere with internal audible emergency alarms.

10.0 Conclusions

An environmental noise survey has been undertaken in order to establish the currently prevailing noise levels.

Results of the noise survey have been presented herein which will be used to inform various aspects of the acoustic design.

Plant noise emission criteria have been recommended based on the results of the noise survey and with reference to the Local Authority's requirements.

Appendix A

The acoustic terms used in this report are defined as follows:

dB — Decibel - Used as a measurement of sound level. Decibels are not an absolute unit of measurement but an expression of ratio between two quantities expressed in logarithmic form. The relationships between Decibel levels do not work in the same way that non-logarithmic (linear) numbers work (e.g. 30dB + 30dB = 33dB, not 60dB).

dBA — The human ear is more susceptible to mid-frequency noise than the high and low frequencies. The 'A'-weighting scale approximates this response and allows sound levels to be expressed as an overall single figure value in dBA. The $_A$ subscript is applied to an acoustical parameter to indicate the stated noise level is A-weighted

It should be noted that levels in dBA do not have a linear relationship to each other; for similar noises, a change in noise level of 10dBA represents a doubling or halving of subjective loudness. A change of 3dBA is just perceptible.

$L_{90,T}$ — L_{90} is the noise level exceeded for 90% of the period *T* (i.e. the quietest 10% of the measurement) and is often used to describe the background noise level.

$L_{eq,T}$ — $L_{eq,T}$ is the equivalent continuous sound pressure level. It is an average of the total sound energy measured over a specified time period, *T*.

L_{max} — L_{max} is the maximum sound pressure level recorded over the period stated. L_{max} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the L_{eq} noise level.

L_p — Sound Pressure Level (SPL) is the sound pressure relative to a standard reference pressure of 2×10^{-5} Pa. This level varies for a given source according to a number of factors (including but not limited to: distance from the source; positioning; screening and meteorological effects).

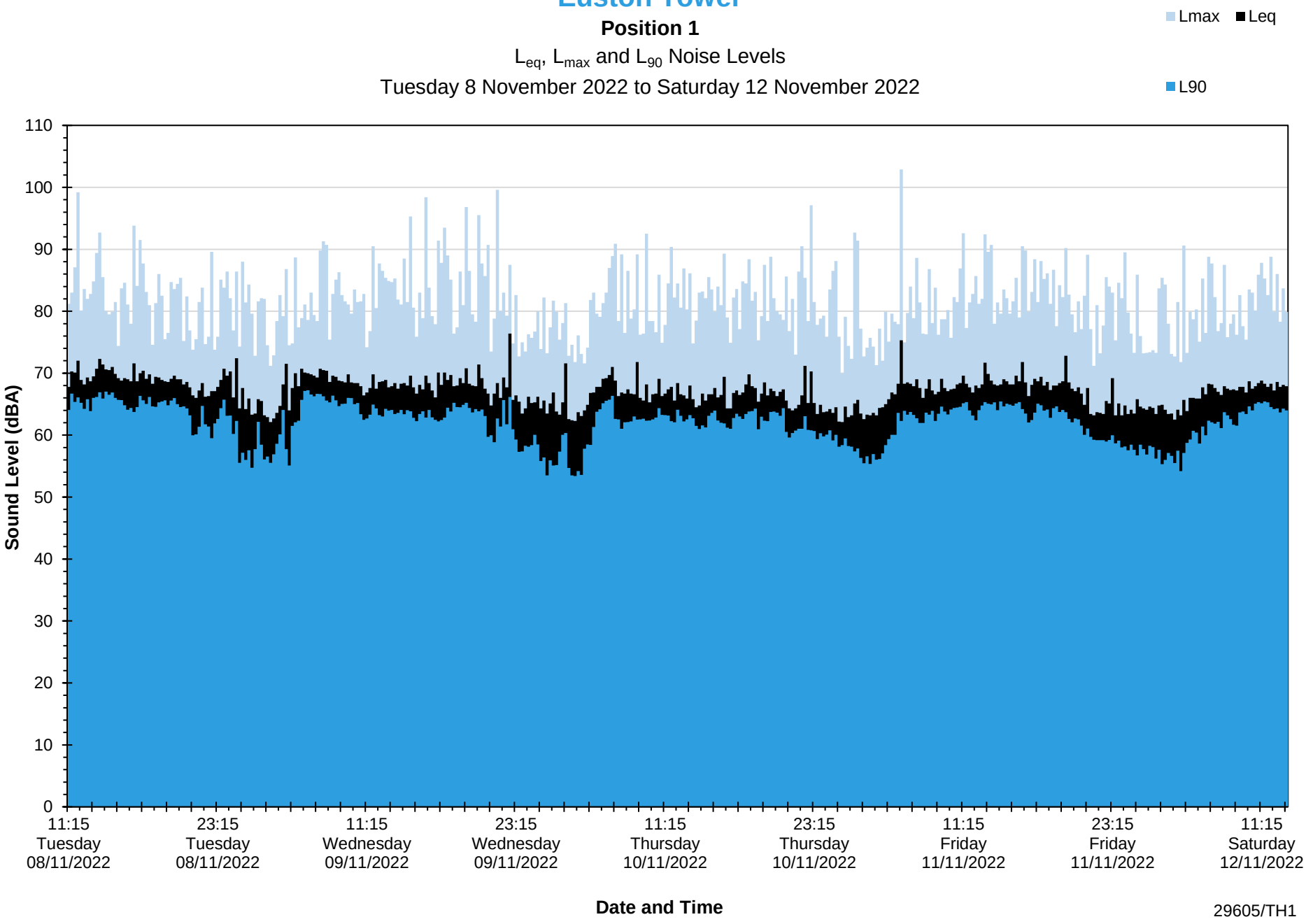
L_w — Sound Power Level (SWL) is the total amount of sound energy inherent in a particular sound source, independent of its environment. It is a logarithmic measure of the sound power in comparison to a specified reference level (usually 10^{-12} W).

Euston Tower

Position 1

L_{eq}, L_{max} and L_{90} Noise Levels

Tuesday 8 November 2022 to Saturday 12 November 2022



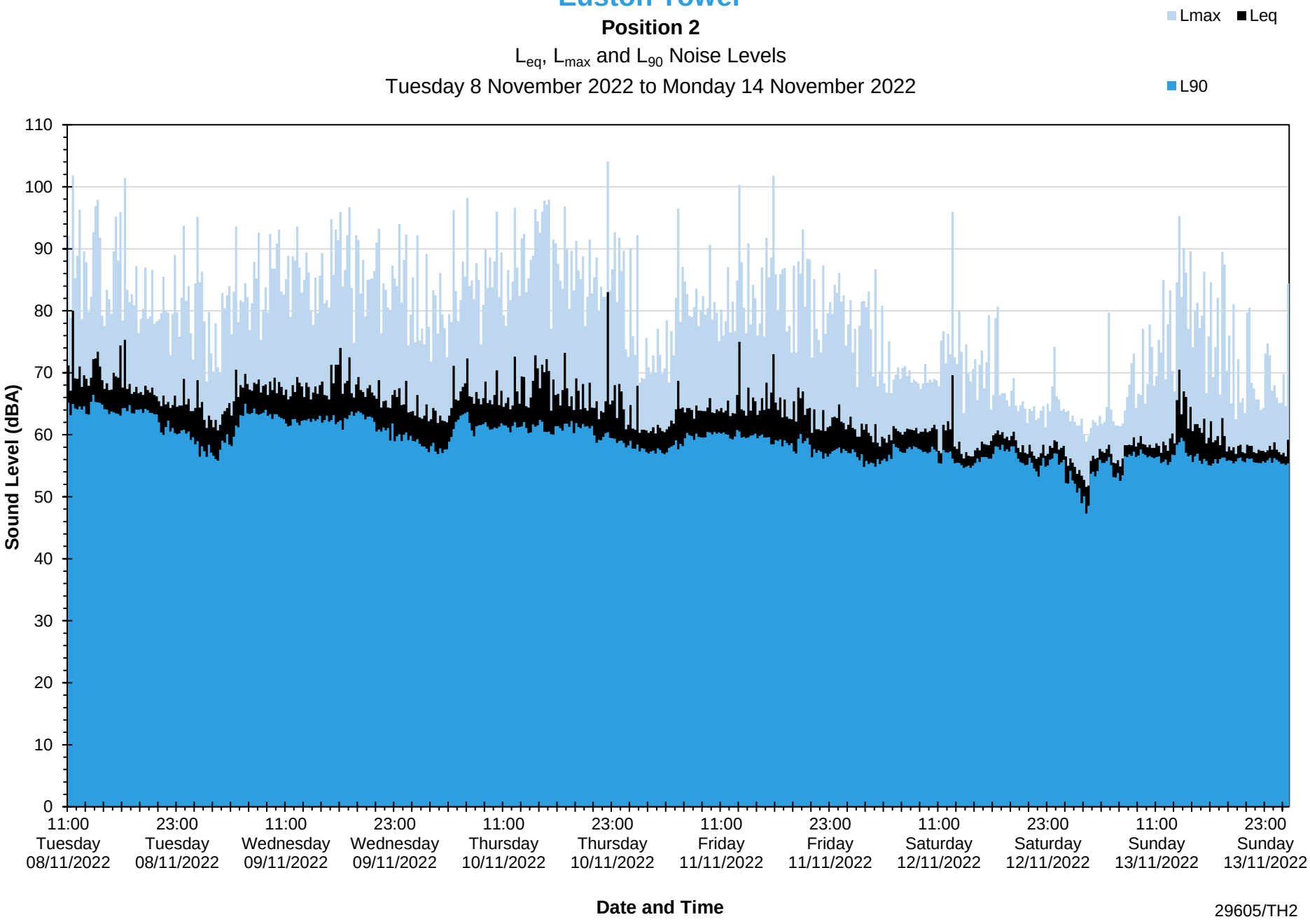
29605/TH1

Euston Tower

Position 2

L_{eq}, L_{max} and L_{90} Noise Levels

Tuesday 8 November 2022 to Monday 14 November 2022



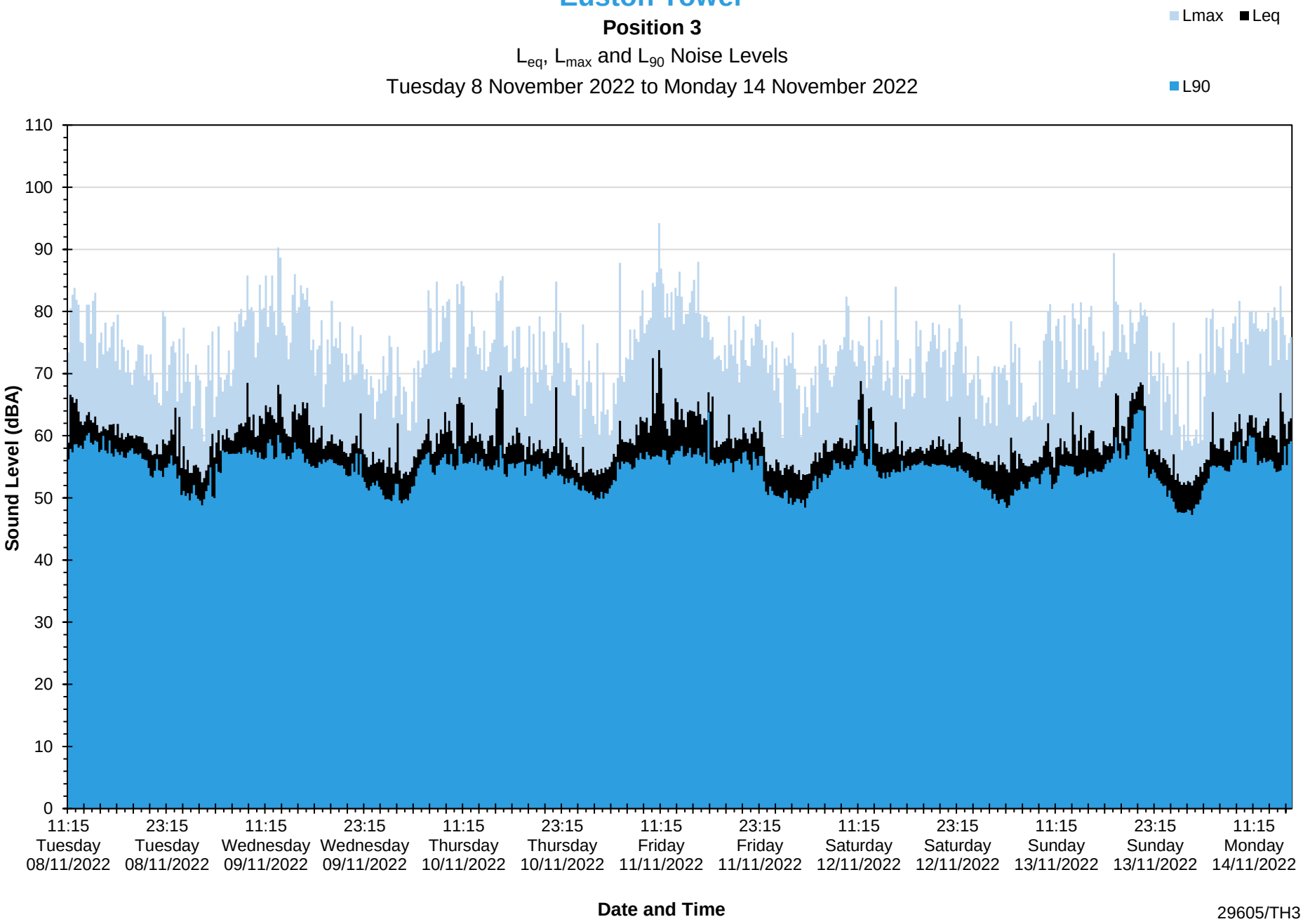
29605/TH2

Euston Tower

Position 3

L_{eq}, L_{max} and L_{90} Noise Levels

Tuesday 8 November 2022 to Monday 14 November 2022



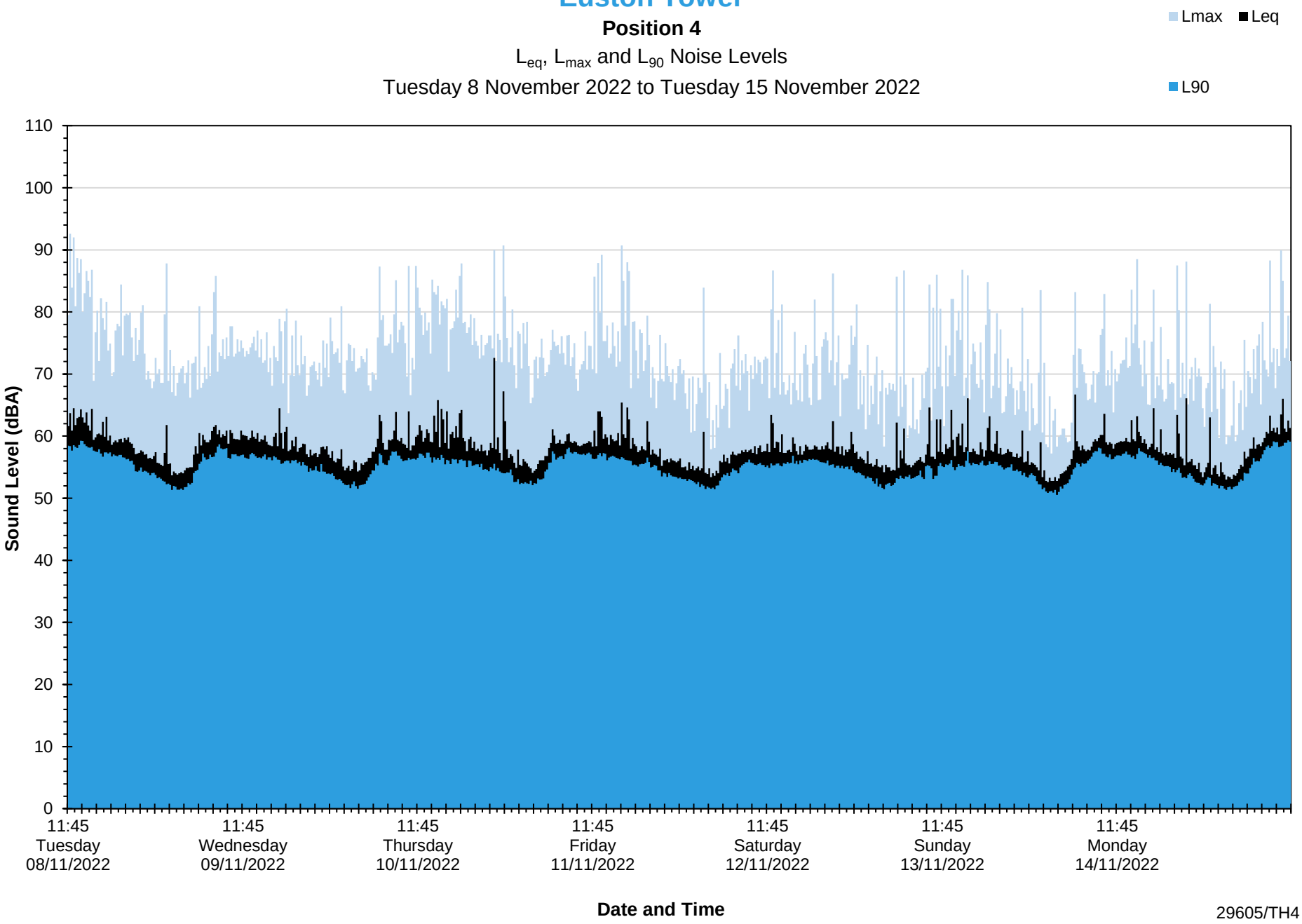
29605/TH3

Euston Tower

Position 4

L_{eq}, L_{max} and L_{90} Noise Levels

Tuesday 8 November 2022 to Tuesday 15 November 2022



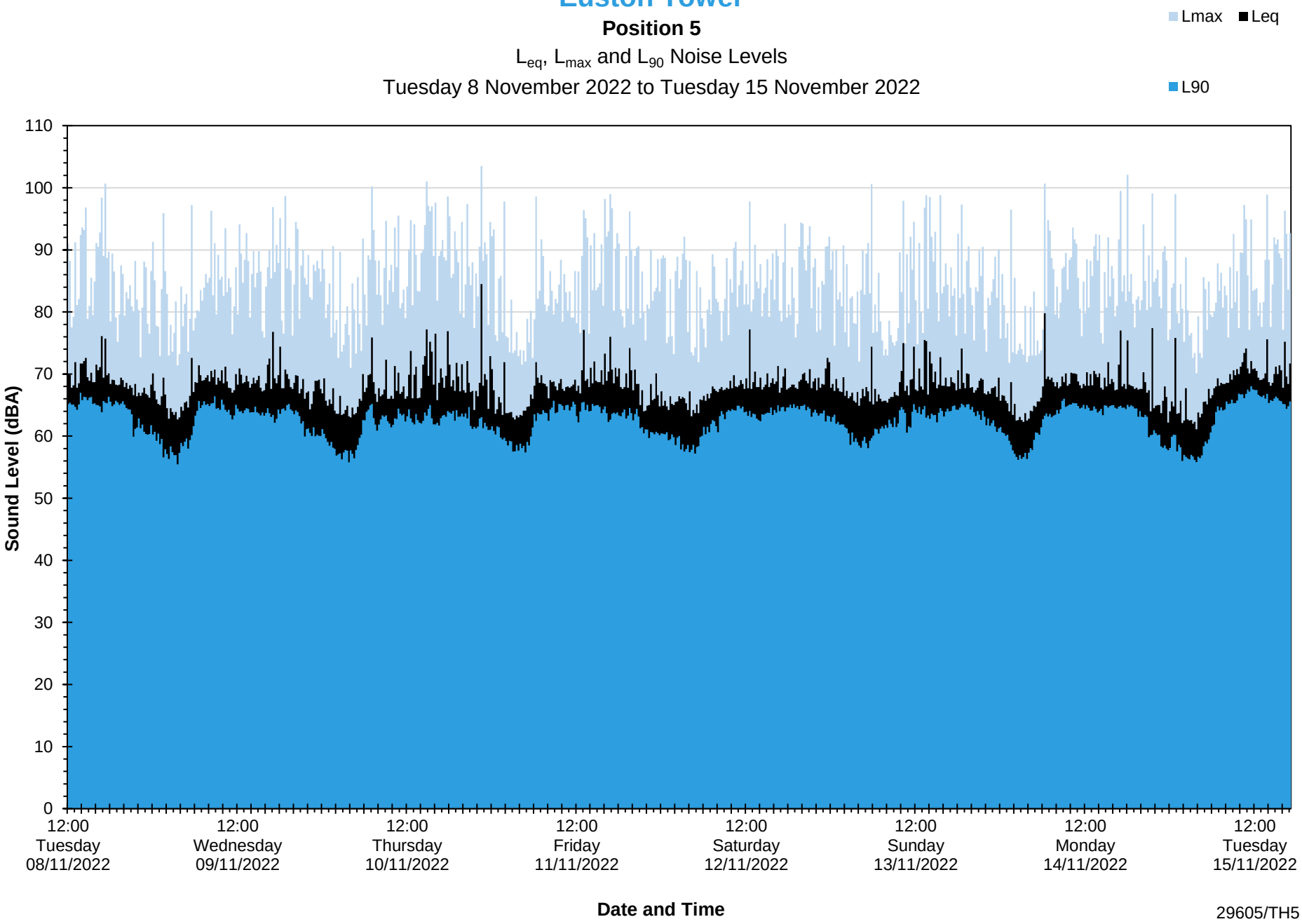
29605/TH4

Euston Tower

Position 5

L_{eq}, L_{max} and L_{90} Noise Levels

Tuesday 8 November 2022 to Tuesday 15 November 2022



29605/TH5

Appendix: Noise and Vibration

Annex 1: Acoustic Terminology

Annex 2: Environmental Noise Survey Report

Annex 3: Noise Modelling Assumptions

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ANNEX 3 – NOISE MODELLING ASSUMPTIONS

Introduction

Hann Tucker have reviewed **ES Volume 1, Chapter 5: Demolition and Construction** and communicated with the design team to formulate an assumed list of fixed and mobile plant items, number of, operational durations and locations during the following key stages:

Timeslice 1

- Demolition: deconstruction of the existing concrete frame structure
- Earthworks: decommissioning and relocation of existing services and utilities within the basement level of the site

Timeslice 2

- Substructure Construction: installation of concrete superstructure

Timeslice 3

- Installation of Envelope and Cladding; installation of unitised cladding panels to the outer face of the superstructure

Noise data for the assumed plant equipment has been derived from the sound level data set out in Annex C of ‘BS 5229-1 Code of practice for noise and vibration control on construction and open sites’.

The table overleaf presents the plant items and associated noise data considered in predictive noise modelling for each timeslice.

Timeslice	Activity	Equipment	No.	% Operating Time (of the day)	BS5228 Ref	SWL	LAeq @10
1	Enabling Works, Demo/Deconstruction and Piling/Basement Box Construction	9T Dumper	1	15	C.1.19	97	69
		5T excavator with hydraulic breaker attachment	2	60	C.1.9	118	90
		14T Excavator	2	50	C.1.17	111	83
		Mobile Crane	1	50	C.4.45	110	82
		Tower Crane (core top)	1	60	C.4.49	105	77
		Diamond Core Drill	1	50	C.4.69	113	85
		Hand Held Breaker	1	50	C.1.7	121	93
		Angle Grinder cutting concrete	1	40	C.4.73	115	84
		Hand Tools	4	40	C.1.19	97	69
		HGV Delivery trucks	1	20	C.6.21	108	80
		Muck Wagons Away	4	40	C.2.27	109	81
		Concrete Pump	2	50	C.4.28	103	75
		Concrete Mixer	2	50	D.6.7	104	76
		CFA Rig	2	50	C.3.21	107	79
		Platform Hoist	2	75	D.7.98	104	77
2	Superstructure: installation of concrete superstructure	Tower Crane (core top, N & S)	3	60	C.4.49	105	77
		Cherry picker	6	60	C.4.53	105	77
		Hand Tools	8	40	C.1.19	97	69
		Concrete Pump	2	50	C.4.28	103	75
		Concrete Mixer	2	50	D.6.7	104	76
		Muck Wagons Away	4	40	C.2.27	109	81
		HGV Delivery trucks	4	20	C.6.21	108	80
		Platform Hoist	4	75	D.7.98	104	77
3	Installation of Envelope and Cladding; installation of unitised cladding panels to the outer face of the superstructure	Mobile Spider / Floor Crane	1	60	C.4.45	110	82
		Tower Crane (core top, N & S)	3	80	C.4.49	105	77
		HGV Delivery trucks	10	20	C.6.21	108	80

Timeslice	Activity	Equipment	No.	% Operating Time (of the day)	BS5228 Ref	SWL	LAeq @10
		Angle Grinder	2	40	C.4.93	108	80
		Hand Tools	8	40	C.1.19	97	69
		Platform Hoist	4	75	D.7.98	104	77

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:
- Area analysed
- Area with more than 2 hours of direct sunlight
- Area with less than 2 hours of direct sunlight
- 50% Percentage of area with more than 2 hours of direct sunlight

N

Project: Euston Tower,
London

Title: BRE 2 Hour Sunlight Test
21st March
Existing

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	1:1250	NOV 23	P2193/SHA/12	13

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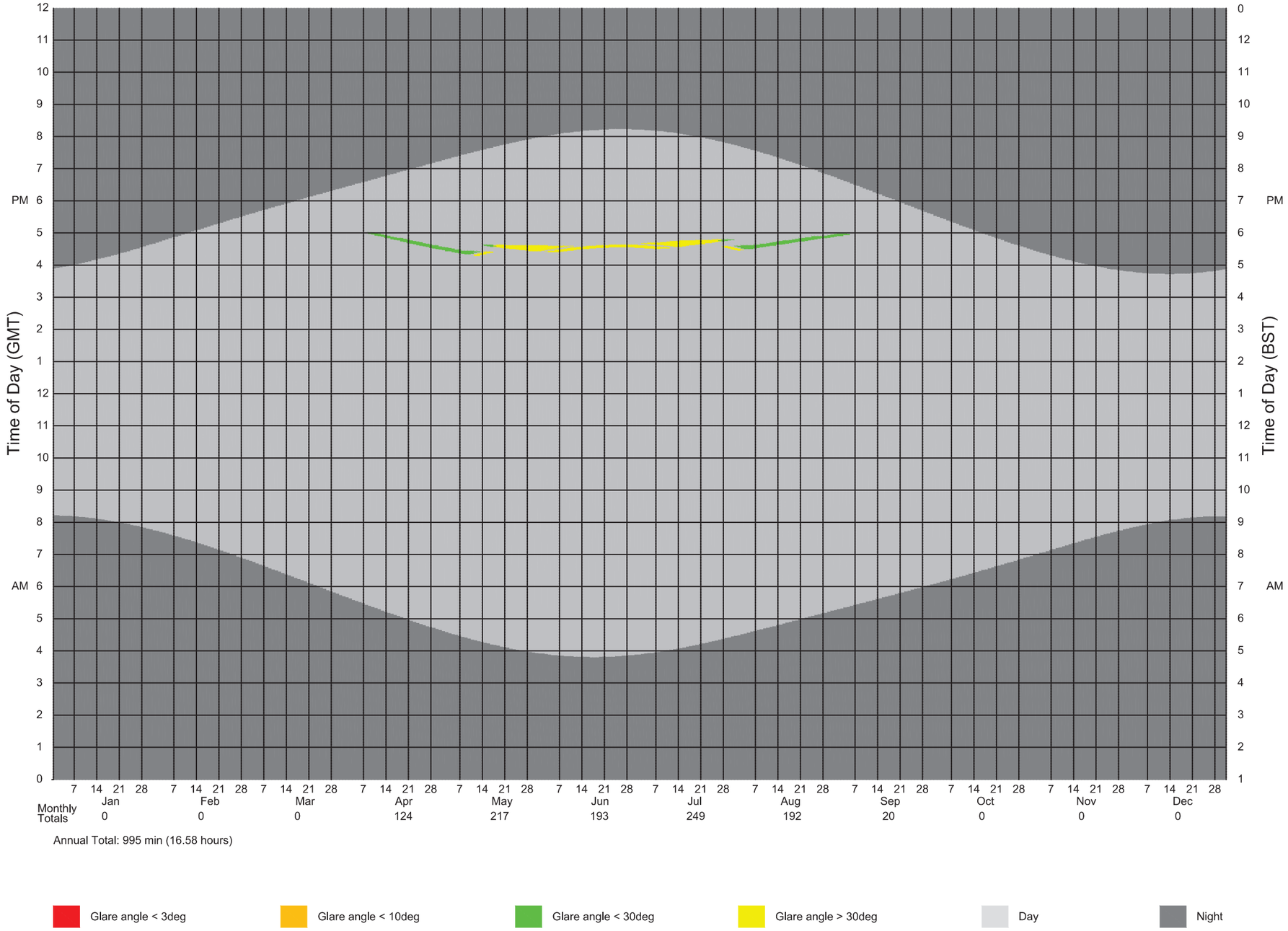
Appendix: Daylight, Sunlight, Overshadowing and Solar Glare

Annex 5 – Solar Glare

Viewpoint 1

Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

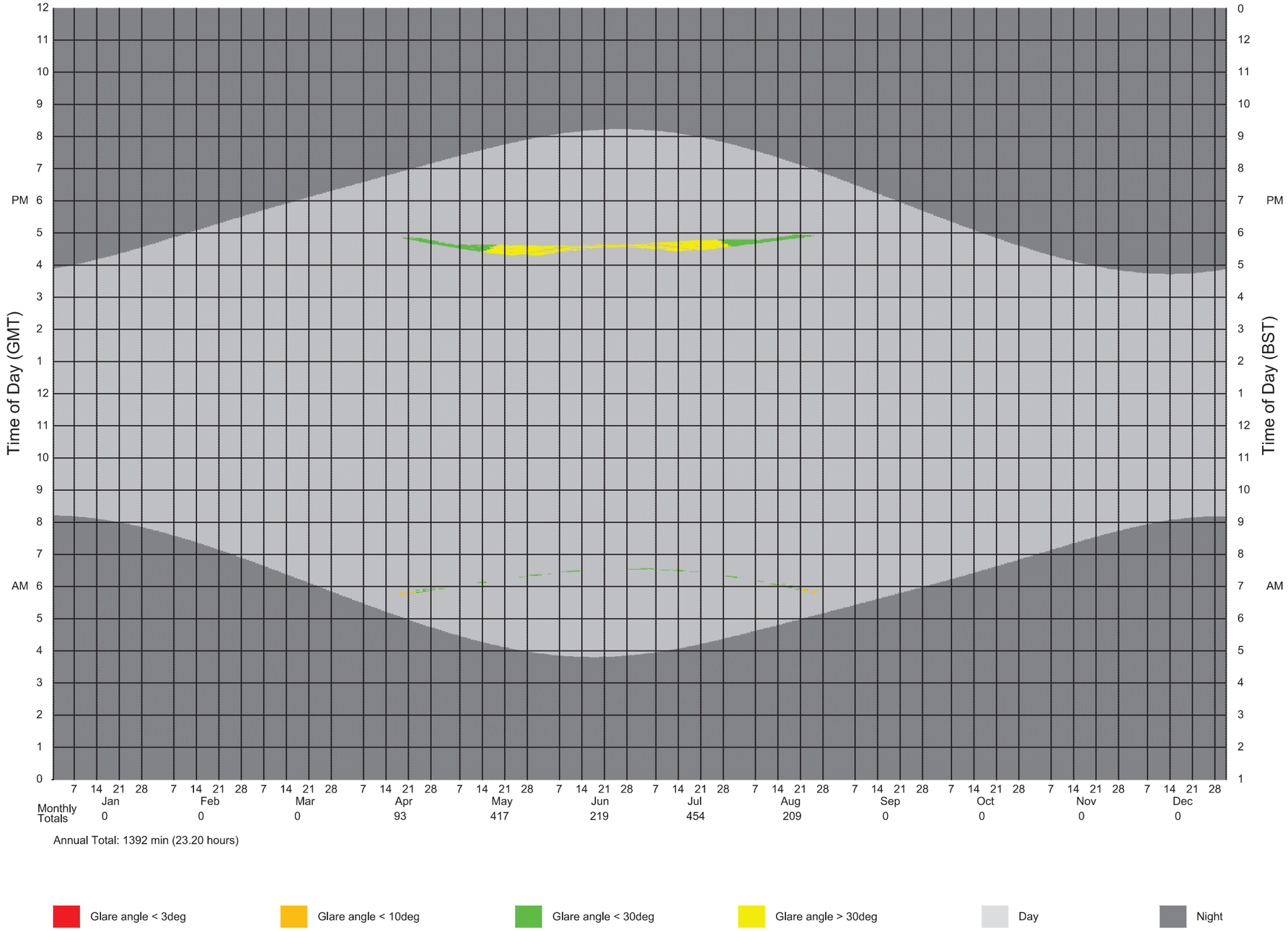
Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Existing Scheme

Viewpoint 01

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	-	OCT 23	P3293/GC/01	12

Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

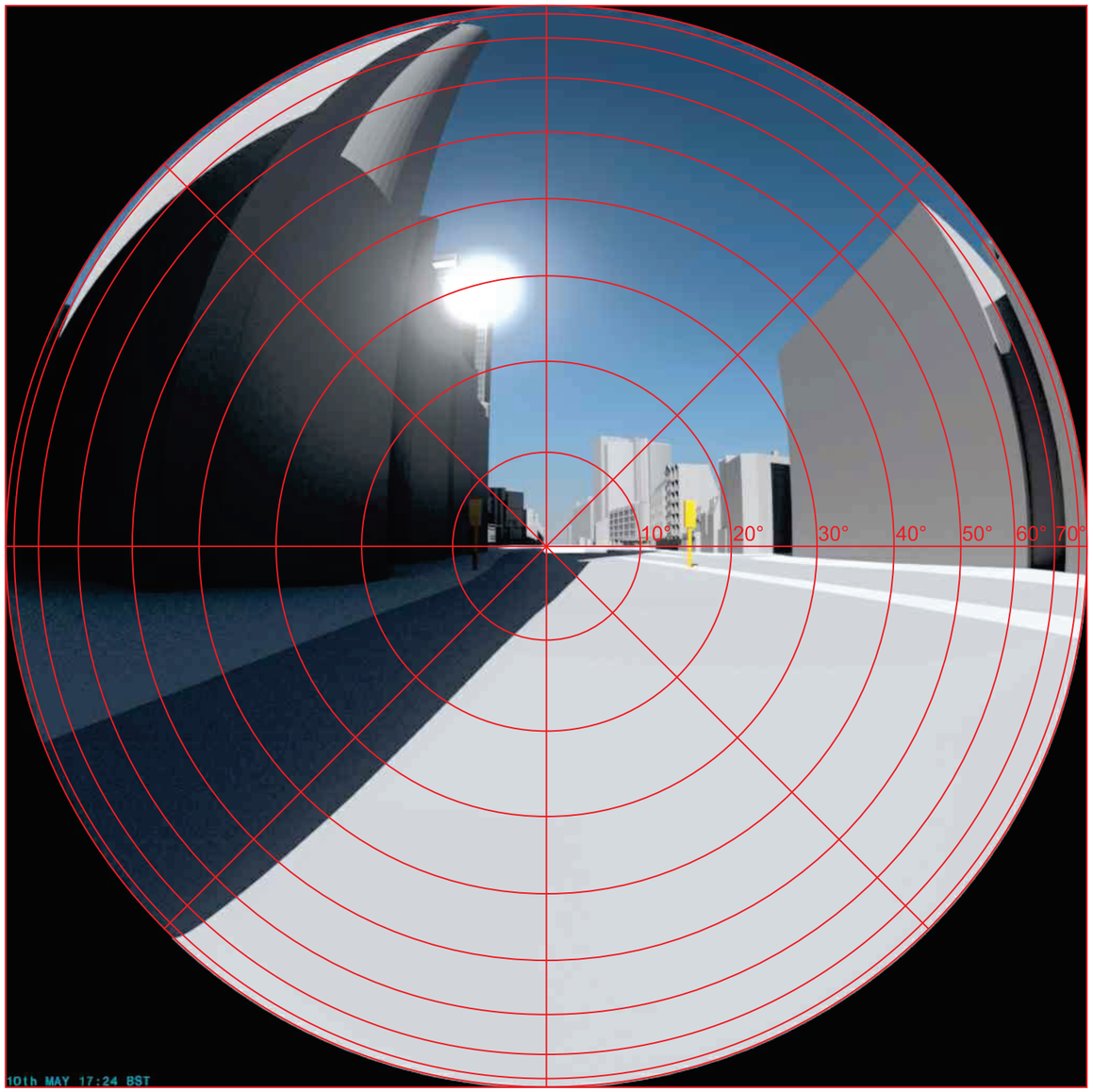
Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Proposed Scheme

Viewpoint 01

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	-	OCT 23	P3293/GC/07	12



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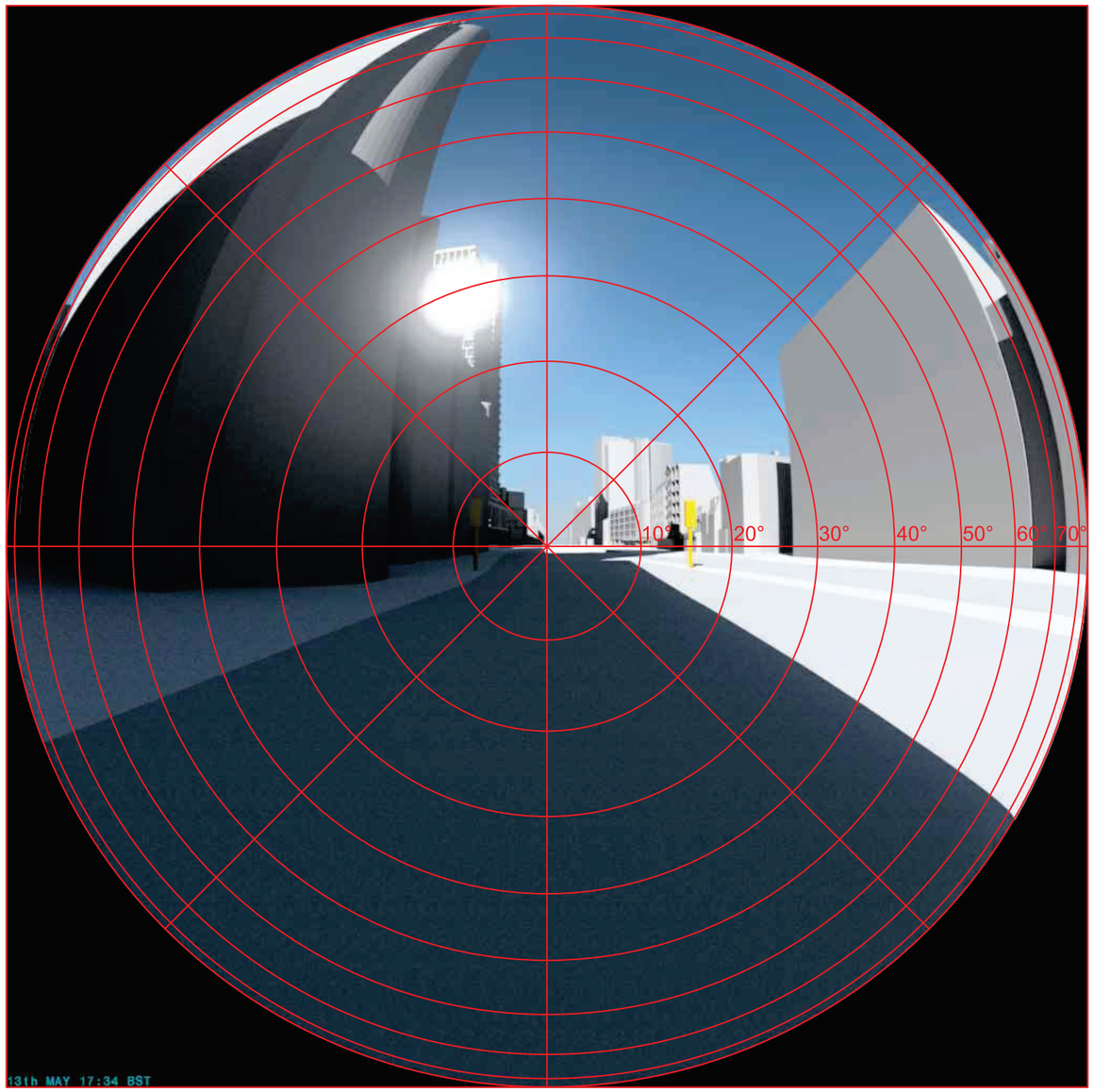

PROPOSED SCHEME
13th May - 17:34

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Images
Existing vs Proposed Scheme 26/09/23

Viewpoint 1

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS @ A3	OCT 23	P3293/GI/01	12

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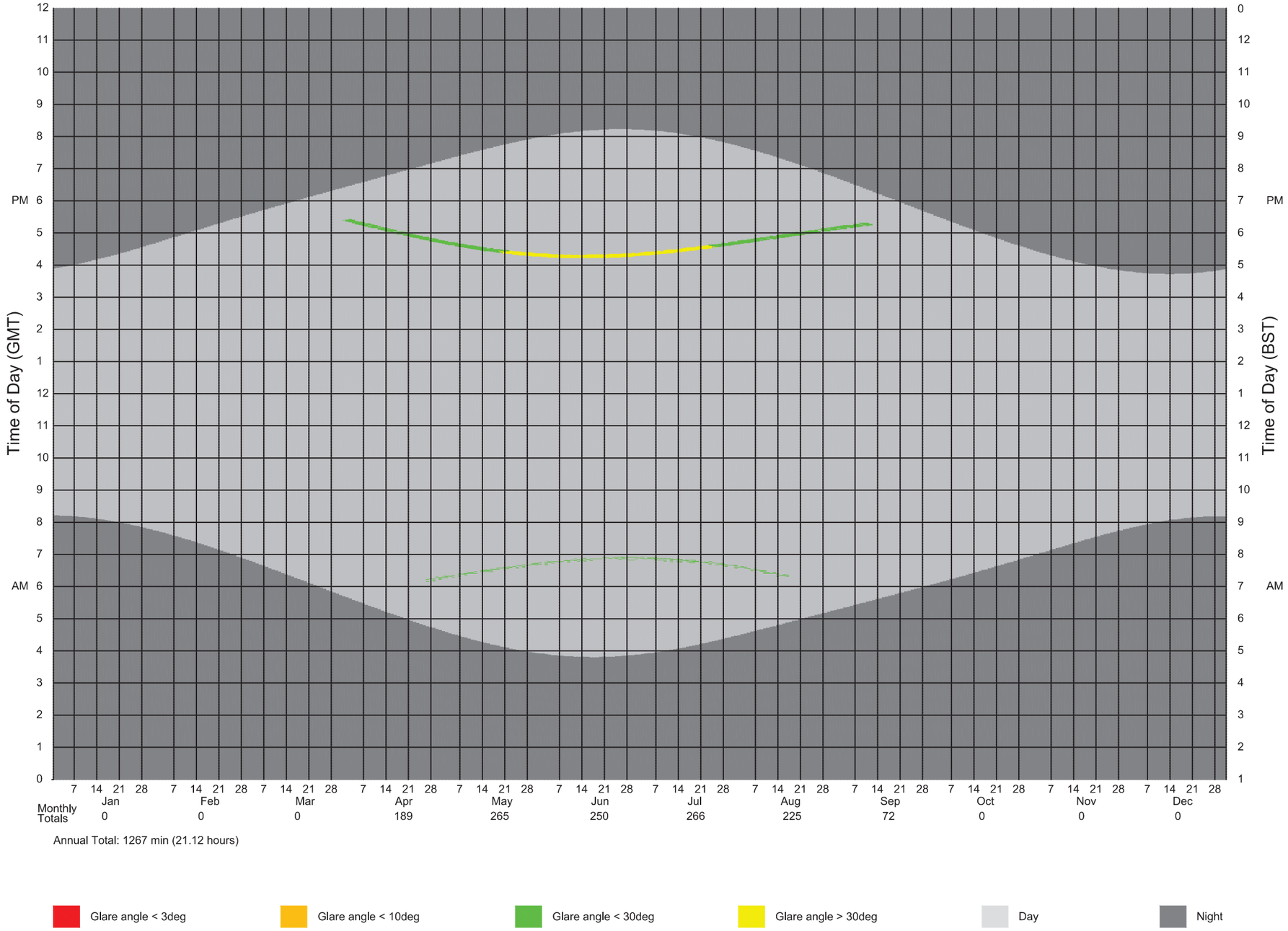
Viewpoint 2

Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Existing Scheme

Viewpoint 02

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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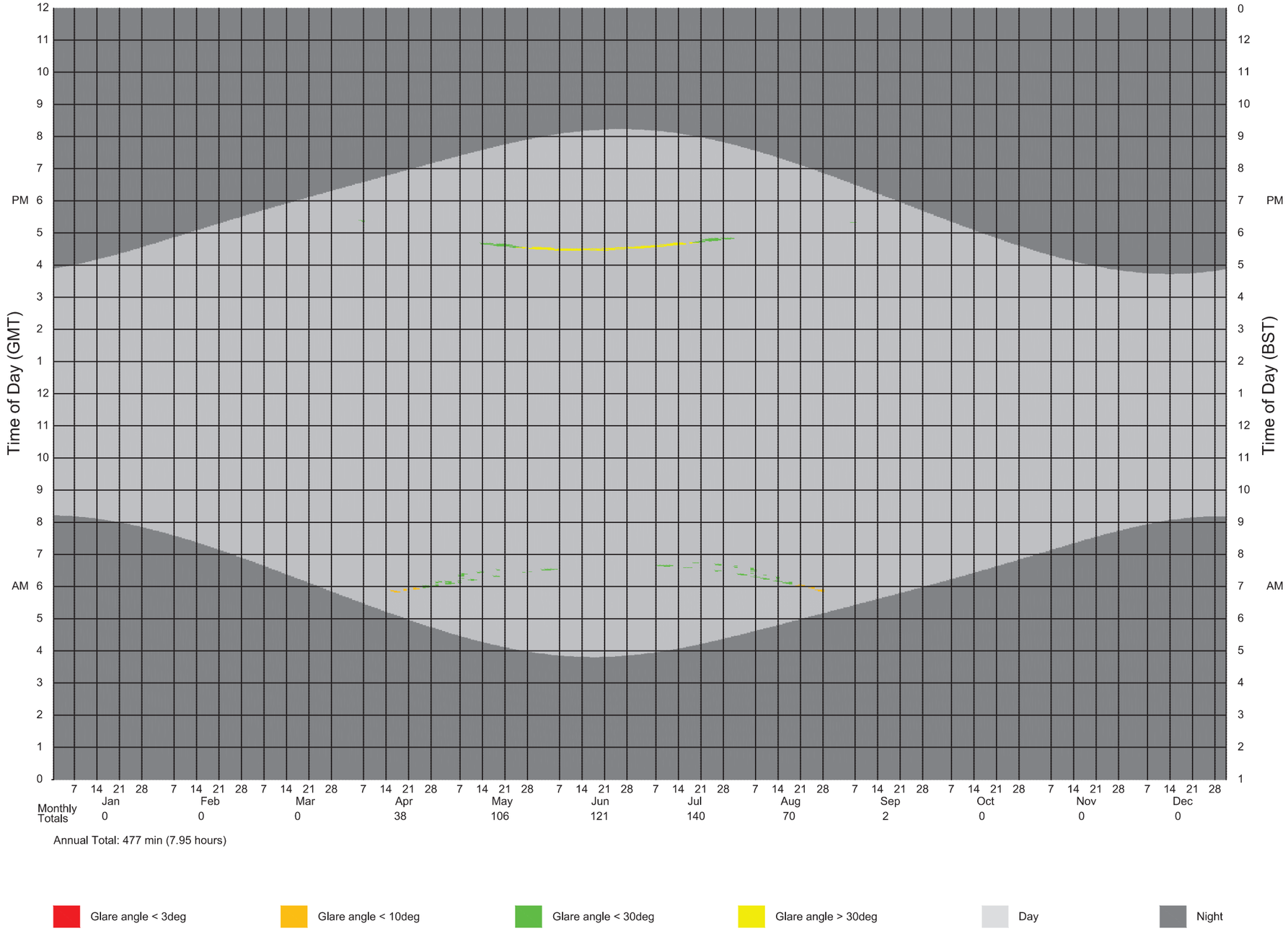
Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Proposed Scheme

Viewpoint 02

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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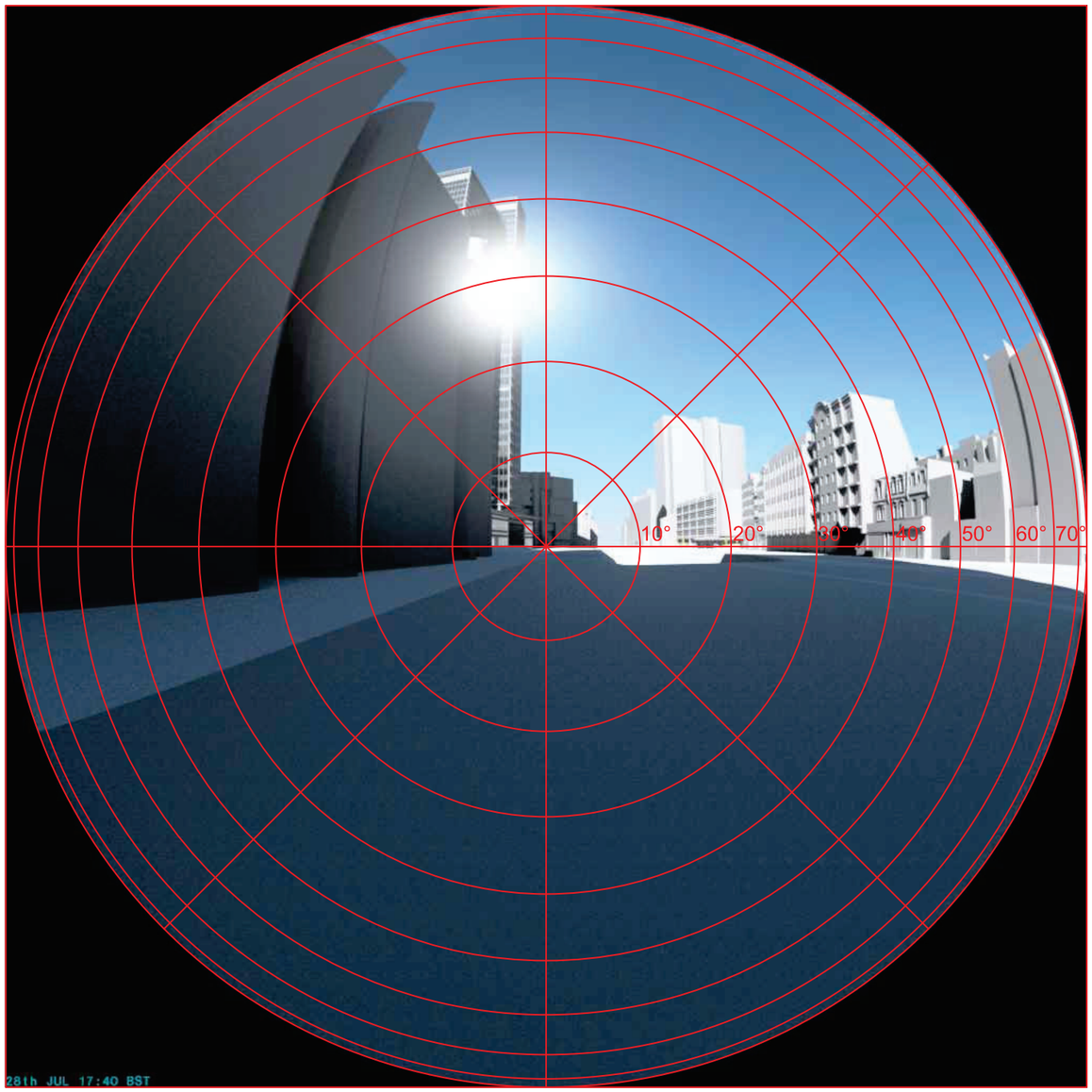

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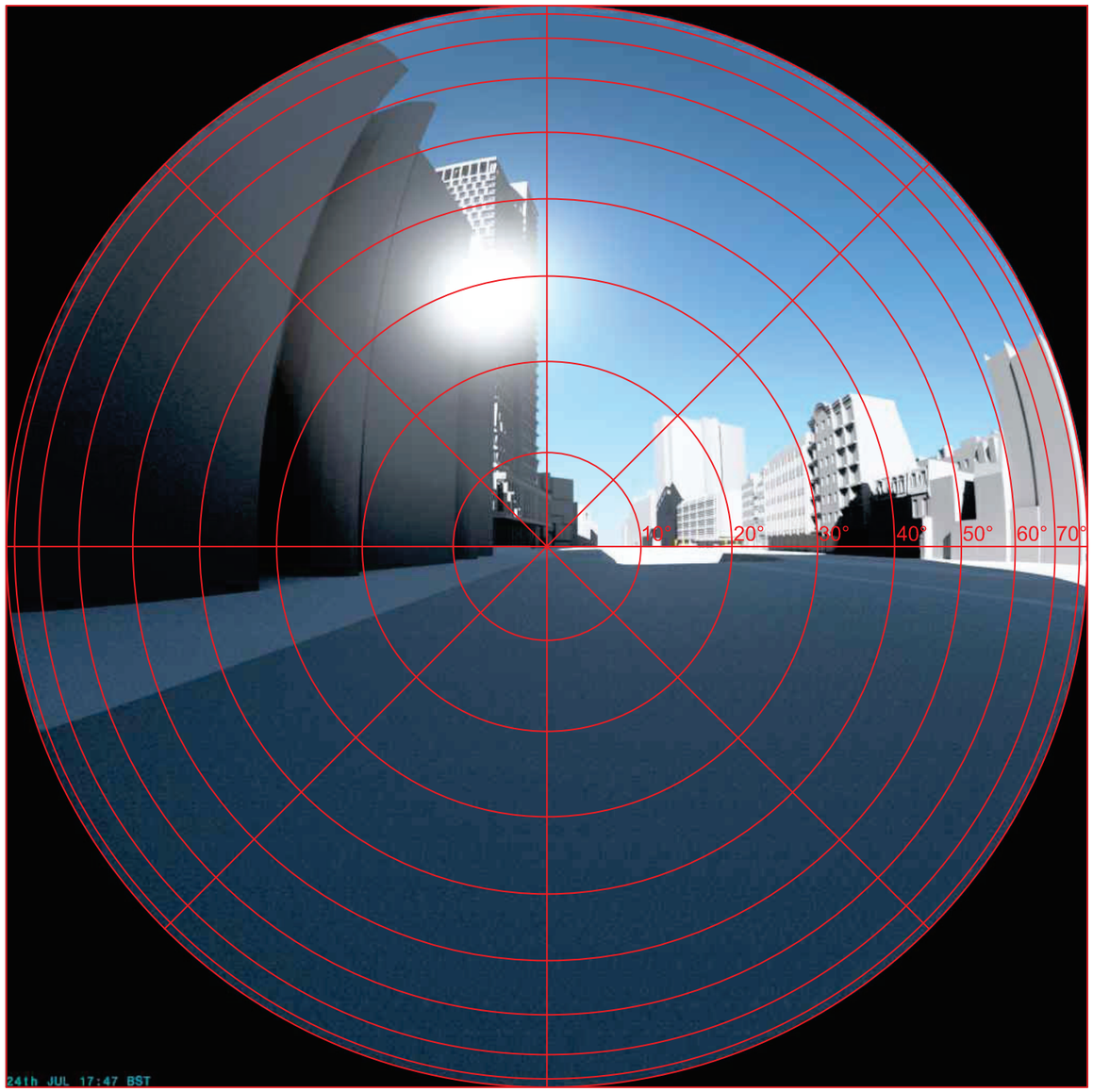

PROPOSED SCHEME
24th July - 17:47 p.m.

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Images
Existing vs Proposed Scheme 26/09/23

Viewpoint 2

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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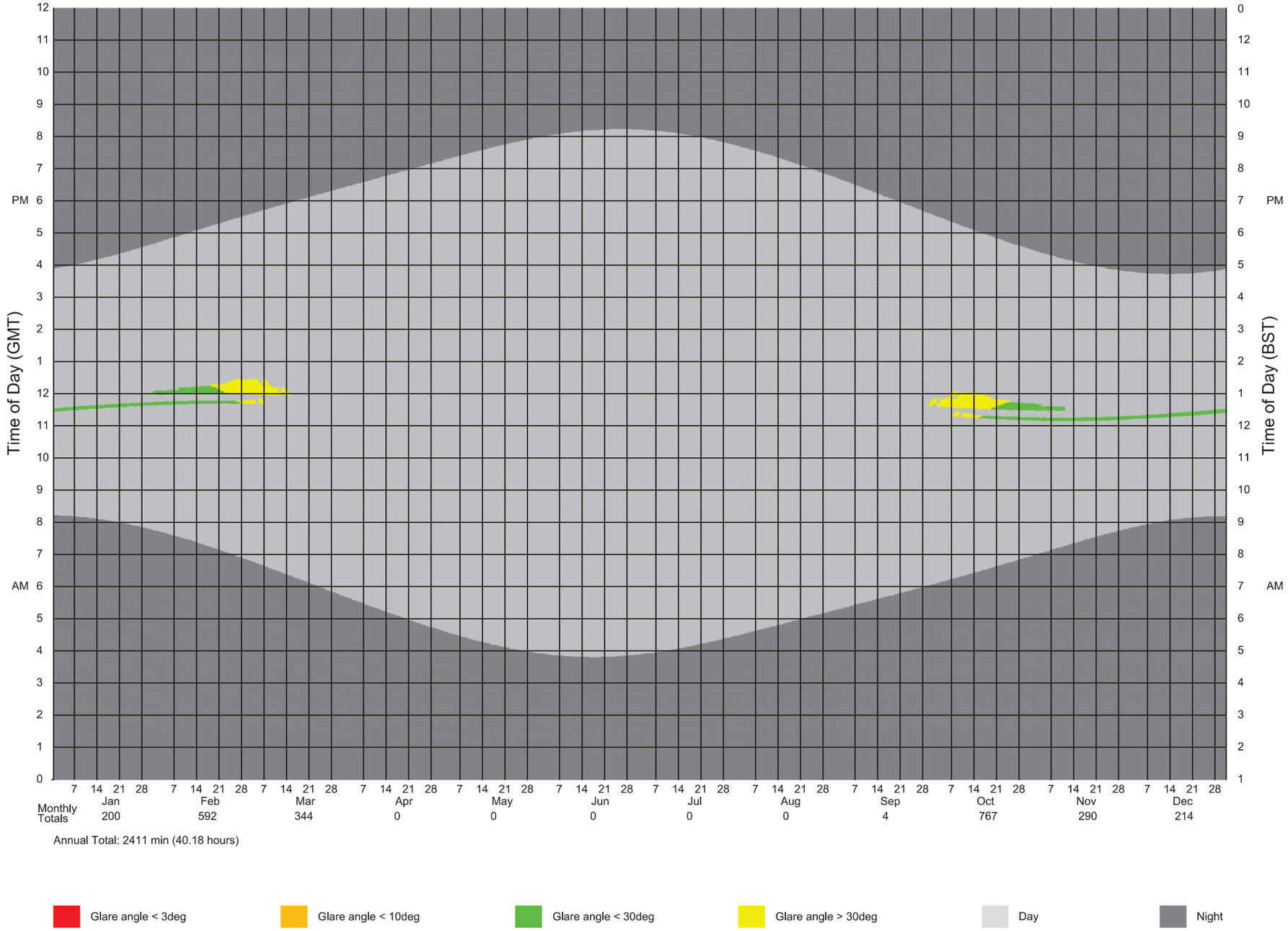
Viewpoint 3

Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

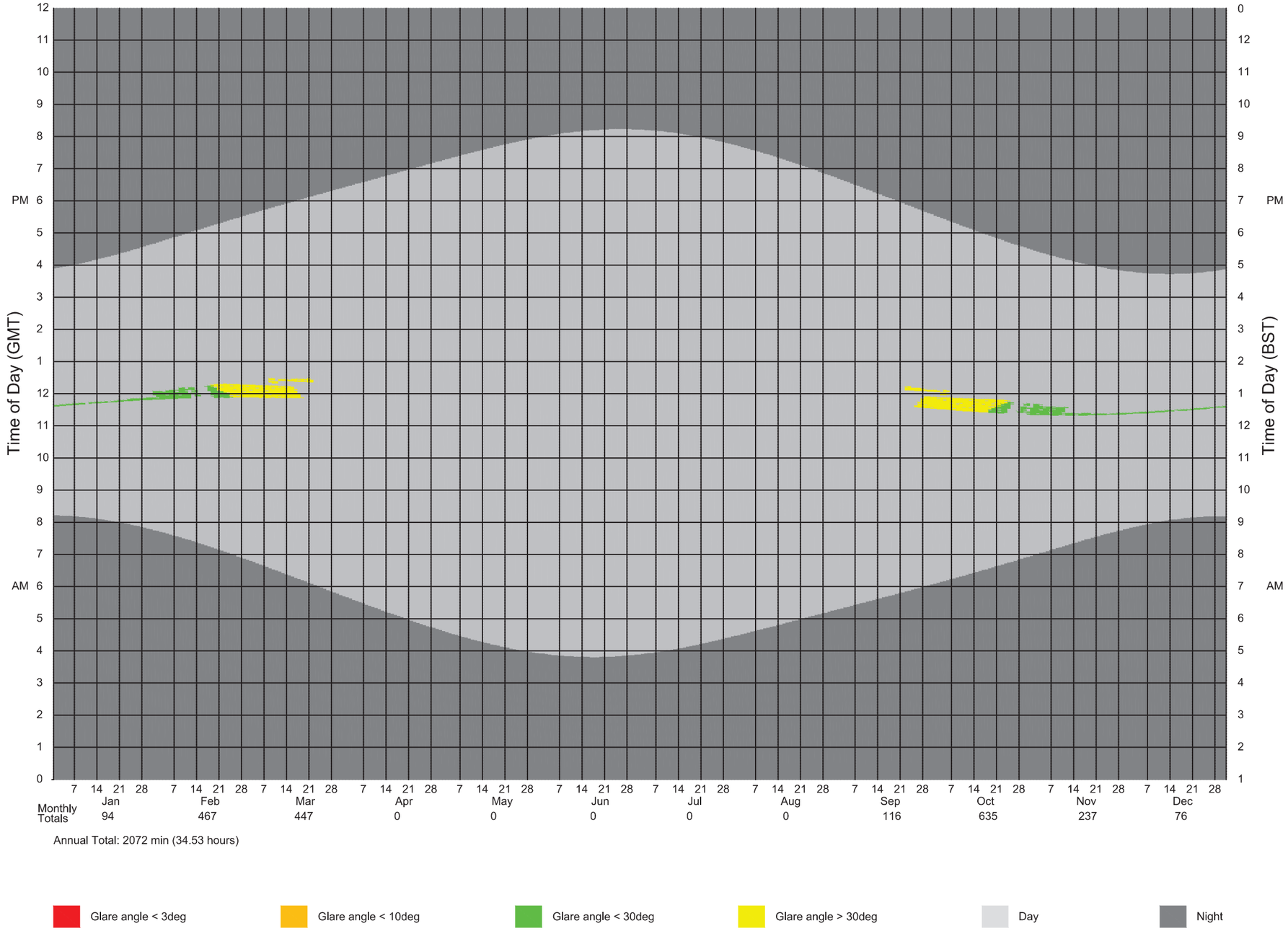
Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Existing Scheme

Viewpoint 03

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	-	OCT 23	P3293/GC/03	12

Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

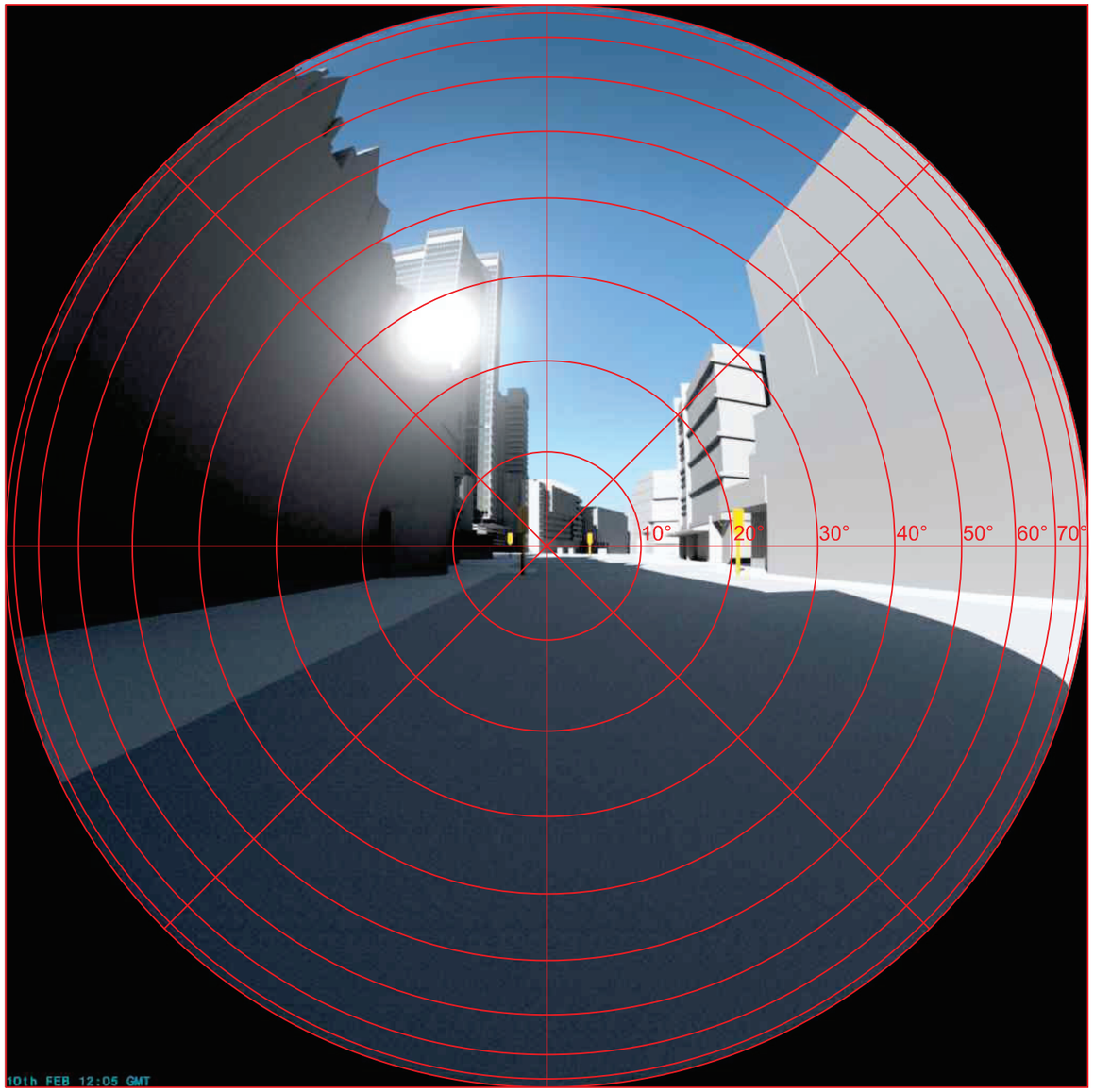
Key:

Project: Euston Tower,
London

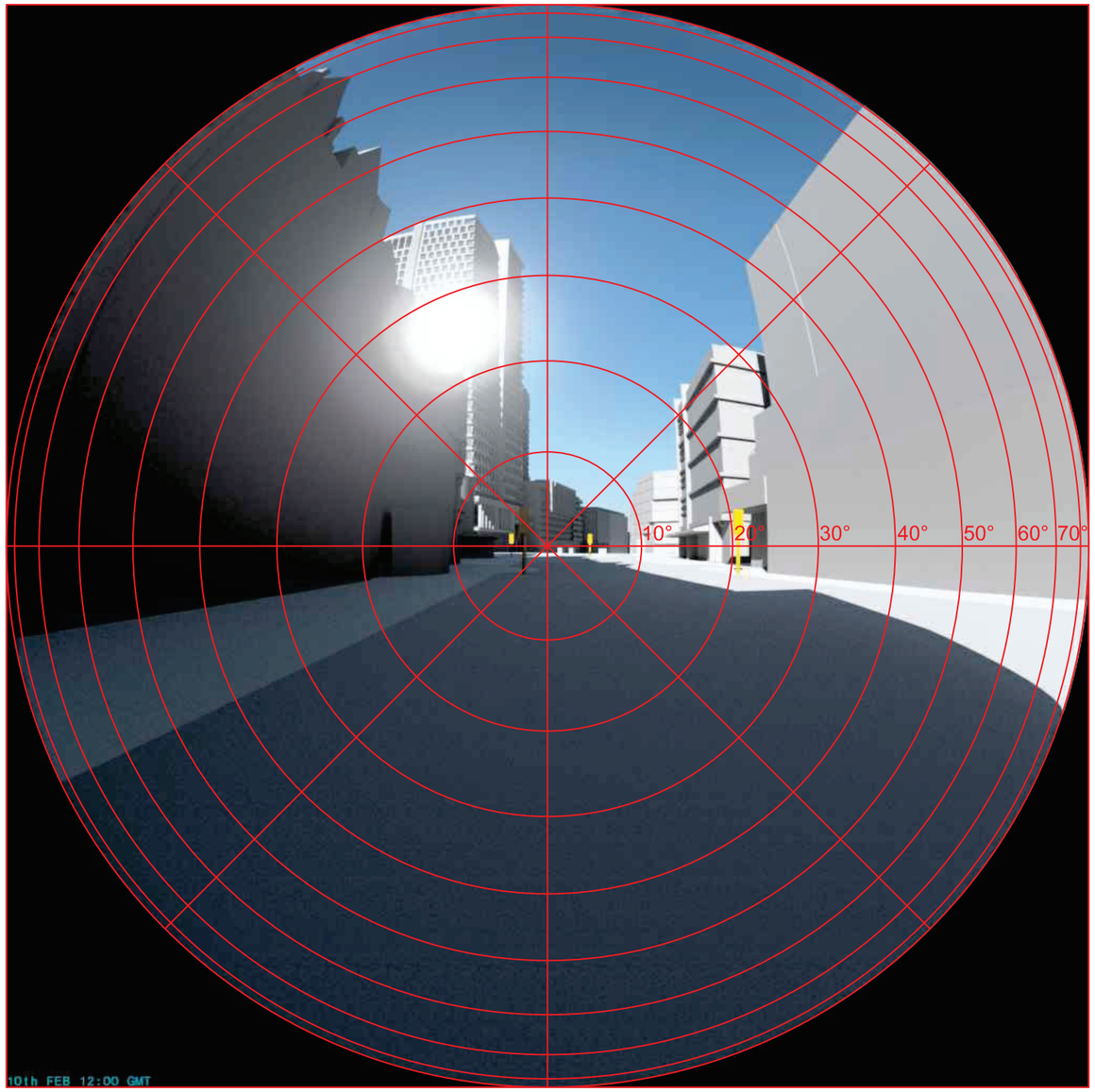
Title: Glare Calendar - Annual Temporal Disability
Proposed Scheme

Viewpoint 03

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	-	OCT 23	P3293/GC/09	12



EXISTING SCHEME
10th February - 12:05



PROPOSED SCHEME
10th February - 12:00

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Images
Existing vs Proposed Scheme 26/09/23

Viewpoint 3

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS @ A3	OCT 23	P3293/GI/03	12

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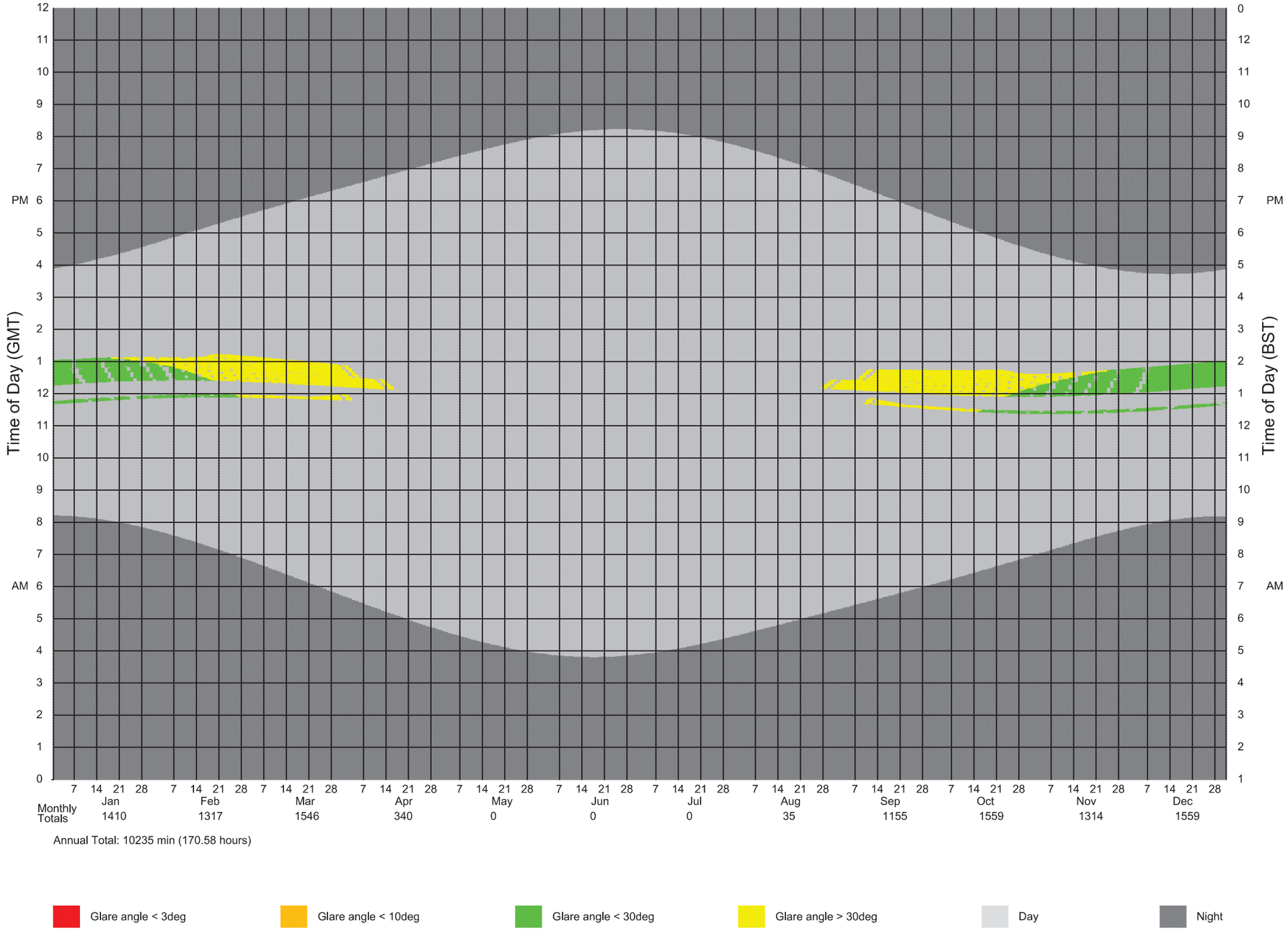
Viewpoint 4

Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Existing Scheme

Viewpoint 04

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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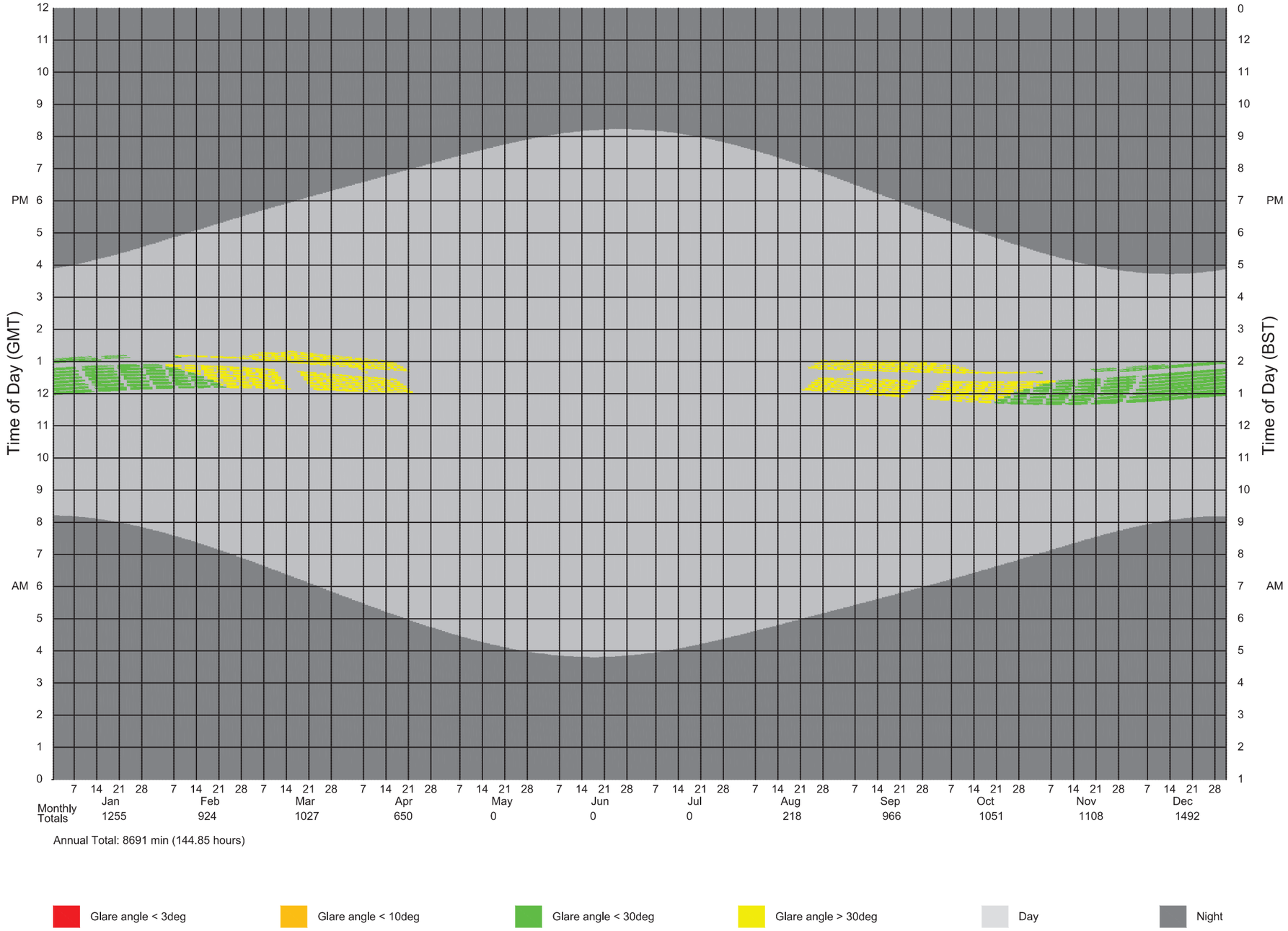
Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

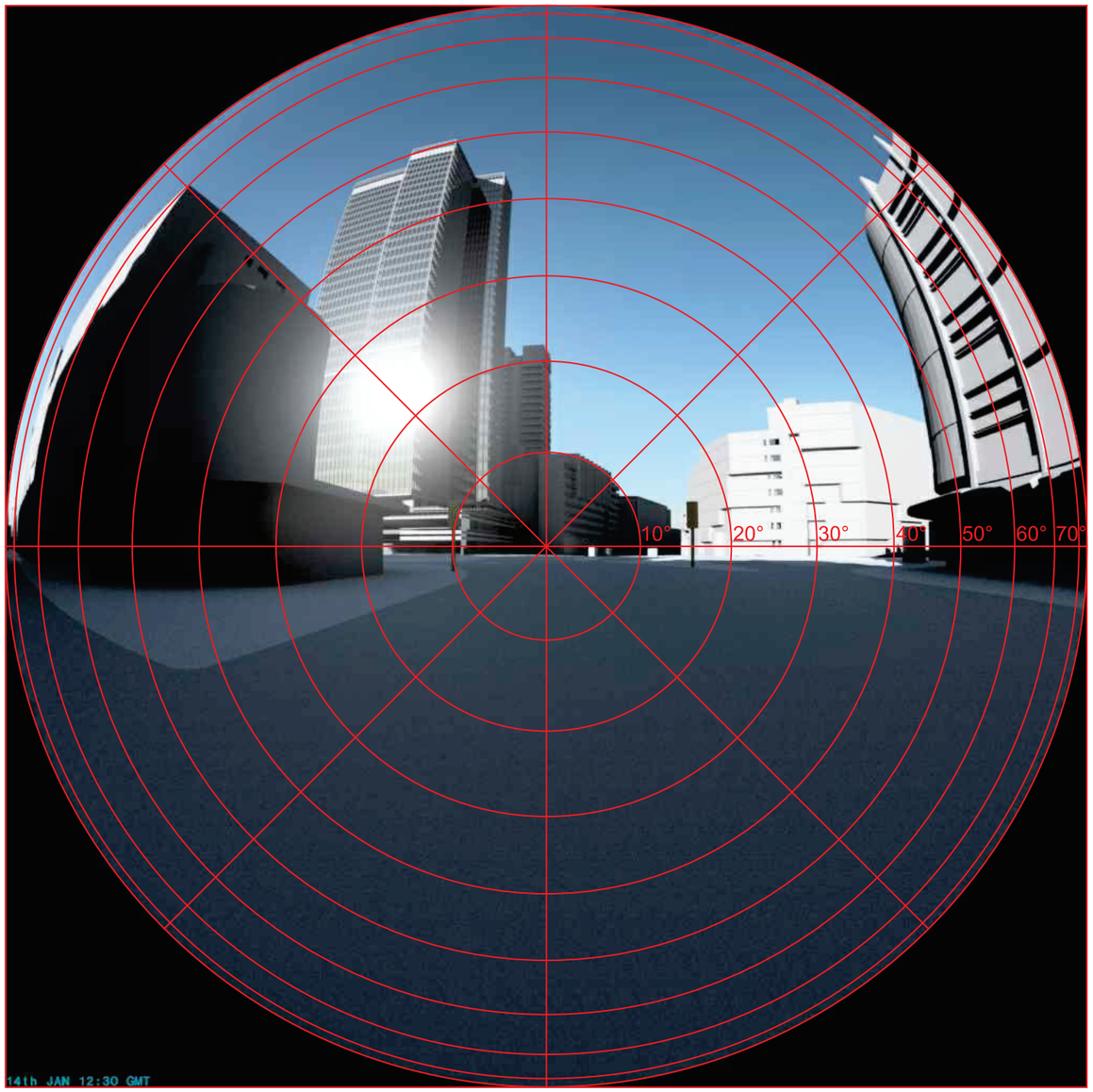
Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Proposed Scheme

Viewpoint 04

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	-	OCT 23	P3293/GC/10	12



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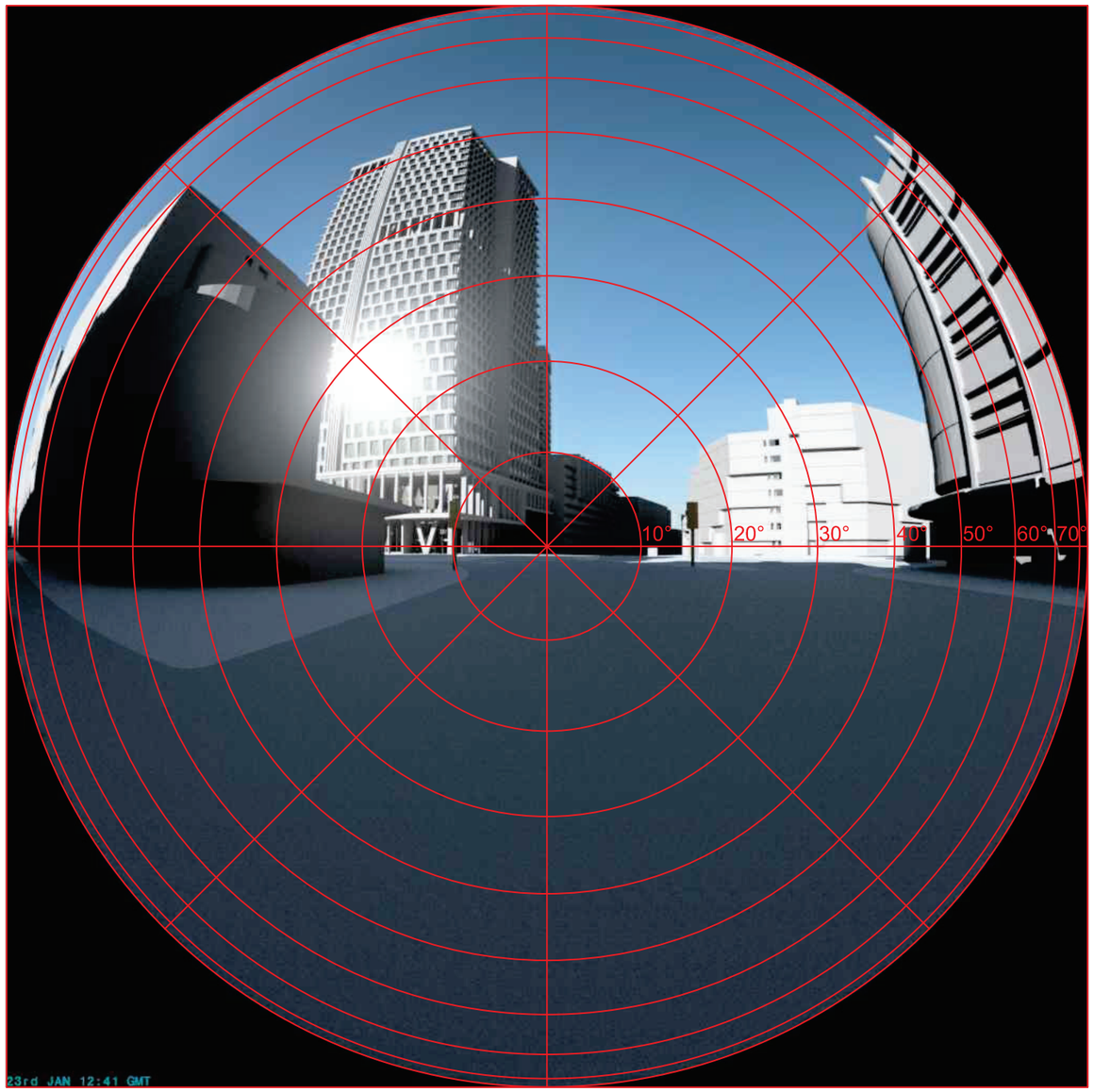

PROPOSED SCHEME
23rd January - 12:41

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Images
Existing vs Proposed Scheme 26/09/23

Viewpoint 4

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS @ A3	OCT 23	P3293/GI/04	12

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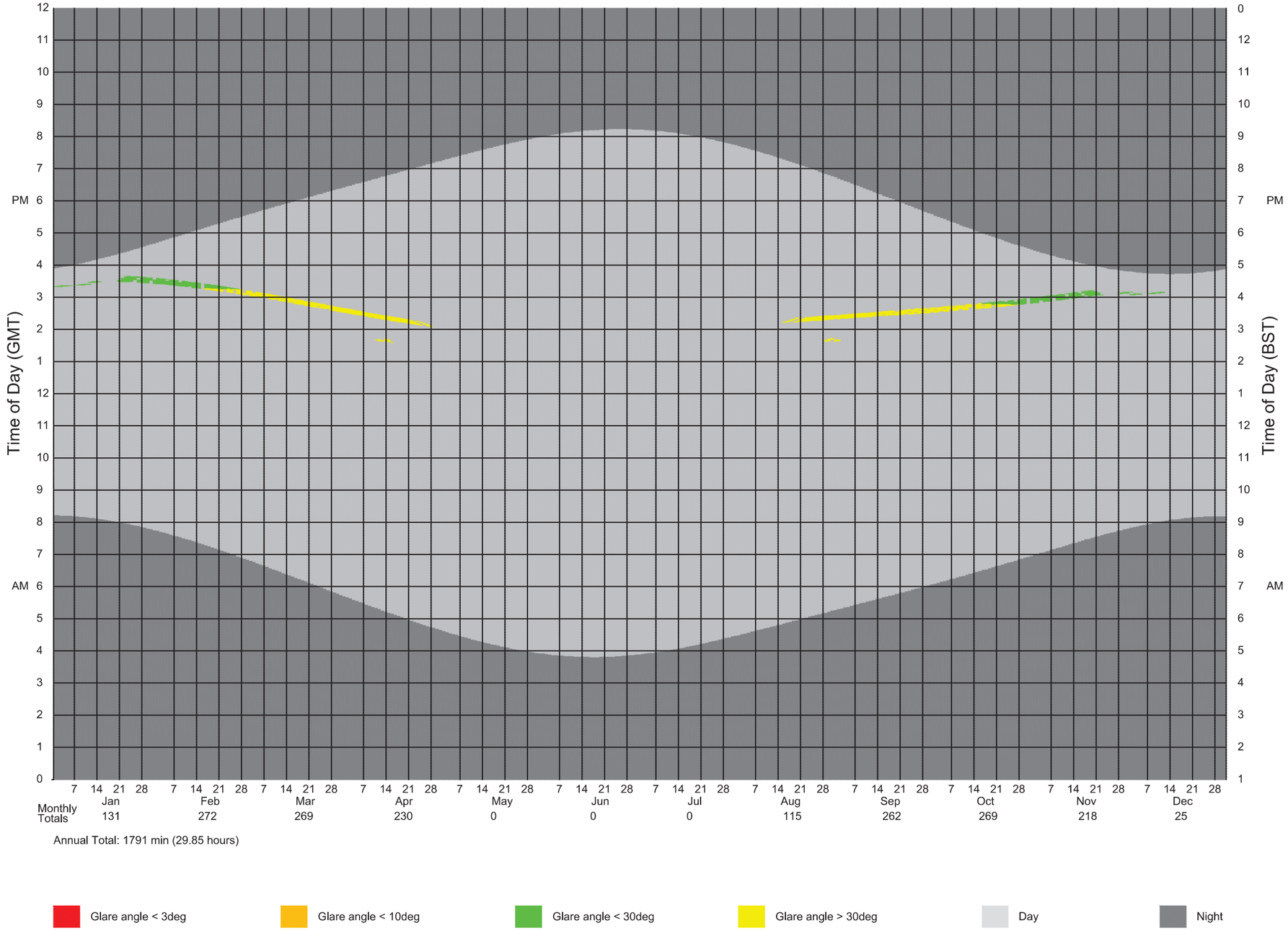
Viewpoint 5

Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Existing Scheme

Viewpoint 05

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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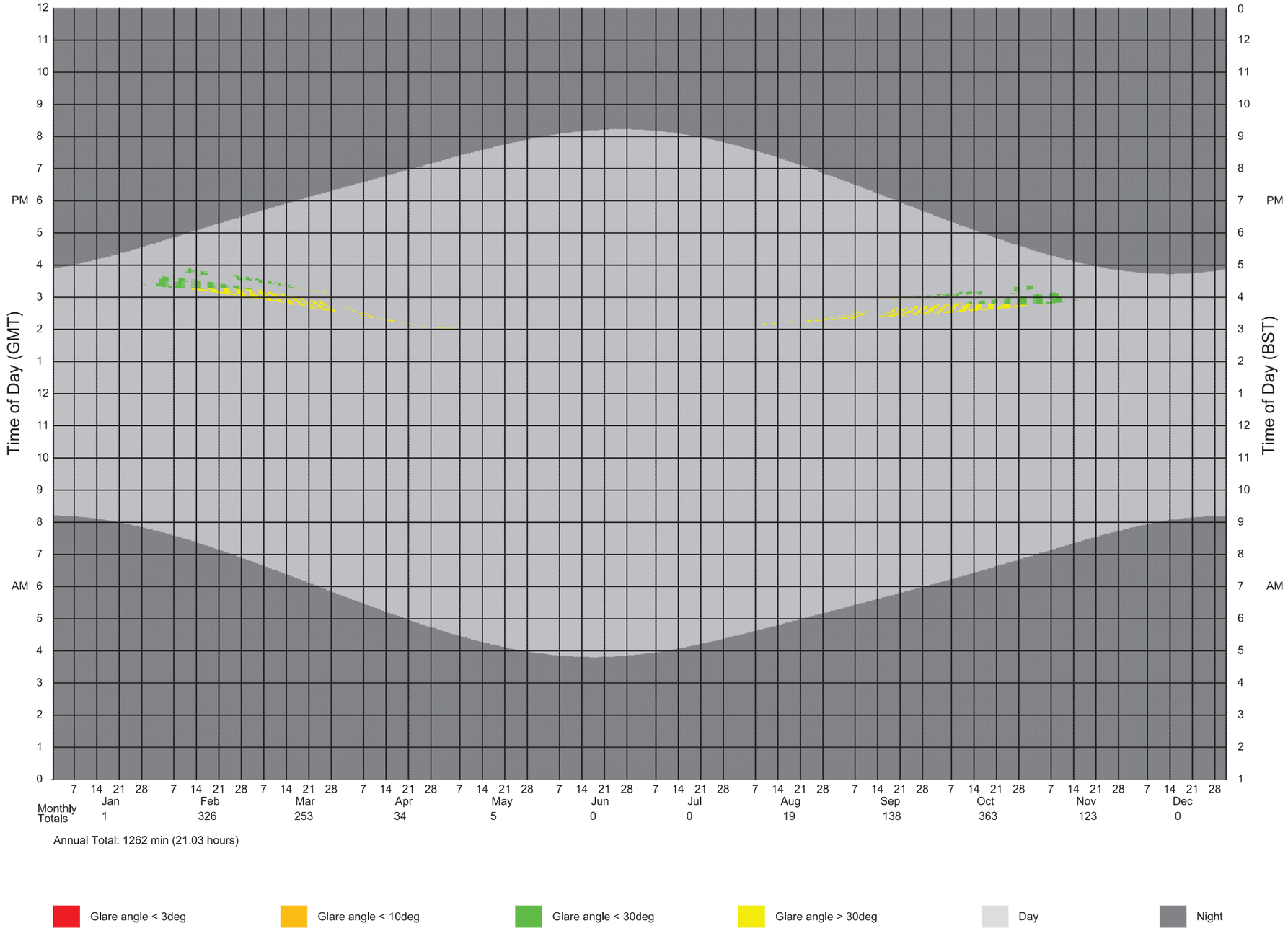
Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Proposed Scheme

Viewpoint 05

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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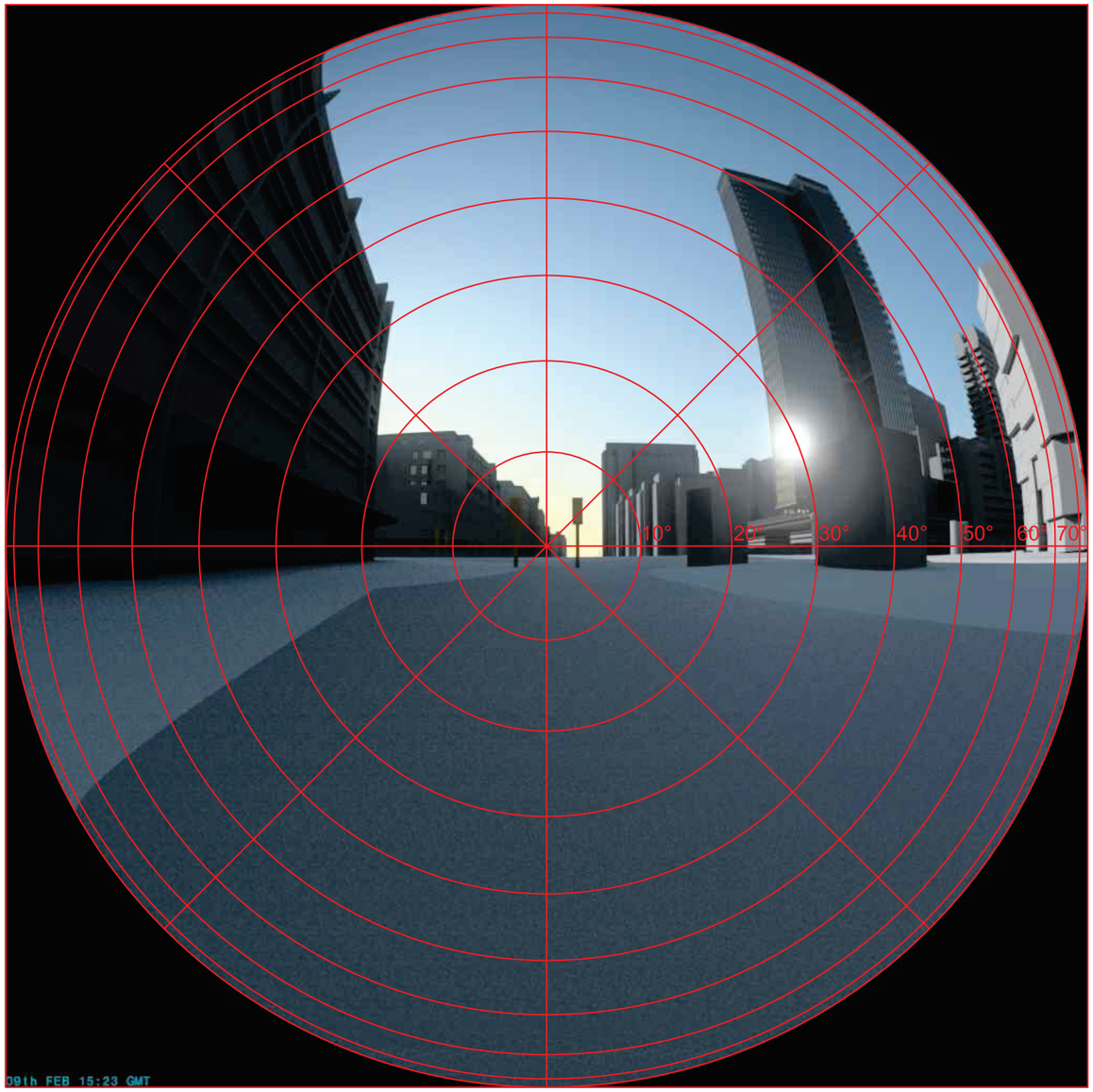
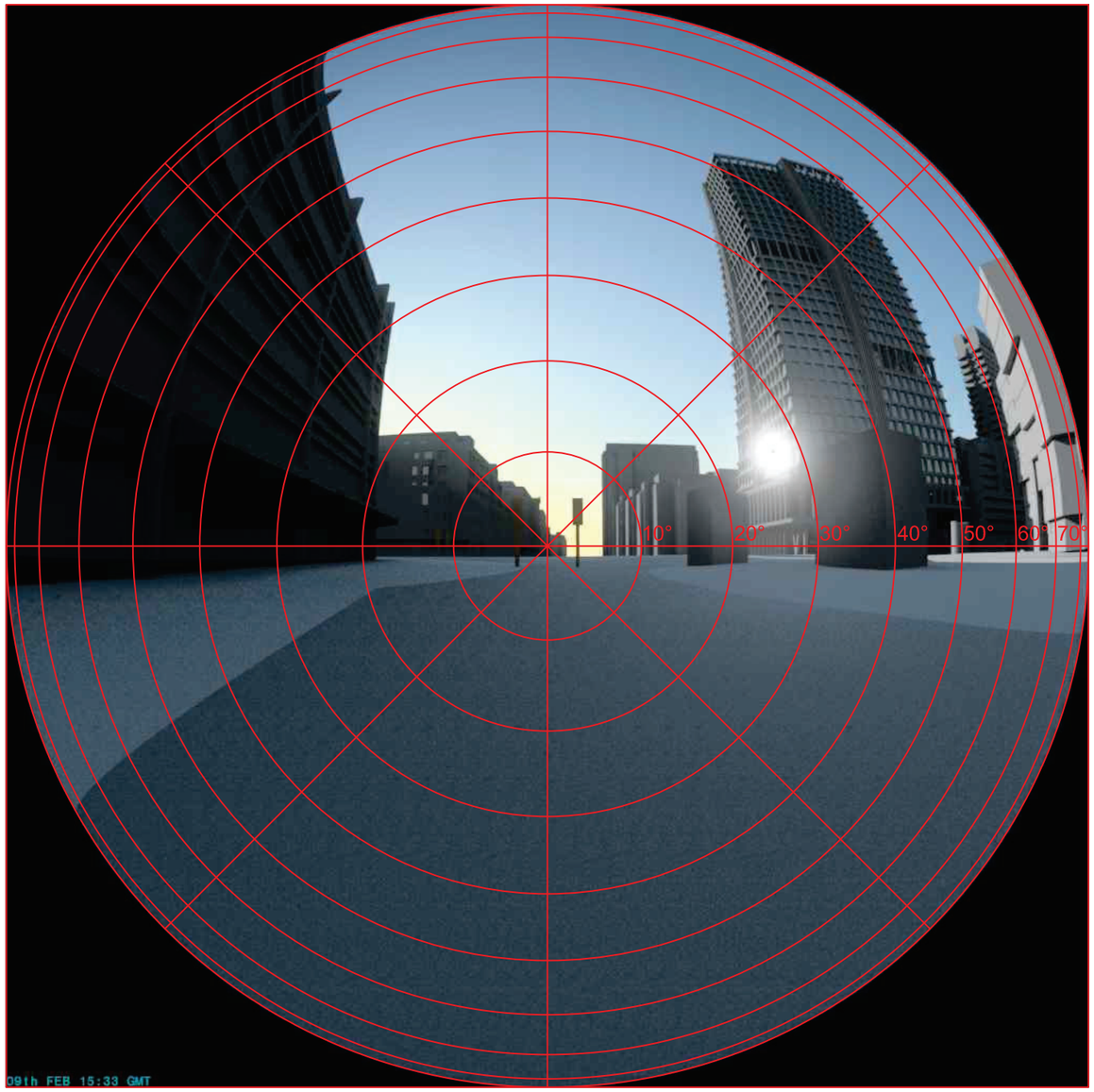


EXISTING SCHEME
09th February - 15:23



PROPOSED SCHEME
09th February - 15:33

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Images
Existing vs Proposed Scheme 26/09/23

Viewpoint 5

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS @ A3	OCT 23	P3293/GI/05	12

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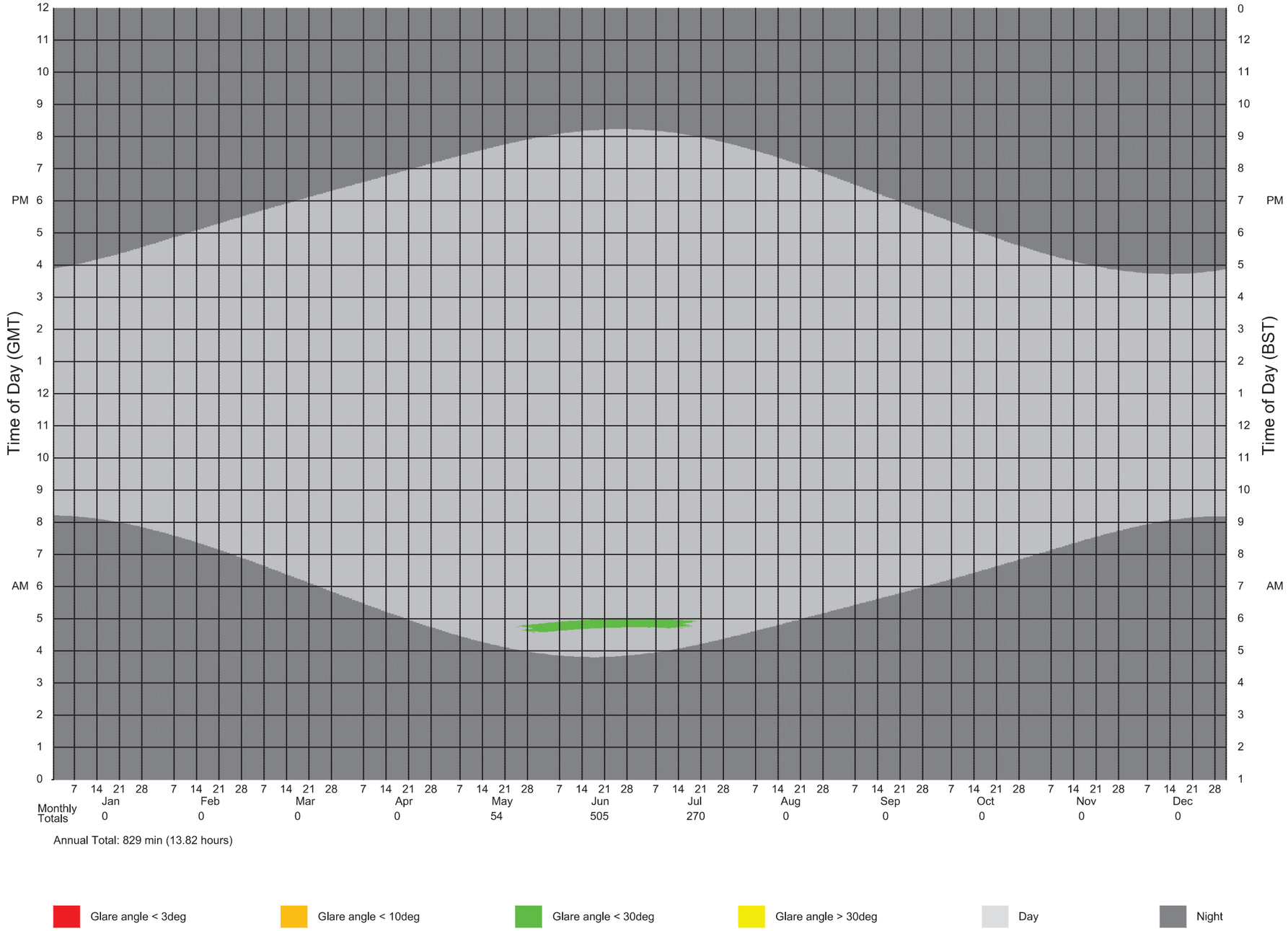
Viewpoint 6

Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Existing Scheme

Viewpoint 06

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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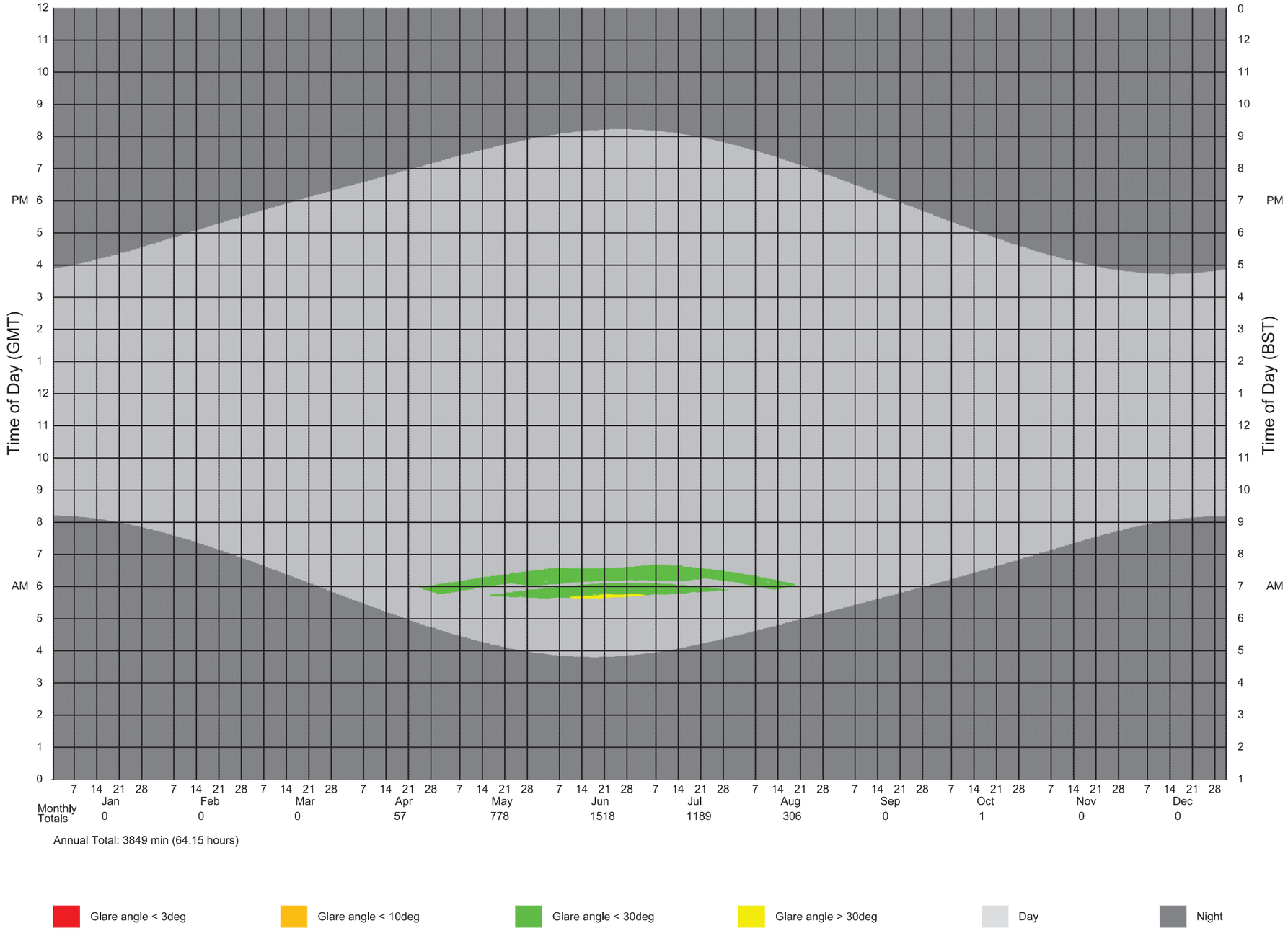
Annual Temporal Disability Glare Analysis



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Calendar - Annual Temporal Disability
Proposed Scheme

Viewpoint 06

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
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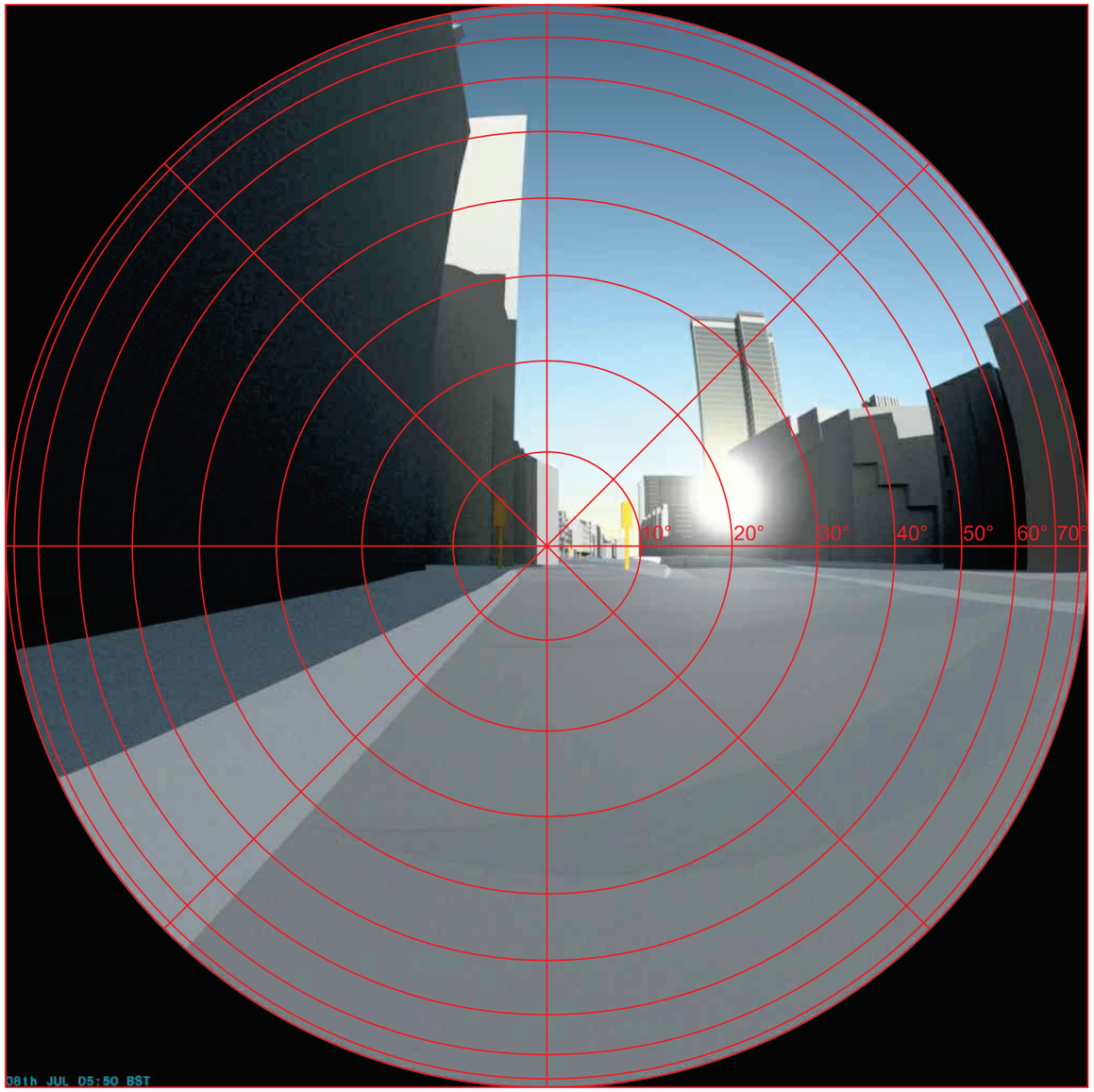
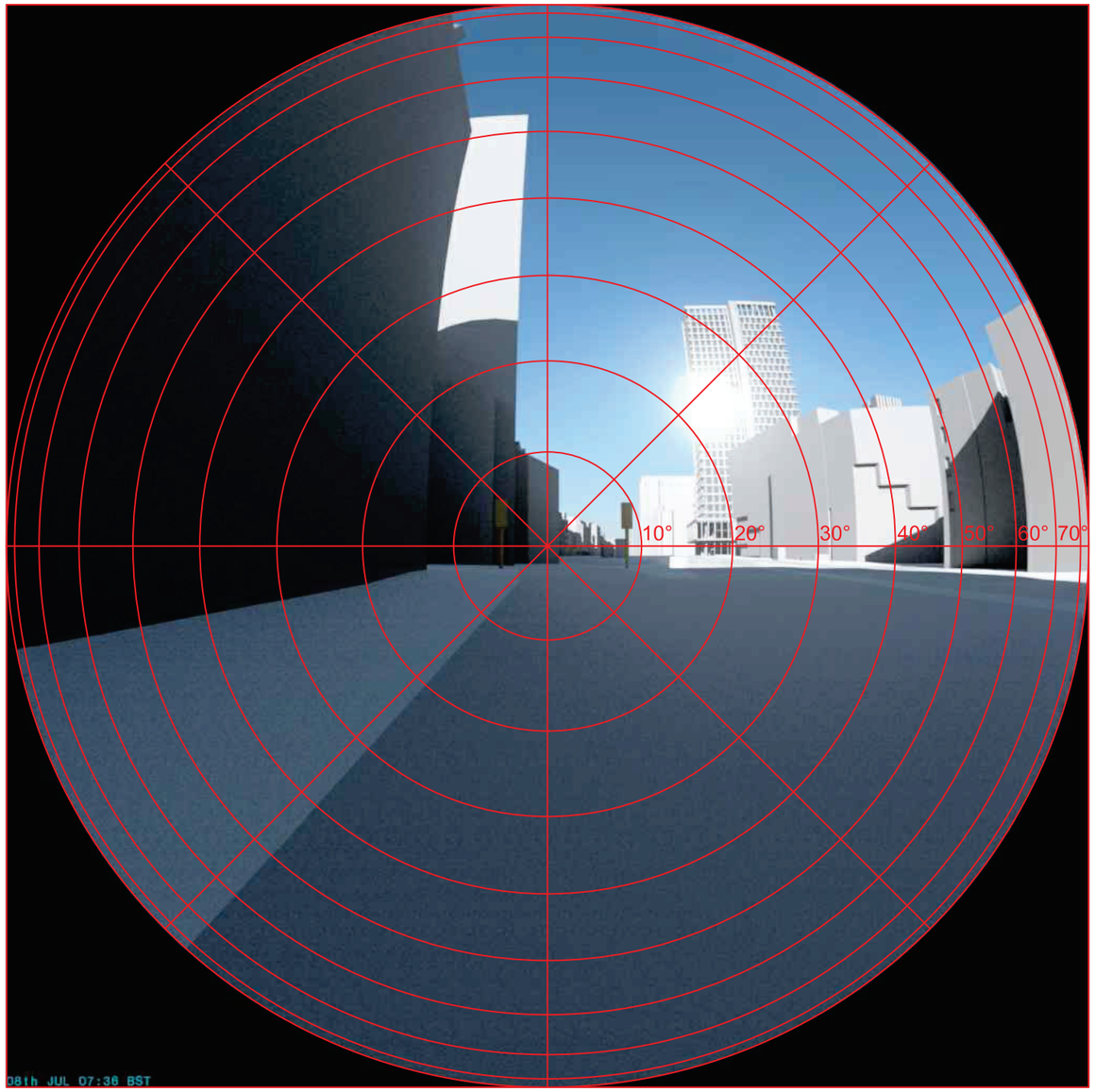


EXISTING SCHEME
08th July - 05:50



PROPOSED SCHEME
08th July - 07:36

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Glare Images
Existing vs Proposed Scheme 26/09/23

Viewpoint 6

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS @ A3	OCT 23	P3293/GI/06	12

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Appendix: Daylight, Sunlight, Overshadowing and Solar Glare

Annex 6 – Window Maps

Schafer House, University College

164-166 Drummond Street

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Window Locations for
Schafer House, University College and
164-166 Drummond Street

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS	OCT 23	P2193/WM 01	12

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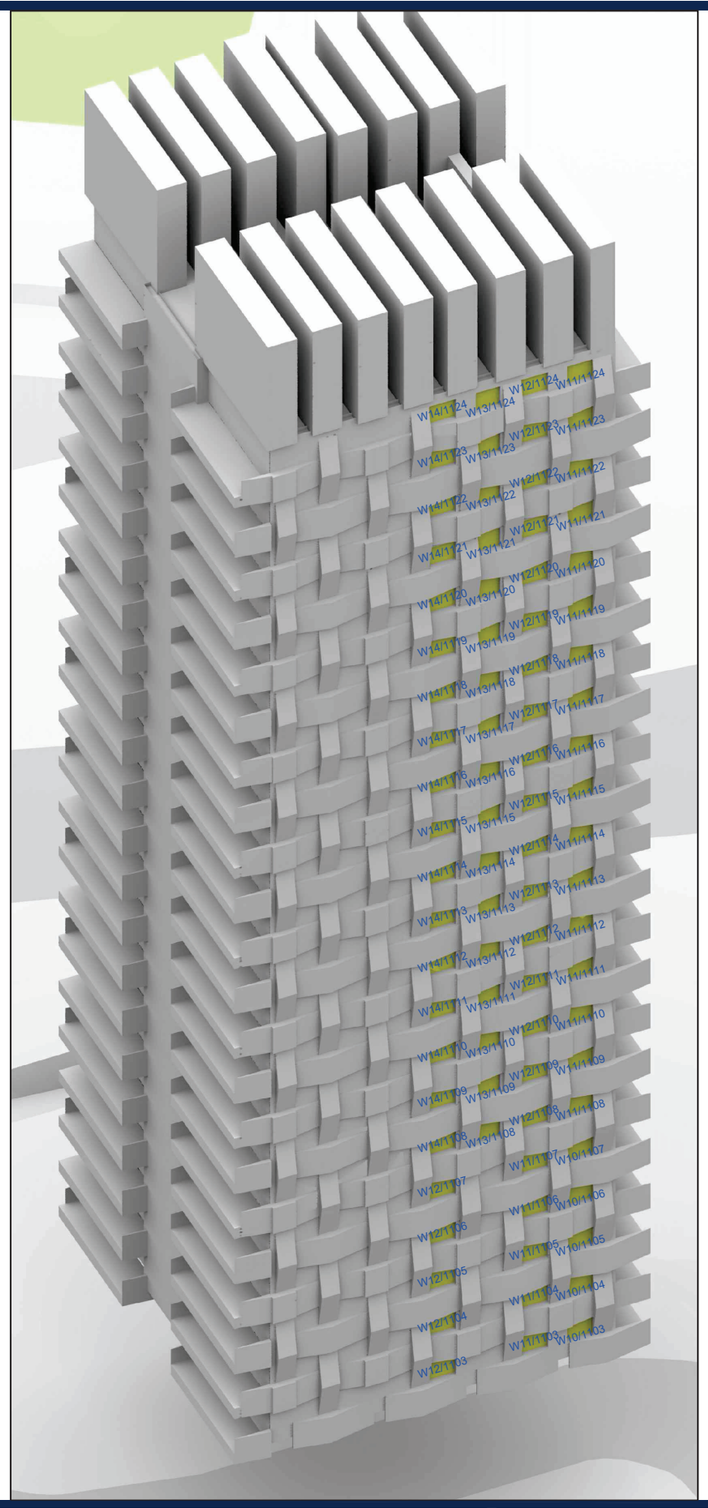
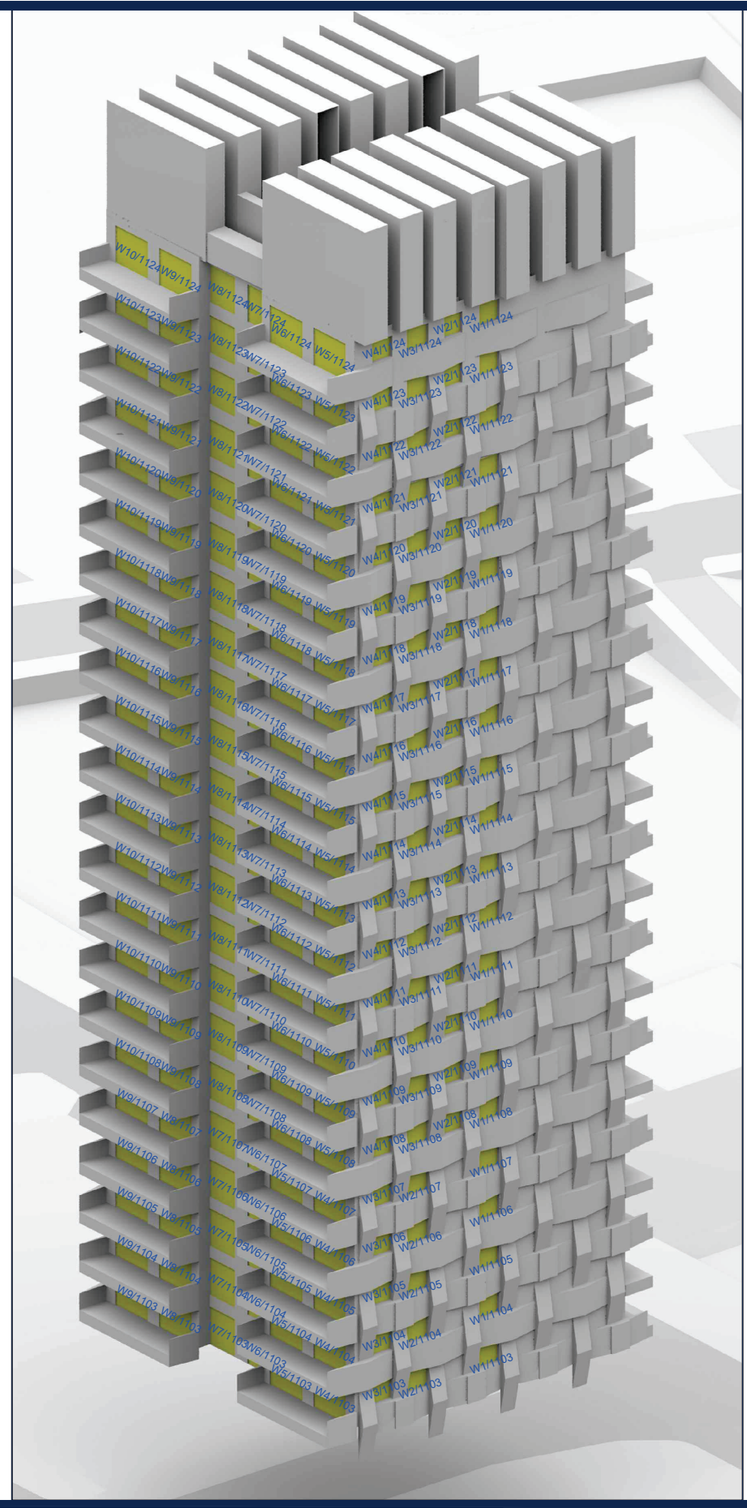




Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

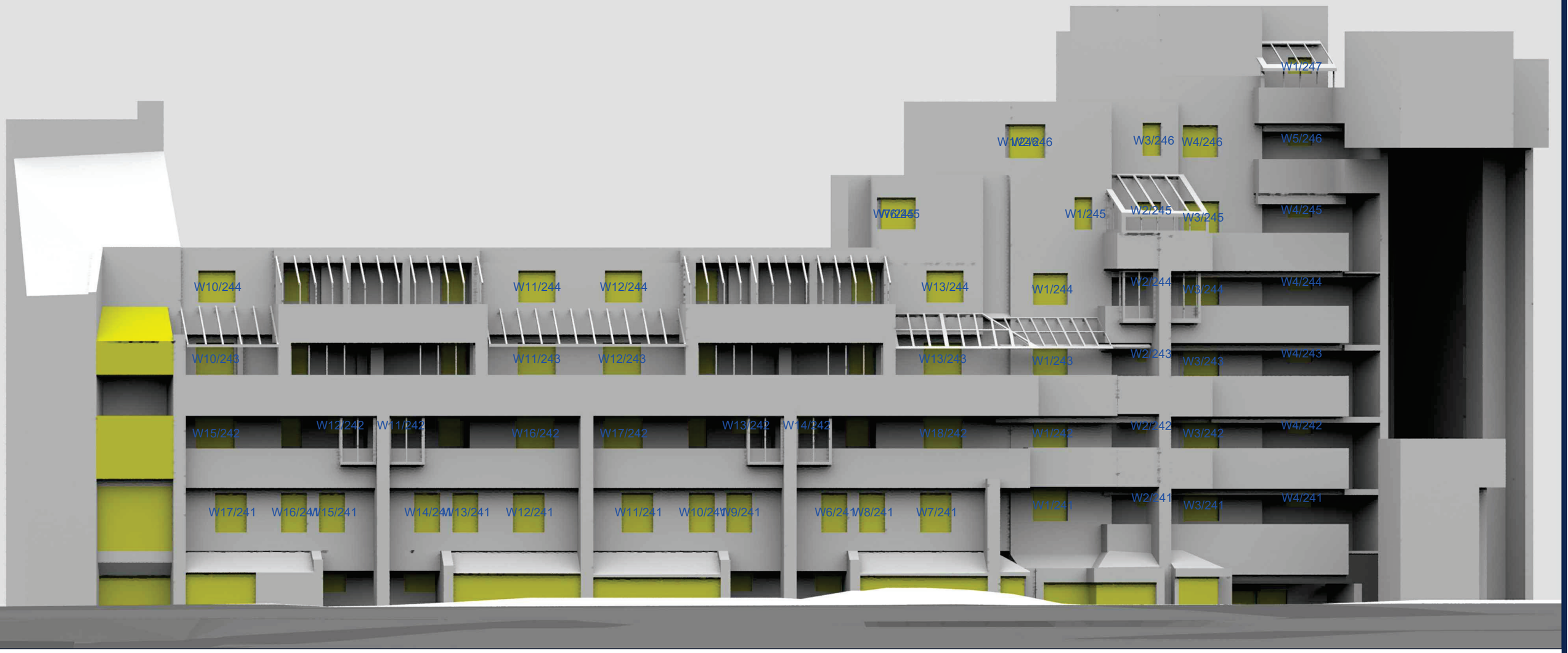
3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Window Locations for
175, Drummond Street

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS	OCT 23	P2193/WM 02	12



Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Window Locations for
40-60 Hampstead Road

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS	OCT 23	P2193/WM 03	12

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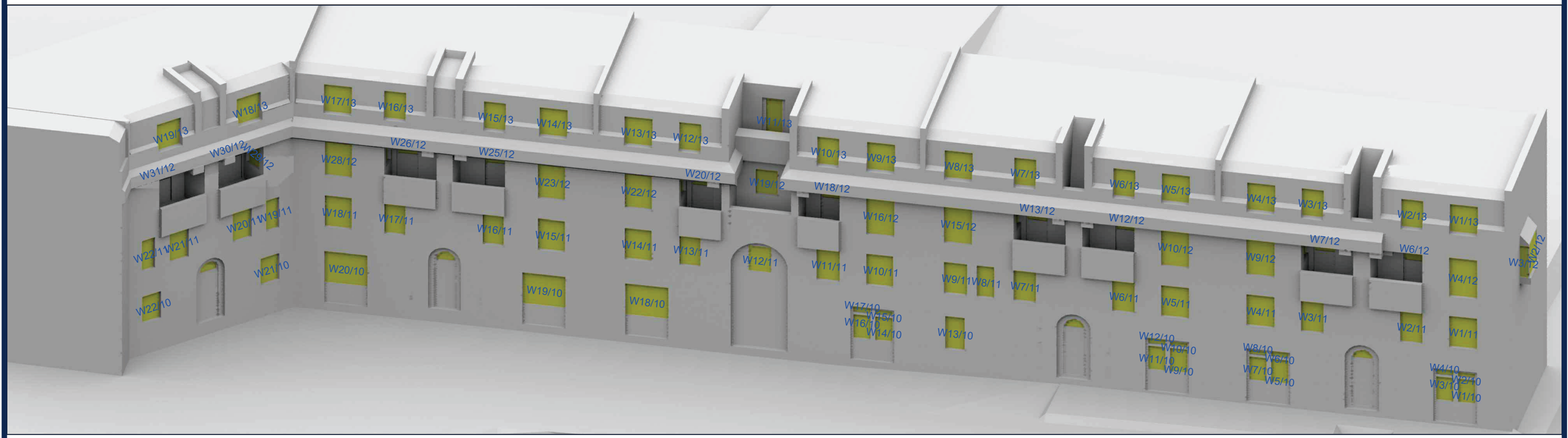

Sources: Plowman Craven
Point Cloud Data
Point 2
Site Photos

Local Planning Authority

3XN.dk
Proposed Info (received 26/09/2023)
EST-3XN-IN-XX-M3-A-SKETCH.rvt

Key:

Project: Euston Tower,
London

Title: Window Locations for
1-6 Tolmers Sq`uare

Scheme Confirmed:	Date:	Drawn By:	Scale:	Date:	Dwg No:	Rel:
-	-	EVJ/CJ/JH/RM	NTS	OCT 23	P2193/WM 04	12

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Appendix: Wind Microclimate
Annex 1: Wind Tunnel Testing Methodology
Annex 2: Planning Policy and Legislation

TRIUM

Appendix: Wind Microclimate

Annex 1: Wind Tunnel Testing Methodology

Annex 2: Planning Policy and Legislation

ANNEX 1 – WIND TUNNEL TESTING METHODOLOGY

Introduction

This appendix sets out the methodology for assessing the likely significant effects on wind microclimate that would arise from the combined existence and operation of the proposed development. The methodology for assessing cumulative wind microclimate effects is also described.

Excessive windiness at ground level may have significant effects on pedestrian comfort and safety. Success in addressing environmental wind issues can enhance the usability of external public spaces including building entrances.

Terminology

ESDU: a documented methodology and computer program used to estimate the topographic effects on wind speeds as they approach a site. This is used to 'translate' wind speeds measured at an airport or meteorological station to the target Site.

Irwin probes: a robust, omnidirectional measurement device used to measure both the mean wind speed and lower-frequency fluctuations of pedestrian-level winds in wind tunnel testing. An Irwin probe consists of a sensor tube that projects above the ground to a scaled height of 1.5m. The tube is mounted within a round sensor hole at ground level and the pressure difference between the sensor hole and the top of the sensor tube is used to calculate the wind speed.

peed up ratios: in environmental wind engineering, a speed up ratio or speed up factor is a ratio between the wind speeds measured at ground level and a single reference point. The reference point should be above the area of interest in a part of the flow that is uninterrupted by the mixing happening below. This ratio allows the modelled wind speeds to be applied to the full scale wind models.

Wind Tunnel Testing

A 1:300 scale model of the proposed (and existing) development and its surroundings was constructed and placed in a boundary layer wind tunnel for testing. A boundary layer wind tunnel is one that reproduces the earth's atmospheric boundary layer by adding roughness elements upstream of the model being tested. Sixteen wind directions have been tested (22.5° each) for each run to satisfy the requirements for the Lawson criteria. The wind data (strength and frequencies) to be used in the wind tunnel is London LDDC at 10m and adjusted to the Site using the ESDU methodology.

Gust and mean wind speeds were obtained using Irwin probes for sixteen equal increments of wind direction. The probe locations were selected either due to wind sensitivity of the expected activity in the area (building entrances, external seating, etc.) or because the Site geometry suggested the possibility of undesirable wind conditions.

The measured wind speed ratios were combined with the wind statistics for the Site to calculate seasonal and annual levels of windiness according to the 'comfort' and 'distress' limits in the Lawson criteria2. These criteria define appropriate levels of windiness according to the type of activity being performed in the area and levels of windiness that may cause distress and have been used to derive significance criteria.

Assumptions

Physical details less than 1m in size have not been modelled in the physical model used in wind tunnel testing. The model is built at a scale of 1:300 and anything less than 1m in size becomes too small for the model makers to accurately recreate.

Landscaping within the Site boundary has been modelled using scale models of deciduous trees without foliage to represent a worst-case scenario. The final landscaping proposed may be slightly different from what was tested in the wind tunnel. A qualitative assessment of the differences can be carried out by Arup's wind specialists to determine if any adverse wind conditions are expected to arise.

Appendix: Wind Microclimate

Annex 1: Wind Tunnel Testing Methodology

Annex 2: Planning Policy and Legislation

ANNEX 2 – POLICY AND LEGISLATION

There is no policy or legislation for wind microclimate conditions or assessment in the UK. However, microclimate is mentioned in national policy and there are guidelines that set out best practice for wind microclimate assessments.

National Planning Policy

National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) was first published in March 2012 and most recently updated in September 2023.

The NPPF does not contain any planning policies directly relating to wind microclimate issues. However, the benefits of a high-quality built environment are emphasised in the NPPF. For example, paragraph 185 states *"Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development."*

National Planning Practice Guidance (2021)

The NPPG identifies the potential for tall and large buildings to affect the wind microclimate. The National Design Guide (2021) states in Paragraph 71 that: *"Proposals for tall buildings (and other buildings with a significantly larger scale or bulk than their surroundings) require special consideration. This includes their […] environmental impacts, such as […] wind. These need to be resolved satisfactorily"*

Regional Policy

London Plan (2021)

Policy D9 – Tall Buildings – states that wind, daylight, sunlight penetration and temperature conditions around the building(s) and neighbourhood must be carefully considered and not compromise comfort and the enjoyment of open spaces, including water spaces, around the building.

Local Planning Policy

The Wind Microclimate Guidelines for Developments in the City of London was published in August 2019 and *"…provides general guidelines for wind microclimate studies required as part of the planning applications of new development proposals in the City of London (CoL)".* Although the site is not within CoL, the guidance has been referenced during the assessment to ensure consistency with the latest wind microclimate advice.

The Lawson LDDC guidance used in this report is the basis of the methodology used in the CoL Guidelines.

Appendix: Climate Change

Annex 1: GHG Policy and Legislation
Annex 2: Extract from Whole Life Carbon Assessment
Annex 3: Extract from Energy Strategy
Annex 4: Professional Experience
Annex 5: Climate Change Technical Note

Appendix: Climate Change

Euston Tower, Camden, Volume 3, Appendix: Greenhouse Gases

November 2023

Experts in air quality management & assessment

Document Control

Client	British Land Property Management Limited	**Principal Contact**	Henry Brittlebank (Trium Environmental LLP)

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Annexes

A1 Annex 1: GHG Policy and Legislation

National Planning Policy

National Planning Policy Framework

A1.1 The National Planning Policy Framework (NPPF)[1] sets out planning policy for England. It states that the purpose of the planning system is to contribute to the achievement of sustainable development, and that the planning system has three overarching objectives, one of which is an environmental objective:

> *"to protect and enhancing our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy".*

A1.2 Part 14 of the framework is entitled *"Meeting the challenge of climate change, flooding and coastal change"* and sets out the strategy for minimising the climate change effects of new development. Paragraph 154 states that:

> *"New development should be planned for in ways that […] can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards."*

A1.3 Paragraph 155 states further that "*to help increase the use and supply of renewable and low carbon energy and heat, plans should:*

> *a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);*
>
> *b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and*
>
> *c) identify opportunities for development to draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers*".

A1.4 Paragraph 157 states that, when determining planning applications, the NPPF requests that planning authorities should expect new development to:

[1] Department for Leveling Up, Housing & Communities, 2023. National Planning Policy Framework, Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1182995/NPPF_Sept_23.pdf

"*a) comply with any development plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and*

b) take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption."

Climate Change Act (2008) [2]

A1.5 The overarching Act in relation to climate is the Climate Change Act 2008. The Act introduces a legally binding target to reduce the UK's greenhouse gas (GHG) emissions to at least 80% below 1990 levels by 2050. It also provides for a Committee on Climate Change (CCC) with power to set out carbon budgets binding on the government for five-year periods.

A1.6 In the 2009 budget, the first three carbon budgets were announced which set out a binding 34% CO_2e[3] reduction by 2020; and the government has since adopted the fourth and fifth carbon budgets to reduce CO_2e by 50% by 2025 and 57% by 2030.

A1.7 The CCC also produces annual reports to monitor the progress in meeting these carbon budgets. Consequent upon the enactment of the Climate Change Act, a raft of policy at national and local level has been developed aimed at reducing carbon emissions.

Climate Change Act 2008 (2050 Target Amendment) Order 2019 [4]

A1.8 In June 2019, the government passed an order to amend the 2050 carbon emissions target in the Climate Change Act 2008 from 80% below 1990 levels to zero net carbon (i.e. 100% below 1990 levels). This new target will essentially end the UK's contribution to climate change by 2050.

Approved Document L[5]

A1.9 The Ministry of Housing, Communities and Local Government has published a series of 'Approved Documents' which provide guidance on ways to meet building regulations. The latest version of the Approved Documents L1A and L2A on the Conservation of Fuel and Power define the energy efficiency requirements for new buildings (domestic and non-domestic). The baseline Part L compliant CO_2 emissions calculated for the Proposed Development and presented within the Energy

2 Her Majesty's Stationery Office, 2008. Climate Change Act 2008

3 Carbon dioxide equivalent (CO_2e) is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO_2e signifies the amount of CO_2 which would have the equivalent global warming impact.

4 Her Majesty's Stationery Office, 2019. The Climate Change Act 2008 (2050 Target Amendment) Order 2019

5 HM Government, 2023. Approved Document L. Conservation of Fuel and Power. Volume 1: Dwellings, and Volume 2: Buildings other than dwellings.

Statement[6] were determined in accordance with the methodology detailed within these Approved Documents.

Regional Policy

The London Plan[7]

A1.10 The London Plan establishes strategic planning policy for London over the next 20 – 25 years and promotes the fundamental objective of accommodating London's population and economic growth through sustainable development. It sets out the Spatial Development Strategy for Greater London and the Development Plans of all London Boroughs must eventually comply with the general requirements of the London Plan.

A1.11 The London Plan includes planning policies both for reducing energy consumption within buildings and, significantly, promoting the use of decentralised electricity generation and renewable energy. These policies cover the role of boroughs in supporting the Mayor's Energy strategy and the requirements of planning applications.

A1.12 Policy SI 2 in the London Plan relates specifically to GHG emissions; it states:

"Policy SI 2 – Minimising Greenhouse Gas Emissions

A. Major development should be net zero-carbon. This means reducing carbon dioxide emissions from construction an operation, and minimising both annual and peak energy demand in accordance with the following energy hierarchy:

1) Be lean: use less energy and manage demand during operation.

2) Be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly.

3) Be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site.

4) Be seen: monitor, verify and report on energy performance.

B. Major development proposals should include a detailed energy strategy to demonstrate how the zero-carbon target will be met within the framework of the energy hierarchy.

C. A minimum on-site reduction of at least 35 per cent beyond Building Regulations is required for major development. Residential development should aim to achieve 10 per cent, and non-residential development should aim to achieve 15 per cent through energy efficiency measures.

6 Arup (2023) Energy Statement

7 GLA, 2021. The London Plan: The Spatial Development Strategy for London, Available: https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf

Where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided, in agreement with the borough, either:

1) through a cash in lieu contribution to the relevant borough's carbon offset fund, or

2) off-site provided that an alternative proposal is identified and delivery is certain.

D. Boroughs must establish and administer a carbon offset fund. Offset fund payments must be ring-fenced to implement projects that deliver greenhouse gas reductions. The operation of offset funds should be monitored and reported on annually.

E. Major development proposals should calculate and minimize carbon emissions from any other part of the development, including plant or equipment, that are not covered by Building Regulations, i.e. unregulated emissions.

F. Development proposals referable to the Mayor should calculate whole life-cycle carbon emissions through a nationally recognized Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions."

GLA Guidance on Energy Assessments [8]

A1.13 The GLA guidance on energy assessments provides guidance to assist with the preparation of energy assessments for new developments, and the role these assessments and strategies play in compliance with Policy SI 2 of the London Plan. The GLA guidance states that:

"Each application is considered on its merits, taking into account the individual characteristics of the development. Case-specific energy comments for each development are provided at Stage 1 and 2 of the GLA planning process by GLA energy officers to ensure applications comply with London Plan policy. However, for the avoidance of doubt, energy assessments should:

- *be submitted at the planning application stage, not submitted post planning in response to a condition;*
- *report estimated site-wide regulated CO_2 emissions and reductions (broken down for the residential and non-residential elements of the development), expressed in tonnes per annum, after each stage of the energy hierarchy, using the GLA's carbon emissions reporting spreadsheet;*
- *demonstrate how the net zero carbon target for major residential and non-residential development will be met, with at least a 35% on-site carbon reduction beyond Part L 2021 and provide the value of the offset payment which will be paid in the relevant borough's carbon offset fund to make up any shortfall to achieve net-zero carbon, where required;*
- *commit that energy efficiency measures alone will reduce regulated CO2 emissions for residential uses by 10 per cent below those of a development compliant with Part L 2021 of the Building Regulations, and by 15 per cent for non-residential uses;*
- *align with related documents and assessments that are submitted as part of the planning application, e.g. Whole Life-Cycle Carbon Assessments, Air Quality Assessments, Sustainability Statements."*

A1.14 Therefore, the target reduction on CO_2 emissions for the Proposed Development according to the GLA's requirements is:

- Residential development: 35% reduction below the Part L 2021 Baseline, with 10% reduction from energy efficiency measures alone, and proposals for making up the shortfall (e.g., offsetting) to net zero carbon; and
- Non-residential development: 35% reduction below the Part L 2021 Baseline, with 15% reduction from energy efficiency measures alone, and proposals for making up the shortfall (e.g., offsetting) to net zero carbon.

Whole Life-Cycle Carbon Assessments Guidance[9]

A1.15 This guidance document explains how to prepare a Whole Life-Cycle Carbon (WLC) assessment in line with Policy SI 2 of the London Plan.

A1.16 It defines WLC emissions as the carbon emissions resulting from the construction and the use of a building over its entire life, including its demolition and disposal. As such they capture a building's operational carbon emissions from both regulated and unregulated energy use, as well as its embodied carbon emissions, i.e., those associated with raw material extraction, manufacture and transport of building materials, construction and the emissions associated with maintenance, repair and replacement as well as dismantling, demolition and eventual material disposal.

A1.17 The draft guidance confirms that the Mayor's net zero-carbon target continues to apply to the operational emissions of a building. The WLC requirement is therefore not subject to this target but, as set out in London Plan Policy SI 2, planning applicants are required to calculate the embodied emissions of the development, as well as the operational emissions, and demonstrate how these can be reduced as part of the WLC assessment.

[8] GLA, 2022. Energy Assessment Guidance: Greater London Authority guidance on preparing energy assessments as part of planning applications (June 2022)

[9] GLA, 2022. London Plan Guidance. Whole Life-Cycle Carbon Assessments. Available: https://www.london.gov.uk/sites/default/files/lpg_-_wlca_guidance.pdf

A1.18 The guidance confirms that planning applicants should continue to follow the GLA's Energy Assessment Guidance to assess and reduce operational emissions and insert the relevant information into the WLC assessment.

London Environment Strategy [10]

A1.19 The London Environment Strategy, published in May 2018, sets out an action plan for environmental improvement in London up to 2050 and covers a range of core environmental aspects including energy and climate change, air quality, green infrastructure, waste and noise.

A1.20 The Strategy sets a series of targets, including the aim to make London a zero-carbon city by 2050; reiterating the same commitment as is included in the London Plan. It sets out a series of measures designed to achieve this aim, which are focussed upon delivering zero-carbon energy, zero-carbon transport and zero-carbon development. The Strategy also sets out plans for retro-fitting existing buildings to enable them to be considered to be zero-carbon.

Local Policies

A1.21 The London Borough of Camden (LBC) Local Plan[11] was adopted in 2017, and within this there are two policies that are relevant to climate change.

A1.22 Policy CC1: Climate change mitigation, which states that:

"The Council will require all development to minimise the effects of climate change and encourage all developments to meet the highest feasible environmental standards that are financially viable during construction and occupation.

We will:

a. promote zero carbon development and require all development to reduce carbon dioxide emissions through following the steps in the energy hierarchy;

b. require all major development to demonstrate how London Plan targets for carbon dioxide emissions have been met;

c. ensure that the location of development and mix of land uses minimise the need to travel by car and help to support decentralised energy networks;

d. support and encourage sensitive energy efficiency improvements to existing buildings;

e. require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building; and

[10] GLA, 2018. London Environment Strategy
[11] London Borough of Camden (2017) Camden Local Plan

f. expect all developments to optimise resource efficiency.

For decentralised energy networks, we will promote decentralised energy by:

g. working with local organisations and developers to implement decentralised energy networks in the parts of Camden most likely to support them;

h. protecting existing decentralised energy networks (e.g., at Gower Street, Bloomsbury, King's Cross, Gospel Oak and Somers Town) and safeguarding potential network routes; and

i. requiring all major developments to assess the feasibility of connecting to an existing decentralised energy network, or where this is not possible establishing a new network.

To ensure that the Council can monitor the effectiveness of renewable and low carbon technologies, major developments will be required to install appropriate monitoring equipment."

A1.23 Policy CC2: Adapting to climate change, which states that:

"The Council will require development to be resilient to climate change.

All development should adopt appropriate climate change adaptation measures such as:

a. the protection of existing green spaces and promoting new appropriate green infrastructure;

b. not increasing, and wherever possible reducing, surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems;

c. incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and

d. measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.

Any development involving 5 or more residential units or 500 sqm or more of any additional floorspace is required to demonstrate the above in a Sustainability Statement.

Sustainable design and construction measures

The Council will promote and measure sustainable design and construction by:

e. ensuring development schemes demonstrate how adaptation measures and sustainable development principles have been incorporated into the design and proposed implementation;

f. encourage new build residential development to use the Home Quality Mark and Passivhaus design standards;

g. encouraging conversions and extensions of 500 sqm of residential floorspace or above or five or more dwellings o achieve "excellent" in BREEAM domestic refurbishment; and

h. expecting non-domestic developments of 500 sqm of floorspace or above to achieve "excellent" in BREEAM assessments and encouraging zero carbon in new development from 2019."

Appendix: Climate Change

Annex 1: GHG Policy and Legislation

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A2 Annex 2: Extract from Whole Life Carbon Assessment

		[A1] to [A3]	[A4]	[A5]	[B1]	[B2]	[B3]	[B4]	[B5]
ent									
	0 kg CO2e	0 kg CO2e	0 kg CO2e	1,163,115 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
	0 kg CO2e	3,558,534 kg CO2e	608,302 kg CO2e	171,196 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
	0 kg CO2e	5,566,266 kg CO2e	1,631,544 kg CO2e	285,135 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
	0 kg CO2e	4,518,791 kg CO2e	2,572,441 kg CO2e	93,074 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
	0 kg CO2e	369,100 kg CO2e	119,441 kg CO2e	15,393 kg CO2e	0 kg CO2e	12,839 kg CO2e	3,210 kg CO2e	224,352 kg CO2e	0 kg CO2e
	-7,427 kg CO2e	751,472 kg CO2e	43,312 kg CO2e	74,897 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	76,233 kg CO2e	0 kg CO2e
	0 kg CO2e	12,634,728 kg CO2e	682,018 kg CO2e	25,532 kg CO2e	0 kg CO2e	389,843 kg CO2e	97,461 kg CO2e	3,992,746 kg CO2e	0 kg CO2e
	0 kg CO2e	136,776 kg CO2e	2,702 kg CO2e	0 kg CO2e	0 kg CO2e	3,554 kg CO2e	888 kg CO2e	257,059 kg CO2e	0 kg CO2e
	0 kg CO2e	1,288,124 kg CO2e	125,687 kg CO2e	130,128 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	1,275,865 kg CO2e	0 kg CO2e
	-177,424 kg CO2e	113,030 kg CO2e	3,953 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	118,758 kg CO2e	0 kg CO2e
	-631,866 kg CO2e	1,955,565 kg CO2e	108,723 kg CO2e	180,616 kg CO2e	0 kg CO2e	57,196 kg CO2e	14,299 kg CO2e	4,248,305 kg CO2e	0 kg CO2e
	-11,986 kg CO2e	371,636 kg CO2e	11,504 kg CO2e	18,113 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	524,750 kg CO2e	0 kg CO2e
	-3 kg CO2e	11,784,959 kg CO2e	340,776 kg CO2e	119,289 kg CO2e	4,213,825 kg CO2e	311,979 kg CO2e	77,995 kg CO2e	22,421,361 kg CO2e	0 kg CO2e
	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
	-3,768 kg CO2e	1,136,790 kg CO2e	379,493 kg CO2e	37,844 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	731,944 kg CO2e	0 kg CO2e
sions not specific to an ilding element category				2,016,066 kg CO2e					
TOTAL kg CO_2e	**-832,473 kg CO2e**	**44,185,768 kg CO2e**	**6,629,896 kg CO2e**	**4,330,398 kg CO2e**	**4,213,825 kg CO2e**	**775,410 kg CO2e**	**193,853 kg CO2e**	**33,871,374 kg CO2e**	**0 kg CO2e**

[B6]	[B7]	[C1]	[C2]	[C3]	[C4]		Module D
		0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
		1,705,902 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	1,705,902 kg CO2e	0 kg CO2e
		0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	1,163,115 kg CO2e	0 kg CO2e
		0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
		0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
		21,232 kg CO2e	82,707 kg CO2e	47,199 kg CO2e	0 kg CO2e	4,489,169 kg CO2e	-422,615 kg CO2e
		33,212 kg CO2e	386,238 kg CO2e	21,921 kg CO2e	356 kg CO2e	7,924,672 kg CO2e	-2,130,046 kg CO2e
		26,962 kg CO2e	66,137 kg CO2e	3,887 kg CO2e	0 kg CO2e	7,281,292 kg CO2e	-63,828 kg CO2e
		2,202 kg CO2e	4,267 kg CO2e	74,621 kg CO2e	0 kg CO2e	825,424 kg CO2e	-117,632 kg CO2e
		4,484 kg CO2e	9,885 kg CO2e	9,171 kg CO2e	0 kg CO2e	962,026 kg CO2e	-652,978 kg CO2e
		75,387 kg CO2e	128,212 kg CO2e	3,326 kg CO2e	9 kg CO2e	18,029,261 kg CO2e	-207,706 kg CO2e
		816 kg CO2e	648 kg CO2e	4 kg CO2e	9 kg CO2e	402,455 kg CO2e	-485 kg CO2e
		7,686 kg CO2e	54,150 kg CO2e	2,318 kg CO2e	445 kg CO2e	2,884,402 kg CO2e	-1,106,151 kg CO2e
		674 kg CO2e	494 kg CO2e	205,256 kg CO2e	62 kg CO2e	264,803 kg CO2e	-20 kg CO2e
		11,668 kg CO2e	29,730 kg CO2e	828,078 kg CO2e	34 kg CO2e	6,802,347 kg CO2e	-2,669,690 kg CO2e
		2,217 kg CO2e	2,478 kg CO2e	14,036 kg CO2e	5 kg CO2e	932,752 kg CO2e	-358,049 kg CO2e
58,259,707 kg CO2e	67,841,914 kg CO2e	70,316 kg CO2e	70,556 kg CO2e	120,740 kg CO2e	1,013 kg CO2e	166,060,096 kg CO2e	-9,983,310 kg CO2e
		0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
		0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e	0 kg CO2e
		6,783 kg CO2e	238,491 kg CO2e	93,614 kg CO2e	292 kg CO2e	2,621,483 kg CO2e	-318,361 kg CO2e
						2,016,066 kg CO2e	
126,101,621 kg CO2e	**425,669 kg CO2e**	**1,969,541 kg CO2e**	**1,073,991 kg CO2e**	**1,424,171 kg CO2e**	**2,224 kg CO2e**	**224,365,267 kg CO2e**	**-18,030,870 kg CO2e**

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A3 Annex 3: Extract from Energy Strategy

	Total regulated emissions (Tonnes CO2 / year)	CO2 savings (Tonnes CO2 / year)	Percentage savings (%)
Baseline: Part L 2021	325.7		
Be lean: Savings from energy demand reduction	292.2	33.5	10%
Be clean: Savings from heat network	292.2	0.0	0%
Be green: Savings from renewable energy	279.2	13.0	4%
Cumulative on-site savings	-	**46.5**	**14%**
Annual savings from off-set payment	-	298.5	-
Cumulative savings for off-set payment (t CO2)		8,375	
Cash in-lieu contribution (£)		£795,581	

Table 2: Total Proposed Development regulated carbon emissions results, savings, off-set calculation and cash in-lieu contribution.

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A4 Annex 4: Professional Experience

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Mr Pellizzaro is a Technical Director with AQC, with more than 15 years' experience in environmental consultancy and is a Technical Director at AQC. He has managed and delivered Greenhouse Gas assessments for major urban regeneration planning applications and EIA developments throughout the UK. He is a Member of the Institution of Environmental Sciences and of the Institute of Air Quality Management, and a Practitioner of the Institute of Environmental Management and Assessment.

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Miss Burnell is a Senior Consultant with AQC with over seven years' experience in the field of air quality. She has experience of undertaking a range of air quality assessments for power, transportation, and mixed-use development projects both in the UK and internationally. She is also experienced at preparing environmental permit applications for medium combustion plant/specified generator sites and has commissioned and maintained numerous ambient air quality monitoring surveys. Prior to her work with AQC, Julia completed an MEnvSci (Hons) in Environmental Science (four-year integrated master's). She is a Member of both the Institute of Air Quality Management and the Institution of Environmental Sciences.

George Chousos, BSc MSc AMIEnvSc AMIAQM

Mr Chousos is a Consultant with AQC, having joined in May 2019. Prior to joining AQC, he completed an MSc in Air Pollution Management and Control at the University of Birmingham, specialising in air pollution control technologies and management, and data processing using R. He also holds a degree in Environmental Geoscience from the University of Cardiff, where he undertook a year in industry working in the field of photo-catalytic technology. Since joining AQC, George has been gaining experience in undertaking air quality assessments, both qualitatively and using atmospheric dispersion modelling, to accompany planning and permitting applications. Projects have ranged in scale, from small scale residential development to Environmental Impact Assessments (EIAs). The assessments have considered the effects on both human health and ecological habitats. George also has experience completing construction dust risk assessments, Air Quality Neutral assessments, Local Authority Annual Status Reports (ASRs), as well as odour assessments.

Appendix: Climate Change

Annex 1: GHG Policy and Legislation
Annex 2: Extract from Whole Life Carbon Assessment
Annex 3: Extract from Energy Strategy
Annex 4: Professional Experience
Annex 5: Climate Change Technical Note

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Climate Change

Technical Note

London

CONTENTS

INTRODUCTION

1 This technical note describes a future climate scenario for the London region which has been developed by Trium using the future climate projections data published by the Met Office (UKCP18). UKCP18 projections consider the climate effects arising from a series of 'Representative Concentration Pathways' (RCP) emissions scenarios (described further below).

2 The purpose of this technical note is to present projection data for the future climate and to provide guidance to the EIA technical team on how to consider whether the effects of the Proposed Development (defined under the current climate conditions) may alter under the future climate scenario. In the context of the future climate condition, consideration needs to be given to:

- The change in the magnitude of impact of the Proposed Development;
- Receptor vulnerability to changes in climate;
- Vulnerability of the Proposed Development to climate change; and
- Resilience of the Proposed Development to climate change.

Climate Projections

3 UKCP18 gives probabilistic projections[1] for a number of atmospheric variables, with different temporal and spatial averaging, for several future time periods, under four different future RCP emissions scenarios.

4 In general, the longer the lifetime of a development, the greater the uncertainty about the impact of climate change over time. Uncertainty is dealt with by presenting projections which are probabilistic in nature, and which give the probability of different climate outcomes.

5 To make use of the probabilistic projections, an emissions scenario and percentile outcome (i.e. the likelihood of the change in climate occurring) needs to be identified.

6 The emissions scenario and probabilistic projection are detailed within this document and have been used by all technical disciplines contributing to the Environmental Impact Assessment (EIA), to ensure consistency in approach.

Emission Scenarios

7 The RCP emission scenarios represent four distinct Representative Concentration Pathways (RCP2.6, RCP4.5, RCP6.0 and RCP8.5) available in the UKCP18 climate projections. These are named according to the concentration of greenhouse gas modelled to occur in the atmosphere in 2100. The RCPs have been developed for long-term and near-term climate modelling and provide time-dependant projections of atmospheric greenhouse gas concentrations. These pathways were developed based on a literature review of current climate modelling research and have been chosen to represent the full range of climate outcomes presented within the literature.

8 The emission scenarios represent assumptions in terms of climate policy, land use and technological development, with RCP2.6 representing the 'optimum' emission scenario (i.e. measures aimed at achieving the maximum reduction in GHG emissions).

9 RCP 8.5 is the most conservative, highest emission, and highest-impact scenario. It assumes that technological development will slow and that there will be little to no decarbonisation of world power from new technology. It also assumes that no further climate mitigation or regulations to reduce climate change or air pollution will be implemented.

[1] Probabilistic projections give a range of possible climate change outcomes and their relative likelihoods i.e. unlikely, likely or very likely ranging across 10th to 90th percentiles.

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10 More information on the RCPs can be found in the UKCP18 Guidance: Representative Concentration Pathways[2].

Adopted Emissions Scenario: RCP8.5

11 RCP8.5 has been used in the climate projections presented in this technical note as it represents a suitably conservative emissions scenario with regards to climate policy, land use, and technological development. This is in accordance with the Institute of Environmental Management and Assessment's (IEMA's) Climate Change Resilience and Adaptation guidance[3], which states that *"Recommended best practice is to use the higher emissions scenario (RCP 8.5 in the latest UKCP18 projections) at the 50th percentile, for the 2080s timelines, unless a substantiated case can be made for not doing this (e.g. anticipated lifespan of the project is shorter than 2080s)"*.

12 The use of RCP8.5 is also in accordance with "*the National Policy Statement on National Networks, which states that developments should use the UKCP09 high emissions scenario at the 50% probability level*"[3]. RCP8.5 is the UKCP18 high emissions scenario and therefore has been identified as the most reasonable conservative emissions scenario for identifying future climate change projections in EIA.

13 The IEMA guidance recommends the use of RCP8.5 against a baseline period of 1980-2000 unless strong justification can be provided otherwise.

14 In line with the IEMA guidance, the climate projection data provided in this technical note are produced using RCP8.5 against the 1980-2000 baseline at the 50% probability level (or percentile).

[2] UKCP18 Guidance: Representative Concentration Pathways https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18-guidance---representative-concentration-pathways.pdf [accessed 16/02/22]
[3] Institute of Environmental Management and Assessment, (2020); Environmental Impact Assessment Guide to: Climate Change Resilience and Adaptation.

APPROACH TO ASSESSMENT

15 The future climate scenario is presented in this note in '*The Future Climate Condition in London for EIA*'. In line with the IEMA guidance and based on the approach, methodology and significance criteria relevant to the technical assessment, each technical specialist should consider this future climate scenario in respect of potential alterations to the following, within their ES chapter:

- The sensitivity of identified receptors;
- The magnitude of impacts;
- The resultant effects; and
- Any additional mitigation that might be required to address the future climate scenario.

Mitigation Measures

16 Mitigation measures should identify appropriate resilience and adaptive management measures.

17 Resilience measures include design features (e.g. habitable rooms within residential units located above the flood level which accounts for climate change) and construction materials (e.g. materials resistant to increases in temperature), to provide an appropriate resilience to changes in the existing climatic conditions, as well as occurrences of extreme weather.

18 Adaptive management measures account for the anticipated changes in the future climate. Consideration should be given as to whether there are opportunities to introduce mitigation measures later into the project when they are required, instead of including them from the outset when they're not required. These measures could be secured through a commitment to prepare a management plan/strategy (or equivalent) which would periodically review the need for such measures and their integration into the scheme when required.

19 Where mitigation is proposed, narrative should be provided on the anticipated effectiveness of the measures against the predicted future climate conditions.

20 A statement should be provided to clarify whether or not the projected future climate change is anticipated to alter the findings of the assessment as already presented for the Proposed Development under the current climate conditions.

THE FUTURE CLIMATE CONDITION IN LONDON FOR EIA

21 The 2022 UKCP Headline Findings[4] highlights the key climate projections for the UK as follows:

- By the end of the 21st century, all areas of the UK are projected to be warmer, more so in summer than in winter;
- Hot summers are expected to become more common. The temperature of hot summer days, by the 2070s, show increases of 3.8°C to 6.8°C, under a high emissions scenario, along with an increase in the frequency of hot spells;
- Rainfall patterns across the UK are not uniform and vary on seasonal and regional scales and will continue to vary in the future;
- Significant increases in hourly precipitation extremes in the future;
- Despite overall summer drying trends in the future, future increases in the intensity of heavy summer rainfall events are likely;
- Future climate change is projected to bring about a change in the seasonality of extremes; and
- Sea levels rising.

[4] *UKCP (August 2022), UK Climate Projections: Headline Findings.*

22 The future climate projections for London, based on RCP8.5, are presented and described below for the climatic variables:

- Temperature
- Precipitation; and
- Wind speed.

23 When assessing the effects of climate change in a technical ES chapter, the data presented in the proceeding tables should be used by the technical specialist as the basis for their assessment.

Temperature

24 Table 1 presents the projected air temperature data for London up until 2099, in 20 year timeslices, from 2020. In line with the Met Office predictions[5], the data present future summers to be hotter and winters to be warmer, with the annual temperature steadily increasing.

25 Depending on the lifetime of the Proposed Development, different timeslices will need to be considered. When developing adaptive mitigation measures, consideration should be given to the appropriate time to implement these measures based on the temperature increase at each timeslice.

26 The data are presented for the Annual Mean, Summer Maximum, and Winter Minimum temperature for each timeslice. It is the responsibility of the technical specialist to select the most relevant and appropriate data for their technical discipline.

Table 1 Air Temperature Anomaly at 1.5m Above Ground Level (°C) Relative to Baseline

Timeslice	Predicted Change from Baseline (°C)		
	Annual Mean	Summer Max	Winter Min
	50th Percentile	50th Percentile	50th Percentile
2020-2039	1.04	1.46	0.90
2040-2059	1.87	2.75	1.65
2060-2079	2.96	4.26	2.52
2080-2099	4.28	6.39	3.58

Precipitation

27 Table 2 presents the predicted percentage change in precipitation levels relative to the 1980-2000 baseline. In line with the Met Office predictions[6], the data present future Summers to be drier and Winters to be wetter. The data also predict that annual precipitation will reduce marginally up to 2099.

28 Depending on the lifetime of the Proposed Development, different timeslices will need to be considered. When developing adaptive mitigation measures, consideration should be given to the appropriate time to implement these measures based on the precipitation change at each timeslice.

29 The data are presented for the seasonal extremes of Winter and Summer, as well as an Annual projection for each timeslice. It is the responsibility of the technical specialist to select the most relevant and appropriate data for their technical discipline.

[5] *Met Office Hadley Centre, 2018. 'UKCP18 Factsheet: Temperature' https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18-fact-sheet-temperature.pdf [accessed 09/03/22]*
[6] *Met Office Hadley Centre, 2018. 'UKCP18 Factsheet: Precipitation' https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp18-factsheet-precipitation.pdf [accessed 09/03/22]*

Table 2 Precipitation Rate Anomaly (%) Relative to Baseline

Timeslice	Predicted Change from Baseline (%)		
	Annual	Summer	Winter
	50th Percentile	50th Percentile	50th Percentile
2020-2039	1.54	-8.66	7.35
2040-2059	-1.36	-19.99	11.42
2060-2079	-1.92	-29.04	17.90
2080-2099	-2.50	-40.10	23.61

Wind Speed

30 UKCP18 probabilistic data for wind is not available, nor any RCP8.5 data for wind through alternative projections. For this reason, UKCP09 wind data has been reviewed for the A1B scenario, as it is comparable to RCP8.5. This data indicates that there is currently no clear trend in the speed and frequency of winds that would make a meaningful difference to wind microclimate assessments. The small changes to the average wind speeds and frequency by 2080 remain substantially less than the typical year-to-year variability. It is considered that applying a 'worst-case' factor would introduce an unhelpful and unrealistic level of conservatism into the results, and hence wind speed is not a factor taken into account when considering the future climate condition.

31 The long term climate change projections will be kept under review to identify any potential clear trends to projected future changes in wind speed and frequency, that can then be considered within the assessments.

Extreme Weather Events

32 Extreme weather events associated with the above climate change projections should also be considered by each technical specialist contributing to the ES, i.e. heat waves and conversely, heavy rainfall events leading to flooding.

SUMMARY

33 This note provides the future climate condition in London for the technical assessment of the Proposed Development, when assessing climate change. It has been developed to ensure consistency across the technical topics covered in the EIA.

34 It is the responsibility of the technical specialist for each topic in the Environmental Statement to follow the steps set out in this note when considering climate change in their technical assessment.

35 The data provided within this technical note is up to date as of 09 March 2022. It is acknowledged that more information will become available on the UKCP18 interface over time, and revisions of this note shall be provided as appropriate.

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Appendix A: Policy and Guidance

Policy and Guidance

- EU Guidance on Integrating Climate Change and Biodiversity into the Environmental Impact Assessment (2013)[7]
- IEMA Environmental Impact Assessment Guide to Climate Change Resilience and Adaptation (2020)[8]
- UK Climate Change Risk Assessment Evidence Report (2017)[9]
- 2017 EIA Regulations (as amended)[10]

[7] European Union, 2013. Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessments
[8] Institute of Environmental Management and Assessment, (2020); Environmental Impact Assessment Guide to: Climate Change Resilience and Adaptation.
[9] HM Government, 2017. UK Climate Change Risk Assessment 2017
[10] His Majesty's Stationery Office (HMSO) 2017. The Town and Country Planning (Environmental Impact Assessment) (England) Regulations 2017 (amended in 2018 and 2020).