# 12.0(A) Daylight, Sunlight, Overshadowing and Solar Glare

# 12.1 Preface (December 2022 Assessment)

- 12.1.1 The assessments in the Environmental Statement (ES) submitted in support of the outline elements of the planning application are based on the parameters plans which have been submitted for approval. One of these parameters plans, plan 111, shows the parameters for the maximum heights of the buildings in the outline element of the application.
- 12.1.2 The Daylight, Sunlight and Overshadowing assessment in the original ES (Chapter 12) was carried out on the assumption that there will be plant, equipment and lift over-runs located on the roofs of the buildings. The space on the roofs which is assumed for these features has therefore been included within the maximum building heights on parameters plan 111, given the likelihood that plant and lift over-runs will be situated on the roofs of the buildings, as is common in developments of this kind. This means that the highest points of the buildings themselves (excluding plant and lift over-runs) are situated below the maximum building height lines shown on parameters plan 111.
- 12.1.3 The Council have requested that, for completeness, the applicant undertakes additional assessment for the Daylight, Sunlight and Overshadowing on the assumption that the tops of the buildings themselves will be built up to the maximum building heights shown on parameters plan 111.
- 12.1.4 In response to the Council's request, the applicant has undertaken this assessment and submits this Daylight, Sunlight and Overshadowing assessment as part of the Supplementary Environmental Statement under Regulation 25 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. It contains the assessments of the impacts of the buildings themselves being constructed up to the maximum heights on plan 111.
- 12.1.5 For ease of understanding, this Daylight, Sunlight and Overshadowing assessment (December 2022) should be read alongside the corresponding Chapter 12 in the original Environmental Statement (January 2022). It should be stressed that these assessments do not replace the chapter in the original Environmental Statement, but supplement them, so that the local planning authority and the public are provided with assessments on these topics on two separate bases (1) with buildings with plant and lift over-runs on the roofs, with the tops of the plant and lift over-runs being included in the maximum heights on the parameters plan, and (2) with the tops of the buildings themselves forming the maximum heights on the parameters plan.
- 12.1.6 At the time of preparing this additional assessment, comments regarding Chapter 12 in the original Environmental Statement (January 2022) had been received from CBRE and Delva Patman Redler on behalf of the Council. These comments, and the clarifications points raised by CBRE and Delva Patman Redler have therefore been incorporated into this additional assessment.
- 12.1.7 In summary, the overall conclusions to be drawn from both sets of assessments are the same.

# 12.2 Introduction

12.2.1 This Chapter reports the likely significant effects of the Proposed Development on the Site and the surrounding area in terms of daylight, sunlight, overshadowing and solar glare matters. Where appropriate, it also identifies proposed mitigation measures to prevent, minimise or

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control likely negative effects arising from the Proposed Development and the subsequent anticipated residual effects.

- 12.2.2 This Chapter (Chapter 12A) is an additional assessment, in response to a request from the Council to assess the impact of the proposals being constructed up to the maximum height parameters. This additional chapter can therefore be read in conjunction with, and compared with, the original assessed in Chapter 12 of the original Environmental Statement (January 2022).
- 12.2.3 Effects in relation to daylight, sunlight and overshadowing will vary throughout the demolition and construction phase. There will be no notable anticipated effect whilst the existing buildings on the Site are demolished. There will also be no anticipated effect following the completion of the demolition of the buildings. During the construction of the Proposed Development, the effects would be no worse than those of the completed Development as set out below. For those residents, who would be living in the initial phases of the Development (completed blocks of the Detailed Proposals of the Development), during the construction of the Outline Proposals, they would enjoy higher levels of daylight/sunlight. Upon completion, these levels of daylight/sunlight would reduce to the levels as reported on within the Internal Daylight, Sunlight and Overshadowing report which is listed within **Appendix 12.27 (A).**
- 12.2.4 This Chapter of the ES therefore identifies and discusses the effects of the completed Development on the following:
  - Daylight and sunlight amenity within the surrounding residential properties;
  - Overshadowing to the surrounding gardens, amenity areas and open spaces; and
  - Solar glare to the approaching motorists, cyclists and train drivers.
- 12.2.5 As set out within the EIA Scoping Opinion issued to LBC on 26<sup>th</sup> May 2021, given that the Proposed Development is predominantly residential led, there are no new light pollution sources, such as large areas of commercial office space, that are likely to cause a potential notable effect on the surrounding sensitive receptors. Any proposed commercial aspects of the Development are small in number, and area and it is anticipated that the commercial aspects of the Development will close before the Institution of Lighting Engineers (ILE) guidance curfew time of 11pm. Detailed light pollution assessments are therefore not considered necessary.
- 12.2.6 The daylight, sunlight and overshadowing conditions within the Proposed Development are set out within the Internal Daylight, Sunlight and Overshadowing assessment which accompanies the planning application submission and has been included within **Appendix 12.27 (A)**.
- 12.2.7 This Chapter (and its associated figures and appendices) should be read together with the Introductory Chapters of the January 2022 ES (Chapters 1 5), as well as Chapter 17: Cumulative Effects and Chapter 12: Daylight, Sunlight and Overshadowing.
- 12.2.8 This Chapter is accompanied by the following appendices:[
  - Appendix 12.1 (A): Existing Site Plan and 3D Computer Views of the Assessment Model;
  - Appendix 12.2 (A): Proposed Site Plan and 3D Computer Views of the Assessment Model;
  - Appendix 12.3 (A): Existing Cumulative Site Plan and 3D Computer Views of the Assessment Model;

- Appendix 12.4 (A): Cumulative Site Plan and 3D Computer Views of the Assessment Model;
- Appendix 12.5 (A): Window Maps of the Surrounding and Cumulative Residential Properties;
- Appendix 12.6 (A): Existing vs. Proposed VSC Tabular Analysis Results for the Surrounding Residential Properties;
- Appendix 12.7 (A): Existing vs. Proposed NSL Tabular Analysis Results for the Surrounding Residential Properties;
- Appendix 12.8 (A): Existing vs. Proposed NSL Contour Results for the Surrounding Residential Properties;
- Appendix 12.9 (A): Existing vs. Proposed APSH Tabular Analysis Results for the Surrounding Residential Properties;
- Appendix 12.10 (A): Existing vs. Proposed VSC Tabular Analysis Results for the Surrounding Residential Properties without balconies in place;
- Appendix 12.11 (A): Existing vs. Proposed NSL Tabular Analysis Results for the Surrounding Residential Properties without balconies in place;
- Appendix 12.12 (A): Existing vs. Proposed APSH Tabular Analysis Results for the Surrounding Residential Properties without balconies in place;
- Appendix 12.13 (A): Existing vs. Proposed Sun on Ground Results for the Surrounding Amenity Spaces;
- Appendix 12.14 (A): Existing vs. Proposed Transient Overshadowing Analysis;
- Appendix 12.15 (A): Solar Glare Analysis and Plots;
- Appendix 12.16 (A): Existing vs. Cumulative VSC Tabular Analysis Results for the Surrounding Residential Properties;
- Appendix 12.17 (A): Existing vs. Cumulative ADF Tabular Analysis Results for the Surrounding Residential Properties;
- Appendix 12.18 (A): Existing vs. Cumulative NSL Tabular Analysis Results for the Surrounding Residential Properties;
- Appendix 12.19 (A): Existing vs. Cumulative APSH Tabular Analysis Results for the Surrounding Residential Properties;
- Appendix 12.20 (A): Existing vs. Cumulative VSC Tabular Analysis Results for the Surrounding Residential Properties without balconies in place;
- Appendix 12.21 (A): Existing vs. Cumulative ADF Tabular Analysis Results for the Surrounding Residential Properties without balconies in place;
- Appendix 12.22 (A): Existing vs. Cumulative NSL Tabular Analysis Results for the Surrounding Residential Properties without balconies in place;
- Appendix 12.23 (A): Existing vs. Cumulative APSH Tabular Analysis Results for the Surrounding Residential Properties without balconies in place;
- Appendix 12.24 (A): Existing vs. Cumulative Sun on Ground Results for the Surrounding Amenity Spaces;
- Appendix 12.25 (A): Existing vs. Cumulative Transient Overshadowing Analysis;
- Appendix 12.26 (A): Contextual Sites Analysis for Determining an Alternative Target Value;
- Appendix 12.27 (A): Internal Daylight, Sunlight and Overshadowing assessment;
- Appendix 12.28 (A): 25 Degree Line Sections.

# 12.3 Competence

- 12.3.1 This assessment has been undertaken by Andrew Cartmell who is a member of the Royal Institution of Chartered Surveyors. Andrew is a founding Director of Point 2 a company that specialises in daylight, sunlight, overshadowing, solar glare and light pollution matters. Point 2 was founded in 2014 and is considered one of the market leading companies providing daylight, sunlight and overshadowing advice.
- 12.3.2 Andrew has specialised in advising on daylight, sunlight and overshadowing matters for planning purposes for some 20 years. He therefore has an extensive and broad range of experience in this area, having worked on hundreds of project and as a result is regularly asked to present on the subject matter.

# 12.4 Legislation, Planning Policy and Guidance

12.4.1 There is no specific legislation relating to the issues of daylight, sunlight and overshadowing as considered in the context of this assessment and Chapter, however, the following national, regional and local planning policy and guidance is of relevance to the assessment of the effects of the Proposed Development.

#### **National Planning Policy**

12.4.2 The following national level policy and guidance documents are of relevance to the Proposed Development:

#### National Planning Policy Framework (NPPF), July 2021

12.4.3 There are no national planning policies directly relating to daylight, sunlight and overshadowing. However, Chapter 11 of the NPPF deals with "Making effective use of land." Under the subheading "Achieving appropriate densities" it states at paragraph 125:

125. Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities and ensure that developments make optimal use of the potential of each site. In these circumstances; ...

(c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight where they would otherwise inhibit making efficient use of the site (as long as the resulting scheme would provide acceptable living standards).

#### **National Planning Practice Guidance, 2016**

12.4.4 The National Planning Practice Guidance (NPPG) is an online resource for planning practitioners. In respect to daylight and sunlight, the document states at paragraph 25 (Reference ID 26-025-20140306) in respect to building form that: -

"Some forms pose specific design challenges, for example how taller buildings meet the ground and how they affect local wind and sunlight patterns should be carefully considered."

In respect to building scale it states at paragraph 26 (Reference ID 26-026-20140306) that:

"Account should be taken of local climatic conditions, including daylight and sunlight, wind, temperature and frost pockets."

#### **Regional Planning Policy**

### The London Plan, The Spatial Development Strategy for Greater London, March 2021

12.4.5 Policy D6 Housing Quality and Standards states:

c) Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating.

d) The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space.

#### 12.4.6 Policy D9 Tall Buildings states:

3) environmental impact

a) 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

#### 12.4.7 Policy D8 Public Realm states:

*j)* ensure that appropriate shade, shelter, seating and, where possible, areas of direct sunlight are provided, with other microclimatic considerations, including temperature and wind, taken into account in order to encourage people to spend time in a place.

# Housing SPG, 2016 (Part of the London Plan)

12.4.8 The key policies from the Housing SPG of relevance to this assessment are detailed below.

#### 12.4.9 Policy 7.6:

"requires new development to avoid causing 'unacceptable harm' to the amenity of surrounding land and buildings, particularly in relation to privacy and overshadowing and where tall buildings are proposed. An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets. This should take into account local circumstances; the need

to optimise housing capacity; and scope for the character and form of an area to change over time".

12.4.10 Paragraph 1.3.46 states that:

"The degree of harm on adjacent properties and the daylight targets within a proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced, but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm."

12.4.11 Policy 7.7 notes that large buildings should not adversely affect their surroundings in terms of overshadowing and solar reflected glare:

"Location and design of tall buildings should not affect their surroundings adversely in terms of microclimate, wind turbulence, overshadowing, noise, reflected glare, aviation, navigation and telecommunication interference".

#### Local Planning Policy

12.4.12 The Proposed Development is located within the London Borough of Camden and the potential effects have therefore been considered against their current planning policy.

#### London Borough of Camden Local Plan (2017)

12.4.13 Policy G1 Delivery and Location of Growth states:

The Council will create the conditions for growth to deliver the homes, jobs, infrastructure and facilities to meet Camden's identified needs and harness the benefits for those who live and work in the borough.

#### Delivery of growth

The Council will deliver growth by securing high quality development and promoting the most efficient use of land and buildings in Camden by:

- a) supporting development that makes best use of its site, taking into account quality of design, its surroundings, sustainability, amenity, heritage, transport accessibility and any other considerations relevant to the site;
- 12.4.14 Policy A1 Managing the impact of development states:

The Council will seek to protect the quality of life of occupiers and neighbours. We will grant permission for development unless this causes unacceptable harm to amenity.

We will:

a. seek to ensure that the amenity of communities, occupiers and neighbours is protected;

b. seek to ensure development contributes towards strong and successful communities by balancing the needs of development with the needs and characteristics of local areas and communities; ...

...The factors we will consider include:

f. sunlight, daylight and overshadowing;

g. artificial lighting levels;

*h. transport impacts, including the use of Transport Assessments, Travel Plans and Delivery and Servicing Management Plans;* 

#### 12.4.15 Paragraph 6.5 specifically references daylight, sunlight and overshadowing by stating:

Loss of daylight and sunlight can be caused if spaces are overshadowed by development. To assess whether acceptable levels of daylight and sunlight are available to habitable, outdoor amenity and open spaces, the Council will take into account the most recent guidance published by the Building Research Establishment (currently the Building Research Establishment's Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011).

#### London Borough of Camden Planning Guidance (CPG) - Amenity (2021)

- 12.4.16 Pages 7-9 of the CPG Amenity set out Camden's expectations when considering the impact of development schemes upon daylight and sunlight levels and state that where appropriate the 'Building Research Establishment's Site Layout Planning for Daylight and Sunlight A Guide to Good Practice 2011' should be followed.
- 12.4.17 It also states at paragraphs 3.14 and 3.15:

The Council notes the intentions of the BRE document is to provide advice to developers and decision makers and therefore it should be regarded as a guide rather than policy.

While we support the aims of the BRE methodology for assessing sunlight and daylight we will consider the outcomes of the assessments flexibility where appropriate, taking into account site specific circumstances and context. For example, to enable new development to respect the existing layout and form in some historic areas, or dense urban environments, it may be necessary to consider exceptions to the recommendations cited in the BRE guidance. Any exceptions will be assessed on a case-by-case basis.

#### Guidance

# Building Research Establishment Guidelines: Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice, Third Edition (2022)

- 12.4.18 It should be noted that the BRE Guidelines have been updated since the submission of Chapter 12 in the original Environmental Statement (January 2022). However, this update does not affect the assessments or conclusions made in Chapter 12 of the original Environmental Statement (January 2022. The update to the BRE Guidelines affected the internal daylight and sunlight assessment (provided at Appendix 12.27 (A)) which was updated and provided in September 2022. The internal daylight and sunlight report based on the proposals being constructed up to the maximum height parameters is again based on the updated BRE guidelines and provided at Appendix 12.27 (A).
- 12.4.19 The BRE Guidelines provides "advice on site layout planning to achieve god daylighting and sunlighting, within buildings and in the open spaces between them." It is

intended for building designers, developers, consultants and Local Planning Authorities (LPAs). It is intended to be used in conjunction with the Chartered Institute of Building Services Engineers (CIBSE) publication Lighting guide: daylighting and window design.

12.4.20 The advice it gives is not mandatory and should not be used as an instrument of planning policy. Of particular relevance, it states within the opening summary:

"This guide is a comprehensive revision of the 1991 edition of Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice. It is purely advisory and the numerical target values within it may be varied to meet the needs of the development and its location."

12.4.21 In addition, paragraph 1.6 states:

...its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances, the developer or the planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."

12.4.22 The BRE Guidelines<sup>1</sup> makes the following statement regarding the potential for reflected solar glare on a development:

Glare or solar dazzle can occur when sunlight is reflected from a glazed façade or area of metal cladding. This can affect road users outside and the occupants of adjoining buildings. The problem can occur either when there are large areas of reflective tinted glass or cladding on the façade, or when there are areas of glass or cladding, which slope back so that high altitude sunlight can be reflected along the ground. Thus, solar dazzle is only a long-term problem for some heavily glazed (or mirror clad) buildings. Photovoltaic panels tend to dazzle because they are designed to absorb light.

# Commission Internationale de L'Eclairage (CIE) 146:2002 & CIE 147:2002 Collection on glare (2002)

# 12.4.23 The guidance<sup>2</sup> states that:

disability glare is glare that impairs vision. It is caused by scattering of light inside the eye...The veiling luminance of scattered light will have a significant effect on visibility when intense light sources are present in the peripheral visual field and contract of objects is seen to be low.

Disability glare is most often of importance at night when contrast sensitivity is low and there may well be one or more bright light sources near to the line of sight, such as car headlights, streetlights or floodlights. But even in daylight conditions disability glare may be

<sup>&</sup>lt;sup>1</sup> Building Research Establishment Guidelines: Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice, Second Edition (2011)

<sup>&</sup>lt;sup>2</sup> Commission Internationale de L'Eclairage (CIE) 146:2002 & CIE 147:2002 Collection on Glare (2002)

of practical significance: think of traffic lights when the sun is close to them, or the difficulty viewing paintings hanging next to windows.

12.4.24 It describes how the closer the instance of glare is to the line of sight of the viewer the worse the veiling effect of glare becomes.

# 12.5 Consultation

- 12.5.1 As discussed in **Chapter 2: Approach to Assessment**, And as agreed with LBC, the scope of this chapter is to consider the daylight, sunlight, overshadowing and solar glare effects of the Development on the surrounding buildings. A separate standalone report accompanies the planning application detailing the levels of daylight, sunlight and overshadowing that will be enjoyed by/within the Development.
- 12.5.2 As set out and agreed within the Scoping Opinion with LBC that detailed light pollution assessments are not considered necessary.
- 12.5.3 The proposed approach to the daylight, sunlight, overshadowing and solar glare assessment was set out in the submitted EIA Scoping Report. It was agreed with LBC through the Scoping Opinion that if an existing surrounding window were to experience a reduction in its daylight amenity beyond the BRE Guidelines, that a second qualitative assessment should be undertaken, which considers whether the effects can be considered acceptable given the site's urban location. This shall consider the retained levels of daylight/sunlight as well as other factors that may influence the retained levels of daylight/sunlight using professional judgement such as the room's use, overhead balconies or set back windows.
- 12.5.4 At the time of preparing this additional assessment (Chapter 12(A), comments regarding Chapter 12 in the original Environmental Statement (January 2022) had been received from CBRE and Delva Patman Redler on behalf of the Council. These comments, and the clarifications points raised by CBRE and Delva Patman Redler have therefore been incorporated into this additional assessment.

# 12.6 Assessment Methodology and Significance Criteria

- 12.6.1 The following section outlines the methodologies applied to identify and assess the potential impacts and likely effects to result from the Proposed Development.
- 12.6.2 The Daylight, Sunlight and Overshadowing assessment in the original ES (Chapter 12) was carried out on the assumption that there will be plant, equipment and lift over-runs located on the roofs of the buildings. The space on the roofs which is assumed for these features has therefore been included within the maximum building heights on parameters plan 111, given the likelihood that plant and lift over-runs will be situated on the roofs of the buildings, as is common in developments of this kind. This means that the highest points of the buildings themselves (excluding plant and lift over-runs) are situated below the maximum building height lines shown on parameters plan 111.
- 12.6.3 The Council have requested that, for completeness, the applicant undertakes additional assessment for the Daylight, Sunlight and Overshadowing on the assumption that the tops of

the buildings themselves will be built up to the maximum building heights shown on parameters plan 111.

12.6.4 In response to the Council's request, the applicant has undertaken this assessment and submits this Daylight, Sunlight and Overshadowing assessment as part of the Supplementary Environmental Statement under Regulation 25 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. It contains the assessments of the impacts of the buildings themselves being constructed up to the maximum heights on plan 111.

#### Scope of the Assessment

- 12.6.5 An EIA Scoping Report was issued to LBC in April 2021 (**Appendix 2.1**). LBC's formal Scoping Opinion was issued in October 2021 (**Appendix 2.2**).
- 12.6.6 The following potential effects were scoped into the assessment:
  - the daylight and sunlight amenity to the surrounding residential properties;
  - overshadowing to the surrounding private gardens and public amenity areas; and
  - the potential for solar glare to affect approaching motorists, cyclists and train drivers.
- 12.6.7 In addition, a separate standalone report, which is appended to the Environmental Statement, (Appendix 12.27 (A)) will consider the potential for achieving satisfactory levels of daylight and sunlight within the residential buildings and amenity spaces of the proposed development itself.
- 12.6.8 The technical analysis has been undertaken via the creation of a digital three-dimensional model of the existing Site and its surroundings, and the Proposed Development. The cumulative schemes identified in **Chapter 17: Cumulative Effects** were also considered where they have potential influence over daylight, sunlight and overshadowing conditions, which was as agreed within the EIA Scoping Report.
- 12.6.9 The daylight and sunlight assessments used to prepare this chapter are based on the BRE Guidelines. Relevant standards within the BRE Guidelines are set out in the following paragraphs.
- 12.6.10 Residential receptors/properties are usually most sensitive to daylight and sunlight availability. This assessment therefore focusses on the effects to residential properties that surround the Site. The extent of the properties assessed is set out below under the heading 'Sensitive Receptors'.
- 12.6.11 Commercial properties are generally deemed to have a greater reliance on supplementary electric lighting and therefore have been excluded from the assessment.
- 12.6.12 The BRE Guidelines provide different methods for assessing daylight for existing and proposed residential accommodation. These are, however, based upon the same fundamental principles.

#### **Likely Significant Effects**

#### **Demolition and Construction Phase**

12.6.13 Owing to the constantly evolving and changing nature of refurbishment, demolition and construction activities, the assessment of potential effects during refurbishment, demolition and construction of the Proposed Development on daylight, sunlight and overshadowing to the surrounding sensitive receptors have not been modelled and analysed. The effects experienced by the sensitive receptors during the refurbishment, demolition and construction phases will be no greater than that described within the Completed Development section. This approach is often adopted within Daylight, Sunlight, Overshadowing and Solar Glare Environmental Impact Assessments.

#### **Operational Phase**

- Likely to be some reductions in daylight and sunlight amenity within the surrounding residential properties;
- Likely to be some reductions in overshadowing to the surrounding gardens, amenity areas and open spaces; and
- Likely to be some adverse solar glare to the approaching motorists, cyclists and train drivers.

#### Extent of The Study Area

- 12.6.14 The assessments undertaken within this ES chapter will be primarily based on the Building Research Establishment (BRE) guidelines entitled 'Site layout planning for daylight and sunlight: a guide to good practice' (referred to as the 'BRE guidelines'), as well as any relevant national, regional or local planning policies.
- 12.6.15 The BRE guidelines suggest that properties within 3 times the height of each part of the Proposed Development should be considered for assessment. When looking at the areas produced from each part of the scheme, the area produced from the tallest part of the Proposed Development exceeds all others (shown below at **Figure 12.1**), therefore this is the area whereby we have determined the potential sensitive receptors.



Figure 12.1 – Site Plan Showing the Span of Surrounding Properties within 3 times the Tallest Part of the Proposed Development

12.6.16 Based on professional opinion and initial calculations during the design stages however, we have deemed that not all the sensitive receptors (the surrounding existing residential properties and amenity spaces) within this red line boundary are required to have detailed assessments undertaken. We have therefore set out which properties have been assessed within the Sensitive Receptors section below, which were as set out within the Environmental Scoping Report.

# Method of Baseline Collection

- 12.6.17 The assessment of daylight and sunlight amenity is governed principally by the extent of the existing and proposed structures (obstructions) which surround a sensitive receptor. Using professional judgement and an inspection of the site and surrounding context, the extent of the study area has been established by considering which of the surrounding sensitive receptors and open spaces may be affected by the construction of the Proposed Development.
- 12.6.18 The current Baseline Conditions are defined as the existing site conditions at the time of the planning submission. Detailed land survey information has been provided by Plowman Craven and Point 2 which surveyed each of the existing buildings and structures on the site, as well as the surrounding area considered to be relevant for the assessment of daylight, sunlight, overshadowing and solar glare effects.
- 12.6.19 Solar glare is not assessed in the baseline situation as the effect assessment is not typically based upon a comparison of the existing and proposed situations.

#### **Method of Assessment**

#### **Demolition & Construction Phase**

12.6.20 Owing to the constantly evolving and changing nature of refurbishment, demolition and construction activities, the assessment of potential effects during refurbishment, demolition and construction of the Proposed Development on daylight, sunlight, overshadowing and solar glare to the surrounding sensitive receptors have not been modelled and analysed. The effects experienced by the sensitive receptors during the refurbishment, demolition and construction phases will be no greater than that described within the Completed Development section, discussed below.

#### **Operational Phase**

- 12.6.21 As outlined in **Volume 1, Chapter 2: Approach to the Assessment**, of this ES, and in clarifications with CBRE, for the Outline Proposals, the relationship between the Development Plots, Building Lines and limits of deviation are set out in the Design Guidelines, which together with the Parameter Plans are submitted for approval and which therefore set the parameters and form of development. For the Outline Element, this ES and assessment includes an assessment that has been based on the maximum building footprints and maximum building heights as depicted by the Development Plot boundaries in Parameter Plan 111. Parameter Plan 103 indicates limits of deviation up to +3m or -3m for some Development Plot boundaries, whilst maintaining the fixed width of public realm. On the basis of these limits of deviation, and because it is not possible to assess all of the possible locations of the buildings within the limits of deviation due to the number of permutations this would involve, the assessment was carried out on the basis of the building footprint explained above.[
- 12.6.22 It is considered that the type and/or magnitude of the effects that are likely to be experienced as a consequence of the Proposed Development will not differ materially as a result of a form of development coming forward on a different building footprint which sits within the permitted deviation of the building lines contained in the Parameters Plans and Design Guidelines. However, in order to ensure that whatever form of development that comes forward is properly assessed, it is proposed that a condition is imposed on the planning permission to be granted for the Proposed Development requiring that reserved matters are accompanied by a statement confirming that the effects remain as assessed or, if they do not, a supplementary environmental statement which assesses any new or different significant impacts. This will ensure that Camden Council as the local planning authority is provided with all necessary information when it determines the reserved matters submission.

#### Daylight

- 12.6.23 The technical specification offered by the BRE Guidelines is generally accepted to be predicated upon a lower-rise suburban environment as opposed to denser urban environments or areas undergoing regeneration. This is recognised in mayoral policy and by LBC in previous planning applications.
- 12.6.24 The BRE Guidelines repeatedly emphasise to the user, whether that be designers, consultants or planning officials to apply the guidelines in a manner that is appropriate for a particular situation. A recurring theme is that the numerical guidance isn't fixed and it is appropriate to assess the effects of development against alternative target values that are appropriate for a particular situation.

- 12.6.25 The BRE Guidelines present two principal tests when calculating daylight to surrounding buildings where they are considered to have a reasonable expectation of daylight. These are:
  - The Vertical Sky Component test; and
  - The No-Sky Line test (which assesses the Daylight Distribution).
- 12.6.26 These methods, along with a third method known as the Average Daylight Factor (ADF) are described in detail below.

Vertical Sky Component (VSC)

12.6.27 VSC is a quantified measurement of the amount of skylight falling on a vertical wall or window. The BRE Guidelines tell us that:

"This is the ratio of the direct sky illuminance falling on a vertical wall at the reference point (usually the centre of the windows), to the simultaneous horizontal illuminance under an unobstructed sky. The standard CIE (Commission International de l'Eclairage – International Commission on illumination) overcast sky is used, and the ratio is usually expressed as a percentage. The maximum value is almost 40% for a completely unobstructed vertical wall".

- 12.6.28 VSC may be calculated by using the sky light indicator or Waldram Diagram. For calculation purposes, the BRE Guidelines advise that it is usual to ignore trees unless they form dense continuous belts. The computer software used for this daylight assessment has utilised the Waldram Diagram method to calculate the VSC.
- 12.6.29 When analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

12.6.30 The above principle also applies to a window which is set back behind a recessed balcony, located beneath a roof overhang, and also any external staircases etc.

#### No Sky Line (NSL)

12.6.31 The NSL test is a measure of the distribution of daylight at the 'working plane' within a room. Typically, the 'working plane' is a horizontal 'desktop' plane taken at 0.85 metres above finished floor level. The NSL divides those areas of the working plane in a room which receives direct sky light through the windows from those areas of the working plane which does not. The BRE Guidelines advise that if a significant area of the working plane lies beyond the NSL (i.e. it receives no direct sky light) then the distribution of daylight in the room would be poor and supplementary electric lighting may be required.

12.6.32 The potential effect of the daylighting distribution in the surrounding existing buildings is established by plotting the NSL in each of the main rooms. For houses, this includes living rooms, dining rooms and kitchens. The BRE Guidelines advise that bedrooms should also be analysed, although they are less important.

### Average Daylight Factor (ADF)

- 12.6.33 The ADF method is a more complex and representative calculation to determine the natural internal luminance (daylight).
- 12.6.34 The ADF is defined in the BRE Guidelines as:

"A ratio of total daylight flux incident on a reference area to the total area of the reference area, expressed as a percentage of outdoor luminance on a horizontal plane, due to an unobstructed sky of assumed or known luminance distribution".

- 12.6.35 This daylight assessment method considers the diffuse visible transmittance of the glazing to the room in question (i.e. how much light gets through the window glass); the net glazed area of the window in question; the total area of the room surfaces (ceiling, walls, floor and windows); and the angle of visible sky reaching the window/windows in question. It also makes allowance for the average reflectance of the internal surfaces of the room and for external obstruction. The BRE Guidelines recommend that for a fairly light-coloured room an internal reflectance value of 0.5 can be assumed.
- 12.6.36 The BRE Guidelines suggest the minimum levels of average daylight factor (ADF) being:
  - Bedroom 1%;
  - Living room 1.5%; and
  - Kitchen 2%.
- 12.6.37 Where a room serves more than one purpose the minimum ADF used should be that for the room type with the highest value.
- 12.6.38 The ADF assessments in this chapter have been used predominantly for the assessment of the proposed new dwellings within the adjacent cumulative Midlands Crescent scheme.

# Sunlight

#### Annual Probable Sunlight Hours (APSH)

- 12.6.39 The BRE Guidelines suggest using the Annual Probable Sunlight Hours (APSH) when assessing sunlight impact to neighbouring properties.
- 12.6.40 For existing residential properties, the BRE Guidelines state in Section 3.2.3 that:

*"all main living rooms of dwellings…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."* 

Section 3.2.4 continues:

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*"If the main living room to a dwelling has a main window facing within 90° of due north, but a secondary window facing within 90° of due south, sunlight to the secondary window should be checked."* 

12.6.41 The BRE Guidelines suggest that when assessing sunlight for existing neighbouring buildings, the point at the centre of the window on the outside window face can be used. Section 3.2.5 states:

"If this window point can receive at least one quarter of APSH, including at least 5% of APSH in the winter months between 21 September and 21 March, then the room should still receive enough sunlight."

12.6.42 Where an existing surrounding room is served by more than one window (regardless of whether they all or only some face within 90° of due south), all windows have been assessed. This ensures that the true level of sunlight amenity to the room in question is considered.

#### Overshadowing

12.6.43 The BRE Guidelines acknowledge that sunlight in the space between buildings has an important effect on the overall appearance and ambience of a development.

"3.3.1 Good site layout planning for daylight and sunlight should not limit itself to providing good natural light inside buildings. Sunlight in the space between buildings has an important effect on the overall appearance and ambience of a development."

#### Sun on Ground

- 12.6.44 The method for assessing sun on the ground is the 'sun-on-ground indicator'. The BRE Guidelines suggest that the Spring Equinox (March 21st) is a suitable date for the assessment.
- 12.6.45 Using specialist software, the path of the sun is tracked to determine where the sun would reach the ground and where it would not. This assessment reviews the total percentage of an area that receives at least 2 hours of direct sunlight on March 21st.
- 12.6.46 The BRE Guidelines suggest that for a garden or amenity area to appear adequately sunlit throughout the year, no more than half (50%) of the area should be prevented by buildings from receiving 2 hours of sunlight on the 21st March.

#### Transient Overshadowing

- 12.6.47 The BRE Guidelines suggest that where large buildings are proposed, which may affect a number of gardens or open spaces, it is useful to plot a shadow plan to illustrate the location of shadows at different times of the day and year. For the purpose of this assessment the overshadowing was mapped for the following three key dates:
  - 21st March (Spring Equinox);
  - 21st June (Summer Solstice); and
  - 21st December (Winter Solstice).
- 12.6.48 September 21st (Autumn Equinox) provides the same overshadowing images as March 21st (Spring Equinox), as the sun follows the same path on these dates.

12.6.49For each of these dates, the overshadowing has been calculated at hourly intervals<br/>O2 - Finchley RoadPlowman Craven<br/>43284Volume 1: Environmental Statement – Main Text43284<br/>December 2022<br/>and Solar Glare

throughout the day from 08:00 to 19:00. Some images are not included within **Appendix 12.14** (A) because the sun would not be present during these times (e.g. from approximately 16:00 onwards on 21st December) and thus no shadow can be cast.

12.6.50 **Table 12.2** below shows the sunset and sunrise times for the 21st March, 21st June and 21st December. It also shows the maximum altitude of the sun and the time at which the sun reaches the altitude of 10°, which is the altitude at which the BRE Guidelines specifies overshadowing should be assessed. Receipt of sunlight can be disregarded when it is lower than this altitude.

London, UK - Greenwich Mean Time (Accurate to Nearest 10 minutes)					
Date	Sunrise Time	Time at 10° Altitude Rising	Maximum (degrees) Altitude	Time at Setting 10° Altitude	Sunset Time
21 March	06:10	07:10	39.4	17:10	18:10
21 June	03:50	05:10	62.4	19:00	20:10
21 December	08:10	09:50	15.6	14:10	16:00

#### Table 12.2 - Sun Altitude Dates and Times

# Solar Glare

- 12.6.51 Glare can be divided into two distinct categories. Discomfort glare (otherwise known as psychological glare) is about the difficulty in being able to see in order to carry out a task, or a reaction to avoid looking towards a bright source of light. Disability glare (otherwise known as physiological 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.
- 12.6.52 Discomfort glare has not been assessed as it is a subjective psychological response to bright light. Disability glare resulting from solar reflection from building facades can give rise to increased risk of accidents, and it is this phenomenon which is the subject of detailed analysis in this assessment.
- 12.6.53 The assessment of solar glare from the Proposed Development is, generally, not a comparative one. There is, therefore, no baseline solar glare condition in this instance. Whilst there may be instances of solar glare from the existing and other surrounding buildings which may be visible from the sensitive viewpoints, or which, when the Proposed Development is constructed, would no longer be visible from the sensitive viewpoints identified, this has not been technically assessed.
- 12.6.54 The Solar Glare assessment has considered the likely effects on the nearby road and railway user in two scenarios. Scenario one equating to a worse-case which assessed the effects of the scheme if it were to be fully mirrored, and another scenario where the detailed

application was modelled as detailed (i.e. with all the windows in the correct places, and brick façades in place etc.) with the outline scheme remaining as fully mirrored (as we do not yet know the position of any windows).

12.6.55 The BRE Guidelines makes the following statement regarding the potential for reflected solar glare on a development at paragraph 5.8.1:

"Glare or solar dazzle can occur when sunlight is reflected from a glazed façade or area of metal cladding. This can affect road users outside and the occupants of adjoining buildings. The problem can occur either when there are large areas of reflective tinted glass or cladding on the façade, or when there are areas of glass or cladding, which slope back so that high altitude sunlight can be reflected along the ground. Thus, solar dazzle is only a long-term problem for some heavily glazed (or mirror clad) buildings. Photovoltaic panels tend to dazzle because they are designed to absorb light."

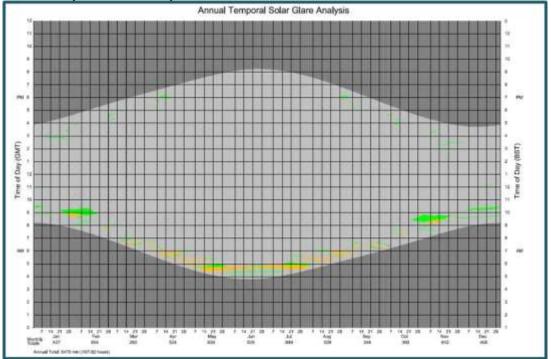
12.6.56 The BRE guidelines outline a brief methodology for evaluation of the scale of a solar glare issue:

"If it is likely that a building may cause solar dazzle the exact scale of the problem should be evaluated...by identifying key locations such as road junctions and windows of nearby buildings and working out the number of hours of the year that sunlight can be reflected to these points."

- 12.6.57 The solar glare assessments undertaken as part of this Chapter first simulate the path of the sun for the entire year around the Proposed Development. This is to establish the locations, times, duration and direction of solar reflections and identify where these may affect sensitive locations, with a particular focus on road users or railways. This is referred to as the 'annual sequence'. The assessment is carried out using a specialist software applied to a three-dimensional AutoCAD model of the building and its surrounding context.
- 12.6.58 From the annual sequence assessment, the sensitive receptor locations have been identified from which more detailed tests have been run using calendar graphs. The type of calendar graph considered shows the angle at which the solar glare that may occur from the reference point, when it will occur, and the duration. An example calendar graph is given below at Figure 12.2:



Figure 12.2 - Example Calendar Graph



- 12.6.59 The calendar graphs' axes show the days of the year along the X axis and time of day on the Y axis. The graph has 365 segments along the X axis, one for each day of the year and 720 segments on the Y axis each representing 5 minutes of the 24hr period per day. The light grey areas illustrate the times of daylight during each day and the dark grey areas illustrates the times of night. The yellow, green, orange and red colours indicate when Solar Glare may occur, and, depending on the colour, the angle at which it is likely to occur from the receptor. If a band of colour is tall it means that solar glare is likely to occur for an extended period of time during that day. If the band of colour is thin and long on the graph, it means solar glare may occur on each day but only for a limited time. This assessment does not account for the limits of the windscreen or for possible use of drivers' visors, which could mitigate some glare instances.
- 12.6.60 Glare occurrences that could encroach on the foveal view (which is 3° from the visual axis See Figure below) are depicted in red on the calendar graphs. Glare occurrences that could encroach between 3° and 10° of the centre of the visual axis are depicted in orange and glare occurrences that could encroach between 10° and 30° of the centre of the visual axis are depicted in green. Beyond 30° the glare occurrences are depicted in yellow.

#### Methodology of Defining an Alternative Target Value

- 12.6.61 When determining the effects a scheme may have on the neighbouring surrounding sensitive receptors, the scale of reduction is just one of many factors to consider. It is also important to consider whether the level of daylight/sunlight left behind is considered acceptable based upon the ever evolving city landscape.
- 12.6.62 The Site doesn't sit within a particular Allocated Development Site or Opportunity Area; however, it is adjacent to four underground/overground rail Stations, which should encourage a delivery of a high density, high-quality mixed-use development, including commercial and residential uses, that optimises the development potential of the site.

- 12.6.63 The NPPF suggests that the BRE Guidelines should be applied sensitively to higher density developments.
- 12.6.64 In urban locations where the proposed development is either currently undeveloped or contains relatively low-rise structures, reductions of daylight and sunlight beyond the BRE Guidelines as a result of redevelopments such as this are considered likely. This is because the existing levels of daylight and sunlight can be unusually high for an urban location such as this and applying the BRE guidelines 20% reduction rule can still result in a retained light level above what is considered well above what is expected for an urban or even suburban area.
- 12.6.65 The above view is recognised by the BRE guidelines, which suggests that it may not be appropriate to apply the general guidance to all development locations but set alternative target values based on the locality of the Development. Therefore, where the likely reductions are beyond the general BRE guidelines criteria, this Chapter has considered whether the likely retained levels of daylight and sunlight are commensurate with the urban context of the Development and its proposed density.
- 12.6.66 The London SPG Housing advises that the daylight impact on adjacent properties should be "assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London". Similar, recently built/consented, schemes in London (referred to as the 'contextual sites') and the levels of daylight retained to the existing surrounding residential properties have therefore been considered as part of the Contextual sites analysis for determining an alternative target value. The aim of this study is to establish what could be considered an acceptable level of retained daylight, which can then be applied to the Development's results. The full analysis and conclusions of the contextual sites analysis is given within **Appendix 12.26 (A)**.
- 12.6.67 For each contextual site considered, three different studies were used in order to draw conclusions:
  - Specific Façade Studies Showing the VSC values to specific buildings/façades and at specific floor levels.
  - Site Facing Residential Façade Studies Showing the VSC to all of the site facing residential façades (i.e. the immediate surrounding elevations with residential windows facing towards the Development).
  - All Façades in the Surrounding Area Consideration was given to the VSC values to all façades in the surrounding area.
- 12.6.68 The purpose of the two general wider area assessments (items ii. and iii. above) was to demonstrate that the elevations chosen for the Specific Façade Studies were not 'cherry picked' as the worst-case for the area and that the results of items ii and iii above should support the results of the Specific Façade Studies.
- 12.6.69 Following the guidance set out in The London SPG Housing, the BRE guidelines should be applied sensitively and alternative targets should be based on comparable residential typologies within the area and of a similar nature across London. The results of these comparable studies therefore helped to draw the conclusion that a retained VSC of 15% (when ignoring the effect of any obstructions such as balconies) can be considered an acceptable level of daylight, given the proposed density and location of the Development.
- 12.6.70 When looking to apply the above guidance, these concluding results were in line with one of the key examples presented which was The Whitechapel Estate Site. This is considered

a suitable comparator, whereby it was an existing low-rise site which was developed as a highdensity residential led scheme within an urban area of London. In the appeal (Appeal Ref: APP/E5900/W/17/3171437) the Inspector noted:

- A blanket application of the BRE guidelines standards, is not appropriate given the inner-city location and the transformational change sought in the area. The London Housing SPG also encourages that the guidelines should be applied sensitively in opportunity areas and accessible locations given the need to optimise housing capacity.
- Vertical Sky Component (VSC) values in the 'mid-teens' have been found to be acceptable across London and endorsed by the GLA in an inner-city area.
- Weight is given to the fact that the Whitechapel Vision Masterplan ('WVM') and Opportunity Area Planning Framework ('OAPF') flag the desirability of high-density development and therefore existing residents 'would be prepared for change and would not necessarily expect existing standards of daylight and sunlight to persist after development'.
- The Proposal would result in some significant individual reductions in daylight and sunlight levels, but this is 'almost unavoidable in achieving the policy requirement for high density development in a confined urban setting'.
- 12.6.71 With regards to daylight distribution, it is not feasible to carry out a similar contextual assessment as undertaken for the VSC. This is because the detail such as the layout of each room surrounding each Site is unknown and would take a very long time to model and assess. We are however of the professional view that it is very difficult to retain direct daylight to at least 80% of the working plane in urban locations without having to compromise on other factors, such as, ensuring the development potential of the site is fully utilised. In addition, it is often found that this level is not achieved in the existing condition. For urban locations, we are generally of the professional view that if more than 50% of the working plane can continue to receive some direct daylight, then the room can be considered to retain an adequate level of daylight distribution.
- 12.6.72 As the ability to receive sunlight is dependent on the orientation of the window it is also not reasonably possible to apply the same methodology to establish some suitable alternative criteria as done for the VSC test. However, based on our collective experience, we would consider a retained total APSH of 15% and above (to a window unobstructed by balconies or other projections etc.) a reasonable level of retained sunlight for a dense urban area.

# 12.7 Significance Criteria

- 12.7.1 The assessment of the potential impacts and likely effects as a result of the Proposed Development has taken into account both the Demolition and Construction Phases and Operational phases. The significance level attributed to each effect has been assessed based on the magnitude of change due to the Proposed Development and the sensitivity of the affected receptor/receiving environmental to change, as well as a number of other factors that are outlined in more detail in **Chapter 2: Approach to Assessment**.
- 12.7.2 Magnitude of change and the sensitivity of the affected receptor/receiving environmental are both assessed on a scale of high, medium, low and negligible (as shown in **Chapter 2: Approach to Assessment).**

# Daylight, Sunlight and Sun on Ground

12.7.3 The BRE Guidelines are predicated upon a suburban environment. Therefore, a degree of

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flexibility should be applied when assessing the significance of daylight and sunlight effects in urban locations.

12.7.4 The BRE Guidelines state at paragraph I3 – I4 of Appendix I:

*"13 Adverse effects occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space* 

14 The assessment of effect will depend on a combination of factors, and there is no simple rule of thumb that can be applied."

- 12.7.5 In view of the above, the interpretation of the daylight and sunlight results must be assessed in terms of the quantum of light lost or gained, not purely in terms of the percentage of change. The percentage value may well be misleading, particularly where the baseline values are small. In these situations, a small change in the quantum of light could represent a high percentage change in the overall figure, implying that there would be a significant change in daylight and sunlight, whereas in reality the difference would be negligible.
- 12.7.6 The numerical criteria provided within the BRE Guidelines are presented in **Table 12.3** below:

# Table 12.3 – Daylight, Sunlight and Sun on Ground Criteria for Existing Surrounding Residential Properties

Issue	BRE Criteria
Vertical Sky Component	A window may be adversely affected if the VSC measured at the centre of the window is less than 27% and less than 0.8 times its former value.
No Sky Line	A room may be adversely affected if the daylight distribution (no sky line) is reduced beyond 0.8 times its existing area.
Annual Probable Sunlight Hours	A window may be adversely affected if a point at the centre of the window receives for the whole year, less than 25% of the APSH including at least 5% of the APSH during the winter months (21 September to 21 March) and less than 0.8 times its former sunlight hours during either period, and (for existing neighbouring buildings), if there is a reduction in total APSH which is greater than 4%.
Sun on Ground	An existing garden or amenity area may be adversely affected if it cannot receive two hours of sunlight on 21st March and is less than 0.8 times its former value.

- 12.7.7 The assessment criteria specified within the BRE Guidelines where a change in daylight and/or sunlight may be noticeable to the occupants, and do not further define effects beyond this.
- 12.7.8 However, in urban locations where the proposed site is either currently undeveloped or contains relatively low structures, reductions of daylight and sunlight beyond the BRE guidelines as a result of redevelopments such as this are considered likely. This is because the existing levels of daylight and sunlight can be high and applying the BRE Guidelines 20% reduction rule can still result in a level above what is considered a good level of daylight or sunlight for an urban area.
- 12.7.9 The above view is supported by the BRE Guidelines which recognises that it may not be appropriate to apply the general guidance but set alternative target values based on the locality of the proposed site. Therefore, as discussed below, and as set out within the EIA Scoping Opinion, which was issued to LBC, the overall conclusions reached for each surrounding

residential building are to be based on up to two separate sub-conclusions.

12.7.10 The first sub-conclusion is established using the relevant tests and criteria set out in the BRE guidelines. These tests enable us to consider whether the Development is likely to create an 'negative', or 'notable' effect, on the surrounding properties. The scale of these reductions/effect have been described as negligible, minor, moderate or major by reference to the criteria summarised within **Table 12.4** below, with moderate or major effects considered to be significant:

Significance	Description
Negligible	No alteration or a small alteration from the existing scenario which is within the numerical levels suggested in the BRE Guidelines.
Minor Negative	Minor infringements (20.1% - 30% reductions) of the numerical values suggested in the BRE Guidelines, which should be viewed in context.
Moderate Negative	Moderate infringements (30.1% - 40%) of the numerical values suggested in the BRE Guidelines, which should be viewed in context.
Major Negative	Major infringements (40.1%+) of the numerical values suggested within the BRE Guidelines, which should be viewed in context.

12.7.11 Once the scale of the reductions has been determined, and if the effects are moderate or major negative (and therefore 'significant'), the second sub-conclusion will consider whether the effects, whilst significant, can still be considered acceptable.

12.7.12 As already set out above, this will include factors such as:

- the retained levels of daylight or sunlight compared to the alternative target values (established within the Contextual Justification at 14%-15% retained VSC at ground floor).
- the room's use, whether the room is served by more than one window and/or the effect on the main window.
- whether existing balconies restrict the existing levels of daylight and/or sunlight; and
- whether the windows are set back from the main elevation such that lower levels of daylight and/or sunlight are enjoyed in the baseline condition.

#### **Transient Overshadowing**

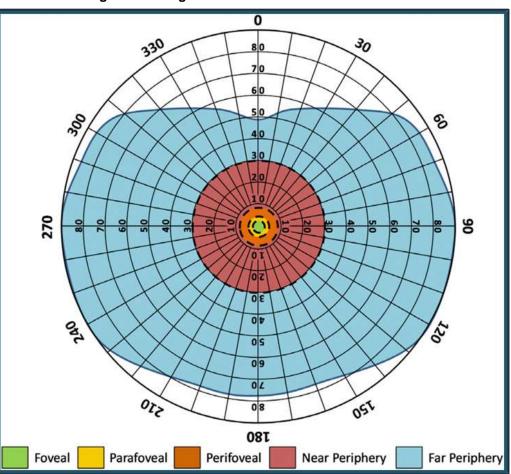
- 12.7.13 The BRE Guidelines do not provide any criteria for the significance of transitory overshadowing, other than to suggest that by establishing the different times of day and year when shadow would be cast over adjacent areas, an indication is given as to the significance of the effect of the development.
- 12.7.14 The assessment of transient overshadowing effects is therefore based on professional judgement, taking into consideration the effect of the existing Site and comparing it with the likely transient overshadowing effect of the Development. The effects are defined as being of negligible, minor negative, moderate negativeor major negative or of beneficial significance, with moderate or major effects considered to be significant.

#### Solar Glare

12.7.15 There are no quantitative criteria within the BRE Guidelines regarding acceptable levels of solar glare. There is, however, research which suggests that the significance of a glare occurrence is largely dependent upon its angle from the line of sight and the relevance of this with respect to the human field of vision:

"The fovea centralis, also generally known as the fovea, is a part of the eye, located in the centre of the macula region of the retina. The fovea is responsible for sharp central vision (also called foveal vision), which is necessary in humans for reading, watching television or movies, driving, and any activity where visual detail is of primary importance."

12.7.16 Glare occurrences that could encroach on the foveal view (which is 3° from the visual axis – See Figure 12.3 below) are likely to cause material and significant visual impairment or distraction. It is also likely that the viewer's line of sight will vary from the chosen view direction at each Viewpoint. To account for this along with the likely range of movement of the eye, it is considered that lengthy occurrences within approximately 10° of the centre of the visual axis are potentially the most hazardous. In this scenario, the adverse impact would often be considered significant and material, and mitigation may be required.





- 12.7.17 Between 10° and 30° corresponds to Near Periphery field of view and therefore where glare occurs between these angles, the impact would not be considered material or significant
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depending upon the location and use of the adjacent sensitive receptor and the period of time the glare occurs for.

12.7.18 An angle of greater than 30° corresponds to the Far Periphery field of view and, therefore, the risk of reflective solar glare causing a hazard is reduced. As such, the impact is considered to be negligible.

#### **Effect Significance**

- 12.7.19 The following terms have been used to define the significance of effects identified:
  - **Major positive or negative effect** where the Proposed Development would cause a large improvement (or deterioration) to the existing environment;
  - **Moderate positive or negative effect** where the Proposed Development would cause a noticeable improvement (or deterioration) to the existing environment;
  - **Minor positive or negative effect** where the Proposed Development would cause a small improvement (or deterioration) to the existing environment; and
  - **Negligible** no discernible improvement or deterioration to the existing environment as a result of the development will occur.

# 12.8 Sensitive Receptors

- 12.8.1 The assessments undertaken within this ES chapter will be primarily based on the Building Research Establishment (BRE) guidelines entitled 'Site layout planning for daylight and sunlight: a guide to good practice' (referred to as the 'BRE guidelines'), as well as any relevant national, regional or local planning policies.
- 12.8.2 In accordance with the BRE guidelines, the potential sensitive receptors to daylight and sunlight reductions are the surrounding residential properties and within these the habitable rooms. All receptors assessed are therefore considered to be of high sensitivity. In accordance with the BRE guidelines, commercial/retail uses, and non-habitable rooms are not considered to have a reasonable expectation of daylight or sunlight and will therefore not be assessed.
- 12.8.3 The properties identified as having a reasonable expectation for daylight and sunlight amenity have been established using desktop research of the London Borough of Camden's online planning applications database and the Valuation Office Agency's online database of property council tax bands.
- 12.8.4 Based on professional opinion and initial calculations undertaken during the design phases, we have deemed that the sensitive receptors (the surrounding existing residential properties and amenity spaces) that require detailed assessment within the ES Chapter include the following: (the locations are shown in **Figure 12.4**).
  - 1. Hardy Building
  - 2. 124 West End Lane
  - 3. 3-9 Blackburn Road
  - 4. Asher House
  - 5. Nido House (Student Residential Accommodation)

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- 6. 54-73 Lithos Road (Odd and Even Numbers)
- 7. 54 A-D Rosemont Road
- 8. 30-48 Rosemont Road
- 9. 26 Rosemont road
- 10. 24 A-C Rosemont Road

- 11. 22 A-C Rosemont Road
- 12. 20 A-C Rosemont Road
- 13. 2-16 Rosemont Road (Even Numbers Only)
- 14. 6-8 Frognal Parade, 1-6 Warwick House
- 15. 1-5 Frognal Parade, 1-4 Midland Court
- 16. Holiday Inn, 152-156 Finchley Road
- 17. 17-27 Canfield Place (Odd Numbers Only)

- 18. 132-150 Finchley Road (Even Numbers Only)
- 19. 1-32 Broadfield
- 20. 33-76 Broadfield
- 21. 77-108 Broadfield
- 22. 140-148 Broadhurst Gardens
- 23. 152-154 Broadhurst Gardens
- 24. 164-190 Broadhurst Gardens
- 25. 102-114 West End Lane (Even Numbers Only)

Figure12. 4 – Location of Sensitive Receptors



- 12.8.5 In response to the comments made by CBRE and Delva Patman Redler, additional sensitive receptors, beyond the extent of those listed above have been considered using the BRE guidelines 25 degree line test. The method involves creating a section through the relevant property and drawing a line at an angle of 25° from the centre of the lowest surrounding residential windows. If the profile of the proposed development sits beneath the 25° angle line, then the development is unlikely to have a substantial effect on the daylight enjoyed by that building. i.e. the effect, if any, would be considered negligible.
- 12.8.6 Sections have been produced at various locations through the Site to consider whether additional properties needed to be considered for detailed assessments. These sections are given at **Appendix 12.28 (A)**.
- 12.8.7 These sections are based on the maximum building footprints and maximum building heights as depicted by the Development Plot boundaries in Parameter Plan 111 (i.e. as assessed in this additional Chapter 12(A).

12.8.8 Each section shows that the proposed development sits beneath the 25° angle line. The effectO2 - Finchley RoadPlowman CravenVolume 1: Environmental Statement – Main Text43284Chapter 12 A: Daylight, Sunlight, OvershadowingDecember 2022and Solar GlareSolar Glare

on these properties, and any further afield can therefore be considered negligible and not require detailed assessment. This also confirmed that the extent of properties proposed to be assessed is correct.

# **12.9 Baseline Conditions**

- 12.9.1 This section outlines the existing baseline conditions of the Site.
- 12.9.2 A 3D model of the existing baseline scenario was constructed. Detailed drawings of this scenario assessment model can be found at Appendix 12.1 (A). The drawings in Appendix 12.1 (A) also illustrate the location of the surrounding residential properties in relation to the Site.
- 12.9.3 The model was analysed in order to ascertain the baseline levels of daylight and sunlight amenity within the surrounding residential properties against the minimum recommended values recommended in the BRE Guidelines.

#### **Baseline VSC**

12.9.4 The baseline VSC conditions were assessed. Full detailed results can be found in **Appendix 12.6 (A)**. These are summarised in **Table 12.5**.

Baseline VSC Summary			
Address	No. of Windows	No. of Windows that meet VSC criterion (>27%)	
Hardy Building	30	27	
124 West End Lane	20	20	
3 Blackburn Road	11	10	
5 Blackburn Road	6	6	
7 Blackburn Road	6	6	
9 Blackburn Road	8	8	
Asher House	51	50	
Nido House (Student Accomodation)	139	139	
73 Lithos Road	16	6	
72 Lithos Road	14	4	
71 Lithos Road	11	5	
70 Lithos Road	11	5	
69 Lithos Road	11	5	
68 Lithos Road	12	6	
67 Lithos Road	12	6	
66 Lithos Road	11	5	
65 Lithos Road	11	5	

#### Table 12.5 - Summary of Baseline VSC Results

	40	<u>^</u>
64 Lithos Road	12	6
63 Lithos Road	12	6
62 Lithos Road	11	5
61 Lithos Road	11	6
60 Lithos Road	11	5
59 Lithos Road	14	4
58 Lithos Road	14	4
57 Lithos Road	10	3
56 Lithos Road	10	5
55 Lithos Road	10	3
54 Lithos Road	11	4
54a-D Rosemont Road	18	13
48 Rosemont Road	11	5
46 Rosemont Road	11	5
44 Rosemont Road	11	5
42 Rosemont Road	11	5
40 Rosemont Road	11	5
38 Rosemont Road	11	5
36 Rosemont Road	11	5
34 Rosemont Road	11	5
32 Rosemont Road	11	4
30 Rosemont Road	41	21
26 Rosemont Road	6	3
24c Rosemont Road	10	4
24b Rosemont Road	10	7
24a Rosemont Road	10	7
22c Rosemont Road	10	7
22b Rosemont Road	10	7
22a Rosemont Road	10	7
20c Rosemont Road	10	7
20b Rosemont Road	10	7
20a Rosemont Road	10	7
16 Rosemont Road	12	9
14 Rosemont Road	8	8
12 Rosemont Road	23	19
10 Rosemont Road	12	9
8 Rosemont Road	15	11
6 Rosemont Road	4	3
4 Rosemont Road	6	6
2 Rosemont Road	7	4
	1	

6-8 Frognal Parade, 1-6 Warwick House	12	12
1-5 Frognal Parade, 1-4 Midland Court	16	14
Holiday Inn, 152-156 Finchley Road	41	41
150 Finchley Road	14	14
148 Finchley Road	12	12
146 Finchley Road	12	12
144 Finchley Road	12	12
142 Finchley Road	12	12
140 Finchley Road	13	13
138 Finchley Road	14	14
136 Finchley Road	14	14
134 Finchley Road	11	11
132 Finchley Road	14	14
17 Canfield Place	6	1
19 Canfield Place	4	1
21 Canfield Place	2	1
23 Canfield Place	9	3
25 Canfield Place	7	1
27 Canfield Place	10	3
1-32 Broadfield	96	58
33-76 Broadfield	122	70
77-108 Broadfield	96	58
140 Broadhurst Gardens	16	8
142 Broadhurst Gardens	16	8
144 Broadhurst Gardens	16	9
146 Broadhurst Gardens	25	10
148 Broadhurst Gardens	23	23
152 Broadhurst Gardens	13	5
154 Broadhurst Gardens	5	3
164 Broadhurst Gardens	4	4
166 Broadhurst Gardens	3	3
168 Broadhurst Gardens	10	8
170 Broadhurst Gardens	8	7
172 Broadhurst Gardens	8	6
174 Broadhurst Gardens	8	7
176 Broadhurst Gardens	7	6
178 Broadhurst Gardens	6	6
180 Broadhurst Gardens	4	3
182 Broadhurst Gardens	4	2
184 Broadhurst Gardens	3	2

186 Broadhurst Gardens	14	13
190 Broadhurst Gardens	24	22
102 West End Lane	16	11
104 West End Lane	2	0
106 West End Lane	1	1
108 West End Lane	1	1
110 West End Lane	1	1
112 West End Lane	2	2
114 West End Lane	4	4
Total	1640	1140

12.9.5 The VSC baseline results show that in the current situation, 69.5% of the surrounding properties benefit from at least 27% VSC which is in accordance with the BRE guidelines.

#### **Baseline NSL**

12.9.6 The baseline NSL conditions of the same properties were assessed. Full detailed results can be found in **Appendix 12.7 (A)**. These are summarised in **Table 12.6**.

Baseline NSL Summary			
Address	No. Of Rooms	No. Of Rooms That Receive NSL In Excess Of 80%	
Hardy Building	17	17	
124 West End Lane	8	8	
3 Blackburn Road	6	6	
5 Blackburn Road	3	3	
7 Blackburn Road	3	3	
9 Blackburn Road	3	3	
Asher House	13	13	
Nido House (Student Accomodation)	107	107	
73 Lithos Road	8	8	
72 Lithos Road	6	6	
71 Lithos Road	4	4	
70 Lithos Road	4	4	
69 Lithos Road	4	4	
68 Lithos Road	5	5	
67 Lithos Road	5	5	
66 Lithos Road	4	4	

Table 12.6 - Summary of Baseline NSL Results

O2 - Finchley Road Volume 1: Environmental Statement – Main Text Chapter 12 A: Daylight, Sunlight, Overshadowing and Solar Glare

65 Lithos Road	4	4
64 Lithos Road	5	5
63 Lithos Road	5	5
62 Lithos Road	4	4
61 Lithos Road	4	4
60 Lithos Road	4	4
59 Lithos Road	6	6
58 Lithos Road	6	6
57 Lithos Road	4	4
56 Lithos Road	4	4
55 Lithos Road	4	4
54 Lithos Road	4	4
54a-D Rosemont Road	12	12
48 Rosemont Road	4	4
46 Rosemont Road	4	4
44 Rosemont Road	4	4
42 Rosemont Road	4	4
40 Rosemont Road	4	4
38 Rosemont Road	4	4
36 Rosemont Road	4	4
34 Rosemont Road	4	4
32 Rosemont Road	4	4
30 Rosemont Road	15	15
26 Rosemont Road	4	1
24c Rosemont Road	4	4
24b Rosemont Road	4	4
24a Rosemont Road	4	4
22c Rosemont Road	4	4
22b Rosemont Road	4	4
22a Rosemont Road	4	4
20c Rosemont Road	4	4
20b Rosemont Road	4	4
20a Rosemont Road	4	4
16 Rosemont Road	7	7
14 Rosemont Road	4	4
12 Rosemont Road	5	5
10 Rosemont Road	3	3
8 Rosemont Road	4	4
6 Rosemont Road	1	1
4 Rosemont Road	2	2

	l	
2 Rosemont Road	4	3
6-8 Frognal Parade, 1-6 Warwick House	6	6
1-5 Frognal Parade, 1-4 Midland Court	8	8
Holiday Inn, 152-156 Finchley Road	41	37
150 Finchley Road	8	8
148 Finchley Road	8	8
146 Finchley Road	8	8
144 Finchley Road	8	8
142 Finchley Road	8	8
140 Finchley Road	8	8
138 Finchley Road	8	8
136 Finchley Road	8	8
134 Finchley Road	8	8
132 Finchley Road	9	8
17 Canfield Place	5	4
19 Canfield Place	2	2
21 Canfield Place	2	2
23 Canfield Place	7	3
25 Canfield Place	3	2
27 Canfield Place	5	2
1-32 Broadfield	96	96
33-76 Broadfield	122	122
77-108 Broadfield	96	96
140 Broadhurst Gardens	9	9
142 Broadhurst Gardens	9	9
144 Broadhurst Gardens	10	9
146 Broadhurst Gardens	9	7
148 Broadhurst Gardens	23	23
152 Broadhurst Gardens	9	8
154 Broadhurst Gardens	5	4
164 Broadhurst Gardens	3	3
166 Broadhurst Gardens	3	3
168 Broadhurst Gardens	6	6
170 Broadhurst Gardens	6	6
172 Broadhurst Gardens	8	8
174 Broadhurst Gardens	6	6
176 Broadhurst Gardens	7	6
178 Broadhurst Gardens	5	5
180 Broadhurst Gardens	4	4
182 Broadhurst Gardens	3	3
	1	1

184 Broadhurst Gardens	3	3
186 Broadhurst Gardens	7	7
190 Broadhurst Gardens	20	17
102 West End Lane	16	12
104 West End Lane	2	1
106 West End Lane	1	1
108 West End Lane	1	1
110 West End Lane	1	1
112 West End Lane	2	2
114 West End Lane	1	1
Total	1040	1008

12.9.7 The NSL baseline results show that in the current situation 96.9% of the rooms within the surrounding properties benefit from direct skylight at working plane height to in excess of 80% of the room area which is in accordance with the BRE guidelines.

#### **Baseline APSH**

12.9.8 The baseline APSH conditions of those properties which have windows which are orientated to within 90° of due south were assessed. Full detailed results can be found in Appendix 12.9 (A). These are summarised in Table 12.7.

Baseline Room APSH Summary			
Address	No. of Rooms	No. of Rooms that Meet APSH Criteria	
Hardy Building	6	6	
124 West End Lane	8	8	
3 Blackburn Road	6	6	
5 Blackburn Road	3	3	
7 Blackburn Road	3	3	
9 Blackburn Road	3	3	
Asher House	13	13	
Nido House (Student Accomodation)	29	29	
73 Lithos Road	8	8	
72 Lithos Road	6	6	
71 Lithos Road	4	4	
70 Lithos Road	4	4	
69 Lithos Road	4	4	
68 Lithos Road	5	5	

Table 12.7 - Summary of Baseline APSH Results

	_	
67 Lithos Road	5	5
66 Lithos Road	4	4
65 Lithos Road	4	4
64 Lithos Road	5	5
63 Lithos Road	5	5
62 Lithos Road	4	4
61 Lithos Road	4	4
60 Lithos Road	4	4
59 Lithos Road	6	6
58 Lithos Road	6	6
57 Lithos Road	4	3
56 Lithos Road	4	3
55 Lithos Road	4	3
54 Lithos Road	4	3
54a-D Rosemont Road	12	12
48 Rosemont Road	4	4
46 Rosemont Road	4	4
44 Rosemont Road	4	4
42 Rosemont Road	4	4
40 Rosemont Road	4	4
38 Rosemont Road	4	4
36 Rosemont Road	4	4
34 Rosemont Road	4	4
32 Rosemont Road	4	4
30 Rosemont Road	8	8
26 Rosemont Road	4	4
24c Rosemont Road	4	4
24b Rosemont Road	4	4
24a Rosemont Road	4	4
22c Rosemont Road	4	4
22b Rosemont Road	4	4
22a Rosemont Road	4	4
20c Rosemont Road	4	4
20b Rosemont Road	4	4
20a Rosemont Road	4	4
16 Rosemont Road	7	6
14 Rosemont Road	4	4
12 Rosemont Road	5	5
10 Rosemont Road	3	3
8 Rosemont Road	4	4
		-

6 Rosemont Road	4	1
	1	1
4 Rosemont Road	2	2
2 Rosemont Road	4	4
6-8 Frognal Parade, 1-6 Warwick House	6	6
1-5 Frognal Parade, 1-4 Midland Court	8	8
Holiday Inn, 152-156 Finchley Road	41	41
150 Finchley Road	8	8
148 Finchley Road	8	8
146 Finchley Road	8	8
144 Finchley Road	8	8
142 Finchley Road	8	8
140 Finchley Road	8	8
138 Finchley Road	8	8
136 Finchley Road	8	8
134 Finchley Road	8	8
132 Finchley Road	9	9
19 Canfield Place	2	1
21 Canfield Place	1	0
23 Canfield Place	4	2
27 Canfield Place	2	1
140 Broadhurst Gardens	2	0
142 Broadhurst Gardens	1	0
144 Broadhurst Gardens	1	0
146 Broadhurst Gardens	2	0
154 Broadhurst Gardens	2	0
170 Broadhurst Gardens	2	1
174 Broadhurst Gardens	2	2
186 Broadhurst Gardens	1	1
Total	449	430

12.9.9 The APSH baseline results show that in the current situation 95.8% of the rooms within the surrounding properties benefit from at least 25% total APSH, of which at least 5% APSH are in the winter months. According to the BRE Guidelines this is sufficient to give reasonable sunlight amenity results in a suburban environment. The APSH assessment takes into account sunlight amenity to all windows serving a room, which means that those windows where sky visibility is obscured by surrounding buildings are mitigated by other windows serving the room.

#### **Baseline Sun on Ground**

12.9.10 The baseline Sun on Ground of the public amenity spaces and the residential gardens were assessed in March, June and December, the location of these can be seen in **Figure 12.5**. Full detailed results can be seen in **Appendix 12.13 (A)**. The existing baseline levels of shadowing for each area are summarised in **Table 12.8**.



Figure 12.5 - Location of Public and Private Amenity Spaces Considered for Sun on Ground Assessments

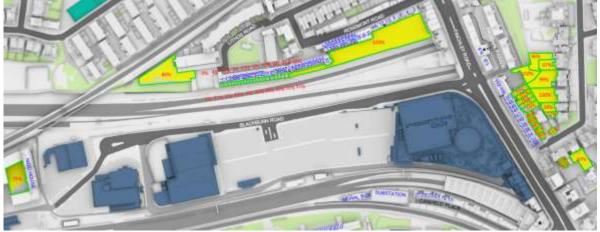


Table 12.8 – Summary of Existing Baseline Sun on Ground Results

% of Area Receiving at Least 2 Hours of Sunlight on 21st March – Existing Baseline
80%
0%
1%
4%
11%
11%
2%
2%
15%
13%
4%
5%
16%
16%
16%
6%
10%
31%
33%

Area	% of Area Receiving at Least 2 Hours of Sunlight on 21st March – Existing Baseline
55 Lithos Road	28%
54 Lithos Road	33%
Rosemont Road Amenity Space	100%
7 Netherhall Gardens	96% and 97%
South Hampstead High School	99% and 100%
3 Netherhall Gardens	100%
1a Netherhall Gardens	99%
1 Netherhall Gardens	57%
The Cottage, 1 Netherhall Gardens	100%
130-132 Finchley Road	99%
134 Finchley Road	81%
136 Finchley Road	78%
138 Finchley Road	100%
140 Finchley Road	94%
142 Finchley Road	59%
144 Finchley Road	72%
146 Finchley Road	76%
148 Finchley Road	97%
150 Finchley Road	73%
4 Netherhall Gardens	97%
2 Netherhall Gardens	95%
2a Netherhall Gardens	100%
Nido House	75%

12.9.11 The above results show that 22 of the 44 areas (50%) currently enjoy good levels of sunlight above that recommended by the BRE guidelines.

#### 12.10 Assessment of Effects, Mitigation and Residual Effects

#### Demolition & Construction Phase

#### Assessment of Effects

- 12.10.1 This section identifies and assesses the scale and nature of the main effects arising from the Proposed Development during the construction phase.
- 12.10.2 Effects in relation to daylight, sunlight and overshadowing will vary throughout the demolition and construction phase.
- 12.10.3 There will be no notable anticipated effect whilst the existing buildings on the Site are demolished. There will also be no anticipated effect following the completion of the demolition of the buildings. During the construction of the Development, the effects would be no worse than those of the completed Development as set out below. For those residents, who would be living in the initial phases of the Development (completed blocks of the detailed element of the Development), during the construction of the outline element of the Development, they would enjoy higher levels of daylight/sunlight. Upon completion, these levels of daylight/sunlight would reduce to as the levels reported on within the Internal Daylight, Sunlight and Overshadowing report which is listed within **Appendix 12.27 (A)**.

#### **Mitigation and Residual Effects**

12.10.4 No mitigation measures are considered necessary as the effects would develop to those of the completed Development, as described below. The residual effect would therefore remain as described below. Therefore, the mitigation and residual effects are the same as reported in the main assessment below.

#### **Operational Phase**

12.10.5 This section identifies and assesses the scale and nature of the main effects arising from the Proposed Development during the operational phase.

#### Assessment of Effects

#### Daylight to Surrounding Properties

- 12.10.6 For clarity, the effects discussed below discuss the effect of the maximum building footprints and maximum building heights as depicted by the Development Plot boundaries in Parameter Plan 111 against the Baseline conditions. This additional assessment does not consider the additional effect of the massing as assessed within Chapter 12 of the January 2022 ES Chapter, nor is any comparison made to it.
- 12.10.7 Throughout this section of the Chapter, statements to make clear the effect on each property or group of properties is given. This is in response to the comments received from Delva Patman Redler on behalf of the Council.
- 12.10.8 There are 1640 windows serving 1040 residential rooms within the assessed properties surrounding the Site. These have all been assessed in terms of both VSC and NSL. Full detailed results can be found at **Appendices 12.5 and 12.6** and are summarised in **Table 12.9** and **Table 12.10** below.

	VSC S	UMMARY				
	<b>-</b>	E	Below BRE G	Guidelines		Total No.
Address	Total that Meet BRE Guidelines	20-29% Loss	30-39.9% Loss	>=40% Loss	Total	of Windows
Hardy Building	30	0	0	0	0	30
124 West End Lane	20	0	0	0	0	20
3 Blackburn Road	1	1	4	5	10	11
5 Blackburn Road	0	1	1	4	6	6
7 Blackburn Road	0	0	1	5	6	6
9 Blackburn Road	0	0	3	5	8	8
Asher House	0	0	0	51	51	51
Nido House (Student Accomodation)	34	0	13	92	105	139
73 Lithos Road	7	1	4	4	9	16
72 Lithos Road	4	0	6	4	10	14
71 Lithos Road	8	0	3	0	3	11
70 Lithos Road	8	0	3	0	3	11
69 Lithos Road	8	0	3	0	3	11
68 Lithos Road	9	0	3	0	3	12
67 Lithos Road	9	0	3	0	3	12
66 Lithos Road	8	0	3	0	3	11
65 Lithos Road	8	0	3	0	3	11
64 Lithos Road	9	0	3	0	3	12
63 Lithos Road	9	0	3	0	3	12
62 Lithos Road	8	0	3	0	3	11
61 Lithos Road	8	0	3	0	3	11
60 Lithos Road	8	0	3	0	3	11
59 Lithos Road	4	0	6	4	10	14
58 Lithos Road	3	1	6	4	11	14
57 Lithos Road	5	3	2	1	6	11
56 Lithos Road	6	2	2	1	5	11
55 Lithos Road	6	2	2	1	5	11
54 Lithos Road	8	0	2	1	3	11
54a-D Rosemont Road	0	1	13	4	18	18
48 Rosemont Road	0	1	6	4	11	11
46 Rosemont Road	0	1	6	4	11	11
44 Rosemont Road	0	1	6	4	11	11
42 Rosemont Road	0	1	6	4	11	11
40 Rosemont Road	0	1	6	4	11	11

#### Table 12.9 – VSC Summary with the Development in Place

38 Rosemont Road	0	1	6	4	11	11
36 Rosemont Road	0	1	6	4	11	11
34 Rosemont Road	0	1	6	4	11	11
32 Rosemont Road	1	2	3	5	10	11
30 Rosemont Road	27	3	8	3	14	41
26 Rosemont Road	4	2	0	0	2	6
24c Rosemont Road	3	4	1	2	7	10
24b Rosemont Road	2	5	0	3	8	10
24a Rosemont Road	3	4	0	3	7	10
22c Rosemont Road	3	4	0	3	7	10
22b Rosemont Road	4	3	0	3	6	10
22a Rosemont Road	5	2	0	3	5	10
20c Rosemont Road	7	0	0	3	3	10
20b Rosemont Road	7	0	0	3	3	10
20a Rosemont Road	0	6	1	3	10	10
16 Rosemont Road	10	2	0	0	2	12
14 Rosemont Road	8	0	0	0	0	8
12 Rosemont Road	23	0	0	0	0	23
10 Rosemont Road	12	0	0	0	0	12
8 Rosemont Road	12	3	0	0	3	15
6 Rosemont Road	4	0	0	0	0	4
4 Rosemont Road	6	0	0	0	0	6
2 Rosemont Road	6	1	0	0	1	7
6-8 Frognal Parade, 1-6 Warwick House	12	0	0	0	0	12
1-5 Frognal Parade, 1-4 Midland Court	16	0	0	0	0	16
Holiday Inn, 152-156 Finchley Road	20	21	0	0	21	41
150 Finchley Road	5	9	0	0	9	14
148 Finchley Road	8	4	0	0	4	12
146 Finchley Road	8	4	0	0	4	12
144 Finchley Road	8	4	0	0	4	12
142 Finchley Road	10	2	0	0	2	12
140 Finchley Road	11	2	0	0	2	13
138 Finchley Road	14	0	0	0	0	14
136 Finchley Road	14	0	0	0	0	14
134 Finchley Road	11	0	0	0	0	11
132 Finchley Road	14	0	0	0	0	14
17 Canfield Place	5	1	0	0	1	6
19 Canfield Place	4	0	0	0	0	4

21 Canfield Place	2	0	0	0	0	2
23 Canfield Place	8	1	0	0	1	9
25 Canfield Place	6	1	0	0	1	7
27 Canfield Place	8	2	0	0	2	10
1-32 Broadfield	17	48	1	30	79	96
33-76 Broadfield	21	49	0	52	101	122
77-108 Broadfield	40	26	4	26	56	96
140 Broadhurst Gardens	16	0	0	0	0	16
142 Broadhurst Gardens	16	0	0	0	0	16
144 Broadhurst Gardens	16	0	0	0	0	16
146 Broadhurst Gardens	25	0	0	0	0	25
148 Broadhurst Gardens	23	0	0	0	0	23
152 Broadhurst Gardens	13	0	0	0	0	13
154 Broadhurst Gardens	5	0	0	0	0	5
164 Broadhurst Gardens	2	2	0	0	2	4
166 Broadhurst Gardens	1	2	0	0	2	3
168 Broadhurst Gardens	8	2	0	0	2	10
170 Broadhurst Gardens	5	3	0	0	3	8
172 Broadhurst Gardens	3	5	0	0	5	8
174 Broadhurst Gardens	6	2	0	0	2	8
176 Broadhurst Gardens	5	2	0	0	2	7
178 Broadhurst Gardens	3	3	0	0	3	6
180 Broadhurst Gardens	3	0	0	1	1	4
182 Broadhurst Gardens	3	0	0	1	1	4
184 Broadhurst Gardens	3	0	0	0	0	3
186 Broadhurst Gardens	14	0	0	0	0	14
190 Broadhurst Gardens	24	0	0	0	0	24
102 West End Lane	16	0	0	0	0	16
104 West End Lane	2	0	0	0	0	2
106 West End Lane	1	0	0	0	0	1
108 West End Lane	1	0	0	0	0	1
110 West End Lane	1	0	0	0	0	1
112 West End Lane	2	0	0	0	0	2
114 West End Lane	4	0	0	0	0	4
Total	858	256	167	362	785	1643

#### Table 12.10 - NSL Summary with the Development in Place

NSL SUMMARY

O2 - Finchley Road Volume 1: Environmental Statement – Main Text Chapter 12 A: Daylight, Sunlight, Overshadowing and Solar Glare

	Total that		Below BRE	Guidelines		Total
Address	Total that Meet BRE Guidelines	20-29% Loss	30- 39.9% Loss	>=40% Loss	Total	No. of Rooms
Hardy Building	17	0	0	0	0	17
124 West End Lane	8	0	0	0	0	8
3 Blackburn Road	3	1	1	1	3	6
5 Blackburn Road	0	0	1	2	3	3
7 Blackburn Road	0	1	0	2	3	3
9 Blackburn Road	0	0	1	2	3	3
Asher House	0	0	0	13	13	13
Nido House (Student Accomodation)	32	5	1	69	75	107
73 Lithos Road	7	0	1	0	1	8
72 Lithos Road	5	0	0	1	1	6
71 Lithos Road	3	1	0	0	1	4
70 Lithos Road	3	1	0	0	1	4
69 Lithos Road	3	1	0	0	1	4
68 Lithos Road	4	1	0	0	1	5
67 Lithos Road	5	0	0	0	0	5
66 Lithos Road	4	0	0	0	0	4
65 Lithos Road	4	0	0	0	0	4
64 Lithos Road	5	0	0	0	0	5
63 Lithos Road	5	0	0	0	0	5
62 Lithos Road	4	0	0	0	0	4
61 Lithos Road	4	0	0	0	0	4
60 Lithos Road	3	1	0	0	1	4
59 Lithos Road	4	1	0	1	2	6
58 Lithos Road	4	1	1	0	2	6
57 Lithos Road	4	0	0	0	0	4
56 Lithos Road	4	0	0	0	0	4
55 Lithos Road	4	0	0	0	0	4
54 Lithos Road	3	1	0	0	1	4
54a-D Rosemont Road	11	1	0	0	1	12
48 Rosemont Road	2	2	0	0	2	4
46 Rosemont Road	2	1	1	0	2	4
44 Rosemont Road	2	0	1	1	2	4
42 Rosemont Road	2	1	1	0	2	4
40 Rosemont Road	2	1	1	0	2	4
38 Rosemont Road	3	0	1	0	1	4
36 Rosemont Road	3	1	0	0	1	4

34 Rosemont Road	3	1	0	0	1	4
32 Rosemont Road	4	0	0	0	0	4
30 Rosemont Road	15	0	0	0	0	15
26 Rosemont Road	1	1	1	1	3	4
24c Rosemont Road	4	0	0	0	0	4
24b Rosemont Road	4	0	0	0	0	4
24a Rosemont Road	4	0	0	0	0	4
22c Rosemont Road	4	0	0	0	0	4
22b Rosemont Road	3	0	1	0	1	4
22a Rosemont Road	4	0	0	0	0	4
20c Rosemont Road	3	0	0	1	1	4
20b Rosemont Road	4	0	0	0	0	4
20a Rosemont Road	3	0	1	0	1	4
16 Rosemont Road	6	0	0	1	1	7
14 Rosemont Road	4	0	0	0	0	4
12 Rosemont Road	5	0	0	0	0	5
10 Rosemont Road	3	0	0	0	0	3
8 Rosemont Road	4	0	0	0	0	4
6 Rosemont Road	1	0	0	0	0	1
4 Rosemont Road	2	0	0	0	0	2
2 Rosemont Road	4	0	0	0	0	4
6-8 Frognal Parade, 1-6 Warwick House	6	0	0	0	0	6
1-5 Frognal Parade, 1-4 Midland Court	8	0	0	0	0	8
Holiday Inn, 152-156 Finchley Road	5	1	3	32	36	41
150 Finchley Road	1	0	2	5	7	8
148 Finchley Road	1	1	0	6	7	8
146 Finchley Road	1	1	5	1	7	8
144 Finchley Road	2	3	3	0	6	8
142 Finchley Road	4	3	1	0	4	8
140 Finchley Road	7	1	0	0	1	8
138 Finchley Road	8	0	0	0	0	8
136 Finchley Road	8	0	0	0	0	8
134 Finchley Road	8	0	0	0	0	8
132 Finchley Road	9	0	0	0	0	9
17 Canfield Place	2	0	3	0	3	5
19 Canfield Place	2	0	0	0	0	2
21 Canfield Place	2	0	0	0	0	2
23 Canfield Place	4	1	1	1	3	7
25 Canfield Place	2	0	0	1	1	3
27 Canfield Place	4	0	0	1	1	5

1-32 Broadfield	96	0	0	0	0	96
33-76 Broadfield	112	4	6	0	10	122
77-108 Broadfield	96	0	0	0	0	96
140 Broadhurst Gardens	9	0	0	0	0	9
142 Broadhurst Gardens	9	0	0	0	0	9
144 Broadhurst Gardens	10	0	0	0	0	10
146 Broadhurst Gardens	9	0	0	0	0	9
148 Broadhurst Gardens	23	0	0	0	0	23
152 Broadhurst Gardens	9	0	0	0	0	9
154 Broadhurst Gardens	5	0	0	0	0	5
164 Broadhurst Gardens	3	0	0	0	0	3
166 Broadhurst Gardens	3	0	0	0	0	3
168 Broadhurst Gardens	5	1	0	0	1	6
170 Broadhurst Gardens	2	3	0	1	4	6
172 Broadhurst Gardens	4	2	0	2	4	8
174 Broadhurst Gardens	2	2	1	1	4	6
176 Broadhurst Gardens	5	1	1	0	2	7
178 Broadhurst Gardens	4	0	1	0	1	5
180 Broadhurst Gardens	4	0	0	0	0	4
182 Broadhurst Gardens	3	0	0	0	0	3
184 Broadhurst Gardens	3	0	0	0	0	3
186 Broadhurst Gardens	7	0	0	0	0	7
190 Broadhurst Gardens	20	0	0	0	0	20
102 West End Lane	16	0	0	0	0	16
104 West End Lane	2	0	0	0	0	2
106 West End Lane	1	0	0	0	0	1
108 West End Lane	1	0	0	0	0	1
110 West End Lane	1	0	0	0	0	1
112 West End Lane	2	0	0	0	0	2
114 West End Lane	1	0	0	0	0	1
Total	805	48	41	146	235	1040

#### 12.10.9 The BRE Guidelines state that:

"...the diffuse daylighting of the existing building may be adversely affected if either the VSC measured at the centre of an existing main window is less than 27% and less than 0.8 times its former value [or] the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value."

12.10.10 In situations where the Development would result in fully BRE compliant VSC and NSL alterations to the windows and rooms within a property, the effect on the daylight amenity to that property is considered to be of negligible significance.

# 12.10.11 The following properties will experience alterations which, in accordance with the BRE Guidelines, will not be noticeable to the occupants:

Plowman Craven

- Hardy Building
- 124 West End Lane
- 14 Rosemont Road
- 12 Rosemont Road
- 10 Rosemont Road
- 6 Rosemont Road
- 4 Rosemont Road
- 6-8 Frognal Parade, 1-6 Warwick House
- 1-5 Frognal Parade, 1-4 Midland Court
- 138 Finchley Road
- 136 Finchley Road
- 134 Finchley Road
- 132 Finchley Road
- 19 Canfield Place
- 21 Canfield Place
- 140 Broadhurst Gardens
- 142 Broadhurst Gardens
- 144 Broadhurst Gardens
- 146 Broadhurst Gardens
- 148 Broadhurst Gardens
- 152 Broadhurst Gardens
- 154 Broadhurst Gardens
- 184 Broadhurst Gardens
- 186 Broadhurst Gardens
- 190 Broadhurst Gardens
- 102 West End Lane
- 104 West End Lane
- 106 West End Lane
- 108 West End Lane
- 110 West End Lane
- 112 West End Lane
- 114 West End Lane



- 12.10.12 The effect on the daylight amenity of a property in an urban context is considered to be minor negative in situations where both the VSC and NSL alterations applicable to the room are no greater than 30% of their baseline values.
- 12.10.13 The following properties are therefore considered to experience reductions which are of minor negative significance:
  - 8 Rosemont Road
  - 2 Rosemont Road
  - 140 Finchley Road
  - 164 Broadhurst Gardens
  - 166 Broadhurst Gardens
  - 168 Broadhurst Gardens.
- 12.10.14 The following properties experience daylight alterations beyond those described as negligible or minor (i.e. experience an effect which is moderate or major negative) in accordance with **Table 12.4** above and, therefore, are considered in more detail below:

#### 3 Blackburn Road

- 12.10.15 Floor plans we have found for this property show that it contains 8 flats, of which 6 are Site facing. The floor plans show that there are 11 windows serving what we understand are:
  - A Living/Kitchen/Dining (LKD) room and studio at ground floor
  - An LKD and bedroom at first floor; and
  - 2 LKDs at second floor.
- 12.10.16 Of the 6 rooms assessed, both the LKDs on the second floor rooms will either experience VSC and NSL alterations which are considered to be of negligible significance or VSC and NSL alterations which are considered to be of minor negative significance.
- 12.10.17 Of the remaining 4 rooms, the two located on the first floor which are understood to serve an LKD and a bedroom, experience VSC and NSL reductions beyond the BRE guidelines to a moderate negative extent (i.e. above a 30% reduction, yet below a 40% reduction). The other two rooms are understood to serve an LKD and a Studio flat. These rooms experience VSC and NSL alterations which exceed the BRE guidelines to a major negative extent (i.e. above a 40% reduction from the existing value).
- 12.10.18 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.19 Looking at the results in more detail, although some rooms will experience significant reductions, all will retain a VSC of at least 15% to their main windows which is in line with our Alternative target value. In addition, all, except for one, will either retain an NSL of at least 50% to their room area or meet the BRE guidelines reduction criteria. Which is considered good for an urban area.



- 12.10.20 The room which does not quite meet our alternative target criteria is the Studio Flat at ground floor, which retains a NSL of 38%.
- 12.10.21 Overall, whilst the percentage reductions to this property when compared to the baseline situation may be of up to a major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 5 Blackburn Road

- 12.10.22 It has not been possible to obtain floor plans for this property, however when looking at the council tax registry we can see that that the property has been split into two flats, one at ground floor and another at first and second. We have therefore applied our reasonable assumptions as to the layout of the property.
- 12.10.23 There are 6 windows serving what we assume are 3 rooms within this property. Of the 3 rooms assessed, 1 room, which we assume serves a bedroom on the second floor, will experience VSC and NSL alterations which are considered to be of a moderate negative significance. The other two rooms which we assume serve the living room of the 1<sup>st</sup> / 2<sup>nd</sup> floor flat, and an LKD for the ground floor flat, experiences VSC and NSL alterations which exceed the BRE guidelines to a major negative extent (i.e. greater than a 40% reduction from the existing value).
- 12.10.24 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.25 Looking at the results in more detail, whilst the percentage reductions show a major negative effect may occur, each of these rooms will retain a VSC of at least 16.56% to its main window which exceeds our Alternative target value, as well as, retaining an NSL of at least 50% to the room area, which is considered good for an urban area.
- 12.10.26 Overall therefore, whilst the percentage reduction compared to the baseline situation may be of a major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 7 Blackburn Road

- 12.10.27 It has not been possible to obtain obtain floor plans for this property, however, when looking at the local council tax registry, it can be seen that the property has been split into three flats at ground-second. We have therefore applied our reasonable assumptions as to the layout of the property.
- 12.10.28 There are 6 windows serving what we assume are 3 LKDS for each flat within this property. Of the 3 rooms assessed, 1 room on the second floor will experience VSC and NSL alterations which are considered to be of a moderate negativesignificance. The other two rooms on the ground and first floors experience VSC and NSL alterations which exceed the BRE guidelines to a major negative extent (i.e. greater than a 40% reduction from the existing value).
- 12.10.29 Overall, taking into account the tests undertaken, the effect of the Proposed



Development on this property is considered to be a major negative effect which is significant.

12.10.30 Looking at the results in more detail, whilst the percentage reductions show a major negative effect may occur, each of the rooms will retain a VSC of at least 16.02% to its main window which exceeds our Alternative target value, as well as, retaining an NSL of at least 50% to the room area, which is considered good for an urban area. Therefore, whilst the percentage reduction compared to the baseline situation may be of a major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 9 Blackburn Road

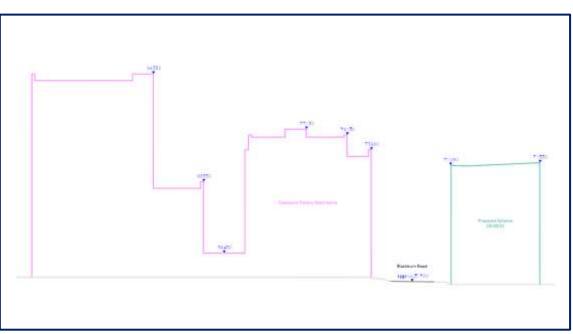
- 12.10.31 It has not been possible to obtain floor plans for this property, however when looking at the council tax registry, it can be seen that that the property has been split into two flats, one at ground floor and another at first and second. We have therefore applied our reasonable assumptions as to the layout of the property.
- 12.10.32 There are 8 windows serving what we assume are 3 rooms within this property. Of the 3 rooms assessed, 1 room, which we assume serves a bedroom on the second floor, will experience VSC and NSL alterations which are considered to be of moderate negative significance.
- 12.10.33 The remaining 2 rooms are located on the ground and first floor and both experience VSC and NSL alterations which exceed the BRE guidelines to a major negative extent.
- 12.10.34 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.35 Whilst the percentage reductions show a major negative effect may occur each of the rooms will retain a VSC of at least 15.26% to their main window, which is in line with our Alternative target value. In addition, one room will retain an NSL of at least 60% (the second floor room), whilst the other two will fall marginally short of our alternative target criteria of 50%, with 44% and 49% retained respectively.
- 12.10.36 Whilst the percentage reductions compared to the baseline situation may be of a moderate scale of effect at first floor and a major scale of effect at ground floor, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### Asher House

12.10.37 There are 51 windows serving what we understand are currently 13 Living Rooms, Bedrooms or Studios based on floorplans obtained. This property has however submitted a planning application for the 'Demolition of [the] existing building and [the] construction of three buildings between 1 and 9 storeys (plus basement) in height comprising 53 residential dwellings, 4,797sqm of commercial floorspace, publicly accessible space, landscaping and resident's facilities including cycle and refuse facilities'. It has not however yet been issued with a decision; therefore it is not incorporated within our Future Baseline (Cumulative) assessments.



- 12.10.38 Looking at the results in more detail, all will experience a reduction beyond the BRE guidelines to a major extent. However, those rooms located on the ground floor would therefore no longer be affected, as, if Asher House has it's planning permission (set out at paragraph 12.9.31) granted, then the proposals are to have commercial at ground floor.
- 12.10.39 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.40 To consider the effects to the first floor rooms, in another way, one of the principal messages set out in the BRE guidelines is that a neighbouring building cannot expect more than their fair share of light, and, in turn, they cannot unfairly burden a neighbouring site. One way to consider this point, which is discussed within the BRE guidelines, is to analyse a mirror image of the affected building and, if the mirror image causes the same or similar impacts to the proposed massing it can be considered to be acceptable.
- 12.10.41 Whilst we have not undertaken detailed VSC or NSL tests against a mirror massing at this time, below is a section taken through the Site that shows the Proposed Development (in green) and the Proposed Redevelopment of Asher House (in pink). The section shows that the proposed massing is very slightly smaller than an exact mirror of Asher House, from this section we know from our experience that a mirror assessment is likely to conclude that the proposals will cause a similar effect i.e., the additional effect is unlikely to be considered material.





12.10.42 In conclusion to the above, whilst the percentage reductions compared to the baseline situation may be of up to a major scale of effect, we are of the opinion that, when developed as proposed, each building will experience similar and acceptable levels of daylight for an urban area. We are therefore of the of the opinion that the effects can be considered



acceptable.

#### Nido House (Student Accommodation)

- 12.10.43 Student accommodation is considered to be comparable to hotel uses as it is not permanent residential accommodation. The expectation of daylight/sunlight in inner city areas is therefore considered low and not considered to be a sensitive receptor. We have however included this property for completeness.
- 12.10.44 There are 139 windows serving what we assume are 107 rooms within this property. Of which, 16 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 1 will experience VSC and NSL alterations which are considered to be of minor negative significance.
- 12.10.45 The remaining 90 rooms experience VSC and NSL alterations which exceed the BRE guidelines to a moderate or major negative extent.
- 12.10.46 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.47 Looking at the results in more detail, of the 90 rooms that experience a moderate or major negative effect, 53 will retain a VSC of at least 15% (when rounded) to their main window which meets our Alternative target value. In addition, of these 53 rooms, 25 rooms will either retain an NSL to at least 50% to the room area or meeting the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.48 This therefore leaves 37 rooms which do not meet the VSC target criteria and 28 rooms which do not meet the NSL target criteira.
- 12.10.49 Of the remaining 37 rooms, 9 will continue to enjoy an ADF above 1% which is the target value as set out in the BRE guidelines. The remaining 28 rooms are all bedrooms, which are considered to have a lesser requirement for daylight even when not taking into account that the property is used for student residential accommodation which is transient in nature. This argument also applies for the 28 rooms which fall short of the NSL criteria.
- 12.10.50 When looking at the contour plots for the rooms the NSL tends to sit towards the front of the room, and so when comparing the contours to the floor plans, the 6th and 7th floor plans from the planning application (planning reference 2017/7072/P) suggest that the desk area within each bedroom is located by the window at the front of the room. Therefore, even though some of the room does not enjoy a NSL to at least 50% of the room area, the key area which is the desk area, continues to sit within the NSL.
- 12.10.51 The remaining room which does not meet the VSC criteria, retains a VSC of 14.21% which is only a minor derogation from the alternative target criteria of 15% VSC.
- 12.10.52 Therefore, whilst the percentage reduction compared to the baseline situation may vary between a moderate to major scale of effect depending on which window we are looking at, the overall effect, when considering the retained daylight values, can be considered acceptable.



#### 73 Lithos Road – 67 Lithos Road (Odd and Even Numbers)

- 12.10.53 There are 87 windows serving what we assume are 36 rooms within these properties as we have not been able to obtain floorplans. We have therefore had to apply our reasonable assumptions as to the layout of the properties.
- 12.10.54 Of the 36 rooms, 12 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 4 rooms will experience VSC and NSL alterations which are considered to be of minor negative significance.
- 12.10.55 The remaining 20 rooms experience VSC and NSL alterations which exceed the BRE guidelines to a moderate or major negative extent.
- 12.10.56 Overall, taking into account the tests undertaken, the effect of the Proposed Development on these properties is considered to be as follows:
  - 73 Lithos Road major negative effect which is significant
  - 72 Lithos Road major negative effect which is significant
  - 71 Lithos Road moderate negative effect which is significant
  - 70 Lithos Road moderate negative effect which is significant
  - 69 Lithos Road moderate negative effect which is significant
  - 68 Lithos Road moderate negative effect which is significant
  - 67 Lithos Road moderate negative effect which is significant
- 12.10.57 Looking at the results in more detail, of the 20 rooms that experience a moderate or major negative effect, 14 will retain a VSC of at least 18.91% to their main window which meets our Alternative target value.
- 12.10.58 This therefore leaves 6 rooms, all of which are set back beneath projecting balconies and when analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

12.10.59 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these 6 rooms will either meet the BRE guidelines reduction criteria without the balcony in place (2 rooms) or will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction



greater than 20% to 4 roooms). However, the windows will retain a VSC of at least 15.60%-26.02% which is considered a an acceptable-very good level of daylight for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a very good level of daylight.

- 12.10.60 In addition, all rooms will either retain an NSL to at least 55% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.61 In conclusion, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 66 Lithos Road – 54 Lithos Road (Odd and Even Numbers)

- 12.10.62 There are 151 windows serving what we assume are 58 rooms within these properties as we have only been able to obtain floorplans for No.'s 58-59 Lithos Road. We have therefore had to apply our reasonable assumptions as to the layout of the other properties.
- 12.10.63 Of the 58 rooms, 20 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 4 rooms will experience VSC and NSL alterations which are considered to be of minor negative significance.
- 12.10.64 The remaining 34 rooms experience VSC and NSL alterations which exceed the BRE guidelines to a moderate or major negative extent.
- 12.10.65 Overall, taking into account the tests undertaken, the effect of the Proposed Development on these properties is considered to be as follows:
  - 66 Lithos Road moderate negative effect which is significant
  - 65 Lithos Road moderate negative effect which is significant
  - 64 Lithos Road moderate negative effect which is significant
  - 63 Lithos Road moderate negative effect which is significant
  - 62 Lithos Road moderate negative effect which is significant
  - 61 Lithos Road moderate negative effect which is significant
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  - 57 Lithos Road major negative effect which is significant
  - 56 Lithos Road major negative effect which is significant
  - 55 Lithos Road major negative effect which is significant
  - 54 Lithos Road major negative effect which is significant
- 12.10.66 Looking at the results in more detail, of the 34 rooms that experience a moderate or major negative effect, 24 will retain a VSC of at least 18.94% to their main window which meets our Alternative target value.



12.10.67 This therefore leaves 10 rooms, of which all 10 are either set back beneath a projecting balcony or a roof overhang and when analysing windows beneath balconies/overhangs, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.10.68 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that of the 10 rooms which previously experienced a moderate or major negative effect, all will retain a VSC of at least 19.19% which is considered a good level for an urban area. It is therefore clear that without the presence of the balcony, that these rooms would retain acceptable levels of daylight in place with the Proposed Development in place.
- 12.10.69 The results of these assessments show that these 10 rooms will either meet the BRE guidelines reduction criteria without the balcony in place (2 rooms, R15/30 and R16/30) or will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20% to 8 roooms). However, the windows will retain a VSC of at least 19.19% which is considered a good level of daylight for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a very good level of daylight.
- 12.10.70 In addition, all rooms will either retain an NSL to at least 50% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.71 In conclusion , whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 54 A-D Rosemont Road

- 12.10.72 There are 18 windows serving what we assume are 12 rooms within these properties as we have not been able to obtain floorplans. We have therefore had to apply our reasonable assumptions as to the layout of the properties.
- 12.10.73 Of the 12 rooms assessed, all will experience VSC and NSL alterations which exceed the BRE guidelines to a moderate or major negative extent.
- 12.10.74 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.



- 12.10.75 When looking at the results in more detail, of the rooms assessed, 10 will retain a VSC of at least 21% to their main window which exceeds our Alternative target value and the remaining 2 are set beneath a projecting balcony. We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least 20.47% which is considered a good level of daylight for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a good level of daylight.
- 12.10.76 In addition, all rooms will meet the BRE guidelines reduction criteria for the NSL assessments.
- 12.10.77 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between a moderate to major scale of effect for the VSC assessments, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 32-48 Rosemont Road (Even Numbers Only)

- 12.10.78 There are 99 windows serving what we understand are 36 rooms within these properties based upon the floor plans we have obtained, which show:
  - Kitchen/Dining rooms at Ground Floor
  - Living Rooms at First Floor; and
  - Bedrooms at the Second and Third Floors
- 12.10.79 These 36 rooms experience VSC and NSL alterations which exceed the BRE guidelines to a moderate or major adverse extent.
- 12.10.80 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.81 Looking at the results on a floor by floor basis (so we discuss the rooms on a room type basis) in more detail, the 9 Kitchen/Dining rooms all experience reductions of a major adverse extent. However, each of the windows serving these rooms are set back beneath a projecting balcony. When analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.10.82 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least least 15.88% (32 Rosemont Road) increasing up to 22.99% (48 Rosemont Road) which exceeds our alternative target value and is considered a good level of daylight for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a good level of daylight.
- 12.10.83 Looking now at the 9 reception rooms on the first floor, the main window closest to the Proposed Development serving each of the rooms will experience a moderate adverse reduction, however each main window will retain a VSC of at least 19.12% which exceeds our alternative target criteria. It can therefore be considered that with the Proposed Development in place, these rooms will retain good levels of daylight for an urban area.
- 12.10.84 The remaining windows serve the bedrooms on the first and second floors of this terrace of properties and when looking at the results in more detail, although reductions beyond the BRE guidelines will occur, which could be considered noticeable, the retained levels of daylight to each room are in excess of 17% which is considered a good level of daylight for an urban area and exceeds our alternative target value.
- 12.10.85 In addition, all rooms will either retain an NSL to at least 49% of the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.86 In conclusion, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 30 Rosemont Road

- 12.10.87 There are 41 windows serving what we assume are 15 rooms within these properties as we have not been able to obtain floorplans. We have therefore had to apply our reasonable assumptions as to the layout of the properties.
- 12.10.88 Of the 15 rooms, 7 rooms will experience VSC and NSL alterations which are considered to be of negligible significance.
- 12.10.89 The remaining 8 rooms experience VSC and NSL alterations which exceed the BRE guidelines to a moderate or major adverse extent.
- 12.10.90 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.91 Looking at the results in more detail, of the 8 rooms that experience a moderate or major negative effect, each will retain a VSC of at least 18.74% to their main windows (which

are located on the southern elevation and not obstructed by a projecting balcony) which exceeds our Alternative target value.

- 12.10.92 In addition, all rooms will meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.93 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 26 Rosemont Road

- 12.10.94 There are 6 windows serving what we assume are 4 rooms which serve 2 bedrooms, a reception room and an LKD according to the floor plans we have managed to obtain.
- 12.10.95 Of the 4 rooms, 1 room will experience VSC and NSL alterations which are considered to be of negligible significance and one further room will experience a VSC and NSL alteration which is considered to be of minor negative significance. In addition, these 2 rooms will meet the BRE guidelines reduction criteria or retain an NSL to over 50% of the room area, which is considered good for an urban area.
- 12.10.96 The remaining 2 rooms are understood to serve the LKD at ground floor level (R1/80) and the reception room on at first floor level (R1/81). Theyexperience a minor negative VSC reduction (only 1.98-3.98 % beyond the BRE guidelines), yet a larger NSL alteration, which is considered to be a moderate (R1/81) and major adverse (R1/80). These windows are highlighted in red in Figure 12.6.
- 12.10.97 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant. When looking at the effects in more detail, the 2 rooms that experience a moderate or major negative effect are tucked around the corner behind 30 Rosemont Road. The window that serves R1/80 (highlighted in red in **Figure 12.6** below) is positioned with a tall wall to its right and a large set of stairs directly in front.

Figure 12.6 – Image of 30 Rosemont Road



- 12.10.98 Room R1/81 will retain 45% NSL which is slightly below our Alternative Target Value by 5%.
- 12.10.99 The outlook to the room R1/80 is already limited meaning the existing NSL is lower than usual at 41%. It is therefore impossible to meet the retained value in accordance with the BRE guidelines or our alternative target value of 50% with the implementation of the Proposed Development.
- 12.10.100 Additionally, as the existing NSL is already lower than usual, even a moderate obstruction opposite could cause a larger relative reduction, the results to this room are therefore considered disproportionate.
- 12.10.101 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 24 A-C Rosemont Road

- 12.10.102 There are 30 windows serving what we understand are 12 rooms within these properties according to the floor plans we have managed to obtain.
- 12.10.103 Of the 12 rooms, 2 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 7 rooms will experience a VSC and



NSL alteration which is considered to be of minor adverse significance.

- 12.10.104 The remaining 3 rooms which are understood to serve LKDs at ground floor experience VSC and NSL alterations which exceed the BRE guidelines to a major adverse extent.
- 12.10.105 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.106 Looking at the results in more detail, the rooms that experience the larger effects are set back beneath projecting balconies and when analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.10.107 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least 15.97% which exceeds our alternative target value and is considered a good level of daylight for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a good level of daylight.
- 12.10.108 In addition, all rooms will meet the BRE guidelines reduction criteria for the NSL assessment, which is considered good for an urban area.
- 12.10.109 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 22 A-C Rosemont Road

- 12.10.110 There are 30 windows serving what we understand are 12 rooms within these properties according to the floor plans we have managed to obtain.
- 12.10.111 Of the 12 rooms, 4 rooms will experience VSC and NSL alterations which are considered to be of negligible significance.
- 12.10.112A further 5 rooms will experience VSC and NSL alterations which are considered to be of

minor adverse significance. The remaining 3 rooms which are understood to serve LKDs experience VSC and (in 22B's case) NSL alterations which exceed the BRE guidelines to a major adverse extent.

- 12.10.113Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.114Looking at the results in more detail, the rooms that experience the larger effects are set back beneath projecting balconies and when analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.10.115 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least 23% which is considered a very good level for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a very good level of daylight.
- 12.10.116 In addition, all rooms will either retain an NSL to at least 50% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.117 In conclusion, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 20 A-C Rosemont Road

- 12.10.118 There are 30 windows serving what we understand are 12 rooms within these properties according to the floor plans we have managed to obtain.
- 12.10.119 Of the 12 rooms, 6 rooms will experience VSC and NSL alterations which are considered to be of negligible significance, and 2 rooms will experience a VSC and NSL alteration which is considered to be of minor adverse significance. A further 1 room will experience VSC and NSL alterations which are considered to be of moderate adverse significance. However, this room (R2/121) is a reception room located at first floor level and will retain at least 24.29% VSC which is well within our Alternative Target criteria.



- 12.10.120 The remaining 3 rooms which are understood to serve LKDs experience VSC and NSL alterations which exceed the BRE guidelines to a major adverse extent.
- 12.10.121 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.122 Looking at the results in more detail, the rooms that experience the larger effects are set back beneath projecting balconies and when analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.10.123 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least 21% which is considered a good level for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a good level of daylight.
- 12.10.124 In addition, all rooms will either retain an NSL to at least 50% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.125 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 16 Rosemont Road

- 12.10.126 We have not been able to obtain floor plans for this property and so have applied our reasonable assumptions as to the layout of the property.
- 12.10.127 There are 12 windows serving what we assume are 7 rooms, of which 6 rooms will experience VSC and NSL alterations which are considered to be of negligible or minor negative significance.
- 12.10.128 The remaining room experiences a negligible VSC reduction, with only the NSL experiencing a major adverse reduction.



- 12.10.129 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.130 When looking at the results in more detail, the retained level of NSL with the Proposed Development in place, is above 50% which is in line with our alternative target criteria.
- 12.10.131 In conclusion, as it is just 1 test for 1 room which falls short of the guidance criteria, we can conclude in accordance with Appendix I, that the effects to this property are minor adverse and therefore acceptable.

#### Holiday Inn (Hotel)

- 12.10.132 Properties serving hotel uses are not considered permanent residential accommodation. The expectation of daylight/sunlight in inner city areas is therefore considered low and not considered to be a sensitive receptor. We have however included this property for completeness.
- 12.10.133 There are 41 windows serving what we understand are 41 bedrooms within this property. Of which, 5 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 1 will experience VSC and NSL alterations which are considered to be of minor adverse significance.
- 12.10.134 The remaining 35 rooms experience either VSC and/or NSL alterations which exceed the BRE guidelines to a moderate or major adverse extent.
- 12.10.135 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.136 When looking at the results in more detail, all of the rooms that experience a moderate or major negative effect will retain a VSC of at least 22.47% which exceeds our Alternative target value.
- 12.10.137 In addition, 19 of these rooms will retain an NSL to at least 50% to the room area which is considered good for an urban area.
- 12.10.138 The last 15 rooms enjoy NSLs which are lower than our alternative target criteria of 50% at 28%-48%. However, these instances are considered minor due to the fact the expectation of daylight is lower due to the properties use as a hotel where the guests are transient in nature.
- 12.10.139 In conclusion, whilst the percentage reductions compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, and the 2 minor derogations in NSL, can be considered acceptable.

#### 142-150 Finchley Road

12.10.140 We have not been able to obtain floor plans for each of these properties and so have applied our reasonable assumptions as to the layout where floorplans were unavailable.



- 12.10.141 There are 62 windows serving what we understand are 40 rooms, of which 6 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 11 rooms will experience a minor adverse reduction.
- 12.10.142 The remaining 23 rooms experience either a negligible or minor adverse VSC reduction, with only the NSL experiencing a moderate/major adverse reduction.
- 12.10.143 Overall, taking into account the tests undertaken, the effect of the Proposed Development on these properties are considered to cause the following effects:
  - 150 Finchley Road major negative effect which is significant
  - 148 Finchley Road major negative effect which is significant
  - 146 Finchley Road major negative effect which is significant
  - 144 Finchley Road major negative effect which is significant
  - 142 Lithos Road moderate negative effect which is significant
- 12.10.144 When looking at the results in more detail, all rooms that expereincea moderate or major negative effect, except for 1 (which is located within 150 Finchley Road on the upper floor and is likely to serve a bedroom (R1/1044), will either retain an NSL to at least 52% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.145 In conclusion therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effects to all rooms, except that 1 room for NSL, when considering the retained daylight values, can be considered acceptable.

#### **17 Canfield Place**

- 12.10.146 We have not been able to obtain floor plans for this property and so have applied our reasonable assumptions as to the layout where floorplans were unavailable.
- 12.10.147 There are 6 windows serving what we understand are 5 rooms, of which 2 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 3 rooms will experience negligible VSC alterations, yet moderate adverse NSL reductions only.
- 12.10.148 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a moderate negative effect which is significant.
- 12.10.149 When looking at the results in more detail all rooms that experience a moderate adverse effect (in NSL) will retain an NSL to at least 48% of the room area, which is only just below the alternative target value.
- 12.10.150 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate scale of effect, the overall effects to all rooms when



considering the retained daylight values, can be considered acceptable.

#### 23-27 Canfield Place

- 12.10.151 We have not been able to obtain floor plans for each of these properties and so have applied our reasonable assumptions as to the layout where floorplans were unavailable.
- 12.10.152 There are 26 windows serving what we understand are 15 rooms, of which 10 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further room will experience a minor adverse reduction.
- 12.10.153 The remaining 4 rooms experience either a negligible or minor adverse VSC reduction, with only the NSL experiencing a moderate/major adverse reduction.
- 12.10.154 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.155 When looking at the results to the 4 rooms that experience a moderate or major negative effect, 3 of these rooms window's are very small, and so in the existing scenario the rooms either only just scrape a NSL of 52% or have low NSLs as 37% and 43% respectively. With the Proposed Development in place this is reduced to 28% or 16%. However, as the rooms retain a VSC of nearly 20%. We consider this one derogation from guidance to be minor. The remaining room which falls short of the NSL assessment is R1/591, however this room retains a NSL to 45% of the room area, which is just 5% short of our alternative target criteria, and it also retains a VSC of 15% which is in line with our alternative target criteria.
- 12.10.156 Therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate scale of effect, the overall effects to all rooms when considering the retained daylight values, can be considered acceptable.

#### 1-108 Broadfield

- 12.10.157 We have not been able to obtain floor plans for each of these properties and so have applied our reasonable assumptions as to the layout where floorplans were unavailable.
- 12.10.158 There are 314 windows serving what we understand are 314 rooms, of which 78 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 123 rooms will experience a VSC and NSL alteration which is considered to be of minor adverse significance.
- 12.10.159 The remaining 113 rooms experience VSC and/or NSL valterations which exceed the BRE guidelines to a moderate or major adverse extent.
- 12.10.160 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.161 When looking at the moderate and major negative results in more detail, these rooms are set back beneath a projecting access walkway and when analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.10.162 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that every room, with the exception of 12, will meet the BRE guidelines reduction criteria without the walkway in place. It is therefore clear that it is the presence of the walkway, rather than the size of the new obstruction, that was the main factor in the relative loss of light. The remaining 12 rooms, although they do not meet the BRE guidelines reduction criteria they each retain a VSC in excess of 20% which is considered a good level for an urban area.
- 12.10.163 In addition, all rooms will either retain an NSL to at least 57% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.10.164 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### 170-182 Broadhurst Gardens

- 12.10.165 We have not been able to obtain floor plans for each of these properties and so have applied our reasonable assumptions as to the layout where floorplans were unavailable.
- 12.10.166 There are 45 windows serving what we understand are 39 rooms, of which 15 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 15 rooms will experience a VSC and NSL alteration which is considered to be of minor adverse significance.
- 12.10.167 Of the remaining 9 rooms, 7 experience negligible VSC alterations but NSL alterations which exceed the BRE guidelines to a moderate or major adverse extent.
- 12.10.168 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.169 When looking at the NSL reductions in more detail, 4 rooms will retain a NSL to at least 50% to the room area which is considered good for an urban area. Therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.
- 12.10.170 The 3 rooms which fall short of the NSL assessment and the 2 rooms which fall short

of the VSC assessment are located within:

- 170 Broadhurst (NSL only R3/1380)
- 172 Broadhurst (NSL only R1/1400)
- 174 Broadhurst (NSL only R2/1400)
- 180 Broadhurst (VSC only R1/1452)
- 182 Broadhurst (VSC only R2/1452)
- 12.10.171 The 3 rooms which fall short of the NSL assessment are understood to possibly serve kitchens, this therefore means that the main habitable room and each of the bedrooms retain a good level of daylight for an urban area, or are not impacted.
- 12.10.172 The reduction to these kitchens is as a result of the proposed development however, all retain a VSC of at least 25.48% which is only short of the BRE guidelines by 1.52%, where the values have been based on more of a sub-urban area. It can therefore be concluded that these rooms will retain a good level of daylight for an urban area and will retain a NSL to at least 40% of the room's area.
- 12.10.173 The remaining 2 rooms experience major adverse VSC alterations yet negligible NSL alterations. However, these 2 rooms are set back beneath a projecting access walkway and when analysing windows beneath balconies/overhangs, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.10.174 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that every room, with the exception of 3 (R3/1380, R1/1400 and R2/1400), will meet the BRE guidelines reduction criteria without the walkway in place. It is therefore clear that it is the presence of the walkway, rather than the size of the new obstruction, that was the main factor in the relative loss of light. The remaining 3 rooms, although they do not meet the BRE guidelines reduction criteria they each retain a VSC in excess of 25% which is considered a good level for an urban area.
- 12.10.175 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

#### **Sunlight to Surrounding Properties**

12.10.176 There are 982 windows serving 449 residential rooms surrounding the Site that are relevant for sunlight amenity assessment. These have all been assessed in terms of total and winter APSH. Full detailed results can be found at **Appendix 12.9 (A)** and are summarised in **Table 12.11**.

		No. Of Rooms Below The APSH Stated In BRE Guidelines									
Address	Meet BRE Guidelines	Below Threshold For Winter APSH				Below	Total No.				
		20- 30%	30- 40%	> 40%	Tot.	20- 30%	30- 40%	>40 %	Tot.	Rooms	
Hardy Building	6	0	0	0	0	0	0	0	0	6	
124 West End Lane	8	0	0	0	0	0	0	0	0	8	
3 Blackburn Road	6	0	0	0	0	0	0	0	0	6	
5 Blackburn Road	3	0	0	0	0	0	0	0	0	3	
7 Blackburn Road	2	0	0	1	1	0	0	1	1	3	
9 Blackburn Road	2	0	0	1	1	0	0	1	1	3	
Asher House	0	0	0	13	13	0	0	13	13	13	
Nido House (Student Accomodation)	26	0	0	3	3	0	1	2	3	29	
73 Lithos Road	7	0	0	1	1	0	0	0	0	8	
72 Lithos Road	6	0	0	0	0	0	0	0	0	6	
71 Lithos Road	4	0	0	0	0	0	0	0	0	4	
70 Lithos Road	4	0	0	0	0	0	0	0	0	4	
69 Lithos Road	4	0	0	0	0	0	0	0	0	4	
68 Lithos Road	5	0	0	0	0	0	0	0	0	5	
67 Lithos Road	5	0	0	0	0	0	0	0	0	5	
66 Lithos Road	4	0	0	0	0	0	0	0	0	4	
65 Lithos Road	4	0	0	0	0	0	0	0	0	4	
64 Lithos Road	5	0	0	0	0	0	0	0	0	5	

Table 12.11 - APSH Summary with the Development in Place

63 Lithos Road	5	0	0	0	0	0	0	0	0	5
62 Lithos Road	4	0	0	0	0	0	0	0	0	4
61 Lithos Road	4	0	0	0	0	0	0	0	0	4
60 Lithos Road	4	0	0	0	0	0	0	0	0	4
59 Lithos Road	6	0	0	0	0	0	0	0	0	6
58 Lithos Road	6	0	0	0	0	0	0	0	0	6
57 Lithos Road	3	0	0	1	1	0	0	1	1	4
56 Lithos Road	3	0	0	1	1	0	0	1	1	4
55 Lithos Road	3	0	0	1	1	0	0	1	1	4
54 Lithos Road	3	0	0	1	1	0	0	1	1	4
54a-D Rosemont Road	11	0	0	1	1	0	0	1	1	12
48 Rosemont Road	4	0	0	0	0	0	0	0	0	4
46 Rosemont Road	3	0	0	1	1	0	0	1	1	4
44 Rosemont Road	3	0	0	1	1	0	0	1	1	4
42 Rosemont Road	3	0	0	1	1	0	0	1	1	4
40 Rosemont Road	3	0	0	1	1	0	0	1	1	4
38 Rosemont Road	3	0	0	1	1	0	0	1	1	4
36 Rosemont Road	4	0	0	0	0	0	0	0	0	4
34 Rosemont Road	3	0	0	1	1	0	0	1	1	4
32 Rosemont Road	3	0	0	1	1	0	0	1	1	4
30 Rosemont Road	8	0	0	0	0	0	0	0	0	8
26 Rosemont Road	1	0	0	3	3	1	0	0	1	4
24c Rosemont Road	3	0	0	1	1	0	0	0	0	4
24b Rosemont Road	4	0	0	0	0	0	0	0	0	4
24a Rosemont Road	4	0	0	0	0	0	0	0	0	4
22c Rosemont Road	4	0	0	0	0	0	0	0	0	4
22b Rosemont Road	4	0	0	0	0	0	0	0	0	4

22a Rosemont Road	4	0	0	0	0	0	0	0	0	4
20c Rosemont Road	4	0	0	0	0	0	0	0	0	4
20b Rosemont Road	4	0	0	0	0	0	0	0	0	4
20a Rosemont Road	4	0	0	0	0	0	0	0	0	4
16 Rosemont Road	7	0	0	0	0	0	0	0	0	7
14 Rosemont Road	4	0	0	0	0	0	0	0	0	4
12 Rosemont Road	5	0	0	0	0	0	0	0	0	5
10 Rosemont Road	3	0	0	0	0	0	0	0	0	3
8 Rosemont Road	4	0	0	0	0	0	0	0	0	4
6 Rosemont Road	1	0	0	0	0	0	0	0	0	1
4 Rosemont Road	2	0	0	0	0	0	0	0	0	2
2 Rosemont Road	4	0	0	0	0	0	0	0	0	4
6-8 Frognal Parade, 1-6 Warwick House	6	0	0	0	0	0	0	0	0	6
1-5 Frognal Parade, 1-4 Midland Court	8	0	0	0	0	0	0	0	0	8
Holiday Inn, 152- 156 Finchley Road	41	0	0	0	0	0	0	0	0	41
150 Finchley Road	8	0	0	0	0	0	0	0	0	8
148 Finchley Road	8	0	0	0	0	0	0	0	0	8
146 Finchley Road	8	0	0	0	0	0	0	0	0	8
144 Finchley Road	8	0	0	0	0	0	0	0	0	8
142 Finchley Road	8	0	0	0	0	0	0	0	0	8
140 Finchley Road	8	0	0	0	0	0	0	0	0	8
138 Finchley Road	8	0	0	0	0	0	0	0	0	8
136 Finchley Road	8	0	0	0	0	0	0	0	0	8
134 Finchley Road	8	0	0	0	0	0	0	0	0	8
132 Finchley Road	9	0	0	0	0	0	0	0	0	9
19 Canfield Place	2	0	0	0	0	0	0	0	0	2

21 Canfield Place	1	0	0	0	0	0	0	0	0	1
23 Canfield Place	4	0	0	0	0	0	0	0	0	4
27 Canfield Place	2	0	0	0	0	0	0	0	0	2
140 Broadhurst Gardens	2	0	0	0	0	0	0	0	0	2
142 Broadhurst Gardens	1	0	0	0	0	0	0	0	0	1
144 Broadhurst Gardens	1	0	0	0	0	0	0	0	0	1
146 Broadhurst Gardens	2	0	0	0	0	0	0	0	0	2
154 Broadhurst Gardens	2	0	0	0	0	0	0	0	0	2
170 Broadhurst Gardens	2	0	0	0	0	0	0	0	0	2
174 Broadhurst Gardens	2	0	0	0	0	0	0	0	0	2
186 Broadhurst Gardens	1	0	0	0	0	0	0	0	0	1
Total	414	0	0	35	35	1	1	29	31	449

#### 12.10.177 The BRE Guidelines state that: -

"...the sunlighting of the existing building may be adversely affected...if the centre of the window receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and receives less than 0.8 times its former sunlight hours during either period and has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours."

12.10.178 For existing residential properties, the BRE Guidelines state in Section 3.2.3 that:

"all main living rooms of dwellings...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."

#### 12.10.179 Section 3.2.4 continues:

*"If the main living room to a dwelling has a main window facing within 90° of due north, but a secondary window facing within 90° of due south, sunlight to the secondary window should be checked."* 



- 12.10.180 The following properties have the following number of Site-facing rooms that are within 90 degrees of due south and will experience alterations which, in accordance with the BRE Guidelines, will not be noticeable to the occupants:
  - Hardy Building
  - 124 West End Lane
  - 3 Blackburn Road
  - 5 Blackburn Road
  - 72 Lithos Road
  - 71 Lithos Road
  - 70 Lithos Road
  - 69 Lithos Road
  - 68 Lithos Road
  - 67 Lithos Road
  - 66 Lithos Road
  - 65 Lithos Road
  - 64 Lithos Road
  - 63 Lithos Road
  - 62 Lithos Road
  - 61 Lithos Road
  - 60 Lithos Road
  - 59 Lithos Road
  - 58 Lithos Road
  - 48 Rosemont Road
  - 36 Rosemont Road
  - 30 Rosemont Road
  - 24b Rosemont Road
  - 24a Rosemont Road
  - 22c Rosemont Road
  - 22b Rosemont Road
  - 22a Rosemont Road
  - 20c Rosemont Road
  - 20b Rosemont Road
  - 20a Rosemont Road
  - 16 Rosemont Road
  - 14 Rosemont Road

- 12 Rosemont Road
- 10 Rosemont Road
- 8 Rosemont Road
- 6 Rosemont Road
- 4 Rosemont Road
- 2 Rosemont Road
- 6-8 Frognal Parade, 1-6 Warwick House
- 1-5 Frognal Parade, 1-4 Midland Court
- Holiday Inn, 152-156 Finchley Road
- 150 Finchley Road
- 148 Finchley Road
- 146 Finchley Road
- 144 Finchley Road
- 142 Finchley Road
- 140 Finchley Road
- 138 Finchley Road
- 136 Finchley Road
- 134 Finchley Road
- 132 Finchley Road
- 19 Canfield Place
- 21 Canfield Place
- 23 Canfield Place
- 27 Canfield Place
- 140 Broadhurst Gardens
- 142 Broadhurst Gardens
- 144 Broadhurst Gardens
- 146 Broadhurst Gardens
- 154 Broadhurst Gardens
- 170 Broadhurst Gardens
- 174 Broadhurst Gardens
- 186 Broadhurst Gardens

12.10.181 Site-facing rooms, located within the following properties, will experience APSH alterations that are beyond those described above and so will be considered in more detail:

- 7 Blackburn Road
- 9 Blackburn Road
- Asher House
- Nido House (Student Accommodation)
- 73 Lithos Road
- 57 Lithos Road
- 56 Lithos Road
- 55 Lithos Road
- 54 Lithos Road

- 54a-D Rosemont Road
- 46 Rosemont Road
- 44 Rosemont Road
- 42 Rosemont Road
- 40 Rosemont Road
- 38 Rosemont Road
- 34 Rosemont Road
- 32 Rosemont Road
- 26 Rosemont Road
- 24C Rosemont Road

#### 7 Blackburn Road

- 12.10.182 The project team have not been able to obtain floor plans for this property, however, when looking at the local council tax registry, can see that the property has been split into three flats at ground-second. We have therefore applied our reasonable assumptions as to the layout of the property.
- 12.10.183 There are 6 windows serving what we assume are 3 LKDS for each flat within this property. Of the 3 rooms, 2 rooms will experience APSH alterations which are considered to be of negligible significance.
- 12.10.184 The remaining room meets the BRE guidelines for annual hours yet derogates from the winter hours criteria by 1%. However, when considering the percentage reduction from the baseline value this is equivalent to a major negative effect.
- 12.10.185 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.186 When looking at the results in more detail, the rooms that experiences a major negative effect meets the alternative winter target value of 3%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon this room to be acceptable.

#### 9 Blackburn Road

- 12.10.187 The project team have not been able to obtain floor plans for this property, however, when looking at the local council tax registry, can see that the property has been split into three flats at ground-second. We have therefore applied our reasonable assumptions as to the layout of the property.
- 12.10.188 There are 8 windows serving what we assume are 3 rooms within this property. Of the 3 rooms, 2 rooms will experience APSH alterations which are considered to be of negligible significance.
- 12.10.189 The remaining room meets the BRE guidelines for annual hours yet derogates from

the winter hours criteria by 1%. However, when considering the percentage reduction from the baseline value this is equivalent to a major negative effect.

- 12.10.190 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.191 When looking at the results in more detail, the rooms that experiences a major negative effect meets the alternative winter target value of 3%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon this room to be acceptable.

#### Asher House

- 12.10.192 There are 51 windows serving what we understand are currently 13 Living Rooms, Bedrooms or Studios based on floorplans obtained. This property has however submitted a planning application for the 'Demolition of [the] existing building and [the] construction of three buildings between 1 and 9 storeys (plus basement) in height comprising 53 residential dwellings, 4,797sqm of commercial floorspace, publicly accessible space, landscaping and resident's facilities including cycle and refuse facilities'. It has not however yet been issued with a decision; therefore it is not incorporated within our Future Baseline (Cumulative) assessments.
- 12.10.193 Of the 13 rooms assessed, 2 experience reductions which are beyond the BRE guidelines for winter hours only, the total hours exceed the BRE guidelines. The remaining 11 rooms experience reductions beyond the BRE guidelines for both winter and annual hours which are equivalent to a major negative effect
- 12.10.194 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.195 When looking at the results in more detail all, except for 1 room, exceeds the alternative annual target value of 15% with annual hours of 20%+. The remaining 1 room however does continue to enjoy an APSH of 15% which is in line with our alternative target criteria.
- 12.10.196 With regard to the winter hours, all will retain either 2 or 3% in comparison to the BRE standard of 5%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon these rooms to be acceptable.

#### Nido House (Student Accommodation)

- 12.10.197 Student accommodation is considered to be comparable to hotel uses as it is not permanent residential accommodation. The expectation of sunlight in city areas is therefore considered low and not considered to be a sensitive receptor. We have however included this property for completeness.
- 12.10.198 There are 42 windows serving what we assume are 29 rooms within this property. Of which, 26 rooms will experience VSC and NSL alterations which are considered to be of negligible significance.



- 12.10.199 The remaining 3 rooms experience APSH alterations which exceed the BRE guidelines to a moderate or major negative extent.
- 12.10.200 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.201 Looking at the results in more detail, each of these 3 rooms meet the BRE guidelines for annual hours yet derogates from the winter hours criteria by up to 2%, therefore, exceeds the alternative winter target value of 3%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon these rooms to be acceptable.

### 73 Lithos Road

- 12.10.202 There are 16 windows serving what we assume are 8 rooms as we have not been able to obtain floorplans. We have therefore had to apply our reasonable assumptions as to the layout of the properties.
- 12.10.203 Of the 8 rooms assessed, all, except for 1, will experience APSH alterations which are considered to be of negligible significance. The remaining room experiences an APSH alteration which is considered to be of major negatiave significance.
- 12.10.204 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.205 When looking at the results in more detail, the room that experiences a major negative effect meets the BRE guidelines for annual hours yet derogates from the winter hours criteria by 1%, therefore, exceeds the alternative winter target value of 3%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon this room to be acceptable.

### 54-57 Lithos Road

- 12.10.206 There are 41 windows serving what we assume are 12 rooms as we have not been able to obtain floorplans. We have therefore had to apply our reasonable assumptions as to the layout of the properties.
- 12.10.207 Of the 16 rooms assessed, 12 rooms will experience APSH alterations which are considered to be of negligible significance. The remaining 4 rooms experience effect which is considered to be of up to a major negative effect.
- 12.10.208 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.209 The remaining 4 rooms experience reductions which are beyond the BRE guidelines are positioned beneath a deep roof overhang, which has the same effect as a projecting balcony. Additional assessments have therefore been undertaken without the roof overhang in place. The results of these assessments show that each room will retain an APSH which is in line with the BRE Guidelines. It is therefore clear that it is the presence of the overhang, rather than the size of the new obstruction, that was the main factor in the relative loss of light

### 54 A-D Rosemont Road

- 12.10.210 There are 18 windows serving what we assume are 12 rooms within these properties as we have not been able to obtain floorplans. We have therefore had to apply our reasonable assumptions as to the layout of the properties.
- 12.10.211 Of the 12 rooms, 11 rooms will experience APSH alterations which are considered to be of negligible significance. The remaining room experience a reduction which is considered to be of a major negative effect.
- 12.10.212 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.213 When looking at the results in more detail, the remaining room meets the BRE guidelines for winter hours yet derogates from the annual hours criteria, however, meets the alternative annual target value of 15% with a total APSH of 20%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon these rooms to be acceptable.

### 46-38 Rosemont Road

- 12.10.214 There are 55 windows serving what we understand are 16 rooms as we have managed to obtain floorplans. Of the 16 rooms, 11 rooms will experience APSH alterations which are considered to be of negligible significance. The remaining rooms experience a reduction which is considered to be of a major negative effect.
- 12.10.215 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant. When looking at the results in more detail, the remaining 5 rooms meet the BRE guidelines for winter hours yet derogate from the annual hours criteria, however, meet the alternative annual target value of 15% with a total APSH of at least 19%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon these rooms to be acceptable.

### 32-34 Rosemont Road

- 12.10.216 There are 22 windows serving what we understand are 8 rooms as we have managed to obtain floorplans. Of the 8 rooms, 6 rooms will experience APSH alterations which are considered to be of negligible significance.
- 12.10.217 The remaining rooms meet the BRE guidelines for winter hours yet derogate from the annual hours criteria. The remaining rooms experience a reduction which is considered to be of a moderate or major negative effect.
- 12.10.218 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.219 When looking at the results in more detail, the rooms that experience a moderate or major negative effect both meet the alternative annual target value of 15% with a total APSH



of 22% and 16% respectively. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon these rooms to be acceptable.

### 26 Rosemont Road

- 12.10.220 There are 6 windows serving what we assume are 4 rooms which serve 2 bedrooms, a reception room and an LKD according to the floor plans we have managed to obtain.
- 12.10.221 Of the 4 rooms, 2 rooms will experience APSH alterations which are considered to be of negligible significance. The remaining rooms experience a reduction which is considered to be of a moderate or major negative effect.
- 12.10.222 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant. When looking at the results in more detail the remaining rooms meet the BRE guidelines/the BRE guidelines reduction criteria for annual hours yet derogate from the winter hours criteria only. Therefore, although the reductions are beyond the BRE guidelines for winter hours, we consider the overall effect upon this room is acceptable.

### 24C Rosemont Road

- 12.10.223 There are 10 windows serving what we understand are 4 rooms within these properties according to the floor plans we have managed to obtain.
- 12.10.224 Of the 4 rooms, 3 rooms will experience APSH alterations which are considered to be of negligible significance. The remaining rooms experience a reduction which is considered to be of a major negative effect.
- 12.10.225 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.10.226 When looking at the results in more detail, the remaining room meets the BRE guidelines criteria for annual hours yet derogates from the winter hours criteria by 1% only. Therefore, although the reductions are beyond the BRE guidelines for winter hours, we consider the overall effect upon this room is acceptable.

#### Overshadowing

12.10.227 The potential for overshadowing to the public and private amenity spaces to the north and east of the Development have been assessed.

### Sun on Ground

12.10.228 The proposed Sun on Ground of the public amenity spaces and the residential gardens were assessed in March. Full detailed results can be seen in **Appendix 12.13 (A)**. The proposed levels of shadowing, compared to the baseline results for each area are summarised in **Table 12.12**.



Area	% of Area Receiving at Least 2 Hours of Sunlight on 21st March – Existing Baseline	% of Area Receiving at Least 2 Hours of Sunlight on 21st March – Proposed	% Reduction from Existing Baseline
Billy Fury Way Amenity Space	80%	80%	0%
73 Lithos Road	0%	0%	0%
72 Lithos Road	1%	1%	0%
71 Lithos Road	4%	4%	0%
70 Lithos Road	11%	11%	0%
69 Lithos Road	11%	11%	0%
68 Lithos Road	2%	2%	0%
67 Lithos Road	2%	2%	0%
66 Lithos Road	15%	15%	0%
65 Lithos Road	13%	13%	0%
64 Lithos Road	4%	4%	0%
63 Lithos Road	5%	5%	0%
62 Lithos Road	16%	16%	0%
61 Lithos Road	16%	16%	0%
60 Lithos Road	16%	16%	0%
59 Lithos Road	6%	6%	0%
58 Lithos Road	10%	10%	0%
57 Lithos Road	31%	29%	6.5%
56 Lithos Road	33%	29%	12.1%
55 Lithos Road	28%	25%	10.7%
54 Lithos Road	33%	28%	15.1%
Rosemont Road Amenity Space	100%	99%	1%
7 Netherhall Gardens	96% and 97%	96% and 96%	0% and 1%
South Hampstead High School	99% and 100%	99% and 100%	0% and 0%

### Table 12.12 – Summary of Proposed Baseline Sun on Ground Results

Area	% of Area Receiving at Least 2 Hours of Sunlight on 21st March – Existing Baseline	% of Area Receiving at Least 2 Hours of Sunlight on 21st March – Proposed	% Reduction from Existing Baseline
3 Netherhall Gardens	100%	100%	0%
1a Netherhall Gardens	99%	99%	0%
1 Netherhall Gardens	57%	57%	0%
The Cottage, 1 Netherhall Gardens	100%	100%	0%
130-132 Finchley Road	99%	99%	0%
134 Finchley Road	81%	81%	0%
136 Finchley Road	78%	78%	0%
138 Finchley Road	100%	100%	0%
140 Finchley Road	94%	94%	0%
142 Finchley Road	59%	59%	0%
144 Finchley Road	72%	72%	0%
146 Finchley Road	76%	76%	0%
148 Finchley Road	97%	97%	0%
150 Finchley Road	73%	73%	0%
4 Netherhall Gardens	97%	97%	0%
2 Netherhall Gardens	95%	95%	0%
2a Netherhall Gardens	100%	100%	0%
Nido House	75%	75%	0%

12.10.229 The proposed sun on ground assessments to the nearby amenity spaces show that either no reduction beyond the BRE guidelines will be experienced, or a very small reduction which is well within the BRE guidelines and therefore considered to be unnoticeable, will be experienced. It is therefore considered that the overall effect is considered to be **negligible**.

## **Transient Overshadowing**

12.10.230 The transient overshadowing images with the Development in place show that longer shadows will be cast as a result of the Development throughout the year. However, the shadows cast are not considered to create a negativeadverse effect as shown by the sun on ground assessment. The effect is therefore considered to be **negligible**.



### Solar Glare

- 12.10.231 For the purposes of the Solar Glare assessments, as we are assessing both the detailed and outline elements of the scheme together, we have assessed two scenarios, a worse-case scenario where we have assumed all the buildings are fully mirrored and a second scenario which then considers a slightly more realistic effect, with the detailed part of the scheme then being modelled as proposed and including some non-reflective façade elements along with the window glazing (the outline aspects of the scheme will however remain fully mirrored as we do not know the locations of the windows).
- 12.10.232 Using scenario 1 (Fully Mirrored) the annual sequence images showed that there was the potential for solar glare to occur to the road users travelling south and north along Finchley Road, north along Fairhazel Gardens and north east along Canfield Gardens. In addition, the train drivers approaching either West Hampstead or Finchley Road stations from an easterly and westerly direction could possibly be affected. Calendar graph assessments have therefore been carried out at 13 assessment points and these can be found within **Appendix 12.15 (A).** A second assessment was then carried out at these same points, yet this time with the detailed elements of the scheme in place. The results of these assessments are discussed below:
- 12.10.233 View Point 01 This assessment point is positioned to consider the glare that may occur to a train driver travelling eastwards from West Hampstead Thameslink Station. When looking at the results of Scenario 1, the calendar graph shows that any instances of glare that may occur are likely to be above 3° degrees from the train drivers' line of sight. The instances where the solar glare occurs within 10° degrees from the train drivers' line of sight occur for a maximum of 15 minutes at any one time, which is for just over a week in May and August and any solar glare that occurs within 3° degrees from the train driver's line of sight is for less than 5 minutes around the 3<sup>rd</sup>-5<sup>th</sup> May pre 5am and the 11<sup>th</sup>-12<sup>th</sup> August at 5am. The overall scale of the effect is therefore considered to be **negligible or minor negative** which is not significant.
- 12.10.234 When then considering this same view point but under scenario two, the solar glare reduces significantly during the summer months after 5am and also in the late afternoon/evening between 4pm and 7pm. The overall scale of the effect is therefore considered to be **negligible or minor negative** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.235 **View Point 02** This assessment point is positioned to consider the glare that may occur to a train driver travelling eastwards from West Hampstead Thameslink Station. The calendar graph shows that any instances of glare that may occur is likely to be above 3° degrees from the train drivers' line of sight. The instances where the solar glare occurs within 10° degrees from the train drivers' line of sight occur for a maximum of 20 minutes at any one time, which is for just over four weeks in April and August and a slight instance in the evening for just over a week in March and September. The overall scale of the effect is therefore considered to be **negligible or minor negative** which is not significant, particularly as this is assuming a fully mirrored scheme.
- 12.10.236 When then considering this same view point but under scenario two, the instances of

solar glare significantly reduce and any instances where the solar glare occurs within 10° degrees from the train drivers' line of sight occur for a maximum of 10 minutes at any one time, which is for just over four weeks in April and August and a slight instance in the evening for just over a week in March and September. The overall scale of the effect is therefore considered to be **negligible or minor negative** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.

- 12.10.237 **View Point 03** This assessment point is positioned to consider the glare that may occur to a train driver travelling eastwards towards West Hampstead Thameslink Station. The calendar graph shows that any instances of glare that may occur is generally likely to be above 3° degrees from the train drivers' line of sight. There are however two instances where the glare is within 3 degrees, and this occurs at around 6pm in mid-March and mid-September for a maximum of 12 minutes at any one time and between 14<sup>th</sup>-18<sup>th</sup> April and 26<sup>th</sup>-30<sup>th</sup> August for a maximum of 8 minutes at any one time. The overall scale of the effect is therefore considered to be **minor negative** which is not significant, particularly as this is assuming a fully mirrored scheme.
- 12.10.238 When then considering this same view point but under scenario two, the instances of solar glare within 3° degrees from the train drivers' line of sight reduce in mid-March and mid-September to a maximum of 7 minutes at any one time significantly reduce and between 14<sup>th</sup>-18<sup>th</sup> April and 26<sup>th</sup>-30<sup>th</sup> August it is reduced to a maximum of 5 minutes at any one time. The overall scale of the effect is therefore considered to be **minor negative** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.239 View Point 04 This assessment point is positioned to consider the glare that may occur to a road user traveling south along Finchley Road, approaching the junction with Blackburn Road. The calendar graph shows that the main instances of glare that may occur are likely to be above 30°, or below 30° but above 10° of the driver's line of sight. Some small and occurrences of glare may occur below 10° but these are for only short periods of time in the morning. The overall scale of the effect is therefore considered to be **negligible or minor negative** which is not significant.
- 12.10.240 When then considering this same view point but under scenario two, the effects remain largely the same. Therefore the overall scale of the effect is considered to be **minor negative** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.241 **View Point 05** This assessment point is positioned to consider the glare that may occur to a road user traveling north along Finchley Road. The calendar graph shows that only small occurrences of glare may occur. The overall scale of the effect is therefore considered to be **negligible** which is not significant.
- 12.10.242 When then considering this same view point but under scenario two, the effects remain largely the same. Therefore the overall scale of the effect is considered to be **negligible** which is not significant. It is however important to note, that these effects may

reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.

- 12.10.243 **View Point 06** This assessment point is positioned to consider the glare that may occur to a road user traveling north-east along Canfield Gardens, approaching the junction with Broadhurst Gardens. The calendar graph shows that any instances of glare that may occur are to be above 30° of the driver's line of sight. The overall scale of the effect is therefore considered to be **negligible** which is not significant.
- 12.10.244 When then considering this same view point but under scenario two, the effects remain largely the same. Therefore the overall scale of the effect is considered to be **negligible** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.245 **View Point 07** This assessment point is positioned to consider the glare that may occur to a train driver travelling eastwards towards Finchley Road Station. The calendar graph shows that any instances of glare that may occur is generally likely to be above 30° degrees from the train drivers' line of sight. There are however some instances where the glare is within 10 degrees, and these occur between 7 and 9am during the winter months for a maximum of 30 minutes at any one time. The overall scale of the effect is therefore considered to be **minor negative** which is not significant, particularly as this is assuming a fully mirrored scheme.
- 12.10.246 When then considering this same view point but under scenario two, the effects remain largely the same. Therefore the overall scale of the effect is considered to be **minor negative** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.247 **View Point 08** This assessment point is positioned to consider the glare that may occur to a train driver travelling westwards towards West Hampstead Tube Station. The calendar graph shows that any instances of glare that may occur is generally likely to be above 30° degrees from the train drivers' line of sight. There are however two instances where the glare is within 10 degrees, and this occurs at around 5am at the end of March and the end of August for a maximum of 10 minutes at any one time. The overall scale of the effect is therefore considered to be **negligible or minor negative** which is not significant, particularly as this is assuming a fully mirrored scheme.
- 12.10.248 When then considering this same view point but under scenario two, the instances of solar glare either reduce or stay the same. The overall scale of the effect is therefore considered to be **minor negative** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.249 **View Point 09** This assessment point is positioned to consider the glare that may occur to a train driver travelling eastwards towards Finchley Road Tube Station. The calendar graph shows that any instances of glare that may occur is generally likely to be above 30°



degrees from the train drivers' line of sight. There are however two instances where the glare is within 3 degrees, and this occurs between 7am and 8 am in February and October for a maximum of 6 minutes at any one time. The overall scale of the effect is therefore considered to be **minor negative** which is not significant, particularly as this is assuming a fully mirrored scheme.

- 12.10.250 When then considering this same view point but under scenario two, the instances of solar glare largely reduce however the two instances where the glare is within 3 degrees remains, and this occurs between 7am and 8 am in February and October for a maximum of 5 minutes at any one time. The overall scale of the effect is therefore considered to be **minor negative** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.251 **View Point 10** This assessment point is positioned to consider the glare that may occur to a road user travelling northeast along Broadhurst Gardens. The calendar graph shows that no instances of glare will occur. The overall scale of the effect is therefore considered to be **negligible** which is not significant, particularly as this is assuming a fully mirrored scheme.
- 12.10.252 When then considering this same view point but under scenario two, the effects remain the same with no solar glare occurring. Therefore the overall scale of the effect is considered to be **negligible** which is not significant.
- 12.10.253 **View Point 11** This assessment point is positioned to consider the glare that may occur to a road user travelling north along Fairhazel Gardens approaching the junction with Broadhurst Gardens. The calendar graph shows that any instances of glare will be small and generally likely to be above 30° degrees from the road users' line of sight. Any instances where the glare is within 10 degrees, occurs for a maximum of 4 minutes at any one time. The overall scale of the effect is therefore considered to be **negligible** which is not significant, particularly as this is assuming a fully mirrored scheme.
- 12.10.254 When then considering this same view point but under scenario two, the effects reduce slightly. Therefore the overall scale of the effect is considered to be **negligible** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.255 **View Point 12** This assessment point is positioned to consider the glare that may occur to a road user travelling westwards along Broadhurst Gardens from the junction of Fairhazel Gardens. The calendar graph shows that any instances of glare that may occur is generally likely to be above 30° degrees from the road users line of sight. The overall scale of the effect is therefore considered to be **negligible** which is not significant, particularly as this is assuming a fully mirrored scheme.
- 12.10.256 When then considering this same view point but under scenario two, the effects reduce slightly. Therefore the overall scale of the effect is considered to be **negligible** which is not significant. It is however important to note, that these effects may reduce even further

when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.

- 12.10.257 **View Point 13** This assessment point is positioned to consider the glare that may occur to a train driver travelling westwards towards West Hampstead Tube Station. The calendar graph shows that any instances of glare that may occur is generally likely to be above 30° degrees from the train drivers' line of sight. There are however two instances where the glare is within 10 degrees, and this occurs at around 5pm in early March and October for a maximum of 10 minutes at any one time. The overall scale of the effect is therefore considered to be **negligible or minor negative** which is not significant, particularly as this is assuming a fully mirrored scheme.
- 12.10.258 When then considering this same view point but under scenario two, the effects remain largely the same. Therefore the overall scale of the effect is considered to be **negligible or minor negative** which is not significant. It is however important to note, that these effects may reduce even further when the solar glare assessments are re-run when the outline elements of the scheme come forward as detailed.
- 12.10.259 The overall scale of the effect is therefore considered to be **negligible/minor negative** which is not significant.

### Mitigation

### **Demolition and Construction Mitigation**

12.10.260 No mitigation measures are required for the demolition and construction stage. Effects in relation to daylight, sunlight and overshadowing would vary throughout the refurbishment, demolition and construction stage. They would, however, certainly be less than the effects of the completed Proposed Development. Those effects, which may be perceptible during construction, would be similar or less than those of the completed Proposed Development set out previously.

## **Completed Development Mitigation**

- 12.10.261 Mitigation measures that were considered necessary to reduce the effects of the Proposed Development to the levels set out above have already been embedded in the design from advice given during the design stage.
- 12.10.262 Whilst minor, moderate and/or major negative effects are expected to occur in terms of the daylight, sunlight, overshadowing and/or solar glare, the discussion concludes that the effects can be considered acceptable. Further mitigation measures are therefore not considered necessary.

### **Residual Effects**

12.10.263 All of the residual effects resulting from the Proposed Development, are as presented within the Assessment of Effects whereby, if reductions exceeded 30% of the existing baseline figures, then the effects were considered significant. Any window or room experiencing less than a 30% reduction was considered to experience an effect which is not significant.

# 12.11 Limitation and Assumptions

- 12.11.1 Daylight and Sunlight the results set out in the appendices and discussed in this ES chapter are based on a 3D computer model of the site and the surrounding area and the use of bespoke software. The surrounding buildings that have been assessed, and the size/locations of the surrounding windows is based on land survey data. Further contextual modelling of the local area is based on a topographically correct 3D model of the area by Z-mapping Ltd.
- 12.11.2 Access into the surrounding properties has not been obtained. The layouts used for the No-Sky Line test (discussed below) have therefore been principally based on publicly available information on the internet, such as planning applications, previous sales particulars, or lease plans available from the Land Registry. Where the layouts for the surrounding properties have not been obtained using these sources, the room layouts have been assumed and typically taken as half the depth of the property.
- 12.11.3 The uses of the adjoining properties, in terms of whether they are of commercial or residential use, were established using external observations, Valuation Office Agency (VOA) checks and the data held on the City of London's Interactive maps.
- 12.11.4 Overshadowing The model, which is orientated to the north, enables the path of the sun to be tracked throughout the year to establish the shadows that will be cast by the existing buildings and the Proposed Development on the nearby amenity spaces. The extent and height of the ground level used in our assessments are based on site notes and a topographically correct 3D model of the area by Z-mapping Ltd.
- 12.11.5 Solar Glare The solar glare assessments have assumed a fully mirrored scheme in order to test a worse-case scenario.

# **12.12 Cumulative Effects**

- 12.12.1 This section considers the likely cumulative effects that could arise from the Proposed Development when considered alongside other committed development schemes proximate to the Site. It identifies whether effects from several developments which individually may be insignificant could, when considered together, cause significant cumulative effects requiring mitigation.
- 12.12.2 A number of committed developments have been identified as being relevant to this assessment. These were identified through a review of LBC's planning portal and have been agreed with LBC (Figure 17.1).
- 12.12.3 The assessment is based on the best available information and draws on the assessments included in the ES and Application Reports that accompany the development applications, where available.
- 12.12.4 From a daylight, sunlight and overshadowing assessment perspective, evolution of the baseline condition can only occur with further schemes being built in the local area. The

cumulative baseline evolution therefore considers those developments that are known to have been granted planning permission.

- 12.12.5 Given the nature of solar glare this topic is typically assessed in absolute terms with the implementation of the Proposed Development. As such, the consideration of this assessment within the context of an evolved baseline is not applicable.
- 12.12.6 For this scenario, it is assumed that all permitted Cumulative Schemes in the vicinity are built in the absence of the Proposed Development being implemented in order to determine the future (evolved) baseline. The Proposed Development has then been included to assess whether any of the surrounding residential properties would experience a further effect. The future (evolved) baseline is hereafter referred to as the Cumulative Baseline within this ES chapter.
- 12.12.7 Of the Cumulative Schemes identified, only Midland Crescent (2014/5527/P) directly to the north of the Site is in close enough proximity to be able to cause the Proposed Development to cause an additional effect and this additional effect would soley be to the Rosemont Road and Finchley Road properties. All of the other nearby sensitive receptors are of a sufficient distance from Midland Crescent as to not be affected.

## **Demolition & Construction Phase**

## **Assessment of Effects**

- 12.12.8 This section identifies and assesses the scale and nature of the main effects arising from the Proposed Development during the construction phase.
- 12.12.9 Effects in relation to daylight, sunlight and overshadowing will vary throughout the demolition and construction phase.
- 12.12.10 There will be no notable anticipated effect whilst the existing buildings on the Site are demolished. There will also be no anticipated effect following the completion of the demolition of the buildings. During the construction of the Development, the effects would be no worse than those of the completed Development as set out below. For those residents, who would be living in the initial phases of the Development (completed blocks of the detailed element of the Development), during the construction of the outline element of the Development, they would enjoy higher levels of daylight/sunlight. Upon completion, these levels of daylight/sunlight would reduce to as the levels reported on within the Internal Daylight, Sunlight and Overshadowing report which is listed within **Appendix 12.27 (A).**

## **Cumulative Baseline**

### Cumulative Baseline VSC

12.12.11 The cumulative baseline VSC conditions were assessed. Full detailed results can be found in **Appendix 12.16 (A)**. These are summarised in **Table 12.13**, which shows the number of windows that in the cumulative baseline situation, meet the minimum VSC levels (27% VSC) recommended by the BRE Guidelines.

Baseline VSC Summary					
Address	No. of Windows	No. of Windows that meet VSC criterion (>27%)			
48 Rosemont Road	11	5			
46 Rosemont Road	11	5			
44 Rosemont Road	11	5			
42 Rosemont Road	11	5			
40 Rosemont Road	11	5			
38 Rosemont Road	11	5			
36 Rosemont Road	11	5			
34 Rosemont Road	11	5			
32 Rosemont Road	11	4			
30 Rosemont Road	41	21			
26 Rosemont Road	6	3			
24c Rosemont Road	10	4			
24b Rosemont Road	10	7			
24a Rosemont Road	10	7			
22c Rosemont Road	10	7			
22b Rosemont Road	10	7			
22a Rosemont Road	10	7			
20c Rosemont Road	10	7			
20b Rosemont Road	10	7			
20a Rosemont Road	10	7			
16 Rosemont Road	12	9			
14 Rosemont Road	8	8			
12 Rosemont Road	23	19			
10 Rosemont Road	12	9			
8 Rosemont Road	15	11			
6 Rosemont Road	4	3			
4 Rosemont Road	6	6			
2 Rosemont Road	7	4			
Midland Crescent	233	208			
6-8 Frognal Parade, 1-6 Warwick House	12	12			

# Table 12.13 - Summary Cumulative Baseline VSC for Surrounding Sensitive Receptors ('Surrounding Properties')

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1-5 Frognal Parade, 1-4 Midland Court	16	14
Holiday Inn, 152-156 Finchley Road	41	41
150 Finchley Road	14	14
148 Finchley Road	12	12
146 Finchley Road	12	12
144 Finchley Road	12	12
142 Finchley Road	12	12
140 Finchley Road	13	13
138 Finchley Road	14	14
136 Finchley Road	14	14
134 Finchley Road	11	11
132 Finchley Road	14	14
Total	753	600

12.12.12 The cumulative VSC baseline results show that in the baseline situation, 79.7% of the surrounding properties benefit from at least 27% VSC which is in accordance with the BRE guidelines.

# Cumulative Baseline NSL

12.12.13 The cumulative baseline NSL conditions of the same properties were assessed. Full detailed results can be found in **Appendix 12.18 (A)**. These are summarised in **Table 12.14** below, which shows the number of rooms in the baseline situation that have at least 80% of the working plane within the No-Sky Line (i.e. Pass), as recommended by the BRE.

Table 12.14 - Summary Cumulative Baseline NSL for Surrounding Sensitive Receptors
('Surrounding Properties)

Baseline NSL Summary							
Address	No. Of Rooms	No. Of Rooms That Receive NSL In Excess Of 80%					
48 Rosemont Road	4	4					
46 Rosemont Road	4	4					
44 Rosemont Road	4	4					
42 Rosemont Road	4	4					
40 Rosemont Road	4	4					
38 Rosemont Road	4	4					
36 Rosemont Road	4	4					
34 Rosemont Road	4	4					

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32 Rosemont Road	4	4
30 Rosemont Road	15	15
26 Rosemont Road	4	1
24c Rosemont Road	4	4
24b Rosemont Road	4	4
24a Rosemont Road	4	4
22c Rosemont Road	4	4
22b Rosemont Road	4	4
22a Rosemont Road	4	4
20c Rosemont Road	4	4
20b Rosemont Road	4	4
20a Rosemont Road	4	4
16 Rosemont Road	7	7
14 Rosemont Road	4	4
12 Rosemont Road	5	5
10 Rosemont Road	3	3
8 Rosemont Road	4	4
6 Rosemont Road	1	1
4 Rosemont Road	2	2
2 Rosemont Road	4	3
Midland Crescent	75	53
6-8 Frognal Parade, 1-6 Warwick House	6	6
1-5 Frognal Parade, 1-4 Midland Court	8	8
Holiday Inn, 152-156 Finchley Road	41	37
150 Finchley Road	8	8
148 Finchley Road	8	8
146 Finchley Road	8	8
144 Finchley Road	8	8
142 Finchley Road	8	8
140 Finchley Road	8	8
138 Finchley Road	8	8
136 Finchley Road	8	8
134 Finchley Road	8	8
132 Finchley Road	9	8
Total	332	301



12.12.14 The cumulative NSL baseline results show that in the baseline situation 90.6% of the total rooms within the surrounding properties benefit from direct skylight at working plane height to in excess of 80% of the room area, in accordance with the BRE Guidelines.

### Cumulative Baseline APSH

12.12.15 The cumulative baseline APSH conditions of those properties which have windows which are orientated to within 90° of due south were assessed. Full detailed results can be found in **Appendix 12.19 (A)**. These are summarised in **Table 12.15**, which shows the number of windows and rooms that in the baseline situation, meet the minimum levels recommended by the BRE Guidelines (for both the total and winter months criterion). A room is considered to 'pass' when the APSH received to that room, which may be from more than one window, meets the BRE Guidelines criteria. i.e. it is the sum of the individual APSH (but without double counting) received through all windows that determines the level of APSH each room will receive.

Baseline Room APSH Summary						
Address	No. of Rooms	No. of Rooms that Meet APSH Criteria				
48 Rosemont Road	4	4				
46 Rosemont Road	4	4				
44 Rosemont Road	4	4				
42 Rosemont Road	4	4				
40 Rosemont Road	4	4				
38 Rosemont Road	4	4				
36 Rosemont Road	4	4				
34 Rosemont Road	4	4				
32 Rosemont Road	4	4				
30 Rosemont Road	8	8				
26 Rosemont Road	4	4				
24c Rosemont Road	4	4				
24b Rosemont Road	4	4				
24a Rosemont Road	4	4				
22c Rosemont Road	4	4				
22b Rosemont Road	4	4				
22a Rosemont Road	4	4				
20c Rosemont Road	4	4				

 Table 12.15 - Summary Cumulative Baseline APSH for Surrounding Sensitive Receptors

 ('surrounding properties) for both Total and Winter Sunlight Hours

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20b Rosemont Road	4	4
20a Rosemont Road	4	4
16 Rosemont Road	7	6
14 Rosemont Road	4	4
12 Rosemont Road	5	5
10 Rosemont Road	3	3
8 Rosemont Road	4	4
6 Rosemont Road	1	1
4 Rosemont Road	2	2
2 Rosemont Road	4	4
Midland Crescent	75	75
6-8 Frognal Parade, 1-6 Warwick House	6	6
1-5 Frognal Parade, 1-4 Midland Court	8	8
Holiday Inn, 152-156 Finchley Road	41	41
150 Finchley Road	8	8
148 Finchley Road	8	8
146 Finchley Road	8	8
144 Finchley Road	8	8
142 Finchley Road	8	8
140 Finchley Road	8	8
138 Finchley Road	8	8
136 Finchley Road	8	8
134 Finchley Road	8	8
132 Finchley Road	9	9
Total	325	324

12.12.16 The cumulative APSH baseline results show that in the cumulative situation 99.7% of the total rooms assessed within the surrounding properties benefit from at least 25% total APSH, with at least 5% APSH in the winter months, which is considered to be a in line with what is expected for a high-density inner-city centre.

## **Cumulative Assessment of Effects**

### Cumulative Daylight to Surrounding Properties

12.12.17 There are 520 windows serving 257 residential rooms within the assessed properties surrounding the Site. These have all been assessed in terms of both VSC and NSL. Full detailed results can be found at Appendices 12.16 and 12.18 and are summarised in Table 12.16 and Table 12.17 below. In addition ADF and NSL assessments have been undertaken to the Midland Crescent scheme and these results can be found at Appendices 12.21 and

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# 12.23.

# Table 12.16 – Cumulative VSC Summary with the Development in Place

VSC SUMMARY								
	Total that	Total that Below BRE Guidelines				Total that Below BRE		Total No.
Address	Meet BRE Guidelines	20-29% Loss	30-39.9% Loss	>=40% Loss	Total	of Windows		
48 Rosemont Road	0	1	6	4	11	11		
46 Rosemont Road	0	1	6	4	11	11		
44 Rosemont Road	0	1	6	4	11	11		
42 Rosemont Road	0	1	6	4	11	11		
40 Rosemont Road	0	1	6	4	11	11		
38 Rosemont Road	0	1	6	4	11	11		
36 Rosemont Road	0	1	6	4	11	11		
34 Rosemont Road	0	1	6	4	11	11		
32 Rosemont Road	1	2	3	5	10	11		
30 Rosemont Road	27	3	8	3	14			
26 Rosemont Road	4	2	0	0	2	6		
24c Rosemont Road	3	4	1	2	7	10		
24b Rosemont Road	2	5	0	3	8	10		
24a Rosemont Road	3	4	0	3	7	10		
22c Rosemont Road	3	4	0	3	7	10		
22b Rosemont Road	3	4	0	3	7	10		
22a Rosemont Road	5	2	0	3	5	10		
20c Rosemont Road	7	0	0	3	3	10		
20b Rosemont Road	7	0	0	3	3	10		
20a Rosemont Road	0	6	1	3	10			
16 Rosemont Road	9	3			3	12		
14 Rosemont Road	8	0	0	0	0	8		
12 Rosemont Road	23	0	0	0	0	23		
10 Rosemont Road	12	0	0	0	0	12		
8 Rosemont Road	12	3			3	15		
6 Rosemont Road	4	0	0	0	0	4		
4 Rosemont Road	6	0	0	0	0	6		
2 Rosemont Road	6	1	0	0	1	7		
6-8 Frognal Parade, 1-6 Warwick House	12	0	0	0	0	12		

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1-5 Frognal Parade, 1-4 Midland Court	16	0	0	0	0	16
Holiday Inn, 152-156 Finchley Road	20	21	0	0	21	41
150 Finchley Road	5	9	0	0	9	14
148 Finchley Road	8	4	0	0	4	12
146 Finchley Road	8	4	0	0	4	12
144 Finchley Road	8	4	0	0	4	12
142 Finchley Road	10	2	0	0	2	12
140 Finchley Road	11	2	0	0	2	13
138 Finchley Road	14	0	0	0	0	14
136 Finchley Road	14	0	0	0	0	14
134 Finchley Road	11	0	0	0	0	11
132 Finchley Road	14	0	0	0	0	14
Total	296	97	61	66	224	520

## Table 12.17 – Cumulative NSL Summary with the Development in Place

NSL SUMMARY						
	Total that	Below BRE Guidelines				Total
Address	Meet BRE Guidelines	20-29% Loss	30-39.9% Loss	>=40% Loss	Total	No. of Rooms
48 Rosemont Road	2	2	0	0	2	4
46 Rosemont Road	2	1	1	0	2	4
44 Rosemont Road	2	0	1	1	2	4
42 Rosemont Road	2	1	1	0	2	4
40 Rosemont Road	2	1	1	0	2	4
38 Rosemont Road	3	0	1	0	1	4
36 Rosemont Road	3	1	0	0	1	4
34 Rosemont Road	3	1	0	0	1	4
32 Rosemont Road	4	0	0	0	0	4
30 Rosemont Road	15	0	0	0	0	15
26 Rosemont Road	1	1	1	1	3	4
24c Rosemont Road	4	0	0	0	0	4
24b Rosemont Road	4	0	0	0	0	4
24a Rosemont Road	4	0	0	0	0	4
22c Rosemont Road	4	0	0	0	0	4

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	1	r	1	1	r	1
22b Rosemont Road	3	0	1	0	1	4
22a Rosemont Road	4	0	0	0	0	4
20c Rosemont Road	3	0	0	1	1	4
20b Rosemont Road	4	0	0	0	0	4
20a Rosemont Road	3	0	1	0	1	4
16 Rosemont Road	6	0	0	1	1	7
14 Rosemont Road	4	0	0	0	0	4
12 Rosemont Road	5	0	0	0	0	5
10 Rosemont Road	3	0	0	0	0	3
8 Rosemont Road	4	0	0	0	0	4
6 Rosemont Road	1	0	0	0	0	1
4 Rosemont Road	2	0	0	0	0	2
2 Rosemont Road	4	0	0	0	0	4
6-8 Frognal Parade, 1-6 Warwick House	6	0	0	0	0	6
1-5 Frognal Parade, 1-4 Midland Court	8	0	0	0	0	8
Holiday Inn, 152-156 Finchley Road	5	1	3	32	36	41
150 Finchley Road	1	0	2	5	7	8
148 Finchley Road	1	1	0	6	7	8
146 Finchley Road	1	1	5	1	7	8
144 Finchley Road	2	3	3	0	6	8
142 Finchley Road	4	3	1	0	4	8
140 Finchley Road	7	1	0	0	1	8
138 Finchley Road	8	0	0	0	0	8
136 Finchley Road	8	0	0	0	0	8
134 Finchley Road	8	0	0	0	0	8
132 Finchley Road	9	0	0	0	0	9
Total	169	18	22	48	8	257

# 12.12.18 The BRE Guidelines state that:

"...the diffuse daylighting of the existing building may be adversely affected if either the VSC measured at the centre of an existing main window is less than 27% and less than 0.8 times its former value [or] the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value."

12.12.19 In situations where the Development would result in fully BRE compliant VSC and NSL alterations to the windows and rooms within a property, the effect on the daylight amenity to that property is considered to be of negligible significance.

12.12.20 The following properties will experience alterations which, in accordance with the BRE Guidelines, will not be noticeable to the occupants:

- 14 Rosemont Road
- 12 Rosemont Road
- 10 Rosemont Road
- 6 Rosemont Road
- 4 Rosemont Road
- 6-8 Frognal Parade, 1-6 Warwick House

- 1-5 Frognal Parade, 1-4 Midland Court
- 138 Finchley Road
- 136 Finchley Road
- 134 Finchley Road
- 132 Finchley Road
- 12.12.21 The effect on the daylight amenity of a property in an urban context is considered to be minor negative in situations where both the VSC and NSL alterations applicable to the room are no greater than 30% of their baseline values.
- 12.12.22 The following properties are therefore considered to experience reductions which are of minor negative significance:
  - 8 Rosemont Road

• 2 Rosemont Road

# 32-48 Rosemont Road (Even Numbers Only)

- 12.12.23 There are 99 windows serving what we understand are 36 rooms within these properties based upon the floor plans we have obtained, which show:
  - Kitchen/Dining rooms at Ground Floor
  - Living Rooms at First Floor; and
  - Bedrooms at the Second and Third Floors
- 12.12.24 These 36 rooms experience VSC and NSL alterations which exceed the BRE guidelines to a moderate or major negative extent.
- 12.12.25 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.26 Looking at the results on a floor by floor basis (so we discuss the rooms on a room type basis) in more detail, the 9 Kitchen/Dining rooms all experience reductions of a major negative extent. However, each of the windows serving these rooms are set back beneath a projecting balcony. When analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.12.27 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least least 16.08% (32 Rosemont Road) increasing up to 23.11% (48 Rosemont Road) which exceeds our alternative target value and is considered a good level of daylight for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a good level of daylight.
- 12.12.28 Looking now at the 9 reception rooms on the first floor, the main window closest to the Proposed Development serving each of the rooms will experience a moderate negative reduction, however each main window will retain a VSC of at least 19.12% which exceeds our alternative target criteria. It can therefore be considered that with the Proposed Development in place, these rooms will retain good levels of daylight for an urban area.
- 12.12.29 The remaining windows serve the bedrooms on the first and second floors of this terrace of properties and when looking at the results in more detail, although reductions beyond the BRE guidelines will occur, which could be considered noticeable, the retained levels of daylight to each room are in excess of 19% which is considered a good level of daylight for an urban area and exceeds our alternative target value.
- 12.12.30 In addition, all rooms will either retain an NSL to at least 49% of the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.12.31 In conclusion, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

## 30 Rosemont Road

- 12.12.32 There are 41 windows serving what we assume are 15 rooms within these properties as we have not been able to obtain floorplans. We have therefore had to apply our reasonable assumptions as to the layout of the properties.
- 12.12.33 Of the 15 rooms, 7 rooms will experience VSC and NSL alterations which are considered to be of negligible significance.
- 12.12.34 The remaining 8 rooms experience VSC and NSL alterations which exceed the BRE guidelines to a moderate or major negative extent.
- 12.12.35 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.



- 12.12.36 Looking at the results in more detail, of the 8 rooms that experience a moderate or major negative effect, each will retain a VSC of at least 18.5% to their main windows (which are located on the southern elevation and not obstructed by a projecting balcony) which exceeds our alternative target value.
- 12.12.37 In addition, all rooms will meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.12.38 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

### 26 Rosemont Road

- 12.12.39 There are 6 windows serving what we assume are 4 rooms which serve 2 bedrooms, a reception room and an LKD according to the floor plans we have managed to obtain.
- 12.12.40 Of the 4 rooms, 1 room will experience VSC and NSL alterations which are considered to be of negligible significance, and one room will experience a VSC and NSL alteration which is considered to be of minor negative significance. In addition, these 2 rooms will meet the BRE guidelines reduction criteria or retain an NSL to at least 50% of the room area, which is considered good for an urban area.
- 12.12.41 The remaining 2 rooms will experience NSL alterations which are considered to be of a moderate and major significance.
- 12.12.42 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.43 When looking at the two rooms that experience a moderate or major negative effect in more detail, they areunderstood to serve the LKD at ground floor and the reception room at first floor. These rooms experience a minor negative VSC reduction (up to 4 % beyond the BRE guidelines), yet a larger NSL alteration, which is considered to be moderate to major negative.
- 12.12.44 These rooms are tucked around the corner behind 30 Rosemont Road and their windows (highlighted in red in **Figure 12.6** below) arepositioned with a tall wall to its right and a large set of stairs directly in front.

### Figure 12.6 – Image of 30 Rosemont Road



- 12.12.45 The outlook to the room R1/80 is already limited meaning the existing NSL is lower than usual at 41%. It is therefore impossible to meet the retained value in accordance with the BRE guidelines or our alternative target value of 50% with the implementation of the Proposed Development.
- 12.12.46 Additionally, as the existing NSL is already lower than usual, even a moderate obstruction opposite could cause a larger relative reduction, the results to this room are therefore considered disproportionate.
- 12.12.47 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

### 24 A-C Rosemont Road

- 12.12.48 There are 30 windows serving what we understand are 12 rooms within these properties according to the floor plans we have managed to obtain.
- 12.12.49 Of the 12 rooms, 2 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 7 rooms will experience a VSC and NSL alteration which is considered to be of minor negative significance.
- 12.12.50 The remaining 3 rooms which are understood to serve LKDs at ground floor experience VSC and NSL alterations which exceed the BRE guidelines to a major negative extent.
- 12.12.51 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.52 Looking at the results in more detail, the rooms that experience the larger reductions are set back beneath projecting balconies and when analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.12.53 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least 15.89% which is in line with our alternative target value and is considered a good level of daylight for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a good level of daylight.
- 12.12.54 In addition, all rooms will meet the BRE guidelines reduction criteria for the NSL assessment, which is considered good for an urban area.
- 12.12.55 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

## 22 A-C Rosemont Road

- 12.12.56 There are 30 windows serving what we understand are 12 rooms within these properties according to the floor plans we have managed to obtain.
- 12.12.57 Of the 12 rooms, 3 rooms will experience VSC and NSL alterations which are considered to be of negligible significance. A further 6 rooms will experience VSC and NSL alterations which are considered to be of minor significance.
- 12.12.58 The remaining 3 rooms which are understood to serve LKDs experience VSC and (in 22B's case) NSL alterations which exceed the BRE guidelines to a major negative extent.
- 12.12.59 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.60 Looking at the results in more detail, the rooms that experience the larger reductions are set back beneath projecting balconies and when analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

*"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.12.61 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least 25% (when rounded) which is considered a very good level for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a very good level of daylight.
- 12.12.62 In addition, all rooms will either retain an NSL to at least 50% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.12.63 In conclusion, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

## 20 A-C Rosemont Road

- 12.12.64 There are 30 windows serving what we understand are 12 rooms within these properties according to the floor plans we have managed to obtain.
- 12.12.65 Of the 12 rooms, 6 rooms will experience VSC and NSL alterations which are considered to be of negligible significance.2 rooms will experience a VSC and NSL alteration which is considered to be of minor negative significance. A further 1 room will experience VSC and NSL alterations which are considered to be moderate negative. However, this room (R2/121) will retain VSC of at least 20% which is in line with our alternative target criteria.
- 12.12.66 The remaining 3 rooms which are understood to serve LKDs experience VSC and NSL alterations which exceed the BRE guidelines to a major negative extent.
- 12.12.67 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.68 Looking at the results in more detail, the rooms that experience the larger reductions are set back beneath projecting balconies and when analysing windows beneath balconies, the BRE Guidelines state at Paragraph 2.2.11:

"2.2.11 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. 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 existing value with the balcony was under 0.8 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."

- 12.12.69 We have therefore undertaken these additional assessments which are included within **Appendix 12.10 (A).** The results of these assessments show that these rooms will continue to experience a reduction beyond the BRE guidelines (with a percentage reduction greater than 20%). However, the windows will retain a VSC of at least 21% which is considered a good level for an urban area. Whilst therefore the test as set out in the BRE guidelines is not technically met, the results do show that without the presence of the balcony, and with the Proposed Development in place, that these rooms will retain a good level of daylight.
- 12.12.70 In addition, all rooms will either retain an NSL to at least 50% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.12.71 Overall therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values, can be considered acceptable.

### 16 Rosemont Road

- 12.12.72 We have not been able to obtain floor plans for this property and so have applied our reasonable assumptions as to the layout of the property.
- 12.12.73 There are 12 windows serving what we assume are 7 rooms, of which 6 rooms will experience VSC and NSL alterations which are considered to be of negligible significance.
- 12.12.74 The remaining room experiences a negligible VSC reduction, with only the NSL experiencing a major negative reduction.
- 12.12.75 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be up to a major negative effect which is significant.
- 12.12.76 The NSL reduction is a result of the Proposed Development, and with the Proposed Development in place, it retains a NSL of 40% which is 10% short of our alternative target criteria.
- 12.12.77 In conclusion, as it is just 1 test for 1 room which falls short of the guidance criteria, we can conclude in accordance with Appendix I, that the effects to this property are minor negative and therefore acceptable.

### Holiday Inn (Hotel)

- 12.12.78 Properties serving hotel uses are not considered permanent residential accommodation. The expectation of daylight/sunlight in inner city areas is therefore considered low and not considered to be a sensitive receptor. We have however included this property for completeness.
- 12.12.79 There are 41 windows serving what we understand are 41 bedrooms within this property. Of which, 5 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 1 will experience VSC and NSL alterations which are considered to be of minor negative significance.
- 12.12.80 The remaining 35 rooms experience either VSC and/or NSL alterations which exceed the BRE guidelines to a moderate or major negative extent.
- 12.12.81 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.82 When looking at the windows that experience a moderate or major negative effect, all will retain a VSC of at least 22.12% which exceeds our Alternative target value.
- 12.12.83 In addition, 12 of these rooms will retain an NSL to at least 50% to the room area which is considered good for an urban area.
- 12.12.84 The last 23 rooms enjoy NSLs which are lower than our alternative target criteria of 50% at 28%-49%. However, these instances are considered minor due to the fact the expectation of daylight is lower due to the properties use as a hotel where the guests are transient in nature.
- 12.12.85 In conclusion, whilst the percentage reductions compared to the baseline situation may be between of a moderate to major scale of effect, the overall effect, when considering the retained daylight values and the transient nature of the guests can be considered acceptable.

#### 140-150 Finchley Road

- 12.12.86 We have not been able to obtain floor plans for each of these properties and so have applied our reasonable assumptions as to the layout where floorplans were unavailable.
- 12.12.87 There are 75 windows serving what we understand are 48 rooms, of which 11 rooms will experience VSC and NSL alterations which are considered to be of negligible significance and a further 14 rooms will experience a minor negative reduction.
- 12.12.88 The remaining 23 rooms experience either a negligible or minor negative VSC reduction, with only the NSL experiencing a moderate/major negative reduction.
- 12.12.89 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.



- 12.12.90 When looking at the results in more detail all rooms except for 1, R1/1044 (which is located within 150 Finchley Road on the upper floor and is likely to serve a bedroom), will either retain an NSL to at least 53% to the room area or meet the BRE guidelines reduction criteria, which is considered good for an urban area.
- 12.12.91 In conclusion therefore, whilst the percentage reduction compared to the baseline situation may be between of a moderate to major scale of effect, the overall effects to all rooms, except that 1 room for NSL, when considering the retained daylight values, can be considered acceptable.

### **Midland Crescent**

- 12.12.92 This property is the cumulative scheme, which as part of our assessments has been assumed to be built. The proposals for this property include the 'Redevelopment of the site by the erection of a part 3, part 4 and part 5 storey building with a double level basement comprising flexible commercial space (Use Classes A1/A2/A3/A4/B1/D1 & D2) at lower basement and ground floor levels, 60 student bedrooms with communal kitchen, lounge and common room areas, and 9 residential dwellings (Class C3)'.
- 12.12.93 Student accommodation uses are not considered permanent residential accommodation. The expectation of daylight/sunlight in inner city areas is therefore considered low and not considered to be a sensitive receptor. We have however included this property for completeness.
- 12.12.94 There are 233 windows serving what we understand are 75 rooms within this property. These have all been assessed in terms of both ADF and NSL in a cumulative scenario. Full detailed results can be found at **Appendix 12.17 (A)**.
- 12.12.95 The results of our assessments show that all rooms, with the exception of 4, will meet the ADF associated with their room use in accordance with the BRE guidelines. The remaining rooms experience a reduction which are equivalent to a major negative effect.
- 12.12.96 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.97 The 4 rooms which do not meet the ADF targets are those positioned behind recessed balconies. As rooms of a similar size, and a similar area of glazing, on the main elevation of the Midland Crescent development meet the BRE guidelines it is clear that it is the presence of the balcony rather than the proposed scale and massing of the Development that results in these slightly lower levels of daylight.
- 12.12.98 In regard to the NSL assessments, all rooms will retain a NSL to over 50% of their room area, which is considered acceptable for an urban area.
- 12.12.99 Therefore, the overall conclusion is that Midlands Crescent may experience losses of minor negative significance.

#### Cumulative Sunlight to Surrounding Properties

12.12.100 There are 979 windows serving 449 residential rooms surrounding the Site that are relevant for sunlight amenity assessment. These have all been assessed in terms of total and winter APSH. Full detailed results can be found at **Appendix 12.23 (A)** and are summarised in **Table 12.18**.

		No. Of Rooms Below The APSH Stated In BRE Guidelines									
Address	Meet BRE Guidelines	Below	Thresho	old For W SH	inter	Below	Total No.				
		20- 30%	30- 40%	> 40%	Tot.	20- 30%	30- 40%	>40 %	Tot.	Rooms	
48 Rosemont Road	4	0	0	0	0	0	0	0	0	4	
46 Rosemont Road	3	0	0	1	1	0	0	1	1	4	
44 Rosemont Road	3	0	0	1	1	0	0	1	1	4	
42 Rosemont Road	3	0	0	1	1	0	0	1	1	4	
40 Rosemont Road	3	0	0	1	1	0	0	1	1	4	
38 Rosemont Road	3	0	0	1	1	0	0	1	1	4	
36 Rosemont Road	4	0	0	0	0	0	0	0	0	4	
34 Rosemont Road	3	0	0	1	1	0	0	1	1	4	
32 Rosemont Road	3	0	0	1	1	0	0	1	1	4	
30 Rosemont Road	8	0	0	0	0	0	0	0	0	8	
26 Rosemont Road	1	0	0	3	3	1	0	0	1	4	
24c Rosemont Road	3	0	0	1	1	0	0	0	0	4	
24b Rosemont Road	4	0	0	0	0	0	0	0	0	4	
24a Rosemont Road	4	0	0	0	0	0	0	0	0	4	
22c Rosemont Road	4	0	0	0	0	0	0	0	0	4	
22b Rosemont Road	4	0	0	0	0	0	0	0	0	4	
22a Rosemont Road	4	0	0	0	0	0	0	0	0	4	

#### Table 12.18 – Cumulative APSH Summary with the Development in Place

	[	1	1	1		Г	Γ			
20c Rosemont Road	4	0	0	0	0	0	0	0	0	4
20b Rosemont Road	4	0	0	0	0	0	0	0	0	4
20a Rosemont Road	4	0	0	0	0	0	0	0	0	4
16 Rosemont Road	7	0	0	0	0	0	0	0	0	7
14 Rosemont Road	4	0	0	0	0	0	0	0	0	4
12 Rosemont Road	5	0	0	0	0	0	0	0	0	5
10 Rosemont Road	3	0	0	0	0	0	0	0	0	3
8 Rosemont Road	4	0	0	0	0	0	0	0	0	4
6 Rosemont Road	1	0	0	0	0	0	0	0	0	1
4 Rosemont Road	2	0	0	0	0	0	0	0	0	2
2 Rosemont Road	4	0	0	0	0	0	0	0	0	4
6-8 Frognal Parade, 1-6 Warwick House	6	0	0	0	0	0	0	0	0	6
1-5 Frognal Parade, 1-4 Midland Court	8	0	0	0	0	0	0	0	0	8
Holiday Inn, 152- 156 Finchley Road	41	0	0	0	0	0	0	0	0	41
150 Finchley Road	8	0	0	0	0	0	0	0	0	8
148 Finchley Road	8	0	0	0	0	0	0	0	0	8
146 Finchley Road	8	0	0	0	0	0	0	0	0	8
144 Finchley Road	8	0	0	0	0	0	0	0	0	8
142 Finchley Road	8	0	0	0	0	0	0	0	0	8
140 Finchley Road	8	0	0	0	0	0	0	0	0	8
138 Finchley Road	8	0	0	0	0	0	0	0	0	8
136 Finchley Road	8	0	0	0	0	0	0	0	0	8
134 Finchley Road	8	0	0	0	0	0	0	0	0	8
132 Finchley Road	9	0	0	0	0	0	0	0	0	9
Total	239	0	0	11	11	1	0	7	8	250

## 12.12.101 The BRE Guidelines state that: -

"...the sunlighting of the existing building may be adversely affected...if the centre of the window receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and receives less than 0.8 times its former sunlight hours during either period and has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours."

# 12.12.102 For existing residential properties, the BRE Guidelines state in Section 3.2.3 that:

"all main living rooms of dwellings...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."

# 12.12.103 Section 3.2.4 continues:

"If the main living room to a dwelling has a main window facing within 90° of due north, but a secondary window facing within 90° of due south, sunlight to the secondary window should be checked."

- 12.12.104 The following properties have the following number of Site-facing rooms that are within 90 degrees of due south and will experience alterations which, in accordance with the BRE Guidelines, will not be noticeable to the occupants:
  - 48 Rosemont Road
  - 36 Rosemont Road
  - 30 Rosemont Road
  - 24b Rosemont Road
  - 24a Rosemont Road
  - 22c Rosemont Road
  - 22b Rosemont Road
  - 22a Rosemont Road
  - 20c Rosemont Road
  - 20b Rosemont Road
  - 20a Rosemont Road
  - 16 Rosemont Road
  - 14 Rosemont Road
  - 12 Rosemont Road
  - 10 Rosemont Road
  - 8 Rosemont Road
  - 6 Rosemont Road

- 4 Rosemont Road
- 2 Rosemont Road
- 6-8 Frognal Parade, 1-6 Warwick House
- 1-5 Frognal Parade, 1-4 Midland Court
- Holiday Inn, 152-156 Finchley Road
- 150 Finchley Road
- 148 Finchley Road
- 146 Finchley Road
- 144 Finchley Road
- 142 Finchley Road
- 140 Finchley Road
- 138 Finchley Road
- 136 Finchley Road
- 134 Finchley Road
- 132 Finchley Road

12.12.105 Site-facing rooms, located within the following properties, will experience APSH

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alterations that are beyond those described above and so will be considered in more detail:

### 46-38 Rosemont Road

- 12.12.106 There are 55 windows serving what we understand are 20 rooms as we have managed to obtain floorplans. Of the 20 rooms, 15 rooms will experience APSH alterations which are considered to be of negligible significance. The remaining rooms experience APSH alterations which are considered to be of up to a major negative effect.
- 12.12.107 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.108 The 5 rooms that experience up to a major negative effect meet the BRE guidelines for winter hours yet derogate from the annual hours criteria, however, meet the alternative annual target value of 15% with a total APSH of at least 19%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon these rooms to be acceptable.

### 32-34 Rosemont Road

- 12.12.109 There are 22 windows serving what we understand are 8 rooms as we have managed to obtain floorplans. Of the 8 rooms, 6 rooms will experience APSH alterations which are considered to be of negligible significance. The remaining rooms experience APSH alterations which are considered to be of up to a major negative effect.
- 12.12.110 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.111 The 2 rooms that experience up to a major negative effect meet the BRE guidelines for winter hours yet derogate from the annual hours criteria, however, both meet the alternative annual target value of 15% with a total APSH of 22% and 16% respectively. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon these rooms to be acceptable.

### 26 Rosemont Road

- 12.12.112 There are 6 windows serving what we assume are 4 rooms which serve 2 bedrooms, a reception room and an LKD according to the floor plans we have managed to obtain.
- 12.12.113 Of the 4 rooms assessed, 1 room will experience APSH alterations which are considered to be of negligible significance. The remaining rooms experience APSH alterations which are considered to be of up to a major negative effect.
- 12.12.114 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.115 For the 3 rooms that experience up to a major negative effect meet, 2 rooms meet the BRE guidelines/the BRE guidelines reduction criteria for annual hours, and 1 will retain at least 20% of a total APSH which is in line with our alternative target criteria. These 3 rooms

only derogate from the winter hours criteria. Therefore, although the reductions are beyond the BRE guidelines for winter hours, we consider the overall effect upon this room is acceptable.

### 24C Rosemont Road

- 12.12.116 There are 10 windows serving what we understand are 4 rooms within these properties according to the floor plans we have managed to obtain.
- 12.12.117 Of the 4 rooms, 3 rooms will experience APSH alterations which are considered to be of negligible significance. The remaining room experiences APSH alterations which are considered to be of up to a major negative effect.
- 12.12.118 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.119 When looking the results in more detail, the remaining room meets the BRE guidelines criteria for annual hours yet derogates from the winter hours criteria. Therefore, although the reductions are beyond the BRE guidelines for winter hours, we consider the overall effect upon this room is acceptable.

### Sunlight to the Proposed Habitable Rooms within the Midland Crescent Scheme

- 12.12.120 There are 75 rooms which are within 90 degrees of due south and have the possibility of being impacted by the proposed Development Site. These have all been assessed in terms of APSH in the cumulative scenario.
- 12.12.121 The results of our assessments show of the 75 rooms, 73 will meet the BRE guidance. The remaining room experiences APSH alterations which are considered to be of up to a major negative effect.
- 12.12.122 Overall, taking into account the tests undertaken, the effect of the Proposed Development on this property is considered to be a major negative effect which is significant.
- 12.12.123 The remaining 2 rooms meet the BRE guidelines for total annual hours yet derogate from the winter hours criteria to a maximum of 1%. Therefore, although the reductions are beyond the BRE guidelines, we consider the overall effect upon these rooms to be acceptable.

### Cumulative Overshadowing

12.12.124 Of the Cumulative Schemes identified, only Midlands Crescent directly to the north of the Site is in close enough proximity to be able to cause the Proposed Development to cause an additional effect and this additional effect would soley be to the Rosemont Road Amenity Space to the north. All of the other nearby sensitive receptors are of a sufficient distance from Midlands Crescent as to not be affected.



#### Cumulative Sun on Ground

12.12.125 The cumulative proposed Sun on Ground assessments were undertaken to the Rosemont Road amenity space in March. Full detailed results can be seen in Appendix 12.24 (A). The proposed baseline levels of shadowing for each area are summarised in Table 12.19

Area	% of Area Receiving at Least 2 Hours of Sunlight on 21st March – Existing Baseline	% of Area Receiving at Least 2 Hours of Sunlight on 21st March – Proposed	% Reduction from Existing Baseline
	Baseline		
Rosemont Road Amenity Space	100%	99%	1%

Table 12.19 – Cumulative Sun on Ground Summary with the Development in Place

12.12.126 The proposed sun on ground assessments to the nearby amenity spaces show that either no reduction beyond the BRE guidelines will be experienced, or a very small reduction which is well within the BRE guidelines and therefore considered to be unnoticeable, will be experienced. It is therefore considered that the overall effect is considered to be **negligible**.

#### Transient Overshadowing

12.12.127 The transient overshadowing images with the Development in place show that longer shadows will be cast as a result of the Development throughout the year. However, the shadows cast are not considered to create an negativev effect as shown by the sun on ground assessment. The effect is therefore considered to be **negligible**.



# Table 12.20: Summary of Effects

DESCRIPTION OF SIGNIFICANT EFFECTS	RECEPTOR	SIGNIFICANCE OF EFFECTS				SUMMARY OF MITIGATION /	SIGNIFIC	CANCE OF	. RELEVANT POLICY	RELEVANT		
		MAJOR / MODERATE / MINOR / NEGLIGIBL E	NEGATI	Т	I ST / MT / LT	ENHANCEMENT MEASURES	MAJOR / MODERATE / MINOR / NEGLIGIBL E	E / NEGATIV	Т		ют / 1Т / Т	ON
Demolition & C	onstruction											
Daylight	Existing adjacent residential properties	Negligible to Major Adverse	Negativ e	Te mp ora ry	LT	None Required	Negligible to Major Adverse	Negative	Te mp ora ry	L	Т	
Sunlight	Existing adjacent residential properties	Negligible to Major Adverse	Negativ e	Te mp ora ry	LT	None Required	Negligible to Major Adverse	Negative	Te mp ora ry	Ľ	T	
Overshadowin	Existing adjacent areas of open space	Negligible	Positive	Te mp ora ry	LT	None Required	Negligible	Positive	Te mp ora ry	Ľ	T	
Solar Glare	Surroundin g road	Negligible to Minor Adverse	Negativ e	Te mp ora ry	LT	None Required	Negligible to Minor Adverse	Negative	Te mp ora ry	Ľ	T	

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	•										
Daylight	Existing	Negligible	Negativ	Per	LT	None Required	Negligible	Negative	Per	LT	
	adjacent	to Major	е	ma			to Major		ma		
	residential properties	Adverse		nen t			Adverse		nen t		
Sunlight	Existing	Negligible	Negativ	Per	LT	None Required	Negligible	Negative	Per	LT	
-	adjacent	to Major	е	ma		•	to Major		ma		
	residential	Adverse		ne			Adverse		ne		
	properties			nt					nt		
Overshadowin	Existing	Negligible	Positive	Per	LT	None Required	Negligible	Positive	Per	LT	
	adjacent			ma					ma		
	areas of			ne					ne		
	open space			nt					nt		
Solar Glare	Surroundin	Negligible	Negativ	Per	LT	None Required	Negligible	Negative	Per	LT	
	g road	to Minor	е	ma		·	to Minor		ma		
	junctions	Adverse		ne			Adverse		ne		
	and train			nt					nt		
	approaches										

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