Mary Feilding Guild Care Home, 103-107 North Hill, London, N6 4DP

Internal Daylight & Sunlight Report

dpr

20 March 2025

PROJECT INFORMATION

Project Title:	Mary Feilding Guild Care Home, 103-103 North Hill, London N6 4DP
Project Number:	21047
Client:	Highgate Care Ltd
DPR Contact:	Stuart Gray BSc Senior Partner E: stuart.gray@dpr.uk.com
DPR Office:	London

VERSION HISTORY

Version	Date	Details
1.0	20/03/2025	First issue

ABOUT US

Delva Patman Redler LLP, Chartered Surveyors
Company number OC335699
www.dpr.uk.com

Offices in London, Liverpool, Bristol, Dublin
(See back cover for contact details)

Regulated by RICS®

DISCLAIMER

This report has been prepared by Delva Patman Redler LLP for the sole use of the above-named Client. No liability for its content is extended to any third party without our written consent. It may contain confidential or legally privileged information. The report has been prepared in accordance with generally accepted surveying practice and is based on the information set out in the report.

Statements and opinions in this report are expressed on behalf of Delva Patman Redler LLP.

CONTENTS

APPENDICES

Tip: Click on footer logo to return to this contents page.

1.0 Introduction

1.1. Delva Patman Redler LLP have been engaged by the Applicant to assess daylight and sunlight provision to the new dwellings within the Proposed Development at 103-107 North Hill ("the Site"). This report has been prepared to accompany the Applicant's planning application.

1.2. The potential daylight and sunlight effects of the Proposed Development to existing neighbouring properties is covered in a separate report.

1.3. The Site is located within the London Borough of Haringey.

1.4. The Proposed Development comprises 50-bed rehabilitation clinic (Class C2 - Residential Institutions), together with a separate residential building fronting North Hill accommodating 9 Class C3 flats (3 x 1 bed, 5 x 2 bed and 1 x 3 bed) and associated works ('the Proposed Development').

1.5. Our 3D computer model of the Proposed Development and its surroundings is illustrated in Figure 1 below and on our 3D view drawing at Appendix 2.

Figure 1 – 3D computer model of the Proposed Development and surrounding context

1.6. Our daylight and sunlight study has been carried out using the assessment methodologies recommended in *'Site Layout Planning for Daylight and Sunlight: A guide to good practice'* (BR209, 2022 edition) published by the Building Research Establishment.

1.7. The 2022 edition of the BRE guide introduced new methodologies and numerical guidelines for assessing internal daylight and sunlight within buildings. The numerical guidelines for daylight provision recommended in the 2022 edition of the BRE guide are more difficult to achieve than those in the 2011 edition. Consequently, the Proposed Development will achieve a lower percentage adherence to the 2022 guidelines than to the 2011 guidelines.

1.8. This report is accompanied by the Appendices listed on the Contents page, including an explanation of the BRE assessment methodologies, a glossary of technical terms, drawings, and tabulated results.

2.0 Planning policy and guidance

National Planning Policy and Guidance

National Planning Policy Framework (December 2024)

2.1. The National Planning Policy Framework (NPPF) sets out the Government's planning policies and how these should be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. It places an emphasis on sustainable development and delivery of housing.

2.2. Chapter 11 of the NPPF, entitled "Making effective use of land", promotes the effective use of land in meeting the need for homes and other uses. It gives examples such as developing under-utilised land and buildings, especially if this would help to meet identified needs for housing where land supply is constrained and available sites could be used more effectively, and upward extensions to create new homes, where they would be consistent with the prevailing height and form of neighbouring properties and the overall street scene.

2.3. In particular, paragraph 130 of the NPPF states:

> *Area-based character assessments, design guides and codes and masterplans can be used to help ensure that land is used efficiently while also creating beautiful and sustainable places. 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 a site (as long as the resulting scheme would provide acceptable living standards).*

National Design Guide (January 2021)

2.4. The National Design Guide is part of a suite of planning practice guidance that supports the NPPF. The National Design Guide outlines the Government's priorities for well-designed places.

2.5. Paragraph 71 of the guidance dealing with built form states:

> *Proposals for tall buildings (and other buildings with a significantly larger scale or bulk than their surroundings) require special consideration. This includes their location and siting; relationship to context; impact on local character, views and sight lines; composition - how they meet the ground and the sky; and environmental impacts, such as sunlight, daylight, overshadowing and wind. These need to be resolved satisfactorily in relation to the context and local character.*

2.6. Paragraphs 126 and 130 of the guidance dealing with homes and buildings state:

> *Well-designed homes and communal areas within buildings provide a good standard and quality of internal space. This includes room sizes, floor-to-ceiling heights, internal and external storage, sunlight, daylight and ventilation. The quality of internal space needs careful consideration in higher density developments, particularly for family accommodation, where access, privacy, daylight and external amenity space are also important.*
>
> *Well-designed private or shared external spaces are fit for purpose and incorporate planting wherever possible. The appropriate size, shape and position for an external amenity space can be defined by considering:*

- *how the associated building sits in the wider context, including access to public and open spaces;*
- *how the amenity space will be used, what for, and by whom;*
- *environmental factors that may affect its usability, such as sunlight and shade, noise or pollution;*
- *wider environmental factors affecting its quality or sustainability, such as a green corridor or drainage.*

National Model Design Code (June 2021)

2.7. The National Model Design Code provides detailed guidance to planning authorities on the production of design codes, guides and policies to promote successful design.

2.8. Paragraphs 114 to 117 of section B.2. dealing with built form states:

> *Building height may also have an impact on local environmental conditions in neighbouring properties, amenity spaces and public spaces in terms of daylight, sunlight, overshadowing, wind and micro-climate. The placing of tall buildings needs to maximise user comfort of spaces between buildings by taking into account their impact on orientation and overshadowing of public and private spaces, quality of external spaces at ground level, wind tunnel effect, noise pollution and enable safe dispersion of pollutants.*
>
> *Tall buildings can be considered in design codes. It may be appropriate to include criteria for the locations of tall buildings in some area types.... Tools that can assist with this include ... characterisation studies and design strategies, dealing with issues such as urban form, historic character, building typologies, prevailing sunlight and daylight levels, green infrastructure, amenity space and quality of external spaces at ground level.*

2.9. Paragraph 188 of section H.2 dealing with health and wellbeing states:

> *The built environment has a significant impact on people's health and wellbeing. This relates across the design code with regard to walkable neighbourhoods, access to greenery and recreation, attractive buildings and public spaces, space standards, and strong communities. There are also specific elements relating to the impact of the design of homes and buildings that affect wellbeing including daylight, aspect and privacy, noise mitigation, security and access to private outdoor space.*
>
> *Good quality housing creates a pleasant indoor environment with adequate levels of natural lighting, and sunlight, without problems of overheating, good quality ventilation, privacy from overlooking and minimal noise impact.*

2.10. Paragraph 202 of section R.1 dealing with energy states:

> *The design of windows needs to consider orientation to balance heat loss and beneficial solar gain, daylight and sunlight. Southern-facing glazing can be beneficial in contributing to overall energy demand in winter. It can lead to overheating in summer and excessive heat loss on cold cloudy days in winter. Glazing needs to be sized appropriately for context and passive measures such as external shading devices or provision for future installation of shading devices needs to be considered to reduce reliance on mechanical ventilation.*

BRE Report 209, 'Site Layout Planning for Daylight and Sunlight: A guide to good practice' (2022)

2.11. The leading publication providing national guidance on the provision of daylight and sunlight to new development, is 'Site Layout Planning for Daylight and Sunlight: A guide to good practice' (BR209, third edition, 2022) published by the Building Research Establishment (hereafter referred to as "the BRE guide"). It is referred to in development plan documents or supplementary planning documents of most planning authorities. It is intended to be used in conjunction with the interior daylighting recommendations in BS EN17037:2018 'Daylight in buildings' and in CIBSE's lighting guide, LG 10 'Daylighting - a guide to designer'.

2.12. The BRE guide states:

> *Summary*
>
> *This guide gives advice on site layout planning to achieve good daylighting and sun lighting, within buildings and in the open spaces between them. It is intended to be used in conjunction with the interior daylight recommendations for new buildings in the British Standard, 'Daylight in buildings', BS EN 17037. It contains guidance on site layout to provide good natural lighting within a new development ... It is purely advisory and the numerical target values within it may be varied to meet the needs of the development and its location.*
>
> *Introduction*
>
> *(Its) main aim is ... to help to ensure good conditions in the local environment, considered broadly, with enough sunlight and daylight on or between the buildings for good interior and exterior conditions.*
>
> *The guide is intended for building designers and their clients, consultants and planning officials. The advice given is not mandatory and the guide should not be seen as an instrument of planning policy; 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. In special circumstances the developer or 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... The calculation methods ... are entirely flexible in this respect...*

British Standard, BS EN 17037:2018, 'Daylight in buildings' (May 2019)

2.13. British Standard, BS EN 17037:2018, 'Daylight in buildings' provides a standard and methodology by which to assess daylight and sunlight provision in new buildings. Its general recommendations for daylight provision in a space may not be achievable for some buildings in the UK, particularly dwellings; for example, those with basement rooms or significant external obstructions, such as those in dense urban areas or in existing buildings being refurbished or converted into dwellings. The standard's National Annex therefore provides guidance on minimum daylight provision in UK dwellings.

Regional planning policy and guidance

The London Plan (March 2021)

2.14. The London Plan 2021 is the Spatial Development Strategy for Greater London. It sets out a framework for how London will develop over the next 20-25 years and the Mayor's vision for Good Growth. Its policies should inform decisions on planning applications across the capital.

2.15. The Plan notes that if London is to meet the challenges of the future, all parts of London will need to embrace and manage change. In many places, change will occur incrementally, especially in outer London, where the suburban pattern of development has significant potential for appropriate intensification over time, particularly for additional housing. The areas that will see the most significant change are identified as Opportunity Areas, many of which are already seeing significant development. London's Central Activities Zone (CAZ) and town centre network have a crucial role to play in supporting London's growth.

Policy GG2 *'Making the best use of land'*

2.16. Policy GG2 states:

> *To create successful sustainable mixed-use places that make the best use of land, those involved in planning and development must:*

> *B prioritise sites which are well-connected by existing or planned public transport*
>
> *C proactively explore the potential to intensify the use of land to support additional homes and workspaces, promoting higher density development, particularly in locations that are well-connected to jobs, services, infrastructure and amenities by public transport, walking and cycling*
>
> *D applying a design–led approach to determine the optimum development capacity of sites*

Policy D3 *'Optimising site capacity through the design-led approach'*

2.17. Policy D3 states:

> *A All development must make the best use of land by following a design-led approach that optimises the capacity of sites, including site allocations. Optimising site capacity means ensuring that development is of the most appropriate form and land use for the site...*
>
> *B Higher density developments should generally be promoted in locations that are well connected to jobs, services, infrastructure and amenities by public transport, walking and cycling...*

Policy D6 *'Housing quality and standards'*

2.18. Policy D6 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.*

2.19. The supporting text notes that dual aspect dwellings with opening windows on at least two sides have many inherent benefits, including better daylight, a greater chance of direct sunlight for longer periods, natural cross-ventilation, etc. It notes that the design of single aspect dwellings must demonstrate that all habitable rooms and the kitchen are provided with adequate daylight, and that the orientation enhances amenity, including views. Single aspect dwellings that are north facing should be avoided. Having bay windows can optimise daylight and sunlight and allow buildings to be closer together than can otherwise be achieved.

Housing Design Standards LPG (June 2023)

2.20. The Mayor of London's London Plan Guidance *'Housing Design Standards'* (June 2023) brings together and helps to interpret the housing-related design guidance and policies set out in the London Plan 2021. It is applicable to all self-contained residential applications (Use Class C3) and across tenures (including build-to-rent and specialist older persons' housing). It does not provide guidance on other specialist forms of housing such as shared living, temporary accommodation and student accommodation. This LPG supersedes the Part 2: Quality chapter of the Housing SPG (March 2016).

2.21. The standards are broken down into those that are expected to be met, and those that are best practice and therefore strongly encouraged.

2.22. Standards A1.7 to A1.9 dealing with placemaking and the public realm state:

> *The most favourable orientation for each new building will be heavily influenced by the site-specific opportunities and constraints. Layouts should optimise the orientation of new buildings to maximise the quality of daylight and thermal comfort for residents, minimise overheating, and optimise thermal efficiency, by utilising and controlling solar gains.*
>
> *Particular consideration should be given to the impact of new development on the level of daylight and sunlight received by the existing residents in surrounding homes and on existing public green space.*
>
> *The orientation and massing of buildings, and the separation distances between them, should ensure that the public realm is not unduly overshadowed to the detriment of health, wellbeing, biodiversity or amenity. Where demonstration is necessary and/or a building over 30 metres high is proposed, a micro-climate/wind/daylight and sunlight assessment should be submitted.*

2.23. Paragraph 4.1.2 states:

> *The standards in this section [Part C: Homes and private outside space] also aim to complement the consideration of daylight and sunlight impacts using the BRE guidance (Site layout planning for daylight and sunlight). This process involves a two-stage approach: firstly, by applying the BRE guidance; and secondly, by considering the location and wider context when assessing any impacts. With extreme weather events becoming increasingly common, design must balance daylight, passive solar gain and overheating considerations.*

2.24. Standards C2.3 and C2.4 dealing with internal space standards state:

> *A minimum ceiling height of 2.5m is required for at least 75 per cent of the gross internal area (GIA) of each dwelling to enhance the spatial quality; improve daylight penetration and ventilation; and assist with cooling.*
>
> *Best practice: The floor-to-floor height of ground-floor dwellings should be at least 3.5m in order to promote flexibility and greater daylight; and allow for easier conversion to non-residential uses if required*

2.25. Standards C4.1 to C4.3 and C4.7 dealing with aspect, orientation, daylight and sunlight state:

> *New homes should be dual aspect unless exceptional circumstances make this impractical or undesirable; for example, when one side of the dwelling would be subjected to excessive noise or outside air pollution. Where single aspect dwellings are proposed, by exception, they should be restricted to homes with one or two bedspaces; should not face north; and must demonstrate that the units will: have adequate passive ventilation, daylight and privacy; and not overheat (particularly relevant for south or west-facing single aspect units). Note: See Appendix 3 [of the Housing Design Standards LPG] for definition of dual aspect.*
>
> *The location of the main living and eating spaces, and the main private outside space, should be optimised to make the most of the best views and the orientation. These spaces should receive direct sunlight (south-facing is preferable, provided that appropriate shading devices are incorporated) and enjoy reasonable privacy through the careful placement of windows, balcony design or other measures.*
>
> *All homes should allow for direct sunlight in conjunction with solar shading. As a minimum, at least one habitable room should receive direct sunlight – preferably the living area and/or the kitchen and dining space.*
>
> *All habitable rooms (including a kitchen/dining room) should receive natural light and have at least one openable window that provides a view out when seated.*

2.26. Standard C6.2 dealing with thermal comfort states:

> *Daylight and overheating assessments should be analysed together to determine the optimal balance. South and west-facing facades are most at risk to overheating, and the use of shading should be used to prevent direct sunlight from entering the home during at-risk periods.*

Housing SPG (March 2016)

2.27. The Mayor of London's *'Housing Supplementary Planning Guidance'* (March 2016) was developed to support previous versions of the London Plan but remains relevant for the implementation of the London Plan 2021.

2.28. Clearly, the guidelines and recommendations given in the BRE guide should be applied with an appropriate degree of flexibility and sensitivity to higher-density housing development, especially in opportunity areas, town centres, large sites and accessible locations. Account should be taken of local circumstances, the need to optimise housing capacity and scope for the character and form of an area to change over time.

Local planning policy

Haringey's Local Plan, Strategic Policies, 2013–2026 (March 2013, consolidated with alterations since 2017)

2.29. The Haringey Local Plan states:

> *Making the best use of land in Haringey*
>
> *2.1.7 In order to accommodate Haringey's growing population, the Council needs to make the best use of the borough's limited land and resources. The Council will promote the most efficient use of land in Haringey and buildings while also seeking to improve the quality of our environment protect the amenity of occupiers and neighbours and meet other planning objectives.*
>
> *Accommodating Haringey's Growth*
>
> *3.1.5 The Council will expect development in the growth areas to maximise site opportunities and the opportunities and benefits for the borough and the local area within the context of the full range of Haringey's planning policies and objectives, including those relating to amenity, sustainability, heritage/built environment, open space, community safety and sustainable transport...*
>
> *High quality homes*
>
> *3.2.7 The Council will expect all new development to be built to the highest quality standards in line with the London Plan and the Mayor of London's Housing SPG (March 2016) ...*
>
> *Sustainable Design and Construction*
>
> *6.1.7 Layout and design and construction of buildings have significant effect on a building's environmental and energy performance. The construction and use of buildings currently account for around half of the carbon emissions in Haringey. The Council considers it is important that all new and redeveloped buildings are designed to have a beneficial impact on their environment.*
>
> *6.1.8 Key areas of focus are reducing energy demand and carbon emissions by improvements to the building fabric, the use of passive solar energy and natural light and ventilation, choosing materials with low embedded energy, and the utilisation of low carbon technologies...*

Haringey Development Management DPD (adopted July 2017)

2.30. The *Haringey Development Management DPD (2017)* contains the following relevant policy:

> *Policy DM1: Delivering High Quality Design*
>
> *D Development proposals must ensure a high standard of privacy and amenity for the development's users and neighbours. The Council will support proposals that:*
>
> *a Provide appropriate sunlight, daylight and open aspects (including private amenity space where required) to all parts of the development and adjacent buildings and land;*
>
> *The supporting text states:*
>
> *2.9 The Council recognises that amenity can be compromised in a number of ways through development such as detrimental loss of daylight and sunlight to existing and adjacent occupiers; loss of privacy and outlook due to the proximity and design of developments; harmful noise, odour, vibration and air pollution from existing and proposed developments (typically commercial activities and other activities such as rail); developments with the potential to endanger highway safety; and cause detrimental micro-climate effects. Buildings should therefore be compatible with their local environment and conditions.*
>
> *2.10 The design and layout of buildings must enable sufficient sunlight and daylight to penetrate into and between buildings, and ensure that adjoining land or properties are protected from unacceptable overshadowing. The Building Research Establishment (BRE) provides guidance on site layout planning to achieve good sun-lighting and day-lighting (BRE Site Layout Planning for Daylight and Sunlight: a guide to good practice).*

3.0 Assessment methodology and numerical guidelines

3.1. The technical assessments that underpin this daylight and sunlight study have been carried out in accordance with the assessment methodologies recommended in the BRE guide.

3.2. The BRE guidance and numerical guidelines are summarised below. The technical assessment methodologies are explained at Appendix 1 of this report, which also contains a glossary of technical terms.

Daylight to new dwellings

Detailed design

3.3. Detailed recommendations for daylight in new buildings are given in BS EN 17037, 'Daylight in Buildings' ('the British Standard') and repeated in the BRE guide. Appendix C of the BRE guide gives guidance on how to calculate the amount of daylight inside a room, which is summarised at Appendix 1 of this report.

3.4. Daylight provision in new rooms may be checked using either of the methods described in the BRE guide: either direct prediction of daylight illuminance levels using hourly climate data, or the use of the daylight factor, which is a ratio of unobstructed external illuminance under overcast sky conditions. Both are measures of the overall amount of daylight in a space. We have calculated daylight provision using the illuminance method.

3.5. The amount of daylight inside a room will depend on:

- the view of sky and level of obstruction outside the window(s);
- the surface reflectances of the external environment;
- the size, position and diffuse light transmittance of the window glazing; and
- the surface reflectances of the room surfaces.

3.6. Appendix C of the BRE guide gives recommendations for typical and maximum reflectances of exterior and interior surfaces and glazing transmittance, which are repeated at Appendix 1 of this report.

<u>Numerical guidelines</u>

3.7. The following minimum recommendations are given for housing in the UK:

- 100 lux in bedrooms
- 150 lux in living rooms
- 200 lux in kitchens

3.8. These are the median illuminances, to be exceeded over at least 50% of the assessment points in the room for at least half of the annual daylight hours.

3.9. They are minimum recommended values for locations where a predominantly daylit appearance is not achievable; for example, in basements or with significant external obstructions, such as in a dense urban area or with tall trees outside, or for existing buildings being refurbished or converted into dwellings.

3.10. Non-daylit internal kitchens should be avoided wherever possible, especially if the kitchen is used as a dining area too. If the layout means that a small internal kitchen is inevitable, it should be directly linked to a well daylit room.

3.11. Where a room has a shared use, the highest target should apply. For example, in a bed-sitting room in student accommodation, the value for a living room should be used if students would often spend time in their rooms during the day. However, the BRE guide advises that local authorities could use discretion here. For example, the target for a living room could be used for a combined living/kitchen/dining area (LKD) of kitchen-diner (KD) if the kitchens are not treated as habitable spaces, as it may avoid small

separate kitchens in a design. (The kitchen space would still need to be included in the assessment area.) For this reason, we have adopted an alternative target of 150 lux for LKDs and KDs in our assessment.

Sunlight to new dwellings

3.12. In housing, the main requirement for sunlight is in living rooms, where it is valued at any time of day but especially in the afternoon. Sunlight is also required in conservatories. It is viewed as less important in bedrooms and in kitchens.

3.13. Site layout is the most important factor affecting the duration of sunlight in buildings. It can be divided into two main issues, orientation and overshadowing.

3.14. A south-facing window will, in general, receive most sunlight, while east- and west-facing windows will receive sunlight only at certain times of the day, and a north-facing elevation will only receive it on a handful of occasions (early morning and late evening in summer).

3.15. Sensitive layout design of flats will attempt to ensure that each individual dwelling has at least one main living room which can receive a reasonable amount of sunlight. The overall sunlighting potential of a large residential development may be initially assessed by counting how many dwellings have a window to a main living room facing south, east, or west. The aim should be to minimise the number of dwellings whose living rooms face solely north, northeast, or northwest, unless there is some compensating factor such as an appealing view to the north.

3.16. The overall access to sunlight of a new development can be considerably enhanced if the layout of new buildings is designed with care so that they overshadow each other as little as possible.

Numerical guideline

3.17. For interiors, access to sunlight can be quantified. BS EN 17037 recommends that a space should receive a minimum of 1.5 hours of direct sunlight on a selected date between 1 February and 21 March with cloudless conditions. The BRE guide suggests that 21 March (equinox) is used. The medium and high levels of recommendation are three hours and four hours respectively.

3.18. The criterion apply to rooms of all orientations, although the BRE guide advises that if a room faces significantly north of due east or west it is unlikely to be met. At least one habitable room per dwelling – preferably a main living room – should meet at least the minimum criterion.

Summary

3.19. In general, a dwelling will appear reasonably sunlit provided:

- at least one main window wall faces within 90° of due south; and
- a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March.

3.20. Where groups of dwellings are planned, site layout design should aim to maximise the number of dwellings with a main living room that meets the above recommendations.

Flexible application of the guidelines and alternative target values

3.21. The default numerical guidelines in the BRE guide are not mandatory and must be interpreted flexibly because natural lighting is only one of many factors in site layout design (see paragraph 2.12 above).

3.22. For housing applications, the NPPF requires local planning authorities to take a flexible approach in applying daylight and sunlight policies and guidance where they would otherwise inhibit making efficient use of a site, as long as the resulting scheme would provide acceptable living standards (see paragraph 2.3 above).

3.23. For the reasons explained at paragraph 3.11 above, we have adopted an alternative target of 150 lux for the minimum illuminance level for any space multi-purpose space containing a kitchen, such as LKDs, KDs and studios.

3.24. Ultimately, it is for the planning authority to judge whether the levels of daylight and sunlight provision within the Proposed Development are acceptable in their neighbourhood context, having regard to all relevant planning policies and guidance and balanced against the merits of the Proposed Development.

4.0 Information used in our technical study

4.1. We have undertaken our technical study using a 3D computer model built in AutoCAD or Revit and specialist analysis software, which runs the assessments recommended in the BRE guide.

4.2. The 3D computer model includes rooms, window apertures, any external projections such as balconies, and nearby obstructions.

4.3. We compiled our 3D computer model from the following information:

4.3.1. Contextual massing: 3D computer model of the existing surrounding massing produced from photogrammetry (aerial photography) supplied by AccuCities Ltd, subsequently enhanced by us using measured survey point cloud produced by our in-house measured survey team in March 2021

4.3.2. Proposed Development: 3D model supplied by DWA Architects in March 2024 (file name: Highgate - Building Model - Revised 50 Bed Scheme - 2023_detached.rvt) & 2D plans/sections and elevations received 17.03.2025

4.4. Our 3D computer model is illustrated in Figure 1 of Section 1.0, Introduction and on our spot-height drawing at Appendix 2.

4.5. For the daylight illuminance assessment, we used the window and room parameters stated in Table 1.

Table 1 – Window and room parameters used in illuminance calculations

Parameter	Value
Maintenance factor (dirt on glass)	0.92 for vertical windows with normal exposure in residential developments in urban locations with good maintenance
Diffuse light transmittance of glazing	0.68 for double glazing
Frame and glazing bar factor	0.7 for metal frames and large panes
Surface reflectances	Reflectances from the guidelines: 0.8 for white ceilings (0.5 for balcony soffits) 0.7 for pale cream/light pastel walls 0.4 for light wood floors 0.5 for lightwells and rear courtyard/sunken garden 0.2 for exterior surfaces

Limitations and assumptions

4.6. In compiling our 3D computer model for our technical study, we have sought to be as accurate as reasonably possible within the scope of our instruction. We have relied upon the information noted above. The surface reflectance of internal wall finishes has typically been applied to the soffits, reveals and cills of window apertures, except glazed door openings, where the reflectance of the floor finish has been applied to the cills.

4.7. We have used proven and trusted specialist computer software (Waldram Tools for AutoCAD® or Revit®) to run the calculations recommended in the BRE guide.

4.8. To the best of our knowledge, the information and advice contained in this report is accurate at the date of issue, based on the information provided to or procured by us prior to its production.

5.0 Scope of the assessment

5.1. Within the Proposed Development, we have assessed daylight and sunlight to all habitable rooms on all floors of the residential block fronting North Hill.

5.2. Daylight has been assessed to all 25 rooms habitable rooms across the 9 dwellings at basement to third floors.

5.3. Sunlight has also been assessed to all habitable rooms irrespective of orientation; however, it should be borne in mind that rooms that do not have at least one window facing within 90˚ of due south will be much less likely to meet the sunlight guidelines (see paragraph 3.18 above).

6.0 Internal daylight and sunlight results

6.1. We assessed all habitable rooms to dwellings within the Proposed Development, comprising 25 rooms across 9 dwellings.

6.2. The room uses and reference numbers of the rooms that are included in our assessment are shown on the room location plans at Appendix 3.

6.3. The daylight and sunlight assessment results are tabulated at Appendix 3. Coloured font has been used in the table to identify results that would be below the numerical guidelines, as follows:

- Orange font = proposed value is within 20% of the guideline
- Red font = proposed value is not within 20% of the guideline.

6.4. To recap, the numerical guidelines are:

6.4.1. Daylight: 100 lux in bedrooms, 150 lux in living rooms, or 200 lux in kitchens or multi-purpose rooms containing a kitchen, e.g., LKDs. (Note: These are the median illuminances to be exceeded over at least 50% of the assessment points in the room for at least half of the annual daylight hours.)

6.4.2. Sunlight: At least 1.5 hours of sunlight on 21 March to at least one habitable room per dwelling, preferably a main living room.

Daylight to new dwellings

6.5. The level of adherence to the BRE daylight guidelines is summarised in Table 2 below.

Table 2 – Daylight illuminance summary table

Building	Daylight illuminance			
	No. of rooms tested	Meeting guideline		Below guideline
		No.	%	
Proposed	25	19	76%	6
Totals:	**25**	**19**	**76%**	**6** **24%**

6.6. Of the 25 rooms assessed, 19 (76%) would satisfy a strict application of the guidelines (i.e., median illuminance of at least 200 lux in multi-purpose rooms containing a kitchen, e.g., LKDs). Taking a flexible and arguably more reasonable application of the guidelines (i.e., 150 lux alternative target value (ATV) in LKDs and such like), 20 (80%) would satisfy the alternative target values.

6.7. In the LKDs the kitchens are typically located to the rear of the spaces where the access to light is lower with the living and dining areas closer to the windows. This is where the light distribution is at its highest and it is this design configuration of these spaces which naturally lends itself to adopting the alternative target values.

6.8. Adopting the alternative target values demonstrates that all rooms at ground floor and above will comfortably comply with those target criteria with only the basement level rooms falling short.

6.9. We have also considered the daylight illuminance results for each room type. The level of adherence to the daylight guidelines for each room type is summarised in Table 3 below.

Table 3 – Daylight illuminance summary table by room type

	Daylight illuminance

Building/ Room use	No. of rooms tested	Meeting min. target		No. below min. target
		No.	%	
Proposed				
Bedroom	14	10	*71%*	4
LK	9	7	*78%*	2
Study	2	2	*100%*	0
Totals:	**25**	**19**		**6**

6.10. Table 3 shows that 10 of the 14 bedrooms, 7 of the 9 Living/Kitchen/Diners (LKDs) and the 2 study spaces will comply with the full criteria. If adopting the alternative target values then 8 of the 9 LKDs will comply with only the basement space falling short.

Sunlight to new dwellings

6.11. All rooms in our assessment have been assessed for sunlight regardless of orientation or room use.

6.12. The level of adherence to the BRE sunlight guidelines is summarised in Table 4 below.

Table 4 – Sunlight exposure summary table – rooms

Building	**Sunlight exposure** (all rooms)						
	No. of rooms tested	Meeting guideline		Below guideline	*Meeting ATV (≥ 80% target hrs, i.e. ≥ 1.2 hrs)*		*Below ATV*
		No.	%		*No.*	*%*	
Proposed	25	7	28%	18	*8*	*32%*	*17*
Totals:	**25**	**7**	*28%*	**18**	***8***	*32%*	***17***
							68%

6.13. Of the 25 rooms assessed, 7 (28%) would satisfy the sunlight guideline (1.5 hours on 21 March).

6.14. As noted above at paragraphs 3.19 3.20, the BRE guide advises that where groups of dwellings are planned, site layout design should aim to maximise the number of dwellings with a main living room that has at least one main window wall facing within 90° of due south; and a habitable room, preferably a main living room, that can receive a total of at least 1.5 hours of sunlight on 21 March. Table 5 below sets out the number of dwellings meeting these recommendations.

Table 5 - Sunlight exposure summary table – dwellings

Building	**Sunlight exposure**						
	No. of dwellings tested	Dwellings meeting the following criteria:					
		Has a window facing within 90° of due south		Has at least one room that can receive ≥ 1.5 hrs sunlight on 21 Mar		Has a main living room that can receive ≥ 1.5 hrs sunlight on 21 Mar	
		No.	%	No.	%	No.	%
Proposed	9	9	*100%*	7	*78%*	1	*11%*
Totals	**9**	**9**	***100%***	**7**	***78%***	**1**	***11%***

6.15. Of the 9 dwellings assessed:

- All 9 (100%) would have at least one window facing within 90° of due south;

- 7 (78%) would have at least one room that could receive at least 1.5 hours of sunlight on 21 March; and
- 1 (11%) would have at least one main living room that could receive at least 1.5 hours of sunlight on 21 March.

7.0 Summary and conclusion

7.1. We assessed the daylight and sunlight provision to all habitable rooms within the Proposed Development using the methodologies recommended in the BRE guide (2022 edition).

7.2. The assessed dwellings comprise a mixture of 1-bed, 2-bed and 3-bed units. The rooms assessed comprise a mixture of living/kitchen/dining rooms (LKDs), living rooms, study's and bedrooms.

7.3. In total, 25 habitable rooms have been assessed across 9 dwellings.

7.4. Of the 25 rooms assessed, 19 (76%) would satisfy a strict application of the guidelines (200 lux for LKDs), and 20 (80%) would satisfy the alternative target values (150 lux for LKDs).

7.5. Turning to sunlight, of the 9 dwellings assessed, 7 (78%) would satisfy the guidelines, with at least one habitable room capable of receiving at least 1.5 hours of sunlight on 21 March.

7.6. The advice in the BRE guide is not mandatory, and its numerical guidelines should be interpreted flexibly.

7.7. The daylight to the dwellings is very good save for the basement level where the access to light is naturally more restricted.

7.8. It is submitted that the layout of the Proposed Development is generally consistent with the Council's local planning policy on daylight and sunlight, particularly having regard to paragraph 130 of the National Planning Policy Framework.

Delva Patman Redler LLP
Chartered Surveyors

Appendix 1

Assessment methodology and glossary

1. This appendix explains the daylight and sunlight assessment methodology recommended in *'Site Layout Planning for Daylight and Sunlight: A guide to good practice'* (BR209, 2022 edition) ('the BRE guide') and provides a glossary of the terminology used.

Daylight to new dwellings

2. BS EN 17037 *'Daylight in Buildings'* ('the British Standard') and the BRE guide provide two alternative methods for calculating the overall amount of daylight in a space:

   - illuminance method, or
   - daylight factor method.

Illuminance method

3. *Illuminance* is a measure of the amount of light falling on a surface, usually measured in lux (lumens per square metre). The illuminance method calculates the illuminance from daylight at each point on an assessment grid on the reference plane at hourly intervals for a typical year. It uses hourly climatic data for a typical year collected by a weather station near to the site's location and a mathematical model for the spatial distribution of real-world sky luminance (e.g., the Perez All-Weather Sky Model). Appropriate weather data files are available from various sources, including EnergyPlus and CIBSE.

4. The illuminance recommendations in the British Standard and BRE guide are based around the illuminances that would be met or exceeded over half of the room, over half of the annual daylight hours.

Daylight factor method

5. *Daylight factor* is the ratio of daylight illuminance at a reference point on the working plane within a space to outdoor illuminance on a horizontal plane due to an unobstructed CIE standard overcast sky The daylight factor method calculates the daylight factor at each point on an assessment grid on the reference plane. The standard overcast sky model is independent of orientation and location. In order to account for different climatic conditions at different locations, the British Standard and BRE guide give equivalent different daylight factor targets for various locations in the UK.

6. The daylight factor recommendations in the British Standard and BRE guide are based on calculating the daylight factor that would be exceeded over half of the room. The recommended daylight factor values are location specific; a set of targets is provided for each of 10 locations in the UK. The target values for the reference location at the nearest latitude to the development location should be used.

Calculation model

7. Both methodologies usually require assessment via detailed computer modelling to simulate the illuminance or daylight factor at calculation points within a proposed space. Appropriate simulation settings must be used. The calculation model should include all the room surfaces, and any surface outside the room that could affect the light received.

Surface reflectance

8. Internal and exterior surfaces and obstructions need to be modelled including appropriate surface reflectances. Fixtures and fittings need not be included. Surface reflectances should represent real conditions.

9. Where reflectance values have not been measured or specified, default values to be used in the calculation are given in Table C4 of the BRE guide, as follows: ceilings, 0.7; interior walls, 0.5; floors, 0.2; exterior walls and obstructions, 0.2; exterior ground, 0.2.

10. Where surface finishes have been specified or measured on site, they can be used in the calculations with appropriate factors for maintenance and furniture. To allow for these factors, maximum reflectances in the calculations should not exceed: white painted surfaces, 0.8 indoors and 0.6 outdoors; light pastel walls, 0.7; light wood floors, 0.4. Surface reflectances used should be presented in the assessment, along with a specification of the materials if non-default reflectances are used.

Glazing transmission

11. Glazing transmission factors, including maintenance factors, need to be included in the simulation along with account for, or modelling of, window framing. Where window frames are not specifically included in the model, frame factors should be applied based on the ratio of glass to overall window aperture area for the type of window to be used; this will generally vary with window size and whether the windows have opening lights. Where window types have not been specified, results for the overall window aperture should be multiplied by a default framing factor as given in Table C5 of the BRE guide, as follows: windows with small panes, 0.5; normal windows with opening lights, 0.6; patio doors, 0.7.

12. For clean, clear double glazing with a low emissivity coating, a value of 0.68 for diffuse transmittance can be used. For other types of glazing, the diffuse transmittance, if needed, can be found by multiplying the manufacturer's normal incidence light transmittance by 0.91. Care needs to be taken to apply the correct values within the calculation software; often software programs use the normal incidence transmittance, which is directly available from the glazing manufacturer, and have inbuilt correction for light coming from oblique angles.

13. An additional maintenance factor also needs to be applied to the glazing transmission to account for dirt on the windows. Full details are given in the National Annex to BS EN 17037. For the more common residential applications, values are given in Table C6 of the BRE guide and reproduced below. These assume the windows will be regularly cleaned.

Table C6 – Maintenance factors for different types of windows

Type of window	Maintenance factor	
	Rural/suburban	Urban
Vertical, no overhang	0.96	0.92
Vertical, sheltered from rain, e.g. by balcony or overhang	0.88	0.76
Sloping rooflight	0.92	0.84
Horizontal rooflight	0.88	0.76

Assessment grid

14. The daylight calculations need to be carried out on a grid of points on a reference plane within each room assessed. The plane should normally be 0.85m from the floor level (sometimes described as the working plane height). The British Standard states that the assessment grid should exclude a band of 0.5m from the walls, unless otherwise specified. The BRE guide recommends that in dwellings the width of the band to be excluded should be of 0.3 m, to avoid excluding parts of the room that are used by the occupants.

15. The BRE guide advises that professional judgement should be used when setting up the reference plane in irregularly shaped rooms or those with corridor or annex areas. Examples are given in Figures C2 to C5 of the guide and include the following:

    - Where room layouts have small variations or alcoves along a wall's length, the inner or dominant section should be taken as a basis for the 0.3m gap to the assessment grid area. Fixed floor to ceiling cupboards can be excluded from the room area, but not kitchen units incorporating a worktop. Areas in bay windows may be included unless they are winter gardens separated from the room by a fixed partition.
    - In a room with a corridor, or annexed entrance, the corridor need not be included in the assessment grid area (unless it is wide enough to be part of the usable space in a room, typically over 1.5m wide). The room layout and surfaces, including the corridor would still need to be included in the calculation model.

- For a combined living/kitchen/ dining area (LKD), the kitchen should always be included as part of the room area in the calculations, even in cases where the kitchen is deemed non-habitable and the living room criterion is applied to the whole space.

16. The British Standard gives an equation for maximum grid spacing. However, for domestic rooms this could potentially give only nine points in the room. The BRE guide therefore recommends a maximum grid spacing of 0.3m and preferably less.

17. Outdoor and semi-conditioned spaces, partitioned from the room, like balconies and winter gardens should not be included in the reference grid, but the effects of balconies and overhangs above a window should be modelled.

Presentation of results

18. It may not be necessary to analyse every room in a proposed development. For example, if a building has the same room and window layouts on each floor, and rooms on a lower floor meet the recommendations, then the corresponding rooms on upper floors would be expected to meet the recommendations too.

19. For each room, the median illuminance or median daylight factor (exceeded over 50% of the reference plane) should be presented, as this enables comparison with the different recommendations in BS EN 17037.

20. Contour plots showing illuminances or daylight factors throughout the room may also be presented.

21. The proportional area of the reference plane exceeding a particular target value may also be presented. This value is labelled as 'SDA % of Area' on our contour plots. ('SDA' is an acronym for 'spatial daylight autonomy', which is a yearly metric that describes the percentage of room area that receives sufficient daylight according to the specified criteria in a particular standard.)

Sunlight to new dwellings

22. When calculating the sunlight, the BRE guide advises that:

> *If window positions are already known, a reference point on the inside face of the window aperture at the centre of the opening width and at least 1.2 m above the floor and 0.3 m above the sill (whichever is the higher) is used. Sunlight blocked by window reveals and balconies or overhangs above the window should not be included, but the effect of window frames and bars can be discounted. Surrounding obstructions should be modelled in detail, and if this is done a minimum solar altitude, as suggested in BS EN 17037, need not apply. If a room has multiple windows, the amount of sunlight received by each can be added together provided they occur at different times and sunlight hours are not double counted.*

23. In a room with multiple windows, our computer software calculates the total sunlight hours across all its windows without double counting.

Glossary of terms

24. The daylight and sunlight terminology used in our report is explained below.

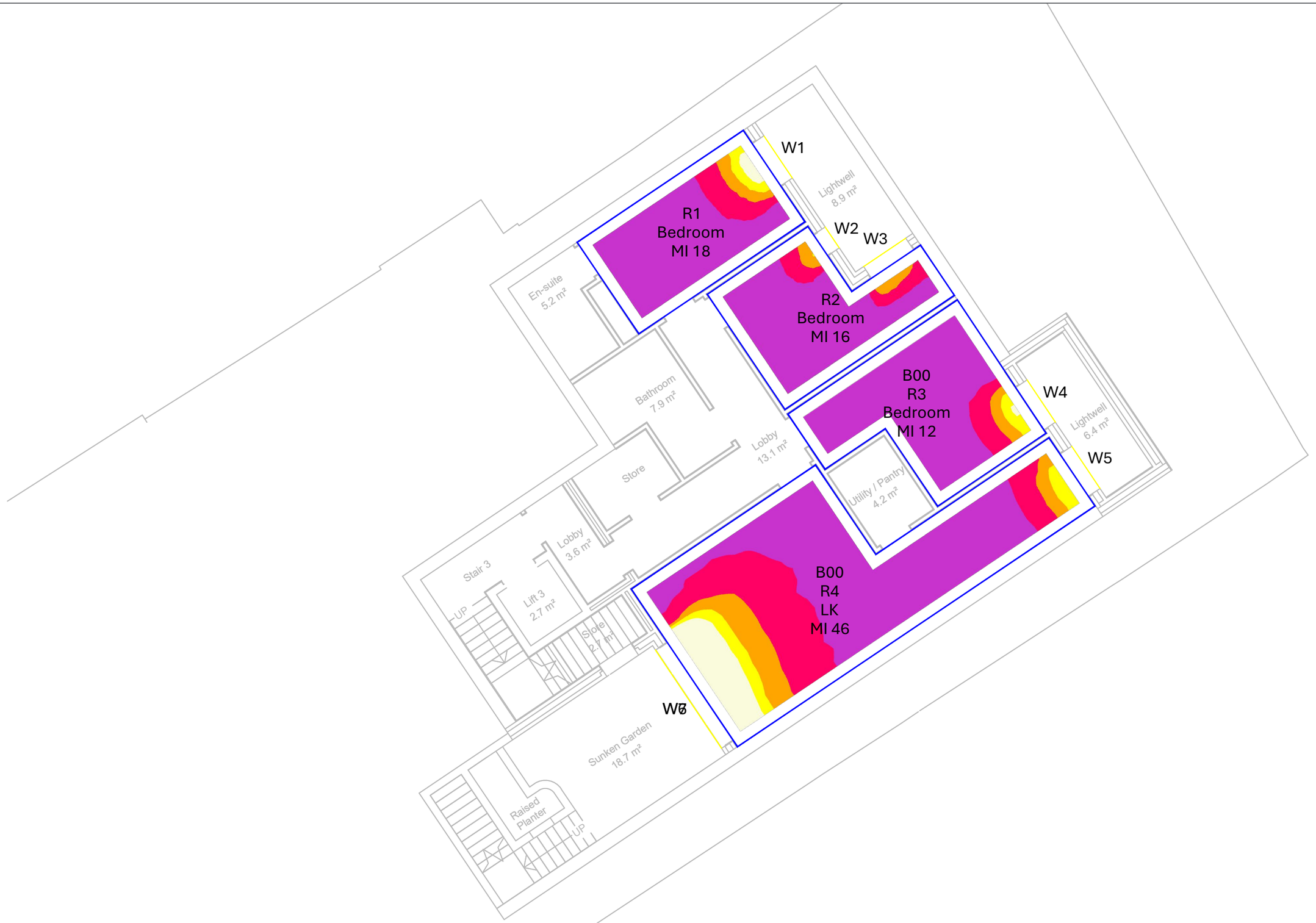
Term	Meaning
Daylight, natural light	Combined skylight and sunlight.
Illuminance	A measure of the amount of light falling on a surface, usually measured in lux.
Diffuse horizontal illuminance (from the sky)	Illuminance produced by skylight on a horizontal surface on the Earth.

Term	Meaning
Target illuminance	Illuminance from daylight that should be achieved for at least half of annual daylight hours across a specified fraction of the reference plane in a daylit space.
Climate-based daylight modelling	The prediction of daylight illuminance across a grid of points on the working plane inside a room at no greater than hourly intervals in a typical year using hourly climate data for a typical year collected by a weather station near to the site's location and a mathematical model for the spatial distribution of real-world sky luminance (e.g., the Perez All-Weather Sky Model).
Daylight factor	Ratio of total daylight illuminance at a reference point on the working plane within a space to outdoor illuminance on a horizontal plane due to an unobstructed CIE standard overcast sky.
Target daylight factor	Daylight factor value equivalent to the target illuminance to be exceeded for more than half of annual daylight hours over a specified fraction of the reference plane within a daylit space.
CIE standard overcast sky	A theoretical completely overcast sky whose luminance varies with angle of elevation, being three times brighter at the zenith (vertically overhead) than on the horizon, but not with orientation.
Obstruction angle	The angular altitude of the top of an obstruction above the horizontal, measured from a reference point in a vertical plane in a section perpendicular to the vertical plane.
Vertical sky component (**VSC**)	The amount of daylight falling on a vertical wall or window. It is the ratio of that part of illuminance, at a point on a given vertical plane (e.g. window), that is received directly from a CIE standard overcast sky, to simultaneous illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The VSC does not include reflected light, either from the ground or from other buildings. The ratio is usually expressed as a percentage. The maximum value is almost 40% for a completely unobstructed vertical wall.
Reference plane or working plane	Horizontal, vertical, or inclined plane in which a visual task lies. Normally the working plane may be taken to be horizontal, 0.85 m above the floor in housing.
Assessment grid or calculation grid	Grid of calculation points on the reference plane that is used to calculate daylight factor or illuminance from daylight.
Sunlight exposure	Sum of the time (hours) within a given period during which the sun is above the horizon with a cloudless sky, which may be limited by permanent obstructions like mountains, buildings, etc.

Appendix 2

Location drawings

Site location plan
Plan & 3D view drawings



B00

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

Median illuminance (lux)
BRE 2022

- ≥ 200
- ≥ 150
- ≥ 100
- ≥ 50
- < 50

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 17.03.2025
Highgate - Building Model - Revised 50 Bed Scheme - 2023_detached.rvt
2d plans/sections received 17.03.2025

NOTES:

Illuminance level calculated in accordance with the BRE guide 2022:
"A space is considered to provide adequate daylight if a target illuminance level is achieved across a 50% of the space for at least half of the daylight hours (4,380) in the year."
SDA presents percentage of area achieves the target illuminance (lux) for at least half of daylight hours.
MI presents median illuminance (lux) value for each room.

Values of target illuminance for room types in UK dwellings:

Room type	Target Illuminance (lux)
Kitchen/LKD/Studio	200
Living room/LD	150
Bedroom	100

Rev	Description	Drawn	Date

dpr

London 020 7936 3668
Liverpool 0151 242 0980
www.dpr.uk.com
Bristol 0117 450 9703
Dublin +353 1 575 8844
info@dpr.uk.com

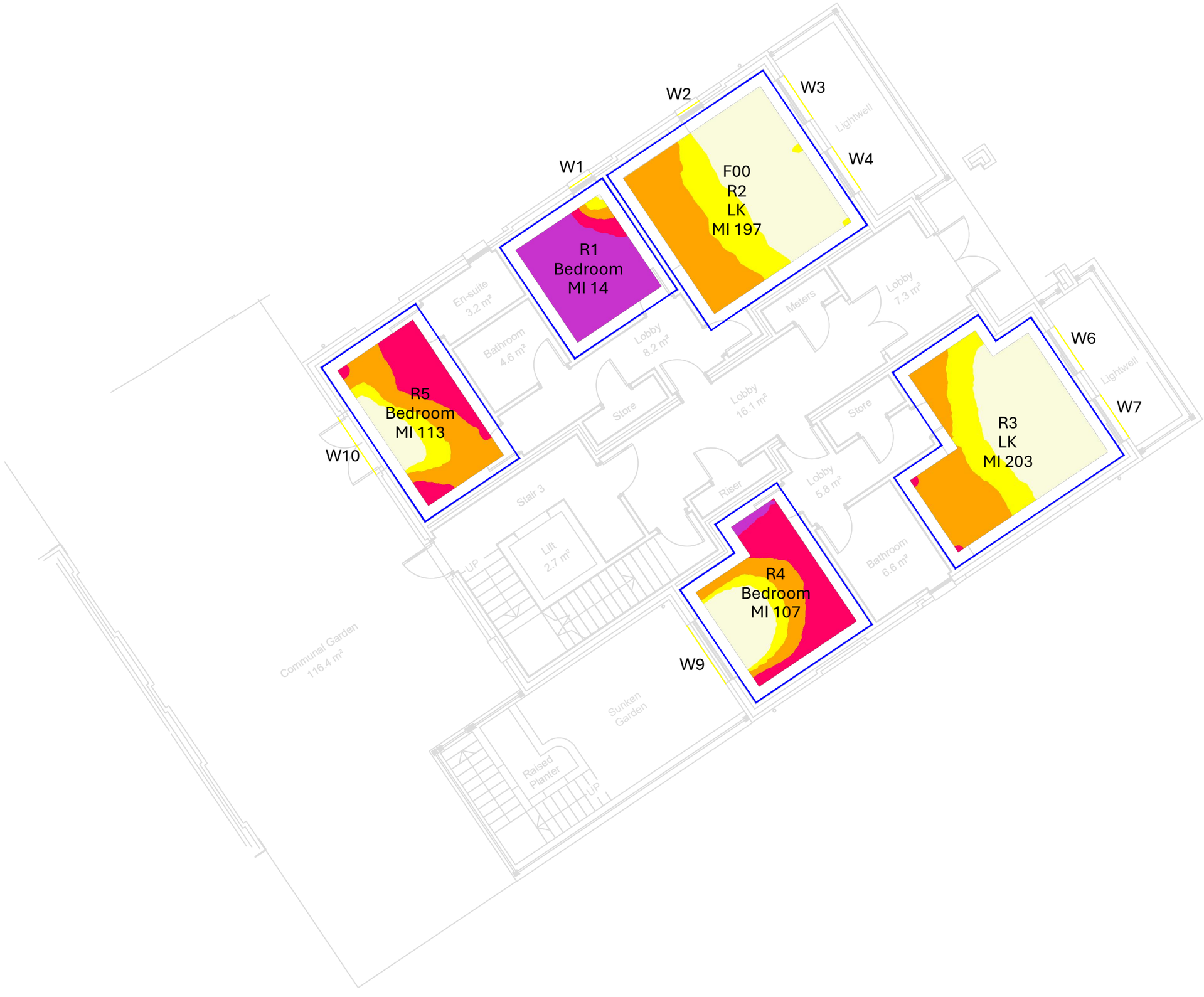
TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL,
LONDON
N6 4DP

DRAWING:

DAYLIGHT ILLUMINANCE STUDY
Plan View

DRAWN: RP
SCALE: 1:100@A3
DATE: 19.03.2025
JOB NBR: 21047
DWG NO: S01-A01-IDS-001
REV:



F00

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

Median illuminance (lux)
BRE 2022

- ≥ 200
- ≥ 150
- ≥ 100
- ≥ 50
- < 50

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 17.03.2025
Highgate - Building Model - Revised 50 Bed Scheme - 2023_detached.rvt
2d plans/sections received 17.03.2025

NOTES:

Illuminance level calculated in accordance with the BRE guide 2022:
"A space is considered to provide adequate daylight if a target illuminance level is achieved across a 50% of the space for at least half of the daylight hours (4,380) in the year."
SDA presents percentage of area achieves the target illuminance (lux) for at least half of daylight hours.
MI presents median illuminance (lux) value for each room.

Values of target illuminance for room types in UK dwellings:

Room type	Target Illuminance (lux)
Kitchen/LKD/Studio	200
Living room/LD	150
Bedroom	100

Rev	Description	Drawn	Date

dpr

London 020 7936 3668
Liverpool 0151 242 0980
www.dpr.uk.com
Bristol 0117 450 9703
Dublin +353 1 575 8844
info@dpr.uk.com

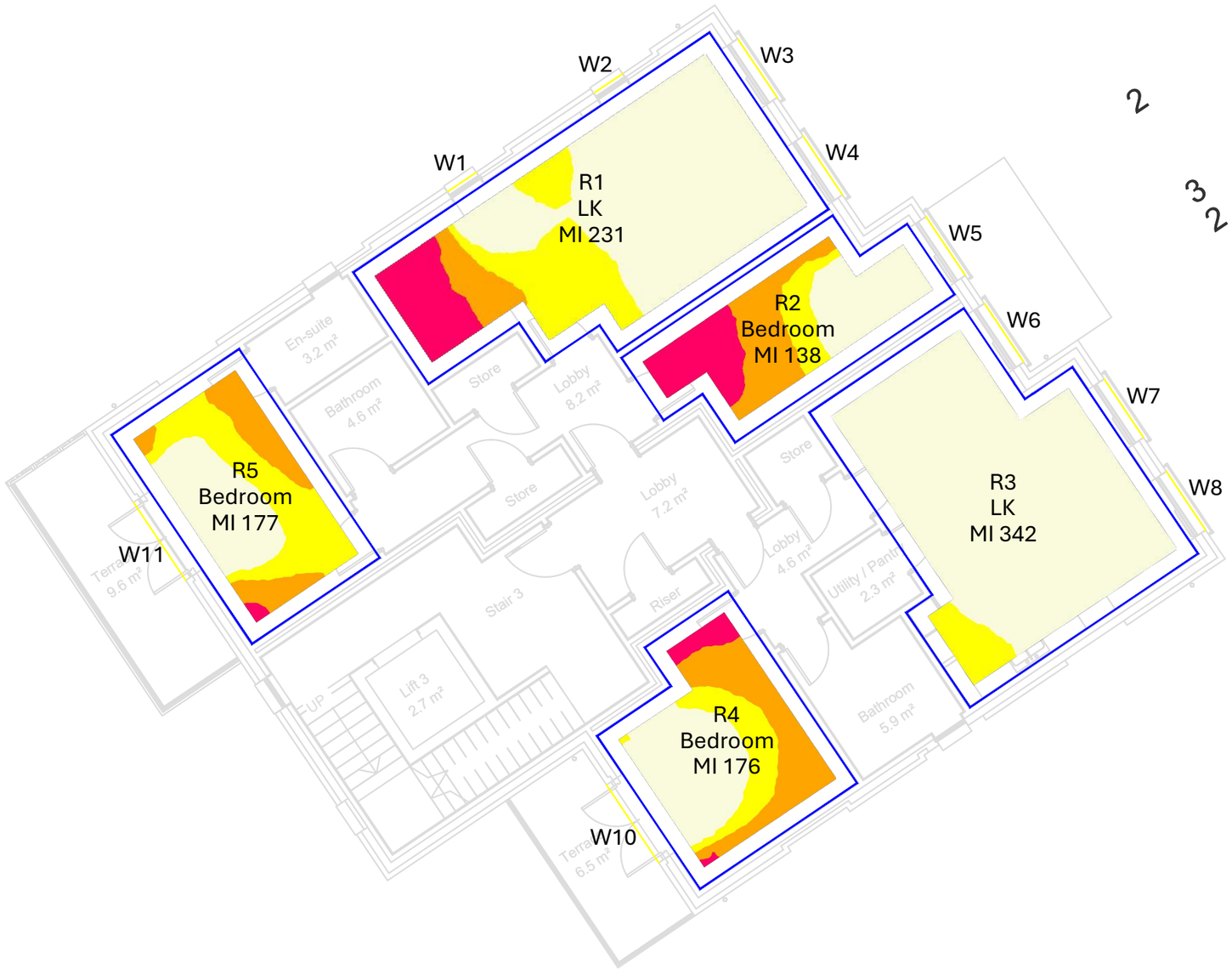
TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL,
LONDON
N6 4DP

DRAWING:

DAYLIGHT ILLUMINANCE STUDY
Plan View

DRAWN: RP
JOB NBR: 21047
SCALE: 1:100@A3
DATE: 19.03.2025
DWG NO: S01-A01-IDS-002
REV:



F01

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

Median illuminance (lux)
BRE 2022

- ≥ 200
- ≥ 150
- ≥ 100
- ≥ 50
- < 50

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 17.03.2025
Highgate - Building Model - Revised 50 Bed Scheme - 2023_detached.rvt
2d plans/sections received 17.03.2025

NOTES:

Illuminance level calculated in accordance with the BRE guide 2022:
"A space is considered to provide adequate daylight if a target illuminance level is achieved across a 50% of the space for at least half of the daylight hours (4,380) in the year."
SDA presents percentage of area achieves the target illuminance (lux) for at least half of daylight hours.
MI presents median illuminance (lux) value for each room.

Values of target illuminance for room types in UK dwellings:

Room type	Target Illuminance (lux)
Kitchen/LKD/Studio	200
Living room/LD	150
Bedroom	100

Rev	Description	Drawn	Date

dpr

London 020 7936 3668
Liverpool 0151 242 0980
www.dpr.uk.com
Bristol 0117 450 9703
Dublin +353 1 575 8844
info@dpr.uk.com

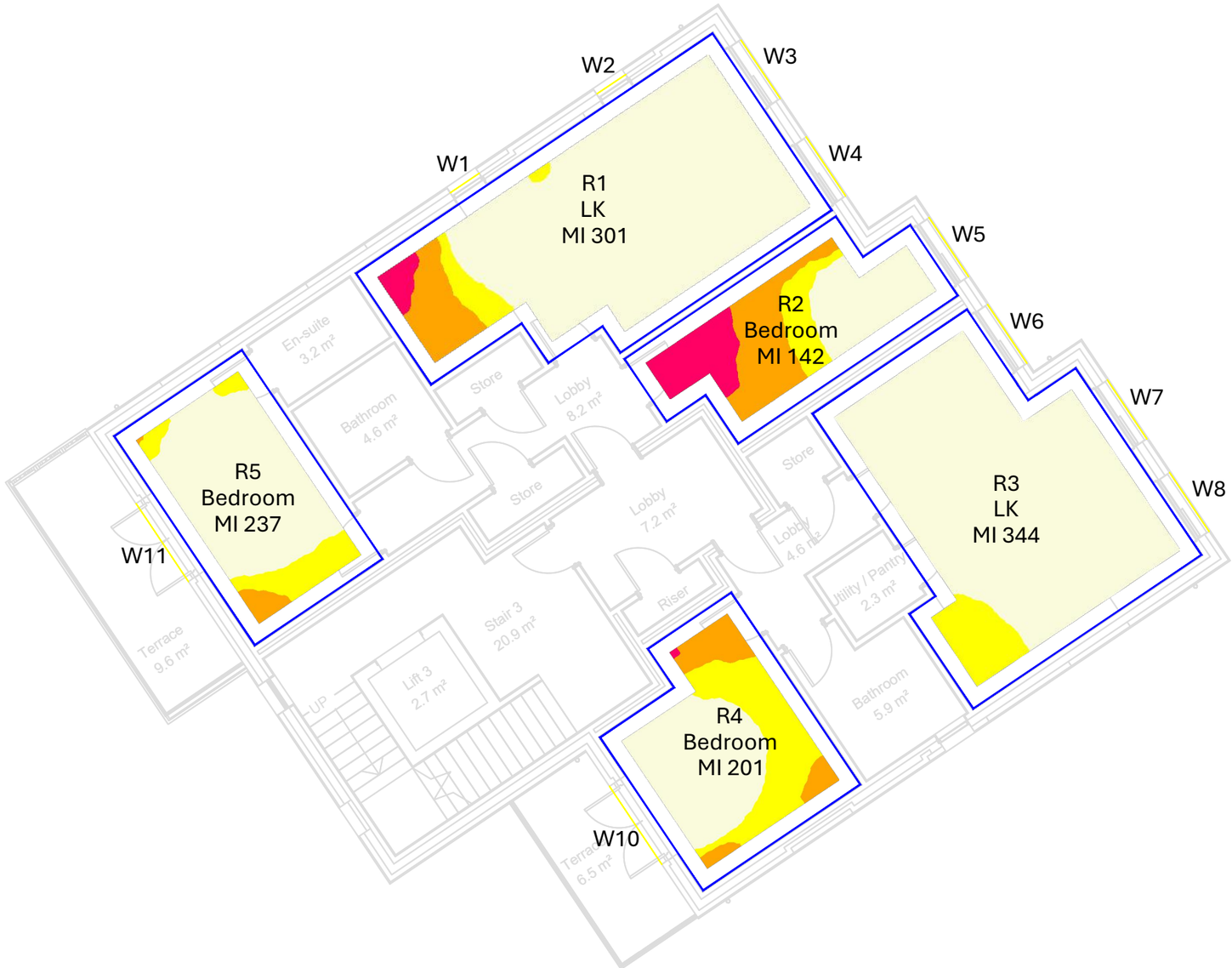
TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL,
LONDON
N6 4DP

DRAWING:

DAYLIGHT ILLUMINANCE STUDY
Plan View

DRAWN: RP
SCALE: 1:100@A3
DATE: 19.03.2025
JOB NBR: 21047
DWG NO: S01-A01-IDS-003
REV:



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

Median illuminance (lux)
BRE 2022

- ≥ 200
- ≥ 150
- ≥ 100
- ≥ 50
- < 50

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 17.03.2025
Highgate - Building Model - Revised 50 Bed Scheme - 2023_detached.rvt
2d plans/sections received 17.03.2025

NOTES:

Illuminance level calculated in accordance with the BRE guide 2022:
"A space is considered to provide adequate daylight if a target illuminance level is achieved across a 50% of the space for at least half of the daylight hours (4,380) in the year."
SDA presents percentage of area achieves the target illuminance (lux) for at least half of daylight hours.
MI presents median illuminance (lux) value for each room.

Values of target illuminance for room types in UK dwellings:	
Room type	Target Illuminance (lux)
Kitchen/LKD/Studio	200
Living room/LD	150
Bedroom	100

Rev	Description	Drawn	Date

dpr
London 020 7936 3668 Bristol 0117 450 9703
Liverpool 0151 242 0980 Dublin +353 1 575 8844
www.dpr.uk.com info@dpr.uk.com

TITLE:

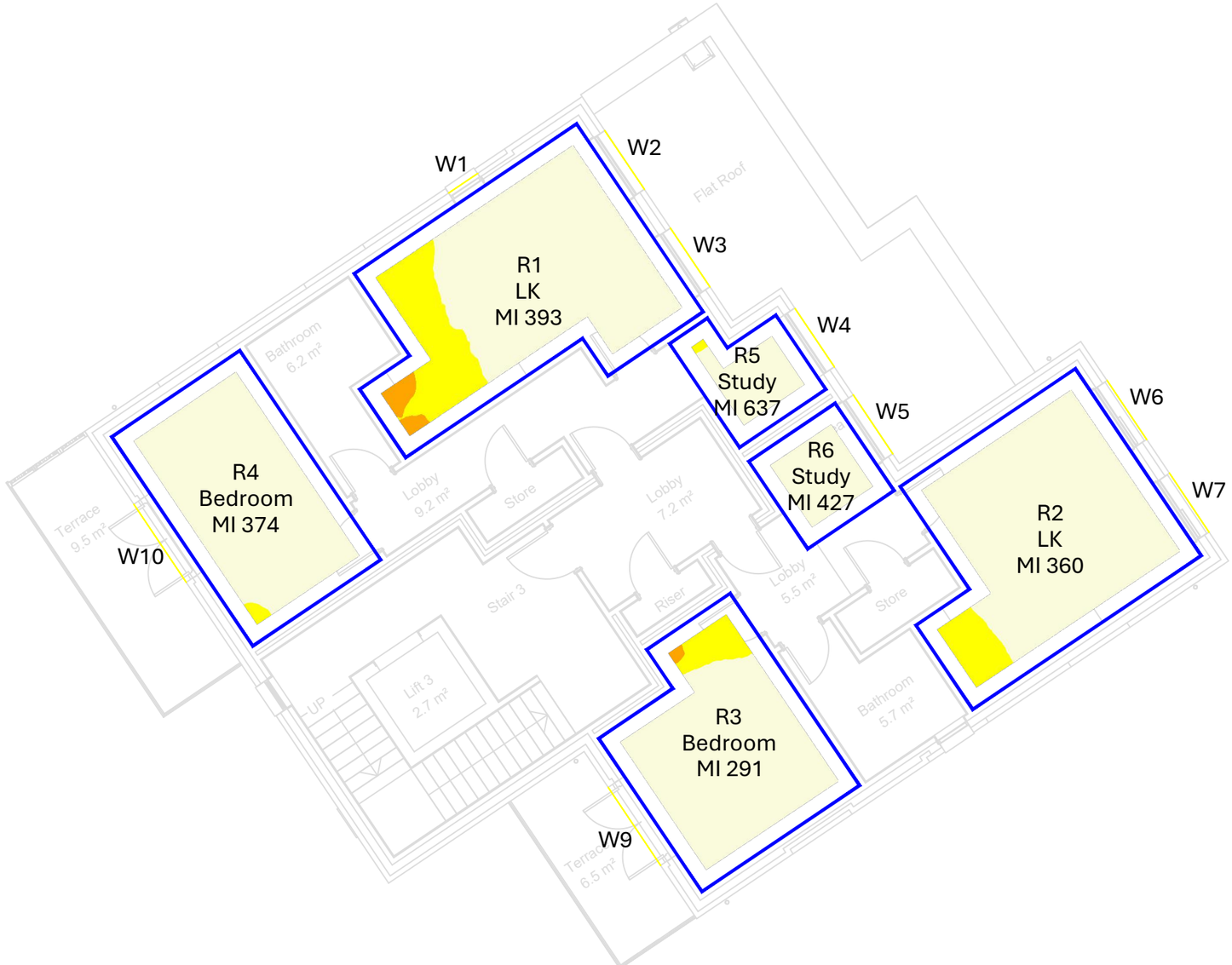
MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL,
LONDON
N6 4DP

DRAWING:

DAYLIGHT ILLUMINANCE STUDY
Plan View

DRAWN: RP
JOB NBR: 21047
SCALE: 1:100@A3
DATE: 19.03.2025
DWG NO: S01-A01-IDS-004
REV:

F02



NO DIMENSIONS TO BE SCALED FROM THIS DRAWING

KEY:

Median illuminance (lux)
BRE 2022

- ≥ 200
- ≥ 150
- ≥ 100
- ≥ 50
- < 50

SOURCE DATA:

Existing and surrounding buildings:
DPR 3D Survey model
Accucities 3D model

Proposed scheme:
DWA Architecture
3D model received 17.03.2025
Highgate - Building Model - Revised 50 Bed Scheme - 2023_detached.rvt
2d plans/sections received 17.03.2025

NOTES:

Illuminance level calculated in accordance with the BRE guide 2022:
"A space is considered to provide adequate daylight if a target illuminance level is achieved across a 50% of the space for at least half of the daylight hours (4,380) in the year."
SDA presents percentage of area achieves the target illuminance (lux) for at least half of daylight hours.
MI presents median illuminance (lux) value for each room.

Values of target illuminance for room types in UK dwellings:

Room type	Target Illuminance (lux)
Kitchen/LKD/Studio	200
Living room/LD	150
Bedroom	100

Rev	Description	Drawn	Date

dpr

London 020 7936 3668
Liverpool 0151 242 0980
www.dpr.uk.com
Bristol 0117 450 9703
Dublin +353 1 575 8844
info@dpr.uk.com

TITLE:

MARY FIELDING GUILD CARE HOME
103-107 NORTH HILL,
LONDON
N6 4DP

DRAWING:

DAYLIGHT ILLUMINANCE STUDY
Plan View

DRAWN: RP
SCALE: 1:100@A3
DATE: 19.03.2025
JOB NBR: 21047
DWG NO: S01-A01-IDS-005
REV:

F03

Appendix 3

Daylight and sunlight results for proposed dwellings

Property & room attributes					BRE 2022				
					Daylight illuminance			Sun exp.	
Floor	Flat/Unit no.	Room ref.	Property type	Room use	Target (lx)	Result (lx)	% area ≥target	(Hrs)	Flat/unit satisfies?
Proposed									
B00	Flat 01	R1	Residential	Bedroom	100	18	11%	0.0	
	Flat 01	R2	Residential	Bedroom	100	16	5%	0.0	
	Flat 01	R3	Residential	Bedroom	100	12	6%	0.0	
	Flat 01	R4	Residential	LK	200	46	9%	1.9	Yes
F00	Flat 03	R1	Residential	Bedroom	100	14	4%	0.0	
	Flat 03	R2	Residential	LK	200	197	48%	0.0	
	Flat 03	R5	Residential	Bedroom	100	113	65%	0.4	No
	Flat 02	R3	Residential	LK	200	203	50%	0.7	
	Flat 02	R4	Residential	Bedroom	100	107	57%	3.3	Yes
F01	Flat 05	R1	Residential	LK	200	231	64%	1.0	
	Flat 05	R2	Residential	Bedroom	100	138	76%	1.0	
	Flat 05	R5	Residential	Bedroom	100	177	99%	1.3	No
	Flat 04	R3	Residential	LK	200	342	95%	1.0	
	Flat 04	R4	Residential	Bedroom	100	176	94%	2.9	Yes
F02	Flat 07	R1	Residential	LK	200	301	86%	1.0	
	Flat 07	R2	Residential	Bedroom	100	142	79%	1.0	
	Flat 07	R5	Residential	Bedroom	100	237	100%	2.7	Yes
	Flat 06	R3	Residential	LK	200	344	92%	1.0	
	Flat 06	R4	Residential	Bedroom	100	201	99%	3.0	Yes
F03	Flat 09	R1	Residential	LK	200	393	78%	1.0	
	Flat 09	R4	Residential	Bedroom	100	374	100%	5.4	
	Flat 09	R5	Residential	Study	150	637	100%	0.0	Yes
	Flat 08	R2	Residential	LK	200	360	92%	1.0	
	Flat 08	R3	Residential	Bedroom	100	291	100%	5.3	
	Flat 08	R6	Residential	Study	150	427	100%	0.0	Yes

Orange or Red = Below guidelines (Orange = within 20% of guideline)

Delva Patman Redler LLP
Chartered Surveyors
www.dpr.uk.com

London
1 George Yard
London
EC3V 9DF
020 7936 3668

North West
Suite 2, The Quay
12 Princes Parade
Liverpool
L3 1BG
0151 242 0990

South West
40 Berkeley Square
Bristol
BS8 1HP
0117 450 9703

Dublin
Block 4, Harcourt Centre
Harcourt Road
Dublin 2
D02 HW77
+353 1 575 8844

General Enquiries
info@dpr.uk.com