RAPLEYS

rapleys.com
0370 777 6292

Fortis Green Tennis Club
31 Southern Road
London N2 9LH

Daylight and Sunlight Amenity Study (Within) Report
prepared on behalf of Fortis Green LLP
Date: March 2024
Our Ref: 23-01796



Contents

1 EXECUTIVE SUMMARY 2
2 PROPOSED DRAWINGS 3
3 INTRODUCTION 4
4 BASIS OF ASSESSMENT 5
5 PLANNING POLICY 6
6 DAYLIGHT AND SUNLIGHT GUIDELINES 12
7 ADVICE ..... ERROR! BOOKMARK NOT DEFINED.
8 CONCLUSIONS 1

Appendices

Appendix 1	Identification Drawings – 200 Lux Target
Appendix 2	Spatial Daylight Autonomy (SDA) Results Tables – 200 Lux Target
Appendix 3	Identification Drawings – 150 Lux Target
Appendix 4	Spatial Daylight Autonomy (SDA) Results Tables – 150 Lux Target
Appendix 5	Sunlight Expose (SE.) Results Tables
Appendix 6	Overshadowing to Amenity Results Tables
Appendix 7	2hr Amenity Drawings



1 EXECUTIVE SUMMARY

1.1 We have been instructed to compile a BRE Daylight & Sunlight Amenity (Within) Report regarding the proposed Development at Fortis Green Tennis Club, 31 Southern Road, London N2 9LH for:

> *Redevelopment of the site to provide a detached three storey block containing a new clubhouse with apartments above and a terrace of houses, one new tennis court, refurbishment of two of the existing tennis courts, creation of a vehicular access off Cherry Tree Road, with associated landscaping, car parking, cycle storage, and refuse storage.*

1.2 The proposals we analysed were provided electronically by the project architect DFA in both 2D and 3D format received in September 2023 (Release 01).

1.3 We have reviewed the Local Authority's planning policy regarding Daylight and Sunlight. The analysis follows Building Research Establishment's Report 209, "Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice" (2022 3rd Edition). This guidance is regarded as industry standard, and we regularly prepare such studies for local authorities throughout the UK.

1.4 Summary tables of the Daylight and Sunlight results are detailed below:

Spatial Daylight Autonomy (LKDs @ 200 Lux)			Spatial Daylight Autonomy (LKDs @ 150 Lux)		
No. Rooms	Pass No.	% Pass	No. Rooms	Pass No.	% Pass
32	31	97	32	32	100

Sunlight Exposure			2 hr Sun on Ground		
No. Units	Pass No.	% Pass	No. Amenity	Pass No.	% Pass
8	8	100	15	15	100

1.5 The results of the proposed Development are very positive. The quality of Daylight and Sunlight in the proposed is high and will allow future occupiers to enjoy the space. We believe the proposed Development is entirely acceptable regarding Daylight and Sunlight.

2 PROPOSED DRAWINGS

2.1 Below is the source data we have used to compile this report:

RELEASE 01 - *Redevelopment of the site to provide a detached three storey block containing a new clubhouse with apartments above and a terrace of houses, one new tennis court, refurbishment of two of the existing tennis courts, creation of a vehicular access off Cherry Tree Road, with associated landscaping, car parking, cycle storage, and refuse storage.*	
PROJECT DATA	
Client	Fortis Green LLP
Architect	DFA Ltd
Project Address	Fortis Green Tennis Club, 31 Southern Road, London N2 9LH
Project Number	23-01796
Type	DLSL
SOURCES OF INFORMATION	
EXISTING SITE	
Site Photos	Rapleys – August 2023
2D Drawings	NA
3D Model	AccuCities – August 2023
PROPOSED SCHEME	
2D Drawings	DFA – September 2023
3D Model	DFA – September 2023
Architect Placed	No
TESTING ENVIRONMENT	
Site Photos	Rapleys – August 2023
Contextual Model	AccuCities – August 2023
Research	Rapleys – August 2023

3 INTRODUCTION

INSTRUCTIONS

3.1 We received instructions from Fortis Green LLP to prepare a BRE Daylight and Sunlight Amenity (Within) Report regarding the proposed Development at Fortis Green Tennis Club, 31 Southern Road, London N2 9LH.

3.2 We confirm that copies of our Terms of Engagement are held on file.

CONFLICT OF INTEREST

3.3 As far as we know, we confirm that no conflict of interest exists, either personally or with Rapleys, in connection with Fortis Green LLP. We would further confirm that Professional Indemnity Insurance on a per-claim basis is available regarding this report.

DISCLOSURE

3.4 This report is specifically for the addressee stated above.

QUALITY ASSURANCE

3.5 This report has been prepared within the quality system operated at Rapleys LLP according to British Standard ISO 9001:2015.

3.6 We confirm that the undersigned is an appropriately qualified Surveyor experienced in the commercial property sector.

Created by:	Felix Carter BA (Hons) PgDip Felix.carter@rapleys.com
Signature:	Felix Carter Felix Carter (Mar 26, 2024 11:48 GMT)
Checked by:	Richard Howard MRICS rRichard.howard@rapleys.com
Signature:	r howard r howard (Mar 26, 2024 12:12 GMT)

4 BASIS OF ASSESSMENT

DETAILS OF THE PROPOSALS

4.1 The proposals are for the following:

'Redevelopment of the site to provide a detached three storey block containing a new clubhouse with apartments above and a terrace of houses, one new tennis court, refurbishment of two of the existing tennis courts, creation of a vehicular access off Cherry Tree Road, with associated landscaping, car parking, cycle storage, and refuse storage.'

4.2 The proposals we analysed were provided electronically by the project architect DFA in both 2D and 3D format received in September 2023 (referred to as Release 01).

4.3 Rapleys have taken the information supplied upon which this report is based, in good faith, as sufficiently accurate. In the event inaccuracies become apparent, Rapleys would be willing to revisit the analysis subject to further instructions.

SITE INSPECTION

4.4 The site and surrounding properties were inspected externally on 3 August 2023 by Felix Carter. During the inspection, the surveyor was unaccompanied.

4.5 We have used the same modelled testing environment for the neighbouring Daylight and Sunlight Report, dated October 2023; however, the neighbouring properties form part of obstruction to the proposed site rather than considering the effect of the Development on the neighbouring properties Daylight and Sunlight levels. Both reports should be read in conjunction.

BACKGROUND TO THE ANALYSIS

4.6 A photogrammetry model formed the base for contextual non-analysed neighbouring massing, supplemented by survey information and site visit photographs.

4.7 The proposal has been modelled and analysed using 2D and 3D AutoCAD drawings provided by DFA Ltd. After that, industry-standard Daylight and Sunlight analysis software was applied to the Model. This produced the results presented and commented upon in this report.

5 PLANNING POLICY

NATIONAL PLANNING GUIDANCE

NATIONAL PLANNING POLICY FRAMEWORK ('NPPF') 2021

5.1 Pg 37 states:

> *'Where there is an existing or anticipate 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 us 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)'*

REGIONAL PLANNING GUIDANCE

THE LONDON PLAN ('LPG') 2021

5.2 Pg 128, 3.3.8 states:

> *'Buildings should be of high quality and enhance, activate and appropriately frame the public realm. Their massing, scale and layout should help make public spaces coherent and should complement the existing streetscape and surrounding area. Particular attention should be paid to the design of the parts of a building or public realm that people most frequently see or interact with in terms of its legibility, use, detailing, materials and location of entrances. Creating a comfortable pedestrian environment with regard to levels of Sunlight, shade, wind, and shelter from precipitation is important.'*

5.3 Pg 140, 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.'*

5.4 Pg 143 – 144, 3.6.3 states:

> *'To address the impacts of the urban heat island effect and the fact that the majority of housing developments in London are made up of flats, a minimum ceiling height of 2.5m for at least 75 per cent of the gross internal area is required so that new housing is of adequate quality, especially in terms of daylight penetration, ventilation and cooling, and sense of space. The height of ceilings, doorways and other thresholds should support the creation of an inclusive environment and therefore be sufficiently high to not cause an obstruction. To allow for some essential equipment in the ceilings of kitchens and bathrooms, up to 25 per cent of the gross internal area of the dwelling can be lower than 2.5 m. However, any reduction in ceiling height below 2.5 m should be the minimum necessary for this equipment, and not cause an obstruction.'*

5.5 Pg 144, 3.6.4 states:

> *'Dual aspect dwellings with opening windows on at least two sides have many inherent benefits. These include better Daylight, a greater chance of direct Sunlight for longer periods, natural cross-ventilation, a greater capacity to address overheating, pollution mitigation, a choice of views, access to a quiet side of the building, greater flexibility in the use of rooms, and more potential for future adaptability by altering the use of rooms'*

5.6 Pg 144, 3.6.5 states:

> *'Single aspect dwellings are more difficult to ventilate naturally and are more likely to overheat, and therefore should normally be avoided. Single aspect dwellings that are north facing, contain*

three or more bedrooms or are exposed to noise levels above which significant adverse effects on health and quality of life occur, should be avoided. The design of single aspect dwellings must demonstrate that all habitable rooms and the kitchen are provided with adequate passive ventilation, privacy and Daylight, and that the orientation enhances amenity, including views. It must also demonstrate how they will avoid overheating without reliance on energy intensive mechanical cooling systems.'

5.7 Pg 144, 3.6.6 states:

'A variety of approaches to housing typologies and layout of buildings should be explored to make the best use of land and create high quality, comfortable and attractive homes. For example, increasing ceiling heights and having bay windows can optimise Daylight and Sunlight and allow buildings to be closer together than can otherwise be achieved.'

5.8 Pg 145, Table 3.2 – Qualitative design aspects to be addressed in housing developments, states:

'iii The site layout, orientation and design of individual dwellings and, where applicable, common spaces should: ... provide privacy and adequate Daylight for residents'

5.9 Pg 146, 3.6.11 states:

'Other components of housing design are also important to improving the attractiveness of new homes as well as the Mayor's wider objectives to improve the quality of Londoners' environment. The Mayor intends to produce a single guidance document which clearly sets out the standards which need to be met in order to implement Policy D6 Housing quality and standards for all housing tenures, as well as wider qualitative aspects of housing developments. This will include guidance on daylight and sunlight standards. This will build on the guidance set out in the 2016 Housing SPG and the previous London Housing Design Guide.'

5.10 Pg 149, 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'

5.11 Pg 153- 154, Policy D9 Tall Building states:

'3)..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'

5.12 Pg 158, 3.9.7 states:

'The middle of a tall building has an important effect on how much sky is visible from surrounding streets and buildings, as well as on wind flow, privacy and the amount of Sunlight and shadowing there is in the public realm and by surrounding properties'

HOUSING SUPPLMENTARY PLANNING GUIDANCE ('SPG') 2016 (AMENDED 2017)

5.13 Pg 52, Standards for Privacy, daylight and sunlight states:

'1.3.45 Policy 7.6Bd 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 guidelines100 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...

'1.3.46 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.'

5.14 Pg 70, Communal and Public Open space states:

'Standard 4 - Where communal open space is provided, development proposals should demonstrate that the space: ... is designed to take advantage of direct sunlight;'

5.15 Pg 84, Homes as a place of retreat states:

'2.3.35 Natural light is also vital to a sense of wellbeing in the home, and this may be restricted in densely developed parts of the city. The Mayor seeks to encourage the kind of housing that provides comfortable and enjoyable places of retreat and privacy. Factors to be considered include privacy, the importance of dual aspect development, noise mitigation, floor to ceiling heights, Daylight and Sunlight.'

5.16 Pg 85, Dual Aspect states:

'2.3.37 Dual aspect dwellings with opening windows on at least two sides have many inherent benefits. These include better Daylight, a greater chance of direct Sunlight for longer periods, natural cross ventilation and a greater capacity to address overheating, mitigating pollution, offering a choice of views, access to a quiet side of the building, greater flexibility in the use of rooms, and more potential for future adaptability by altering the use of rooms. Where possible the provision of dual aspect dwellings should be maximised in a development proposal...

2.3.39 Single aspect dwellings are more difficult to ventilate naturally and more likely to overheat (see Standard 29 and Policy 5.9). This is an increasing concern in London due to anticipated temperature increases related to climate change, coupled with the urban heat island effect that is experienced in high density areas of the city. The design of single aspect flats will need to demonstrate that all habitable rooms and the kitchen are provided with adequate ventilation, privacy and Daylight and the orientation enhances amenity, including views. North facing143 single aspect dwellings should be avoided wherever possible. However, in applying this standard consideration should also be given to other planning and design objectives for a site, for example the aim to maximise active frontages and minimise inactive frontages...

2.3.41 In single aspect dwellings with more than two bedrooms it is difficult to achieve adequate natural ventilation and Daylight to all rooms in an efficient plan layout which avoids long internal corridors. Single aspect dwellings containing three or more bedrooms should therefore be avoided. The design of single aspect ground floor dwellings will require particular consideration to maintain privacy and adequate levels of Daylight.'

5.17 Pg 87, Floor to ceiling heights states:

'2.3.44 Table 3.3 of the Minor Alterations recognises that ceiling heights are an important element in the design of a dwelling in the unique circumstances of London. They can help offset issues associated with its distinct higher densities and effects of climate change by positively impacting on how spacious, light and comfortable the dwelling is. High ceilings can improve the amount and quality of natural light and ventilation and provide flexibility in the use of a room. Therefore, a ceiling height of 2.5 meters is strongly encouraged in London'

5.18 Pg 87, Daylight and sunlight

'Standard 32 - All homes should provide for direct Sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct Sunlight...

2.3.45 Daylight enhances residents' enjoyment of an interior and reduces the energy needed to provide light for everyday activities, while controlled Sunlight can help to meet part of the winter heating requirement. Sunlight is particularly desirable in living areas and kitchen dining spaces. The risk of overheating should be taken into account when designing for Sunlight alongside the need to ensure appropriate levels of privacy. In addition to the above standards, BRE good practice guidelines and methodology146 can be used to assess the levels of Daylight and Sunlight achieved within new developments, taking into account guidance below and in Section 1.3...

2.3.46 Where direct Sunlight cannot be achieved in line with Standard 32, developers should demonstrate how the daylight standards proposed within a scheme and individual units will achieve good amenity for residents. They should also demonstrate how the design has sought to optimise the amount of Daylight and amenity available to residents, for example, through the design, colour and landscaping of surrounding buildings and spaces within a development.

2.3.47 BRE guidelines147 on assessing Daylight and Sunlight should be applied sensitively to higher density development in London, particularly in central and urban settings, recognising the London Plan's strategic approach to optimise housing output (Policy 3.4) and the need to accommodate additional housing supply in locations with good accessibility suitable for higher density development (Policy 3.3). Quantitative standards on Daylight and Sunlight should not be applied rigidly, without carefully considering the location and context and standards experienced in broadly comparable housing typologies in London.'

Pg 149, Improving health outcomes states:

'6.3.3 The quality of new housing in all tenures plays a key role in influencing the health and well-being of future residents. Housing standards set out in Part 2 of this SPG are especially important to achieving the objectives of Policy 3.2 of the London Plan, in particular those on internal space provision; dual aspect; air quality; Daylight and Sunlight; private open space; ceiling heights; overheating; noise; privacy; accessibility and adaptability. Providing a range of affordable and suitably sized properties in a range of tenures is also important to address overcrowding in the existing housing stock. Well-designed public and communal open spaces, parks, play spaces and urban greening within new large developments can provide benefits in terms of quality of life, physical and mental health and wellbeing.'

LONDON PLAN GUIDANCE – HOUSING DESIGN STANDARDS 2023

5.19 Pg 7, Table A – Placemaking and the public realm states:

5.20 'A1.7 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 and minimise overheating as well as optimise thermal efficiency by utilising and controlling solar gains. [NB] ...

5.21 A1.8 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. [NB.]'

5.22 Pg 15, Table B – Shared Space and ancillary spaces states:

5.23 'B2.2 Internal corridors, particularly 'double-banked' corridors (those that serve flats on both sides), should be avoided or kept short and receive Daylight and natural ventilation. (This standard is not directly applicable to specialist older persons housing) [NB, CoU] ...

5.24 B9.5 Maximise the quality and availability of Daylight and Sunlight in communal outside spaces, particularly in winter. It is particularly important that spaces designed for frequent use (including sitting and play spaces) receive direct Sunlight through the day, particularly at times they are most likely to be used. [NB, CoU]'

5.25 Pg 19 - , Policy – Part C: Homes and private outside space, states:

5.26 Pg 19, 4.1.2 states:

5.27 '...Consideration should also be given to the internal layout of homes, including vertical stacking, to reduce noise impacts (for example between living rooms and bedrooms). These standards aim to complement the consideration of Daylight and Sunlight impacts using the BRE guidance (Site layout planning for Daylight and Sunlight: a guide to good practice). 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. Extreme weather events are increasingly common due to climate change. Design must balance Daylight, passive solar gain and over-heating considerations. Summer heat can be reduced through orientation, shading, fenestration, insulation, high albedo materials, the provision of green infrastructure and other strategies. In areas with poorer air quality and/or high background noise levels, careful design will be needed to ensure passive ventilation is possible, in line with carbon reduction targets and the need to avoid additional waste heat and noise associated with mechanical ventilation.'

5.28 Pg 20, Table C – Homes and private outside space states:

5.29 'C2.3 A minimum ceiling height of 2.5m is required for at least 75% of the gross internal area to enhance the spatial quality, improve daylight penetration and ventilation and assist with cooling. Any reduction (from 2.5m) in floor-toceiling heights should only be for essential equipment in the ceilings of kitchens and bathrooms. [NB, CoU] ...

5.30 C4.1 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). [All] ...

5.31 C6.2 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. [All]'

5.32 LONDON PLAN GUIDANCE - OPTIMISING SITE CAPACITY: A DESIGN-LED APPROACH 2023

5.33 Pg 14, 2.7 Building Height, Layout and uses states:

'2.7.1 Next, a site analysis of the building heights, layout and land uses should be carried out. As part of this, the impact of potential future building heights should be considered on heritage assets, protected views and the Daylight and Sunlight of neighbouring properties. This includes the impact of overshadowing on existing properties, open green space and the internal spaces within the site itself. An analysis of nearby land uses should also be used to inform the mix and location of uses for any future development. In analysing the layout, it may be useful to establish 'desire lines' across the site and visually compare the size of the urban blocks within the site with those surrounding it. If the urban blocks on the existing site are particularly large, it may be beneficial to subdivide these. This should be closely informed by the characterisation assessment and historic street layout.'

5.34 Pg 23, 4.4 Public realm and street types states:

'4.4.1 The character, quality and potential usage of public space is influenced significantly by the way it is enclosed by buildings. Appropriate building height-to-street width ratios can encourage vitality while allowing good levels of Daylight and Sunlight to be reached in public realm and to dwellings along the street. As a result, boroughs, neighbourhood planning groups and applicants should define the street types that are appropriate for the site using the street types in the National Model Design Code. Where a site borders an existing street, the aim should be to provide a strong street frontage and clear fronts and backs. Using these street types and the subsequent enclosure ratios will also help reinstate existing streets that have become less desirable. In addition, these types can help inform the appropriate heights of buildings by defining the street height-to-street width ratio. For further guidance, please refer to Manual for Streets.'

LONDON PLAN GUIDANCE – SMALL SITE DESIGN CODES 2023

5.35 Pg 10, 2.5 Backland conditions states:

'2.5.1 Backland sites are sites that do not have a street frontage or where direct access to the street is limited. Among others, they include residential garages that are located behind development and estate infill in areas that are not street-facing. These sites offer the opportunity to provide additional housing and improved public realm. While developments in street-facing conditions are generally governed by a clearer set of rules established by the urban order of an existing streetscape, backland sites require more innovation and reinterpretation to enable Development. Consideration of access and servicing and the inter-relationship between overlooking, privacy and daylight/sunlight is paramount to the success and acceptability of new Development in backland locations.'

5.36 Pg 14, 4.1 Design code conduct states:

'4.1.7 Character types of semi-detached and detached houses may have more variation in their building line, allowing flexibility in the positioning of new Development in relation to the street. However, any design codes for these areas should ensure that the building line of new Development should not negatively impact the street scene or harm either the privacy or the Daylight and Sunlight enjoyed by occupiers of existing nearby dwellings. Nor should it create or exacerbate street canyons in areas of existing poor air quality. The code should identify whether incremental Development that bookend a street, or are located on a corner site, may have the opportunity to accommodate additional depth due to their potential to have multiple aspects and a prominent position. In these locations, a building line that steps out in relation to adjacent buildings could be considered appropriate, but care should be taken not to interfere with circulation and the public realm...

4.1.10 Building height is one of the key design coding elements. It can influence the character of a place, its identity and the environment for occupiers and users. Design codes may also be used to encourage increases in height particularly where this would optimise sites with good accessibility. For instance, new Development may seek to accommodate one or more additional storeys. To ensure that the character and scale of the buildings along a street is maintained, design codes can include requirements to set back the top floor or advocate that upward extensions be partially contained within the roof space. In all circumstances, it is critical to ensure that existing and surrounding properties continue to receive good levels of Daylight and Sunlight and that the streetscape is positively enhanced...

4.1.11 When setting design codes for buildings or extensions that extend beyond a rear building line, parameters should be set to ensure that there is no unreasonable impact on the amenity of neighbouring homes in relation to Daylight, Sunlight and privacy...

4.1.13 Design codes can also use rear projection lines to set parameters on the height of new developments or extensions. These can ensure that new Development is not overly dominant and access to Daylight and Sunlight of the habitable rooms of neighbouring homes is maintained.'

LOCAL PLANNING GUIDANCE

DEVELOPMENT MANAGEMENT DPD 2017

5.37 Pg 13, 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;'

5.38 Pg 13, 2.9 – 2.10 states:

'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 daylighting (BRE Site Layout Planning for Daylight and Sunlight: a guide to good practice).'

6 DAYLIGHT AND SUNLIGHT GUIDELINES

6.1 BRE Report 209 *Site Layout Planning for Daylight and Sunlight – a guide to good practice Third Edition 2022*, provides guidance to designers, clients, consultants and planning officials on laying out proposed Development sites, to ensure that the rooms within the proposed Development are adequately well lit for future occupiers. This document is widely used in the construction industry.

6.2 An important point to note contained within the introduction of the BRE Report is:

> *'The advice given here 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 the main 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...'*

6.3 The BRE guide sets out recommendations for light levels within particular rooms, these guidelines are intended to be applied flexibly. Accordingly, in some cases there may be special requirements for Daylight or Sunlight; this could increase or reduce the recommendations for particular rooms.

SPATIAL DAYLIGHT AUTONOMY ('SDA')

6.4 The Spatial Daylight Autonomy test is also referred to as the Illuminance Method. It involves using climate data (based on climate data collected every hour across various locations since the 1980s).

6.5 This information is used to calculate the illuminance from Daylight at each point on an assessment grid placed within the room at the working plane at hourly intervals for a typical year.

6.6 Target illuminance (ET) for bedrooms is 100 lux, for living rooms, 150 lux and kitchens, 200 lux.

6.7 These levels should be achieved across at least 50% of the working plane in a daylit space for at least half of the possible Daylight hours (4,380 hours).

SUNLIGHT EXPOSURE ('SE.')

6.8 The BRE guide requires that the sunlight testing is applied to rooms of all orientations, noting that rooms facing north of due east or west are unlikely to meet the targets.

6.9 BS EN 17037 recommends that a space should receive a minimum of 1.5 hours of direct Sunlight on the 21 March (equinox).

6.10 For dwellings, at least one habitable room, preferably a main living room, should meet at least the minimum criterion.

6.11 The orientation of the site will play a big role in the proposal's compliance with this test. Obviously not all sites are well situated to receive direct Sunlight, so a flexible approach is recommended on this basis.

2HR SUNLIGHT TO AMENITY (PERMANENT OVERSHADOWING 'PO' TO GARDENS AND OPEN SPACES)

6.12 The BRE guide recommends that at least 50% of the area of each amenity space should receive at least two hours of Sunlight on 21 March. The availability of Sunlight should be checked for all open spaces where Sunlight is required.

7 FINDINGS OF RESULTS

RESULTS

7.1 The SDA results are presented in tables and illustrated as contour drawings in appendices 2 and 3. SE results are contained in Appendix 4. Overshadowing to gardens and open spaces results are contained within Appendix 5. The 2-hour Amenity drawings are contained in Appendix 6.

7.2 The following section contains commentary on the results of the analysis.

SPATIAL DAYLIGHT AUTONOMY ('SDA')

7.3 These levels should be achieved across at least 50% of the working plane in a daylit space for at least half of the possible Daylight hours (4,380 hours).

7.4 The Daylight has been assessed to eight units and one bar area.

7.5 32 rooms have been assessed. The results demonstrate full BRE compliance to:

- Unit 1
- Unit 2
- Unit 3
- Unit 4
- Unit 6
- Unit 7
- Unit 8
- Bar

7.6 There is one minor deviation to the lower ground LKD ('R1') to Unit 5. The results demonstrate good Daylight for most of the room, with 46% of the area meeting 200 lux. The BRE recommends a target of 50%, so the deviation is 4% of the room area, equating to 1.36 sq.m, which should be treated flexibly. When reviewing this room at 150 lux, all LKDs meet and exceed the recommendations.

7.7 The overall Daylight for the proposed condition is 97% when assessing at the highest values. The overall compliance rate for the proposed when assessing the LKDs at a supplementary target of 150 lux is 100%.

7.8 Overall, we would consider the Daylight to the proposed very good and will provide an enjoyable space for future occupiers.

SUNLIGHT EXPOSURE ('SE')

7.9 For dwellings, at least one habitable room, preferably a main living room, should meet at least the minimum criterion.

7.10 The site's orientation will greatly influence the proposal's compliance with this test. Not all sites are well situated to receive direct Sunlight, so a flexible approach is recommended.

7.11 All of the proposed units meet the recommendations for Sunlight.

2HR SUNLIGHT TO AMENITY ('PO')

7.12 The BRE guide recommends that at least 50% of the area of each amenity space should receive at least two hours of Sunlight on 21 March. The availability of Sunlight should be checked for all open spaces where Sunlight is required.

7.13 15 amenity areas have been assessed. The results demonstrate that all 15 will meet the recommendations in the BRE.

8 CONCLUSION

8.1 The results confirm that the rooms within the proposed Development will receive good levels of Daylight and Sunlight.

8.2 Overall, 97% of the rooms assessed meet the highest BRE targets for Daylight. 100% of the rooms assessed meet commonly accepted alternative targets for LKDs (150 lux). The quality of Daylight in the proposed Development should be looked at favourably by the Local Planning Authority. It demonstrates best practice, as stated in the BRE.

8.3 Sunlighting, the proposed Development, demonstrates that all the proposed units meet the recommendations in the BRE.

8.4 The results of the Sunlighting to the amenity and gardens test demonstrates full compliance with the BRE recommendations.

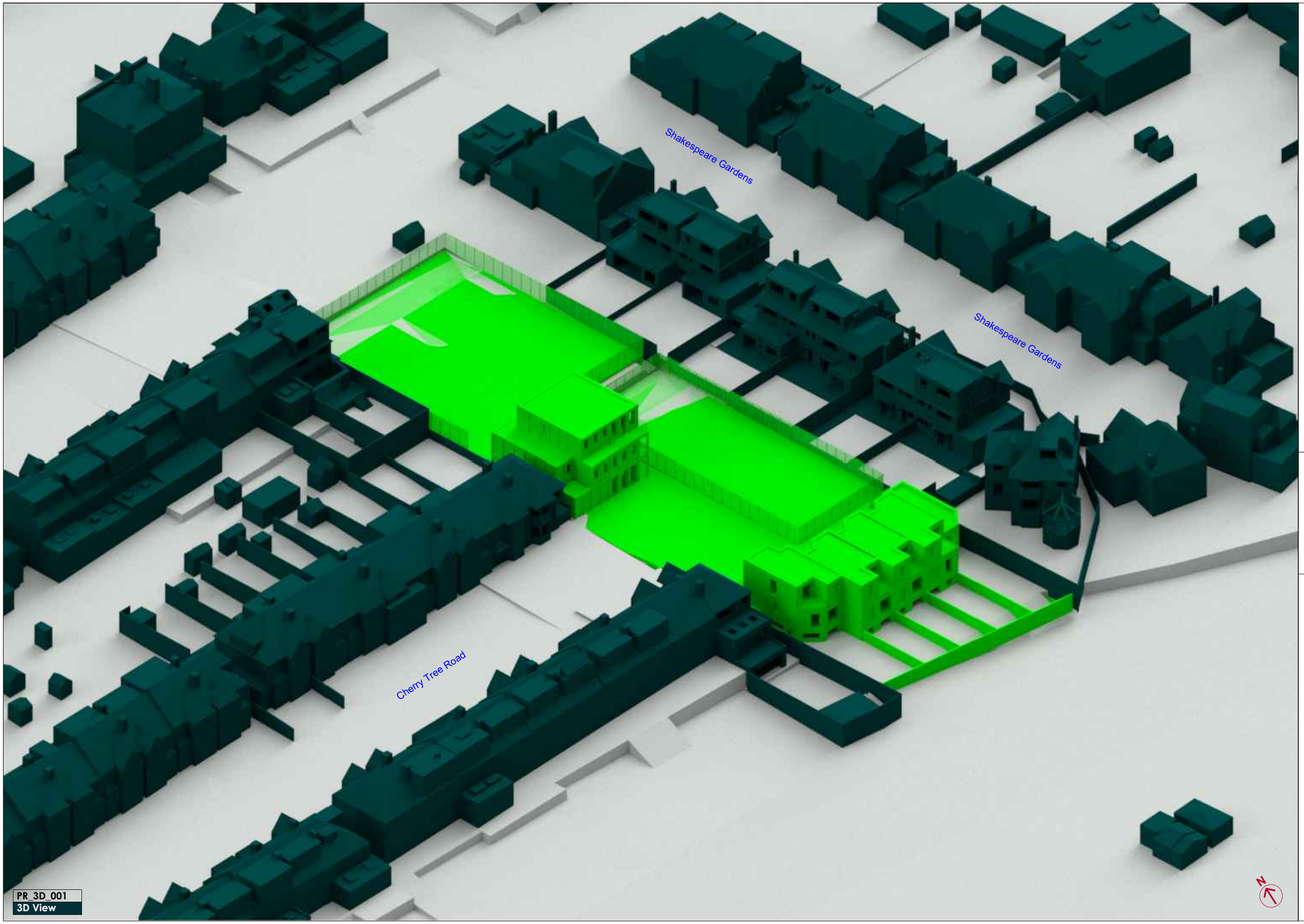
8.5 National, Regional and Local Planning Policy has been reviewed as part of this assessment in addition to the BRE guidance on Daylight and Sunlight.

8.6 The results follow the planning policy and the BRE guidance. The proposal is fully compliant in respect of Daylight and Sunlight.

8.7 We believe the proposed Development is fully acceptable in terms of Daylight and Sunlight. The result and contour plans demonstrate that the proposed Development has been designed to optimise Daylight and Sunlight conditions within, which future occupiers can enjoy.

Appendix 01

Identification Drawings - 200 Lux Target



PR_3D_001
3D View

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

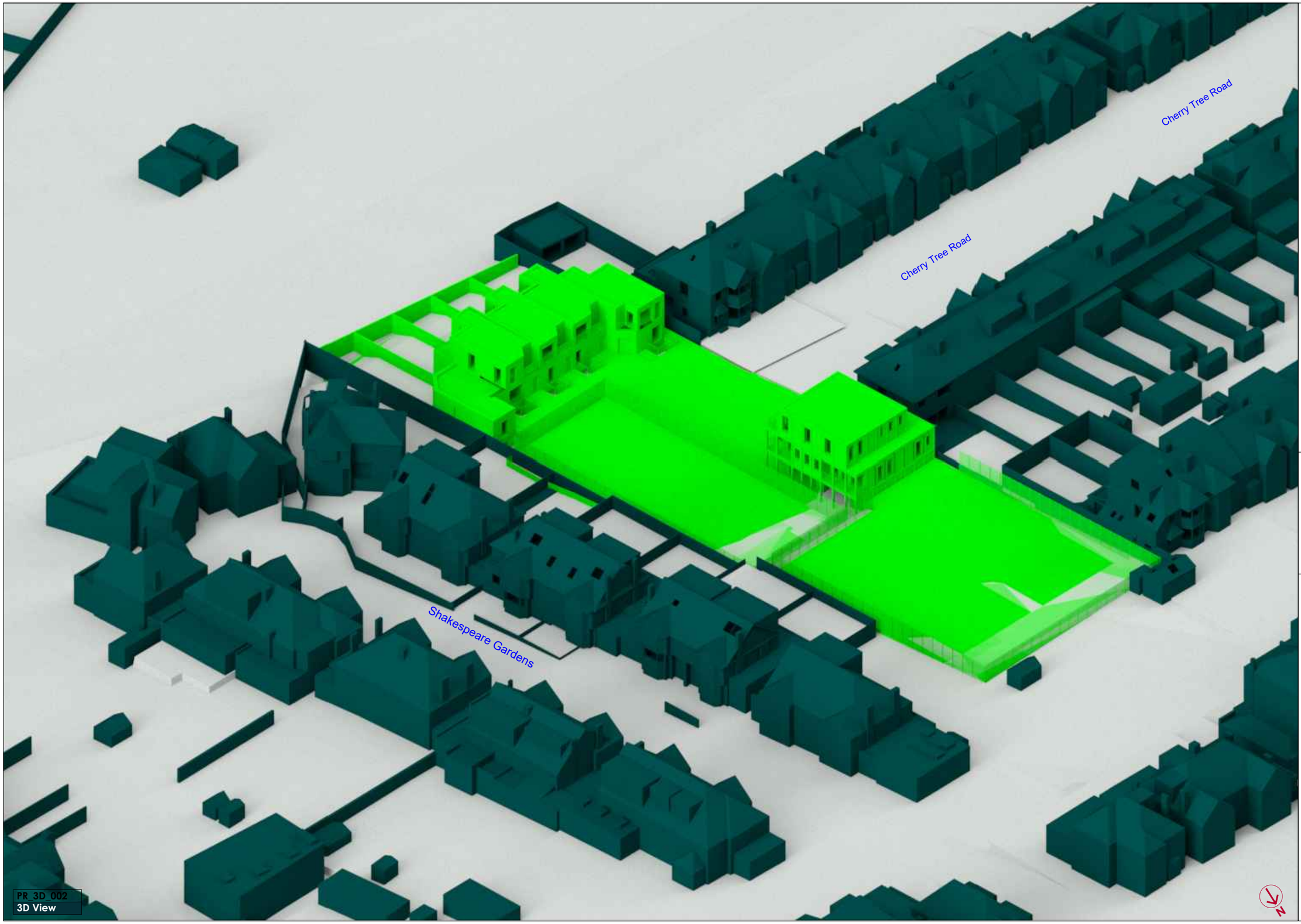
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
3D View - Proposed

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001_lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

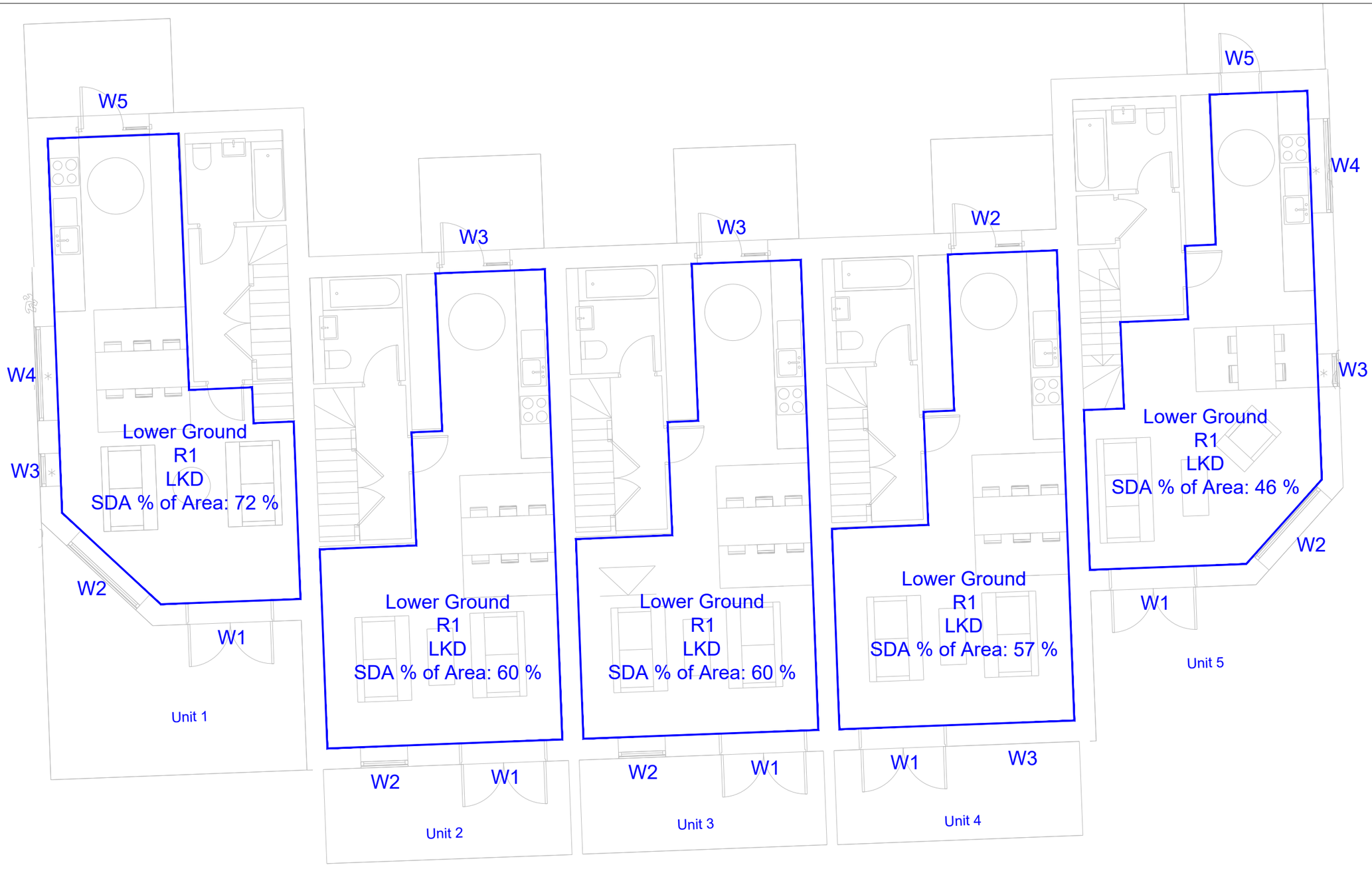
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
3D View - Proposed

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



003 Lower Ground Floor - Unit 1 to 5
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



004 Ground Floor - Unit 1 to 5
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



005 Ground Floor - Bar
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001_lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



006 First Floor - Unit 1 to 4
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

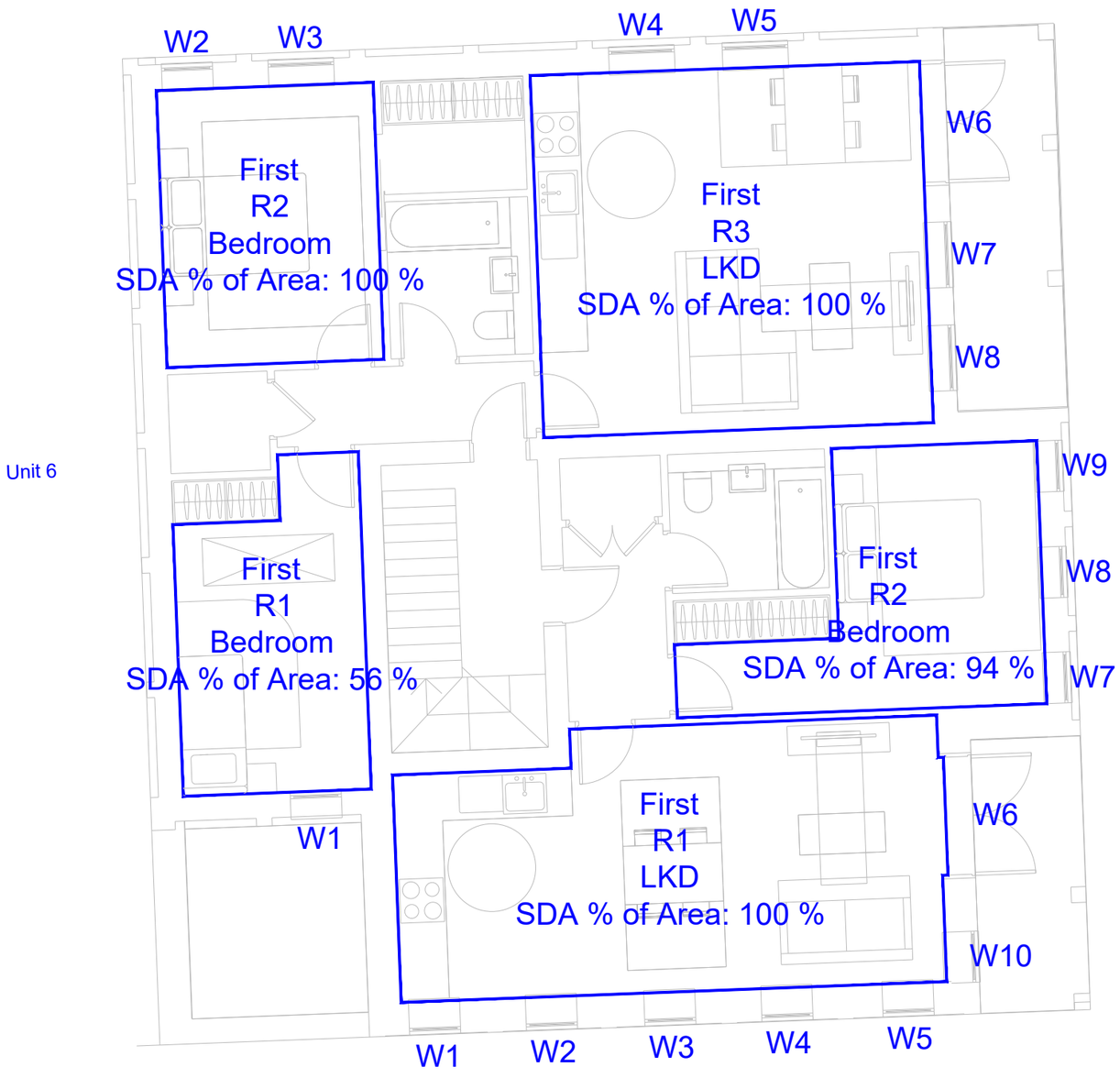
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



007 First Floor - Unit 6 & 7
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

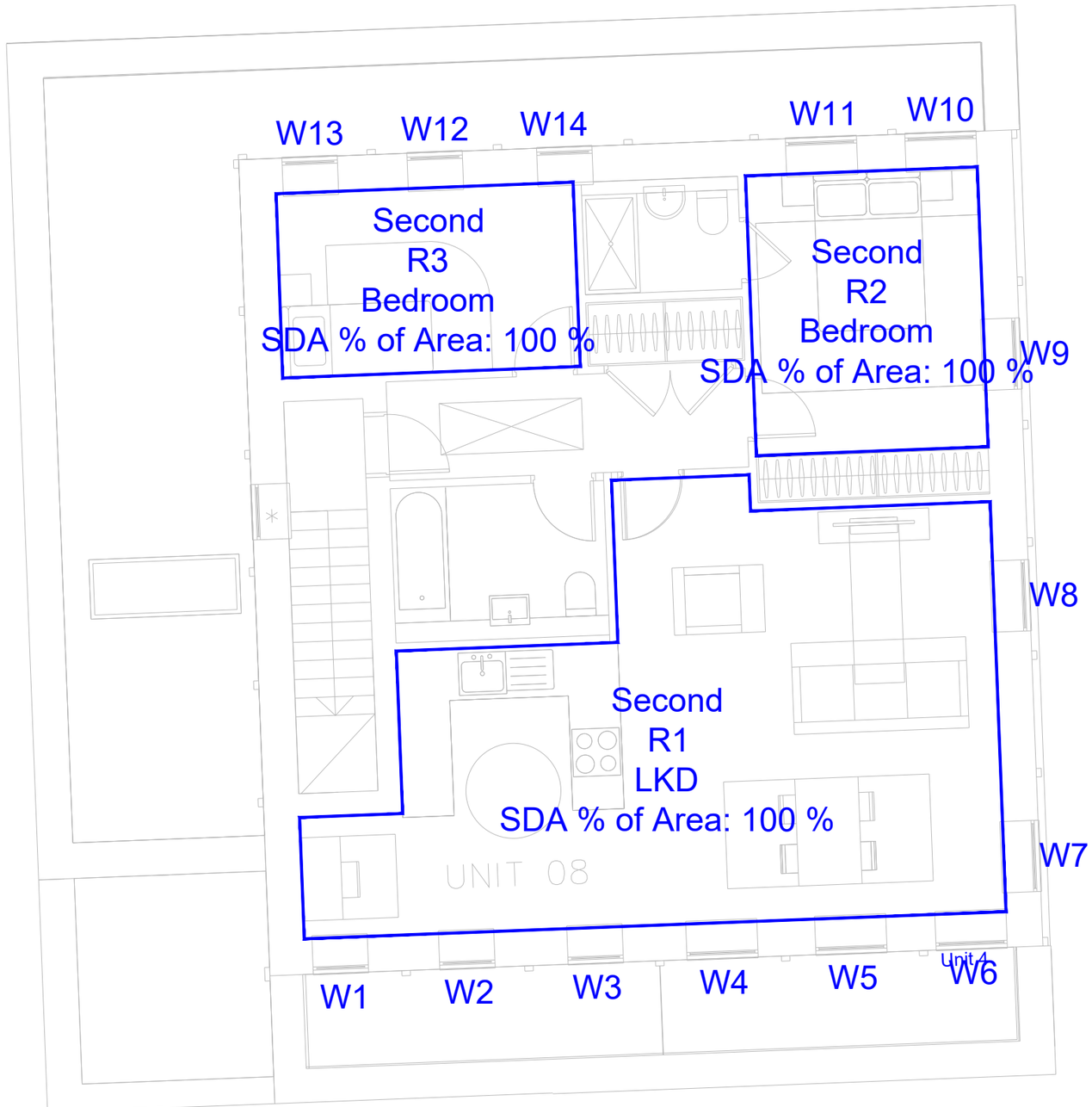
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



008 Second Floor - Unit 8
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com

Appendix 02

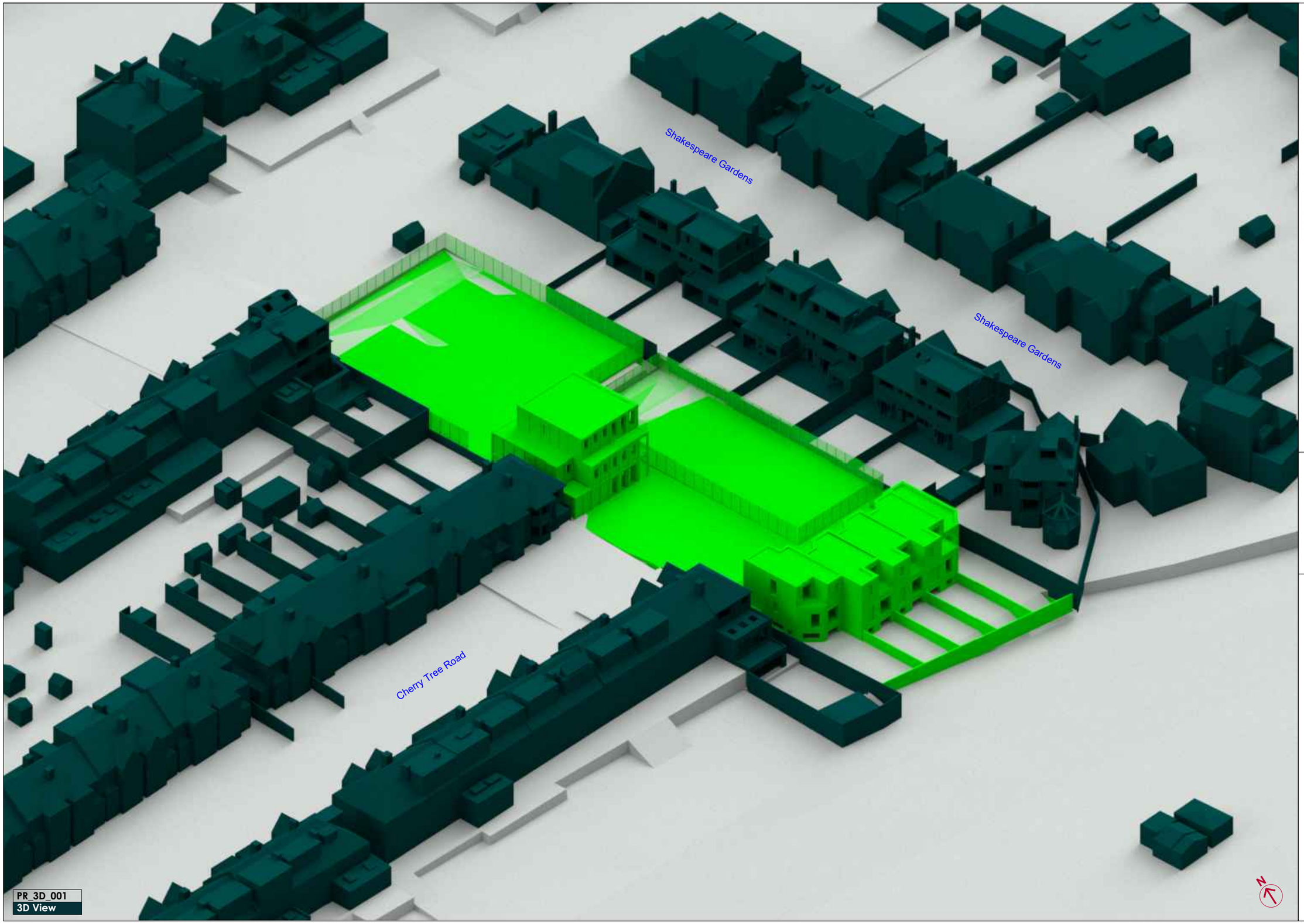
Spatial Daylight Autonomy (SDA) Results Table

Project Name: Fortis Green Tennis Club, 31 Southern Road, London N2 9LH
Project No.: 23-01796
Report Title: Spatial Daylight Autonomy (SDA) Results
Date of Analysis: October 2023

									Criteria				
Floor Ref	Room Ref	Property Type	Room Use	Room Area m2	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux	Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	Meets Criteria
UNIT 1													
Lower Ground	R1	Residential	LKD	35.16	26.88	291	19.37	72%	200	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	15.41	11.13	583	11.13	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	9.81	6.04	241	6.04	100%	100	50%	50%	4380	YES
First	R1	Residential	Bedroom	11.85	7.84	536	7.84	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	12.47	8.27	596	8.27	100%	100	50%	50%	4380	YES
UNIT 2													
Lower Ground	R1	Residential	LKD	36.10	27.45	235	16.61	60%	200	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	12.38	8.43	425	8.43	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	8.52	5.16	167	5.16	100%	100	50%	50%	4380	YES
First	R1	Residential	Bedroom	11.27	7.38	328	7.38	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	13.43	9.24	364	9.24	100%	100	50%	50%	4380	YES
UNIT 3													
Lower Ground	R1	Residential	LKD	36.11	27.47	228	16.43	60%	200	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	12.45	8.49	424	8.49	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	8.49	5.14	185	5.14	100%	100	50%	50%	4380	YES
First	R1	Residential	Bedroom	11.15	7.28	344	7.28	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	13.32	9.15	393	9.15	100%	100	50%	50%	4380	YES
UNIT 4													
Lower Ground	R1	Residential	LKD	36.16	27.51	226	15.60	57%	200	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	11.98	8.09	226	8.09	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	8.61	5.24	526	5.24	100%	100	50%	50%	4380	YES
First	R1	Residential	Bedroom	11.15	7.28	708	7.28	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	13.31	9.14	376	9.14	100%	100	50%	50%	4380	YES
UNIT 5													
Lower Ground	R1	Residential	LKD	34.08	25.72	168	11.74	46%	200	50%	50%	4380	NO
Ground	R1	Residential	Bedroom	14.05	9.66	468	9.66	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	11.71	7.76	266	7.69	99%	100	50%	50%	4380	YES
UNIT 6													
First	R1	Residential	Bedroom	10.57	6.61	109	3.72	56%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	11.26	7.56	304	7.56	100%	100	50%	50%	4380	YES
	R3	Residential	LKD	26.40	20.59	426	20.59	100%	200	50%	50%	4380	YES
UNIT 7													
First	R1	Residential	LKD	26.07	19.71	724	19.71	100%	200	50%	50%	4380	YES
	R2	Residential	Bedroom	12.37	7.53	328	7.06	94%	100	50%	50%	4380	YES
UNIT 8													
Second	R1	Residential	LKD	37.55	29.20	667	29.20	100%	200	50%	50%	4380	YES
	R2	Residential	Bedroom	10.36	6.84	904	6.84	100%	100	50%	50%	4380	YES
	R3	Residential	Bedroom	8.75	5.46	331	5.46	100%	100	50%	50%	4380	YES
BAR													
Ground	R1	Commercial	Communal Occupied Space	69.60	58.43	264	34.66	59%	200	50%	50%	4380	YES

Appendix 03

Identification Drawings – 150 Lux Target



PR_3D_001
3D View

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

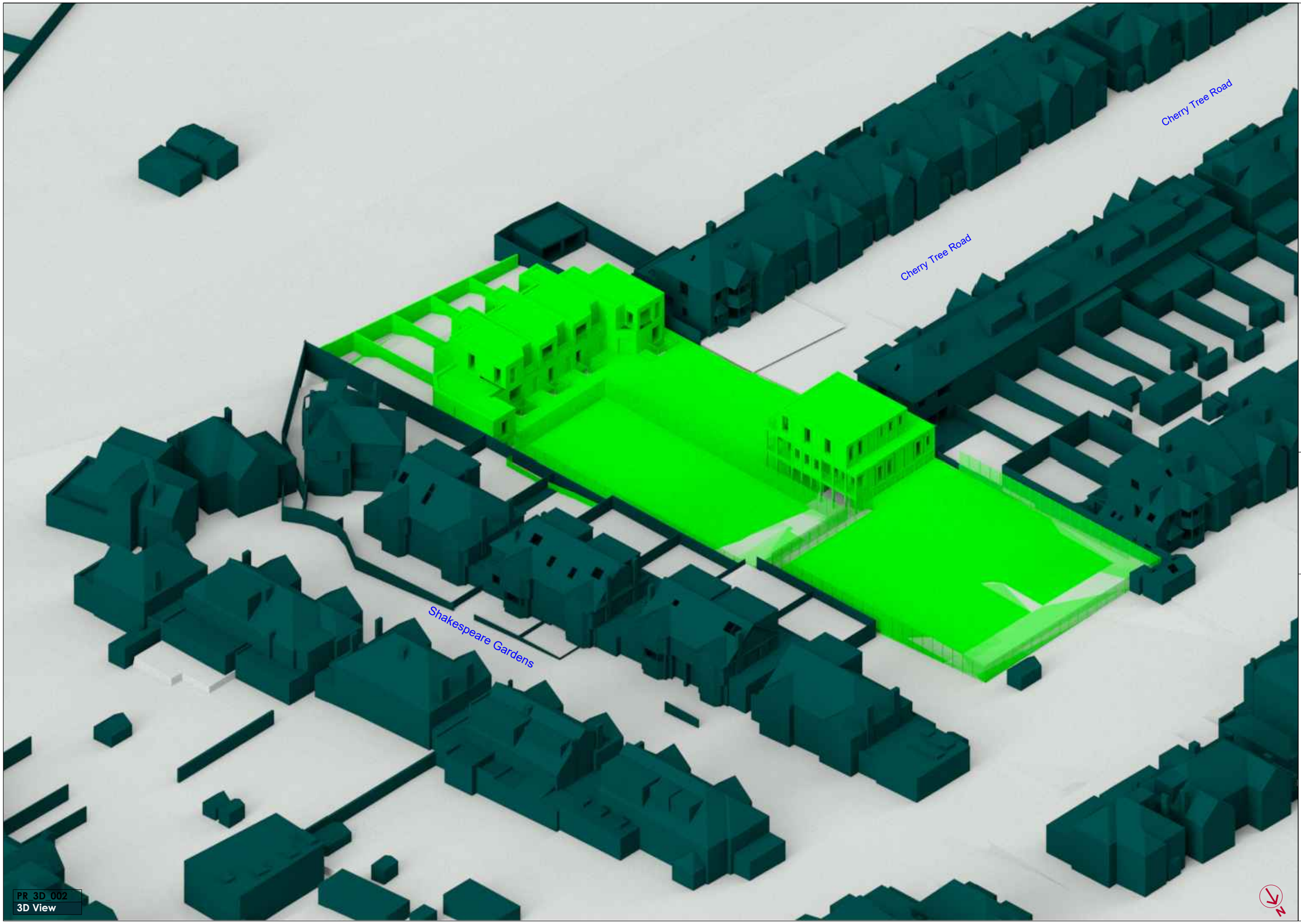
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
3D View - Proposed

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001_lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

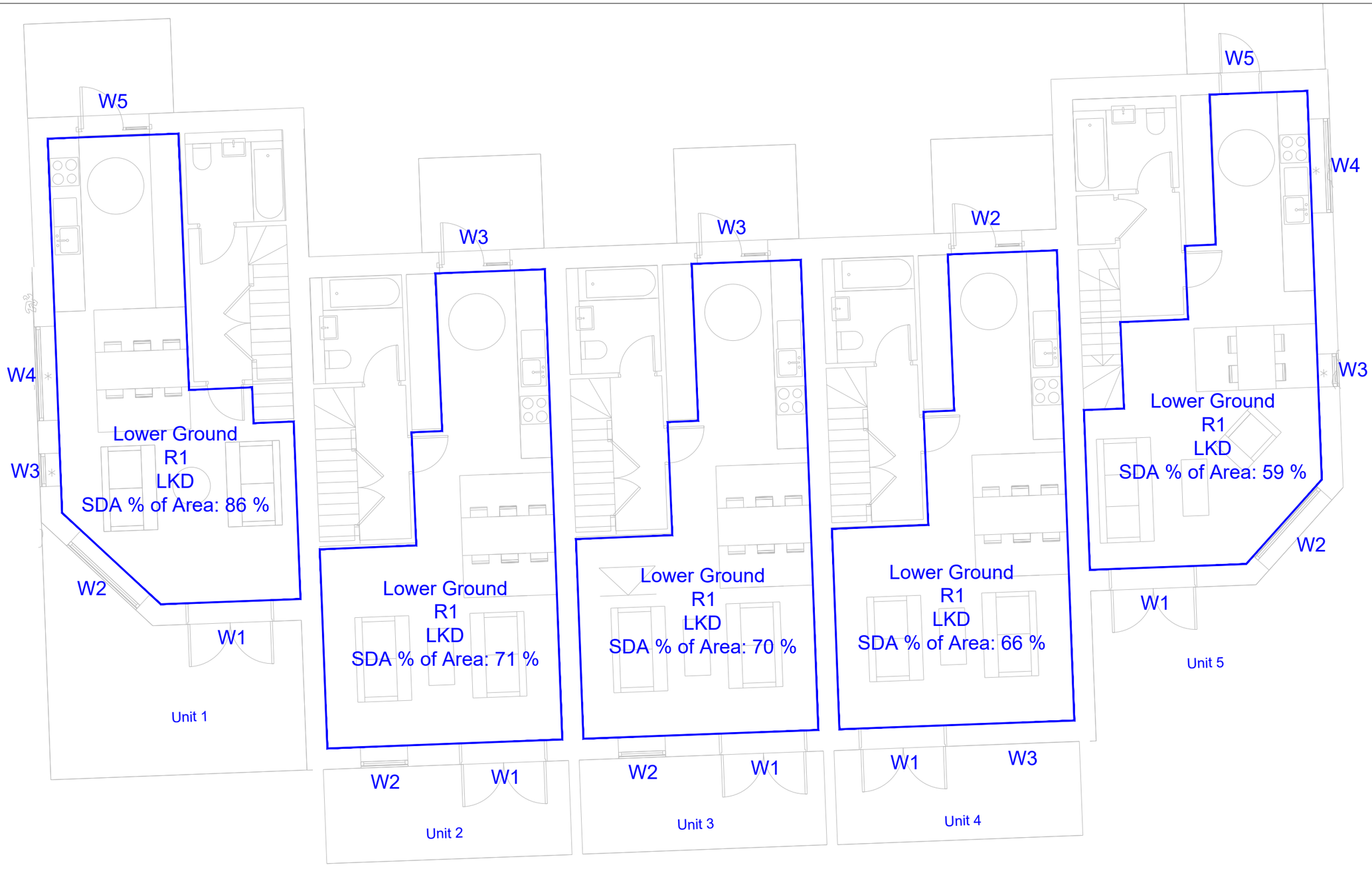
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
3D View - Proposed

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



003 Lower Ground Floor - Unit 1 to 5
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



004 Ground Floor - Unit 1 to 5
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

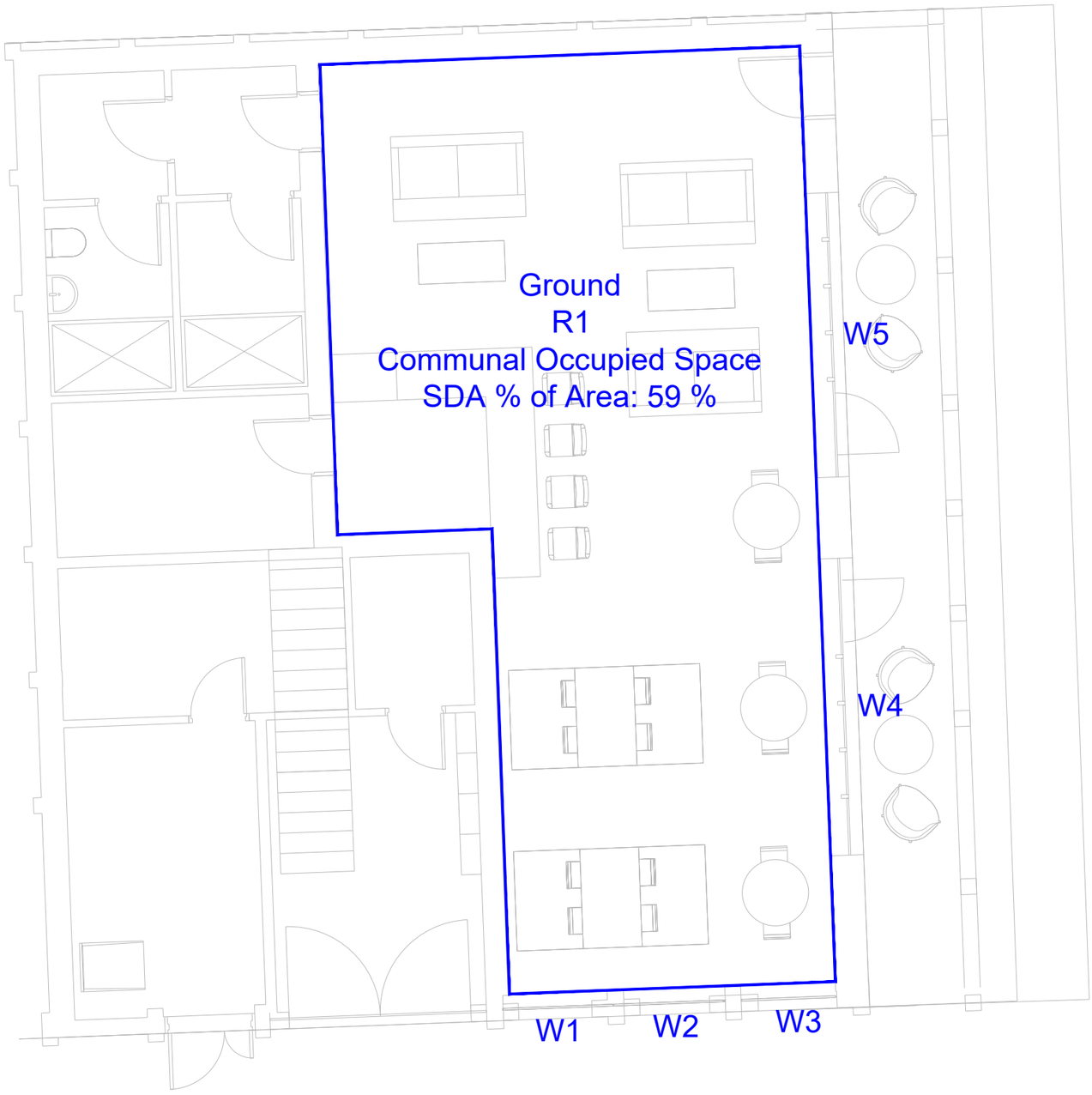
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



005 Ground Floor - Bar
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



006 First Floor - Unit 1 to 4
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

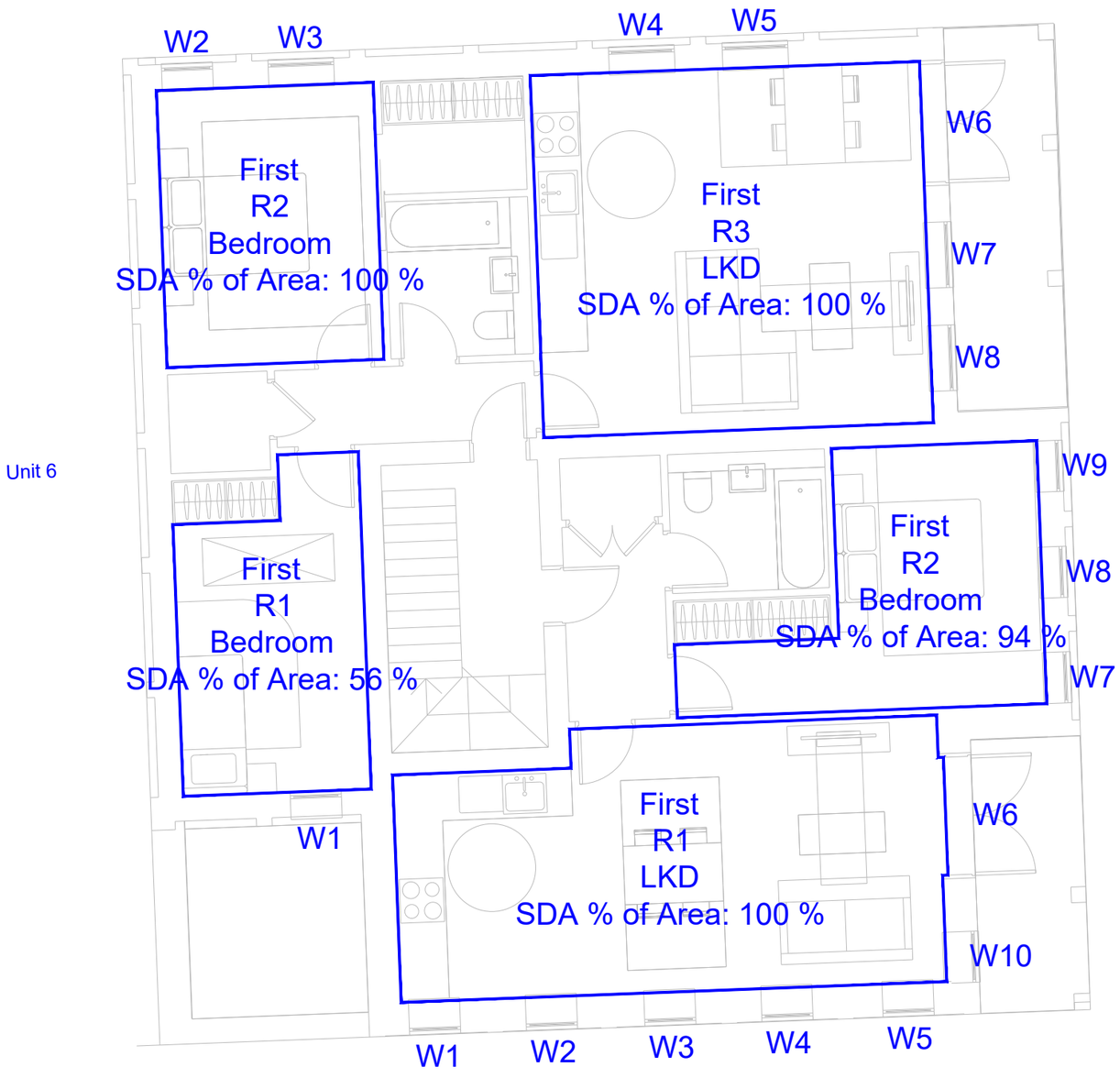
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



007 First Floor - Unit 6 & 7
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

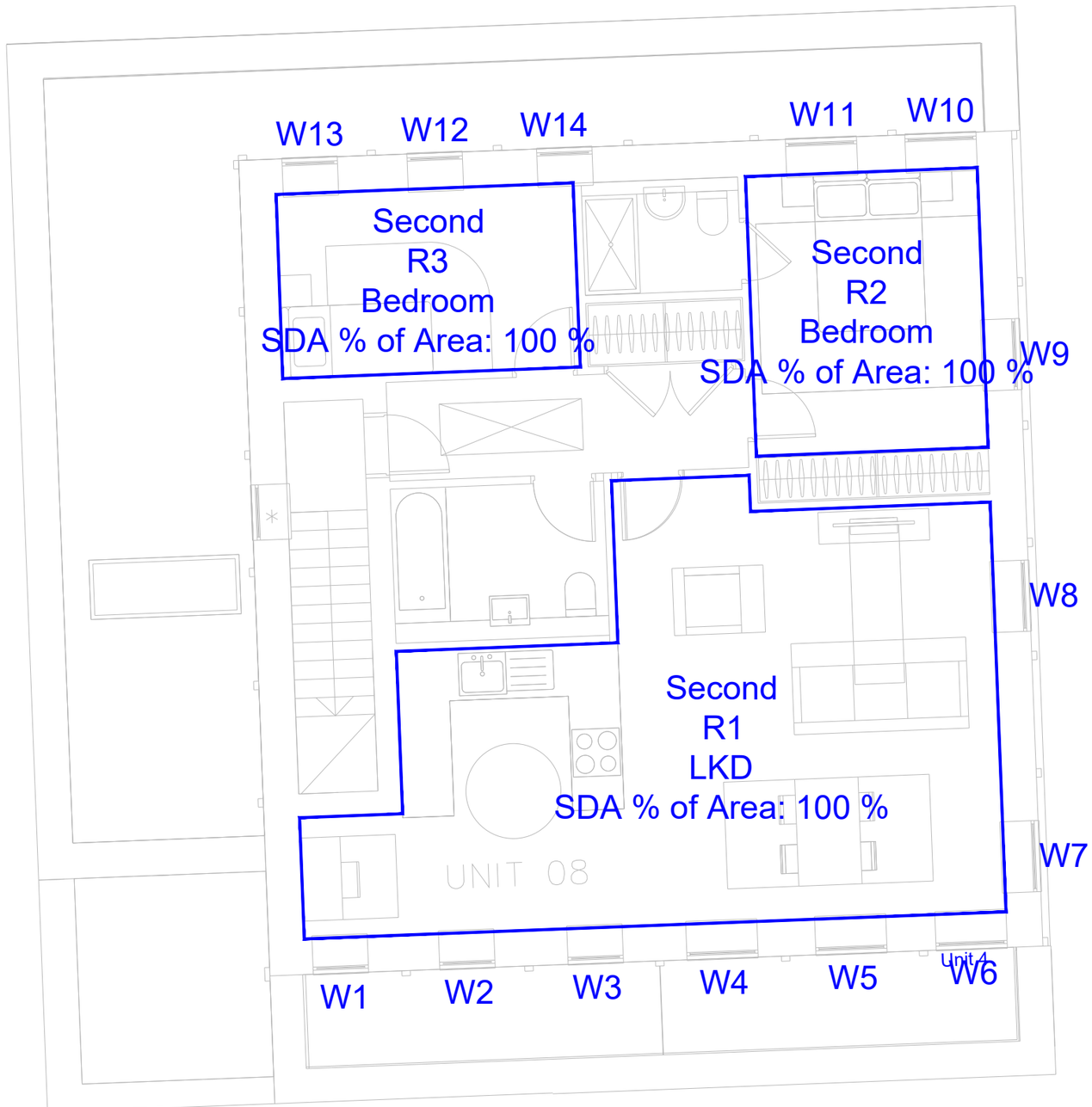
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



008 Second Floor - Unit 8
Rooms & Windows Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
Rooms & Windows Layout

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com

Appendix 04

Spatial Daylight Autonomy (SDA) Results Tables – 150 Lux Target

Project Name: Fortis Green Tennis Club, 31 Southern Road, London N2 9LH
Project No.: 23-01796
Report Title: Spatial Daylight Autonomy (SDA) Results
Date of Analysis: October 2023

									Criteria				
Floor Ref	Room Ref	Property Type	Room Use	Room Area m2	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux	Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	Meets Criteria
UNIT 1													
Lower Ground	R1	Residential	LKD	35.16	26.88	291	23.17	86%	150	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	15.41	11.13	583	11.13	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	9.81	6.04	241	6.04	100%	100	50%	50%	4380	YES
First	R1	Residential	Bedroom	11.85	7.84	536	7.84	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	12.47	8.27	596	8.27	100%	100	50%	50%	4380	YES
UNIT 2													
Lower Ground	R1	Residential	LKD	36.10	27.45	235	19.43	71%	150	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	12.38	8.43	425	8.43	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	8.52	5.16	167	5.16	100%	100	50%	50%	4380	YES
First	R1	Residential	Bedroom	11.27	7.38	328	7.38	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	13.43	9.24	364	9.24	100%	100	50%	50%	4380	YES
UNIT 3													
Lower Ground	R1	Residential	LKD	36.11	27.47	228	19.26	70%	150	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	12.45	8.49	424	8.49	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	8.49	5.14	185	5.14	100%	100	50%	50%	4380	YES
First	R1	Residential	Bedroom	11.15	7.28	344	7.28	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	13.32	9.15	393	9.15	100%	100	50%	50%	4380	YES
UNIT 4													
Lower Ground	R1	Residential	LKD	36.16	27.51	226	18.09	66%	150	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	11.98	8.09	226	8.09	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	8.61	5.24	526	5.24	100%	100	50%	50%	4380	YES
First	R1	Residential	Bedroom	11.15	7.28	708	7.28	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	13.31	9.14	376	9.14	100%	100	50%	50%	4380	YES
UNIT 5													
Lower Ground	R1	Residential	LKD	34.08	25.72	168	15.30	59%	150	50%	50%	4380	YES
Ground	R1	Residential	Bedroom	14.05	9.66	468	9.66	100%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	11.71	7.76	266	7.69	99%	100	50%	50%	4380	YES
UNIT 6													
First	R1	Residential	Bedroom	10.57	6.61	109	3.72	56%	100	50%	50%	4380	YES
	R2	Residential	Bedroom	11.26	7.56	304	7.56	100%	100	50%	50%	4380	YES
	R3	Residential	LKD	26.40	20.59	426	20.59	100%	150	50%	50%	4380	YES
UNIT 7													
First	R1	Residential	LKD	26.07	19.71	724	19.71	100%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	12.37	7.53	328	7.06	94%	100	50%	50%	4380	YES
UNIT 8													
Second	R1	Residential	LKD	37.55	29.20	667	29.20	100%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	10.36	6.84	904	6.84	100%	100	50%	50%	4380	YES
	R3	Residential	Bedroom	8.75	5.46	331	5.46	100%	100	50%	50%	4380	YES
BAR													
Ground	R1	Residential	nunal Occupied S	69.60	58.43	264	34.66	59%	200	50%	50%	4380	YES

Appendix 05

Overshadowing to Gardens and Open Spaces

Project Name: Fortis Green Tennis Club, 31 Southern Road, London N2 9LH
Project No.: 23-01796
Report Title: Sunlight Exposure (SE) Results
Date of Analysis: October 2023

Floor Ref	Room Ref	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure (Hours)	Rating
UNIT 1							
Lower Ground	R1	Residential	LKD	W1	178°	5	
				W2	223°	4.1	
				W3	268°	0	
				W4	268°	1.4	
				W5	358°N	0	
						5	High
Ground	R1	Residential	Bedroom	W1	178°	4.9	
				W2	223°	5	
						6.1	High
Ground	R2	Residential	Bedroom	W3	358°N	0	
						0	Failed
First	R1	Residential	Bedroom	W1	178°	4.8	
				W2	268°	2.6	
						6.2	High
First	R2	Residential	Bedroom	W3	358°N	0	
				W4	358°N	0	
				W5	88°N	0	
						0	Failed
UNIT 2							
Lower Ground	R1	Residential	LKD	W1	178°	6	
				W2	178°	5.4	
				W3	358°N	0	
						6.5	High
Ground	R1	Residential	Bedroom	W1	178°	7.6	
						7.6	High
Ground	R2	Residential	Bedroom	W2	358°N	0	
						0	Failed
First	R1	Residential	Bedroom	W1	178°	3.1	
						3.1	Medium
First	R2	Residential	Bedroom	W2	308°N	0	
				W3	358°N	0	
						0	Failed
UNIT 3							
Lower Ground	R1	Residential	LKD	W1	178°	5.9	
				W2	178°	5.4	
				W3	358°N	0	
						6.5	High
Ground	R1	Residential	Bedroom	W1	178°	7.6	
						7.6	High
Ground	R2	Residential	Bedroom	W2	358°N	0	
						0	Failed
First	R1	Residential	Bedroom	W1	178°	3.1	
						3.1	Medium
First	R2	Residential	Bedroom	W2	308°N	0	
				W3	358°N	0	
						0	Failed
UNIT 4							
Lower Ground	R1	Residential	LKD	W1	178°	6.3	
				W2	358°N	0	
				W3	178°	4.4	
						6.3	High
Ground	R1	Residential	Bedroom	W1	178°	5.4	
						5.4	High
Ground	R2	Residential	Bedroom	W2	358°N	0	
						0	Failed
First	R1	Residential	Bedroom	W1	178°	5.5	
				W2	88°N	2.3	
						6.2	High

Project Name: Fortis Green Tennis Club, 31 Southern Road, London N2 9LH
Project No.: 23-01796
Report Title: Sunlight Exposure (SE) Results
Date of Analysis: October 2023

Floor Ref	Room Ref	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure (Hours)	Rating
First	R2	Residential	Bedroom	W3	88°N	2	
				W4	358°N Inc	0	
				W5	308°N	0	
						2	Minimum
UNIT 5							
Lower Ground	R1	Residential	LKD	W1	178°	4.2	
				W2	132°	2.1	
				W3	88°N	0	
				W4	88°N	0	
				W5	358°N	0	
						4.2	High
Ground	R1	Residential	Bedroom	W1	178°	5.2	
				W2	132°	4.1	
						5.4	High
Ground	R2	Residential	Bedroom	W3	268°	0	
				W4	358°N	0	
						0	Failed
UNIT 6							
First	R1	Residential	Bedroom	W1	178°	2.8	
						2.8	Minimum
First	R2	Residential	Bedroom	W2	358°N	0	
				W3	358°N	0	
						0	Failed
First	R3	Residential	LKD	W4	358°N	0	
				W5	358°N	0	
				W6	88°N	1.9	
				W7	88°N	1.9	
				W8	88°N	0.3	
						1.9	Minimum
UNIT 7							
First	R1	Residential	LKD	W1	178°	4.1	
				W2	178°	4.1	
				W3	178°	4.1	
				W4	178°	4.1	
				W5	178°	4.1	
				W6	88°N	1.3	
				W10	88°N	1	
						6	High
First	R2	Residential	Bedroom	W7	88°N	1.6	
				W8	88°N	1.6	
				W9	88°N	1.6	
						1.6	Minimum
UNIT 8							
Second	R1	Residential	LKD	W1	178°	4.1	
				W2	178°	4.1	
				W3	178°	4.1	
				W4	178°	5	
				W5	178°	5	
				W6	178°	5	
				W7	88°N	2.1	
				W8	88°N	2.1	
						7.1	High
Second	R2	Residential	Bedroom	W9	88°N	2.1	
				W10	358°N	0	
				W11	358°N	0	
						2.1	Minimum

Project Name: Fortis Green Tennis Club, 31 Southern Road, London N2 9LH
Project No.: 23-01796
Report Title: Sunlight Exposure (SE) Results
Date of Analysis: October 2023

Floor Ref	Room Ref	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure (Hours)	Rating
Second	R3	Residential	Bedroom	W12	358°N	0	
				W13	358°N	0	
				W14	358°N	0	
						0	Failed
BAR							
Ground	R1	Residential	Communal Occupied	W1	178°	4.4	
				W2	178°	4.3	
				W3	178°	4.7	
				W4	88°N	1.3	
				W5	88°N	1.1	
						6	High

Appendix 06

2hr Amenity Drawings

Project Name: Fortis Green Tennis Club, 31 Southern Road, London N2 9LH
Project No.: 23-01796
Report Title: Two hours Sunlight to Amenity Analysis
Date of Analysis: October 2023

Floor Ref	Amenity Ref		Amenity Area	Lit Area Proposed	Meets BRE Criteria
Ground	A1	Area m2 Percentage	97.87	72.08 74%	YES
Ground	A2	Area m2 Percentage	51.69	36.01 70%	YES
Ground	A3	Area m2 Percentage	55.23	39.61 72%	YES
Ground	A4	Area m2 Percentage	59.28	43.59 74%	YES
Ground	A5	Area m2 Percentage	96.09	76.70 80%	YES
Ground	A10	Area m2 Percentage	287.33	286.59 100%	YES
Ground	A11	Area m2 Percentage	510.96	510.92 100%	YES
Ground	A12	Area m2 Percentage	877.43	797.33 91%	YES
First	A1	Area m2 Percentage	6.71	4.16 62%	YES
First	A2	Area m2 Percentage	4.85	4.71 97%	YES
Second	A1	Area m2 Percentage	4.94	4.87 98%	YES
Second	A2	Area m2 Percentage	4.95	4.94 100%	YES
Second	A3	Area m2 Percentage	5.57	5.57 100%	YES
Second	A4	Area m2 Percentage	1.87	0.00 0%	NO
Second	A5	Area m2 Percentage	1.82	0.00 0%	NO
Second	A6	Area m2 Percentage	1.81	0.00 0%	NO
Second	A7	Area m2 Percentage	1.11	0.00 0%	NO
Second	A8	Area m2 Percentage	6.42	5.06 79%	YES
Second	A10	Area m2 Percentage	3.32	3.32 100%	YES

Appendix 06

2hr Amenity Drawings



001 Ground Floor - Unit 1 to 5
Amenity Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Key

- 2 Hour Amenity Contours

A1 - Amenity 1

Notes

Project Identification

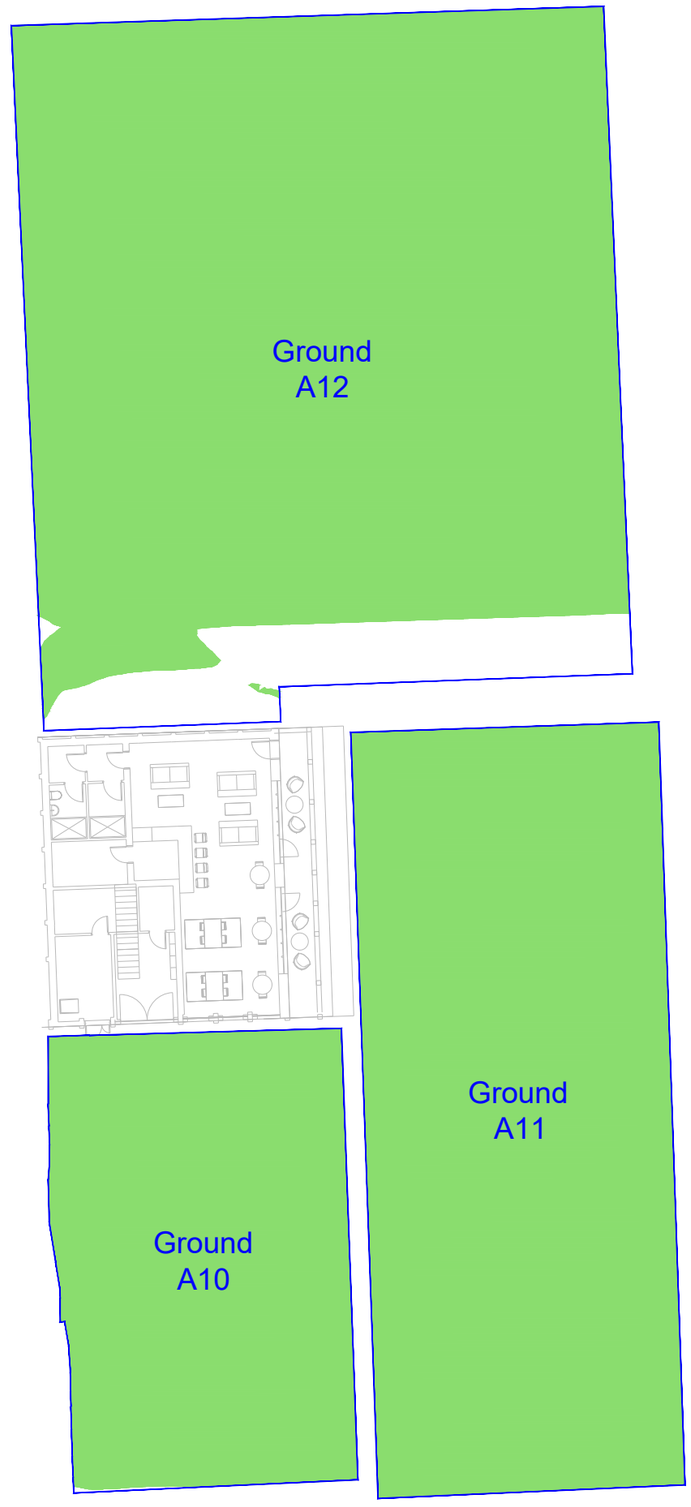
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
2hr Sunlight to Amenity

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



002 Ground Floor
Amenity Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Key

- 2 Hour Amenity Contours

A1 - Amenity 1

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
2hr Sunlight to Amenity

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



003 First Floor - Unit 6 & 7
Amenity Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Key

- 2 Hour Amenity Contours

A1 - Amenity 1

Notes

Project Identification

Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
2hr Sunlight to Amenity

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Key

- 2 Hour Amenity Contours

A1 - Amenity 1

Notes

Project Identification

Client
Fortis Green LLP

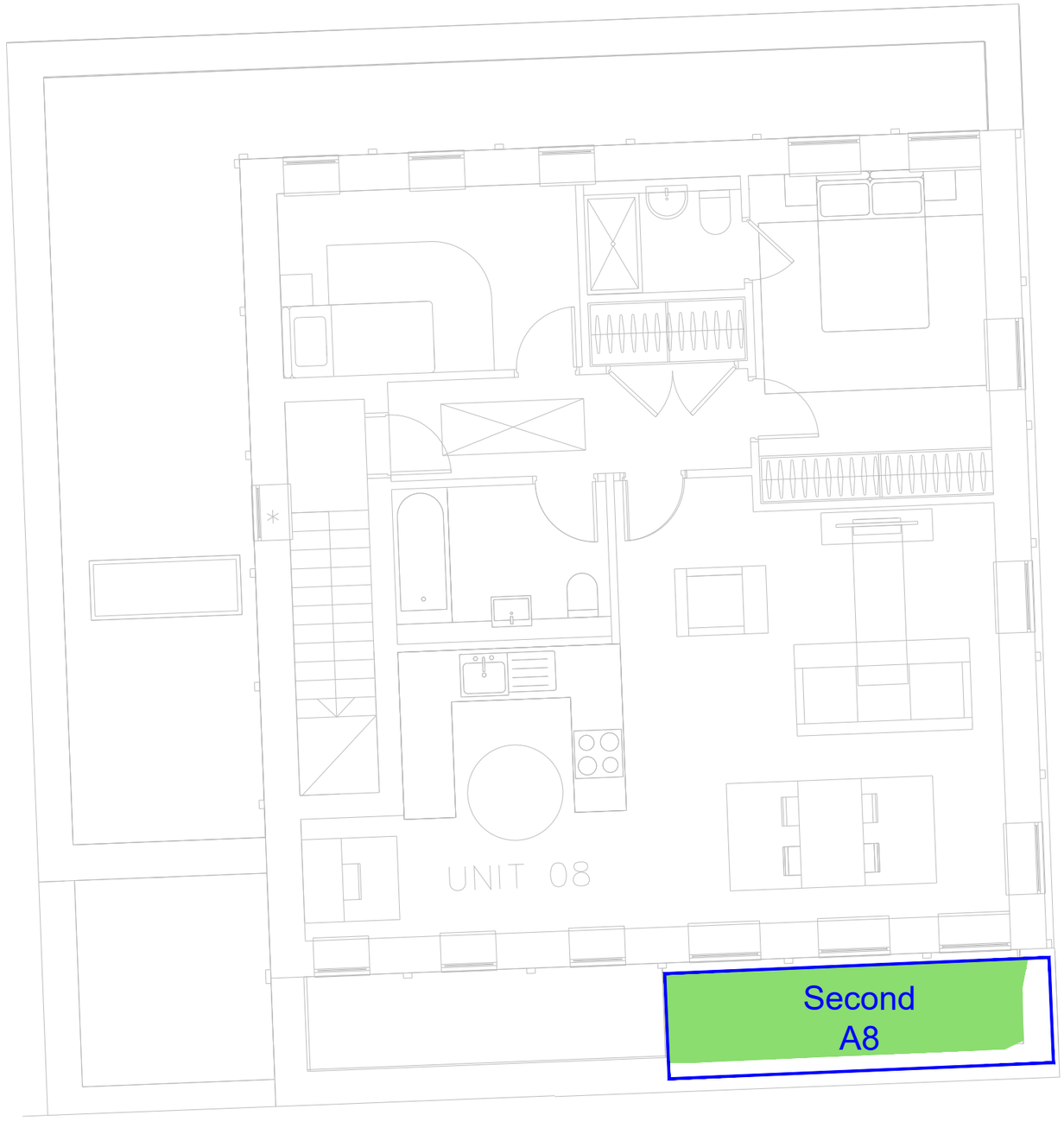
Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
2hr Sunlight to Amenity

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com

004 Second Floor - Unit 1 to 4
Amenity Layout



Unit 8

005 Second Floor - Unit 8
Amenity Layout

Source Data

Testing Environment:
Site Photographs - Rapleys - August 2023
Contextual Model - N2 9LH_Shakespeare Gardens,East Finchley_HD_MASTER
OS Data - Dowen Farmer Architects - September 2023

Existing Building:
2D Drawings - Dowen Farmer Architects - September 2023

Proposed Scheme:
2D Drawings - Dowen Farmer Architects - September 2023
3D Model - 1143-DFA-GR_00_M3_A_0001 _lucyT8XA4 - 3D View - {3D - lucyT8XA4}

Key

- 2 Hour Amenity Contours

A1 - Amenity 1

Notes

Project Identification

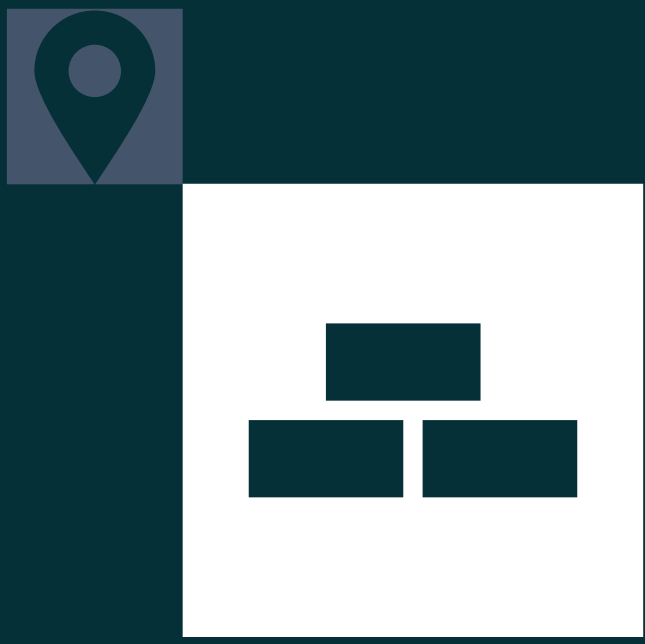
Client
Fortis Green LLP

Job Title
23-01796 - Fortis Green tennis club, London N2 9LJ

Drawing Title
2hr Sunlight to Amenity

Scale	Date	Drawn
NTS	Oct-23	MF

RAPLEYS
66 St James's Street,
St James's, London SW1A 1NE
Tel: 0370 777 6292 www.rapleys.com



For further details contact:

Rapleys LLP is registered as a Limited Liability Partnership in England and Wales.
Registration No: OC308311. Registered Office at Unit 3a, The Incubator, The Boulevard,
Enterprise Campus, Alconbury Weald, Huntingdon, PE28 4XA. Regulated by RICS.

rapleys.com
0370 777 6292

RAPLEYS