

## **DAYLIGHT & SUNLIGHT REPORT**

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relating to the

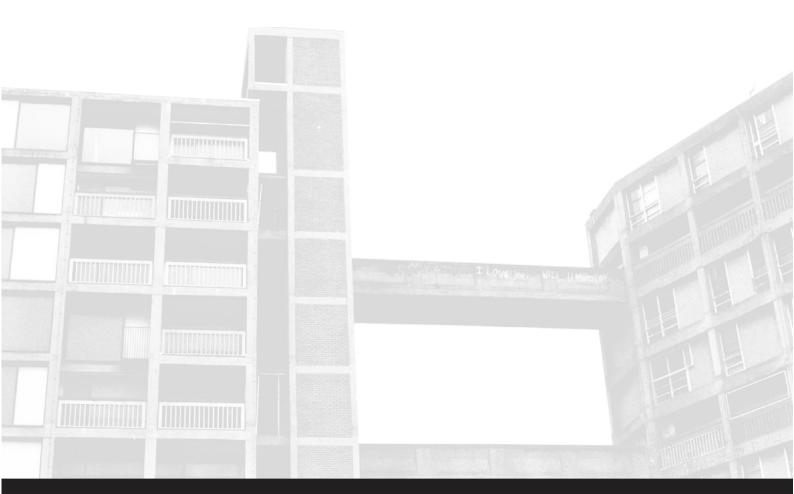
PROPOSED DEVELOPMENT

of

34 NASSAU ROAD, SW13 9QE

on behalf of (the 'Applicant')

**MR & MRS RICHARDS** 





Author: Neil Cawood BSc (Hons), MSc, MAPM, MRICS

About CPMC Chartered Surveying Ltd

CPMC Chartered Surveying Ltd is a multi-disciplinary surveying practice, specialising in rights of light and BRE daylight and sunlight analysis for the planning process, the Party Wall etc Act 1996, access agreements, condition scheduling, crane oversail licences & Accurate Visual Representation (AVR) imagery.

We are an industry leading Chartered Surveying practice with considerable experience in relation to providing documentation to support the planning process and the resolution of 'neighbourly matters' issues in all parts of the UK. We have significant experience with regard to the provision of daylight and sunlight assessment criteria and regularly produce comprehensive assessments to aid planning authorities understand the impact of an applicant's site on its neighbours. We are also regularly asked to assess the likely light levels within a proposed developments, so that the likely light levels for future occupants can be better understood.

Our client base is broad, and we work with developers, authorities and private individuals in order to effectively manage their neighbourly matters concerns.



#### List of Contents

Section 1 Overview

Section 2 Executive Summary

Section 3 Introduction

Section 4 Description of Development

Section 5 Assessment Process

Section 6 Daylight
Section 7 Sunlight

Section 8 Amenity Space

Appendix A: Results:

Vertical Sky Component (VSC)

Available Sunlight Hours (APSH)

Daylight Distribution (DD)

**Amenity Space** 

Appendix B: Model view, neighbouring window, room & amenity

space references

Notes



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#### Section 1: Overview

There is no national planning policy relating to daylight and sunlight and overshadowing. However, general guidance is given on the need to protect existing amenity and provide adequate new accommodation, as set out in the National Planning Policy Framework.

The 2022 (3rd Edition) Building Research Establishment's 'Site Layout Planning for Daylight and Sunlight - A Guide to Good Practice' (The BRE Guide) and BS EN 17037:2018 enable such assessments to be made.

When considering the BRE Guide's requirements, it is important to remember that the Guide is not a set of planning rules, which are either passed or failed. Numerical values are given and used, not as proscriptive or prescriptive values but as a way of comparing situations and arriving at a balanced judgement. The BRE Guide is conceived as an aid to planning officers and designers by giving objective means of making assessments. The target values in the BRE Guide may not be obtainable in dense urban areas where the grain of development is tight, while higher values might well be desirable in more open suburban or rural areas where the grain is contrastingly open. This is recognised by the BRE and made clear in the BRE Guide.

The need to apply daylight and sunlight advice flexibly was also reinforced in the recent National Planning Policy Framework (NPPF) revision (December 2023), at paragraph 129 [c]) "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".

The need to apply the guidance flexibly was also reiterated in the <u>NPPG 'Effective Use of Land' guidance (July 2019)</u>, and this is particularly relevant in London, where it is acknowledged in the Greater London Authority's Housing Supplementary Planning Guidance (SPG), March 2016 (para 1.3.46), which states:

"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."

Context is therefore of key importance when applying the standards contained in the BRE Guide.



#### Section 2: Executive Summary

In urban locations such as Barnes, site constraints, including the number, height and proximity of other neighbouring buildings mean that it is more difficult for neighbouring windows, rooms and external amenity spaces to meet the criteria laid out in the BRE Guide.

The BRE Guide is clear that the target levels are by no means mandatory, should be used flexibly and that in certain environments, such as a city location, a higher degree of obstruction is frequently unavoidable. This is particularly the case when existing sites are open or contain modest massing, because any meaningful massing is likely to cause BRE guide transgressions.

The importance of applying daylight and sunlight advice *flexibly* is increasingly recognised and is stated in the recently adopted National Planning Policy Framework (NPPF) and the NPPG 'Effective Use of Land' guidance.

In this case all of the tested neighbouring windows and rooms comfortably fulfil all of the planning guidance. This is regarded as a high level of compliance in an urban environment such as London and planning permission should not be withheld for daylight and sunlight reasons.



#### Section 3: Introduction

The purpose of this report is to assess the impact of the proposed extension works on the daylight and sunlight of neighbouring properties.

This report considers the daylight and sunlight criteria set out in the following publications:

- Site Layout Planning for Daylight & Sunlight (SLPDS / BRE Guide), PJ Littlefair 2022 published by the BRE (Building Research Establishment). The tests prescribed by the BRE Guide are approved by the Department of the Environment and provide a clear methodology for comprehensive testing.
- BS EN 17037:2018 Daylight in buildings.

Compliance with the BRE Guide is not a planning criterion and the foreword to the Guide is careful to make this point. There are therefore no minimum mandatory requirements for daylight and sunlight in Building Regulations for England & Wales but the guidance set out in BRE Guide is widely accepted as the approved methodology when calculating sunlight & skylight.

The target levels contained in the BRE Guide correlate with a lower density suburban model<sup>1</sup> and therefore need to be applied flexibly in denser urban locations.

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<sup>&</sup>lt;sup>1</sup> For example, the target Vertical Sky Component of 27 percent correlates with a shallow c.25 degree obstruction angle. In cities the existing obstruction angle may be over 40-45 degrees.



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## Section 4: Description of the Development

The scheme comprises of the extension and alterations to the existing property.

The property is located on the south side of Nassau Road. The site and the surrounding buildings which have been assessed are shown in Figure 1 and the proposed site model can be seen in Figure 2.



Fig. 1 - Applicant site & assessed neighbouring properties





Fig. 2 - Image of the Existing site model



Fig. 3 - Image of the proposed site model



#### Section 5: Assessment Process

The effect on neighbouring properties:

The BRE Guide describes three parameters to be assessed in order to measure the impact of the proposed new building on Daylight/Sunlight availability to the key adjacent properties. The three parameters to be assessed are as follows:

1) Daylight:

Vertical Sky Component (VSC)

Daylight Distribution (DD)<sup>2</sup>

2) Sunlight:

Annual Probable Sunlight Hours (APSH)

3) Overshadowing (Amenity Space)

Sun on the ground on the 21st March received by external amenity spaces

The guidance states that rooms to be assessed should be living rooms, kitchens and bedrooms in residential properties. In non-domestic buildings rooms where occupants 'have a reasonable expectation of daylight' should be assessed. Although these spaces are not defined, examples are given of the type of non-domestic buildings that would normally fall into this category. Such spaces might include schools, hospitals, hotels and hostels, small workshops and *some* offices.

As it is often difficult to be certain of the specific use of some neighbouring spaces a view has been taken on the relevance of the properties adjacent to the proposed development.

It is important to reiterate that the numerical values in the guidance are *advisory* and different criteria may be used based on the requirements for daylighting in an area viewed against other site layout constraints and local context.

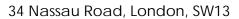
The neighbouring properties that have assessed are as follows:

- 32 Nassau Road
- 36 Nassau Road (note that only the ground floor of this property has been considered)

The assessment is based on the following drawings, provided by Richard James Hastings Architecture:

- 2313\_BASE-10\_PLAN
- 2313\_BASE-11\_PLAN
- 2313\_BASE-12\_PLAN
- 2313 BASE-19 PLAN
- 2313\_BASE-22-REAR ELEVATION

<sup>&</sup>lt;sup>2</sup> Also known as the 'no-sky-line' test.





- 2313\_BASE-23-SIDE ELEVATION
- 2313\_BASE-31-SECTION A
- RICHARD HASTINGS-270130-MM-34 NASSAU ROAD LONDON SW13 9QE-CONT2382493629



Section 6: Daylight

Vertical Sky Component:

Daylight is the light received from the sun which is diffused through the sky's clouds. Even on a cloudy day when the sun is not visible a room will continue to be lit with light from the sky. This is also known as 'diffuse light'. Any reduction in the total amount of daylight can be calculated by finding the 'Vertical Sky Component'.

The Vertical Sky Component (VSC) is the ratio of the direct skylight illuminance falling on a vertical face at a reference point (usually the centre of a window), to the simultaneous horizontal illuminance under an unobstructed sky.

The Guide recommends that where the VSC value of a main window as proposed is below 27 percent, then the amount by which it is reduced (if any) should be checked and if the reduction is greater than 20 percent or one fifth of its former value, then the reduction is likely to be "noticeable" to the average occupant.

If the VSC is more than 27 percent then enough light would still reach the window of the neighbouring building. However if the VSC is less than 27 percent as well as less than 0.8 times (one fifth) its former value the occupants will notice the reduction in the amount of skylight. It is important to note that baseline light levels in urban areas are frequently significantly below 27 percent, and therefore the site context is a key consideration in any BRE Guide analysis.

In an urban location such as Barnes existing obstruction angles created by taller buildings mean that it is relatively common for windows to have baseline levels well below the BRE guidance recommended levels. This is because the obstruction angle (c.25 degrees) associated with 27 percent VSC target is both shallow and the point where formal BRE assessments such as this are advised. In undertaking a formal BRE Guide assessment it is therefore anticipated that some neighbouring windows will be locally lower than the target levels.

It is also the case that where an existing building relationship is tight, the windows will frequently have low existing VSC levels. Such windows are inevitably more sensitive to smaller (1-3 percent) VSC reductions. Whilst relatively small reductions in VSC may create a technical VSC transgression it is unlikely that such small losses would be noticeable to the average occupant of the associated rooms and even a modest neighbouring development may also cause transgressions to such sensitive windows.

For sloping or horizontal rooflights a similar approach can be used, with a horizontal or sloping sky component. If the value with the new development in place is less than 0.80 times the value before, there would be a noticeable reduction in the light entering the rooflight.



#### **VSC** Results

Our assessment was undertaken in accordance with the guidance and methodology contained in the 2022 BRE Guide, and detailed results can be found in Appendix A of this report:

- 32 Nassau Road the tested windows very comfortably pass.
- 36 Nassau Road the tested windows very comfortably pass.

#### Daylight Distribution:

Where room layouts are known (or estimated) the impact on daylighting distribution can be found by plotting what is known as the 'no-sky-line' in each of the main rooms. The rooms we have tested correspond with the windows tested as part of the above VSC test.

The no-sky-line effectively divides the points on the working plane (0.85m high for residential properties and 0.7m high for other uses) that cannot see the sky. Therefore areas beyond the no sky line will receive no direct daylight but will instead be lit from reflected light.

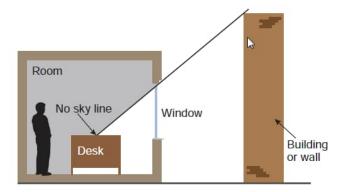


Fig. 4 - Excerpt (Fig. 15) taken from the BRE 209 Guide

Following the construction of a new development, if the no sky line moves so that the area of the existing room, which does not receive direct skylight, is reduced to less than 0.8 times its former value, this will be noticeable to the average occupant.

We have either assumed internal layouts or used layouts obtained from the local authority planning portal to assess the Daylight Distribution in rooms adjacent to the development.



In an urban location, where existing buildings create restrictions, it is common for baseline DD levels to be 45-50 percent.

#### Daylight Distribution Results

Our assessment was undertaken in accordance with the guidance and methodology contained in the 2022 BRE Guide, and detailed results can be found in Appendix A of this report:

- 32 Nassau Road the tested rooms very comfortably pass.
- 36 Nassau Road the tested rooms very comfortably pass.



### Section 7: Sunlight

**Available Sunlight Hours** 

Sunlight guidance values can be found in Section 3 of Site Layout Planning for Daylight and Sunlight (SLPDS).

Habitable rooms in domestic buildings that face within 90 degrees of due south are tested, as are rooms in non-domestic buildings that have a particular requirement for sunlight. The analysis is known as the Annual Probable Sunlight Hours (APSH) analysis.

The recommendations are that applicable windows should receive a minimum of 25 percent of the total annual probable sunshine hours, to include a minimum of 5 percent of that which is available during the winter months between 21st September to the 21st March (the approximate dates of the autumn and spring equinoxes). As stated in the BRE Guide<sup>3</sup>, the primary focus should be the main window of a living room. The guidance also states<sup>4</sup> that 'normally loss of sunlight need not be analysed to kitchens and bedrooms, except for bedrooms that also comprise a living space' (such as a bedsit).

However if this is not possible (or the amount of sunlight is already reduced because of the effect of existing obstructions) then a further reduction in sunlight availability will be noticeable to an occupier if the total number of sunlight hours is below the target 25 percent of the total annual probable sunshine hours, to include a minimum of 5 percent of that which is available during the winter months, and is less than 0.8 times its former value prior to the development. For a transgression to occur, there is also a requirement for the reduction in sunlight over the whole year to be greater than 4 percent of annual probable sunlight hours.

There is no requirement for windows that face within 90 degrees of due north to be tested so windows that fall into this category have not been considered within our sunlight calculations.

The BRE Guide states<sup>5</sup> that if the main living room window is impacted but there are secondary windows within 90 degrees of due south, sunlight to the secondary window should be checked. Although care needs to be taken, and the APSH for multiple windows cannot simply be added together, this allows for sunlight within a room to be considered, rather than just the impact on a single aperture.

<sup>&</sup>lt;sup>3</sup> Paragraph 3.2.13.

<sup>&</sup>lt;sup>4</sup> Paragraph 3.2.3.

<sup>&</sup>lt;sup>5</sup> Paragraph 3.2.5.



#### **Available Sunlight Hours Results**

Our assessment was undertaken in accordance with the guidance and methodology contained in the 2022 BRE Guide, and detailed results can be found in Appendix A of this report:

- 32 Nassau Road all tested windows pass.
- 36 Nassau Road all tested windows pass or are oriented north.



#### Section 8: Amenity Space

The BRE guidance suggests that at least 50 percent of any garden or open space should receive no less than 2 hours of direct sun on the spring equinox (approximately March 21st).

Open spaces would normally include:

- Residential gardens, usually the main back garden of a house
- Parks and playing fields
- Children's playgrounds
- Outdoor swimming pools
- Sitting out areas such as those between non-domestic buildings and in public squares
- Focal points for views such as a group of monuments or fountains

If as a result of new development an existing garden does not receive 2 hours of direct sunlight on the ground on the 21<sup>st</sup> March and is less than 0.8 times (one fifth) its former value, the BRE guide considers this to be a transgression.

The BRE Guide does not list balconies and terraces as receptors and therefore we have not considered any such spaces herein.

#### Amenity Space Results

Our assessment was undertaken in accordance with the guidance and methodology contained in the 2022 BRE Guide, and detailed results can be found in Appendix A of this report. Due to the orientation, it was only considered necessary to test the garden at 32 Nassau Road.

- 32 Nassau Road the rear garden passes.
- 36 Nassau Road the rear garden passes.



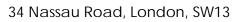
# Appendix A

Results:

Vertical Sky Component (VSC)

Annual Probable Sunlight Hours (APSH)

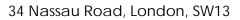
#### Window Orientation 32 Nassau Road 27.00 27.00 YES Ground R1 Residential Unknown W1 Existing 38.68 0.97 YES 214° 76.00 0.93 YES 1.00 71.00 Proposed Ground R1 Residential Unknown W3 Existing 68.06 1.00 YES 90° Hz 51.00 1.00 YES 15.00 15.00 1.00 YES Proposed 68.40 51.00 Ground R2 Residential Unknown W2 Existing 35.86 1.00 YES 214° 75.00 0.99 YES 26.00 1.00 YES Proposed 35.71 74.00 26.00 First R1 Residential Unknown W1 Existing 39.19 1.00 YES 214° 76.00 1.00 YES 28.00 1.00 YES Proposed 39.19 28.00 YES R1 Residential W1 YES 215° YES 1.00 Second Unknown Existing Proposed 38.23 1.00 74.00 1.00 25.00 36 Nassau Road R1 YES 213° YES YES Ground W1 38.93 1.00 1.00 1.00 Residential Unknown Existing 80.00 28.00 28.00 15.00 15.00 Existing Proposed \*North Ground R1 W4 71.68 1.00 YES 299°N Inc 48.00 \*North \*North Residential Unknown \*North Ground R1 Residential Unknown W5 Existing 79.41 1.00 YES 90° Hz 88.00 1.00 YES 30.00 1.00 YES 79.41 88.00 Proposed 30.00 Ground R2 Residential Unknown W2 Existing 1.00 YES 213° 80.00 1.00 YES 28.00 1.00 YES 39.38 80.00 28.00 Ground R2 Residential Unknown W3 Existing 57.53 1.00 YES 123° Inc 73.00 1.00 YES 26.00 1.00 YES Proposed 73.00 26.00





Daylight Distribution (DD)

Project Name: 34   Test: Daylight Dist								
Floor Ref.	Room Ref	Property Type	Room Use		Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
			32 Nassau Ro	ad				
Ground	R1	Residential	Unknown	Area m2	16.02	16.02	1.00	YES
				% of room	100.00%	100.00%		
	R2	Residential	Unknown	Area m2 % of room	17.61 99.23%	17.61 99.23%	1.00	YES
First	R1	Residential	Unknown	Area m2	17.69	17.69	1.00	YES
11130	IX.	Residential	Onknown	% of room	99.69%	99.69%	1.00	125
Second	R1	Residential	Unknown	Area m2	10.12	10.12	1.00	YES
				% of room	90.79%	90.79%		
			36 Nassau Ro	ad				
Ground	R1	Residential	Unknown	Area m2 % of room	26.94 63.91%	26.94 63.91%	1.00	YES
	R2	Residential	Unknown	Area m2	11.46	11.46	1.00	YES





Amenity Space

Pro	iect I	Name.	34	Nassau	Road
110		varric.	$\sigma$	Nassau	Noau

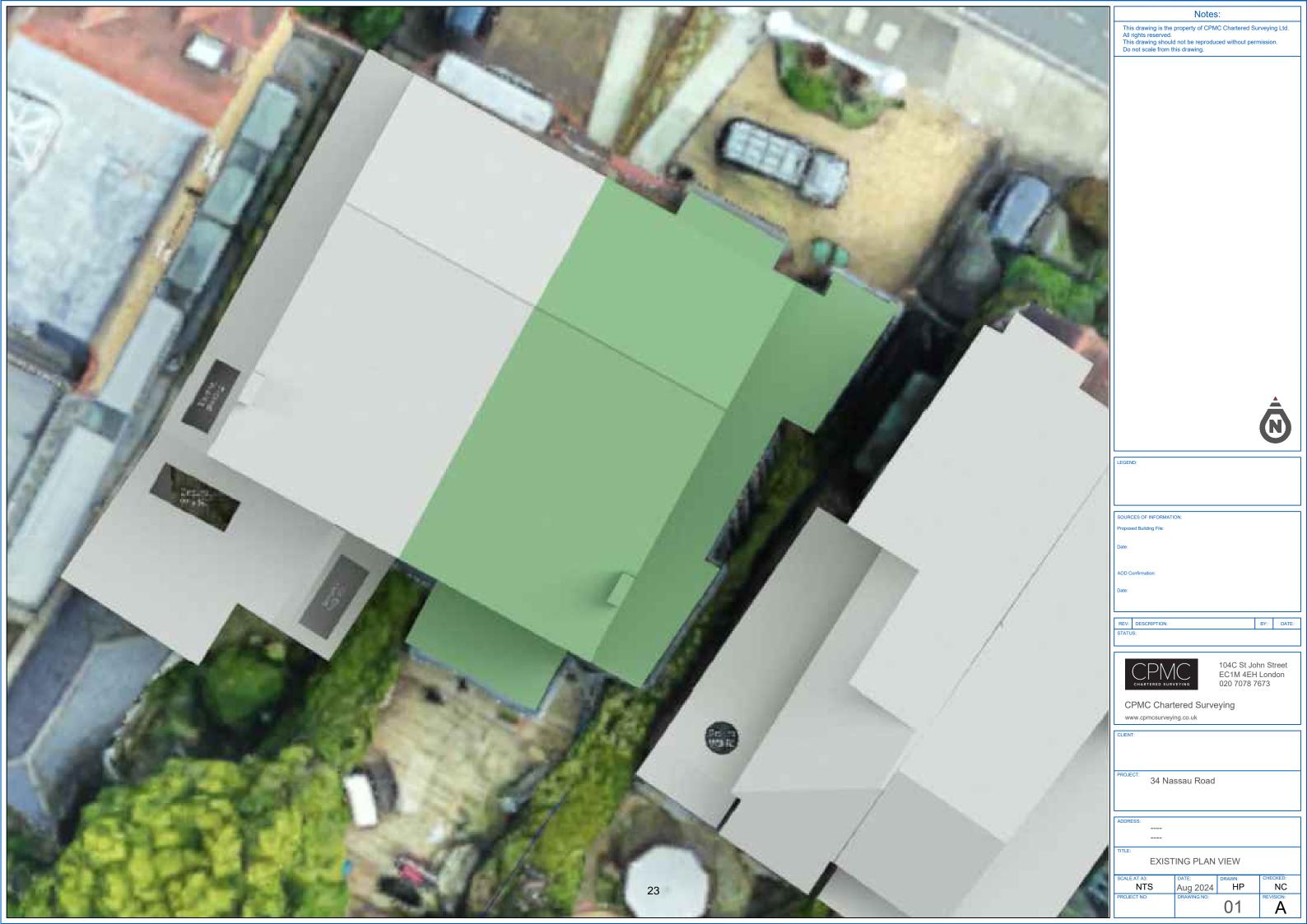
Test: External Amenity

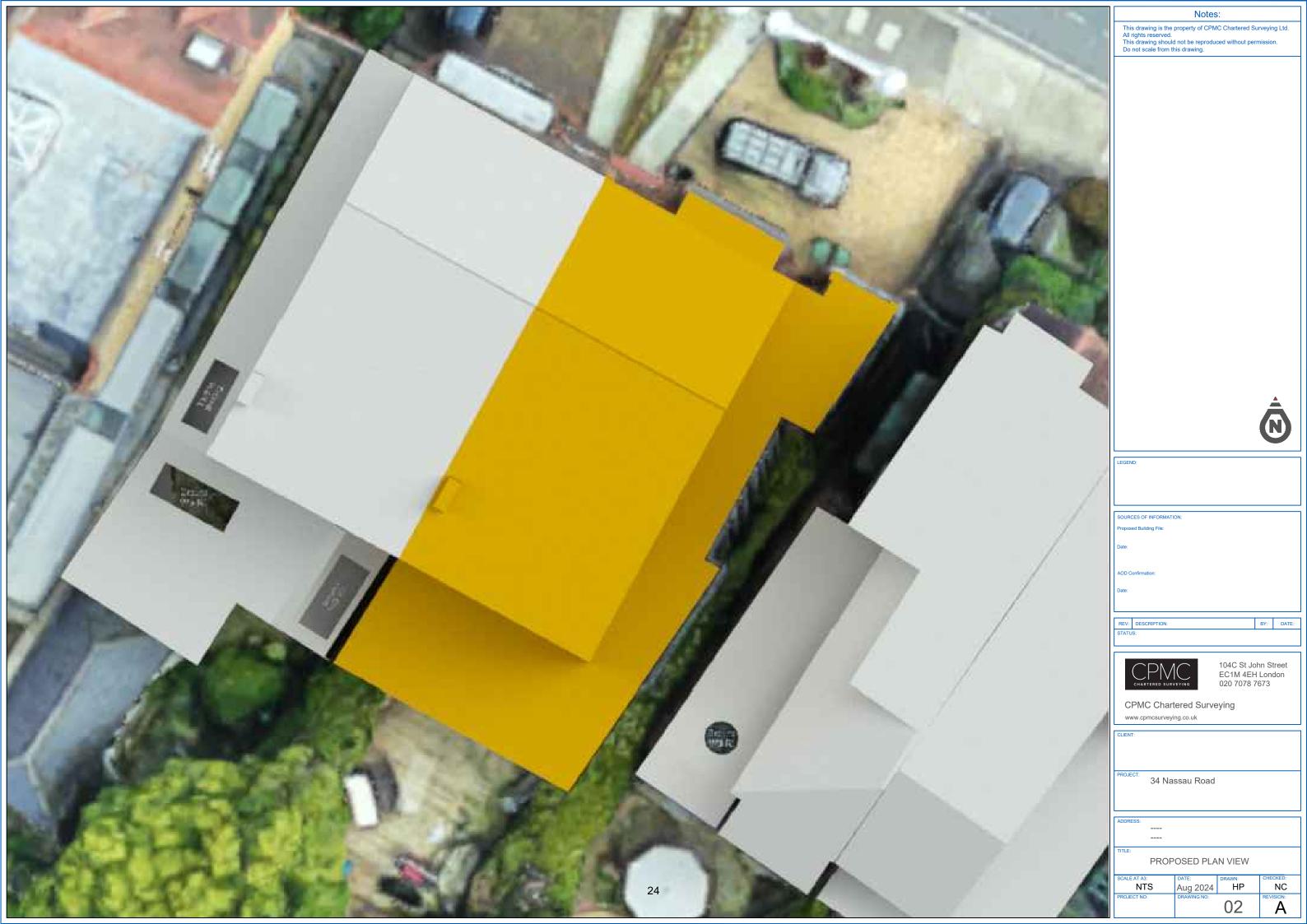
Floor Ref	Amenity Ref		Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria	
32 Nassau Road							
Ground	A1	Area m2 Percentage	174.95 91%	174.79 <mark>91%</mark>	1.00	YES	
36 Nassau Road							
Ground	A1	Area m2 Percentage	444.80 100%	444.80 100%	1.00	YES	

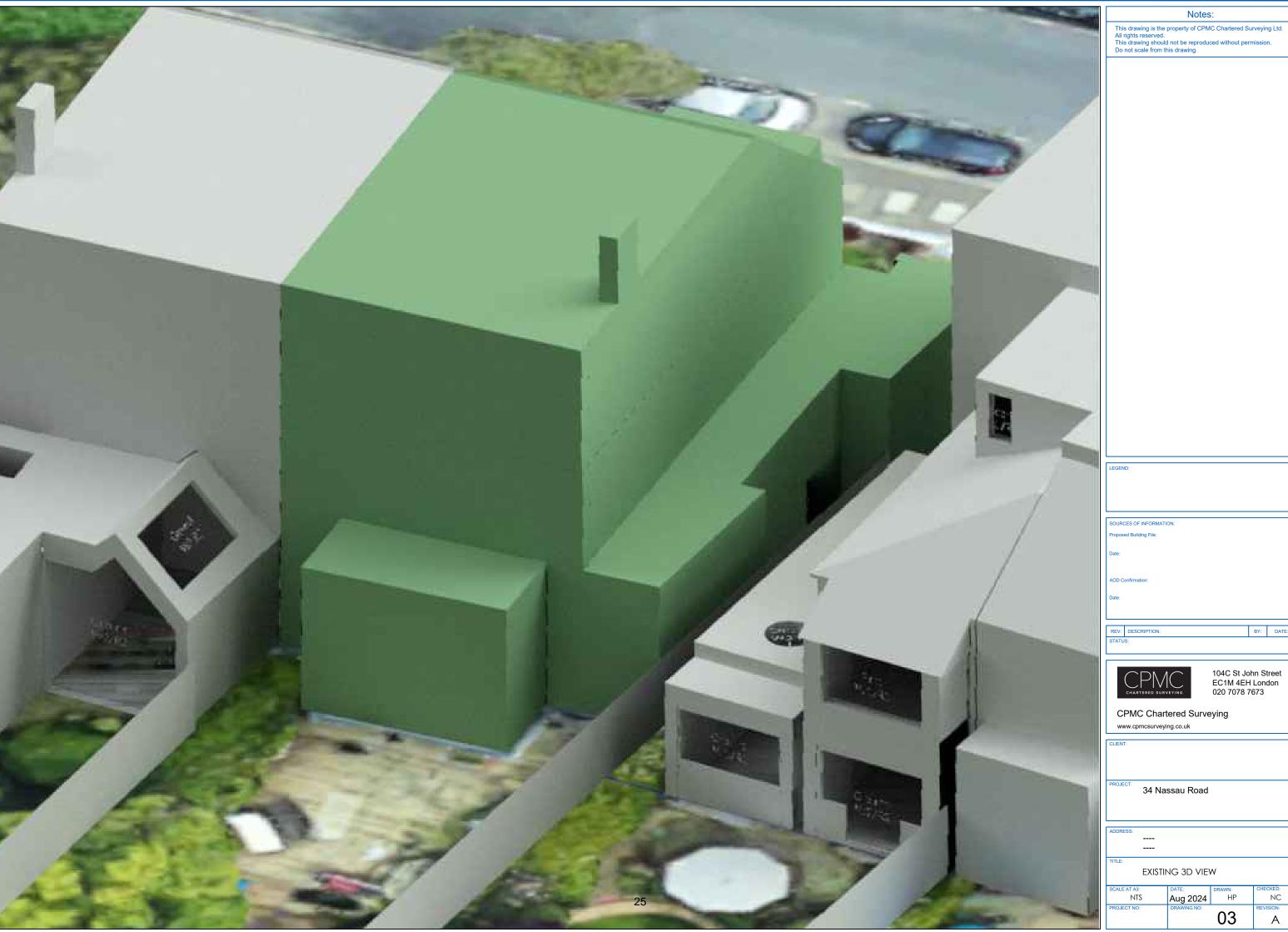


# Appendix B

Model images, neighbouring window, room & amenity Space references:







Notes:

104C St John Street EC1M 4EH London 020 7078 7673

BY: DATE:

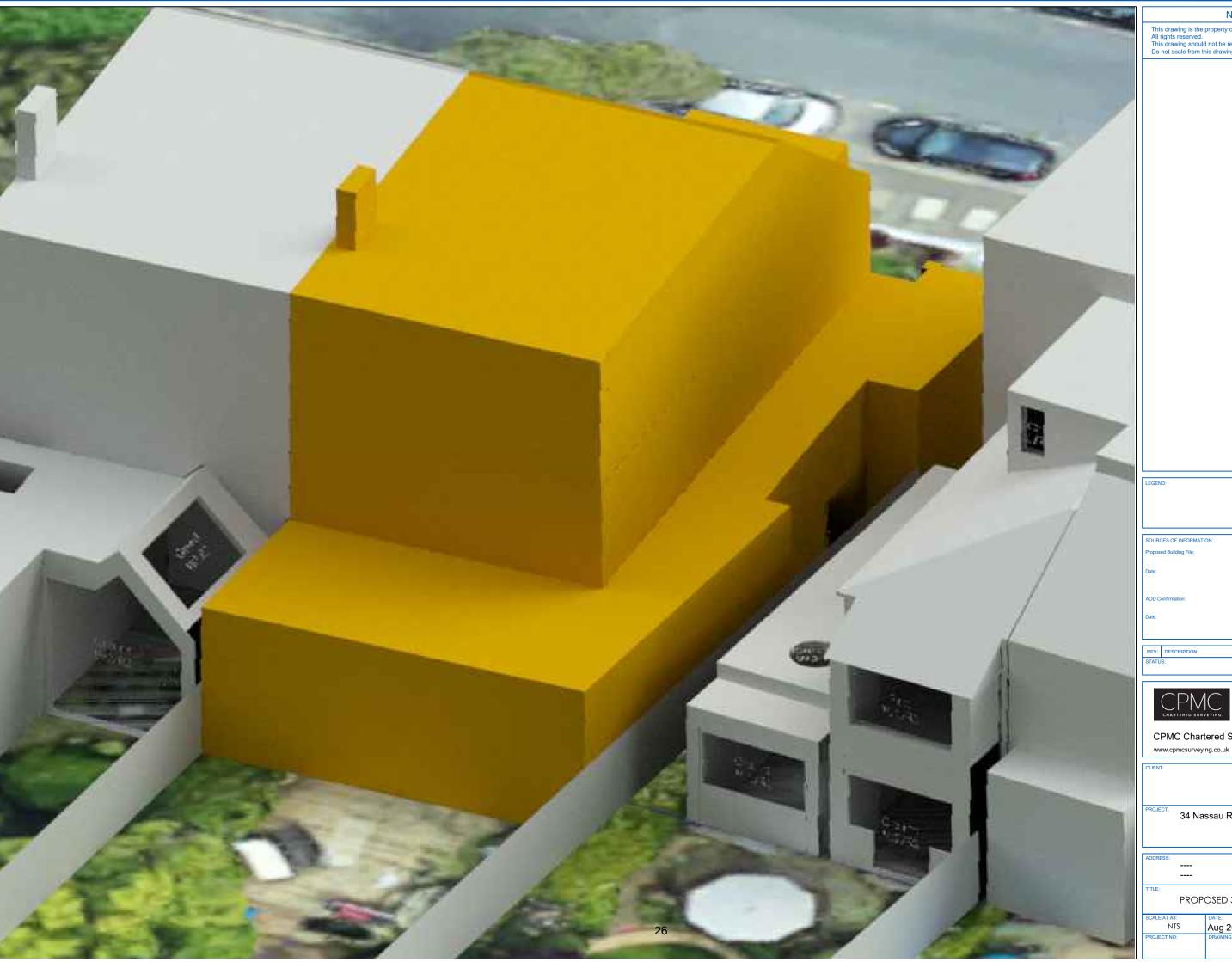
CPMC Chartered Surveying

34 Nassau Road

EXISTING 3D VIEW

NC Aug 2024 Α

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Notes:

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104C St John Street EC1M 4EH London 020 7078 7673

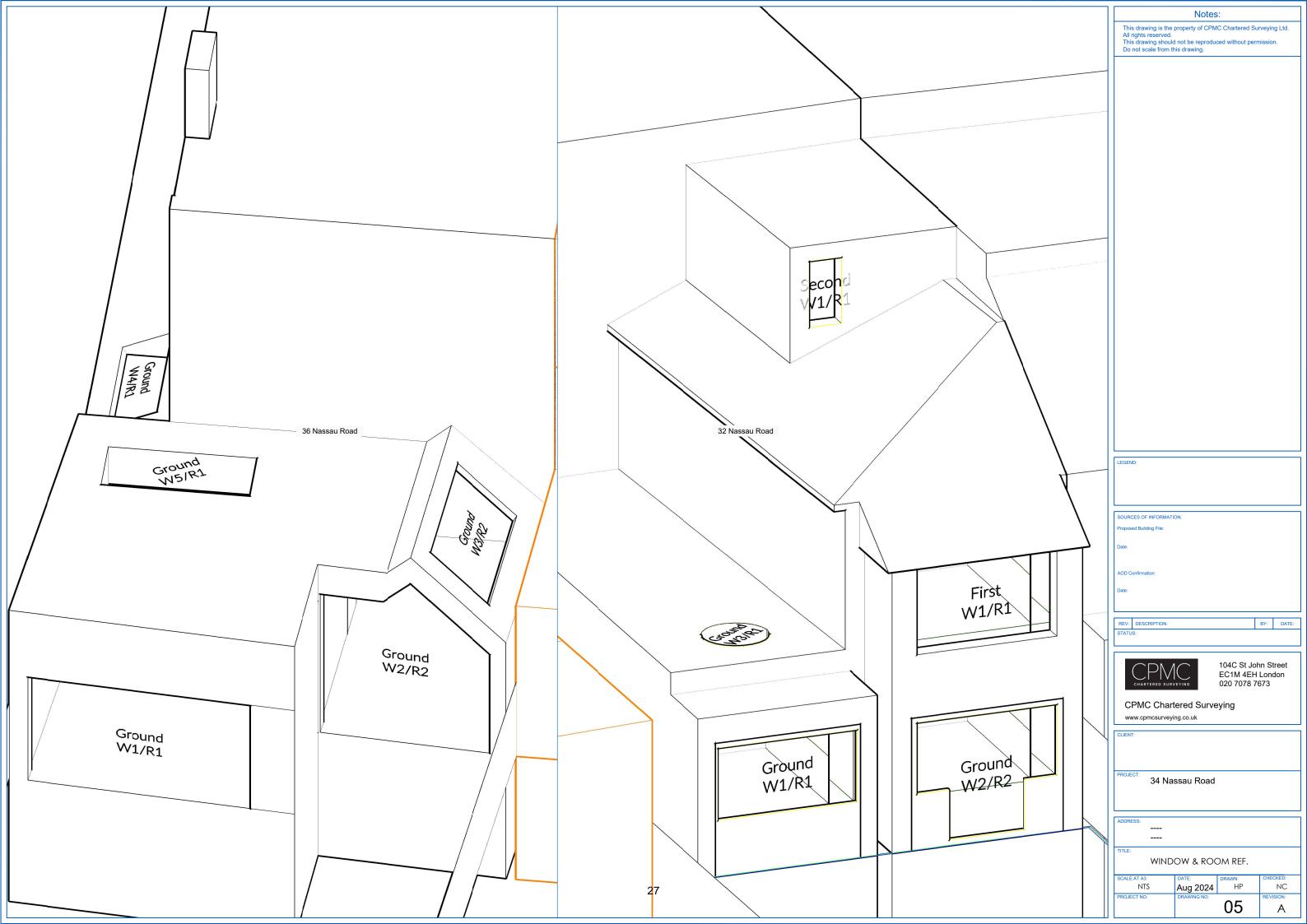
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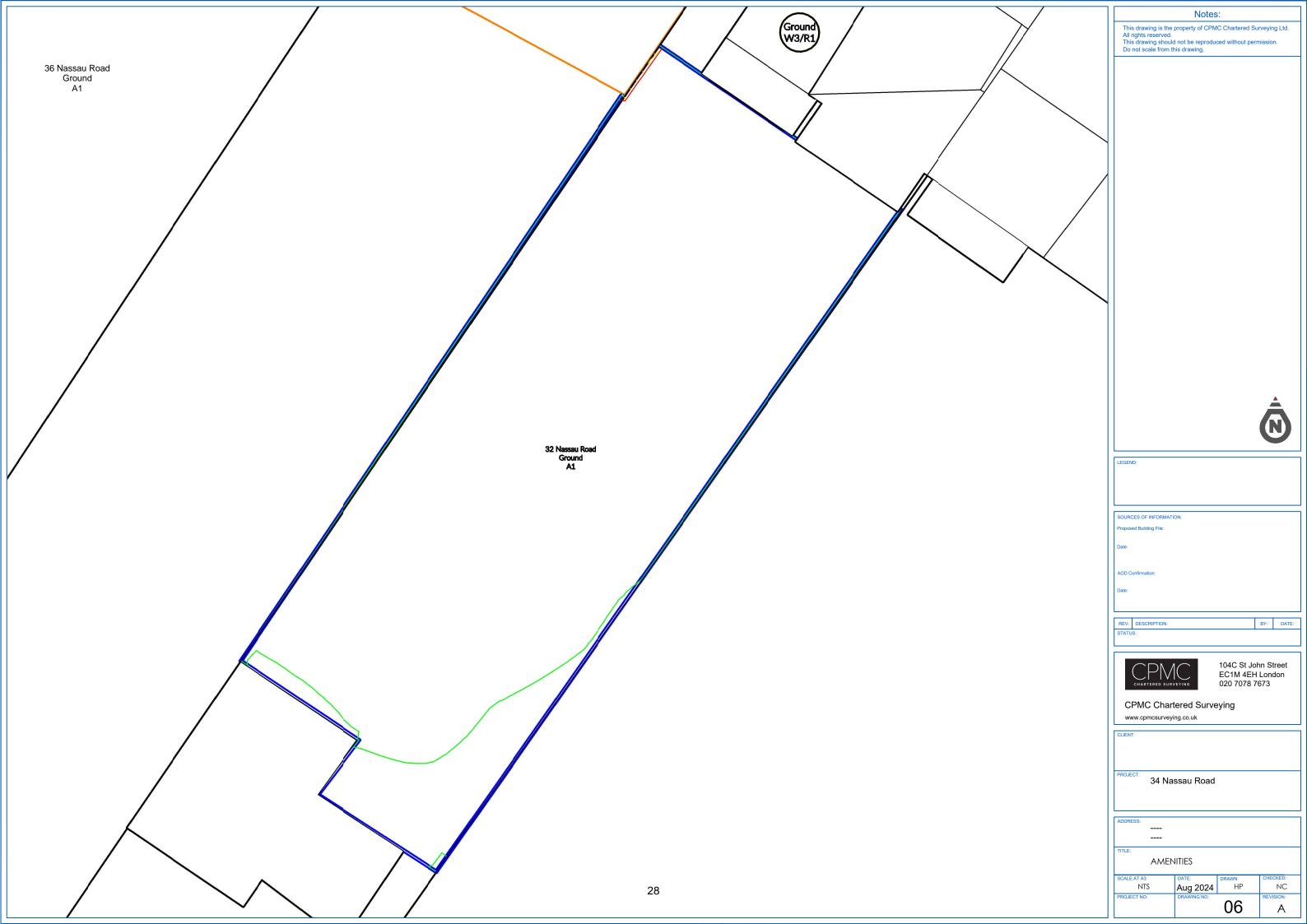
CPMC Chartered Surveying

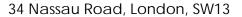
34 Nassau Road

PROPOSED 3D VIEW

NC Aug 2024 04 Α









Notes

Where access was not available we have made reasonable estimations of internal layouts, floor areas, window sizes and positions etc.

Our calculations model has been built from a combination of architect's plans, partial site survey, site and aerial photographs.

We are not aware of any conflicts of interest between ourselves and any neighbouring owners or their consultants concerning this project.

This report has been prepared for the sole use of the Client. No representation or warranty (expressed or implied) is given to any other parties.