

DAYLIGHT AND SUNLIGHT REPORT

**Kingsway House
99-103 Kingsway
London
WC2B 6QX**

Client
GMS Estates Limited

Dated
17 July 2024

Prepared by
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CONTENTS

| | PAGE |
|---|-------------|
| 1 INTRODUCTION..... | 3 |
| 2 PLANNING POLICY AND GUIDANCE..... | 4 |
| 3 ASSESSMENT METHODOLOGY AND NUMERICAL GUIDELINES | 7 |
| 4 ASSESSMENT OF SURROUNDING PROPERTIES..... | 10 |
| 5 ASSESSMENT OF LIGHT LEVELS WITHIN THE DEVELOPMENT..... | 11 |
| 6 CONCLUSION | 13 |

Appendices

Appendix A: Site Plan and 3D Drawings

Appendix B: Window Maps and No Sky Line Contours

Appendix C: Vertical Sky Component, No Sky Line and Annual Probable Sunlight Hours Results Spreadsheet

Appendix D: Illuminance Drawings

Appendix E: Illuminance and Sunlight Exposure Results Spreadsheet

1 INTRODUCTION

- 1.1 In accordance with your instructions, we have analysed the effect that the proposed change of use and extension to Kingsway House, 99-103 Kingsway ('the site') will have on the daylight and sunlight amenity to the neighbouring properties.
- 1.2 We have also considered the potential for adequate light to be received within the proposed apart-hotel.
- 1.3 The development comprises the conversion of the existing building from commercial office (Class E) use, construction of a two storey extension and remodelling of upper storeys to provide a new 58 bedroom apart-hotel ('the development').
- 1.4 Our 3D model of the site, surrounding buildings and proposed development are shown in Images 1 and 2 below. The existing building within the site is shaded green and the development is shaded blue.



Image 1: 3D view of the site



Image 2: 3D view of the development

- 1.5 Our study has been carried out using the assessment methodologies recommended in the Building Research Establishment (BRE) Report 209, *'Site Layout Planning for Daylight and Sunlight: A guide to good practice'* (2022) ('the BRE guide').

2 PLANNING POLICY AND GUIDANCE

2.1 National Policy

- 2.1.1 The revised National Planning Policy Framework ('NPPF') 2023 addresses the need for the flexible application of guidance relating to daylight and sunlight under Section 11 'Making effective use of land'. Paragraph 125(c) under subsection "*Achieving appropriate densities*" states the following;

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

2.2 Regional Policy – Greater London Authority

- 2.2.1 Paragraph D of Policy D6 'Housing Quality and Standard' of The London Plan (2021) states the following in respect of daylight and sunlight amenity:

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

- 2.2.2 Paragraph 4.1.2 of the Mayor's 2023 Housing Design Standards LPG states:

"The standards in this section also aim to complement the consideration of daylight and sunlight impacts using the BRE guidance (Site layout planning for daylight and sunlight). This process involves a two-stage approach: firstly, by applying the BRE guidance; and secondly, by considering the location and wider context when assessing any impacts. With extreme weather events becoming increasingly common, design must balance daylight, passive solar gain and overheating considerations. Summer heat can be reduced through orientation, shading, fenestration, insulation, high-albedo materials, the provision of green infrastructure and other strategies"

- 2.2.3 This document acknowledges the need to balance daylight and sunlight against thermal efficiency and paragraph C6.2 states that:

"Daylight and overheating assessments should be analysed together to determine the optimal balance."

2.2.4 Policy at national or regional level does not provide further detail in relation to daylight and sunlight amenity, whereas local policy is more specific, as detailed below.

2.3 Local Policy – London Borough of Camden ('LBC')

2.3.1 Policy A1 "Managing the impact of development" of LBC's Local Plan (2017) states:

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

We will:

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

The factors we will consider include...

f. sunlight, daylight and overshadowing."

2.3.2 Paragraph 6.5 of the Local Plan states:

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

2.3.3 Camden Planning Guidance on Amenity (2021) provides further details of the tests recommended by the Building Research Establishment ('BRE'). Paragraphs 3.14 and 3.15 state:

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

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

2.3.4 Paragraph 3.7 notes that:

“Although it is normally only residential uses that are assessed, there may also be non-residential uses, existing nearby or proposed as part of the application, that are particularly sensitive to light and so justify a report.”

- 2.3.5 The 2011 version of the Building Research Establishment ('BRE') guidance document was superseded in 2022. Whilst the guidance relating to the impact of development on neighbouring properties remains largely unchanged, the latest version of the BRE report provides new methodologies and guidance relating to natural light within new development.

2.4 National Guidance – The BRE guide

- 2.4.1 The BRE guide was updated in June 2022, with the 2011 version now withdrawn. The recommended tests are detailed in Section 3 of this report. The guidance provided is intended for use for rooms in dwellings where daylight is required, including living rooms, kitchens and bedrooms. The guidelines may also be applied to any non-domestic building where the occupants have a reasonable expectation of daylight; we would consider this to include hotels.

- 2.4.2 The BRE guide provides nationally recognised assessment methodologies and guidance relating to daylight and sunlight amenity. The guide and subsequent recommendations are applicable to all manner of built environments, ranging from low rise housing estates to dense city centres undergoing significant regeneration. The suggested target daylight and sunlight values remain consistent and are often unachievable in urban locations. Indeed, the introductory summary of the BRE guide states that:

“This report is a comprehensive revision of the 2011 edition of site layout planning for daylight and sunlight: a guide to good practice. It is purely advisory and the numerical target values within it may need to be varied to meet the needs of the development and its location...”

- 2.4.3 It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict set of rules. It states that:

“The advice given here is not mandatory and this document 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 because natural lighting is only one of many factors in site layout design. (para. 1.6)

“Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylighting in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light”. (para. 2.2.3)

- 2.4.4 For neighbouring properties, the numerical guidance provided by the BRE identifies where reductions in daylight or sunlight may be noticeable, satisfying the first stage of two-stage approach referenced in the Mayor's Housing Design Standards. The second stage requires professional judgement by considering the retained levels of daylight and sunlight relative to the site location and wider context when assessing any impacts.

3 ASSESSMENT METHODOLOGY AND NUMERICAL GUIDELINES

3.1 Sources of Information and Assumptions

- 3.1.1 The daylight and sunlight analysis has been carried out in accordance with the assessment methodologies recommended in the BRE guide. A summary of the tests and numerical recommendations can be found below.
- 3.1.2 Our study has been undertaken by preparing a three-dimensional computer model of the site and surrounding buildings and analysing the daylight and sunlight levels received by the neighbouring buildings and within the development using our bespoke software. Our assessment is based on a visual inspection, the information detailed below and estimates of relevant distances, dimensions and levels which are as accurate as the circumstances allow.
- 3.1.3 We have received the following documents and used them in preparing our analysis and report:
- AccuCities Limited: Photogrammetric survey of the existing site and surrounding buildings received on 10 May 2024;
 - Studio Moren Architects: 3D model of the development received on 14 June 2024.
- 3.1.4 The neighbouring properties that contain residential accommodation have been identified using Valuation Office Agency (VOA) records. Any properties with a council tax entry are assumed to be in residential use. We have also assessed a neighbouring hotel and church.
- 3.1.5 We have researched the internal arrangements of the neighbouring residential properties using LBC's online planning database and property comparison websites such as Rightmove. Where floor plans are not available, we have used reasonable assumptions to model the internal arrangements and assess no sky line within the rooms. Where an educated assumption has been used to model an internal layout, the room use has been annotated with a caret (^) on the appended drawings and spreadsheets. The no sky line contour drawings show the internal arrangements used.
- 3.1.6 In accordance with the BRE guide, a working plane of 850mm above finished floor level has been used for the no sky line test.

3.2 Extent of Assessment

3.2.1 We have analysed the effect of the development on the daylight and sunlight amenity to the properties with a reasonable expectation of daylight and sunlight amenity situated around the site, namely the properties in residential use, the hotel and the church.

3.2.2 To determine whether a neighbouring existing building may be adversely affected, the initial test provided by the BRE is to establish if any part of the proposal subtends an angle of more than 25° from the lowest window serving the existing building. If this is the case then there may be an adverse effect, and more detailed calculations are required to quantify the extent of any impact. Properties further afield that comply with the preliminary 25-degree line test do not require detailed assessment, as the daylight and sunlight amenity to them would not be adversely affected.

3.3 Daylight to Neighbouring Properties

3.3.1 Daylight has been assessed using the following tests:

- **Vertical Sky Component ('VSC')** – the proportion of the sky dome that can be seen from a point in the centre of a window. The BRE guide suggests that daylighting may be adversely affected if a main window retain less than 27% VSC or less than 0.80 times the VSC in the existing conditions.
- **No Sky Line ('NSL')** – the area of the working plane in a room that can and cannot receive direct skylight. This test is sometimes termed daylight distribution. The BRE guide suggests that daylighting may be adversely affected if a habitable room retains less than 0.80 times the NSL in the existing conditions.

3.4 Sunlight to Neighbouring Properties

3.4.1 Sunlight has been assessed using the following test:

- **Annual Probable Sunlight Hours ('APSH')** – the total number of hours in the year that the sun is expected to shine on a window, allowing for average levels of cloudiness. It is recommended that a room retains at least 25% APSH, including at least 5% during the winter months, or at least 0.80 times the APSH received in the existing conditions, or have an absolute reduction in APSH of no more than 4%.

3.5 Daylight within New Development

3.5.1 The BRE guide provides two methodologies for assessing daylight within new development, Illuminance or Daylight Factor ('DF'). The key difference between the two methodologies is that DF

is based on a uniform overcast sky and illuminance uses an accurate sky model, which simulates the movement of the sun throughout the day and accounts for the weather conditions at the time.

3.5.2 As a result, the illuminance test accounts for the presence of sunlight and therefore the orientation of the rooms/windows is accounted for. A south facing room is likely to have access to higher levels of natural light than a north facing room and as a result, in order to meet the BRE guidance, a north facing room would typically need larger windows.

3.5.3 Both tests account for internally and externally reflected light and the parameters used are detailed on the drawings in Appendix D.

3.5.4 We have chosen to assess daylight using the following test, as it is more detailed and provides more realistic results:

- **Illuminance** – the median lux received to assessment points across a room over a typical year. It is recommended that rooms achieve the recommended median lux to at least 50% of the assessment points in the room for at least half of the daylight hours. The recommended median lux is 200 in kitchens, 150 in living rooms and 100 in bedrooms. In multi-use rooms, such as the proposed apart-hotel suites, the target value for living rooms can be used.

3.6 Sunlight within New Development

3.6.1 Sunlight within new development has been assessed using the following test:

- **Sunlight Exposure ('SE')** – the total number of hours on 21 March that sunlight is expected to shine on a window. It is recommended that at least one habitable room in a dwelling (ideally a main living room) should receive at least 1.5 hours of direct sunlight on 21 March. Where groups of dwellings are planned, it is acknowledged that not all the units will have access to sunlight and design should aim to maximise the number of dwellings with a main living area that meets the guidance.

4 ASSESSMENT OF SURROUNDING PROPERTIES

- 4.1 The analysis drawings and results spreadsheet for the neighbouring buildings can be found in Appendices A to C.
- 4.2 The full list of assessed properties is below and the location of all windows and rooms tested are shown on the drawings in Appendix B.
1. Hexagon Apartments, Parker Tower.
 2. Apartments 1-7, Parker Tower.
 3. 58 Parker Street.
 4. St. Anselm and St Cecelia Church.
 5. 6 and 7 Great Queen Street.
 6. Middle Eight Hotel, 66 Great Queen Street.
- 4.3 The results of our assessment show that all of the windows and rooms assessed would comply with the BRE guidelines for daylight using the VSC and NSL tests. Accordingly, the development will not cause any noticeable reductions to the daylight received to the neighbouring properties.
- 4.4 Similarly, where neighbouring rooms are served by at least one window orientated within 90-degrees of due south, all would comply with the BRE guidelines for both annual and winter sunlight.
- 4.5 In summary, in accordance with national, regional and local planning policy and the guidance provided by the BRE, the effect of the development is considered acceptable.

5 ASSESSMENT OF LIGHT LEVELS WITHIN THE DEVELOPMENT

5.1 We have analysed the daylight and sunlight availability to the proposed apart-hotel suites within the development and the results are set out below. The illuminance results, along with the location of the tested rooms and window references are shown on the drawing in Appendix D. The illuminance and sunlight exposure results spreadsheet is included in Appendix E.

5.2 Daylight

5.2.1 As outlined in Section 3, it is recommended that bedrooms achieve a median illuminance of 100 lux, living rooms a median illuminance of 150 lux and kitchens a median illuminance of 200 lux. In multi-use rooms, such as the proposed apart-hotel suites, the 150 lux target can be applied, although it could be argued that a 100 lux target is appropriate given the proposed use of the rooms.

5.2.2 The analysis results show that 54 of the 58 apart-hotel suites (93%) would comply with the BRE guidelines for daylight amenity, when applying the higher 150 lux threshold for living rooms.

5.2.3 Using the 150 lux target value, the four suites that deviate from the guidance would achieve it for between 41% and 46% of the room area, only marginally below the 50% recommendation. Applying a threshold of 100 lux, recommended for bedrooms, all 58 rooms (100%) would comply with the illuminance criteria.

5.2.4 Image 3 illustrates the illuminance result in one of the suites that does not meet the 150 lux target. The area of the room receiving higher levels of daylight are shaded yellow, orange and red with the areas where daylight is restricted shaded purple. As can be seen from the example below, the living area within the suite, located adjacent to the window, would receive high levels of daylight amenity with the bedroom at the rear of the room receiving slightly lower levels.

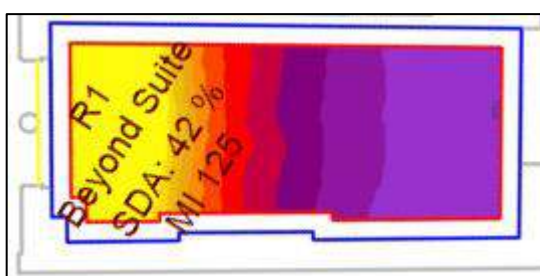


Image 3: Illuminance drawing for second floor room R1

5.2.5 As the suites would each comply with the BRE criteria using the 100 lux recommendation for bedrooms and the living area in each suite would be well-lit, we would conclude that adequate levels of daylight will be received. The levels of daylight are much higher than those often seen within hotels and residential accommodation in an inner urban location such as this.

5.3 Sunlight

- 5.3.1 Owing to the orientation of the existing building, the majority of windows are orientated in a northerly direction. With the exception of the eighth floor, there are three suites at each floor served by windows facing in a southerly direction. At eighth floor, there are two suites served by windows facing in a southerly direction.
- 5.3.2 The results show that 18 of the 23 apart-hotel suites served by south facing windows (78%) would comply with the BRE guidelines for SE, receiving well in excess of 1.5 hours of direct sunlight on 21 March.
- 5.3.3 The 5 rooms that deviate from the numerical guidelines are located at ground, first and second floors, where sunlight is obstructed by the neighbouring buildings on the opposite side of Great Queen Street. Three of these rooms will receive at least 1 hour of direct sunlight on 21 March, with the remaining rooms, both at first floor, receiving direct sunlight for 48 and 18 minutes on 21 March.
- 5.3.4 The compliance rate for SE is typical for a development in an inner urban location such as this and is largely driven by the existing obstructions around the site. It is considered that adequate levels of sunlight amenity will be received with the development, particularly given the proposed use as an apart-hotel.

6 CONCLUSION

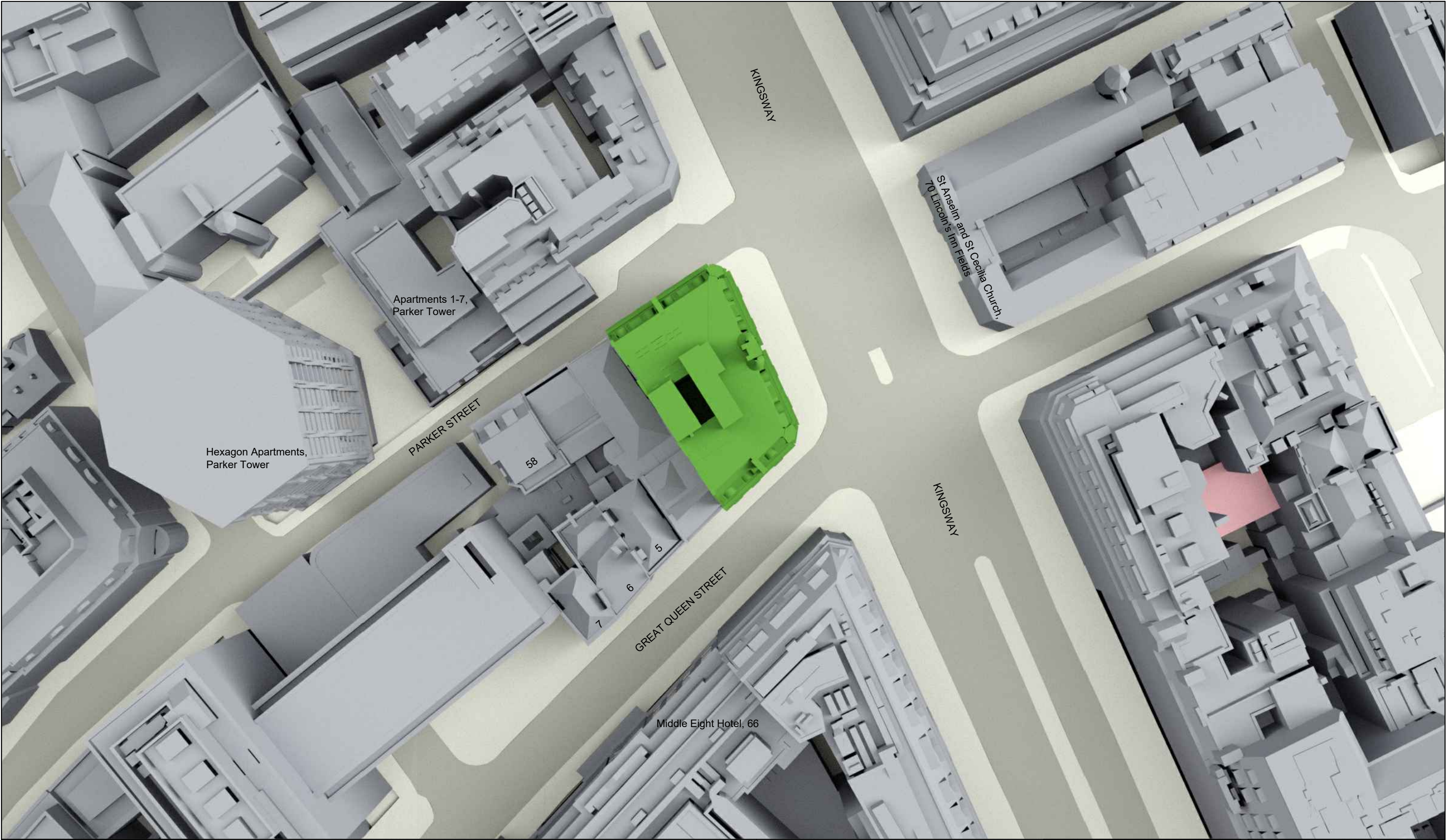
6.1 Effect on Neighbouring Residential Properties



- 6.1.1 Our analysis has been undertaken in accordance with the methodologies and recommendations given in the BRE guide and has considered the effect that the development would have on daylight and sunlight amenity to the neighbouring properties.
- 6.1.2 The results show that all the rooms assessed would fully comply with the BRE guidelines for both daylight and sunlight amenity.
- 6.1.3 Therefore, in accordance with the NPPF, London Plan, LBC's planning policy and BRE guidance, it is considered that the development would leave all the neighbouring properties with adequate levels of daylight and sunlight amenity.

6.2 Light Received within the Development

- 6.2.1 The analysis results show that 54 of the 58 apart-hotel suites (93%) will comply with the BRE guidelines when applying a target median lux of 150, which the BRE considers appropriate for living rooms. Applying a 100 lux target value, the recommendation for bedrooms, all 58 suites (100%) would comply.
- 6.2.2 The 4 suites that marginally deviate from the BRE guidelines for living rooms would each receive high levels of daylight in the living area, with the bedrooms located towards the rear of the suites.
- 6.2.3 The vast majority (78%) of apart-hotel suites that are served by at least one window orientated in a southerly direction will meet the guidelines for sunlight. This represents a high level of compliance for an apart-hotel scheme set within an inner urban environment.
- 6.2.4 In summary, the daylight and sunlight assessments demonstrate that the proposed apart-hotel suites will receive good levels of daylight and sunlight amenity, in compliance with national, regional and local planning policy and the guidance provided by the BRE.

APPENDIX A
SITE PLAN AND 3D DRAWINGS



- KEY
-  Existing buildings
 -  Surrounding buildings



SOURCES OF INFORMATION:
Studio Moren proposed scheme received on 28/06/2024

AccuCities 3d context model received on 10/05/2024

CLIENT
GMS Estates Limited

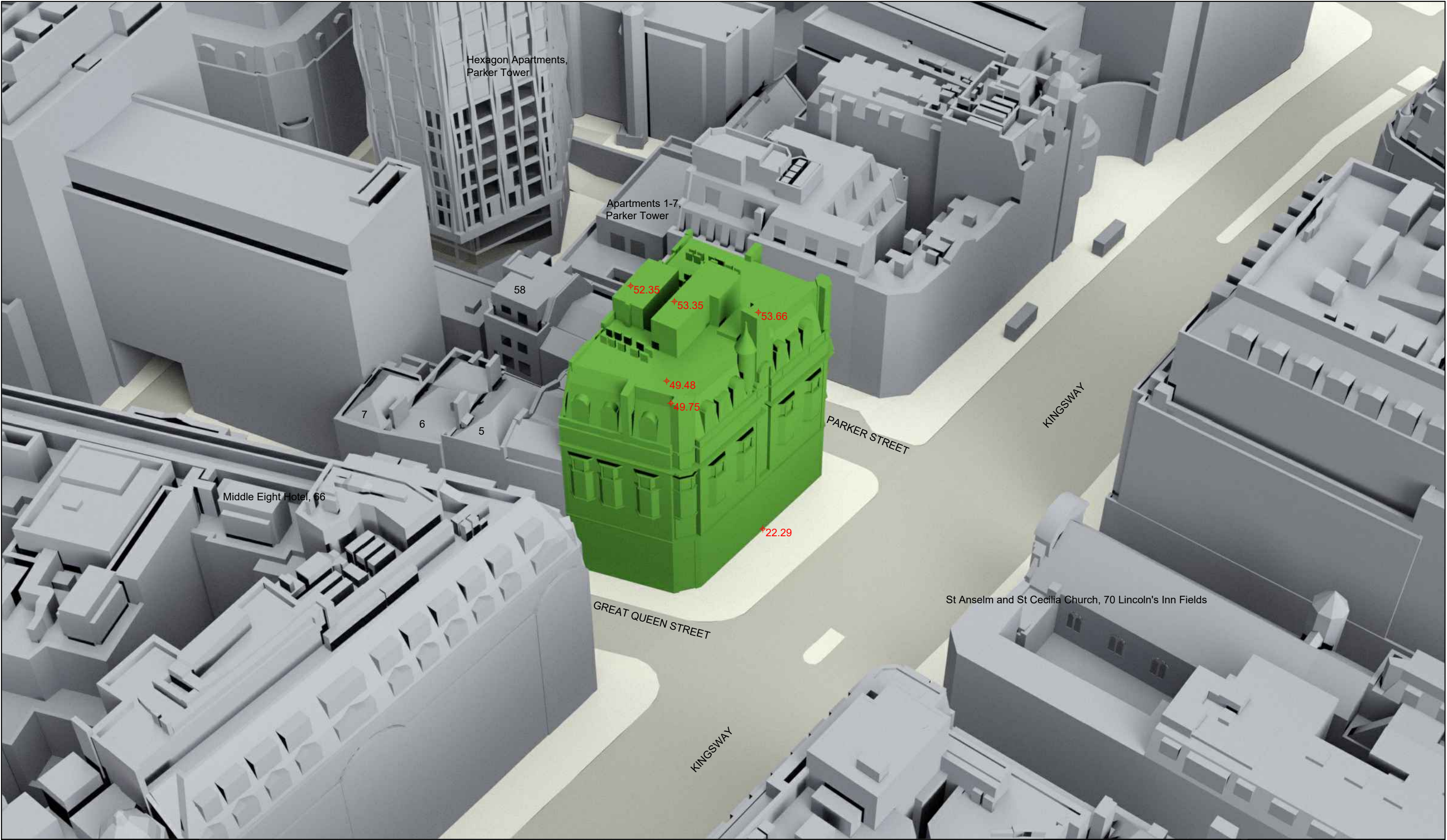
PROJECT
Kingsway House, 99-103 Kingsway,
London WC2B 6QX

DRAWING TITLE
Existing plan view

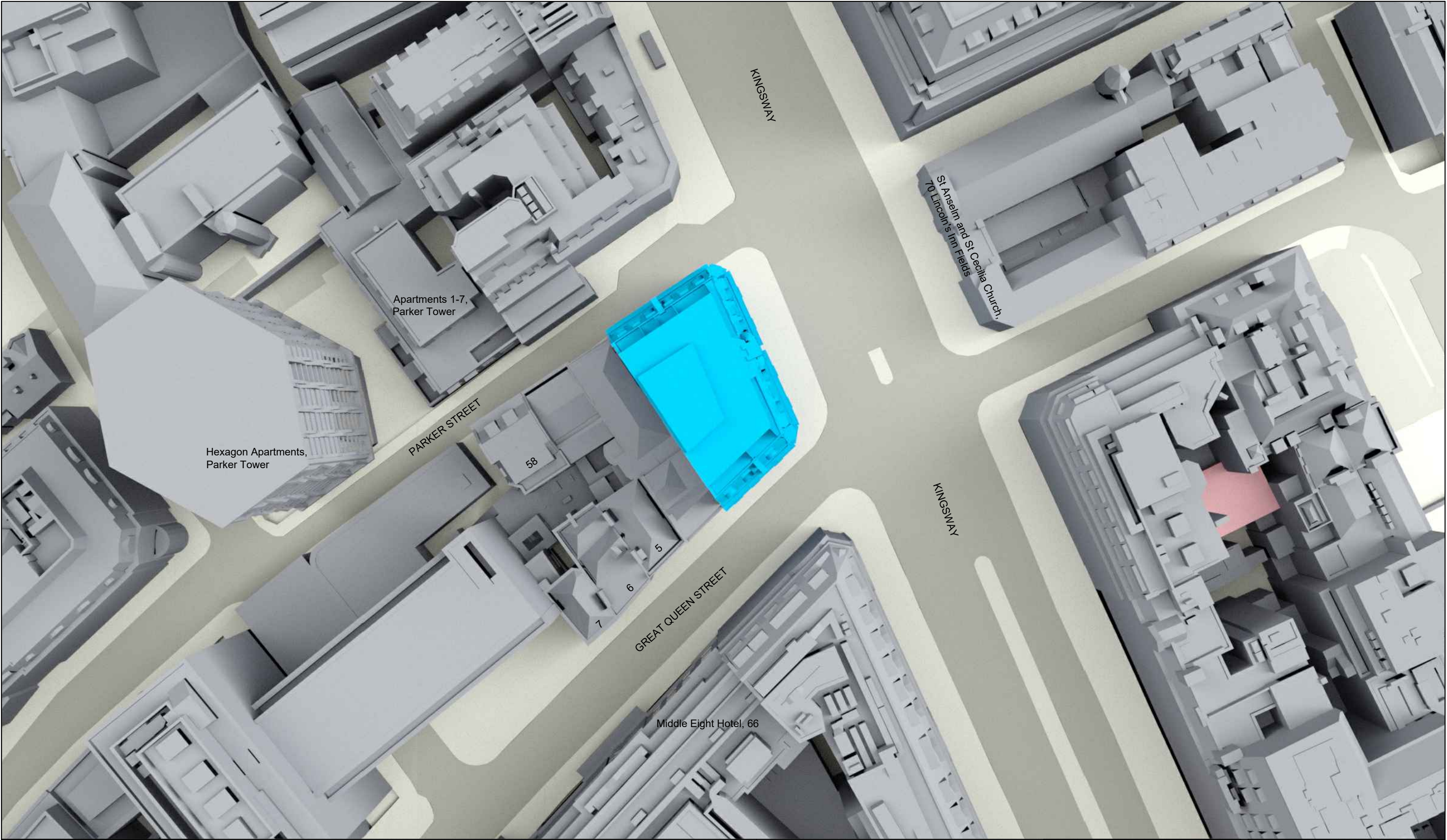
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- KEY
-  Proposed buildings
 -  Surrounding buildings



SOURCES OF INFORMATION:
Studio Moren proposed scheme received on 28/06/2024

AccuCities 3d context model received on 10/05/2024

CLIENT
GMS Estates Limited

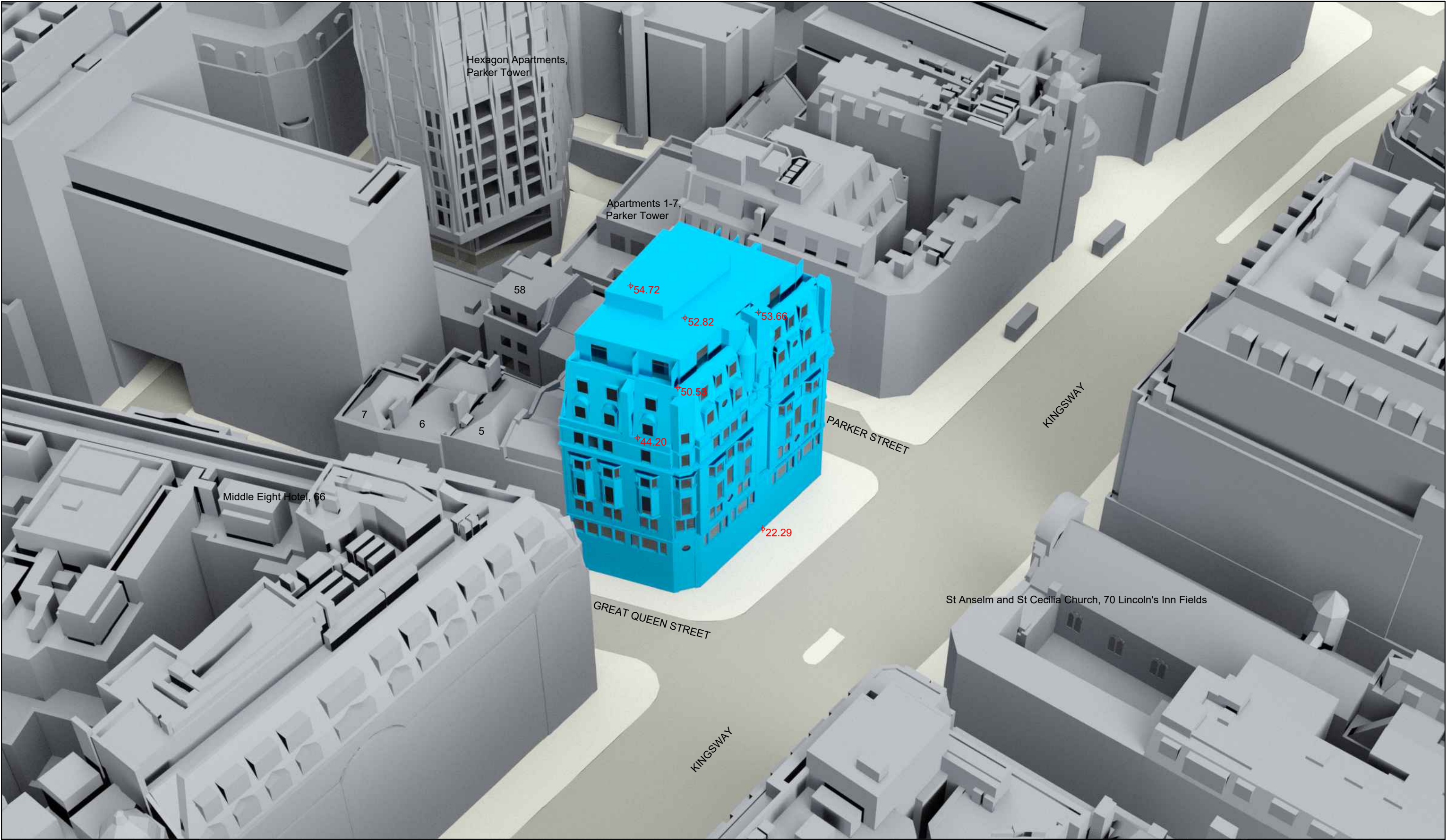
PROJECT
Kingsway House, 99-103 Kingsway,
London WC2B 6QX

DRAWING TITLE
Proposed plan view

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| DRAWN BY DR | CHECKED BY JW |

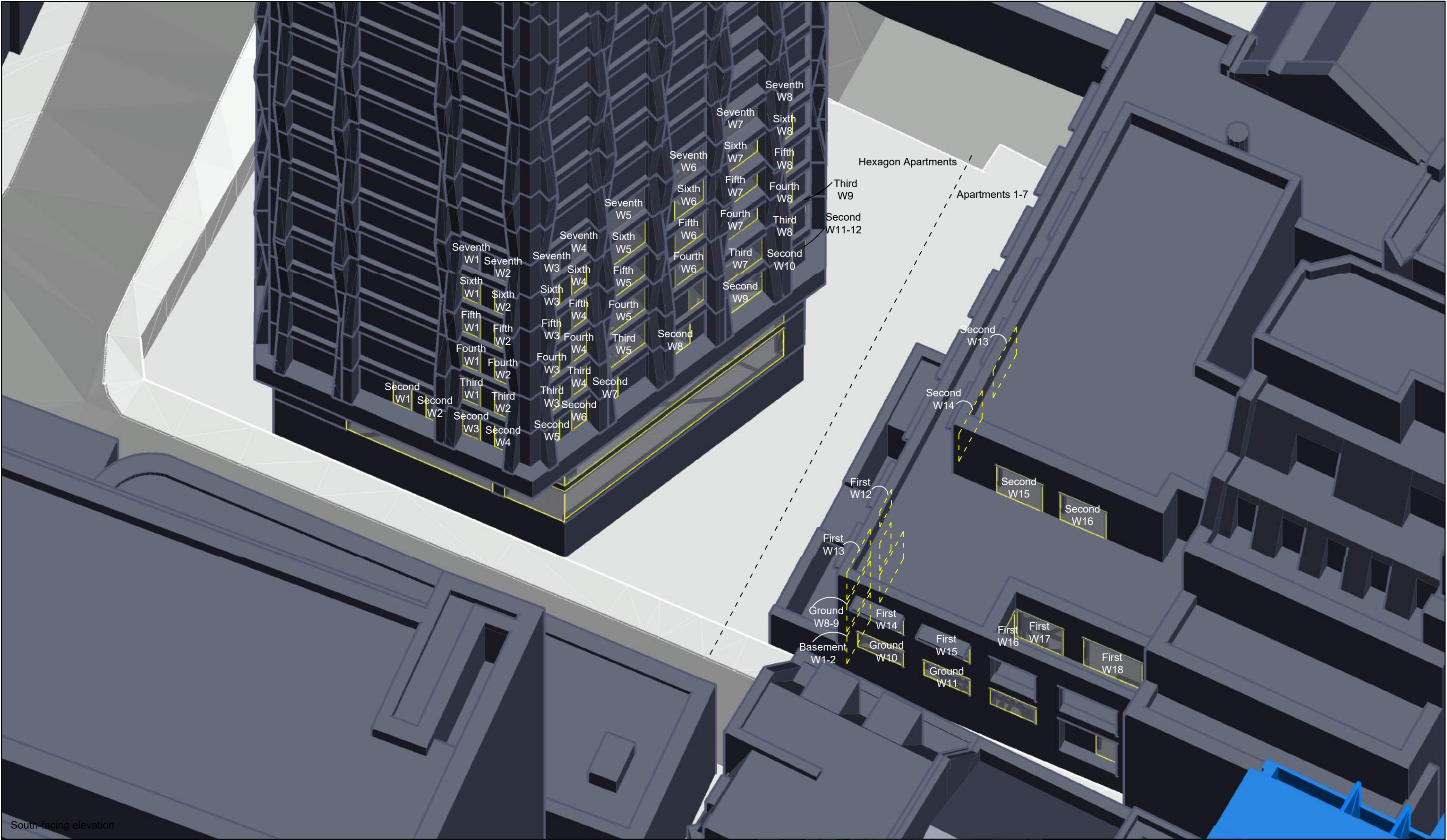
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APPENDIX B
WINDOW MAPS AND NO SKY LINE CONTOURS



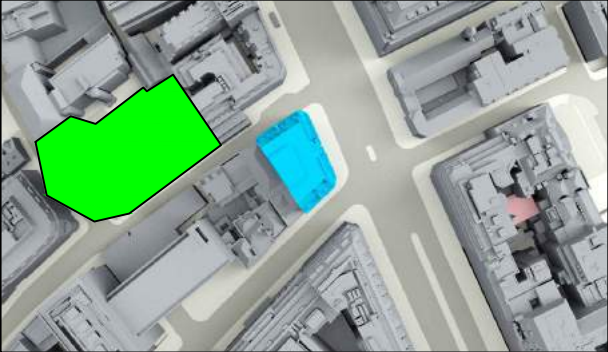
South-facing elevation

KEY

 Surrounding buildings

 Window Location

SOURCES OF INFORMATION:
Studio Moren proposed scheme received on 28/06/2024
AccuCities 3d context model received on 10/05/2024



CLIENT
GMS Estates Limited

PROJECT
Kingsway House, 99-103 Kingsway,
London WC2B 6QX

DRAWING TITLE
Window Maps
Hexagon Apartments and
Apartments 1-7, Parker Tower

SCALE
Not to scale

DATE
28/06/2024

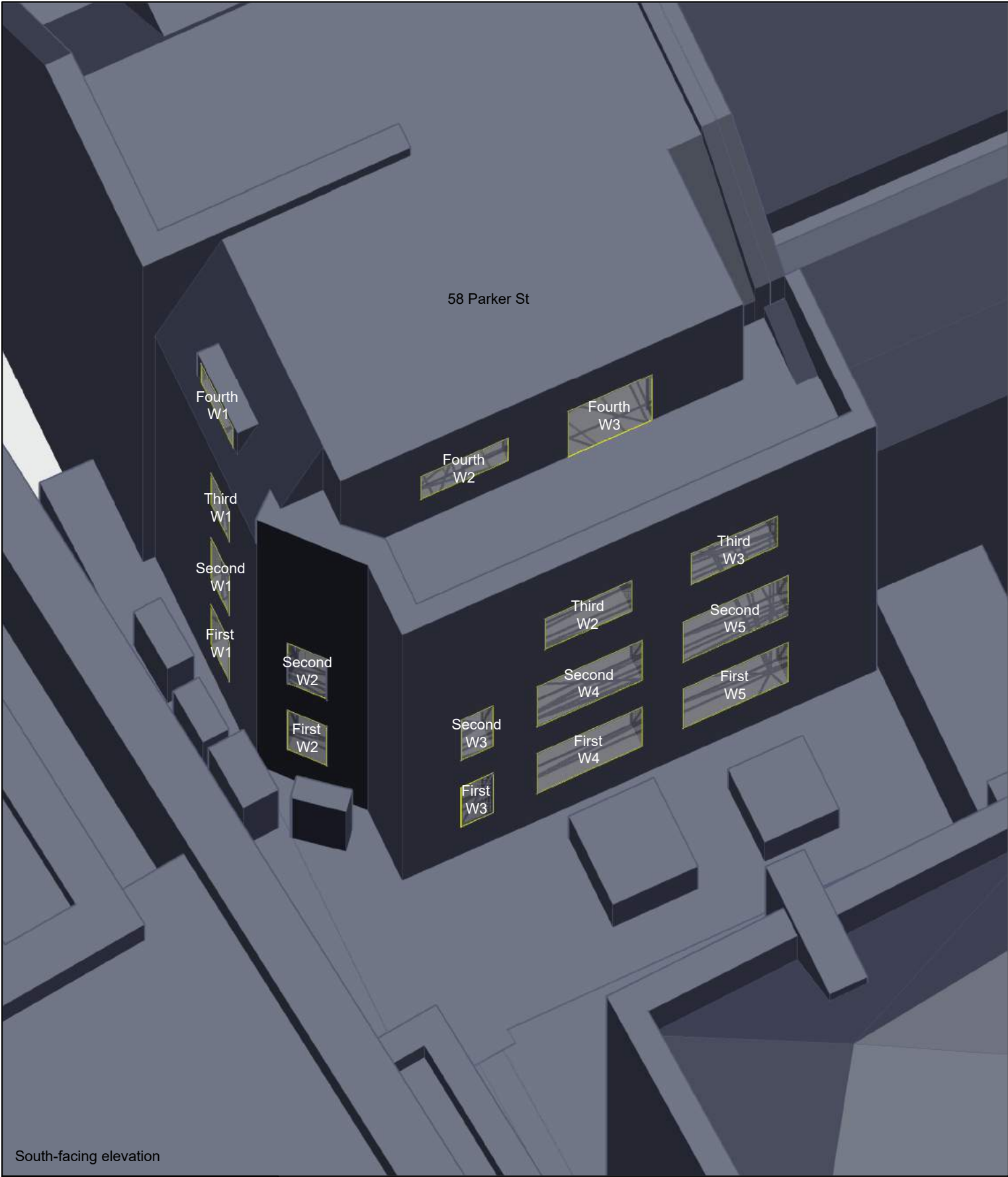
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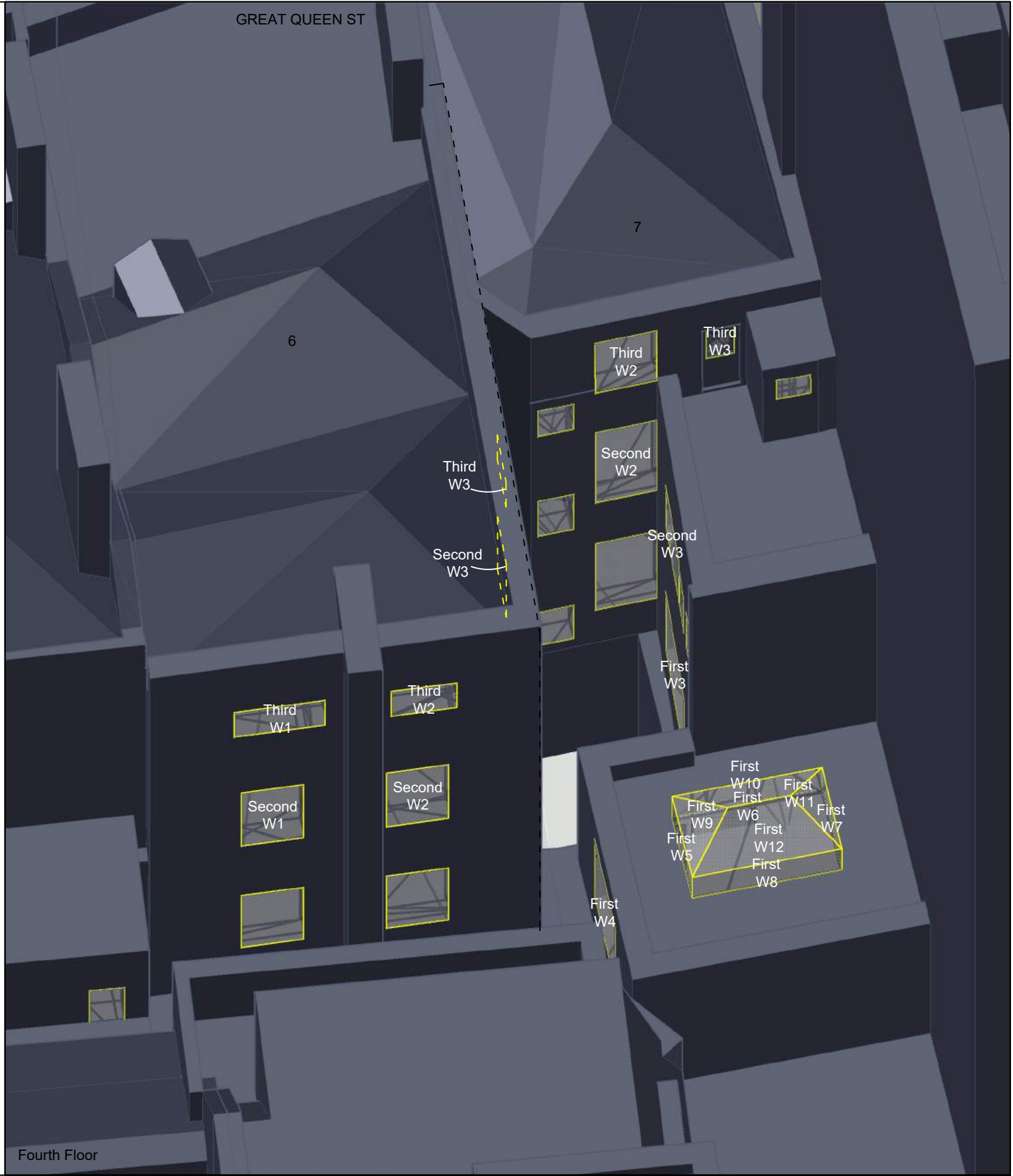
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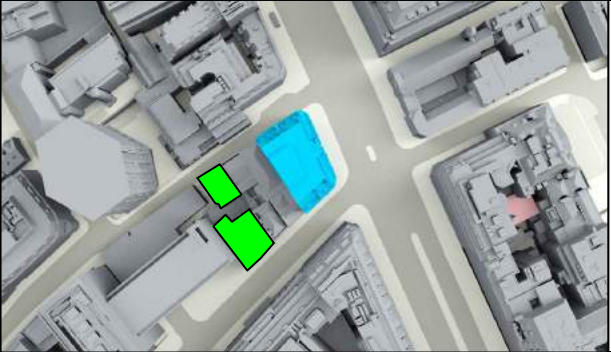
South-facing elevation



Fourth Floor

- KEY**
-  Surrounding buildings
 -  Window Location

SOURCES OF INFORMATION:
Studio Moren proposed scheme received on 28/06/2024
AccuCities 3d context model received on 10/05/2024



CLIENT
GMS Estates Limited

PROJECT
Kingsway House, 99-103 Kingsway,
London WC2B 6QX

DRAWING TITLE
Window Maps
58 Parker Street, 6-7 Great Queen
Street

SCALE
Not to scale

DATE
28/06/2024

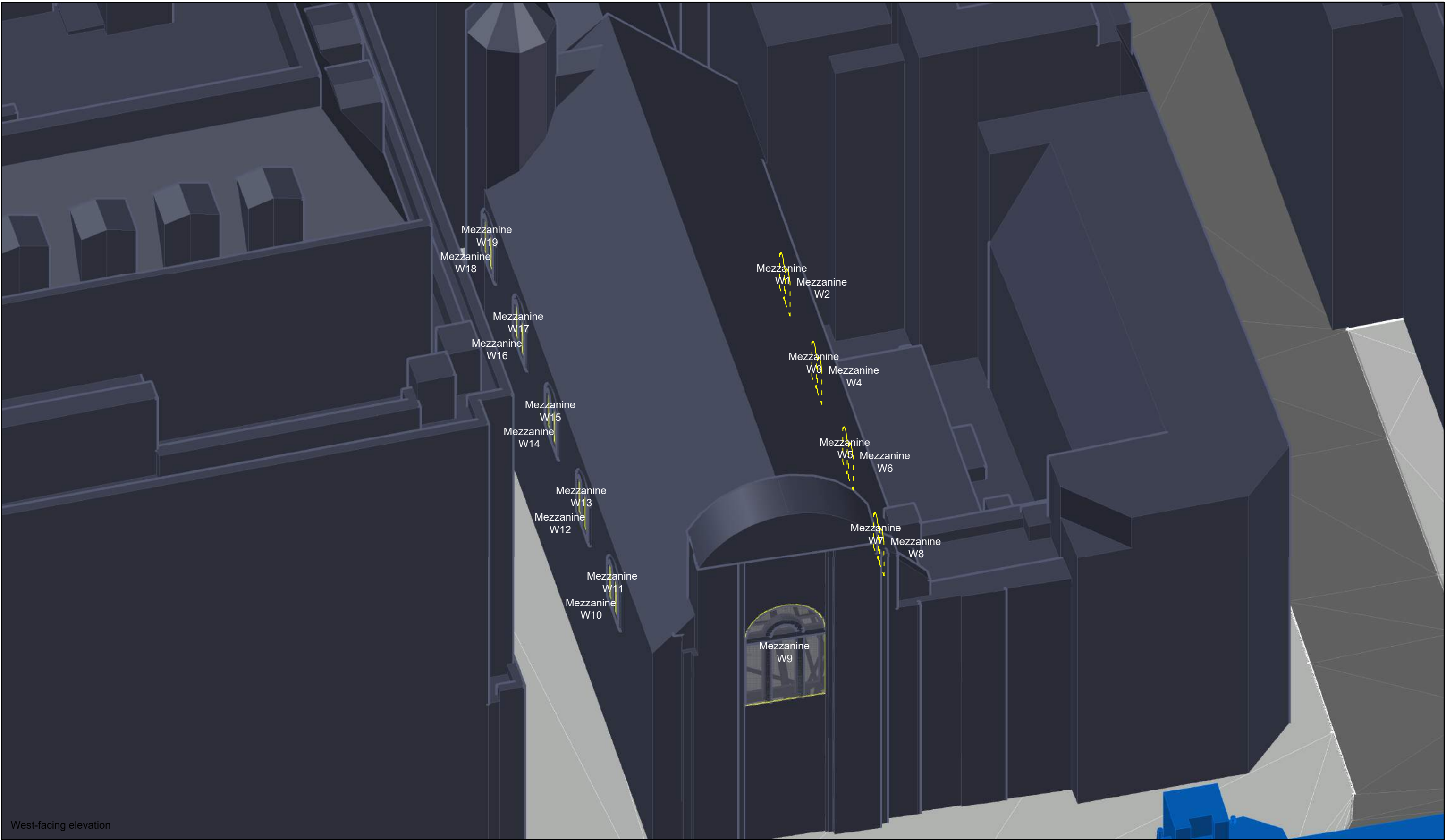
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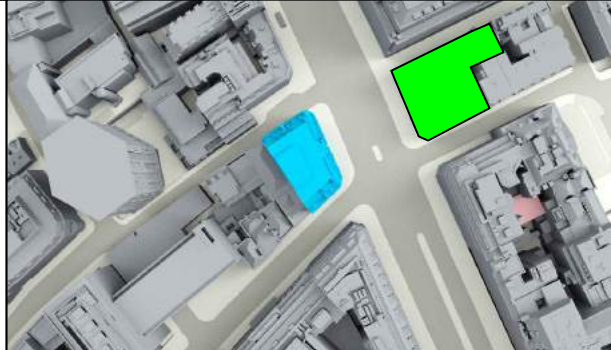
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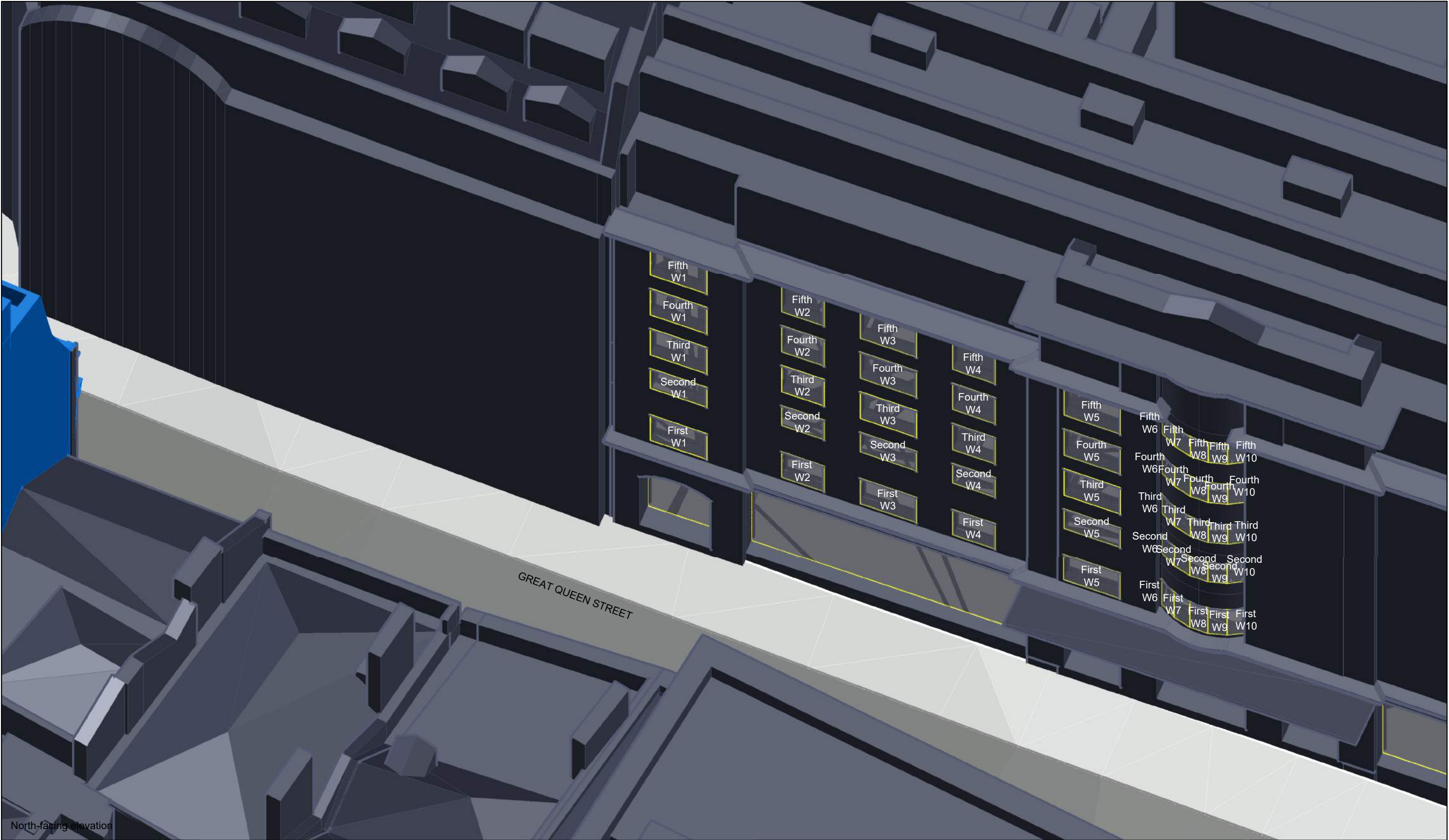
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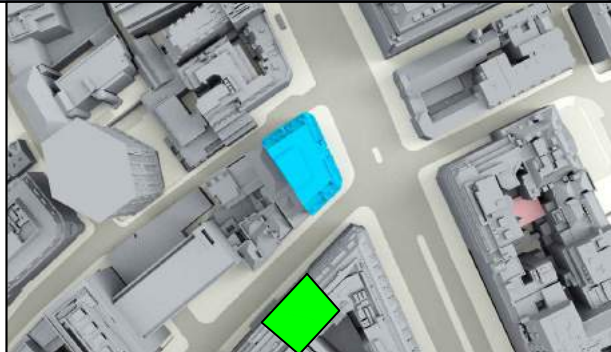


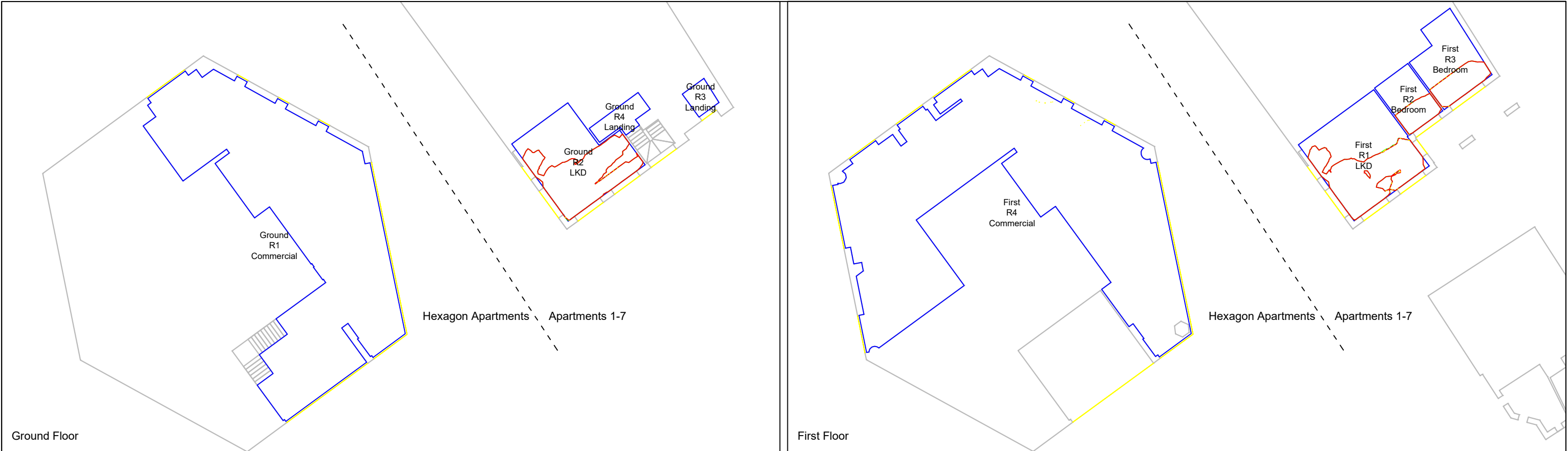
West-facing elevation

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North-facing elevation

| | | | | |
|---|---|---|--|--|
| <div>KEY</div> <div><div><div></div></div>Surrounding buildings</div> <div><div><div>XXXXXX WX</div></div>Window Location</div> | <div>SOURCES OF INFORMATION:</div> <div>Studio Moren proposed scheme received on 28/06/2024</div> <div>AccuCities 3d context model received on 10/05/2024</div> |  | <div>CLIENT</div> <div>GMS Estates Limited</div> <div>PROJECT</div> <div>Kingsway House, 99-103 Kingsway, London WC2B 6QX</div> <div>DRAWING TITLE</div> <div>Window Maps</div> <div>Middle Eight Hotel, 66 Great Queen Street</div> | <div><div>SCALE</div><div>Not to scale</div><div>DRAWN BY</div><div>DR</div></div> <div><div>DATE</div><div>28/06/2024</div><div>CHECKED BY</div><div>JW</div></div> |
| | | | <div><div>DWG No.</div><div>D+S/1/ 304</div></div> <div><div>REV.</div></div> | <div>CONSIL</div> |
| | | | | |



KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain

SOURCES OF INFORMATION:

Studio Moren proposed scheme received on 28/06/2024

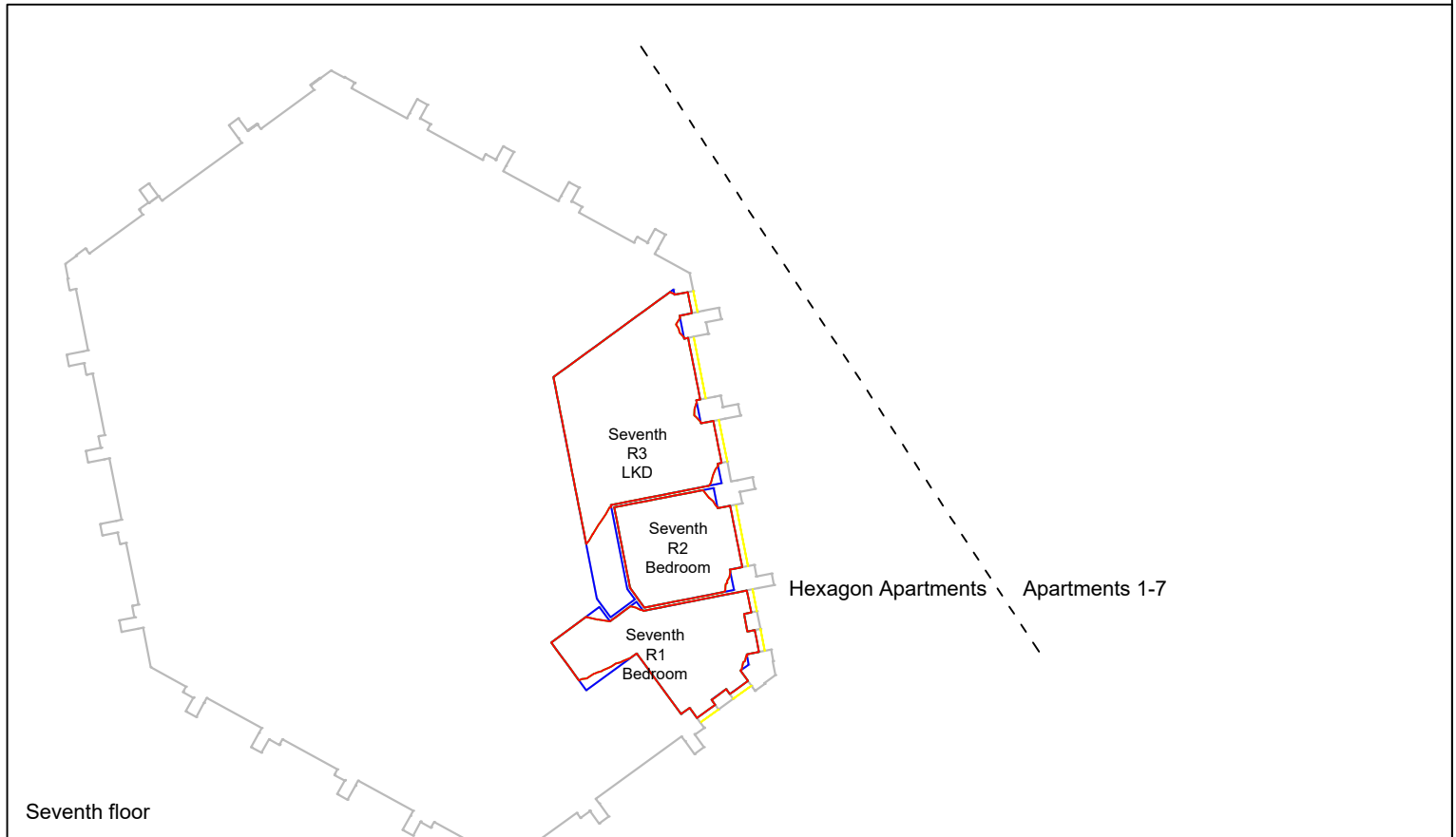
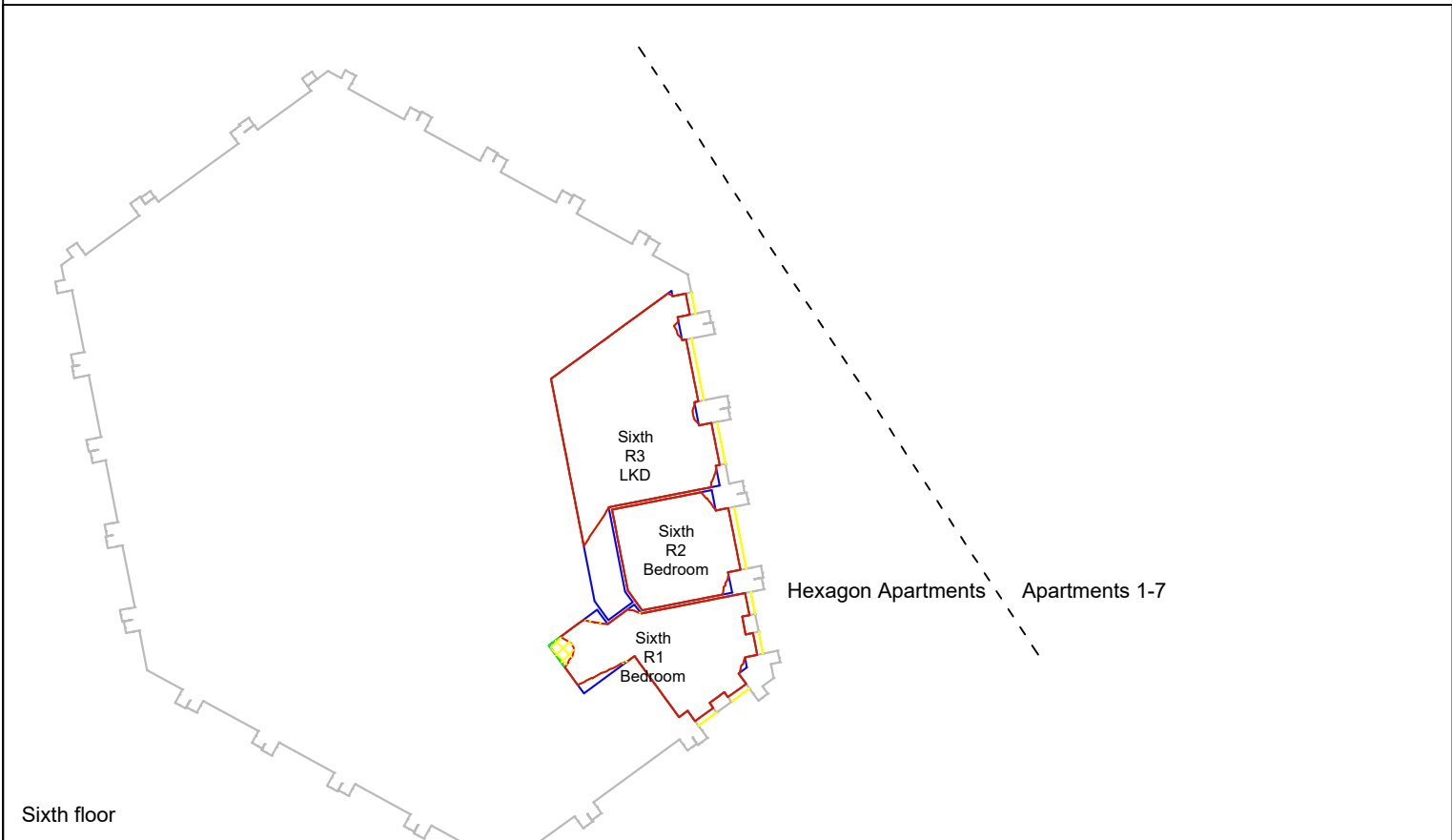
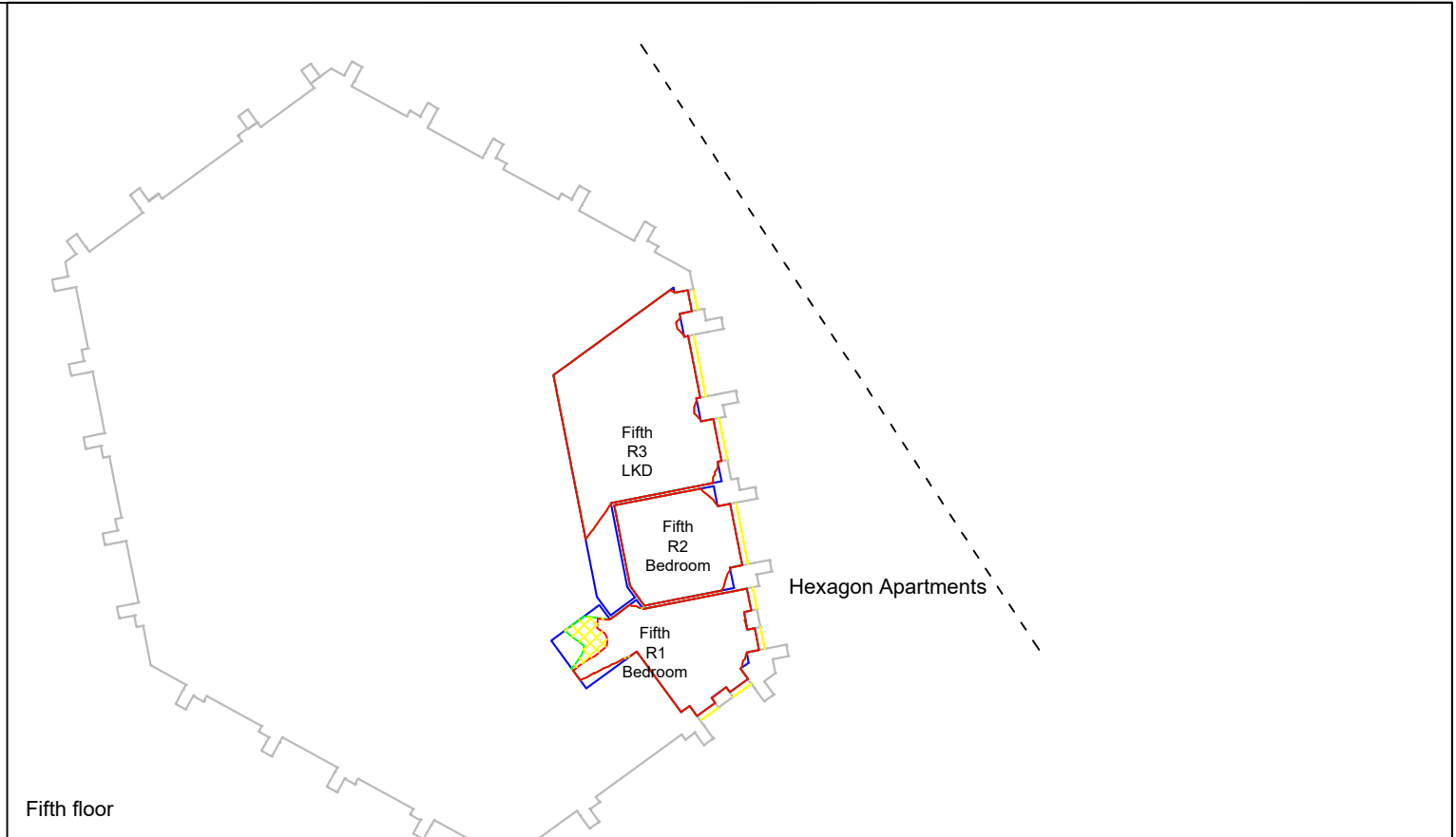
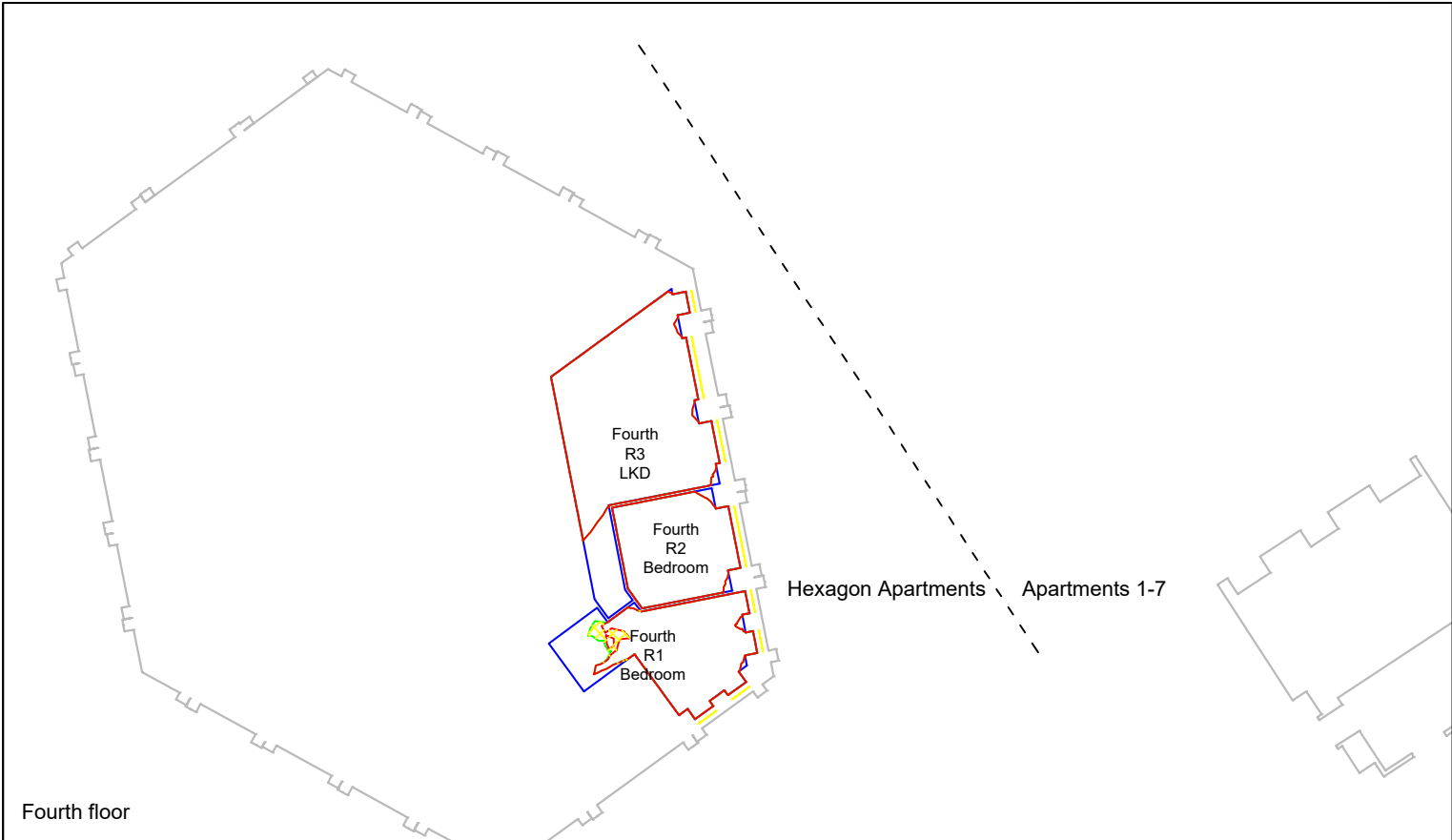
AccuCities 3d context model received on 10/05/2024

CLIENT
GMS Estates Limited

PROJECT
Kingsway House, 99-103 Kingsway,
London WC2B 6QX

DRAWING TITLE
Daylight Distribution contours
Hexagon Apartments and
Apartments 1-7, Parker Tower

| | |
|------------------------------|---------------------------|
| SCALE 1:250@A3 | DATE 28/06/2024 |
| DRAWN BY DR | CHECKED BY JW |
| DWG No. D+S/1/ 201 | REV. |

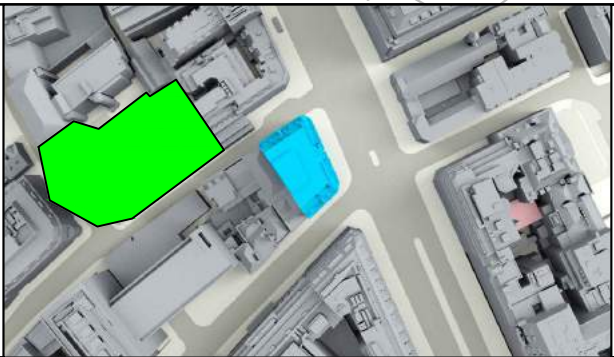


KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain

SOURCES OF INFORMATION:
Studio Moren proposed scheme received on 28/06/2024

AccuCities 3d context model received on 10/05/2024



CLIENT
GMS Estates Limited

PROJECT
Kingsway House, 99-103 Kingsway,
London WC2B 6QX

DRAWING TITLE
Daylight Distribution contours
Hexagon Apartments and
Apartments 1-7, Parker Tower

| | |
|------------------------------|---------------------------|
| SCALE 1:250@A3 | DATE 28/06/2024 |
| DRAWN BY DR | CHECKED BY JW |
| DWG No. D+S/1/ 202 | REV. |

CONSIL

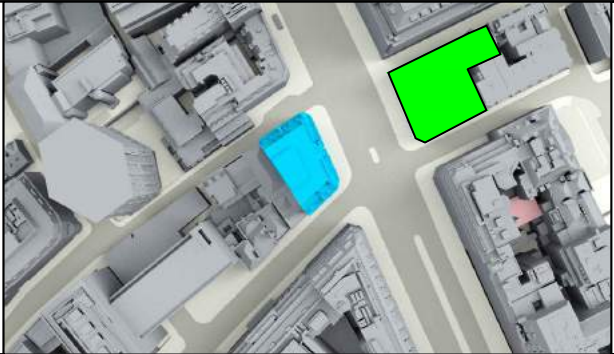




KEY

- R1 Room area
- Existing no-skyline
- Proposed no-skyline
- Area of loss / gain

SOURCES OF INFORMATION:
Studio Moren proposed scheme received on 28/06/2024
AccuCities 3d context model received on 10/05/2024



CLIENT
GMS Estates Limited

PROJECT
Kingsway House, 99-103 Kingsway,
London WC2B 6QX

DRAWING TITLE
Daylight Distribution contours
St Anselm and St Cecilia Church,
70 Lincoln's Inn Fields

| | |
|------------------------------|---------------------------|
| SCALE 1:200@A3 | DATE 28/06/2024 |
| DRAWN BY DR | CHECKED BY JW |
| DWG No. D+S/1/ 204 | REV. |



APPENDIX C
VERTICAL SKY COMPONENT, NO SKY LINE AND ANNUAL PROBABLE SUNLIGHT HOURS RESULTS
SPREADSHEET

Daylight and Sunlight Result Spreadsheet

| Room / Window Reference Number | Room Use. (Assumed*) | Vertical Sky Component (VSC) Results | | | | No Sky Line (NSL) Results | | | Annual Probable Sunlight Hours (APSH) Results (per room) | | | Winter Probable Sunlight Hours (WPSH) Results (per room) | | |
|----------------------------------|----------------------|--------------------------------------|------------------|------|--------|---------------------------|-----------------------|--------|--|----------|--------|--|----------|--------|
| | | Existing VSC (%) | Proposed VSC (%) | Loss | % Loss | Existing Lit Area (%) | Proposed Lit Area (%) | % Loss | Existing | Proposed | % Loss | Existing | Proposed | % Loss |
| Hexagon Apartments, Parker Tower | | | | | | | | | | | | | | |
| Second R1 / W1 | LKD | 11.99 | 11.82 | 0.17 | 1 | 74 | 74 | 0 | 37 | 37 | 0 | 3 | 3 | 0 |
| Second R1 / W2 | | 10.77 | 10.71 | 0.06 | 1 | | | | | | | | | |
| Second R1 / W3 | | 12.41 | 12.21 | 0.20 | 2 | | | | | | | | | |
| Second R1 / W4 | | 13.06 | 12.85 | 0.21 | 2 | | | | | | | | | |
| Second R1 / W5 | | 23.35 | 22.86 | 0.49 | 2 | | | | | | | | | |
| Second R1 / W6 | | 21.65 | 21.19 | 0.46 | 2 | | | | | | | | | |
| Second R1 / W7 | | 24.05 | 23.58 | 0.47 | 2 | | | | | | | | | |
| Second R2 / W8 | Bedroom | 24.52 | 24.03 | 0.49 | 2 | 84 | 82 | 2 | North Facing | | | | | |
| Second R3 / W9 | LKD | 25.06 | 24.60 | 0.46 | 2 | 85 | 85 | 0 | North Facing | | | | | |
| Second R3 / W10 | | 23.58 | 23.13 | 0.45 | 2 | | | | | | | | | |
| Second R3 / W11 | | 23.25 | 23.08 | 0.17 | 1 | | | | | | | | | |
| Second R3 / W12 | | 24.73 | 24.58 | 0.15 | 1 | | | | | | | | | |
| Third R1 / W1 | Bedroom | 14.41 | 14.20 | 0.21 | 1 | 98 | 98 | 1 | 38 | 38 | 0 | 1 | 1 | 0 |
| Third R1 / W2 | | 15.38 | 15.16 | 0.22 | 1 | | | | | | | | | |
| Third R1 / W3 | | 25.62 | 25.08 | 0.54 | 2 | | | | | | | | | |
| Third R1 / W4 | | 23.81 | 23.27 | 0.54 | 2 | | | | | | | | | |
| Third R2 / W5 | LKD | 26.71 | 26.18 | 0.53 | 2 | 79 | 79 | 1 | North Facing | | | | | |
| Third R4 / W7 | Bedroom | 27.76 | 27.27 | 0.49 | 2 | 98 | 98 | 0 | North Facing | | | | | |
| Third R4 / W8 | | 26.35 | 25.88 | 0.47 | 2 | | | | | | | | | |
| Third R4 / W9 | | 25.99 | 25.82 | 0.17 | 1 | | | | | | | | | |
| Fourth R1 / W1 | Bedroom | 17.30 | 17.08 | 0.22 | 1 | 81 | 78 | 4 | 48 | 48 | 0 | 5 | 5 | 0 |
| Fourth R1 / W2 | | 17.78 | 17.56 | 0.22 | 1 | | | | | | | | | |
| Fourth R1 / W3 | | 27.83 | 27.28 | 0.55 | 2 | | | | | | | | | |
| Fourth R1 / W4 | | 28.13 | 27.58 | 0.55 | 2 | | | | | | | | | |
| Fourth R2 / W5 | Bedroom | 29.04 | 28.50 | 0.54 | 2 | 98 | 98 | 0 | North Facing | | | | | |
| Fourth R3 / W6 | LKD | 29.80 | 29.28 | 0.52 | 2 | 89 | 89 | 0 | North Facing | | | | | |
| Fourth R3 / W7 | | 30.24 | 29.74 | 0.50 | 2 | | | | | | | | | |
| Fourth R3 / W8 | | 30.43 | 29.94 | 0.49 | 2 | | | | | | | | | |
| Fifth R1 / W1 | Bedroom | 19.17 | 18.96 | 0.21 | 1 | 92 | 85 | 8 | 51 | 49 | 4 | 4 | 4 | 0 |
| Fifth R1 / W2 | | 19.56 | 19.36 | 0.20 | 1 | | | | | | | | | |
| Fifth R1 / W3 | | 29.38 | 28.82 | 0.56 | 2 | | | | | | | | | |
| Fifth R1 / W4 | | 30.17 | 29.62 | 0.55 | 2 | | | | | | | | | |
| Fifth R2 / W5 | Bedroom | 30.90 | 30.36 | 0.54 | 2 | 98 | 98 | 0 | North Facing | | | | | |
| Fifth R3 / W6 | LKD | 31.78 | 31.26 | 0.52 | 2 | 89 | 89 | 0 | North Facing | | | | | |
| Fifth R3 / W7 | | 31.83 | 31.33 | 0.50 | 2 | | | | | | | | | |
| Fifth R3 / W8 | | 32.50 | 32.02 | 0.48 | 1 | | | | | | | | | |
| Sixth R1 / W1 | Bedroom | 23.16 | 22.95 | 0.21 | 1 | 96 | 94 | 3 | 64 | 63 | 2 | 11 | 11 | 0 |
| Sixth R1 / W2 | | 23.61 | 23.40 | 0.21 | 1 | | | | | | | | | |
| Sixth R1 / W3 | | 32.12 | 31.57 | 0.55 | 2 | | | | | | | | | |
| Sixth R1 / W4 | | 32.71 | 32.16 | 0.55 | 2 | | | | | | | | | |

Daylight and Sunlight Result Spreadsheet

| Room / Window Reference Number | Room Use. (Assumed*) | Vertical Sky Component (VSC) Results | | | | No Sky Line (NSL) Results | | | Annual Probable Sunlight Hours (APSH) Results (per room) | | | Winter Probable Sunlight Hours (WPSH) Results (per room) | | |
|--------------------------------|----------------------|--------------------------------------|------------------|------|--------|---------------------------|-----------------------|--------|--|----------|--------|--|----------|--------|
| | | Existing VSC (%) | Proposed VSC (%) | Loss | % Loss | Existing Lit Area (%) | Proposed Lit Area (%) | % Loss | Existing | Proposed | % Loss | Existing | Proposed | % Loss |
| Sixth R2 / W5 | Bedroom | 33.29 | 32.75 | 0.54 | 2 | 98 | 98 | 0 | North Facing | | | | | |
| Sixth R3 / W6 | LKD | 33.90 | 33.40 | 0.50 | 1 | 89 | 89 | 0 | North Facing | | | | | |
| Sixth R3 / W7 | | 34.22 | 33.74 | 0.48 | 1 | | | | | | | | | |
| Sixth R3 / W8 | | 34.57 | 34.10 | 0.47 | 1 | | | | | | | | | |
| Seventh R1 / W1 | Bedroom | 26.91 | 26.71 | 0.20 | 1 | 96 | 96 | 0 | 64 | 64 | 0 | 14 | 14 | 0 |
| Seventh R1 / W2 | | 27.54 | 27.33 | 0.21 | 1 | | | | | | | | | |
| Seventh R1 / W3 | | 34.36 | 33.84 | 0.52 | 2 | | | | | | | | | |
| Seventh R1 / W4 | | 33.81 | 33.29 | 0.52 | 2 | | | | | | | | | |
| Seventh R2 / W5 | Bedroom | 35.00 | 34.49 | 0.51 | 1 | 98 | 98 | 0 | North Facing | | | | | |
| Seventh R3 / W6 | LKD | 35.17 | 34.69 | 0.48 | 1 | 89 | 89 | 0 | North Facing | | | | | |
| Seventh R3 / W7 | | 35.51 | 35.04 | 0.47 | 1 | | | | | | | | | |
| Seventh R3 / W8 | | 35.11 | 34.67 | 0.44 | 1 | | | | | | | | | |

Apartments 1-7, Parker Tower

| | | | | | | | | | | | | | | |
|------------------|---------|-------|-------|------|---|----|----|---|----|----|---|---|---|-----|
| Basement R1 / W1 | Bedroom | 1.49 | 1.49 | 0.00 | 0 | 12 | 12 | 0 | 6 | 6 | 0 | 0 | 0 | 100 |
| Basement R2 / W2 | Bedroom | 4.87 | 4.87 | 0.00 | 0 | 26 | 26 | 0 | 10 | 10 | 0 | 0 | 0 | 100 |
| Ground R2 / W8 | LKD | 3.23 | 3.23 | 0.00 | 0 | 56 | 56 | 0 | 22 | 22 | 0 | 3 | 3 | 0 |
| Ground R2 / W9 | | 5.63 | 5.63 | 0.00 | 0 | | | | | | | | | |
| Ground R2 / W10 | | 8.08 | 7.95 | 0.13 | 2 | | | | | | | | | |
| Ground R2 / W11 | | 6.91 | 6.77 | 0.14 | 2 | | | | | | | | | |
| First R1 / W12 | LKD | 1.34 | 1.34 | 0.00 | 0 | 50 | 50 | 0 | 17 | 17 | 0 | 2 | 2 | 0 |
| First R1 / W13 | | 4.04 | 4.04 | 0.00 | 0 | | | | | | | | | |
| First R1 / W14 | | 1.97 | 1.93 | 0.04 | 2 | | | | | | | | | |
| First R1 / W15 | | 1.02 | 0.99 | 0.03 | 3 | | | | | | | | | |
| First R1 / W16 | | 7.09 | 7.06 | 0.03 | 0 | | | | | | | | | |
| First R2 / W17 | Bedroom | 6.77 | 6.59 | 0.18 | 3 | 41 | 41 | 0 | 5 | 5 | 0 | 0 | 0 | 100 |
| First R3 / W18 | Bedroom | 8.02 | 7.88 | 0.14 | 2 | 33 | 33 | 0 | 17 | 17 | 0 | 0 | 0 | 100 |
| Second R4 / W13 | LKD | 4.80 | 4.80 | 0.00 | 0 | 87 | 87 | 0 | 37 | 34 | 8 | 5 | 5 | 0 |
| Second R4 / W14 | | 4.82 | 4.82 | 0.00 | 0 | | | | | | | | | |
| Second R4 / W15 | | 17.62 | 17.21 | 0.41 | 2 | | | | | | | | | |
| Second R4 / W16 | | 17.43 | 17.00 | 0.43 | 2 | | | | | | | | | |

58 Parker St

| | | | | | | | | | | | | | | |
|----------------|---------|-------|-------|------|---|----|----|---|----|----|---|---|---|-----|
| First R1 / W1 | Bedroom | 7.29 | 7.29 | 0.00 | 0 | 60 | 60 | 0 | 21 | 21 | 0 | 1 | 1 | 0 |
| First R1 / W2 | | 7.58 | 7.58 | 0.00 | 0 | | | | | | | | | |
| First R1 / W3 | | 6.09 | 5.97 | 0.12 | 2 | | | | | | | | | |
| First R2 / W4 | Bedroom | 5.41 | 5.27 | 0.14 | 3 | 31 | 31 | 0 | 2 | 2 | 0 | 0 | 0 | 100 |
| First R2 / W5 | | 5.43 | 5.29 | 0.14 | 3 | | | | | | | | | |
| Second R1 / W1 | Bedroom | 11.02 | 11.02 | 0.00 | 0 | 85 | 85 | 0 | 28 | 28 | 0 | 3 | 3 | 0 |
| Second R1 / W2 | | 9.61 | 9.61 | 0.00 | 0 | | | | | | | | | |
| Second R1 / W3 | | 10.05 | 9.88 | 0.17 | 2 | | | | | | | | | |
| Second R2 / W4 | Bedroom | 9.45 | 9.27 | 0.18 | 2 | 61 | 61 | 0 | 16 | 16 | 0 | 1 | 1 | 0 |
| Second R2 / W5 | | 9.64 | 9.45 | 0.19 | 2 | | | | | | | | | |

Daylight and Sunlight Result Spreadsheet

| Room / Window Reference Number | Room Use. (Assumed*) | Vertical Sky Component (VSC) Results | | | | No Sky Line (NSL) Results | | | Annual Probable Sunlight Hours (APSH) Results (per room) | | | Winter Probable Sunlight Hours (WPSH) Results (per room) | | |
|--|----------------------|--------------------------------------|------------------|------|--------|---------------------------|-----------------------|--------|--|----------|--------|--|----------|--------|
| | | Existing VSC (%) | Proposed VSC (%) | Loss | % Loss | Existing Lit Area (%) | Proposed Lit Area (%) | % Loss | Existing | Proposed | % Loss | Existing | Proposed | % Loss |
| Third R1 / W1 | Bedroom | 12.09 | 12.09 | 0.00 | 0 | 81 | 81 | 0 | 51 | 51 | 0 | 6 | 6 | 0 |
| Third R1 / W2 | | 16.98 | 16.75 | 0.23 | 1 | | | | | | | | | |
| Third R1 / W3 | | 17.59 | 17.33 | 0.26 | 1 | | | | | | | | | |
| Fourth R1 / W1 | Bedroom | 13.05 | 13.05 | 0.00 | 0 | 99 | 98 | 0 | 57 | 56 | 2 | 9 | 9 | 0 |
| Fourth R1 / W2 | | 19.88 | 19.57 | 0.31 | 2 | | | | | | | | | |
| Fourth R1 / W3 | | 20.52 | 20.18 | 0.34 | 2 | | | | | | | | | |
| St Anselm and St Cecilia Church, 70 Lincoln's Inn Fields | | | | | | | | | | | | | | |
| Mezzanine R2 / W1 | Gallery | 11.95 | 11.94 | 0.01 | 0 | 96 | 96 | 0 | 70 | 70 | 0 | 14 | 14 | 0 |
| Mezzanine R2 / W2 | | 13.11 | 13.09 | 0.02 | 0 | | | | | | | | | |
| Mezzanine R2 / W3 | | 17.32 | 17.30 | 0.02 | 0 | | | | | | | | | |
| Mezzanine R2 / W4 | | 17.94 | 17.92 | 0.02 | 0 | | | | | | | | | |
| Mezzanine R2 / W5 | | 19.55 | 19.52 | 0.03 | 0 | | | | | | | | | |
| Mezzanine R2 / W6 | | 19.69 | 19.66 | 0.03 | 0 | | | | | | | | | |
| Mezzanine R2 / W7 | | 17.71 | 17.71 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W8 | | 16.06 | 16.06 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W9 | | 27.12 | 26.68 | 0.44 | 2 | | | | | | | | | |
| Mezzanine R2 / W10 | | 7.03 | 7.03 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W11 | | 6.24 | 6.24 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W12 | | 3.93 | 3.93 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W13 | | 3.61 | 3.61 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W14 | | 2.96 | 2.96 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W15 | | 2.87 | 2.87 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W16 | | 2.67 | 2.67 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W17 | | 2.65 | 2.65 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W18 | | 2.54 | 2.54 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R2 / W19 | | 2.18 | 2.18 | 0.00 | 0 | | | | | | | | | |

Daylight and Sunlight Result Spreadsheet

| Room / Window Reference Number | Room Use. (Assumed*) | Vertical Sky Component (VSC) Results | | | | No Sky Line (NSL) Results | | | Annual Probable Sunlight Hours (APSH) Results (per room) | | | Winter Probable Sunlight Hours (WPSH) Results (per room) | | |
|--------------------------------|----------------------|--------------------------------------|------------------|------|--------|---------------------------|-----------------------|--------|--|----------|--------|--|----------|--------|
| | | Existing VSC (%) | Proposed VSC (%) | Loss | % Loss | Existing Lit Area (%) | Proposed Lit Area (%) | % Loss | Existing | Proposed | % Loss | Existing | Proposed | % Loss |
| Mezzanine R1 / W1 | Nave | 11.95 | 11.94 | 0.01 | 0 | 70 | 70 | 0 | 70 | 70 | 0 | 14 | 14 | 0 |
| Mezzanine R1 / W2 | | 13.11 | 13.09 | 0.02 | 0 | | | | | | | | | |
| Mezzanine R1 / W3 | | 17.32 | 17.30 | 0.02 | 0 | | | | | | | | | |
| Mezzanine R1 / W4 | | 17.94 | 17.92 | 0.02 | 0 | | | | | | | | | |
| Mezzanine R1 / W5 | | 19.55 | 19.52 | 0.03 | 0 | | | | | | | | | |
| Mezzanine R1 / W6 | | 19.69 | 19.66 | 0.03 | 0 | | | | | | | | | |
| Mezzanine R1 / W7 | | 17.71 | 17.71 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W8 | | 16.06 | 16.06 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W9 | | 27.12 | 26.68 | 0.44 | 2 | | | | | | | | | |
| Mezzanine R1 / W10 | | 7.03 | 7.03 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W11 | | 6.24 | 6.24 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W12 | | 3.93 | 3.93 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W13 | | 3.61 | 3.61 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W14 | | 2.96 | 2.96 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W15 | | 2.87 | 2.87 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W16 | | 2.67 | 2.67 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W17 | | 2.65 | 2.65 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W18 | | 2.54 | 2.54 | 0.00 | 0 | | | | | | | | | |
| Mezzanine R1 / W19 | | 2.18 | 2.18 | 0.00 | 0 | | | | | | | | | |
| 6 Great Queen St | | | | | | | | | | | | | | |
| Second R1 / W2 | KD | 9.09 | 9.09 | 0.00 | 0 | 31 | 31 | 0 | 1 | 1 | 0 | 0 | 0 | 100 |
| Second R1 / W3 | | 1.56 | 1.56 | 0.00 | 0 | | | | | | | | | |
| Second R2 / W1 | Bedroom | 11.89 | 11.69 | 0.20 | 2 | 26 | 26 | 0 | North Facing | | | | | |
| Third R1 / W2 | Bedroom | 15.79 | 15.79 | 0.00 | 0 | 39 | 39 | 0 | 8 | 8 | 0 | 0 | 0 | 100 |
| Third R1 / W3 | | 2.99 | 2.99 | 0.00 | 0 | | | | | | | | | |
| Third R2 / W1 | Bedroom | 18.56 | 18.28 | 0.28 | 2 | 41 | 41 | 0 | North Facing | | | | | |
| 7 Great Queen St | | | | | | | | | | | | | | |
| First R3 / W3 | LKD | 2.33 | 2.33 | 0.00 | 0 | 93 | 93 | 0 | 4 | 4 | 0 | 0 | 0 | 100 |
| First R3 / W4 | | 4.83 | 4.42 | 0.41 | 8 | | | | | | | | | |
| First R3 / W5 | | 7.23 | 6.79 | 0.44 | 6 | | | | | | | | | |
| First R3 / W6 | | 1.14 | 1.14 | 0.00 | 0 | | | | | | | | | |
| First R3 / W7 | | 0.21 | 0.21 | 0.00 | 0 | | | | | | | | | |
| First R3 / W8 | | 10.22 | 10.13 | 0.09 | 1 | | | | | | | | | |
| First R3 / W9 | | 30.99 | 30.38 | 0.61 | 2 | | | | | | | | | |
| First R3 / W10 | | 16.71 | 16.52 | 0.19 | 1 | | | | | | | | | |
| First R3 / W11 | | 16.13 | 16.12 | 0.01 | 0 | | | | | | | | | |
| First R3 / W12 | | 31.74 | 31.31 | 0.43 | 1 | | | | | | | | | |
| Second R2 / W2 | | Living Room | 9.65 | 9.65 | 0.00 | | | | | | | | | |
| Second R3 / W3 | Kitchen | 5.81 | 5.81 | 0.00 | 0 | 56 | 56 | 0 | North Facing | | | | | |
| Thirld R2 / W2 | LKD | 16.95 | 16.70 | 0.25 | 1 | 89 | 89 | 0 | North Facing | | | | | |
| Third R2 / W3 | | 16.44 | 16.21 | 0.23 | 1 | | | | | | | | | |

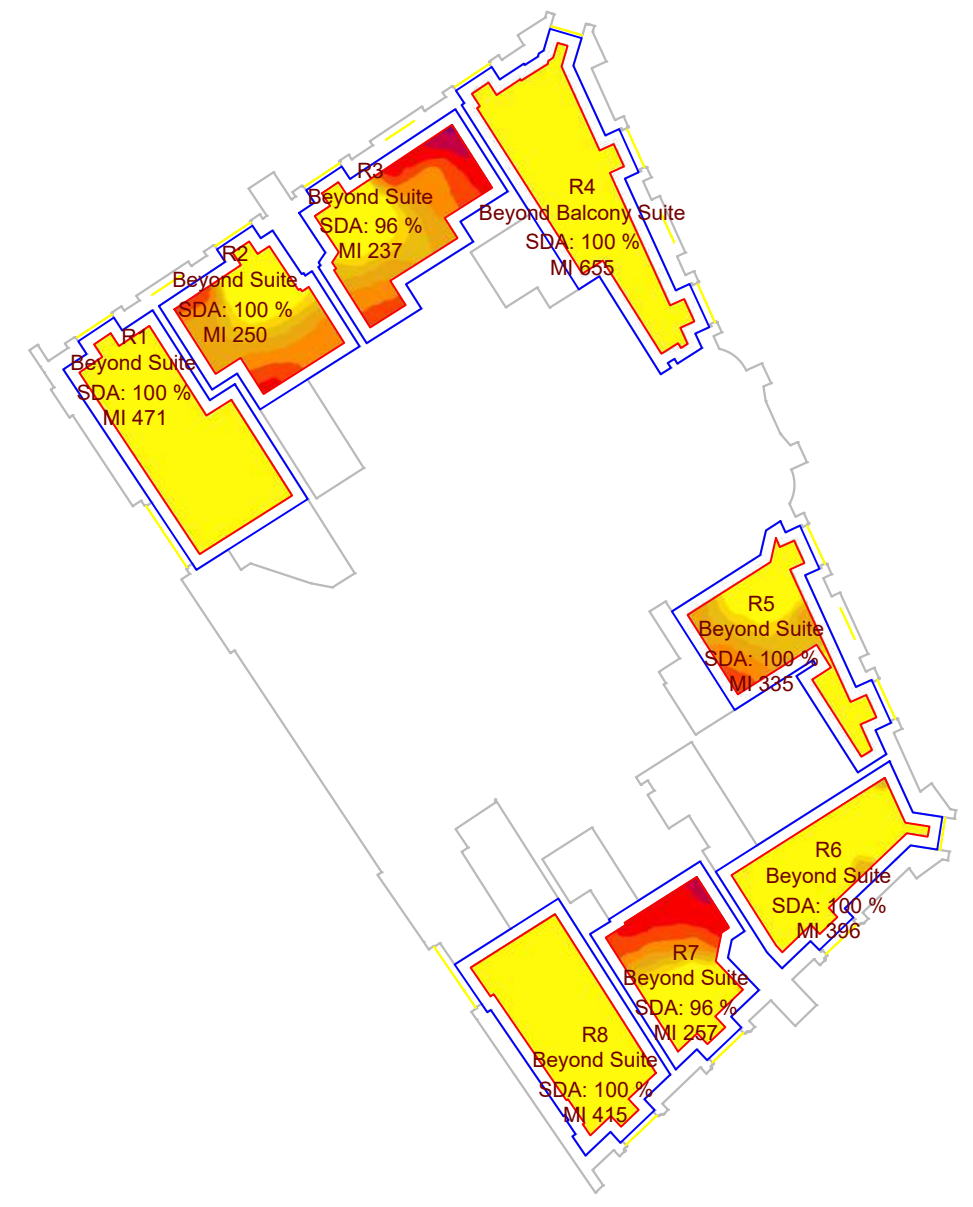
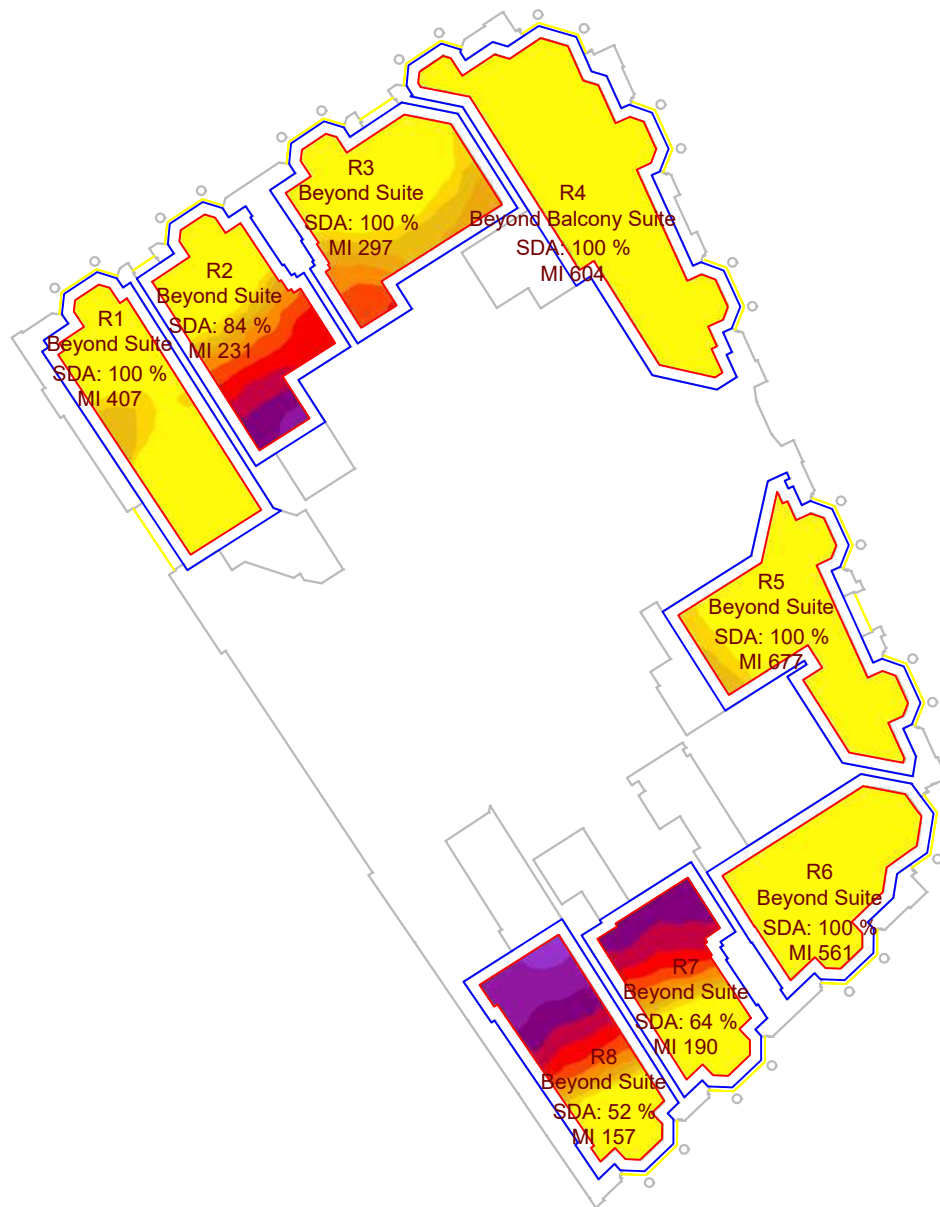
Daylight and Sunlight Result Spreadsheet

| Room / Window Reference Number | Room Use. (Assumed*) | Vertical Sky Component (VSC) Results | | | | No Sky Line (NSL) Results | | | Annual Probable Sunlight Hours (APSH) Results (per room) | | | Winter Probable Sunlight Hours (WPSH) Results (per room) | | |
|---|----------------------|--------------------------------------|------------------|------|--------|---------------------------|-----------------------|--------|--|----------|--------|--|----------|--------|
| | | Existing VSC (%) | Proposed VSC (%) | Loss | % Loss | Existing Lit Area (%) | Proposed Lit Area (%) | % Loss | Existing | Proposed | % Loss | Existing | Proposed | % Loss |
| Middle Eight Hotel, 66 Great Queen Street | | | | | | | | | | | | | | |
| First R1 / W1 | Bedroom | 16.12 | 15.83 | 0.29 | 2 | 39 | 39 | 0 | North Facing | | | | | |
| First R2 / W2 | Bedroom | 16.30 | 16.02 | 0.28 | 2 | 32 | 32 | 0 | North Facing | | | | | |
| First R3 / W3 | Bedroom | 16.27 | 16.01 | 0.26 | 2 | 42 | 42 | 0 | North Facing | | | | | |
| First R4 / W4 | Bedroom | 16.00 | 15.77 | 0.23 | 1 | 39 | 38 | 3 | North Facing | | | | | |
| First R5 / W5 | Bedroom | 15.20 | 15.00 | 0.20 | 1 | 41 | 41 | 0 | North Facing | | | | | |
| First R6 / W6 | Bedroom | 12.68 | 12.36 | 0.32 | 3 | 44 | 44 | 0 | North Facing | | | | | |
| First R6 / W7 | | 14.96 | 14.69 | 0.27 | 2 | | | | | | | | | |
| First R6 / W8 | | 14.47 | 14.29 | 0.18 | 1 | | | | | | | | | |
| First R6 / W9 | | 14.29 | 14.20 | 0.09 | 1 | | | | | | | | | |
| First R6 / W10 | | 10.61 | 10.58 | 0.03 | 0 | | | | | | | | | |
| Second R1 / W1 | Bedroom | 20.07 | 19.69 | 0.38 | 2 | 63 | 63 | 0 | North Facing | | | | | |
| Second R2 / W2 | Bedroom | 20.12 | 19.79 | 0.33 | 2 | 45 | 45 | 0 | North Facing | | | | | |
| Second R3 / W3 | Bedroom | 20.03 | 19.72 | 0.31 | 2 | 63 | 63 | 0 | North Facing | | | | | |
| Second R4 / W4 | Bedroom | 19.68 | 19.41 | 0.27 | 1 | 62 | 61 | 1 | North Facing | | | | | |
| Second R5 / W5 | Bedroom | 18.33 | 18.09 | 0.24 | 1 | 54 | 54 | 0 | North Facing | | | | | |
| Second R6 / W6 | Bedroom | 15.34 | 15.00 | 0.34 | 2 | 53 | 53 | 0 | North Facing | | | | | |
| Second R6 / W7 | | 17.73 | 17.45 | 0.28 | 2 | | | | | | | | | |
| Second R6 / W8 | | 17.14 | 16.95 | 0.19 | 1 | | | | | | | | | |
| Second R6 / W9 | | 16.66 | 16.56 | 0.10 | 1 | | | | | | | | | |
| Second R6 / W10 | | 12.57 | 12.55 | 0.02 | 0 | | | | | | | | | |
| Third R1 / W1 | Bedroom | 23.16 | 22.73 | 0.43 | 2 | 88 | 88 | 0 | North Facing | | | | | |
| Third R2 / W2 | Bedroom | 22.91 | 22.54 | 0.37 | 2 | 48 | 48 | 0 | North Facing | | | | | |
| Third R3 / W3 | Bedroom | 22.65 | 22.32 | 0.33 | 1 | 85 | 85 | 0 | North Facing | | | | | |
| Third R4 / W4 | Bedroom | 22.24 | 21.95 | 0.29 | 1 | 76 | 75 | 2 | North Facing | | | | | |
| Third R5 / W5 | Bedroom | 20.54 | 20.29 | 0.25 | 1 | 70 | 70 | 0 | North Facing | | | | | |
| Third R6 / W6 | Bedroom | 17.31 | 16.96 | 0.35 | 2 | 54 | 54 | 0 | North Facing | | | | | |
| Third R6 / W7 | | 19.87 | 19.57 | 0.30 | 2 | | | | | | | | | |
| Third R6 / W8 | | 19.29 | 19.09 | 0.20 | 1 | | | | | | | | | |
| Third R6 / W9 | | 18.62 | 18.52 | 0.10 | 1 | | | | | | | | | |
| Third R6 / W10 | | 14.28 | 14.25 | 0.03 | 0 | | | | | | | | | |

Daylight and Sunlight Result Spreadsheet

| Room / Window Reference Number | Room Use. (Assumed*) | Vertical Sky Component (VSC) Results | | | | No Sky Line (NSL) Results | | | Annual Probable Sunlight Hours (APSH) Results (per room) | | | Winter Probable Sunlight Hours (WPSH) Results (per room) | | |
|--------------------------------|----------------------|--------------------------------------|------------------|------|--------|---------------------------|-----------------------|--------|--|----------|--------|--|----------|--------|
| | | Existing VSC (%) | Proposed VSC (%) | Loss | % Loss | Existing Lit Area (%) | Proposed Lit Area (%) | % Loss | Existing | Proposed | % Loss | Existing | Proposed | % Loss |
| Fourth R1 / W1 | Bedroom | 25.15 | 24.67 | 0.48 | 2 | 89 | 89 | 0 | North Facing | | | | | |
| Fourth R2 / W2 | Bedroom | 24.89 | 24.49 | 0.40 | 2 | 52 | 52 | 0 | North Facing | | | | | |
| Fourth R3 / W3 | Bedroom | 24.70 | 24.35 | 0.35 | 1 | 87 | 87 | 0 | North Facing | | | | | |
| Fourth R4 / W4 | Bedroom | 24.19 | 23.88 | 0.31 | 1 | 78 | 78 | 0 | North Facing | | | | | |
| Fourth R5 / W5 | Bedroom | 22.42 | 22.17 | 0.25 | 1 | 72 | 72 | 0 | North Facing | | | | | |
| Fourth R6 / W6 | Bedroom | 18.99 | 18.64 | 0.35 | 2 | 55 | 55 | 0 | North Facing | | | | | |
| Fourth R6 / W7 | | 21.73 | 21.43 | 0.30 | 1 | | | | | | | | | |
| Fourth R6 / W8 | | 21.34 | 21.14 | 0.20 | 1 | | | | | | | | | |
| Fourth R6 / W9 | | 20.51 | 20.41 | 0.10 | 0 | | | | | | | | | |
| Fourth R6 / W10 | | 16.06 | 16.04 | 0.02 | 0 | | | | | | | | | |
| Fifth R1 / W1 | Bedroom | 25.91 | 25.40 | 0.51 | 2 | 90 | 90 | 0 | North Facing | | | | | |
| Fifth R2 / W2 | Bedroom | 25.49 | 25.07 | 0.42 | 2 | 55 | 55 | 0 | North Facing | | | | | |
| Fifth R3 / W3 | Bedroom | 25.46 | 25.10 | 0.36 | 1 | 88 | 88 | 0 | North Facing | | | | | |
| Fifth R4 / W4 | Bedroom | 24.88 | 24.57 | 0.31 | 1 | 79 | 79 | 0 | North Facing | | | | | |
| Fifth R5 / W5 | Bedroom | 23.38 | 23.13 | 0.25 | 1 | 74 | 74 | 0 | North Facing | | | | | |
| Fifth R6 / W6 | Bedroom | 19.46 | 19.12 | 0.34 | 2 | 56 | 56 | 0 | North Facing | | | | | |
| Fifth R6 / W7 | | 23.17 | 22.88 | 0.29 | 1 | | | | | | | | | |
| Fifth R6 / W8 | | 23.49 | 23.29 | 0.20 | 1 | | | | | | | | | |
| Fifth R6 / W9 | | 22.00 | 21.90 | 0.10 | 0 | | | | | | | | | |
| Fifth R6 / W10 | | 16.68 | 16.66 | 0.02 | 0 | | | | | | | | | |

APPENDIX D
ILLUMINANCE DRAWINGS



KEY


R1 Room Reference

Illuminance (Lux)

| | | |
|-----|-----|----|
| 300 | 175 | 50 |
| 275 | 150 | 25 |
| 250 | 125 | 0 |
| 225 | 100 | |
| 200 | 75 | |

x% SDA (% of room area)

MI Median Illuminance (Lux)



SOURCES OF INFORMATION:
Studio Moren proposed scheme received on 28/06/2024

AccuCities 3d context model received on 10/05/2024

ANALYSIS PARAMETERS:

Maintenance Factor -
Unobstructed windows: 0.92
Obstructed windows: 0.76

Window diffuse transmittance - 0.68

Frame to Glazing Ratio - Bespoke

Reflectivities (internal materials) -
Walls: 0.80 Floors: 0.40
Ceilings: 0.80 Window frames: ____

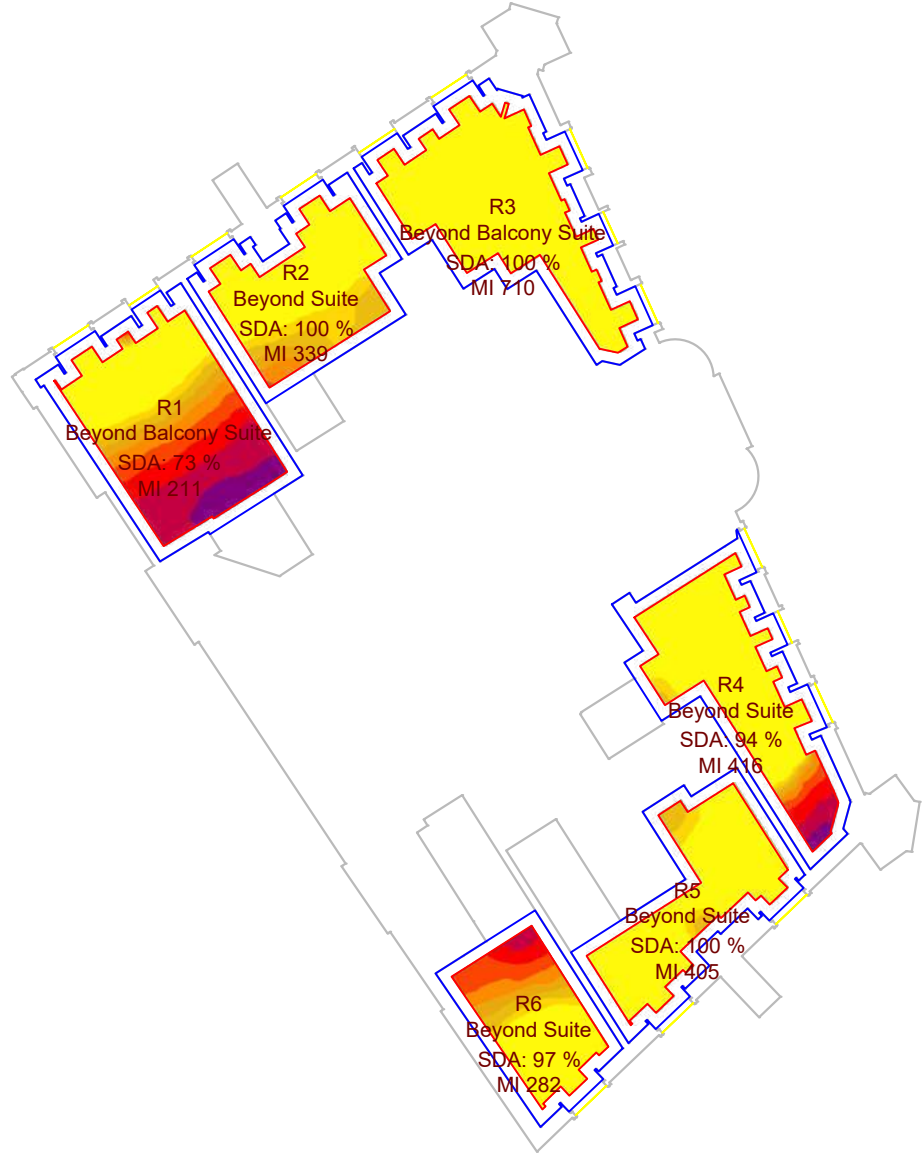
Reflectivities (external materials R,G,B) -
Red Brick: 0.20 Concrete: 0.30
Medium Brick: 0.40 Light wood: 0.40
Light render: 0.60 Matt Aluminium: 0.45
All other reflectances: 0.20

| |
|--|
| CLIENT GMS Estates Limited |
| PROJECT Kingsway House, 99-103 Kingsway, London WC2B 6QX |
| DRAWING TITLE Illuminance (SDA or Spatial Daylight Autonomy) analysis |

| | |
|----------|------------|
| SCALE | DATE |
| 1:200@A3 | 28/06/2024 |
| DRAWN BY | CHECKED BY |
| DR | JW |

| | |
|------------|------|
| DWG No. | REV. |
| D+S/1/ 502 | |

CONSIL



KEY

R1 Room Reference

Illuminance (Lux)

| | | |
|---|---|--|
| 300 | 175 | 50 |
| 275 | 150 | 25 |
| 250 | 125 | 0 |
| 225 | 100 | |
| 200 | 75 | |

x% SDA (% of room area)

MI Median Illuminance (Lux)

SOURCES OF INFORMATION:

Studio Moren proposed scheme received on 28/06/2024

AccuCities 3d context model received on 10/05/2024

ANALYSIS PARAMETERS:

Maintenance Factor -
Unobstructed windows: 0.92
Obstructed windows: 0.76

Window diffuse transmittance - 0.68

Frame to Glazing Ratio - Bespoke

Reflectivities (internal materials) -
Walls: 0.80 Floors: 0.40
Ceilings: 0.80 Window frames: ____

Reflectivities (external materials R,G,B) -
Red Brick: 0.20 Concrete: 0.30
Medium Brick: 0.40 Light wood: 0.40
Light render: 0.60 Matt Aluminium: 0.45
All other reflectances: 0.20

CLIENT
GMS Estates Limited

PROJECT
Kingsway House, 99-103 Kingsway,
London WC2B 6QX

DRAWING TITLE
Illuminance (SDA or Spatial Daylight
Autonomy) analysis

| | |
|--------------------------|---------------------------|
| SCALE 1:200@A3 | DATE 28/06/2024 |
| DRAWN BY DR | CHECKED BY JW |

| | |
|------------------------------|-------------|
| DWG No. D+S/1/ 503 | REV. |
|------------------------------|-------------|

APPENDIX E
ILLUMINANCE AND SUNLIGHT EXPOSURE RESULT SPREADSHEETS

| Floor Ref | Room Ref | Property Type | Room Use | Daylight | | | | Sunlight | | |
|--------------------------|----------|---------------|----------------------|------------|---------|---------------------------|--------------------|------------------------------------|--------------------|-------------------|
| | | | | Median Lux | Req Lux | % of Area Meeting Req Lux | Meets BRE criteria | Proposed Sunlight Exposure (Hours) | Meets BRE criteria | South Facing? |
| Proposed 99-103 Kingsway | | | | | | | | | | |
| First | R1 | Aparthotel | Beyond Suite | 147 | 150 | 50% | Yes | 00:00 | No | Yes Yes Yes |
| | R2 | Aparthotel | Beyond Suite | 239 | 150 | 96% | Yes | 00:00 | No | |
| | R3 | Aparthotel | Beyond Suite | 412 | 150 | 100% | Yes | 00:00 | No | |
| | R4 | Aparthotel | Beyond Balcony Suite | 1019 | 150 | 100% | Yes | 00:42 | No | |
| | R5 | Aparthotel | Beyond Suite | 1025 | 150 | 100% | Yes | 00:42 | No | |
| | R6 | Aparthotel | Beyond Suite | 540 | 150 | 100% | Yes | 02:12 | Yes | |
| | R7 | Aparthotel | Beyond Suite | 232 | 150 | 99% | Yes | 00:48 | No | |
| | R8 | Aparthotel | Beyond Suite | 179 | 150 | 62% | Yes | 00:18 | No | |
| Second | R1 | Aparthotel | Beyond Suite | 125 | 150 | 42% | No | 00:00 | No | Yes Yes Yes |
| | R2 | Aparthotel | Beyond Suite | 221 | 150 | 75% | Yes | 00:00 | No | |
| | R3 | Aparthotel | Beyond Suite | 268 | 150 | 100% | Yes | 00:00 | No | |
| | R4 | Aparthotel | Beyond Balcony Suite | 857 | 150 | 100% | Yes | 01:12 | No | |
| | R5 | Aparthotel | Beyond Suite | 637 | 150 | 100% | Yes | 01:12 | No | |
| | R6 | Aparthotel | Beyond Suite | 730 | 150 | 100% | Yes | 02:54 | Yes | |
| | R7 | Aparthotel | Beyond Suite | 197 | 150 | 76% | Yes | 01:06 | No | |
| | R8 | Aparthotel | Beyond Suite | 156 | 150 | 52% | Yes | 01:12 | No | |
| Third | R1 | Aparthotel | Beyond Suite | 132 | 150 | 45% | No | 00:00 | No | Yes Yes Yes |
| | R2 | Aparthotel | Beyond Suite | 238 | 150 | 77% | Yes | 00:00 | No | |
| | R3 | Aparthotel | Beyond Suite | 169 | 150 | 66% | Yes | 00:00 | No | |
| | R4 | Aparthotel | Beyond Balcony Suite | 818 | 150 | 100% | Yes | 00:18 | No | |
| | R5 | Aparthotel | Beyond Suite | 788 | 150 | 100% | Yes | 00:30 | No | |
| | R6 | Aparthotel | Beyond Suite | 535 | 150 | 100% | Yes | 03:42 | Yes | |
| | R7 | Aparthotel | Beyond Suite | 179 | 150 | 63% | Yes | 02:06 | Yes | |
| | R8 | Aparthotel | Beyond Suite | 143 | 150 | 46% | No | 01:18 | No | |
| Fourth | R1 | Aparthotel | Beyond Suite | 407 | 150 | 100% | Yes | 05:12 | Yes | Yes Yes Yes |
| | R2 | Aparthotel | Beyond Suite | 231 | 150 | 84% | Yes | 00:00 | No | |
| | R3 | Aparthotel | Beyond Suite | 297 | 150 | 100% | Yes | 00:00 | No | |
| | R4 | Aparthotel | Beyond Balcony Suite | 604 | 150 | 100% | Yes | 03:48 | Yes | |
| | R5 | Aparthotel | Beyond Suite | 677 | 150 | 100% | Yes | 03:12 | Yes | |
| | R6 | Aparthotel | Beyond Suite | 561 | 150 | 100% | Yes | 06:54 | Yes | |
| | R7 | Aparthotel | Beyond Suite | 190 | 150 | 64% | Yes | 04:48 | Yes | |
| | R8 | Aparthotel | Beyond Suite | 157 | 150 | 52% | Yes | 04:48 | Yes | |
| Fifth | R1 | Aparthotel | Beyond Suite | 576 | 150 | 100% | Yes | 04:48 | Yes | Yes Yes Yes |
| | R2 | Aparthotel | Beyond Suite | 348 | 150 | 99% | Yes | 00:00 | No | |
| | R3 | Aparthotel | Beyond Suite | 583 | 150 | 100% | Yes | 00:06 | No | |
| | R4 | Aparthotel | Beyond Balcony Suite | 753 | 150 | 100% | Yes | 02:24 | Yes | |
| | R5 | Aparthotel | Beyond Suite | 713 | 150 | 100% | Yes | 01:06 | No | |
| | R6 | Aparthotel | Beyond Suite | 380 | 150 | 100% | Yes | 05:24 | Yes | |
| | R7 | Aparthotel | Beyond Suite | 305 | 150 | 100% | Yes | 05:30 | Yes | |
| | R8 | Aparthotel | Beyond Suite | 120 | 150 | 41% | No | 05:30 | Yes | |
| Sixth | R1 | Aparthotel | Beyond Suite | 471 | 150 | 100% | Yes | 05:00 | Yes | Yes Yes Yes |
| | R2 | Aparthotel | Beyond Suite | 250 | 150 | 100% | Yes | 00:00 | No | |
| | R3 | Aparthotel | Beyond Suite | 237 | 150 | 96% | Yes | 00:00 | No | |
| | R4 | Aparthotel | Beyond Balcony Suite | 655 | 150 | 100% | Yes | 03:48 | Yes | |
| | R5 | Aparthotel | Beyond Suite | 335 | 150 | 100% | Yes | 02:30 | Yes | |
| | R6 | Aparthotel | Beyond Suite | 396 | 150 | 100% | Yes | 06:06 | Yes | |
| | R7 | Aparthotel | Beyond Suite | 257 | 150 | 96% | Yes | 06:48 | Yes | |
| | R8 | Aparthotel | Beyond Suite | 415 | 150 | 100% | Yes | 10:06 | Yes | |
| Seventh | R1 | Aparthotel | Beyond Balcony Suite | 211 | 150 | 73% | Yes | 00:00 | No | Yes Yes Yes |
| | R2 | Aparthotel | Beyond Suite | 339 | 150 | 100% | Yes | 00:00 | No | |
| | R3 | Aparthotel | Beyond Balcony Suite | 710 | 150 | 100% | Yes | 04:00 | Yes | |
| | R4 | Aparthotel | Beyond Suite | 416 | 150 | 94% | Yes | 03:24 | Yes | |
| | R5 | Aparthotel | Beyond Suite | 405 | 150 | 100% | Yes | 06:54 | Yes | |
| | R6 | Aparthotel | Beyond Suite | 282 | 150 | 97% | Yes | 07:00 | Yes | |
| Eighth | R1 | Aparthotel | Beyond Suite | 484 | 150 | 87% | Yes | 02:30 | Yes | Yes Yes |
| | R2 | Aparthotel | Beyond Suite | 609 | 150 | 100% | Yes | 07:12 | Yes | |
| | R3 | Aparthotel | Beyond Suite | 600 | 150 | 100% | Yes | 07:00 | Yes | |
| | R4 | Aparthotel | Beyond Suite | 410 | 150 | 100% | Yes | 00:00 | No | |