# DAYLIGHT & SUNLIGHT ASSESSMENT

11 Loveridge Mews, NW6 2DP| Blue Sky Surveyors

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BLUE SKY SURVEYORS

# Contents

# 1.0 Introduction

Blue Sky Surveyors have been appointed by Rotherwick Property Limited to undertake an assessment in order to understand the potential effect that their proposed extension of 11 Loveridge Mews would have upon the daylight and sunlight enjoyed by the neighbouring high level windows on the properties to the north of the site, 65 and 63 Loveridge Road.

Blue Sky Surveyors undertook a full technical analysis in order to understand the likely impact that the proposed project would have with respect to daylight and sunlight. This assessment was undertaken using 3-D laser scan data, 3-D computer modelling and specialist assessment software to run a simulation. Imagery of our assessment model can be seen in Appendix A.

When considering the results of our assessment, reference has been made to the BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice* (third edition, 2022). A summary of the assessment methodology and key recommendations from the BRE Report for daylight & sunlight can be found in Section 2.

A plan view of the site along with imagery of the modelling in its existing and proposed conditions can be found in Appendix A.

## 2.0 BRE Assessment & Guidelines

The primary tests that are advised to be undertaken in the BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice* (third edition, 2022) are the Vertical Sky Component (VSC) and Daylight Distribution (DD) for daylight; and the Annual Probable Sunlight Hours (APSH) test for sunlight. It should be noted that we have only tested with respect to the neighbours daylight & sunlight amenity and not for the aesthetic impact of the proposal (a right to a view is not recognised).

Below we have provided a brief explanation of each test:

Vertical Sky Component Definition:

The VSC test is used to determine the amount of sky that is visible at the centre point of a window on the external plane. On a vertical plane the maximum value the VSC can take is 40%, which would represent a totally unobstructed window. The size of the window, nor the size of the room it serves, are accounted for in the VSC test. Therefore, it is necessary to look at the VSC result in conjunction with the Daylight Distribution (DD) test.

Daylight Distribution Definition:

The Daylight Distribution test is used to assess the area of a room which will have a view of sky at working plane level. This test is represented using contours drawings, which plot the 'no sky line' at working plane level.

Annual Probable Sunlight Hours Definition:

The sunlight levels which reach the centre point of a window can be looked at in percentage terms of the Annual Probable Sunlight Hours (APSH). Within its glossary, the BRE guidelines define "annual sunlight hours" as the following:

*"the long-term average of the total number of hours during a year in which direct sunlight reaches the unobstructed ground (when clouds are taken into account)."*

BLUE SKY SURVEYORS

Recommended Targets for Daylight:

Section 2.2 of the BRE Report states the following: *"If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building from the centre of the lowest window, subtends an angle of more than 25° to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:*

- *the VSC [vertical sky component] measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value; [or]*
- *the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value."*

Recommended Targets for Sunlight:

Paragraph 3.2.11 of the BRE Report states the follows:

*"If a living room of an existing dwelling has a main window facing within 90° of due south, and any part of a new development subtends an angle of more than 25° to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely affected. This will be the case if the centre of the window:*

- *receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and*
- *receives less than 0.8 times its former sunlight hours during either period and*
- *has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours".*

# 3.0 Information for Computer Modelling

To carry out the daylight & sunlight tests, we built a model which detailed 11 Loveridge Mews in its existing and proposed conditions; as well as nearby neighbouring properties and additional context massing. Imagery of the computer model can be found in Appendix A.

The modelling was based around the following information:

Existing Massing

- Blue Sky Surveyors' Partial 3D Scan Survey.
- OS Map.
- Blue Sky Surveyors' site photography.

Proposed Scheme

- BM Architects Proposal Drawings: 11 Loveridge Mews copy.dwg - received 20/03/24.
- Digital OS Extract.

# 4.0 Results of the Assessment

65 Loveridge Road

Our assessment has indicated that the upper window to this property will incur no meaningful reduction to the daylight and sunlight levels currently enjoyed.

All of the BRE recommended tests for daylight and sunlight are adhered to.

63 Loveridge Road

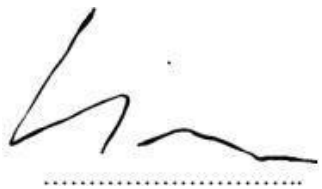
Our assessment has indicated that the upper windows to this property will incur no meaningful reduction to the daylight and sunlight levels currently enjoyed.

All of the BRE recommended tests for daylight and sunlight are adhered to.

# 5.0 Conclusion

We have undertaken a full daylight & sunlight computer assessment in order to determine the impact of the proposed extension at 11 Loveridge Mews on the upper windows to the neighbouring residential properties to the north of the site, 65 and 63 Loveridge Road. The assessment was undertaken in accordance with the BRE Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice* (third edition, 2022).

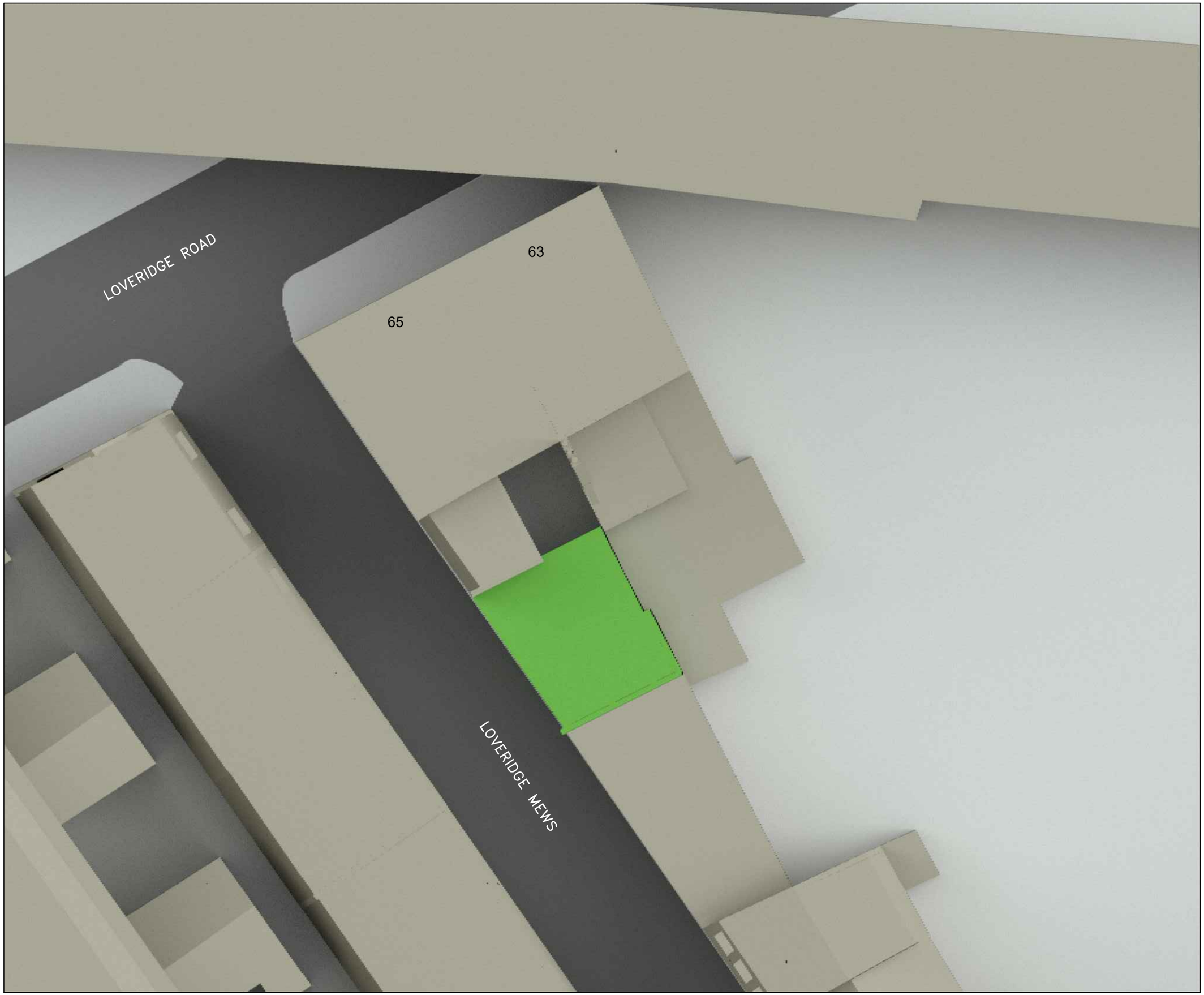
The results of the assessment show that the proposal will be fully compliant in regard to the daylight & sunlight impact to the assessed neighbouring windows.



Stevan Dillon

**DIRECTOR - BLUE SKY SURVEYORS**
05/04/2024

## Appendix A – Plans & 3-D Views




Sources:

BLUE SKY SURVEYORS
3D LASER SCAN SURVEY DATA
11 Loveridge Mews London NW6 2DP.rcp

BM ARCHITECTS
PROPOSAL DRAWINGS
11 Loveridge Mews copy.dwg
RECEIVED 20/03/24

DIGITAL OS EXTRACT

KEY:

N

EXISTING BUILDINGS IN GREEN

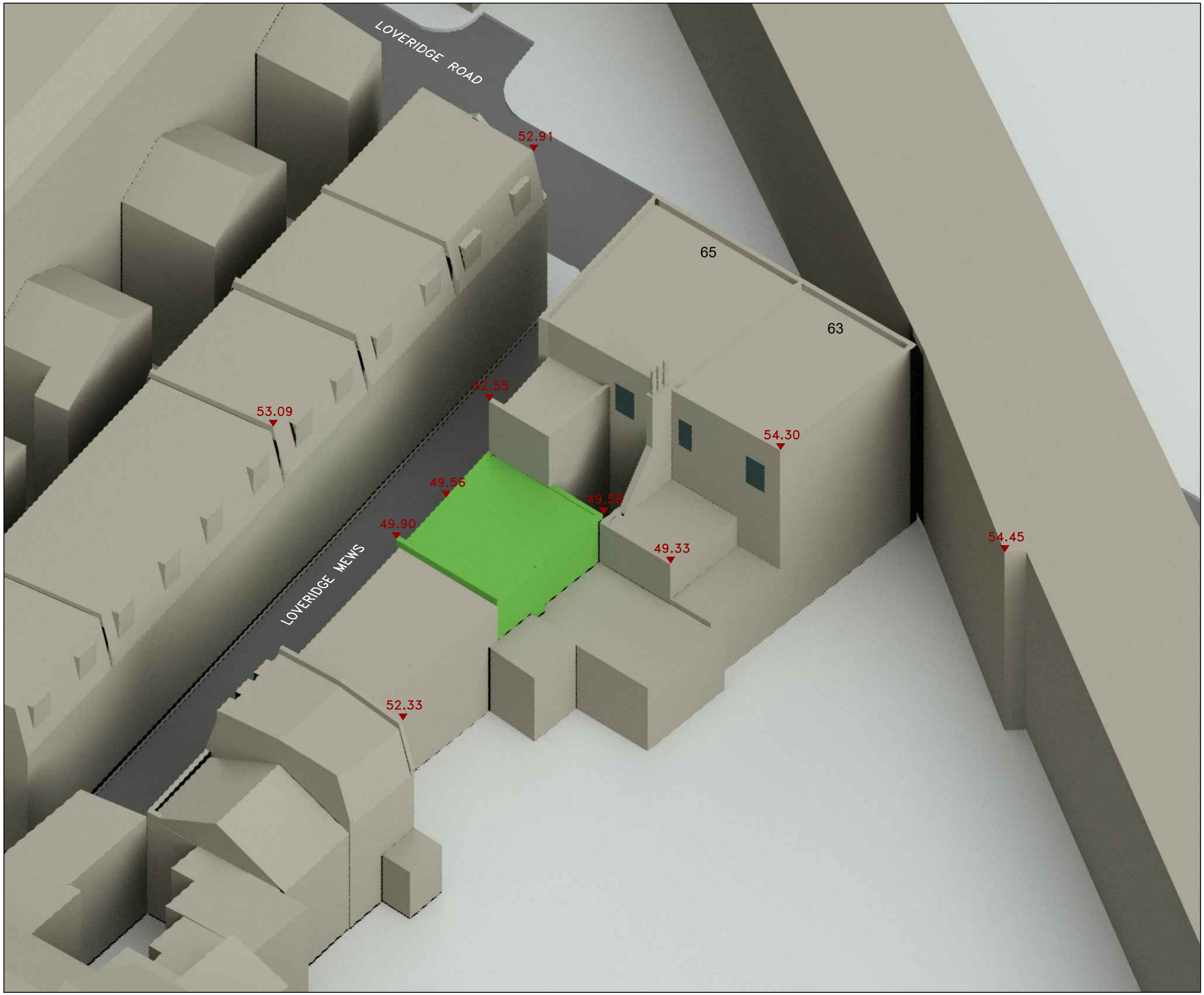
| REV: | DETAILS: | DATE: |
|---|---|---|
| A | - | - |

ADDRESS:
11 LOVERIDGE MEWS
LONDON, NW6 2DP

TITLE:
SITE PLAN
EXISTING

| DRAWN: | DATE: |
|---|---|
| MG | 31/03/24 |
| DRAWING NO: | SCALE: |
| SDIL/309/ROL/01 | 1:150 @ A3 |

BLUE SKY SURVEYORS




Sources:

BLUE SKY SURVEYORS
3D LASER SCAN SURVEY DATA
11 Loveridge Mews London NW6 2DP.rcp

BM ARCHITECTS
PROPOSAL DRAWINGS
11 Loveridge Mews copy.dwg
RECEIVED 20/03/24

DIGITAL OS EXTRACT

KEY:

HEIGHTS IN METRES AOD

EXISTING BUILDINGS IN GREEN

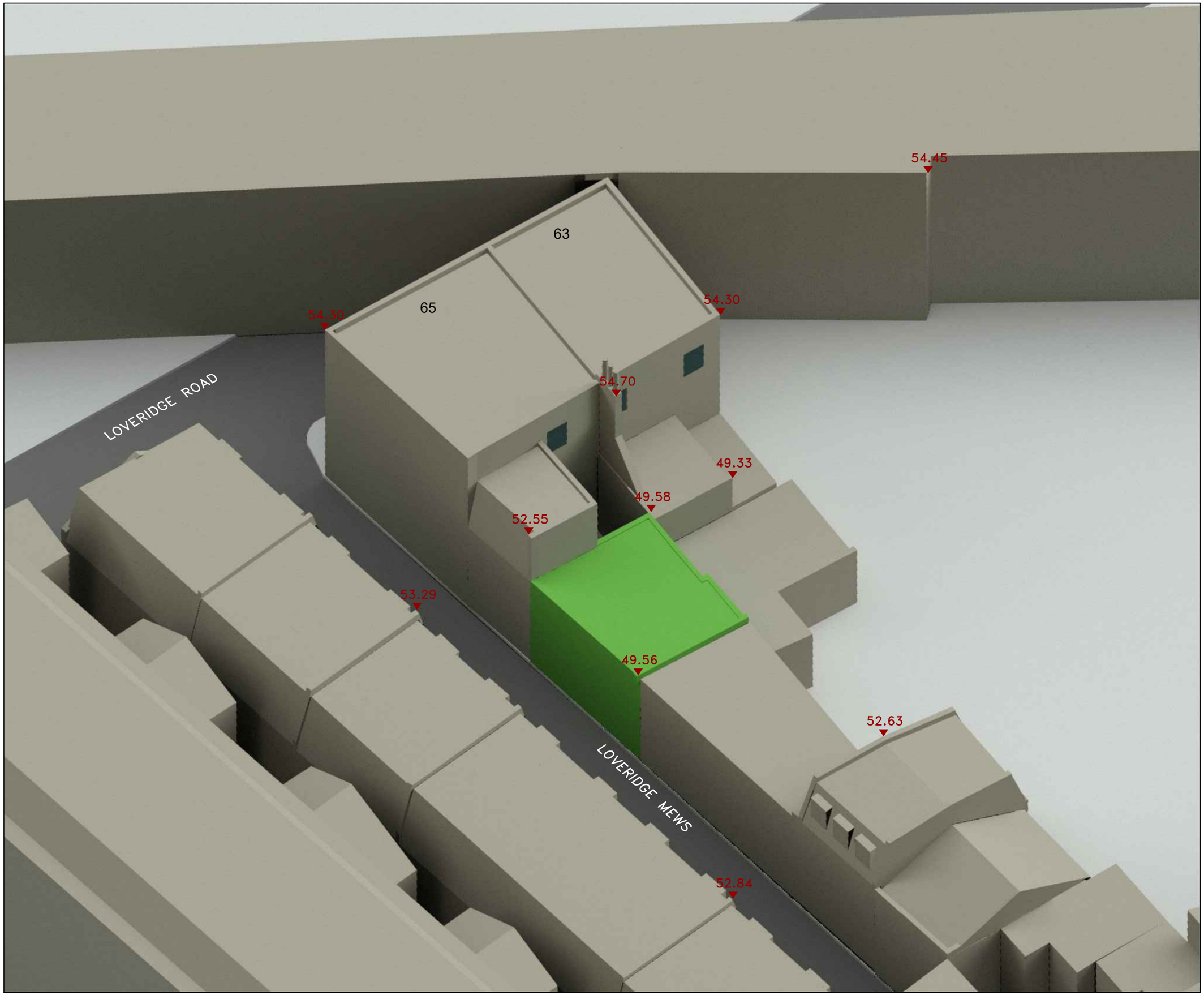
| REV: | DETAILS: | DATE: |
|---|---|---|
| A | - | - |

ADDRESS:
11 LOVERIDGE MEWS
LONDON, NW6 2DP

TITLE:
3D VIEW
EXISTING

| DRAWN: | DATE: |
|---|---|
| MG | 31/03/24 |
| DRAWING NO: | SCALE: |
| SDIL/309/ROL/02 | NTS |

BLUE SKY SURVEYORS




Sources:

BLUE SKY SURVEYORS
3D LASER SCAN SURVEY DATA
11 Loveridge Mews London NW6 2DP.rcp

BM ARCHITECTS
PROPOSAL DRAWINGS
11 Loveridge Mews copy.dwg
RECEIVED 20/03/24

DIGITAL OS EXTRACT

KEY:

HEIGHTS IN METRES AOD

EXISTING BUILDINGS IN GREEN

| REV: | DETAILS: | DATE: |
|---|---|---|
| A | - | - |

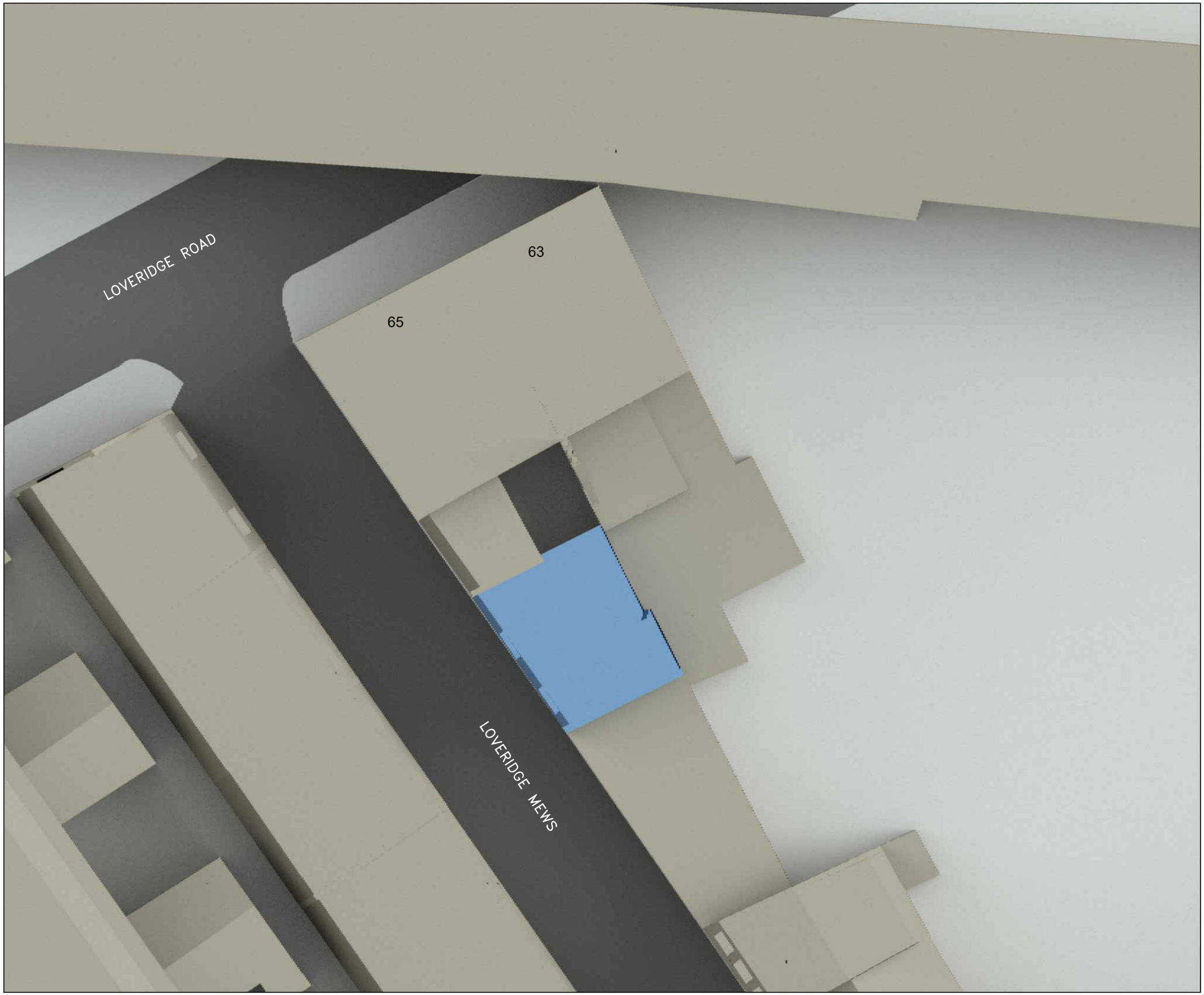
ADDRESS:
11 LOVERIDGE MEWS
LONDON, NW6 2DP

TITLE:
3D VIEW
EXISTING

| DRAWN: | DATE: |
|---|---|
| MG | 31/03/24 |

| DRAWING NO: | SCALE: |
|---|---|
| SDIL/309/ROL/03 | NTS |

BLUE SKY SURVEYORS




Sources:

BLUE SKY SURVEYORS
3D LASER SCAN SURVEY DATA
11 Loveridge Mews London NW6 2DP.rcp

BM ARCHITECTS
PROPOSAL DRAWINGS
11 Loveridge Mews copy.dwg
RECEIVED 20/03/24

DIGITAL OS EXTRACT

KEY:

N

PROPOSED SCHEME IN BLUE

| REV: | DETAILS: | DATE: |
|---|---|---|
| A | - | - |

ADDRESS:
11 LOVERIDGE MEWS
LONDON, NW6 2DP

TITLE:
SITE PLAN
PROPOSED SCHEME
RECEIVED 20/03/24

| DRAWN: | DATE: |
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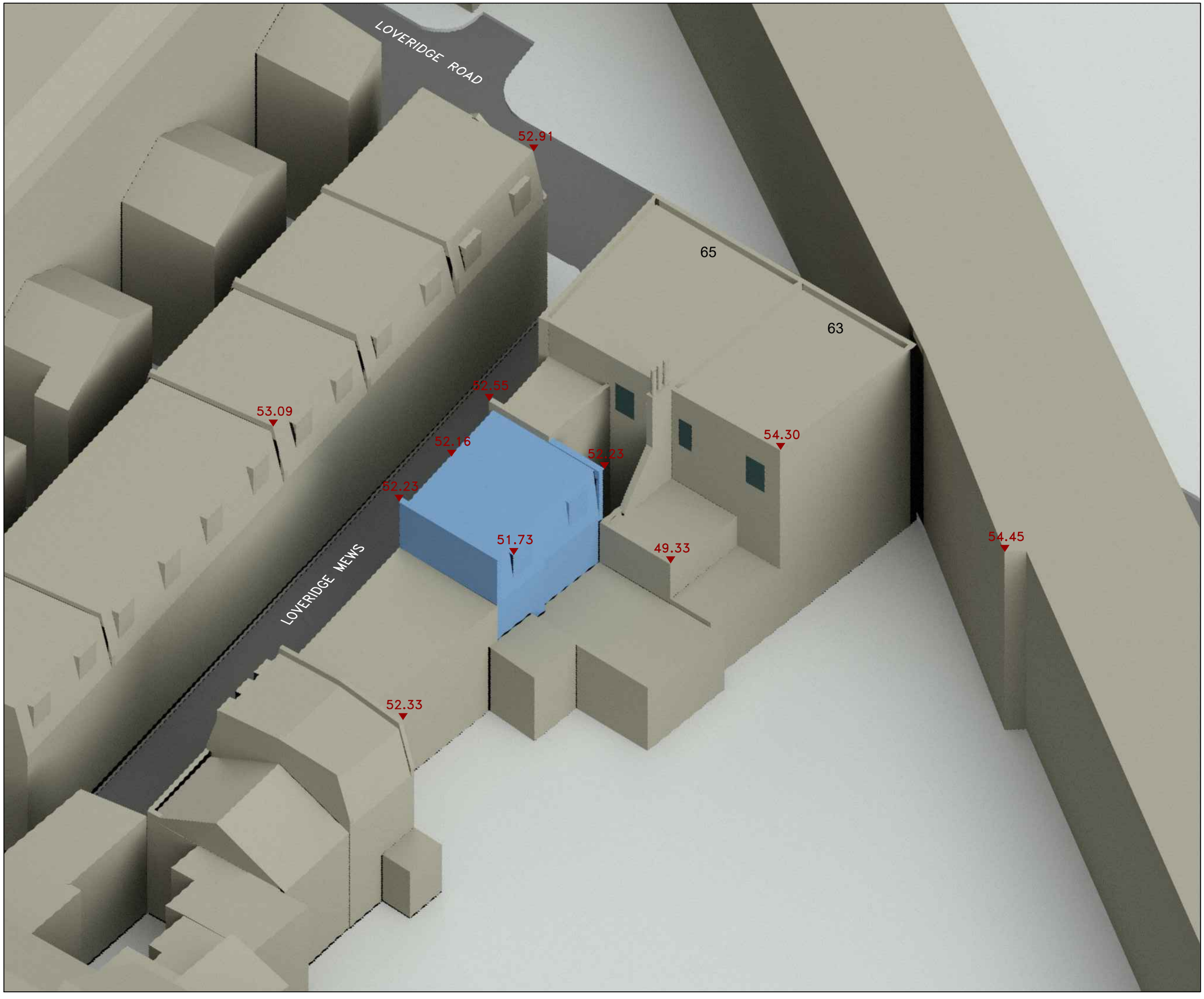
BLUE SKY SURVEYORS




Sources:

BLUE SKY SURVEYORS
3D LASER SCAN SURVEY DATA
11 Loveridge Mews London NW6 2DP.rcp

BM ARCHITECTS
PROPOSAL DRAWINGS
11 Loveridge Mews copy.dwg
RECEIVED 20/03/24

DIGITAL OS EXTRACT

KEY:

HEIGHTS IN METRES AOD

PROPOSED SCHEME IN BLUE

| REV: | DETAILS: | DATE: |
|---|---|---|
| A | - | - |

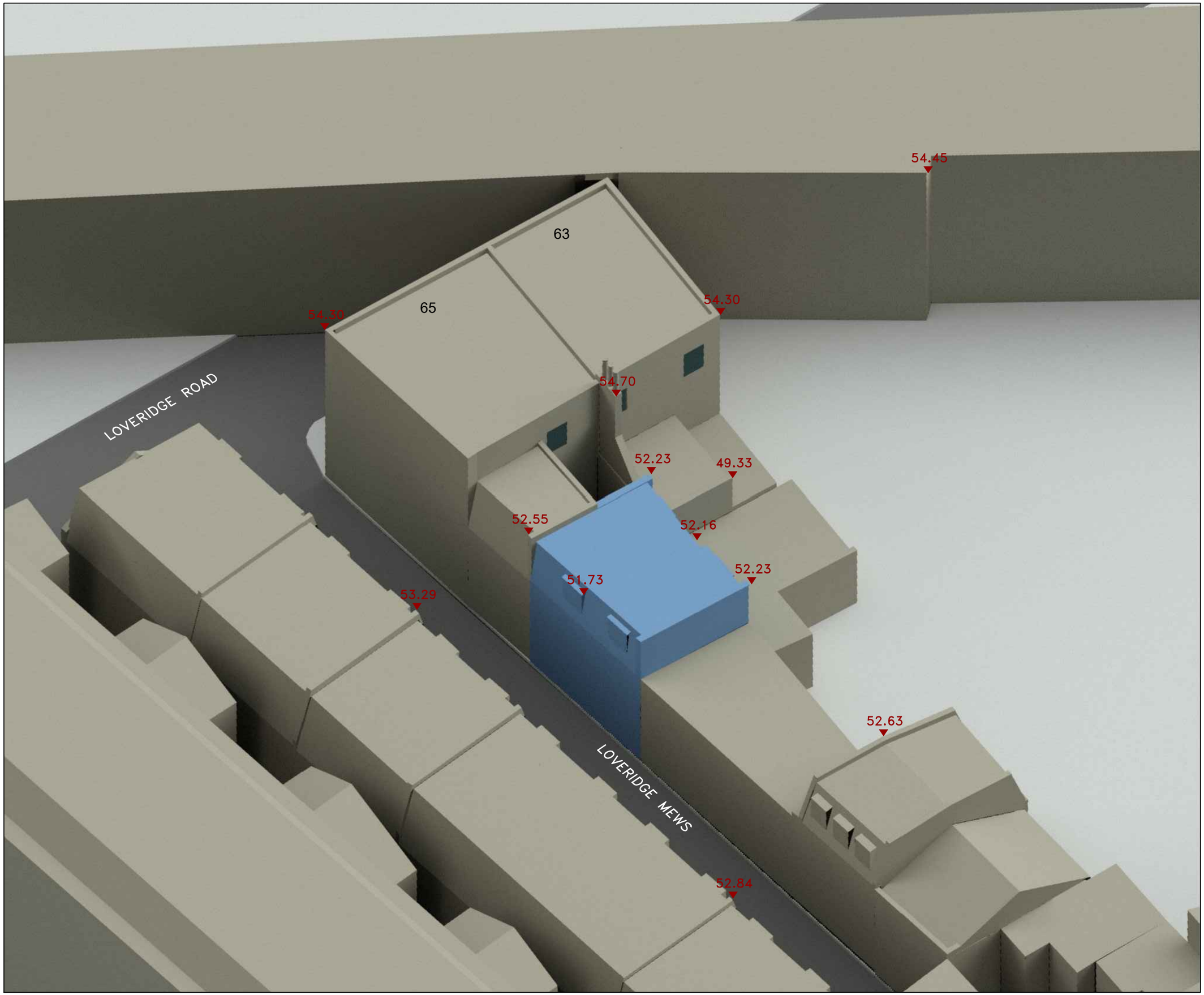
ADDRESS:
11 LOVERIDGE MEWS
LONDON, NW6 2DP

TITLE:
3D VIEW
PROPOSED SCHEME
RECEIVED 20/03/24

| DRAWN: | DATE: |
|---|---|
| MG | 31/03/24 |

| DRAWING NO: | SCALE: |
|---|---|
| SDIL/309/ROL/05 | NTS |

BLUE SKY SURVEYORS




Sources:

BLUE SKY SURVEYORS
3D LASER SCAN SURVEY DATA
11 Loveridge Mews London NW6 2DP.rcp

BM ARCHITECTS
PROPOSAL DRAWINGS
11 Loveridge Mews copy.dwg
RECEIVED 20/03/24

DIGITAL OS EXTRACT

KEY:

HEIGHTS IN METRES AOD

PROPOSED SCHEME IN BLUE

| REV: | DETAILS: | DATE: |
|---|---|---|
| A | - | - |

ADDRESS:
11 LOVERIDGE MEWS
LONDON, NW6 2DP

TITLE:
3D VIEW
PROPOSED SCHEME
RECEIVED 20/03/24

| DRAWN: | DATE: |
|---|---|
| MG | 31/03/24 |

| DRAWING NO: | SCALE: |
|---|---|
| SDIL/309/ROL/06 | NTS |

BLUE SKY SURVEYORS

## Appendix B – Numeric Results

63 LOVERIDGE ROAD

65 LOVERIDGE ROAD

Second
R2
Unknown
Floor Plan

Second
R1
Unknown
Floor Plan

Second
R1
Bedroom
Floor Plan

W2

W1

W1

Sources:

BLUE SKY SURVEYORS
3D LASER SCAN SURVEY DATA
11 Loveridge Mews London NW6 2DP.rcp

BM ARCHITECTS
PROPOSAL DRAWINGS
11 Loveridge Mews copy.dwg
RECEIVED 20/03/24

DIGITAL OS EXTRACT

KEY:

EXISTING NO-SKY CONTOUR

PROPOSED NO-SKY CONTOUR

AREA OF LOSS / GAIN

N

| REV: | DETAILS: | DATE: |
|---|---|---|
| A | - | - |

ADDRESS:
11 LOVERIDGE MEWS
LONDON, NW6 2DP

TITLE:
NO-SKY LINE CONTOURS

| DRAWN: | DATE: |
|---|---|
| MG | 31/03/24 |
| DRAWING NO: | SCALE: |
| SDIL/309/ROL/07 | 1:80 @ A3 |

BLUE SKY SURVEYORS

Project Name: 11 Loveridge Mews, London NW6 2DP_M01
Project No.:
Report Title: Daylight Distribution Analysis - Neighbour
Date of Analysis: 31/03/2024

| Floor Ref. | Room Ref | Room Attribute | Property Type | Room Use | | Room Area | Lit Area Existing | Lit Area Proposed | Pr/Ex | Meets BRE Criteria |
|---|---|---|---|---|---|---|---|---|---|---|
| **63 Loveridge Road** | | | | | | | | | | |
| Second | R1 | Floor Plan | Residential | Unknown | Area m2 | 6.65 | 6.46 | 6.46 | | |
| | | | | | % of room | | 97.07% | 97.07% | 1.00 | YES |
| | R2 | Floor Plan | Residential | Unknown | Area m2 | 8.27 | 8.15 | 8.15 | | |
| | | | | | % of room | | 98.46% | 98.46% | 1.00 | YES |
| **65 Loveridge Road** | | | | | | | | | | |
| Second | R1 | Floor Plan | Residential | Bedroom | Area m2 | 17.47 | 15.94 | 15.94 | | |
| | | | | | % of room | | 91.23% | 91.23% | 1.00 | YES |

Project Name: 11 Loveridge Mews, London NW6 2DP_M01
Project No.:
Report Title: Daylight & Sunlight Analysis - Neighbour
Date of Analysis: 31/03/2024

| Floor Ref. | Room Ref. | Room Attribute | Property Type | Room Use | Window Ref. | Window Attribute | | VSC | Pr/Ex | Meets BRE Criteria | Window Orientation | Room VSC | Pr/Ex | Meets BRE Criteria | Annual | Pr/Ex | Meets BRE Criteria | Winter | Pr/Ex | Meets BRE Criteria | Total Suns per Room Annual | Pr/Ex | Meets BRE Criteria | Total Suns per Room Winter | Pr/Ex | Meets BRE Criteria |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **63 Loveridge Road** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Second | R1 | Floor Plan | Residential | Unknown | W1 | | Existing | 28.46 | 1.00 | YES | 151° | | | | 49.00 | 1.00 | YES | 14.00 | 1.00 | YES | | | | | | |
| | | | | | | | Proposed | 28.46 | | | | | | | 49.00 | | | 14.00 | | | | | | | | |
| | | | | | | | | | | | | 28.46 | 1.00 | YES | | | | | | | 49.00 | | | 14.00 | | |
| | | | | | | | | | | | | 28.46 | | | | | | | | | 49.00 | 1.00 | YES | 14.00 | 1.00 | YES |
| | R2 | Floor Plan | Residential | Unknown | W2 | | Existing | 35.82 | 1.00 | YES | 151° | | | | 75.00 | 1.00 | YES | 24.00 | 1.00 | YES | | | | | | |
| | | | | | | | Proposed | 35.82 | | | | | | | 75.00 | | | 24.00 | | | | | | | | |
| | | | | | | | | | | | | 35.82 | 1.00 | YES | | | | | | | 75.00 | | | 24.00 | | |
| | | | | | | | | | | | | 35.82 | | | | | | | | | 75.00 | 1.00 | YES | 24.00 | 1.00 | YES |
| **65 Loveridge Road** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Second | R1 | Floor Plan | Residential | Bedroom | W1 | | Existing | 31.22 | 1.00 | YES | 151° | | | | 68.00 | 1.00 | YES | 19.00 | 1.00 | YES | | | | | | |
| | | | | | | | Proposed | 31.22 | | | | | | | 68.00 | | | 19.00 | | | | | | | | |
| | | | | | | | | | | | | 31.22 | 1.00 | YES | | | | | | | 68.00 | | | 19.00 | | |
| | | | | | | | | | | | | 31.22 | | | | | | | | | 68.00 | 1.00 | YES | 19.00 | 1.00 | YES |