The Cottage, 10 Lyndhurst Road London NW3 5PX

Daylight & Sunlight Report



January 2024



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#### 1 Introduction and Methodology

### Generally

- We have been instructed to examine the impact that proposed Cottage at 10 Lyndhurst Road will have in 1.1 relation to daylight and sunlight amenity enjoyed by the neighbouring residential properties.
- It is usual to assess daylight and sunlight in relation to the guidelines set out in the 2022 Building 1.2 Research Establishment report 'Site layout planning for daylight and sunlight - A guide to good practice' by Paul Littlefair. This document is most widely accepted by planning authorities as the means by which to judge the acceptability of a scheme.
- The BRE guidelines are not mandatory, and they explicitly state that the numerical target values should 1.3 be interpreted flexibly. While local planning authorities will consider the acceptability of a proposed scheme in relation to BRE guidance, consideration will be given to the context within which a scheme is located, and daylight and sunlight will be one of a number of planning considerations.
- 1.4 In relation to the properties surrounding a site, usually the local planning authority will only be concerned with the impact to main habitable accommodation (i.e. living rooms, bedrooms and kitchens) within residential properties.
- 1.5 The BRE guidelines provide two principal measures of daylight for assessing the impact on properties neighbouring a site, namely Vertical Sky Component (VSC) and No-Sky Line (NSL). In terms of sunlight we examine the BRE Annual Probable Sunlight Hours (APSH); and in relation to sunlight amenity to gardens and amenity spaces, we apply the quantitative BRE overshadowing guidance. These measures of daylight and sunlight are discussed in the following paragraphs -

### **Diffuse Daylight**

- Vertical Sky Component (VSC) VSC is a measure of the direct skylight reaching a point from an 1.6 overcast sky. It is the ratio of the illuminance at a point on a given vertical plane to the illuminance at a point on a horizontal plane due to an unobstructed sky.
- For existing buildings, the BRE guideline is based on the loss of VSC at a point at the centre of a window, 1.7 on the outer plane of the wall.
- The BRE guidelines state that if the VSC at the centre of a window is less than 27%, and it is less than 0.8 1.8 times its former value (i.e. the proportional reduction is greater than 20%), then the reduction in skylight will be noticeable, and the existing building may be adversely affected.
- No-Sky Line (NSL) NSL is a measure of the distribution of daylight within a room. It maps out the region 1.9 within a room where light can penetrate directly from the sky, and therefore accounts for the size of and number of windows by simple geometry.
- 1.10 The BRE suggest that the area of the working plane within a room that can receive direct skylight should not be reduced to less than 0.8 times its former value (i.e. the proportional reduction in area should not be greater than 20%).

# Sunlight

- Annual Probable Sunlight Hours (APSH) In relation to sunlight, the BRE recommends that the APSH 1.11 received at a given window in the proposed case should be at least 25% of the total available, including at least 5% in winter.
- 1.12 Where the proposed values fall short of these, and the absolute loss is greater than 4%, then the proposed values should not be less than 0.8 times their previous value in each period (i.e. the proportional reductions should not be greater than 20%).
- 1.13 The BRE guidelines state that '...all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90 degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block out too much sun'.
- 1.14 The APSH figures are calculated for each window, and where a room is served by more than one window the contribution of each is accounted for in the overall figures for the room. The acceptability criteria are applied to overall room based figures.

### 1.4.1 Daylight and Sunlight Within Proposed Developments

# Climate Based Daylight Modelling (CBDM) – Daylight Illuminance (DI)

- The new CBDM methodology is based on the British Standard 'Daylight in Buildings' (BS EN17037). This 1.15 contains advice and guidance on interior daylighting for all buildings across Europe but also has a UK National Annex which provides suggested targets for dwellings in the UK.
- 1.16 BS EN17037 supersedes BS 8206 Part 2 which was based on Average Daylight Factor (ADF) and is no longer recommended.
- The CBDM methodology is based on target illuminances from daylight, to be achieved over half the area 1.17 of the room (measured on a reference plane at tabletop level) for at least half of the daylight hours in a typical year. The calculations are based on weather data files which cover different regions of the UK. The calculations are done for each hour of the day for every day of the year. There are 8760 hours in the year, of which 4380 are daylight hours, and therefore the targets should be achieved for 2190 hours in the year. The methodology uses a more accurate sky model which simulates the movement of the sun throughout the day and accounts for the weather conditions at the time. As a result, CBDM 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 comply a north facing room would typically need larger windows.
- 1.18 The UK National Annex gives illuminance recommendations of 100 Lux in bedrooms, 150 Lux in living rooms and 200 Lux in kitchens. These are median illuminances to be achieved over 50% of the assessment grid for at least half of the daylight hours.

- Where a room has a shared use, the highest target should apply. However, it also says that Local 1.19 Authorities could use discretion here and that a living room target of 150 Lux could be used for combined living/kitchen/dining room if the kitchens are not treated as habitable spaces, as it may avoid small separate kitchens in the design. Following this advice, we have adopted a 150 Lux target for LKD's since their principal use is as a living space.
- 1.20 There is a further simplistic methodology based on daylight factors (not the same as the old ADF methodology), which does not use climate-based data but uses a simple fixed sky model. However, since this alternative simplistic methodology does not account for the effect of sunlight, or the orientation of the room, it has not been used in our assessment.
- Section 5 below provides details of the parameters used in the assessment. 1.21

# Sunlight within Proposed Developments

1.22 For new buildings, the BRE guidelines refer to BS EN 17037 which says that a space should receive a minimum of 1.5 hours of sunlight on a selected date between 1st February and 21st March with cloudless conditions. The BRE document suggests 21st March be used. For dwellings, at least one habitable room, preferably a main living room, should achieve at least this minimum criterion and that at least one main window faces within 90 degrees of south. Whilst BS EN 17037 applies to all orientations, the BRE guidelines say that if the room faces significantly north of due east or west, the criterion is unlikely to be met.

### **Overshadowing**

- Section 3.3 of the BRE guidelines describes the method of assessment of the availability of sunlight 1.23 within garden/amenity spaces. This relates to the proportion of shading on March 21st.
- The BRE criteria for gardens or amenity areas are as follows, 'It is recommended that for it to appear 1.24 adequately sunlit throughout the year, at least half of a garden or amenity space should receive at least two hours of sunlight on 21 March. If as a result of a new development an existing garden or amenity space does not meet the above, and the area that can receive two hours of sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.

#### 2 Sources of Information

Metro Plans Land& Measured Building Surveys Survey Info (received 15/12/23) 4362-No.9 Lyndhurst Road, NW3 5PX (revised 01.12.23).dwg

Delva Patman Redler Information and model (received 15/12/23) ENV ROL + VSC 001 - .dwg

Mary Dugan Architects Proposed scheme drawings (received 15/12/23) MD141-A-(00)-100 A.dwg

MD141-A-(00)-101 A.dwg MD141-A-(01)-200 D.dwg MD141-A-(01)-300 D.dwg MD141-A-(01)-301 B.dwg

#### 3 **Drawings Attached**

| Drawing Number: | Title:                   |
|-----------------|--------------------------|
| W1351_01-03     | Site Plan and 3D Views a |
| W1351_04-06     | Site Plan and 3D Views a |
| W1351_WM_01-02  | Window Locations         |
| W1351_SHA_01    | 2hr Overshadowing Asse   |
| W1351_CBDM_01   | CBDM assessment of lig   |
|                 |                          |

#### 4 **Calculations and Assumptions**

- 4.1 In order to calculate the various measures of daylight and sunlight it is necessary to construct a 3D computer model. The model is then analysed using proprietary software to calculate the various measures of daylight and sunlight.
- 4.2 The contextual massing and details of neighbouring properties was based on the 3D CAD model provided which we understand was based on the measured survey data. The proposed scheme was modelling from the architects 2d drawings. The window apertures were based on the survey data. Where necessary window apertures and internal room layouts were based on site research of planning drawings and agents' particulars. Where necessary other features were estimated from site and aerial photography.
- 4.3 The 3D model is created to reproduce the massing of the buildings both on and surrounding the site at a level of detail appropriate to the calculations performed. All heights in the model are in mm Above Ordnance Datum (AOD).
- 4.4 In relation to the CBDM assessment of the daylight and sunlight within the proposed scheme, the following assumptions and parameters have been used. The design team have specified light-coloured internal finishes and therefore, in accordance with paragraph C24 of Appendix C of the new BRE guidelines, the following Reflectance values have been used: light pastel walls with a reflectance of 0.7, light wood veneer floors/ cream carpets with a reflectance of 0.4, and white ceilings with a reflectance of 0.8. All external reflectance's have been assumed to 0.2 as per the guidelines.
- As per the guidelines, for most windows a transmittance factor of 0.68 has been used. A window framing 4.5 factor of 0.8 was derived from the framing dimensions for a typical window shown on the architects' drawings. A maintenance factor of 8% has been allowed to account for the effect of dirt on the glass in an urban environment. The room assessment grid area excludes a 300mm band around the perimeter of the room, as per the paragraph C28 of the guidelines.

as Existing as Proposed

sessment ght within the Proposed Development

#### 5 **Setting Appropriate Targets**

- 5.1 In an urban location, frequently site constraints and the proximity of neighbouring buildings mean that some windows or rooms will fall short of the guideline figures. However, daylight and sunlight are one of a number of factors to be considered in designing a building. In its introduction, the BRE guide itself urges that the guidelines be interpreted flexibly. Section 1.6 says: "The advice given here is not mandatory.....Although it gives numerical guidelines, these should be interpreted flexibly......For example in an historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable...."
- 5.2 The default nationwide BRE numerical criteria are based on 25 degree development angles, which are frequently inappropriate, and indeed unachievable, in urban areas. The BRE VSC target of 27% is based on a uniform 25 degree development angle. Appendix F of the BRE guidelines provide advice on setting alternative targets for access to daylight and sunlight. In relation to the default targets it says; "These values are purely advisory and different targets may be used.....for example, in a mews in a historic city centre, a typical obstruction angle might be close to 40 degrees. This would correspond to a VSC of 18%, which could be used as a target"
- 5.3 In many urban areas development angles of 40 degrees, or more, are common. This is equivalent to a VSC of 18% which is a reasonable and accepted level of daylight in many urban areas.
- 5.4 Such daylight levels have been accepted in many desirable central areas for well over a century. In recent years the need to make best use of available land means that the redevelopment of previously comparatively low-rise, low-density sites has required an increase in density, with corresponding increases in typical development angles and reductions in daylight.
- 5.5 Furthermore, the presence of balconies or recessed windows can dramatically reduce the VSC measured at the windows centre. For example, in the situation shown in the photograph opposite, the VSC on the façade is 22% (which corresponds to a uniform, and this case reciprocal, development angle of 34 degrees) but the presence of the access decks reduces the VSC at the window centre to only 5%. This shows that the substantial effects of balcony overhangs (or recessed windows) means that the VSC figures in such cases should not be used to judge the acceptability of the massing opposite.



#### 6 **Results and Discussion**

- We refer to attached drawings W1351/01-03 which illustrate the site in plan and 3D prior to 6.1 development. Drawings W1351/04-06 illustrate the proposed development.
- 6.2 Drawings W1351/WM/01-02 show the window locations and labelling within the neighbouring residential properties that have been considered in detail. For the purpose of this analysis, each window and room are given a unique reference. This is necessary to track the windows through the various calculations. These labels appear in the table of results titled 'DAYLIGHT & SUNLIGHT ANALYSIS', which shows the daylight and sunlight figures.
- 6.3 The attached table of results show the daylight and sunlight figures for the properties considered sufficiently close to the site to require a detailed assessment and the results for these are discussed below. It is clear from the results for these properties that there would be no material impact to the more distant properties.

# 9 Lyndhurst Road

The results show that the impact to this property in relation to both daylight and sunlight will be very 6.4 small and fully compliant with the BRE guidelines.

# 10 Lyndhurst Road

6.5 The results show that the impact to all windows that appear likely to serve habitable rooms is small and fully compliant with the BRE guidelines. Whilst there would be a noticeable impact to window W1/21, we understand that this serve a bathroom or WC and therefore would not be relevant. The NSL results indicate a small improvement.

#### 7 **Light Within the Proposed Development**

- 7.1 Drawing W1325 CBDM 01 show the internal arrangements within the proposal, together with daylight illuminance (Lux level) contours are achieved for 50% of daylight hours. The drawings also show the median daylight illuminance figure for each of the room. The results show that the overall daylight amenity within the proposed accommodation will be very good. All room will comfortably achieve the recommend daylight target. The open plan living room at ground floor will achieve over twice the minimum recommended figure which is an unusually good level of daylight for an urban location.
- 7.2 With reference to attached table for Sunlight Exposure, the results show that the unit complies with the recommended guidelines.

# 8 <u>Overshadowing</u>

- 8.1 The attached drawing W1351\_SHA\_01 shows that the rear gardens at 9 & 10 Lyndhurst Road will receive at least 2 hours of sunlight on 21<sup>st</sup> March over 58% and 59% of their area respectively. Since for each garden this is more than the 50% BRE guideline threshold, this demonstrates that they will receive good sunlight levels throughout the year. Therefore, the overshadowing impact of the proposed development on neighbouring properties fully accords with BRE guidance on overshadowing.
- 8.2 Whilst the rear garden of the cottage is slightly below guidance on 21<sup>st</sup> March, the target is achieved by the 31<sup>st</sup> March which nevertheless is a good result for a north facing garden in an urban location.

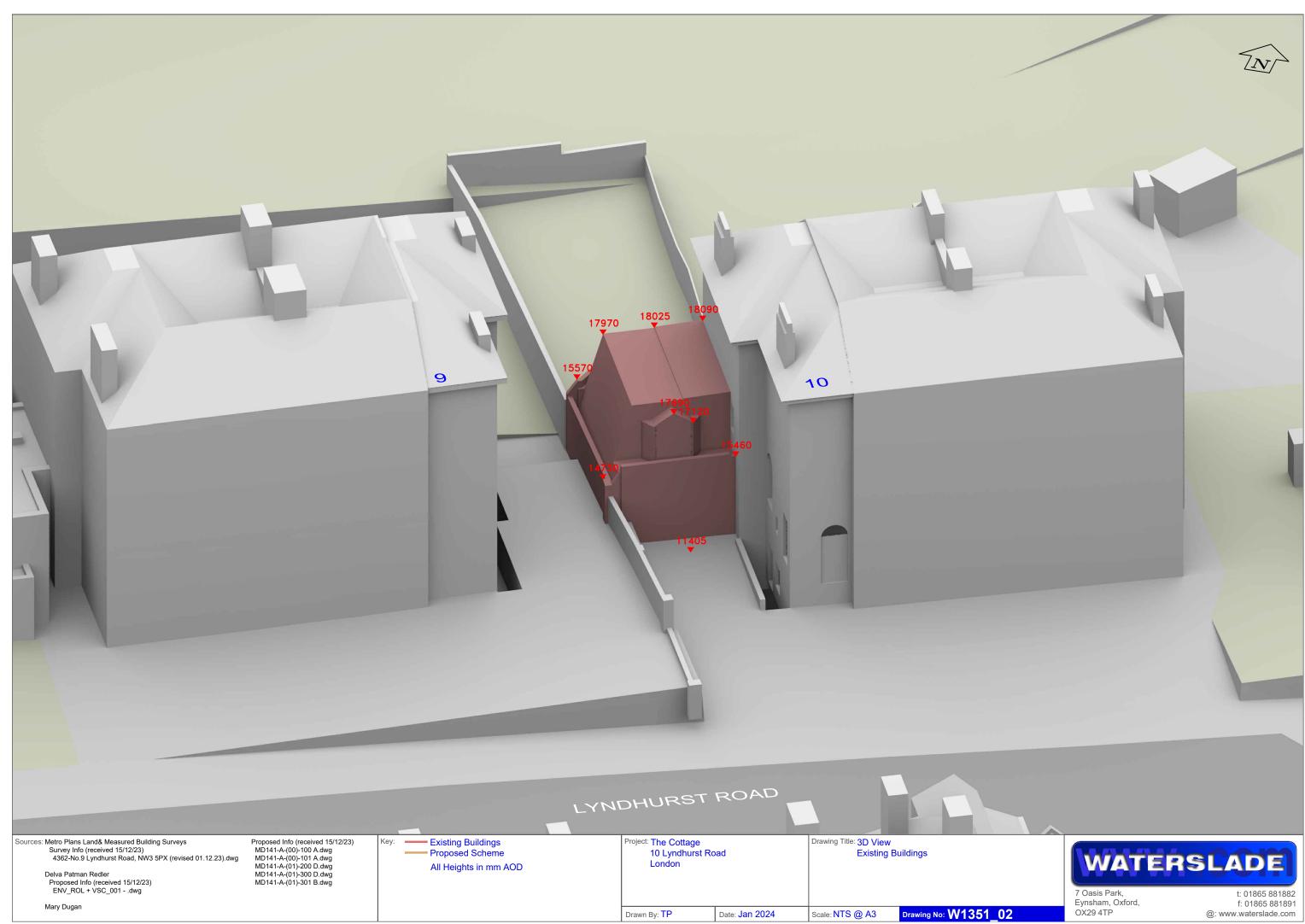
# 9 <u>Summary and Conclusions</u>

- 9.1 We have considered the proposed development in relation to the BRE guidelines on daylight and sunlight.
- 9.2 The effect of the proposed development on the daylight and sunlight to the neighbouring properties will be minimal and fully compliant with the BRE guidelines.
- 9.3 The light within the proposed new dwelling will be unusually good for an urban location and fully compliant with the BRE guidelines.
- 9.4 Therefore, the impact of proposed development on daylight and sunlight should be regarded as acceptable.

Waterslade Ltd.

|   | 9  | 10  |                         |
|---|--|---|-------------------------|
|   |  | LYNDHURST ROAD  |                         |
| Sources: Metro Plans Land& Measured Building Surveys<br>Survey Info (received 15/12/23)<br>4362-No.9 Lyndhurst Road, NW3 5PX (revised 01.12.23).dwg<br>Delva Patman Redler<br>Proposed Info (received 15/12/23)<br>Build 141-A-(01)-100 A.dwg<br>MD141-A-(01)-200 D.dwg<br>MD141-A-(01)-300 D.dwg<br>MD141-A-(01)-301 B.dwg | Key: Existing Buildings<br>Proposed Scheme | Project: The Cottage<br>10 Lyndhurst Road<br>London               | Plan<br>ting Buildings  |
| Proposed Info (received 15/12/23) MD141-A-(01)-301 B.dwg<br>ENV_ROL + VSC_001dwg<br>Mary Dugan  | -  | Drawn By: <b>TP</b> Date: <b>Jan 2024</b> Scale: <b>1:300</b> @ A | A3 Drawing No: W1351_0' |





| Sources: Metro Plans Land& Measured Building Surveys<br>Survey Info (received 15/12/23)<br>4362-No.9 Lyndhurst Road, NW3 5PX (revised 01.12.23).dwg<br>Delva Patman Redler<br>Proposed Info (received 15/12/23)<br>ENV_ROL + VSC_001dwg | Proposed Info (received 15/12/23)<br>MD141-A-(00)-100 A.dwg<br>MD141-A-(00)-101 A.dwg<br>MD141-A-(01)-200 D.dwg<br>MD141-A-(01)-300 D.dwg<br>MD141-A-(01)-301 B.dwg | ey: Existing Buildings<br>Proposed Scheme<br>All Heights in mm AOD | Project: The Cottage<br>10 Lyndhurst Road<br>London | Drawing Title: 3D View<br>Existing Buildings |
|---|---|--|---|--|

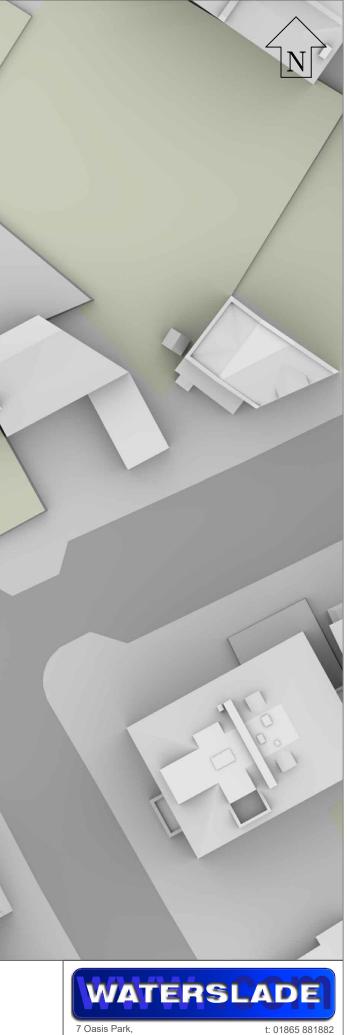
Drawn By: TP

Date: Jan 2024

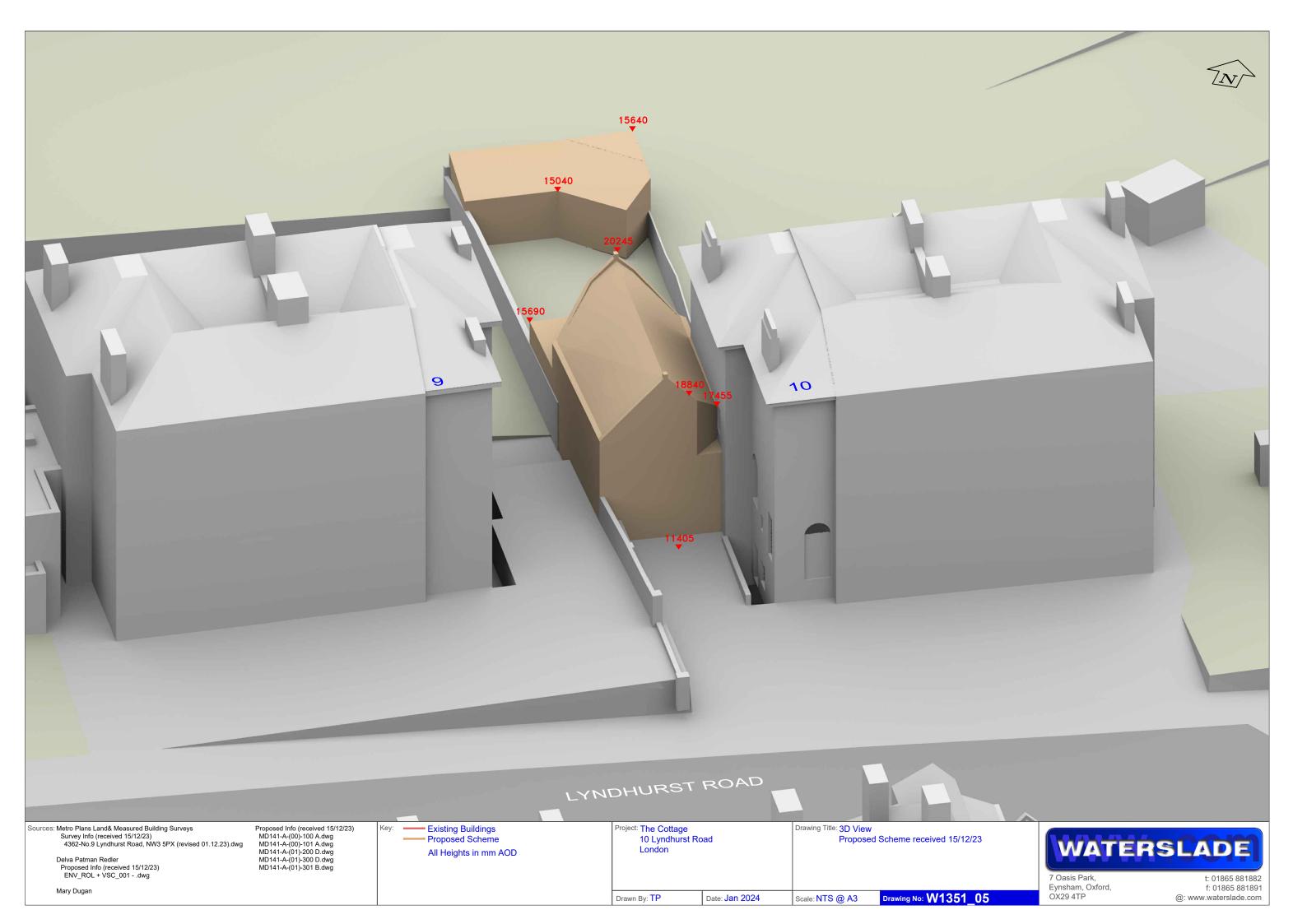
Scale: NTS @ A3

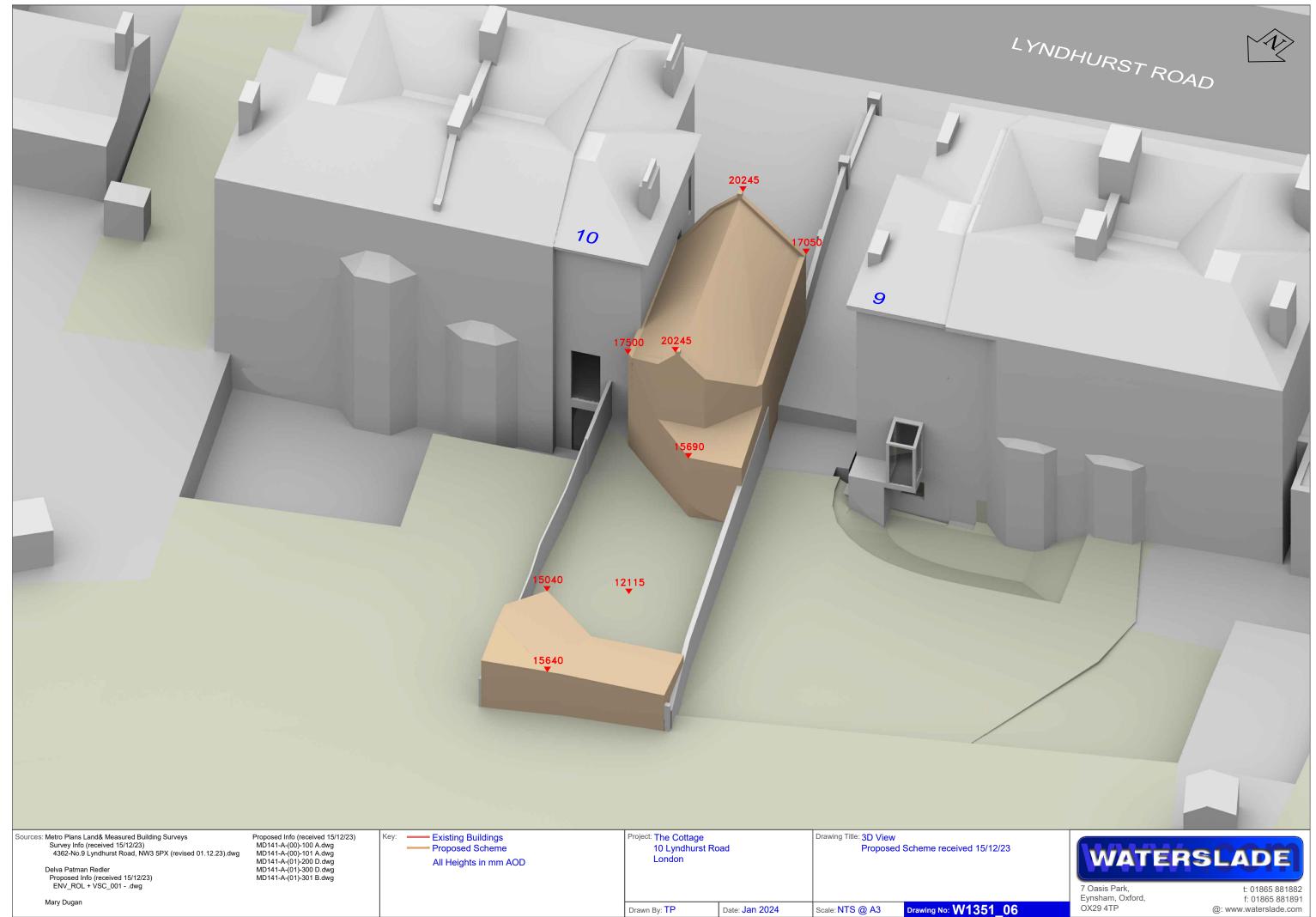


| LYNDHURST ROAD   |                                   |
|--|-----------------------------------|
| Sources: Metro Plans Land& Measured Building Surveys Proposed Info (received 15/12/23)   Survey Info (received 15/12/23) MD141-Ar(00)=100 A dvg   4362-No.9 Lyndhurst Road, NW3 5PX (revised 01.12.23).dwg MD141-Ar(00)=100 A dvg   Delva Patama Reder Proposed Info (received 15/12/23)   Proposed Info (received 15/12/23) MD141-Ar(00)=100 A dvg   MD141-Ar(00)=100 A dvg MD141-Ar(00)=100 A dvg   MD141-Ar(01)=200 D dvg MD141-Ar(01)=200 D dvg   MD141-Ar(01)=301 B.dvg MD141-Ar(01)=301 B.dvg   Mary Dugan Drawn By: TP Date: Jan 2024 Scale: 1:300 @ A3 | an<br>ed Scheme received 15/12/23 |

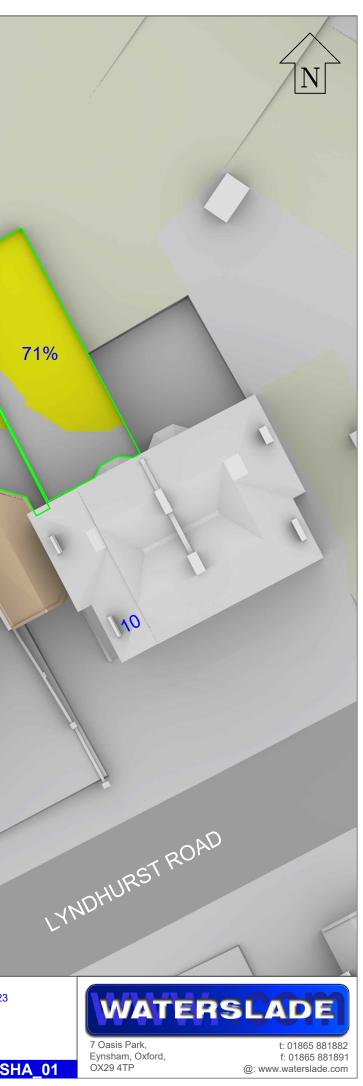


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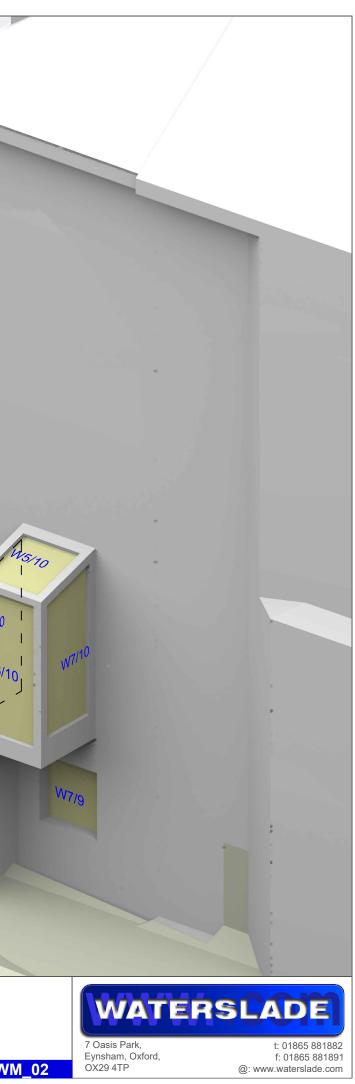
|  | 59%  |  |                | 65%                                  | 51%                                       |
|--|--|--|----------------|--------------------------------------|---|
| 21st March   | LYNDHURSTROAD  | 31st March                                       |                |                                      |   |
| Sources: Metro Plans Land& Measured Building Surveys<br>Survey Info (received 15/12/23)   Proposed Info (received 15/12/23)     4362-No.9 Lyndhurst Road, NW3 5PX (revised 01.12.23).dwg   MD141-A-(00)-101 A.dwg     Delva Patman Redler   MD141-A-(10)-200 D.dwg     Proposed Info (received 15/12/23)   MD141-A-(01)-300 D.dwg     Proposed Info (received 15/12/23)   MD141-A-(01)-300 D.dwg     Proposed Info (received 15/12/23)   MD141-A-(01)-300 D.dwg     Proposed Info (received 15/12/23)   MD141-A-(01)-301 B.dwg | Key: Area analysed   | Project: The Cottage<br>10 Lyndhurst R<br>London | load           | Drawing Title: BRE 2hr S<br>Proposed | Sunlight Test<br>Scheme received 15/12/23 |
| MD141-A-(01)-200 D.dwg     Delva Patman Redler   MD141-A-(01)-300 D.dwg     Proposed Info (received 15/12/23)   MD141-A-(01)-301 B.dwg   | Area with more than 2 hours of direct sunlight                   | London   |                | 21st Marc                            | h vs 31st March                           |
| EINV_KOL + VSC_001uwg  | Area with less than 2 hours of direct sunlight                   |  |                |                                      |   |
| Mary Dugan   | 50% Percentage of area with more than 2 hours of direct sunlight | Drawn By: TP                                     | Date: Jan 2024 | Scale: 1:300 @ A3                    | Drawing No: W1351_S                       |



|   |   |      | WSRO   |   |
|---|---|------|--|---|
| Sources: Metro Plans Land& Measured Building Surveys<br>Survey Info (received 15/12/23)<br>4362-No.9 Lyndhurst Road, NW3 5PX (revised 01.12.23).dwg<br>Delva Patman Redler<br>Proposed Info (received 15/12/23)<br>ENV_ROL + VSC_001dwg<br>Mary Dugan | Proposed Info (received 15/12/23)<br>MD141-A-(00)-100 A.dwg<br>MD141-A-(00)-101 A.dwg<br>MD141-A-(01)-200 D.dwg<br>MD141-A-(01)-300 D.dwg<br>MD141-A-(01)-301 B.dwg | Key: | Project: The Cottage<br>10 Lyndhurst Road<br>London<br>Drawn By: TP Date: Jan 2024 | Drawing Title: Window Locations<br>10 Lyndhurst Road<br>Scale: NTS @ A3 Drawing No: W1351_V |



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|---|---|-----------|--|--|
| Sources: Metro Plans Land& Measured Building Surveys<br>Survey Info (received 15/12/23)<br>4362-No.9 Lyndhurst Road, NW3 5PX (revised 01.12.23).dwg<br>Delva Patman Redler<br>Proposed Info (received 15/12/23)<br>ENV_ROL + VSC_001dwg<br>Mary Dugan | Proposed Info (received 15/12/23)<br>MD141-A-(00)-100 A.dwg<br>MD141-A-(00)-101 A.dwg<br>MD141-A-(01)-200 D.dwg<br>MD141-A-(01)-300 D.dwg<br>MD141-A-(01)-301 B.dwg |           | Project: The Cottage<br>10 Lyndhurst Road<br>London<br>Drawn By: TP Date: Jan 2024 | Drawing Title: Window Locations<br>9 Lyndhurst Road<br>Scale: NTS @ A3 Drawing No: W1351_W |





# DAYLIGHT ANALYSIS EXISTING vs PROPOSED SCHEME RECEIVED 15/12/23

| Location       |             | Vertical Sky Component (VSC) |                 |                 |                     | No-Sky Line (NSL) |                   |                   | Wind                | low              | Annual Probable Sunlight Hours (APSH) (room) |          |            |         |                        |        |
|----------------|-------------|------------------------------|-----------------|-----------------|---------------------|-------------------|-------------------|-------------------|---------------------|------------------|--|----------|------------|---------|------------------------|--------|
| Room           | Room Use    | Window                       | EXISTING<br>VSC | PROPOSED<br>VSC | Reduction<br>Factor | Whole<br>Room     | EXISTING<br>sq ft | PROPOSED<br>sq ft | Reduction<br>Factor | Angle from South | Aspect                                       | Existing | Annual 9   | Propose | d Red<br>Annual % Fact | uction |
| Room           | Room 036    | Window                       | 100             | 100             | 1 40101             | Room              | 34 10             | 3411              |                     | Journ            |  | Winter / | , Annuar / |         |                        |        |
| 9 LYNDH        | IURST ROAD  |                              |                 |                 |                     |                   |                   |                   |                     |                  |  |          |            |         |                        |        |
| R1/9           | BEDROOM     | W1/9                         | 20.3            | 20.3            | 1.00                | 84.9              | 34.3              | 34.3              | 1.00                |                  |  |          |            |         |                        |        |
| R2/9           | HALL        | W2/9                         | 17.3            | 17.3            | 1.00                | 54.4              | 31.8              | 31.8              | 1.00                |                  |  |          |            |         |                        |        |
| R2/9           | HALL        | W3/9                         | 13.6            | 13.6            | 1.00                |                   |                   |                   |                     |                  |  |          |            |         |                        |        |
| R3/9           | BEDROOM     | W4/9                         | 16.5            | 16.5            | 1.00                | 84.5              | 38.3              | 38.3              | 1.00                | 28.4°E           | Southerly                                    |          |            |         |                        |        |
| R3/9           | BEDROOM     | W5/9                         | 17.2            | 17.2            | 1.00                |                   |                   |                   |                     | 118.3°E          | Northerly                                    | 7        | 32         | 7       | 32                     | 1.00   |
| R4/9           | KITCHEN     | W6/9                         | 16.2            | 16.2            | 1.00                | 167.7             | 154.3             | 154.3             | 1.00                |                  |  |          |            |         |                        |        |
| R4/9           | KITCHEN     | W7/9                         | 16.4            | 16.4            | 1.00                |                   |                   |                   |                     |                  |  |          |            |         |                        |        |
| R1/10          |             | W4/10                        | 28.6            | 28.3            | 0.99                | 94.8              | 84.8              | 84.8              | 1.00                |                  |  |          |            |         |                        |        |
| R2/10          |             | W3/10                        | 22.3            | 22.1            | 0.99                | 45.2              | 42.7              | 42.7              | 1.00                |                  |  |          |            |         |                        |        |
| R3/10          |             | W1/10                        | 25.9            | 24.9            | 0.96                | 87.9              | 78.4              | 70.4              | 0.90                |                  |  |          |            |         |                        |        |
| R3/10          |             | W2/10                        | 25.8            | 25.0            | 0.97                |                   |                   |                   |                     |                  |  |          |            |         |                        |        |
| R4/10          |             | W5/10                        | 61.9            | 61.8            | 1.00                | 187.2             | 172.8             | 172.8             | 1.00                | 104.4°W          | Northerly                                    |          |            |         |                        |        |
| R4/10          |             | W6/10                        | 34.1            | 34.1            | 1.00                |                   |                   |                   |                     | 152°W            | Northerly                                    |          |            |         |                        |        |
| R4/10<br>R4/10 |             | W7/10<br>W8/10               | 16.7<br>22.8    | 16.7<br>21.2    | 1.00<br>0.93        |                   |                   |                   |                     | 62°W<br>118°E    | Southerly<br>Northerly                       | 2        | 17         | 2       | 16                     | 0.94   |
|                |             |                              |                 |                 |                     |                   |                   |                   |                     | 110 2            | literationly                                 | -        |            | -       |                        |        |
| R1/11          | WC          | W1/11                        | 33.3            | 33.0            | 0.99                | 34.7              | 29.6              | 29.6              | 1.00                |                  |  |          |            |         |                        |        |
| R2/11          |             | W2/11                        | 32.0            | 31.3            | 0.98                | 25.4              | 22.3              | 22.3              | 1.00                |                  |  |          |            |         |                        |        |
| R2/11          |             | W3/11                        | 31.7            | 31.2            | 0.98                |                   |                   |                   |                     |                  |  |          |            |         |                        |        |
| 10 LYND        | HURST ROAD  |                              |                 |                 |                     |                   |                   |                   |                     |                  |  |          |            |         |                        |        |
| R1/19          |             | W1/19                        | 16.2            | 16.2            | 1.00                | 160.0             | 149.1             | 149.1             | 1.00                |                  |  |          |            |         |                        |        |
| R1/20          |             | W2/20                        | 19.8            | 18.6            | 0.94                | 106.1             | 87.9              | 87.9              | 1.00                | 62.4°W           | Southerly                                    | 20       | 46         | 20      | 46                     | 1.00   |
| R2/20          |             | W3/20                        | 22.3            | 20.9            | 0.94                | 76.8              | 76.6              | 76.6              | 1.00                | 62.4°W           | Southerly                                    |          |            |         |                        |        |
| R2/20          |             | W4/20                        | 25.5            | 24.5            | 0.96                |                   |                   |                   |                     | 62.4°W           | Southerly                                    |          |            |         |                        |        |
| R2/20          |             | W5/20                        | 31.9            | 31.9            | 1.00                |                   |                   |                   |                     | 27.9°E           | Southerly                                    | 26       | 77         | 26      | 77                     | 1.00   |
| R3/20          |             | W1/20                        | 32.5            | 30.2            | 0.93                | 160.0             | 150.2             | 150.2             | 1.00                |                  |  |          |            |         |                        |        |
| R1/21          | Bathroom/WC | W1/21                        | 17.6            | 9.3             | 0.53                | 32.1              | 24.4              | 25.7              | 1.05                | 62.4°W           | Southerly                                    | 17       | 45         | 16      | 30                     | 0.67   |
| 21/20          |             | W1/29                        | 14.9            | 14.0            | 0.94                | 76.9              | 26.6              | 25.5              | 0.96                | 62.4°W           | Southarly                                    | 10       | 34         | 10      | 34                     | 1.00   |
| R1/29          |             | VV 1/29                      | 14.9            | 14.0            | 0.94                | 76.8              | 20.0              | 20.0              | 0.96                | 02.4 VV          | Southerly                                    | 10       | 34         | 10      | 34                     | 1.00   |



# SUNLIGHT EXPOSURE ANALYSIS

THE COTTAGE, 10 LYNDHURST ROAD, LONDON PROPOSED SCHEME RECEIVED 15/12/23

| Unit | Room       | Room Use         | Window   | Orientation   | Date   | Sunlight<br>Exposure<br>(Hours)                                    | Room<br>Complies? | Unit<br>Complies? |  |
|------|------------|------------------|--|---|--|--|-------------------|-------------------|--|
|      | THE COTTAG | SE, 10 LYNDHURST | ROAD   |   |  |  |                   | $\checkmark$      |  |
|      | R1/99      | BEDROOM          | W1/99  | Northerly   | 21-Mar<br>21-Mar   | 0.0<br>0.0   | ×                 |                   |  |
|      | R2/99      | BEDROOM          | W2/99  | Northerly   | 21-Mar<br>21-Mar   | 0.0<br>0.0   | ×                 |                   |  |
|      | W3/100     | LKD              | W1/100<br>W3/100<br>W2/100<br>W1/101<br>W1/110<br>W1/100<br>W1/101<br>W2/100<br>W3/100 | Northerly<br>Northerly<br>Southerly<br>Southerly<br>Northerly<br>Southerly<br>Northerly<br>Westerly | 21-Mar<br>21-Mar<br>21-Mar<br>21-Mar<br>21-Mar<br>21-Mar<br>21-Mar<br>21-Mar<br>21-Mar | 2.3<br>0.0<br>0.3<br>0.0<br>2.3<br>3.4<br>0.0<br>2.3<br>0.0<br>0.3 | •                 |                   |  |
|      | R1/101     | BEDROOM          | W4/101<br>W3/101<br>W2/101   | Northerly<br>Northerly<br>Southerly   | 21-Mar<br>21-Mar<br>21-Mar<br>21-Mar   | 4.2<br>0.0<br>0.0<br>4.2   | ✓                 |                   |  |