### DAYLIGHT AND SUNLIGHT STUDY

160 Malden Road, London by Love Design Studio

August 2022 PR455\_V1



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#### **EXECUTIVE SUMMARY**

Love Design Studio are appointed to prepare a daylight and sunlight assessment for the proposed development at 160 Malden Road. This is to assess the on-site daylight and sunlight provision to rooms deemed habitable and the impact of daylight and sunlight access to neighbouring properties, based on relevant industry guidance.

Of the proposed scheme assessment, 108 windows and 47 adjoining rooms were identified in Flats 1-15 as part of habitable spaces for the assessments, consisting of 15 Living/kitchen/dining rooms (LKDs) and 32 bedrooms.

The following neighbouring properties were assessed for impact by the proposed scheme:

- Wellesley Road Care Home
- 131 141 (Odd) Malden Road

To ensure that this assessment has correctly considered the daylight and sunlight access experienced on-site and to neighbouring properties, it has been instigated in accordance with the Building Research Establishment's publication "Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice" (2022) (the "BRE Guidelines").

Daylight and sunlight access is typically desirable for occupants within residential 'habitable' rooms. This is acknowledged within the BRE guidelines, which place the most emphasis on these uses; mainly living rooms.

Furthermore, the government wish to densify sites to maximise the delivery of housing for the UK and maximise the sustainability credentials by maximising the use on-site. The National Planning Policy Framework (2021) states at para.125 in relation to achieving appropriate densities that:

"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)."

Para.125 is also a policy objective of the adopted London Plan 2021 and supports Policy H1 'Maximising Housing Supply' of the Camden Local Plan 2017.

Please see below a concise summary of the study:



### PROPOSED SCHEME DAYLIGHT AND SUNLIGHT ACCESS

108 windows and 47 adjoining rooms were identified in Flats 1-15 as part of habitable spaces for the assessments, consisting of 15 Living/kitchen/dining rooms (LKDs) and 32 bedrooms.

Assessments were made using the 'illuminance method' to measure internal daylight provision and 'sunlight exposure' to measure sunlight access.

For interior daylight of new developments in the UK, the BRE guidelines are intended to be used with The British Standard "Daylight in buildings" (BS EN 17037) and its National Annex.

BS EN 17037 states that a target illuminance should be achieved across a minimum of 50% of the reference plane, for at least 50% of the daylight hours. The target illuminance is dependent on room use, in which bedrooms, living rooms, and kitchens have a target of 100 lux, 150 lux, and 200 lux, respectively.

As the proposed scheme contains LKDs, a target of 150 lux for living rooms was used, as recommended in Appendix C of the BRE guidelines.

The illuminance method demonstrated the following:

- All 15 LKDs met the BRE target of 150 lux across 50% of the reference plane, for at least 50% of the daylight hours.
- 30 out of 32 bedrooms met the target of 100 lux across 50% of the reference plane, for at least 50% of the daylight hours.
- Overall, the proposed scheme has a 96% pass rate for daylight provision using the illuminance method.

Regarding Sunlight, all habitable rooms 90° due south met the BRE Guidelines by receiving a minimum of 1.5 hours of sunlight on March 21.



### DAYLIGHT AND SUNLIGHT ACCESS TO NEIGHBOURING PROPERTIES

Assessments were made of the Vertical Sky Component (VCS) and Daylight Distribution (DD) to measure daylight access.

Guidance and reference have been sought within the National Planning Policy Framework (2021) and Greater London Authority representation hearing report D&P/3067/03 – Appendix 1 (18<sup>th</sup> November 2013); this is to consider the context of the site sitting within a dense urban location within London.

As the site is in a dense urban location, with several of the properties located close to the site boundary, some buildings are therefore considered as neighbours that impose potential restriction of further development; as per Appendix F of the "BRE Guidelines". In this case, the neighbouring properties are Wellesley Road Care Home and 131-141 (Odd) Malden Road. It is therefore accepted that a VSC of 20% is a more appropriate application of the tests given the urban context of the site and the national, regional, and local planning policy objective of making the most efficient use of land.

Regarding 131-141 (Odd) Malden Road, the results of the VSC analysis demonstrate that all 32 windows achieve a VSC greater than 20% and a relative VSC greater than 0.8 times the existing value.

The daylight distribution analysis of the 22 rooms across 131-141 (Odd) Malden Road demonstrates that the proposed scheme does not affect the no-skyline of any of the habitable rooms, except for the lower ground room of 137 Malden Road, which is assumed to be a bedroom.

However, it should be noted that the internal layout of 137 Malden Road is based off assumptions. The assumptions were made using floor plans of 129 Malden Road extracted from the Camden Planning Portal (Appendix B). The no-skyline test is especially sensitive to the depth, width, size and layout of the room and the results are likely to be misleading.

Regarding Wellesley Road Care Home, the results of the VSC analysis demonstrates that 28 of the 31 windows analysed achieve a VSC greater than 20%.

Of the 3 windows that fall short of the 20% VSC target:

• 2 of the windows adjoin a communal seating area. This is a dual aspect room consisting of 4 windows in total, 2 of which pass the 20% VSC target while the remaining 2 fall short. Thus, the daylight distribution of the room (discussed below) is unaffected, meeting BRE guidelines.



• 1 window adjoins a corridor, which is not considered a habitable space and is to be ignored under BRE guidelines.

The daylight distribution analysis conducted on the Wellesley Road Care Home demonstrates that the proposed scheme does not affect the no-skyline of any habitable rooms. Most importantly, no bedrooms within the care home experience a reduction in daylight access from the proposed scheme.

Only 2 areas experienced an impact to the no-skyline; one being a corridor and the other is a dual aspect kitchen, which is not considered to be a habitable room for the residents of the care home. Therefore, as the no-skyline is not significantly affected in any habitable rooms of the Wellesley Road Care Home, the proposed scheme aligns with the BRE guidelines.

To assess sunlight, the BRE guidelines state that neighbouring windows within 90° due south should receive Annual Probable Sunlight Hours (APSH) of 25%, including at least 5% during the winter months (WPSH). All assessed windows meet the BRE targets of 25% APSH and at least 5% (WPSH), apart from 1 window in Wellesley Road Care Home. However, this window adjoins a corridor, so it is to be ignored by the BRE guidelines.

It is therefore considered that the proposed development design is in line with the objectives of the National, Regional and Local policy context and the guidelines on daylight and sunlight set by BRE whilst simultaneously considering other environmental factors.



#### INTRODUCTION

Love Design Studio are appointed to prepare a daylight and sunlight assessment for the proposed development at 160 Malden Road, London, NW5 4BS. This is to assess the on-site daylight and sunlight access to rooms deemed habitable and the impact of daylight and sunlight access to neighbouring properties, based on relevant industry guidance.

The proposal is to demolish the existing buildings on site and to deliver a 4-storey development consisting of a commercial unit on the ground floor and 15 residential units spread across the ground and upper floors.

All neighbouring properties shown in the below image were included within the surrounding massing model where relevant; the existing site of 160 Malden Road is indicated within the red line boundary.

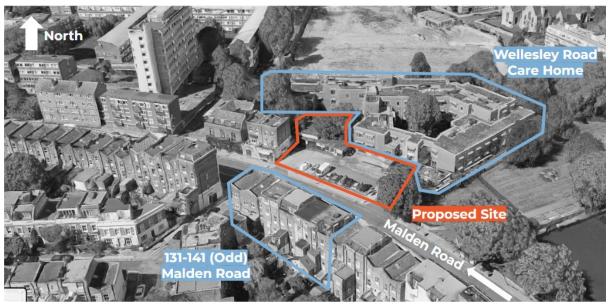


Figure 1: Site plan aerial view with the proposed development (red) and neighbouring buildings assessed (blue)



#### **METHODOLOGY**

#### MODELLING METHODOLOGY

Using architectural drawings prepared by Piotr Garstecki (received 12<sup>th</sup> June 2022) and google maps observations, 3D models were created in industry accepted daylight and sunlight software. These included the on-site existing structures within the site boundary, the proposed development, and the relevant neighbouring properties. Using a specialist computer programme, we have undertaken the analysis set out in the BRE Guidelines.

The guidelines for modelling and testing the scheme's daylight and sunlight access were provided by the BRE's "Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice" by PJ Littlefair (2022); accepted as good practice by Planning Authorities when assessing the applications for new schemes. For further guidance on the methodology please see the BRE's document<sup>1</sup>.

#### PROPOSED DEVELOPMENT ASSESSMENT METHODOLOGY

Assessments were made using the 'illuminance method' to measure daylight provision, set out in Appendix C of the BRE guidelines. Assessments were made using 'sunlight exposure' to measure sunlight.

For interior daylight of new developments, the BRE guidelines are intended to be used with the British Standard "Daylight in buildings" (BS EN 17037) and its UK National Annex.

BS EN 17037 states that a target illuminance should be achieved across a minimum of 50% of the reference plane, for at least 50% of the daylight hours. The document sets numerical values for the target illuminance and seeks to ensure that habitable rooms receive ample daylight access. Depending on the room type there are different guidelines on the target illuminance; with living rooms and large kitchens given greater weighting.

https://www.brebookshop.com/details.jsp?id=328056



A table of the scheme's Target Illuminance values are set out below:

Table 1: The proposed scheme target ADF values

Item	Target Illuminance	% assessment grid
Living Rooms	150 lux	50%
Kitchens	200 lux	50%
Bedrooms	100 lux	50%

As the proposed scheme contains LKDs, a target of 150 lux for living rooms was used, provided the kitchen space is included in the assessment area, as recommended in Appendix C of the BRE guidelines.

Assumptions of the reflectance and other modelling variables are set out below:

Table 2: The proposed scheme target illuminance variables.

rable 2. The proposed scriente target illaminance variables.						
Item	Value	Comment				
Window light transmittance	0.68	Clear glass				
		% loss of daylight based on:				
Maintenance factor	92%	'urban'				
		vertical glazing				
Frame factor	83%	As measured from the architectural drawings of this scheme				
Floor reflectance	0.3	-				
Wall reflectance	0.7	-				
Ceiling reflectance	0.9	-				

With regards to sunlight, the BRE Guidelines seek those windows within 90° of due south should receive a minimum of 1.5 hours of sunlight on 21 March, with greater emphasis on main living rooms.



### DAYLIGHT AND SUNLIGHT ACCESS TO NEIGHBOURS METHODOLOGY

The numerical values contained within the BRE Guidelines to establish whether the proposals will have a significant effect on the daylight enjoyed by the neighbouring properties are based initially on a Vertical Sky Component analysis (VSC). It seeks for each window to achieve a VSC of 27% or 0.8 times the existing.

Guidance and reference have been sought within the National Planning Policy Framework (2021) and Greater London Authority representation hearing report D&P/3067/03 – Appendix 1 (18<sup>th</sup> November 2013); this is to consider the context of the site sitting within a dense urban location within London.

As the site is in a dense urban location, with several of the properties located close to the site boundary, some buildings are therefore considered as neighbours that impose potential restriction of further development; as per Appendix F of the BRE Guidelines. It is therefore accepted that a VSC of 20% is considered a more appropriate application of the tests given the urban context of the site and the national, regional, and local planning policy objective of making the most efficient use of land.

The BRE Guidelines also states that both the total amount of skylight (Vertical Sky Component) and its distribution within the building (Daylight Distribution) are important. Where room layouts are known, the impact on the daylighting distribution can be found by plotting the 'no-skyline' in each of the main rooms.

For a room to enjoy good daylight distribution, the BRE Guidelines set out numerical values for daylight distribution and seeks to ensure that a significant portion or at least 0.8 times the existing area of each habitable room lies in front of the no-skyline, but specifically states that bedrooms are less important than living rooms.

With regards to sunlight, the BRE Guidelines seek that all windows within 90° of due south achieve 25% of the Average Probable Sunlight Hours (APSH), with at least 5% during the winter months.



#### **ASSUMPTIONS & LIMITATIONS**

Drawings used to model the proposed scheme are based on pdf and cad files prepared by Piotr Garstecki (received 12<sup>th</sup> June 2022), as well as google maps observations.

Drawings used to model Wellesley Road Care Home were extracted from internal floor plans, dated November 2009, provided by Grade Planning (Appendix B).

Where limited access or information is available, assumptions have been made, which may affect the conclusions reached in this report. Without internal room layouts for 131-141 (Odd) Malden Road, assumptions were made using floor plans of 129 Malden Road extracted from the Camden Planning Portal (Appendix B).

Therefore, the report may need to be updated if room layouts are confirmed by the local authority or by the consultation responses.

This study does not calculate the effects of trees and hedges on daylight and sunlight. The BRE guide states that it is usual to ignore the effect of existing trees and shrubs.

The report provided is solely for the use of the client and no liability to anyone else is accepted and this report is based upon and subject to the scope of work set out in Love Design Studio's terms and conditions.



#### **NEIGHBOURING PROPERTIES**

For reference, please see below images of the existing neighbouring properties; this is for illustrative purposes only.

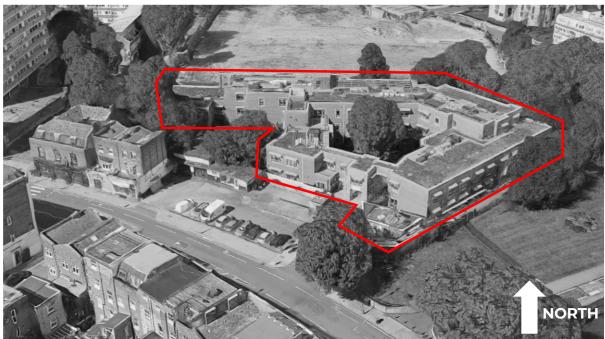


Figure 2: Aerial view of Wellesley Road Care Home (Red)



Figure 3: (Left to Right) Aerial view of 131 to 141 (Odd) Malden Road (Red)



#### PROPOSED SCHEME MODEL IMAGE

For reference, please see below images of the constructed model from the relevant software; this is for illustrative purposes only.

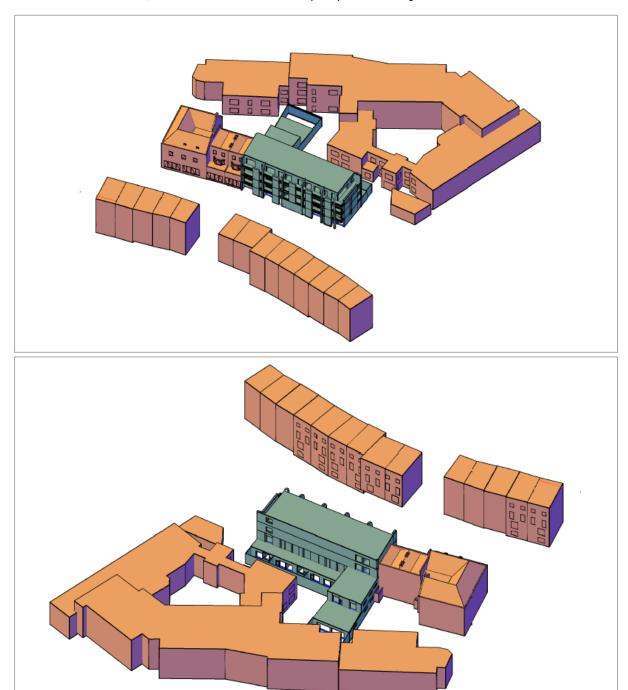


Figure 4: Aerial view of the proposed scheme (North, Top; South, Bottom)



#### **PROPOSED SCHEME SUMMARY**

Assessments were made using the illuminance method to measure on-site daylight provision and sunlight exposure to measure on-site sunlight access.

All habitable rooms within the proposed development were assessed for daylight provision by calculating if bedrooms and LKDs met a target illuminance of 100 and 150 lux, respectively, across a minimum of 50% of the reference plane, for at least 50% of the daylight hours.

All habitable rooms within 90° due south were assessed for sunlight exposure, in which a minimum of 1.5 hours of sunlight should be achieved on March 21. LKDs were also assessed for sunlight even if they were not 90° due south, as the BRE guidelines place high value on main living rooms.

A full set of calculations of the daylight provision and sunlight access are set out below:

Table 3: Full Daylight and Sunlight Test results for the proposed development

Reference*	Target illuminance area achieved (%)	Sunlight exposure (hours)
Unit 1/GF/LKD/R11	100%	3.7
Unit 1/GF/Bed/R7	56%	*North*
Unit 1/GF/Bed/R8	74%	*North*
Unit 1/GF/Bed/R9	55%	*North*
Unit 2/GF/LKD/R12	50%	5.9
Unit 2/GF/Bed/R4	40%	*North*
Unit 2/GF/Bed/R5	59%	*North*
Unit 2/GF/Bed/R6	41%	*North*
Unit 3/GF/LKD/R1	99%	8.2
Unit 3/GF/Bed/R2	73%	*North*
Unit 3/GF/Bed/R3	50%	*North*
Unit 4/L1/LKD/R6	100%	*North*
Unit 4/L1/Bed/R4	94%	2.8
Unit 4/L1/Bed/R5	100%	*North*

Reference*	Target illuminance area achieved (%)	Sunlight exposure (hours)
Unit 4/L1/Bed/R7	83%	*North*
Unit 5/L1/LKD/R8	51%	4.8
Unit 5/L1/Bed/R9	100%	7.0
Unit 6/L1/LKD/R10	100%	4.7
Unit 6/L1/Bed/R11	99%	6.7
Unit 6/L1/Bed/R12	100%	7.5
Unit 7/L1/LKD/R15	75%	4.7
Unit 7/L1/Bed/R13	100%	7.3
Unit 7/L1/Bed/R14	100%	7.2
Unit 8/L1/LKD/R1	100%	9.5
Unit 8/L1/Bed/R2	100%	6.4
Unit 8/L1/Bed/R3	100%	6.1
Unit 9/L2/LKD/R6	100%	8
Unit 9/L2/Bed/R4	100%	*North*
Unit 9/L2/Bed/R5	100%	*North*
Unit 10/L2/LKD/R7	100%	4.8
Unit 10/L2/Bed/R8	100%	7.1
Unit 10/L2/Bed/R9	100%	7.9
Unit 11/L2/LKD/R12	100%	4.8
Unit 11/L2/Bed/R10	100%	7.7
Unit 11/L2/Bed/R11	100%	7.4
Unit 12/L2/LKD/R1	100%	8
Unit 12/L2/Bed/R2	100%	6.4
Unit 12/L2/Bed/R3	100%	6.4
Unit 13/L3/LKD/R4	100%	8.3



Reference*	Target illuminance area achieved (%)	Sunlight exposure (hours)
Unit 13/L3/Bed/R2	100%	1.2
Unit 13/L3/Bed/R3	100%	1.2
Unit 14/L3/LKD/R5	100%	8.3
Unit 14/L3/Bed/R6	100%	7.2
Unit 15/L3/LKD/R1	100%	9.5
Unit 15/L3/Bed/R7	100%	6.6
Unit 15/L3/Bed/R8	100%	7.2
Unit 15/L3/Bed/R9	100%	6.6

<sup>\*</sup>X/XX(X)/XX/XX - Flat Ref/Floor/Room Use/Room Ref

Regarding daylight, the illuminance method demonstrated that all LKDs met the BRE target of 150 lux across a 50% of the reference plane, for at least 50% of the daylight hours. 2 north facing bedrooms on the ground floor fell short of BRE target (R4 and R6 on the GF), only by 10% and 9%, respectively. Overall, the proposed scheme has a 96% pass rate for daylight provision using the illuminance method.

Regarding sunlight, all rooms 90° due south meet the minimum requirement of 1.5 hours of sunlight on March 21.

The layouts have been designed to maximise daylight and sunlight access to future occupiers. It is therefore considered that the proposed development design is in line with the objectives of the National, Regional and Local policy context and the guidelines on daylight and sunlight set by BRE.



#### **NEIGHBOURING PROPERTIES SUMMARY**

#### **DAYLIGHT**

In accordance with the BRE Guidelines, the Vertical Sky Component (VSC) has been calculated, both in the existing and proposed situation. This establishes the amount of daylight currently enjoyed on the face of the window and following the implementation of the proposal.

The BRE Guidelines state that if the VSC calculated at the centre of each window is 27% or more, then enough skylight should be reaching the window. If with implementation of the proposals the window does not achieve 27% VSC but is more than 0.8 times its former value, then the BRE guidelines state that skylight is unlikely to be seriously affected.

However, given the dense urban context of the site and the national, regional, and local planning policy objective of making the most efficient use of land, this study has considered a VSC of 20% as a more appropriate application of the tests.

The BRE guidelines states that both the total amount of skylight (Vertical Sky Component) and its distribution within the building (Daylight Distribution) are important. The BRE guide states that where room layouts are known, the impact on the daylighting distribution can be found by plotting the 'no-skyline' in each room.

The BRE guidelines state that for a room to enjoy good daylight distribution, a significant area of the room should not lie behind the no-skyline, but specifically states that bedrooms are less important than living rooms.

Please see below a written outline of the results and see Appendix A for the detailed table of the full VSC and Daylight Distribution results.



#### 131-141 (ODD) MALDEN ROAD

The 6 properties are located to the south of the site along Malden Road. 131, 133, 135, and 139 Malden Road provides residential accommodation over four floors (starting from the lower ground floor). 139 and 141 Malden Road provide commercial spaces on the ground floor, and residential on the upper floors. Only the residential windows on the northern façade of the properties were assessed for impact.

The results of the VSC analysis demonstrates that all 32 windows analysed achieve a VSC of greater than 20% and a relative VSC of greater than 0.8 times the existing value.

The level of daylight distribution within 22 rooms across the properties were also considered. This analysis demonstrates that the no-skyline is unaffected to all rooms, except the lower ground room (assumed to be a bedroom) of 137 Malden Road, which falls short of the BRE targets for daylight distribution.

However, it should be noted that the internal layout of 137 Malden Road is based off assumptions. The assumptions were made using floor plans of 129 Malden Road extracted from the Camden Planning Portal. The no-skyline test is especially sensitive to the depth, width, size and layout of the room and the results are likely to be misleading. Additionally, the BRE guidelines state that the daylight distribution of bedrooms is less important than living rooms. Also, being a single aspect room, the BRE guidelines states the following:

### "IF AN EXISTING BUILDING CONTAINS ROOMS LIT FROM ONE SIDE ONLY AND GREATER THAN 5M DEEP, THEN A GREATER MOVEMENT OF THE NO SKY-LINE MAY BE UNAVOIDABLE."

Furthermore, as the results of the VSC analysis demonstrates that the window to the lower ground room has a VSC greater that 20% and has a relative VSC of 84%, it is considered that the aims of the BRE Guidelines are achieved.

Therefore, the proposal is unlikely to have a significant effect on the daylight enjoyed by 131-141 (Odd) Malden Road, particularly considering the urban location.



#### **WELLESLEY ROAD CARE HOME**

The Wellesley Road Care Home is located north of the proposed site along Wellesley Road. Only the windows on the southern façade and some on the western façade of the property were assessed for impact, with 31 windows assessed in total.

The results of the VSC analysis demonstrates that 28 of the 31 windows analysed achieve a VSC of greater than 20%.

Of the 3 windows that fall short of the 20% VSC target:

- 2 of the windows adjoin a communal seating area (Ref. WRCH/GF/R2/W5 and W8). This is a dual aspect room consisting of 4 windows in total, 2 of which pass the 20% VSC target while the remaining 2 fall short. Thus, the daylight distribution of the room (discussed below) passes the BRE guidelines.
- 1 window (Ref. WRCH/GF/R7/W10) adjoins a corridor, which is not considered a habitable space and is to be ignored under BRE guidelines.

The level of daylight distribution within rooms deemed habitable of the property was also considered. This analysis demonstrates that the no-skyline is unaffected to all rooms deemed habitable, aligning with BRE targets for daylight distribution. Most importantly, no bedrooms in the care home experience an impact of daylight from the proposed scheme.

Only 2 areas experienced an impact to the no-skyline; one being a corridor (Ref. WRCH/L1/R3/W4) and the other is a dual aspect kitchen (Ref. WRCH/GF/R1/W1), which is not considered to be a habitable room for the residents of the care home. Therefore, as the no-skyline is not significantly affected in any habitable rooms of the Wellesley Road Care Home, the proposed scheme aligns with the BRE guidelines.

Therefore, the proposal is unlikely to have a significant effect on the daylight enjoyed by the residents of Wellesley Road Care Home, particularly considering the urban location.



#### **SUNLIGHT**

To assess sunlight, the BRE guidelines state that neighbouring windows within 90° due south should receive Annual Probable Sunlight Hours (APSH) of 25%, including at least 5% during the winter months (WPSH).

The only neighbouring property containing windows facing within 90° of due south is Wellesley Road Care Home and 22 of the 31 windows modelled are 90° due south.

All 22 windows achieve the BRE target of at least 25% APSH and 5% WPSH, apart from I window in Wellesley Road Care Home (Ref. WRCH/GF/R7/WI0). However, this window adjoins a corridor, so it is to be ignored by the BRE guidelines. Therefore, the results of this analysis demonstrate that the proposed scheme will not have a significant effect on the sunlight enjoyed by the Wellesley Road Care Home and the BRE guidelines are achieved.

See Appendix A for the detailed table of the APSH and WPSH results.



#### **DETAILED RESULTS - 131 & 133 MALDEN ROAD**



Figure 5: Image of the building assessed at 131 and 133 Malden Road

Table 4: Vertical Sky Component Daylight Test results for 131 and 133 Malden Road

Table 1. Vertical Sity	Table 4. Vertical sky component bayinght restresalts for 151 and 155 Malaett Road					
Windows	Windows that	meet BRE	VSC Windows			
Tested	Guidelines		No. of Windows I	Experiencing Adv	erse Impacts	
rested	No.	%	20-29.99% loss	30-39.99% loss	>40% loss	
	131 Malden Road					
6	6	100%	0	0	0	
133 Malden Road						
6	6	100%	0	0	0	

Table 5: No-Sky-Line Daylight Test results for 131 and 133 Malden Road

ruble 3. No-3ky-Line Daylight Test results for 131 and 133 Maiden Road						
	Rooms that	meet BRE	NSL Rooms			
Rooms Tested   Guidelines   No. of Rooms Experiencing Adverse Impacts				se Impacts		
	No.	%	20-29.99% loss	30-39.99% loss	>40% loss	
	131 Malden Road					
6	6	100%	0	0	0	
133 Malden Road						
6	6	100%	0	0	0	



#### **DETAILED RESULTS - 135 & 137 MALDEN ROAD**



Figure 6: Image of the building assessed at 135 and 137 Malden Road

Table 6: Vertical Sky Component Daylight Test results for 135 and 137 Malden Road

Windows Tested	Windows that Guidelines	meet BRE		Experiencing Adv	erse Impacts
rested	No.	%	20-29.99% loss	30-39.99% loss	>40% loss
	135 Malden Road				
6	6	100%	0	0	0
137 Malden Road					
6	6	100%	0	0	0

Table 7: No-Sky-Line Daylight Test results for 135 and 137 Malden Road

	Bayngine recerecare				
	Rooms that	meet BRE	NSL Rooms		
Rooms Tested Guidelines No. of Rooms Experiencing Adverse Impacts				se Impacts	
	No.	%	20-29.99% loss	30-39.99% loss	>40% loss
	135 Malden Road				
6	6	100%	0	0	0
137 Malden Road					
6	5	83%	0	0	1



### **DETAILED RESULTS - 139 & 141 MALDEN ROAD**



Figure 7: Image of the building assessed at 139 and 141 Malden Road

Table 8: Vertical Sky Component Daylight Test results for 139 and 141 Malden Road

	NAT: 1 11 11 11 11 11 11 11 11 11 11 11 11				
Windows	Windows that	meet BRE	VSC Windows		
Tested	Guidelines		No. of Windows I	Experiencing Adv	erse Impacts
rested	No.	%	20-29.99% loss	30-39.99% loss	>40% loss
	139 Malden Road				
4	4	100%	0	0	0
141 Malden Road					
4	4	100%	0	0	0

Table 9: No-Sky-Line Daylight Test results for 139 and 141 Malden Road

Table 3. NO Sky Line	Table 5. No sky Line bayinght restresants for iss and i in Malacin Road					
	Rooms that	meet BRE	NSL Rooms			
Rooms Tested   Guidelines   No. of Rooms Experiencing Adverse Impacts				se Impacts		
	No.	%	20-29.99% loss	30-39.99% loss	>40% loss	
	139 Malden Road					
4	4	100%	0	0	0	
141 Malden Road						
4	4	100%	0	0	0	



#### **DETAILED RESULTS - WELLESLEY ROAD CARE HOME**



Figure 8: Image of the building assessed at Wellesley Road Care Home

Table 10: Vertical Sky Component Daylight Test results for Wellesley Road Care Home

Windows Tested	Windows that Guidelines	meet BRE	VSC Windows No. of Windows Experiencing Adverse Impacts						
rested	No.	% 20-29.99% loss 30-39.99% loss	>40% loss						
31	28	90%	1	0	2				

Table 11: No-Sky-Line Daylight Test results for Wellesley Road Care Home

Table 11: No sky line baying it restresults for Wellesley Road Care Horne											
Rooms/Areas	Rooms that	meet BRE	NSL Rooms								
Tested	Guidelines		No. of Rooms Experiencing Adverse Imp								
rested	No.	%	20-29.99% loss	30-39.99% loss	>40% loss						
18	16	89%	0	0	2						

Table 12: Probable Sunlight Hours Sunlight Test results for Wellesley Road Care Home

	able 12. Probable Samilynt noars Samilynt rest results for Wellesley Road Care Home											
	Windows Tested	Annual Proba	able Sunlight I	Hours	Winter Probable Sunlight Hours							
		Windows m Guidelines	eeting BRE	/\d\/\prc\i	Windows m Guidelines	Adversely						
		No.	%		No.	%	impacted					
Ī	22	21	95%	1	22	100%	0					



### **APPENDIX A – DETAILED RESULTS TABLE**

Table 13: Full Daylight and Sun	Ĭ											
	Vertical Sky Component Test			No-Sky-Line Test			APSH Test			WPSH Test		
Reference*	Existing %	Proposed %	Relative	Existing %	Proposed %	Relative	Existing APSH (%)	Proposed APSH	Relative	Existing WPSH %	Proposed WPSH %	Relative
				Welles	ley Road Care	e Home						
WRCH/GF/R1/W1	19.66	19.66	1.0	73.16	39.26	0.54	89	89	1.0	30	30	1.0
WRCH/GF/R2/W2	28.76	24.27	0.84				-	-	-	-	-	-
WRCH/GF/R2/W3	27.42	24.42	0.89	00.01	06.70		-	-	-	-	-	-
WRCH/GF/R2/W5	27.70	14.55	0.53	98.91	96.70	0.98	65	33	0.51	17	6	0.35
WRCH/GF/R2/W8	27.75	15.24	0.55				63	34	0.54	16	6	0.38
WRCH/GF/R3/W4	29.13	24.86	0.85	99.57	99.57	1.0	-	-	-	-	-	-
WRCH/GF/R4/W6	26.85	25.22	0.94	93.51	93.51	1.0	-	-	-	-	-	-
WRCH/GF/R5/W7	20.23	17.92	0.89	90.61	83.98	0.93	42	37	0.88	12	7	0.58
WRCH/GF/R6/W9	28.56	20.11	0.7	98.62	81.96	0.83	66	43	0.65	19	15	0.79
WRCH/GF/R7/W10	18.59	13.93	0.75	70.FC	F0.10		25	18	0.72	8	5	0.63
WRCH/GF/R7/W11	20.04	19.25	0.96	78.56	78.10	0.99	39	39	1.0	13	13	1.0
WRCH/GF/R8/W12	24.43	21.73	0.89	75.17	74.92	1.0	51	45	0.88	11	11	1.0
WRCH/L1/R1/W1	30.33	28.31	0.93	95.82	95.82	1.0	76	75	0.99	17	16	0.94
WRCH/L1/R2/W2	32.34	29.69	0.92	00.07	00.07		79	76	0.96	20	17	0.85
WRCH/L1/R2/W3	33.73	30.45	0.9	99.03	99.03	1.0	82	79	0.96	23	20	0.87
WRCH/L1/R3/W4	26.55	23.80	0.9	99.95	52.90	0.53	51	49	0.96	19	17	0.89
WRCH/L1/R4/W5	34.04	31.31	0.92	05.66	07.17		-	-	-	-	-	-
WRCH/L1/R4/W6	34.14	31.04	0.91	95.66	93.13	0.97	-	-	-	-	-	-



	Vertical	Sky Componer	t Test	N	o-Sky-Line Te	st	APSH Test			WPSH Test			
Reference*	Existing %	Proposed %	Relative	Existing %	Proposed %	Relative	Existing APSH (%)	Proposed APSH	Relative	Existing WPSH %	Proposed WPSH %	Relative	
WRCH/L1/R4/W7	37.10	20.72	0.56				77	51	0.66	27	7	0.26	
WRCH/L1/R4/W10	37.32	21.23	0.57				77	50	0.65	27	8	0.30	
WRCH/L1/R5/W8	32.57	29.37	0.9	99.87	99.87	1.0	69	67	0.97	21	19	0.90	
WRCH/L1/R6/W9	32.49	30.47	0.94	97.64	97.60	1.0	-	-	-	-	-	-	
WRCH/L1/R7/W11	29.93	23.72	0.79				58	51	0.88	20	14	0.7	
WRCH/L1/R7/W12	28.77	21.99	0.76				43	34	0.79	11	5	0.45	
WRCH/L1/R7/W13	24.91	20.81	0.84	99.62	99.62	99.62	1.0	-	-	-	-	-	-
WRCH/L1/R7/W14	37.91	31.56	0.83				99.62	99.62	1.0	77	66	0.86	26
WRCH/L1/R7/W15	25.95	25.95	1.0				51	51	1.0	20	20	1.0	
WRCH/L1/R7/W16	28.24	27.25	0.96				46	46	1.0	18	18	1.0	
WRCH/L1/R8/W17	36.34	32.89	0.91	99.76	99.76	1.0	64	60	0.94	23	22	0.96	
WRCH/L2/R1/W1	36.68	34.58	0.94	99.91	99.91	1.0	84	83	0.99	26	25	0.96	
WRCH/L2/R2/W2	36.83	35.43	0.96	94.85	94.85	1.0	-	-	-	-	-	-	
				131-141	(Odd) Malder	n Road							
131/LG/R1/W1	28.46	27.46	0.96	96.51	95.85	0.99	-	-	-	-	-	-	
131/GF/R1/W1	37.50	35.36	0.94	98.41	98.40	1.0	-	-	-	-	-	-	
131/L1/R1/W1	38.36	36.85	0.96	07.55	07.55	10	-	-	-	-	-	-	
131/L1/R1/W2	38.27	36.46	0.95	97.55	97.55	1.0	-	-	-	-	-	-	
131/L2/R1/W1	39.16	38.27	0.98	92.01	92.01	1.0	-	-	-	-	-	-	
131/L2/R1/W2	39.11	38.05	0.97	92.01	92.01	1.0	-	-	-	-	-	-	
133/LG/R4/W4	28.71	26.54	0.92	96.98	94.20	0.97	-	-	-	-	-	-	
133/GF/R6/W6	37.11	33.84	0.91	97.43	97.43	1.0	-	-	-	-	-	-	



	Vertical Sky Component Test			No-Sky-Line Test			APSH Test			WPSH Test		
Reference*	Existing %	Proposed %	Relative	Existing %	Proposed %	Relative	Existing APSH (%)	Proposed APSH	Relative	Existing WPSH %	Proposed WPSH %	Relative
133/L1/R2/W3	38.20	36.09	0.94	97.17	97.17	10	-	-	-	-	-	-
133/L1/R2/W12	38.10	35.58	0.93	97.17	97.17	1.0	-	-	-	-	-	-
133/L2/R2/W3	39.09	37.85	0.97	92.01	92.01	1.0	-	-	-	-	-	-
133/L2/R2/W12	39.08	37.61	0.96	92.01	92.01	1.0	-	-	-	-	-	-
135/LG/R3/W3	26.84	24.56	0.92	96.73	94.73	0.98	-	-	-	-	-	-
135/GF/R5/W5	36.54	32.01	0.88	97.86	97.83	1.0	-	-	-	-	-	-
135/L1/R6/W11	37.54	33.80	0.90	97.83	97.82	1.0	-	-	-	-	-	-
135/L1/R6/W10	37.82	34.64	0.92	97.03	97.82	1.0	-	-	-	-	-	-
135/L2/R6/W11	38.96	37.12	0.95	94.47	94.46	1.0	-	-	-	-	-	-
135/L2/R6/W10	38.82	36.69	0.95	94.47			-	-	-	-	-	-
137/LG/R2/W2	24.99	21.02	0.84	94.25	48.54	0.51	-	-	-	-	-	-
137/GF/R4/W4	32.71	26.50	0.81	94.10	82.19	0.87	-	-	-	-	-	-
137/L1/R5/W9	36.74	32.48	0.88	97.05	97.05	1.0	-	-	-	-	-	-
137/L1/R5/W8	31.08	26.78	0.86	97.05	97.03	1.0	-	-	-	-	-	-
137/L2/R5/W9	38.32	35.90	0.94	94.03	94.03	1.0	-	-	-	-	-	-
137/L2/R5/W8	31.06	28.80	0.93	94.03	94.03	1.0	-	-	-	-	-	-
139/L1/R4/W7	37.18	31.58	0.85	94.82	94.81	1.0	-	-	-	-	-	-
139/L1/R4/W6	36.94	31.22	0.85	94.82	94.61	1.0	-	-	-	-	-	-
139/L2/R4/W6	38.60	35.32	0.92	88.44	88.44	1.0	-	-	-	-	-	-
139/L2/R4/W7	38.71	35.49	0.92	00.44	00.44	1.0	-	-	-	-	-	-
141/L1/R3/W5	36.67	30.97	0.84	97.90	97.89	1.0	-	-	-	-	-	-
141/L1/R3/W4	36.36	30.82	0.85	97.90	37.03	1.0	-	-	-	-	-	-



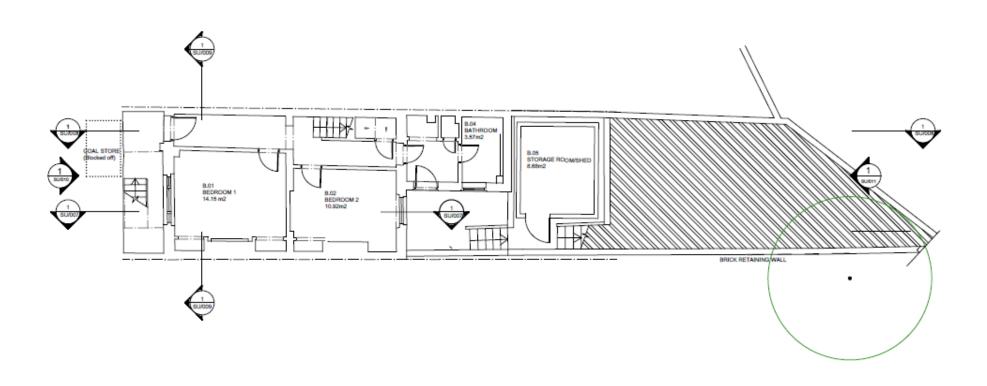
	Vertical Sky Component Test			No-Sky-Line Test			APSH Test			WPSH Test		
Reference*	Existing %	Proposed %	Relative	Existing %	Proposed %	Relative	Existing APSH (%)	Proposed APSH	Relative	Existing WPSH %	Proposed WPSH %	Relative
141/L2/R3/W4	38.33	35.14	0.92	06.01	96.00	10	-	-	-	-	-	-
141/L2/R3/W5	38.47	35.19	0.91	96.01		1.0	-	-	-	-	-	-

<sup>\*</sup>Dwelling name/Floor/Room/Window

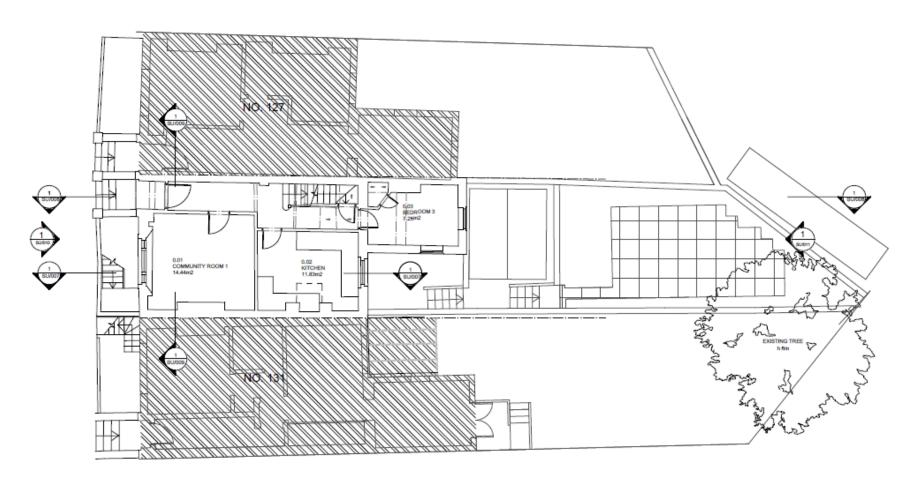


### **APPENDIX B - NEIGHBOURING PROPERTY REFERENCES**

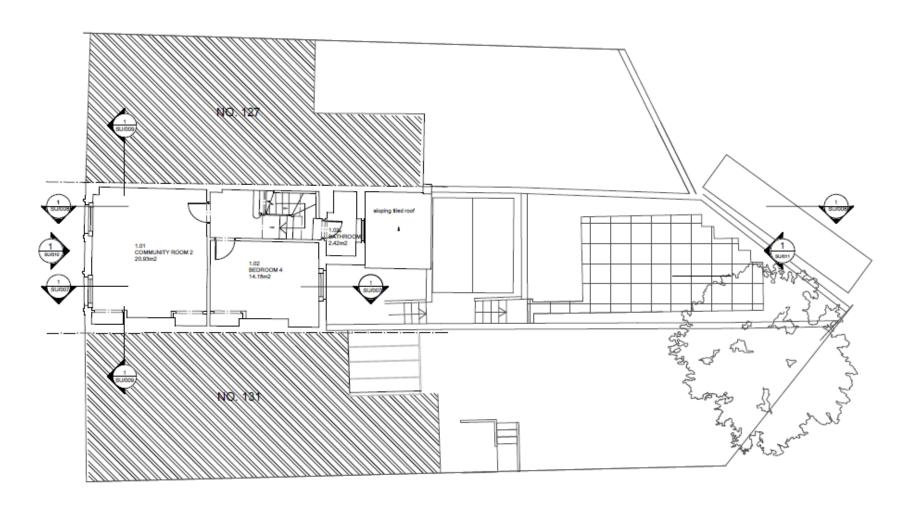
#### 129 MALDEN ROAD - LOWER GROUND FLOOR PLAN



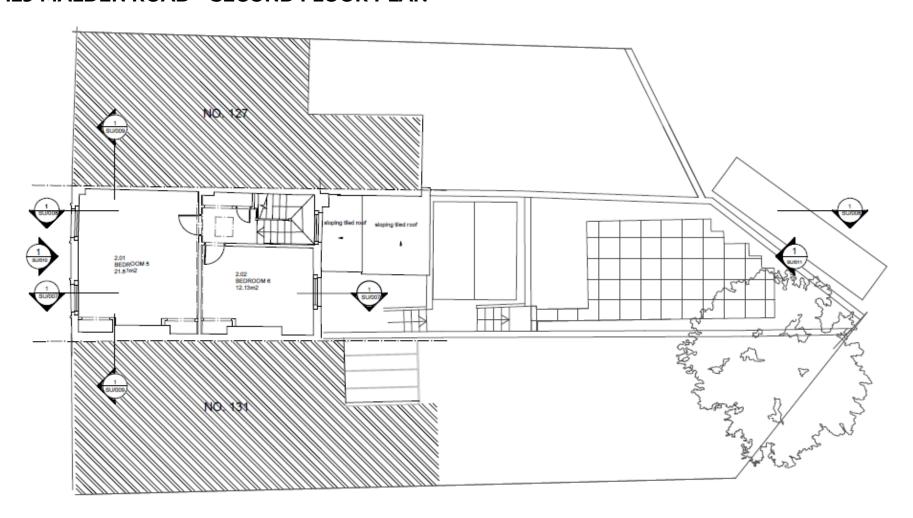
#### 129 MALDEN ROAD - GROUND FLOOR PLAN



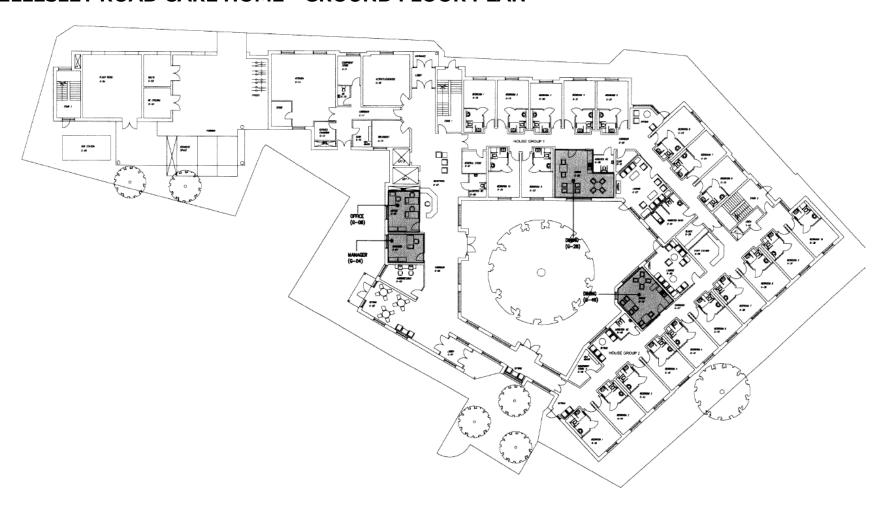
#### 129 MALDEN ROAD - FIRST FLOOR PLAN



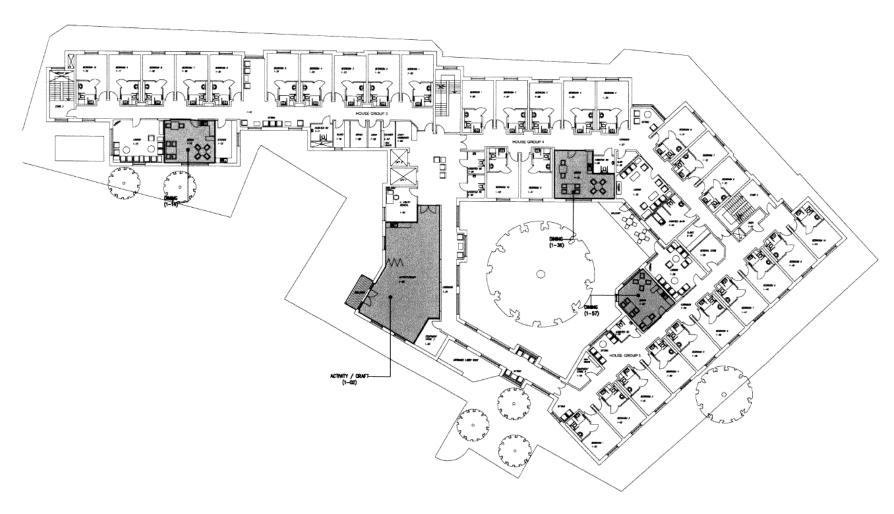
#### 129 MALDEN ROAD - SECOND FLOOR PLAN



#### WELLESLEY ROAD CARE HOME - GROUND FLOOR PLAN



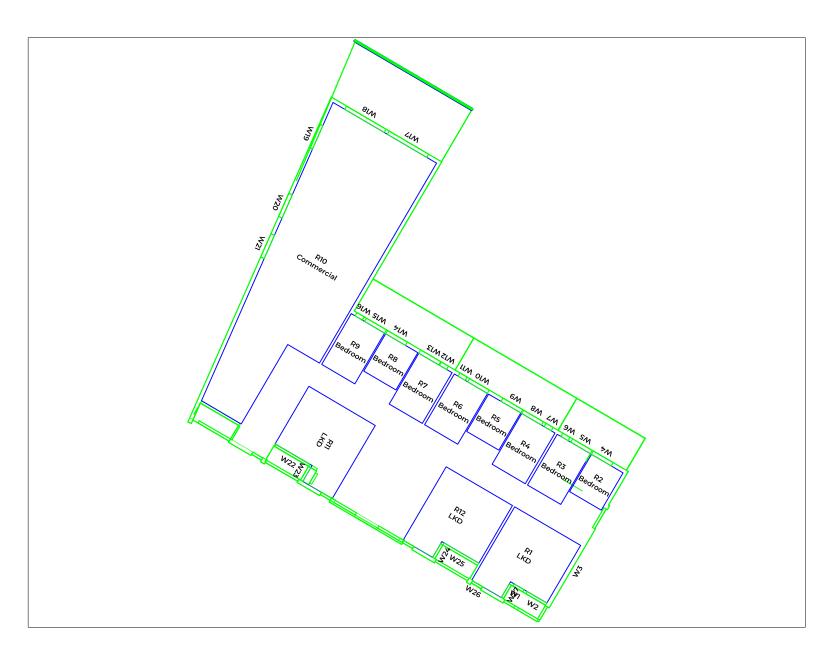
#### WELLESLEY ROAD CARE HOME - FIRST FLOOR PLAN





## APPENDIX C – WINDOW AND ROOM REFERENCES

The following images reference the window, room, and amenity locations as per the results tables from earlier sections.



160 Malden Road, London Ground Floor Room Reference Window Reference

NOT TO SCALE ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-GF

Issue: 00A



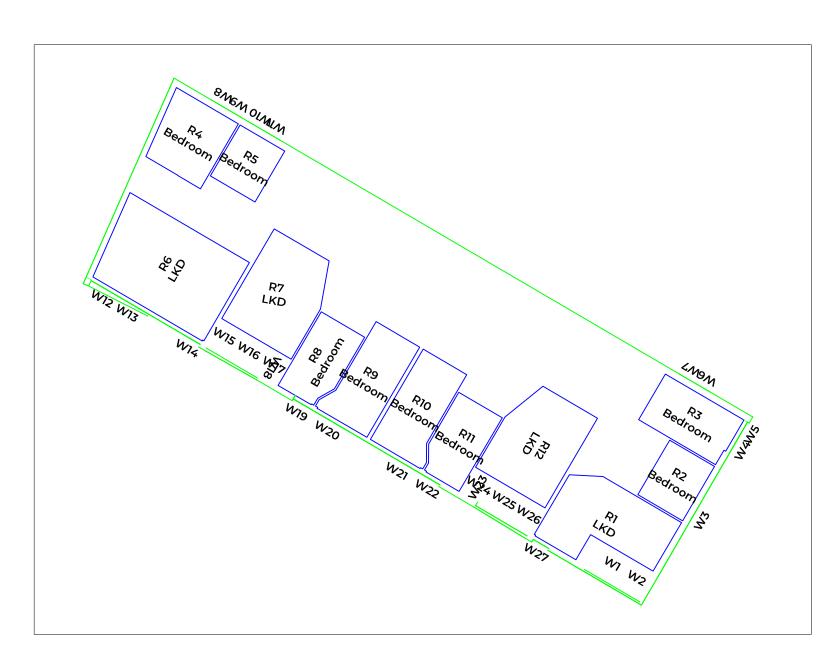
160 Malden Road, London First Floor Room Reference Window Reference

NOT TO SCALE ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-L1

Issue: 00A



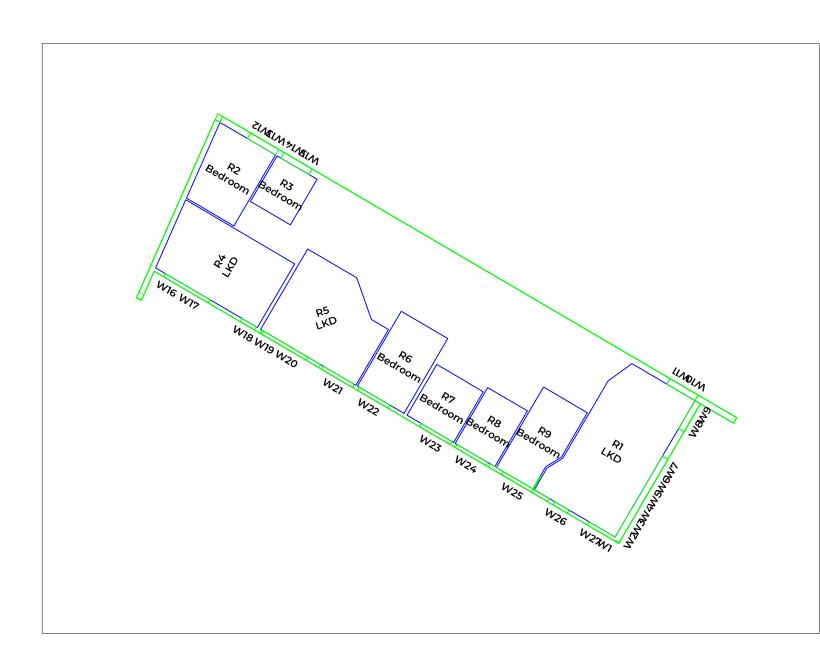
160 Malden Road, London Second Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-L2

Issue: 00A



160 Malden Road, London Third Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-L3

Issue: 00A



Wellesley Road Care Home Ground Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-WRCH-GF

Issue: 00A



Wellesley Road Care Home First Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-

WRCH-L1 Issue: 00A



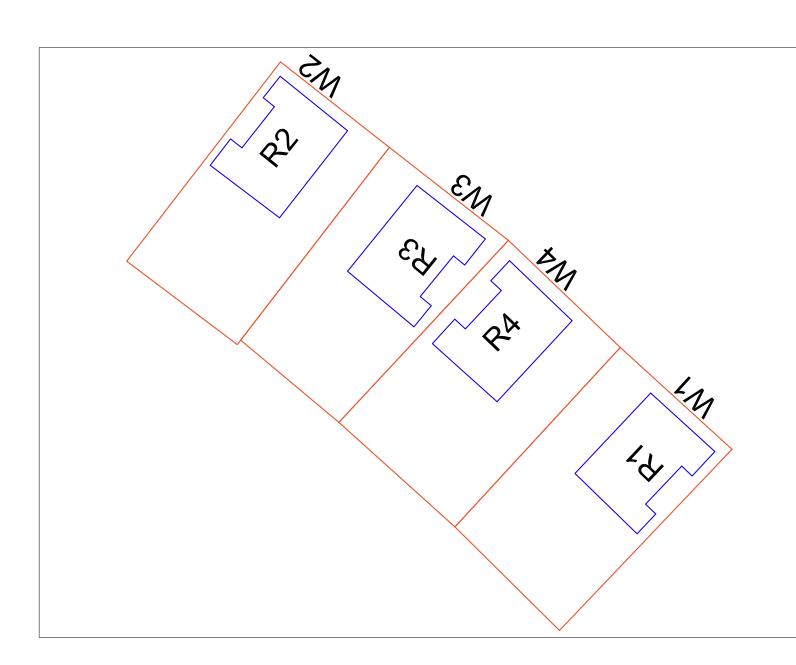
Wellesley Road Care Home Second Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-WRCH-L2

Issue: 00A



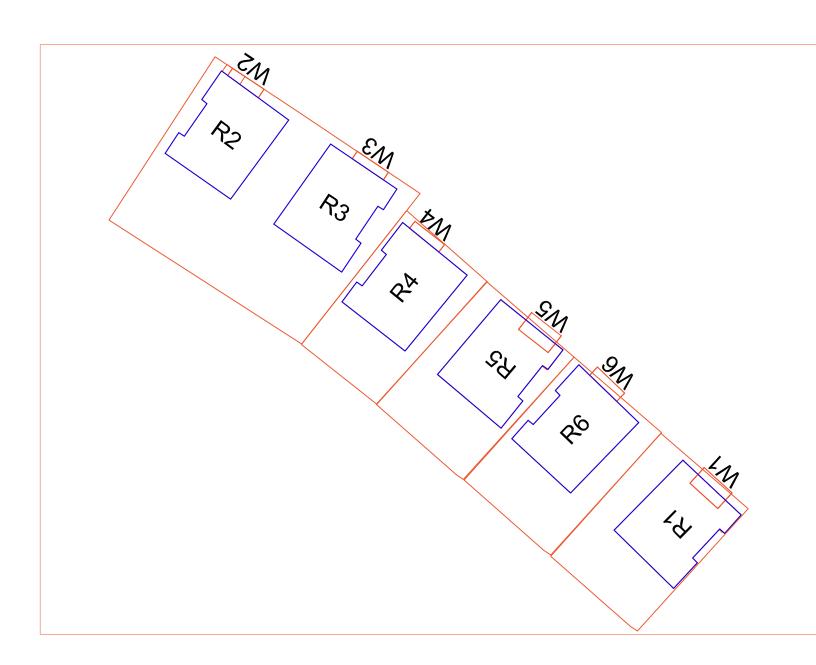
131 to 141 Malden Road Lower Ground Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-

131-141MR-LGF Issue: 00A



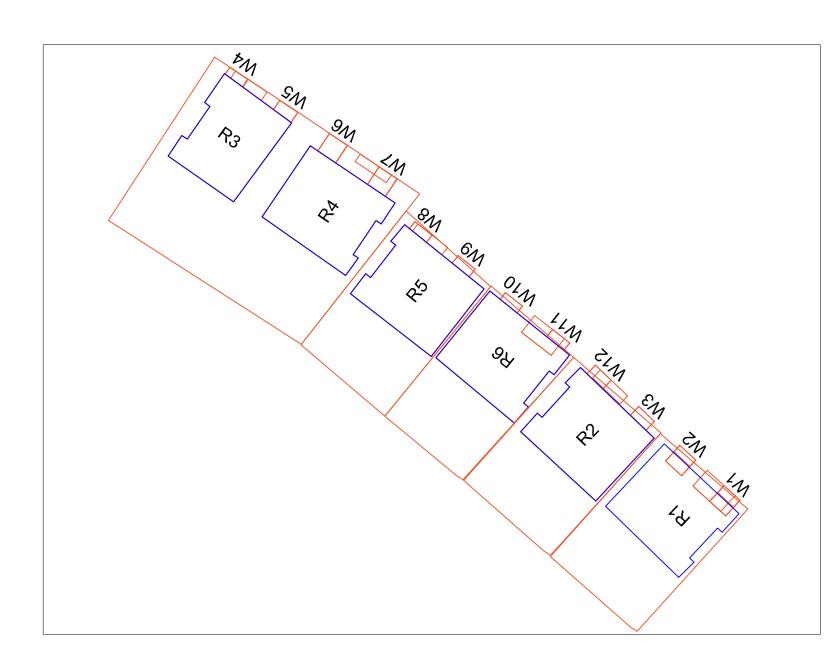
131 to 141 Malden Road Ground Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-131-141MR-GF

ISI-141MR-G Issue: 00A



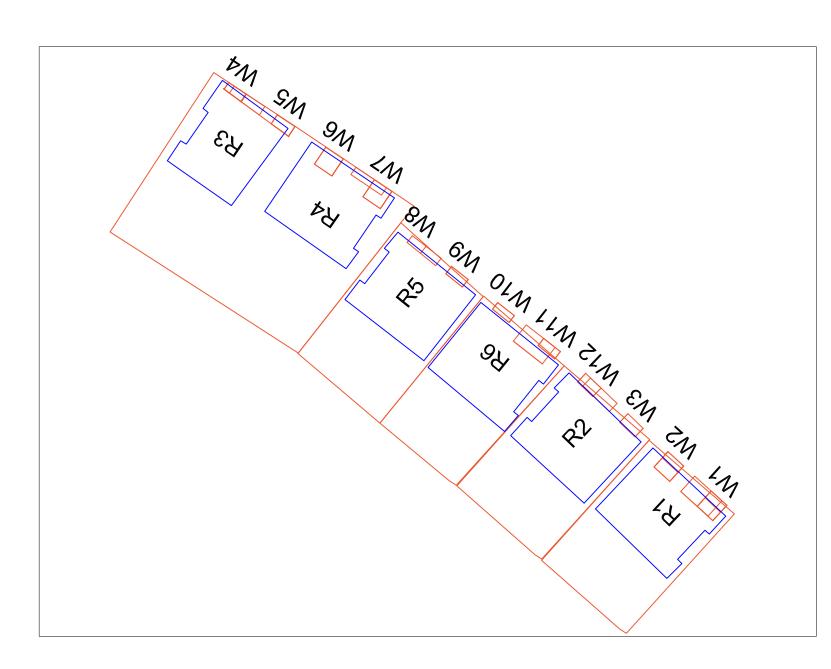
131 to 141 Malden Road First Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-131-141MR-L1

Issue: 00A



131 to 141 Malden Road Second Floor Room Reference Window Reference

NOT TO SCALE
ILLUSTRATIVE ONLY

Date: 16/08/2022

Drawing: 455-160MR-WR/RR-

131-141MR-L2 Issue: 00A



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