## waldrams

## City House, Sutton Park Road

Daylight and Sunlight Report
6 February 2024

# City House, Sutton Park Road 

DAYLIGHT AND SUNLIGHT REPORT

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## DOCUMENT HISTORY

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## EXECUTIVE SUMMARY

- This is a report into the impact of the proposed development at City House, Sutton Park Road on the daylight and sunlight to surrounding residential properties, amenity spaces, and internally to the scheme itself. This analysis has been based upon scheme drawings provided by Wimshurst Pelleriti, a photogrammetric survey, and site imagery.
- The analysis has been carried out in accordance with the methodologies contained in the Building Research Establishment's Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (2022) (known as the "BRE Guidelines"), which is used by the local authority to determine the acceptability of a proposal in terms of its effect on neighbouring daylight and sunlight amenity.
- The analysis shows that the neighbouring church and 74-139 Homefield Park both meet the BRE Guidelines' target values for daylight and sunlight with the proposal in place. At 2-6 Sutton Park Road, analysis of the comparison of the proposed and alternative baseline positions demonstrates that many rooms and windows experience improvements against the alternative baseline position and that, where impacts occur, these are primarily the result of overhanging balconies restricting access to daylight. As such, the daylight and sunlight position for all neighbouring residential or pastoral properties is considered acceptable in our opinion.
- Internally, $87 \%$ of rooms meet their target daylight value. Where living rooms do not meet their target value, this is primarily due to the provision of private amenity spaces in the form of balconies. Given that the significant majority of rooms meet their target daylight value and that all units are provided with a private amenity space, the daylighting is considered acceptable overall.
- $83 \%$ of units meet the target sunlight value. The BRE Guidelines acknowledge that not all units can be south-facing in larger developments and, where units do not meet the target value, they are positioned on a corner of the proposal to maximise sunlight access as per the BRE Guidelines' recommendations. As such, the sunlighting across the proposal is considered acceptable.
- In overshadowing terms, the church playground and both proposed amenity spaces all meet the target sunlight amenity value.


## 1 INTRODUCTION

Waldrams have been instructed to provide daylight and sunlight analysis for the proposed development of the site at City House, Sutton Park Road. This analysis is based upon scheme drawings by Wimshurst Pelleriti, a photogrammetric survey of the site and surrounding context and site imagery.

The analysis has been carried out in accordance with the methodologies contained in the BRE Guidelines which is used by the local authority to determine the acceptability of a proposal in terms of its effect on neighbouring daylight and sunlight amenity.

The existing site and proposed scheme can be seen in Appendix 1. The numerical results of the quantitative daylight and sunlight analysis can be found in Appendix 2. The numerical results of the quantitative internal daylight and sunlight analysis can be found in Appendix 3. The sunlight amenity results can be found in Appendix 4. Window maps showing the locations of the windows analysed in the neighbouring property can be found in Appendix 5.

## 2 SUMMARY OF HOW DAYLIGHT AND SUNLIGHT ARE CONSIDERED FOR PLANNING

### 2.1 INTRODUCTION TO THE BRE GUIDELINES

Daylight and sunlight are planning considerations. The main reference used by local planning authorities to determine the acceptability of proposals in terms of their internal daylight and sunlight and the impact on daylight and sunlight to the surrounding properties is the BRE Guidelines, used in conjunction with British Standard Daylight in Buildings, BS EN 17037. The BRE Guidelines provide scientific, objective methods for establishing the acceptability of daylight and sunlight internal to the scheme and the surrounding properties and overshadowing.

### 2.2 DAYLIGHT AND SUNLIGHT CRITERIA TO SURROUNDING PROPERTIES

## Daylight

According to the BRE Guidelines, a surrounding existing building to a proposed scheme will retain the potential for good interior daylighting if the scheme subtends less than 25 degrees from the horizontal as measured from the lowest habitable windows in the neighbouring windows. If this is not achieved, then good daylighting to the neighbouring properties is still achieved if the Vertical Sky Component (VSC) is in excess of $27 \%$ or is reduced by less than $20 \%$ from its existing level and if the area of the room that can see the sky at desk height (known as the daylight distribution or no sky contour) is reduced by less than $20 \%$ of its existing area. The BRE Guidelines state this in paragraph 2.2.23 as:
"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 $25^{\circ}$ to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:

- $\quad$ The VSC measured at the centre of an existing main window is less than $27 \%$, and less than 0.8 times its former value
- 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."

The BRE Guidelines state in paragraph 2.2.2:
"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens, and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas, and garages need not be analysed. The guidelines may also be applied to any existing non-domestic building where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops, and some offices."

## Sunlight

The test for sunlight to the neighbouring properties is calculated for each living room with a main window facing within $90^{\circ}$ of due south. Bedrooms and kitchens are considered by the BRE Guidelines as less important for sunlight. The BRE Guidelines state that any south facing window may potentially receive up to 1486 hours of sunlight per year on average, representing $100 \%$ of the annual probable sunlight hours (APSH).

The BRE Guidelines state in paragraph 3.2.13 that:
"If a living room of an existing dwelling has a main window facing within $90^{\circ}$ of due south, and any part of a new development subtends an angle of more than $25^{\circ}$ 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 and less than 0.80 times its former annual value; or less than 5\% of annual probable sunlight hours between 21 September and 21 March and less than 0.80 times its former value during that period;
- and also has a reduction in sunlight received over the whole year greater than 4\% of annual probable sunlight hours."

Following the BRE Guidelines recommendations, VSC and APSH are measured from a point on the outer window wall.

### 2.3 ALTERNATIVE TARGET VALUES AND APPLYING A FLEXIBLE APPROACH

The BRE Guidelines specify that the daylight and sunlight results be considered flexibly and in the context of the site. Clearly, there would be a higher expectation for daylight and sunlight in a rural or suburban environment than in a dense city centre location. The important factor in all cases is that the levels of daylight and sunlight are appropriate, taking into account all the planning policy requirements of the site. The BRE Guidelines acknowledge this in the introduction where they state in paragraph 1.6:
"The advice given here is not mandatory and the guide 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 as natural lighting is only one of many factors in site layout design. In special circumstances the developer or planning authority may wish to use different target values. "

The numerical figures set out in the BRE Guidelines should therefore not be rigidly applied, but instead used as part of the overall evaluation of the daylight and sunlight to the surroundings in context of the site, its existing massing, and the need for regeneration and local planning policy guidance for the site. In particular, existing local precedents or recent planning consents may provide a good indication as to appropriate levels in the vicinity.

The BRE recommend that, in urban development locations, alternative baselines or lower target values may be used (c.f. Appendix F of the BRE Guidelines for Daylight \& Sunlight). Paragraph F1 states:
"These values [those set out in the BRE Guidelines] are purely advisory and different targets may used based on the special requirements of the proposed development or its location. Such alternative targets may be generated from the layout dimensions of existing development, or they may be derived from considering the internal layout and daylight needs of the proposed development itself."

Indeed, in paragraph 2.2.3 of the BRE Guidelines it states:
"Note that numerical values given here are purely advisory. Different criteria may be used based on 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 more than its fair share of light. Appendix $F$
gives further guidance."
Applying flexibility when considering the BRE Guidelines in planning terms is also supported by the National Planning Policy Framework (NPPF) (July 2021) which states in paragraph 125:
> "Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site. In these circumstances:
(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)."

It is important to note that the BRE Guidelines merely state that occupants may "notice" reductions of more than $20 \%$ and do not talk about acceptability. Planning appeal decisions and investigations carried out by the Inspectorate in recent years (such as appeal ref. APP/E5900/W/17/3191757) have made it clear that, in assessing daylight and sunlight impacts, the context of the site is key in understanding whether occupants in surrounding properties will be left with appropriate levels of amenity and whether or not reductions are acceptable. For instance, where the resulting levels of daylight and sunlight are comparable to those of other local residents, changes (i.e. reductions) can be considered acceptable and contextually appropriate. It is also important to remember that residential amenity should be balanced against the advantages of living in such a location (such as close links to transport, amenities, employment, services etc.).

The Appeal (APP/E5900/W/17/3191757) decision states that, in considering daylight and sunlight impacts, the following process should be considered:
"15. ...In essence, first, as a matter of calculation, whether there would be a material deterioration in conditions and second, as a matter of judgement, whether that deterioration would be acceptable in the particular circumstances of the case.
16. The Court held that the first question can be answered by applying the BRE Guidelines: for each window assessing the 'vertical sky
component' (VSC) and the 'no sky line' (NSL) for daylight and the 'annual probable sunlight hours' (APSH) for sunlight. If the guidelines are exceeded the deterioration would be material. In answering the second question whether that deterioration is acceptable - wider considerations come into play. This indicates to me that the acceptability of a material deterioration in living conditions must be judged in its local context."

In considering planning policy, it is important therefore to firstly establish whether the impact of a proposed development on the daylighting and sunlight conditions of surrounding property to the development would result in a noticeable impact, and secondly whether such an impact can be considered acceptable or not in view of the site context. A two-stage approach can therefore be adopted as follows:

1) Whether a proposed scheme would or would not result in a "material deterioration" in daylight and sunlight. This can be assessed against the BRE's target values with a $20 \%$ or more reduction in daylight and sunlight being considered as having a "noticeable" impact; and
2) whether such deterioration would be considered acceptable or not given the context of the site.

### 2.4 INTERNAL DAYLIGHT \& SUNLIGHT CRITERIA FOR NEW BUILDS

The BRE Guidelines set out their interior daylight recommendations in Appendix C of their document. They refer to the British Standard Daylight in Buildings BS EN17037 and its UK National Annex which sets out two criteria for assessing interior daylight. Daylight provision in new rooms may be checked using either of the methods in BS EN 17037. One is based on target illuminances from daylight to be achieved over specified fractions of the reference plane (a plane at table top height covering the room) for at least half of the daylight hours in a typical year. The other, alternative, method is based on calculating the daylight factors achieved over specified fractions of the reference plane. We have undertaken the assessment based on the illuminance method.

## Illuminance Method

This method involves using climatic data for the location of the site (via the use of an appropriate, typical or average year, weather file within the software) to calculate the illuminance from daylight at each point on an assessment grid on the reference plane at an at least hourly interval for a typical year.

The UK National Annex gives illuminance recommendations of:

- $\quad 100$ lux in bedrooms
- $\quad 150$ lux in living rooms
- 200 lux in kitchens.

These are the median illuminances, to be exceeded over at least $50 \%$ of the assessment points in the room for at least half of the daylight hours. The recommended levels over $95 \%$ of a reference plane need not apply to dwellings in the UK.

The BRE Guidelines state in paragraph C17 that:
> "Where a room has a shared use, the highest target should apply. For example in a bed sitting room in student accommodation, the value for a living room should be used if students would often spend time in their rooms during the day. Local authorities could use discretion here. For example, the target for a living room could be used for a combined living/dining/kitchen area if the kitchens are not treated as habitable spaces, as it may avoid small separate kitchens in a design."

## Sunlight

For internal sunlight, the BRE Guidelines state in paragraph 3.1.15:
"In general a dwelling, or non-domestic building that has a particular requirement for sunlight, will appear reasonably sunlit provided:

- at least one main window wall faces within $90^{\circ}$ of due south and
- a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March. This is assessed at the inside centre of the window(s); sunlight received by different windows can be added provided they occur at different times and sunlight hours are not double counted."


### 2.5 METHOD USED FOR CALCULATING THE DAYLIGHT AND SUNLIGHT RESULTS

The analysis provided in this report utilizes state-of-the-art software to calculate in three dimensions the daylight and sunlight following the methods specified in the BRE Guidelines. A three dimensional accurate computer model has been created for the existing site in context of the immediate surrounding properties, based upon architect's drawings, a [photogrammetric] survey of the site and surrounding properties, site imagery and surrounding property information. The results generated are then reviewed against the BRE Guidelines' target values.

### 2.6 METHOD FOR ANALYSING ACCEPTABLE SUNLIGHT AMENITY TO THE OPEN AMENITY SPACES WITHIN AND SURROUNDING THE PROPOSED SCHEME

The BRE Guidelines state that for an amenity space to appear adequately sunlit
throughout the year, at least half of the amenity area should receive at least two hours of sunlight on 21 st March. If as a result of new development an existing amenity area does not meet the above, it should retain at least $80 \%$ of its former value with the proposal in place. If a detailed calculation cannot be carried out and the area is a simple shape, the BRE Guidelines suggest that the centre area of each amenity space should receive at least 2 hours of sunlight on March 21 st.

## REFERENCES:

BRE Guidelines (BR 209): Site layout planning for daylight and sunlight: a guide to good practice(2022).

These Guidelines provide the basis of the analysis described in this report. Please refer to this document for a detailed description as to the approach, methodology, and implementation of the numerical analysis used in this report. A summary of the approach and methods recommended by the BRE Guidelines is included in Section 2 above of this report.

## 3 ASSUMPTIONS USED IN THE ANALYSIS

Uses of the surrounding properties have been based on external appearance to determine whether they are residential or commercial use. We have also researched the Council Tax records for the property, which if listed would indicate residential use.

It is important to note that, in some cases and where no additional information is available, the window positions in the surrounding property elevations have been estimated based on brick counts from site photographs. The floor levels for the surrounding buildings are assumed unless otherwise indicated.

We have obtained layouts for the following properties from the local planning portal and/ or estate agency listings:

- 2-6 Sutton Park Road

We have not obtained layouts or gained access internally to any of the remaining surrounding properties and so details of the internal layouts and floor level heights have been assumed from the external appearance of the building, and the locations of windows. Unless known or otherwise, appropriate the depths of rooms have been assumed at 4.27 m for residential properties and 6 m for commercial properties, or half the building depth if this is less than these dimensions.

All property addresses are taken from the Land Registry MapSearch website and we advise that these are checked by your solicitor prior to any action being taken based on this report.

The following reflectance, transmittance, maintenance and framing values have been used in the internal daylight calculations:

- Transmittance (T): 0.68
- Reflectance (R): 0.4 for floors, 0.8 for ceilings, and 0.7 for walls
- Maintenance Factor: 0.92
- Framing Factor: 0.6

BS EN 17037 section B.3.1 states that, "the recommended values of reflectance for the major interior surfaces would be in the following ranges: ceiling 0.7 to 0.9 ; interior walls 0.5 to 0.8 ; floor 0.2 to 0.4." Paragraph C24 of the BRE Guidelines meanwhile states, "Where surface finishes have been specified or measured on site, they can be used in the calculations with appropriate factors for maintenance and furniture. To allow for these factors, maximum reflectances for white painted surfaces in the calculations should not exceed 0.8 indoors, and 0.6 outdoors. Maximum reflectances for light pastel walls should not exceed 0.7 in the calculations, and maximum reflectances for light wood floors should not exceed 0.4."

## 4 SOURCES OF INFORMATION USED IN THE REPORT

## Wimshurst Pelleriti

WP-0816-A-0151-P-Ground Floor
WP-0816-A-0170-P-Basement 200
WP-0816-A-0171-P-Ground Floor 200
WP-0816-A-0172-P-Typical Low 200
WP-0816-A-0173-P-L4 200
WP-0816-A-0174-P-L5 200
WP-0816-A-0175-P-Typical High 200
WP-0816-A-0176-P-LR 200
WP-0816-E-PR
WP-0816-S-PR
2023-11-29 Model Zero Coordinates
2023-11-29 Model
Received 30/11/23

Local Authority Planning Records/Rightmove
2-6 Sutton Park Road
Plans and elevations
Homefield Park
Selected floorplans
Obtained December 2022 and April 2023

## Waldrams Chartered Surveyors

Photogrammetry
Site Photographs


Image 1: Existing site

## 5 DAYLIGHT \& SUNLIGHT ANALYSIS

The development site is located in the Sutton Town Centre, c.300m from Sutton station and is located within the 'Primary Growth Area' and 'Area of Potential Intensification' as indicated in the Sutton Local Plan 2016-2031. The site is therefore located in the central setting where the highest densities are normally expected and is also in an 'Area of Taller Building Potential'.

The Mayor of London's Housing Supplementary Planning Guidance (SPG) from the London Plan, March 2016 states at paragraphs 1.3.45 and 1.3.46:
"An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets. This should take into account local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time.

The degree of harm on adjacent properties and the daylight targets within a
proposed scheme should be assessed drawing on broadly comparable residential typologies within the area and of a similar nature across London. Decision makers should recognise that fully optimising housing potential on large sites may necessitate standards which depart from those presently experienced but which still achieve satisfactory levels of residential amenity and avoid unacceptable harm."

As stated in Section 2.3 above, it is therefore important to consider the impact and acceptability of the proposed development not solely on the numerical guidelines, but rather in balance of wider site considerations and context. Given the site currently consists of a three-storey building and a car park, meaningful redevelopment which maximises the full use of the site is therefore likely to result in daylight and sunlight impacts beyond the BRE Guidelines. As such, and as per the Mayor of London's guidance, optimising the site "may necessitate standards which depart from those presently experienced".

The existing site and proposed scheme can be seen in Appendix 1. The existing site in its current condition is shown in image 1 above.

In terms of daylight and sunlight, the following properties in the table below were analysed due to their proximity to the development site given the height and massing of the proposal.

| Property | Vertical Sky Component |  |  |  |  | No Sky Line |  |  |  |  | Annual Probable Sunlight Hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Windows tested | Windows satisfying BRE criteria | Windows not satisfying BRE criteria (reduction) |  |  | Rooms tested | Rooms satisfying BRE criteria | Rooms not satisfying BRE criteria (reduction) |  |  | South facing windows tested | Windows satisfying BRE criteria |
|  |  |  | $\begin{gathered} 20.1- \\ 30 \% \end{gathered}$ | $\begin{gathered} 30.1- \\ 40 \% \end{gathered}$ | >40.1\% |  |  | $\left\|\begin{array}{l} 20.1- \\ 30 \% \end{array}\right\|$ | $\begin{gathered} 30.1- \\ 40 \% \end{gathered}$ | $>40.1 \%$ |  |  |
| 2-6 Sutton Park Road | 88 | 43 | 22 | 19 | 4 | 72 | 64 | 1 | 7 |  | 8 | 8 |
| $79-134$ <br> Homefield Park | 58 | 53 | 5 |  |  | 48 | 48 |  |  |  | 6 | 6 |
| Sutton Baptist Church | 62 | 45 | 5 | 5 | 7 | 1 | 1 |  |  |  | 24 | 24 |



Image 2: 2-6 Sutton Park Road

## 2-6 SUTTON PARK ROAD

This building was constructed approximately fifteen years ago and features a number of windows facing directly over the site boundary with City House. It is of commercial use on the ground and mezzanine floors with residential units above.

The part of the site closest to this neighbour is the car park. As such, any meaningful redevelopment on the site is likely to result in noticeable changes to this neighbour. It is therefore important to remember the site context when considering the daylight and sunlight impacts on this property.

## RESULTS (EXISTING VS. PROPOSED)

In daylight terms, of the 88 windows analysed, 43 retain at least $80 \%$ of their existing levels of VSC which are deemed to be negligible impacts. Of the 45 remaining windows, 22 experience impacts which are considered to be minor (e.g. no more than $30 \%$ reductions from the existing level), and 19 which are considered to be moderate (e.g. no more than $40 \%$ reductions from the existing level). These windows all retain absolute levels of VSC which are in the 'mid-teens' or above with the proposed development in place (it should be noted that retained levels of VSC in the 'mid-teens' and above have been found to be acceptable within London by the GLA and at appeal in recent years).

The four windows which experience reductions in VSC of more than $40 \%$ from their

existing levels are all positioned beneath an overhanging balcony. The BRE Guidelines acknowledge in paragraph 2.2.13 that, "Existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even a modest obstruction opposite may result in a large relative impact on the VSC, and on the area receiving direct skylight."

In terms of NSL, 64 out of the 72 rooms analysed will retain at least $80 \%$ of their existing level of NSL. The eight remaining rooms are all obstructed by an overhanging balcony which again restricts the amount of daylight entering the room.

In sunlight terms, all windows that face within $90^{\circ}$ of due south meet the APSH target values and also experience no change as compared to the mirror-image alternative baseline.

## COMMENTARY

This neighbouring property's positioning in relation to the proposed development site, coupled with its close proximity to the shared site boundary, means it is reliant on daylight received from across the site. The lower lying nature of the development site in comparison means that any massing that is to be in keeping with the urban context of this central part of Sutton has the potential to cause daylight reductions to this property beyond the BRE Guidelines. In order to better understand the nature of the daylight and sunlight impacts it is therefore necessary to explore the contextual relationship more fully.

To allow for fair and equivalent development on neighbouring sites and to ensure consistency of townscape, the BRE Guidelines recommend that, in instances such as this, daylight and sunlight target values are set to those for a mirror-image building of the same height and size, an equal distance away from the boundary. This alternative baseline is shown on drawings in Appendix 1; analysis has been undertaken comparing the daylight and sunlight position for this alternative baseline to that with the proposed development in place. The results of this analysis are included in Appendix 2.2. A table summarising the results is shown below.

| Scenario | Vertical Sky Component |  |  |  |  | No Sky Line |  |  |  |  | Annual Probable Sunlight Hours |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Windows tested | Windows retaining $>20 \%$ of their existing VSC | Windows losing $>20 \%$ of their existing VSC |  |  | Rooms tested | Rooms retaining $>20 \%$ of their existing NSL | Rooms losing $>20 \%$ of their existing NSL |  |  | South facing windows tested | Windows satisfying BRE criteria |
|  |  |  | $\begin{gathered} 20.1- \\ 30 \% \end{gathered}$ | $\begin{array}{\|c\|} 30.1- \\ 40 \% \end{array}$ | >40.1\% |  |  | $\begin{array}{\|c} 20.1- \\ 30 \% \end{array}$ | $\begin{gathered} 30.1- \\ 40 \% \end{gathered}$ | >40.1\% |  |  |
| Existing vs Proposed | 88 | 43 | 22 | 19 | 4 | 72 | 64 | 1 | 7 |  | 8 | 8 |
| Mirror vs Proposed | 88 | 88 |  |  |  | 72 | 72 |  |  |  | 8 | 8 |

## RESULTS (MIRROR VS. PROPOSED)

In daylight terms, the results of the alternative baseline analysis show that all windows would retain at least $80 \%$ of their alternative baseline VSC level. 20 windows would have the same or an improved level of VSC, as compared to the alternative baseline, while 60 windows would retain at least $90 \%$ of their alternative baseline VSC. The eight remaining windows retain between $83 \%$ and $89 \%$ of their alternative baseline VSC level; these windows are all obstructed from above by an overhanging balcony. For these windows, it is instructive to consider the impact to neighbouring, unobstructed windows. In all cases, the windows next to the overhung apertures experience no worse than $9 \%$ reductions from the alternative baseline position and retain at least $24 \%$ VSC in absolute terms. This demonstrates that it is the presence of the balcony which is the primary cause of the relative daylight reduction to these windows.

In NSL terms, all rooms will retain at least $80 \%$ of their alternative baseline NSL, with the vast majority either retaining at least $90 \%$ or seeing an improvement. Only three rooms experience more than a $10 \%$ reduction compared to the mirror-image alternative baseline position. Two of the three rooms are bedrooms, which are considered "less important" by the BRE Guidelines when it comes to the measurement of NSL, while the third room is a deep, single aspect LKD which retains a high (29\%) level of VSC in absolute terms with the proposed development in place..

## CONCLUSION

The analysis against the mirror-image clearly demonstrates a marked improvement from the existing $v$ proposed analysis and, in our opinion, therefore reduces the overall impact on this property to minor. Given the comparable levels of daylight and sunlight across the building to the mirror-image alternative baseline position, in our view, the daylight and sunlight position for 2-6 Sutton Park Road should be considered contextually appropriate and therefore acceptable.


Image 3: Sutton Baptist Church

## SUTTON BAPTIST CHURCH

This church is located to the east of the proposed development. The modelling of the main worship space within the building has been based on internal photography.

There are no specific references to the potential daylight impacts to churches or other places of worship and only an implied reference to churches potentially requiring sunlight analysis as a "nearby non-domestic building(s) where there is a particular requirement for sunlight".

## RESULTS

Of the 62 windows understood to serve the main worship space, 45 meet the target value for VSC individually. When the weighted mean of the VSC for the room as a whole is calculated, the room is shown to experience a $15 \%$ reduction and retain $28 \%$ VSC in absolute terms. The VSC impact to this room is therefore negligible. The room experiences a $1 \%$ reduction in no-sky line and therefore the overall impact to daylight is acceptable.

In sunlight terms, all windows meet the target annual and winter sunlight values with the proposal in place. The overall impact to sunlight is therefore acceptable.


Image 4: 74-139
Homefield Park

## 74-139 HOMEFIELD PARK

This residential development is located to the west of the proposal.

## RESULTS

53 out of 58 windows meet the target value for VSC with the proposal in place. Where windows do not meet the target value, in all cases their external appearance indicates they serve circulation space which is not sensitive to alterations in daylight and sunlight as per the BRE.

All 48 rooms analysed meet the target value for NSL with the proposal in place.
In sunlight terms, all six windows that face the proposal and within $90^{\circ}$ of due south meet the target values for annual and winter sunlight with the proposal in place.

The daylight and sunlight impact to this development is therefore acceptable.

## 6 INTERNAL DAYLIGHT \& SUNLIGHT ANALYSIS

The results of the internal daylight and sunlight analysis are included in Appendix 3. We have assessed the internal daylight within the scheme using the illuminance method.

For internal daylight, the UK National Annex to BS EN 17037 gives the following median illuminances to be exceeded over at least $50 \%$ of the assessment points in the room for at least half of the daylight hours:

- $\quad 100$ lux in bedrooms
- $\quad 150$ lux in living rooms
- 200 lux in kitchens.

As per paragraph C17 of the BRE Guidelines, the target for a combined living/dining/ kitchen room has been set to that of a living room in cases where the kitchens have been added to the main living space in order to avoid small separate kitchens in the design. In these cases, the primary use of the room is as a living room and the kitchen area is there solely for food preparation etc.

For internal sunlight, the BRE Guidelines state that a dwelling will appear reasonably sunlit provided that at least one main window wall faces within $90^{\circ}$ of due south and a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March.

## RESULTS

In daylight terms, 183 out of 211 ( $87 \%$ ) rooms meet their target daylight value.
In sunlight terms, 58 out of 70 units (83\%) meet the target sunlight value.

## COMMENTARY

Where living rooms do not meet their target daylight value, in all cases they have direct access to an external balcony which provides an additional source of daylight amenity. It is also widely acknowledged that the provision of balconies leads to a restriction on access to daylight due to the obstruction caused to the window beneath the balcony. There is, therefore, a trade-off between provision of private amenity spaces and daylight to these rooms and the results should be considered in balance against the need for such spaces.

Similarly, although larger windows may increase daylight levels in some locations, this would also result in an increase in overheating for the room in question and, given the recent update to overheating regulations, a balance between solar gain and access to daylight must also be achieved. As such, given that the significant majority of rooms meet their target daylight value and that all units are provided with a private amenity space,
the daylighting is considered acceptable overall.
Regarding sunlight, the BRE Guidelines acknowledge that it may be difficult to achieve the target level in all units in larger developments:
"3.1.7 ... The aim should be to minimise the number of dwellings whose living rooms face solely north, northeast or northwest, unless there is some compensating factor such as appealing view to the north."

And:
"3.1.8 ...For larger developments, it may not be possible to have every living room facing within 90 degrees of due south."

The Guidelines go on to suggest ways of improving the position, which include:
"Arranging the flats so that the living rooms are placed on the end corners of the building and hence can be dual aspect. That way, living rooms on the north side of the building can also have an east or west facing window that receives some sun."

All of the units that do not meet their target value in question are positioned on a corner of the proposal to maximise their access to sunlight. Additionally, all units have access to an exterior private amenity space which will provide an alternative source of sunlight amenity. In our view, therefore, the guidance has been followed with north-facing living positioned on the corners of the proposal where possible, thus minimising "the number of dwellings whose living rooms face solely north". As the BRE acknowledge that it may not be possible to ensure all living rooms face towards the southern sky, the sunlighting results are considered acceptable overall.

## 7 SUNLIGHT AMENITY (OVERSHADOWING)

We have assessed the level of sunlight to the outdoor amenity spaces (i.e. gardens) within the surrounding properties and within the proposed development. The overshadowing results can be found in Appendix 4.

The BRE Guidelines recommend that an outdoor amenity space receives at least 2 hours of sunlight on March 21 st to at least $50 \%$ of its area in the proposed situation or retains at least $80 \%$ of its former value with the proposal in place.

## RESULTS

The analysis demonstrates that the church playground and both proposed amenity spaces meet the target sunlight amenity value with the proposal in place.

## 8 CONCLUSIONS

This is a report into the impact of the proposed development at City House, Sutton Park Road on the daylight and sunlight to surrounding residential properties, amenity spaces, and internally to the scheme itself. This analysis has been based upon scheme drawings provided by Wimshurst Pelleriti, a photogrammetric survey, and site imagery.

The analysis has been carried out in accordance with the methodologies contained in the BRE Guidelines, which is used by the local authority to determine the acceptability of a proposal in terms of its effect on neighbouring daylight and sunlight amenity.

The analysis shows that the neighbouring church and 74-139 Homefield Park both meet the BRE Guidelines' recommendations for daylight and sunlight with the proposal in place. At 2-6 Sutton Park Road, analysis of the comparison of the proposed and alternative baseline positions demonstrates that many rooms and windows experience improvements against the alternative baseline position and that, where impacts occur, these are primarily the result of overhanging balconies restricting access to daylight. As such, the daylight and sunlight position for all neighbouring residential or pastoral properties is considered acceptable in our opinion.

Internally, $87 \%$ of rooms meet their target daylight value. Where living rooms do not meet their target value, this is primarily due to the provision of private amenity spaces in the form of balconies. Given that the significant majority of rooms meet their target daylight value and that all units are provided with a private amenity space, the daylighting is considered acceptable overall.
$83 \%$ of units meet the target sunlight value. The BRE Guidelines acknowledge that not all units can be south-facing in larger developments and, where units do not meet the target value, they are positioned on a corner of the proposal to maximise sunlight access as per the BRE Guidelines' recommendations. As such, the sunlighting across the proposal is considered acceptable.

In overshadowing terms, the church playground and both proposed amenity spaces all meet the target sunlight amenity value.

## APPENDIX 1

Drawings











SOURCES OF INFORMATION:
WALDRAMS LTD
2991_05
IR15 (RECEIVED 07.02.2024)
SITE PHOTOGRAPHS
SURROUNDING PROPERTY INFORMATION

## notes:

SDA \% OF HOURS

MORE THAN 50

| PROJECT <br> CITY HOUSE, <br> SUTTON SMI |  |
| :--- | :--- |
| DRAWING <br> SPATIAL DAYLIGHT AUTONOMY |  |
| SCALE @ A3 <br> 1:180 | DATE <br> 07.02.2024 |
| MODELLED BY DRAWN BY <br> DF  | DF |
| PROJECT No. REL No.- DWG No. <br> 2991 O7-O1 |  |




SOURCES OF INFORMATION:
WALDRAMS LTD
2991_05
IR15 (RECEIVED 07.02.2024)
SITE PHOTOGRAPHS
SURROUNDING PROPERTY INFORMATION

## NOTES:

SDA \% OF HOURSLESS THAN 50
MORE THAN 50

## PROJECT <br> CITY HOUSE SUTTON SM

DRAWING
SPATAL DAYLIGHT AUTONOMY

|  |  |
| :--- | :--- |
| SCALE @ A3 <br> $1: 180$ | DATE <br> 17.12 .2023 |
| MODELLED BY <br> DF | DRAWN BY <br> DF |
| PROJECT No. | REL No.- DWG No. |
| 2991 | $07-02$ |



OURCES OF INFORMATION:
WALDRAMS LTD
2991_05
IR15 (RECEIVED 07.02.2024)
SITE PHOTOGRAPHS
SURROUNDING PROPERTY INFORMATION


## SOURCES OF INFORMATION:

WALDRAMS LTD
2991_05
IR15 (RECEIVED 07.02.2024)
SITE PHOTOGRAPHS
SURROUNDING PROPERTY INFORMATION

drawing
SPATIAL DAYLIGHT AUTONOMY

| SCALE @ A3 <br> $1: 180$ | DATE <br> 17.12 .2023 |
| :--- | :--- |
| MODELED BY <br> DF | DRAWN BY <br> DF |
| PROJECT No. REL No.- DWG No. <br> 2991 $07-05$ |  |

## SOURCES OF INFORMATION:

WALDRAMS LTD
2991_05
IR15 (RECEIVED 07.02.2024)
SITE PHOTOGRAPHS
SURROUNDING PROPERTY INFORMATION

drawing
SPATIAL DAYIIGHT AUTONOMY

| SCALE @ A3 <br> $1: 180$ | DATE <br> 17.12 .2023 |
| :--- | :--- |
| MODELLED BY <br> DF | DRAWN BY <br> DF |
| PROJECT No. <br> 2991 | REL No.- DWG No. |

## APPENDIX 2.1

Daylight \& Sunlight Results
Existing vs Proposed

| Address/Floor | Room Ref | Property Type | Room Usage | Window Ref | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Existing VSC \% | Proposed vsC \% |  | Room Area $\mathrm{m}^{2}$ | Existing NSC \% | Proposed NSC \% |  | Existing Sunlight Annual\% | Proposed Sunlight Annual\% |  | Existing <br> Sunlight Winter\% | Proposed Sunlight Winter\% |  |
| Church |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ground | R1 | Commercial | Pastoral | W1 | 34.69 | 28.5 | 0.82 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 37 | 19 | North | 7 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W2 | 34.73 | 28.26 | 0.81 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 36 | 16 | North | 7 | 0 | North |
| Ground | R1 | Commercial | Pastoral | w3 | 34.51 | 27.82 | 0.81 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 33 | 14 | North | 6 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W4 | 36.53 | 30.2 | 0.83 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 40 | 21 | North | 9 | 0 | North |
| Ground | R1 | Commercial | Pastoral | w5 | 36.46 | 29.82 | 0.82 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 38 | 18 | North | 9 | 0 | North |
| Ground | R1 | Commercial | Pastoral | w6 | 37.17 | 30.75 | 0.83 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 40 | 21 | North | 9 | 0 | North |
| Ground | R1 | Commercial | Pastoral | w7 | 33.91 | 24.86 | 0.73 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 37 | 10 | North | 8 | 1 | North |
| Ground | R1 | Commercial | Pastoral | w8 | 34.04 | 24.54 | 0.72 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 35 | 9 | North | 7 | 0 | North |
| Ground | R1 | Commercial | Pastoral | w9 | 33.95 | 23.93 | 0.70 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 33 | 6 | North | 7 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W10 | 36.06 | 26.78 | 0.74 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 38 | 15 | North | 8 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W11 | 36.09 | 26.36 | 0.73 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 36 | 12 | North | 8 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W12 | 36.81 | 27.44 | 0.75 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 42 | 18 | North | 10 | 1 | North |
| Ground | R1 | Commercial | Pastoral | W13 | 33.65 | 20.67 | 0.61 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 35 | 5 | North | 7 | 1 | North |
| Ground | R1 | Commercial | Pastoral | W14 | 33.82 | 20.31 | 0.60 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 33 | 5 | North | 7 | 1 | North |
| Ground | R1 | Commercial | Pastoral | W15 | 33.73 | 19.62 | 0.58 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 30 | 2 | North | 7 | 2 | North |
| Ground | R1 | Commercial | Pastoral | W16 | 35.85 | 22.58 | 0.63 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 39 | 9 | North | 9 | 1 | North |
| Ground | R1 | Commercial | Pastoral | W17 | 35.88 | 22.01 | 0.61 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 36 | 4 | North | 8 | 1 | North |
| Ground | R1 | Commercial | Pastoral | W18 | 36.67 | 23.25 | 0.63 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 40 | 8 | North | 9 | 1 | North |
| Ground | R1 | Commercial | Pastoral | W19 | 29.2 | 13.17 | 0.45 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 35 | 8 | North | 7 | 1 | North |
| Ground | R1 | Commercial | Pastoral | W20 | 30.67 | 14.26 | 0.46 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 35 | 9 | North | 7 | 2 | North |
| Ground | R1 | Commercial | Pastoral | W21 | 31.68 | 14.91 | 0.47 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 35 | 10 | North | 7 | 2 | North |
| Ground | R1 | Commercial | Pastoral | W22 | 32.11 | 15.79 | 0.49 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 38 | 10 | North | 7 | 2 | North |
| Ground | R1 | Commercial | Pastoral | W23 | 33.33 | 16.62 | 0.50 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 38 | 10 | North | 8 | 3 | North |
| Ground | R1 | Commercial | Pastoral | W24 | 33.94 | 17.41 | 0.51 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 39 | 11 | North | 8 | 3 | North |
| Ground | R1 | Commercial | Pastoral | W25 | 26.24 | 22.43 | 0.85 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 65 | 55 | 0.85 | 17 | 15 | 0.88 |
| Ground | R1 | Commercial | Pastoral | W26 | 26.39 | 22.76 | 0.86 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 66 | 57 | 0.86 | 18 | 16 | 0.89 |
| Ground | R1 | Commercial | Pastoral | W27 | 26.46 | 23.02 | 0.87 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 68 | 57 | 0.84 | 18 | 16 | 0.89 |
| Ground | R1 | Commercial | Pastoral | W28 | 27.69 | 23.94 | 0.86 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 68 | 58 | 0.85 | 19 | 17 | 0.89 |
| Ground | R1 | Commercial | Pastoral | W29 | 27.8 | 24.24 | 0.87 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 69 | 59 | 0.86 | 19 | 17 | 0.89 |
| Ground | R1 | Commercial | Pastoral | w30 | 28.16 | 24.48 | 0.87 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 68 | 59 | 0.87 | 19 | 17 | 0.89 |
| Ground | R1 | Commercial | Pastoral | w31 | 34.01 | 34.01 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 42 | 42 | 1.00 | 10 | 10 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W32 | 34.36 | 34.36 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 46 | 46 | 1.00 | 13 | 13 | 1.00 |
| Ground | R1 | Commercial | Pastoral | w33 | 34.31 | 34.31 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 47 | 47 | 1.00 | 13 | 13 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W34 | 37.03 | 37.03 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 47 | 47 | 1.00 | 12 | 12 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W35 | 37.17 | 37.17 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 50 | 50 | 1.00 | 14 | 14 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W36 | 37.73 | 37.73 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 50 | 50 | 1.00 | 14 | 14 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W37 | 33.81 | 33.81 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 48 | 48 | 1.00 | 14 | 14 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W38 | 33.57 | 33.57 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 49 | 49 | 1.00 | 15 | 15 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W39 | 32.58 | 32.58 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 49 | 49 | 1.00 | 15 | 15 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W40 | 36.74 | 36.74 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 48 | 48 | 1.00 | 14 | 14 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W41 | 36.22 | 36.22 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 51 | 51 | 1.00 | 15 | 15 | 1.00 |

[^0]|  |  |  |  |  | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Address/FIoor | Room Ref | Property <br> Type | $\begin{aligned} & \text { Room } \\ & \text { Usage } \end{aligned}$ | Window Ref | Existing VSC \% | Proposed VSC \% |  | $\underset{\mathrm{m}^{2}}{\text { Room Area }}$ | Existing NSC \% | Proposed NSC \% |  | Existing Sunlight Annual\% | Proposed Sunlight Annual\% |  | Existing <br> Sunlight Winter\% | Proposed Sunlight Winter\% |  |
| Ground | R1 | Commercial | Pastoral | W42 | 37.21 | 37.21 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 51 | 51 | 1.00 | 15 | 15 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W43 | 35.91 | 35.91 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 44 | 44 | 1.00 | 11 | 11 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W44 | 36.1 | 36.1 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 47 | 47 | 1.00 | 13 | 13 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W45 | 35.89 | 35.89 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 49 | 49 | 1.00 | 14 | 14 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W46 | 37.35 | 37.35 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 50 | 50 | 1.00 | 14 | 14 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W47 | 37.09 | 37.09 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 47 | 47 | 1.00 | 12 | 12 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W48 | 37.82 | 37.82 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 49 | 49 | 1.00 | 13 | 13 | 1.00 |
| Ground | R1 | Commercial | Pastoral | W49 | 35.34 | 35.34 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 13 | 13 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W50 | 35.51 | 35.51 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 16 | 16 | North | 1 | 1 | North |
| Ground | R1 | Commercial | Pastoral | W51 | 36.34 | 36.34 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 17 | 17 | North | 2 | 2 | North |
| Ground | R1 | Commercial | Pastoral | W52 | 33.04 | 33.04 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 5 | 5 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W53 | 32.81 | 32.81 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 5 | 5 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W54 | 36.1 | 36.1 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 6 | 6 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W55 | 36.08 | 36.08 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 6 | 6 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W56 | 35.92 | 35.92 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 6 | 6 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W57 | 37.05 | 37.05 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 6 | 6 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W58 | 36.99 | 36.99 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 6 | 6 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W59 | 37.45 | 37.45 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 6 | 6 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W60 | 35.42 | 35.42 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 9 | 9 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W61 | 35.5 | 35.5 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 8 | 8 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Pastoral | W62 | 36.43 | 36.43 | 1.00 | 386.603529 | 99.94161 | 98.658514 | 0.99 | 9 | 9 | North | 0 | 0 | North |
| 2-6 Sutton Park Road |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ground | R1 | Commercial | Unknown | W1 | 15.65 | 14.58 | 0.93 | 515.913576 | 87.581655 | 87.561383 | 1.00 | 15 | 15 | 1.00 | 1 | 1 | 1.00 |
| Ground | R1 | Commercial | Unknown | W2 | 17.74 | 8.98 | 0.51 | 515.913576 | 87.581655 | 87.561383 | 1.00 | 7 | 7 | North | 0 | 0 | North |
| Ground | R1 | Commercial | Unknown | w3 | 26.23 | 15.6 | 0.59 | 515.913576 | 87.581655 | 87.561383 | 1.00 | 9 | 9 | North | 1 | 1 | North |
| Ground | R1 | Commercial | Unknown | W4 | 25.63 | 25.63 | 1.00 | 515.913576 | 87.581655 | 87.561383 | 1.00 | 42 | 42 | 1.00 | 14 | 14 | 1.00 |
| Ground | R1 | Commercial | Unknown | W5 | 25.37 | 25.37 | 1.00 | 515.913576 | 87.581655 | 87.561383 | 1.00 | 43 | 43 | 1.00 | 15 | 15 | 1.00 |
| Ground | R1 | Commercial | Unknown | W6 | 25.36 | 25.36 | 1.00 | 515.913576 | 87.581655 | 87.561383 | 1.00 | 40 | 40 | 1.00 | 13 | 13 | 1.00 |
| Ground | R1 | Commercial | Unknown | W7 | 12.71 | 12.71 | 1.00 | 515.913576 | 87.581655 | 87.561383 | 1.00 | 30 | 30 | 1.00 | 1 | 1 | 1.00 |
| Ground | R1 | Commercial | Unknown | W8 | 15.29 | 15.29 | 1.00 | 515.913576 | 87.581655 | 87.561383 | 1.00 | 31 | 31 | 1.00 | 2 | 2 | 1.00 |
| First | R1 | Residential | Bedroom | W1 | 30.68 | 22.7 | 0.74 | 10.967508 | 97.176154 | 81.416141 | 0.84 | 8 | 7 | North | 0 | 0 | North |
| First | R2 | Residential | Unknown | W2 | 33.5 | 25.56 | 0.76 | 6.268203 | 98.451287 | 88.208815 | 0.90 | 5 | 4 | North | 1 | 1 | North |
| First | R3 | Residential | LKD | W3 | 22.28 | 14.57 | 0.65 | 17.718617 | 98.655871 | 97.074168 | 0.98 | 7 | 6 | North | 1 | 1 | North |
| First | R4 | Residential | LKD | W4 | 22.72 | 14.47 | 0.64 | 28.024259 | 98.61029 | 89.769913 | 0.91 | 10 | 10 | North | 0 | 0 | North |
| First | R5 | Residential | Bedroom | W5 | 34.53 | 23.93 | 0.69 | 8.054742 | 98.626141 | 86.781141 | 0.88 | 9 | 9 | North | 0 | 0 | North |
| First | R6 | Residential | Bedroom | W6 | 37.41 | 26.15 | 0.70 | 8.505716 | 98.904178 | 87.386995 | 0.88 | 10 | 10 | North | 1 | 1 | North |
| First | R7 | Residential | Bedroom | W7 | 34.31 | 22.69 | 0.66 | 10.459045 | 98.435885 | 81.966484 | 0.83 | 4 | 4 | North | 0 | 0 | North |
| First | R8 | Residential | LKD | W8 | 22.89 | 13.04 | 0.57 | 23.218426 | 99.974322 | 68.972649 | 0.69 | 10 | 10 | North | 1 | 1 | North |
| First | R9 | Residential | LKD | w9 | 34.92 | 24.03 | 0.69 | 27.469237 | 99.999995 | 99.3034 | 0.99 | 7 | 7 | North | 1 | 1 | North |
| First | R9 | Residential | LKD | W10 | 23.8 | 15.45 | 0.65 | 27.469237 | 99.999995 | 99.3034 | 0.99 | 10 | 10 | North | 2 | 2 | North |
| First | R9 | Residential | LKD | W11 | 23.01 | 23.01 | 1.00 | 27.469237 | 99.999995 | 99.3034 | 0.99 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Second | R1 | Residential | Bedroom | W1 | 38.29 | 30.84 | 0.81 | 10.967508 | 97.169446 | 81.584681 | 0.84 | 9 | 8 | North | 0 | 0 | North |
| Second | R2 | Residential | Unknown | W2 | 35.22 | 27.79 | 0.79 | 6.268203 | 98.4512 | 88.033733 | 0.89 | 6 | 5 | North | 1 | 1 | North |
| Second | R3 | Residential | LKD | W3 | 21.99 | 14.28 | 0.65 | 17.718617 | 98.075233 | 96.230548 | 0.98 | 3 | 2 | North | 0 | 0 | North |


|  |  |  |  |  | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Address/FIoor | Room Ref | Property Type | Room Usage | Window <br> Ref | Existing VSC \% | Proposed VSC \% | Ratio Proposed /Existing vSC | $\begin{array}{\|c} \begin{array}{c} \text { Room Area } \\ \mathrm{m}^{2} \end{array} \\ \hline \end{array}$ | Existing NSC \% | Proposed NSC \% |  | Existing Sunlight Annual\% | Proposed Sunlight Annual\% |  | Existing Sunlight Winter\% | Proposed Sunlight Winter\% |  |
| Second | R4 | Residential | LKD | W4 | 22.15 | 13.87 | 0.63 | 28.024259 | 98.551066 | 90.104952 | 0.91 | 10 | 10 | North | 0 | 0 | North |
| Second | R5 | Residential | Bedroom | w5 | 34.84 | 24.75 | 0.71 | 8.054742 | 98.752569 | 86.942569 | 0.88 | 9 | 9 | North | 0 | 0 | North |
| Second | R6 | Residential | Bedroom | W6 | 37.73 | 26.99 | 0.72 | 8.505716 | 98.88851 | 87.445712 | 0.88 | 10 | 10 | North | 1 | 1 | North |
| Second | R7 | Residential | Bedroom | w7 | 34.63 | 23.54 | 0.68 | 10.459045 | 98.411831 | 81.960345 | 0.83 | 4 | 4 | North | 0 | 0 | North |
| Second | R8 | Residential | LKD | W8 | 23.31 | 13.4 | 0.57 | 23.218426 | 99.974648 | 69.161297 | 0.69 | 10 | 10 | North | 1 | 1 | North |
| Second | R9 | Residential | LKD | w9 | 35.26 | 24.89 | 0.71 | 27.469237 | 99.999997 | 99.309858 | 0.99 | 7 | 7 | North | 1 | 1 | North |
| Second | R9 | Residential | LKD | W10 | 24.23 | 15.82 | 0.65 | 27.469237 | 99.999997 | 99.309858 | 0.99 | 10 | 10 | North | 2 | 2 | North |
| Second | R9 | Residential | LKD | W11 | 23.88 | 23.88 | 1.00 | 27.469237 | 99.999997 | 99.309858 | 0.99 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Third | R1 | Residential | Bedroom | W1 | 38.35 | 31.51 | 0.82 | 10.967508 | 97.169733 | 81.96691 | 0.84 | 9 | 8 | North | 0 | 0 | North |
| Third | R2 | Residential | Unknown | w2 | 35.27 | 28.43 | 0.81 | 6.268203 | 98.4512 | 88.430215 | 0.90 | 6 | 5 | North | 1 | 1 | North |
| Third | R3 | Residential | LKD | W3 | 22.06 | 14.48 | 0.66 | 17.718617 | 98.084718 | 96.256552 | 0.98 | 3 | 2 | North | 0 | 0 | North |
| Third | R4 | Residential | LKD | W4 | 22.23 | 14.02 | 0.63 | 28.024259 | 98.551611 | 90.229176 | 0.92 | 10 | 10 | North | 0 | 0 | North |
| Third | R5 | Residential | Bedroom | w5 | 34.91 | 25.48 | 0.73 | 8.054742 | 98.752569 | 86.94791 | 0.88 | 9 | 9 | North | 0 | 0 | North |
| Third | R6 | Residential | Bedroom | w6 | 37.8 | 27.73 | 0.73 | 8.505716 | 98.88851 | 87.407217 | 0.88 | 10 | 10 | North | 1 | 1 | North |
| Third | R7 | Residential | Bedroom | W7 | 34.7 | 24.3 | 0.70 | 10.459045 | 98.435802 | 82.041946 | 0.83 | 4 | 4 | North | 0 | 0 | North |
| Third | R8 | Residential | LKD | w8 | 23.42 | 13.54 | 0.58 | 23.218426 | 99.974675 | 69.233117 | 0.69 | 10 | 10 | North | 1 | 1 | North |
| Third | R9 | Residential | LKD | w9 | 35.33 | 25.64 | 0.73 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 7 | 7 | North | 1 | 1 | North |
| Third | R9 | Residential | LKD | W10 | 24.35 | 15.97 | 0.66 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 10 | 10 | North | 2 | 2 | North |
| Third | R9 | Residential | LKD | W11 | 24.29 | 24.29 | 1.00 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Fourth | R1 | Residential | Bedroom | W1 | 38.39 | 32.21 | 0.84 | 10.967508 | 97.169733 | 82.781243 | 0.85 | 9 | 8 | North | 0 | 0 | North |
| Fourth | R2 | Residential | Unknown | w2 | 35.29 | 29.07 | 0.82 | 6.268203 | 98.4512 | 89.837429 | 0.91 | 6 | 5 | North | 1 | 1 | North |
| Fourth | R3 | Residential | LKD | w3 | 22.11 | 14.76 | 0.67 | 17.718617 | 98.095803 | 96.272224 | 0.98 | 3 | 2 | North | 0 | 0 | North |
| Fourth | R4 | Residential | LKD | W4 | 22.26 | 14.23 | 0.64 | 28.024259 | 98.552143 | 90.232374 | 0.92 | 10 | 10 | North | 0 | 0 | North |
| Fourth | R5 | Residential | Bedroom | w5 | 34.94 | 26.29 | 0.75 | 8.054742 | 98.752576 | 87.086943 | 0.88 | 9 | 9 | North | 0 | 0 | North |
| Fourth | R6 | Residential | Bedroom | w6 | 37.85 | 28.59 | 0.76 | 8.505716 | 98.88851 | 87.410052 | 0.88 | 10 | 10 | North | 1 | 1 | North |
| Fourth | R7 | Residential | Bedroom | W7 | 34.73 | 25.16 | 0.72 | 10.459045 | 98.435802 | 82.02614 | 0.83 | 4 | 4 | North | 0 | 0 | North |
| Fourth | R8 | Residential | LKD | w8 | 23.46 | 13.74 | 0.59 | 23.218426 | 99.974706 | 69.175887 | 0.69 | 10 | 10 | North | 1 | 1 | North |
| Fourth | R9 | Residential | LKD | w9 | 35.37 | 26.47 | 0.75 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 7 | 7 | North | 1 | 1 | North |
| Fourth | R9 | Residential | LKD | W10 | 24.39 | 16.16 | 0.66 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 10 | 10 | North | 2 | 2 | North |
| Fourth | R9 | Residential | LKD | W11 | 24.37 | 24.37 | 1.00 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Fifth | R1 | Residential | Bedroom | W1 | 38.43 | 33 | 0.86 | 10.967508 | 97.169446 | 84.501525 | 0.87 | 9 | 8 | North | 0 | 0 | North |
| Fifth | R2 | Residential | Unknown | w2 | 35.32 | 29.73 | 0.84 | 6.268203 | 98.4512 | 91.208539 | 0.93 | 6 | 5 | North | 1 | 1 | North |
| Fifth | R3 | Residential | LKD | W3 | 22.15 | 15.61 | 0.70 | 17.718617 | 98.084738 | 96.25393 | 0.98 | 3 | 2 | North | 0 | 0 | North |
| Fifth | R4 | Residential | LKD | W4 | 22.3 | 15.11 | 0.68 | 28.024259 | 98.55246 | 90.207328 | 0.92 | 10 | 10 | North | 0 | 0 | North |
| Fifth | R5 | Residential | Bedroom | W5 | 35 | 27.27 | 0.78 | 8.054742 | 98.75257 | 87.734331 | 0.89 | 9 | 9 | North | 0 | 0 | North |
| Fifth | R6 | Residential | Bedroom | w6 | 37.92 | 29.64 | 0.78 | 8.505716 | 98.88851 | 87.764835 | 0.89 | 10 | 10 | North | 1 | 1 | North |
| Fifth | R7 | Residential | Bedroom | W7 | 34.78 | 26.21 | 0.75 | 10.459045 | 98.411831 | 82.14317 | 0.83 | 4 | 4 | North | 0 | 0 | North |
| Fifth | R8 | Residential | LKD | w8 | 23.5 | 14.74 | 0.63 | 23.218426 | 99.974707 | 69.103609 | 0.69 | 10 | 10 | North | 1 | 1 | North |
| Fifth | R9 | Residential | LKD | w9 | 35.45 | 27.48 | 0.78 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 7 | 7 | North | 1 | 1 | North |
| Fifth | R9 | Residential | LKD | W10 | 24.43 | 17.03 | 0.70 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 10 | 10 | North | 2 | 2 | North |
| Fifth | R9 | Residential | LKD | W11 | 24.39 | 24.39 | 1.00 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Sixth | R1 | Residential | Bedroom | w1 | 38.44 | 33.83 | 0.88 | 10.967508 | 97.170843 | 87.684888 | 0.90 | 9 | 8 | North | 0 | 0 | North |
| Sixth | R2 | Residential | Unknown | w2 | 35.3 | 30.42 | 0.86 | 6.268203 | 98.451535 | 95.348726 | 0.97 | 6 | 5 | North | 1 | 1 | North |
| Sixth | R3 | Residential | LKD | w3 | 22.18 | 16.56 | 0.75 | 17.718617 | 98.084718 | 96.243564 | 0.98 | 3 | 2 | North | 0 | 0 | North |


| Address/Floor | Room Ref | Property Type | Room Usage | Window Ref | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Existing VSC \% | Proposed vsC \% | Ratio Proposed IExisting VSC | Room Area $m^{2}$ | Existing NSC \% | Proposed NSC \% |  | Existing Sunlight Annual\% | Proposed Sunlight Annual\% |  | Existing <br> Sunlight Winter\% | Proposed Sunlight Winter\% |  |
| Sixth | R4 | Residential | LKD | W4 | 22.35 | 16.13 | 0.72 | 28.024259 | 98.55283 | 90.22551 | 0.92 | 10 | 10 | North | 0 | 0 | North |
| Sixth | R5 | Residential | Bedroom | w5 | 35.04 | 28.39 | 0.81 | 8.054742 | 98.81868 | 89.346802 | 0.90 | 9 | 9 | North | 0 | 0 | North |
| Sixth | R6 | Residential | Bedroom | w6 | 38.02 | 30.87 | 0.81 | 8.505716 | 98.944824 | 89.305747 | 0.90 | 10 | 10 | North | 1 | 1 | North |
| Sixth | R7 | Residential | Bedroom | w7 | 34.82 | 27.41 | 0.79 | 10.459045 | 98.419216 | 83.269831 | 0.85 | 4 | 4 | North | 0 | 0 | North |
| Sixth | R8 | Residential | LKD | w8 | 23.54 | 15.92 | 0.68 | 23.218426 | 99.975694 | 69.202414 | 0.69 | 10 | 10 | North | 1 | 1 | North |
| Sixth | R9 | Residential | LKD | w9 | 35.61 | 28.74 | 0.81 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 7 | 7 | North | 1 | 1 | North |
| Sixth | R9 | Residential | LKD | W10 | 24.5 | 18.09 | 0.74 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 10 | 10 | North | 2 | 2 | North |
| Sixth | R9 | Residential | LKD | W11 | 24.4 | 24.4 | 1.00 | 27.469237 | 99.999997 | 99.311053 | 0.99 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Seventh | R1 | Residential | Bedroom | W1 | 38.11 | 34.38 | 0.90 | 10.967508 | 97.493665 | 93.412044 | 0.96 | 11 | 10 | North | 0 | 0 | North |
| Seventh | R2 | Residential | Unknown | W2 | 35.47 | 31.46 | 0.89 | 6.268203 | 99.04076 | 98.942335 | 1.00 | 6 | 5 | North | 1 | 1 | North |
| Seventh | R3 | Residential | LKD | w3 | 22.18 | 17.57 | 0.79 | 17.718617 | 98.084718 | 96.348039 | 0.98 | 3 | 2 | North | 0 | 0 | North |
| Seventh | R4 | Residential | LKD | W4 | 22.36 | 17.24 | 0.77 | 28.024259 | 98.55494 | 90.203442 | 0.92 | 11 | 11 | North | 1 | 1 | North |
| Seventh | R5 | Residential | Bedroom | w5 | 35.29 | 29.84 | 0.85 | 8.054742 | 98.769655 | 93.439953 | 0.95 | 12 | 12 | North | 1 | 1 | North |
| Seventh | R6 | Residential | Bedroom | w6 | 37.77 | 31.9 | 0.84 | 8.505716 | 99.13966 | 93.662282 | 0.94 | 11 | 11 | North | 1 | 1 | North |
| Seventh | R7 | Residential | Bedroom | W7 | 35.07 | 28.98 | 0.83 | 10.459045 | 98.422089 | 85.867774 | 0.87 | 4 | 4 | North | 0 | 0 | North |
| Seventh | R8 | Residential | LKD | W8 | 23.62 | 17.29 | 0.73 | 23.218426 | 99.976878 | 69.077609 | 0.69 | 12 | 12 | North | 1 | 1 | North |
| Seventh | R9 | Residential | LKD | w9 | 36.28 | 30.64 | 0.84 | 27.469237 | 99.999998 | 99.311054 | 0.99 | 8 | 8 | North | 1 | 1 | North |
| Seventh | R9 | Residential | LKD | W10 | 24.59 | 19.29 | 0.78 | 27.469237 | 99.999998 | 99.311054 | 0.99 | 10 | 10 | North | 2 | 2 | North |
| Seventh | R9 | Residential | LKD | W11 | 24.38 | 24.38 | 1.00 | 27.469237 | 99.999998 | 99.311054 | 0.99 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Eighth | R1 | Residential | Bedroom | W1 | 32.67 | 29.85 | 0.91 | 10.967508 | 96.791998 | 96.791998 | 1.00 | 9 | 8 | North | 0 | 0 | North |
| Eighth | R2 | Residential | Unknown | w2 | 32.47 | 29.43 | 0.91 | 6.268203 | 97.999552 | 97.999552 | 1.00 | 9 | 8 | North | 0 | 0 | North |
| Eighth | R3 | Residential | LKD | w3 | 33.41 | 29.88 | 0.89 | 17.718617 | 98.651954 | 98.651955 | 1.00 | 5 | 4 | North | 0 | 0 | North |
| Eighth | R4 | Residential | LKD | W4 | 33.48 | 29.54 | 0.88 | 28.024259 | 98.596324 | 91.858295 | 0.93 | 9 | 9 | North | 1 | 1 | North |
| Eighth | R5 | Residential | Bedroom | w5 | 32.38 | 28.24 | 0.87 | 8.054742 | 98.00688 | 98.00688 | 1.00 | 9 | 9 | North | 0 | 0 | North |
| Eighth | R6 | Residential | Bedroom | w6 | 32.4 | 27.92 | 0.86 | 8.505716 | 97.986872 | 97.986872 | 1.00 | 10 | 10 | North | 1 | 1 | North |
| Eighth | R7 | Residential | Bedroom | w7 | 32.39 | 27.74 | 0.86 | 10.459045 | 97.783386 | 93.972593 | 0.96 | 10 | 10 | North | 1 | 1 | North |
| Eighth | R8 | Residential | LKD | W8 | 34.69 | 29.79 | 0.86 | 23.218426 | 99.972927 | 70.412221 | 0.70 | 10 | 10 | North | 1 | 1 | North |
| Eighth | R9 | Residential | LKD | w9 | 32.39 | 28.11 | 0.87 | 27.469237 | 99.999996 | 99.332818 | 0.99 | 11 | 11 | North | 2 | 2 | North |
| Eighth | R9 | Residential | LKD | W10 | 35 | 30.92 | 0.88 | 27.469237 | 99.999996 | 99.332818 | 0.99 | 16 | 16 | North | 2 | 2 | North |
| Eighth | R9 | Residential | LKD | W11 | 36.7 | 36.7 | 1.00 | 27.469237 | 99.999996 | 99.332818 | 0.99 | 53 | 53 | 1.00 | 20 | 20 | 1.00 |
| Mezzanine | R1 | Commercial | Unknown | W1 | 20.62 | 19.12 | 0.93 | 515.913576 | 97.628296 | 97.612927 | 1.00 | 16 | 16 | 1.00 | 2 | 2 | 1.00 |
| Mezzanine | R1 | Commercial | Unknown | W2 | 21.93 | 10.76 | 0.49 | 515.913576 | 97.628296 | 97.612927 | 1.00 | 11 | 11 | North | 1 | 1 | North |
| Mezzanine | R1 | Commercial | Unknown | w3 | 32.62 | 21.83 | 0.67 | 515.913576 | 97.628296 | 97.612927 | 1.00 | 10 | 10 | North | 2 | 2 | North |
| Mezzanine | R1 | Commercial | Unknown | W4 | 30.34 | 30.34 | 1.00 | 515.913576 | 97.628296 | 97.612927 | 1.00 | 58 | 58 | 1.00 | 19 | 19 | 1.00 |
| Mezzanine | R1 | Commercial | Unknown | W5 | 34.96 | 34.96 | 1.00 | 515.913576 | 97.628296 | 97.612927 | 1.00 | 56 | 56 | 1.00 | 19 | 19 | 1.00 |
| Mezzanine | R1 | Commercial | Unknown | w6 | 35.48 | 35.48 | 1.00 | 515.913576 | 97.628296 | 97.612927 | 1.00 | 54 | 54 | 1.00 | 17 | 17 | 1.00 |
| Mezzanine | R1 | Commercial | Unknown | w7 | 19.47 | 19.47 | 1.00 | 515.913576 | 97.628296 | 97.612927 | 1.00 | 39 | 39 | 1.00 | 9 | 9 | 1.00 |
| Mezzanine | R1 | Commercial | Unknown | w8 | 24.03 | 24.03 | 1.00 | 515.913576 | 97.628296 | 97.612927 | 1.00 | 45 | 45 | 1.00 | 13 | 13 | 1.00 |
| 116-127 Homefield Park |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ground | R1 | Residential | Unknown | W1 | 30.61 | 25.3 | 0.83 | 17.984549 | 98.856067 | 96.892661 | 0.98 | 20 | 9 | North | 0 | 0 | North |
| Ground | R2 | Residential | Unknown | w2 | 31.24 | 26.31 | 0.84 | 14.784299 | 99.381379 | 90.819694 | 0.91 | 24 | 13 | North | 1 | 1 | North |
| Ground | R3 | Residential | Unknown | w3 | 16.2 | 13.72 | 0.85 | 16.270002 | 84.899007 | 82.125541 | 0.97 | 36 | 25 | 0.69 | 4 | 2 | 0.50 |
| Ground | R4 | Residential | Unknown | w4 | 33.32 | 30.63 | 0.92 | 14.586116 | 97.507217 | 93.736726 | 0.96 | 36 | 29 | North | 6 | 5 | North |
| Ground | R4 | Residential | Unknown | w5 | 33.39 | 30.82 | 0.92 | 14.586116 | 97.507217 | 93.736726 | 0.96 | 36 | 29 | North | 6 | 5 | North |


| Address/FIoor | Room Ref | $\begin{aligned} & \text { Property } \\ & \text { Type } \end{aligned}$ | $\begin{aligned} & \text { Room } \\ & \text { Usage } \end{aligned}$ | Window Ref | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Existing VSC \% | Proposed VSC \% |  | Room Area $\mathrm{m}^{2}$ | Existing NSC \% | Proposed NSC \% |  | Existing Sunlight Annual\% | Proposed Sunlight Annual\% |  | Existing Sunlight Winter\% | Proposed Sunlight Winter\% |  |
| First | R1 | Residential | Circulation | W1 | 21.4 | 15.98 | 0.75 | 14.301628 | 48.051691 | 47.954918 | 1.00 | 10 | 2 | North | 0 | 0 | North |
| First | R2 | Residential | Unknown | w2 | 31.93 | 26.5 | 0.83 | 17.984549 | 98.708548 | 97.396234 | 0.99 | 23 | 11 | North | 1 | 1 | North |
| First | R3 | Residential | Unknown | w3 | 32.54 | 27.49 | 0.84 | 14.784299 | 99.179248 | 93.334408 | 0.94 | 29 | 17 | North | 2 | 2 | North |
| First | R4 | Residential | Unknown | W4 | 32.8 | 28.36 | 0.86 | 14.784299 | 99.122978 | 99.068086 | 1.00 | 32 | 19 | North | 3 | 3 | North |
| First | R5 | Residential | Unknown | w5 | 32.29 | 28.23 | 0.87 | 17.984549 | 98.56809 | 87.83817 | 0.89 | 33 | 20 | North | 3 | 3 | North |
| First | R6 | Residential | Circulation | w6 | 21.96 | 20.29 | 0.92 | 6.850814 | 82.768306 | 71.206592 | 0.86 | 10 | 4 | North | 0 | 0 | North |
| First | R7 | Residential | Circulation | W7 | 18.2 | 15.01 | 0.82 | 6.850814 | 54.66204 | 54.659063 | 1.00 | 31 | 21 | North | 4 | 2 | North |
| First | R8 | Residential | Unknown | w8 | 17.54 | 15.01 | 0.86 | 16.270002 | 86.319398 | 84.634261 | 0.98 | 38 | 30 | 0.79 | 6 | 4 | 0.67 |
| First | R9 | Residential | Unknown | w9 | 34.5 | 31.74 | 0.92 | 14.586116 | 98.265294 | 96.167455 | 0.98 | 37 | 30 | North | 6 | 5 | North |
| First | R9 | Residential | Unknown | W10 | 34.56 | 31.94 | 0.92 | 14.586116 | 98.265294 | 96.167455 | 0.98 | 36 | 29 | North | 6 | 5 | North |
| Second | R1 | Residential | Unknown | W1 | 33.56 | 25.81 | 0.77 | 21.123904 | 92.605741 | 92.590913 | 1.00 | 33 | 23 | North | 5 | 5 | North |
| Second | R1 | Residential | Unknown | w2 | 21.42 | 21.37 | 1.00 | 21.123904 | 92.605741 | 92.590913 | 1.00 | 0 | 0 | North | 0 | 0 | North |
| Second | R2 | Residential | Circulation | w3 | 22.97 | 17.04 | 0.74 | 7.150814 | 84.496312 | 84.375895 | 1.00 | 12 | 3 | North | 0 | 0 | North |
| Second | R3 | Residential | Unknown | W4 | 33.23 | 27.75 | 0.84 | 17.984549 | 98.735844 | 98.431852 | 1.00 | 26 | 16 | North | 1 | 1 | North |
| Second | R4 | Residential | Unknown | W5 | 33.83 | 28.73 | 0.85 | 14.784299 | 99.286897 | 97.255033 | 0.98 | 32 | 22 | North | 2 | 2 | North |
| Second | R5 | Residential | Unknown | w6 | 34.08 | 29.59 | 0.87 | 14.784299 | 99.169853 | 99.126472 | 1.00 | 34 | 24 | North | 3 | 3 | North |
| Second | R6 | Residential | Unknown | W7 | 33.58 | 29.48 | 0.88 | 17.984549 | 98.584262 | 92.05018 | 0.93 | 36 | 25 | North | 5 | 5 | North |
| Second | R7 | Residential | Circulation | W8 | 22.9 | 21.19 | 0.93 | 6.850814 | 82.724796 | 72.21009 | 0.87 | 11 | 5 | North | 0 | 0 | North |
| Second | R8 | Residential | Circulation | w9 | 18.89 | 15.67 | 0.83 | 6.850814 | 54.605315 | 54.602907 | 1.00 | 32 | 23 | North | 5 | 3 | North |
| Second | R9 | Residential | Unknown | W10 | 19.18 | 16.65 | 0.87 | 16.270002 | 90.203633 | 89.307773 | 0.99 | 40 | 31 | 0.78 | 7 | 5 | 0.71 |
| Second | R10 | Residential | Unknown | W11 | 35.62 | 32.84 | 0.92 | 14.586116 | 98.281257 | 96.218978 | 0.98 | 39 | 32 | North | 8 | 6 | North |
| Second | R10 | Residential | Unknown | W12 | 35.67 | 33.03 | 0.93 | 14.586116 | 98.281257 | 96.218978 | 0.98 | 39 | 32 | North | 8 | 6 | North |
| Third | R1 | Residential | Unknown | W1 | 34.75 | 27.05 | 0.78 | 21.123904 | 92.655313 | 92.628875 | 1.00 | 34 | 24 | North | 6 | 6 | North |
| Third | R1 | Residential | Unknown | w2 | 23.66 | 23.61 | 1.00 | 21.123904 | 92.655313 | 92.628875 | 1.00 | 0 | 0 | North | 0 | 0 | North |
| Third | R2 | Residential | Circulation | w3 | 20.22 | 19.43 | 0.96 | 6.850814 | 52.711758 | 47.164555 | 0.89 | 0 | 0 | North | 0 | 0 | North |
| Third | R3 | Residential | Circulation | W4 | 24.15 | 18.29 | 0.76 | 7.150814 | 86.287785 | 86.287782 | 1.00 | 13 | 3 | North | 0 | 0 | North |
| Third | R4 | Residential | Unknown | w5 | 34.57 | 29.13 | 0.84 | 17.984549 | 99.116818 | 99.116818 | 1.00 | 29 | 20 | North | 1 | 1 | North |
| Third | R5 | Residential | Unknown | w6 | 35.11 | 30.05 | 0.86 | 14.784299 | 99.662932 | 99.164978 | 1.00 | 33 | 25 | North | 2 | 2 | North |
| Third | R6 | Residential | Unknown | w7 | 35.35 | 30.89 | 0.87 | 14.784299 | 99.652907 | 99.652907 | 1.00 | 36 | 27 | North | 5 | 5 | North |
| Third | R7 | Residential | Unknown | w8 | 34.92 | 30.83 | 0.88 | 17.984549 | 99.071555 | 95.180777 | 0.96 | 36 | 27 | North | 5 | 5 | North |
| Third | R8 | Residential | Circulation | w9 | 24.02 | 22.31 | 0.93 | 6.850814 | 83.612968 | 73.603252 | 0.88 | 11 | 6 | North | 0 | 0 | North |
| Third | R9 | Residential | Circulation | W10 | 19.62 | 16.4 | 0.84 | 6.850814 | 56.437484 | 56.43748 | 1.00 | 32 | 24 | North | 5 | 3 | North |
| Third | R10 | Residential | Unknown | W11 | 21.69 | 19.17 | 0.88 | 16.270002 | 97.65011 | 97.545955 | 1.00 | 45 | 37 | 0.82 | 9 | 7 | 0.78 |
| Third | R11 | Residential | Unknown | W12 | 36.62 | 33.85 | 0.92 | 14.586116 | 97.581079 | 95.936425 | 0.98 | 39 | 33 | North | 8 | 6 | North |
| Third | R11 | Residential | Unknown | W13 | 36.67 | 34.04 | 0.93 | 14.586116 | 97.581079 | 95.936425 | 0.98 | 39 | 33 | North | 8 | 6 | North |
| Fourth | R1 | Residential | Unknown | W1 | 35.8 | 28.3 | 0.79 | 21.123904 | 95.653795 | 95.639049 | 1.00 | 36 | 25 | North | 6 | 6 | North |
| Fourth | R1 | Residential | Unknown | w2 | 27.78 | 27.73 | 1.00 | 21.123904 | 95.653795 | 95.639049 | 1.00 | 1 | 0 | North | 0 | 0 | North |
| Fourth | R2 | Residential | Circulation | w3 | 21.05 | 20.27 | 0.96 | 6.850814 | 52.774442 | 47.628548 | 0.90 | 0 | 0 | North | 0 | 0 | North |
| Fourth | R3 | Residential | Circulation | W4 | 26.08 | 20.39 | 0.78 | 7.150814 | 86.730774 | 86.730779 | 1.00 | 18 | 9 | North | 0 | 0 | North |
| Fourth | R4 | Residential | Unknown | w5 | 35.96 | 30.67 | 0.85 | 17.984549 | 99.305092 | 99.305092 | 1.00 | 34 | 25 | North | 3 | 3 | North |
| Fourth | R5 | Residential | Unknown | w6 | 36.34 | 31.42 | 0.86 | 14.784299 | 99.774251 | 99.580807 | 1.00 | 35 | 28 | North | 4 | 4 | North |
| Fourth | R6 | Residential | Unknown | w7 | 36.57 | 32.21 | 0.88 | 14.784299 | 99.783148 | 99.783148 | 1.00 | 37 | 30 | North | 6 | 6 | North |
| Fourth | R7 | Residential | Unknown | w8 | 36.31 | 32.31 | 0.89 | 17.984549 | 99.31397 | 96.08274 | 0.97 | 37 | 32 | North | 6 | 6 | North |
| Fourth | R8 | Residential | Circulation | w9 | 25.86 | 24.17 | 0.93 | 6.850814 | 83.730527 | 74.546533 | 0.89 | 11 | 7 | North | 0 | 0 | North |


|  |  |  |  |  | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Address/Floor | Room Ref | Property Type | Room | $\begin{gathered} \text { Window } \\ \text { Ref } \end{gathered}$ | Existing VSC \% | Proposed VSC \% | Ratio Proposed <br> /Existing <br> vSC | $\underset{m^{2}}{\text { Room Area }}$ | Existing NSC \% | Proposed NSC \% | Ratio Proposed /Existing NSC | Existing Sunlight Annual\% | Proposed Sunlight Annual\% | Ratio <br> Proposed IExisting Annual | Existing Sunlight Winter\% | Proposed Sunlight Winter\% | Ratio Proposed /Existing Winter |
| Fourth | R9 | Residential | Circulation | W10 | 20.49 | 17.33 | 0.85 | 6.850814 | 56.669185 | 56.66918 | 1.00 | 35 | 29 | North | 5 | 3 | North |
| Fourth | R10 | Residential | Unknown | W11 | 26.05 | 23.57 | 0.90 | 16.270002 | 98.691477 | 98.691472 | 1.00 | 55 | 48 | 0.87 | 14 | 12 | 0.86 |
| Fourth | R11 | Residential | Unknown | W12 | 37.5 | 34.8 | 0.93 | 14.586116 | 97.58581 | 96.334457 | 0.99 | 39 | 34 | North | 8 | 6 | North |
| Fourth | R11 | Residential | Unknown | W13 | 37.54 | 34.98 | 0.93 | 14.586116 | 97.58581 | 96.334457 | 0.99 | 39 | 34 | North | 8 | 6 | North |
| Fifth | R1 | Residential | Unknown | W1 | 36.65 | 29.55 | 0.81 | 21.123904 | 98.665823 | 98.659266 | 1.00 | 36 | 25 | North | 6 | 6 | North |
| Fifth | R1 | Residential | Unknown | W2 | 34.17 | 34.12 | 1.00 | 21.123904 | 98.665823 | 98.659266 | 1.00 | 2 | 1 | North | 0 | 0 | North |
| Fifth | R2 | Residential | Unknown | W3 | 32.72 | 30.36 | 0.93 | 16.270002 | 99.181005 | 99.181003 | 1.00 | 72 | 67 | 0.93 | 20 | 18 | 0.90 |
| Fifth | R3 | Residential | Unknown | W4 | 38.2 | 35.64 | 0.93 | 14.586116 | 97.591228 | 97.105403 | 1.00 | 39 | 36 | North | 8 | 6 | North |
| Fifth | R3 | Residential | Unknown | w5 | 38.23 | 35.8 | 0.94 | 14.586116 | 97.591228 | 97.105403 | 1.00 | 39 | 36 | North | 8 | 6 | North |

## APPENDIX 2.2

Daylight \& Sunlight Results
Alternative Baseline vs Proposed

| Address/Floor | Room Ref | Property Type | Room Usage | Window Ref | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Existing VSC \% | Proposed VSC \% |  | Room Area $\mathrm{m}^{2}$ | Existing NSC \% | Proposed NSC \% |  | Existing Sunlight Annual\% | Proposed Sunlight Annual\% |  | Existing Sunlight Winter\% | Proposed Sunlight Winter\% |  |
| 2-6 Sutton Park Road |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First | R1 | Residential | Bedroom | W1 | 22.55 | 22.7 | 1.01 | 10.967508 | 72.419472 | 81.416141 | 1.12 | 8 | 7 | North | 0 | 0 | North |
| First | R2 | Residential | Unknown | w2 | 24.97 | 25.56 | 1.02 | 6.268203 | 71.519873 | 88.208815 | 1.23 | 5 | 4 | North | 1 | 1 | North |
| First | R3 | Residential | LKD | w3 | 13.13 | 14.57 | 1.11 | 17.718617 | 94.63855 | 97.074168 | 1.03 | 7 | 6 | North | 1 | 1 | North |
| First | R4 | Residential | LKD | W4 | 13.07 | 14.47 | 1.11 | 28.024259 | 65.940797 | 89.769913 | 1.36 | 10 | 10 | North | 0 | 0 | North |
| First | R5 | Residential | Bedroom | w5 | 24.8 | 23.93 | 0.96 | 8.054742 | 80.151586 | 86.781141 | 1.08 | 9 | 9 | North | 0 | 0 | North |
| First | R6 | Residential | Bedroom | w6 | 27.63 | 26.15 | 0.95 | 8.505716 | 79.788603 | 87.386995 | 1.10 | 10 | 10 | North | 1 | 1 | North |
| First | R7 | Residential | Bedroom | W7 | 24.63 | 22.69 | 0.92 | 10.459045 | 73.342196 | 81.966484 | 1.12 | 4 | 4 | North | 0 | 0 | North |
| First | R8 | Residential | LKD | w8 | 13.5 | 13.04 | 0.97 | 23.218426 | 65.720994 | 68.972649 | 1.05 | 10 | 10 | North | 1 | 1 | North |
| First | R9 | Residential | LKD | w9 | 26.39 | 24.03 | 0.91 | 27.469237 | 99.3034 | 99.3034 | 1.00 | 7 | 7 | North | 1 | 1 | North |
| First | R9 | Residential | LKD | W10 | 15.71 | 15.45 | 0.98 | 27.469237 | 99.3034 | 99.3034 | 1.00 | 10 | 10 | North | 2 | 2 | North |
| First | R9 | Residential | LKD | W11 | 22.98 | 23.01 | 1.00 | 27.469237 | 99.3034 | 99.3034 | 1.00 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Second | R1 | Residential | Bedroom | W1 | 30.82 | 30.84 | 1.00 | 10.967508 | 73.029013 | 81.584681 | 1.12 | 9 | 8 | North | 0 | 0 | North |
| Second | R2 | Residential | Unknown | w2 | 27.35 | 27.79 | 1.02 | 6.268203 | 72.933161 | 88.033733 | 1.21 | 6 | 5 | North | 1 | 1 | North |
| Second | R3 | Residential | LKD | w3 | 13.54 | 14.28 | 1.05 | 17.718617 | 93.687491 | 96.230548 | 1.03 | 3 | 2 | North | 0 | 0 | North |
| Second | R4 | Residential | LKD | W4 | 13.25 | 13.87 | 1.05 | 28.024259 | 66.101915 | 90.104952 | 1.36 | 10 | 10 | North | 0 | 0 | North |
| Second | R5 | Residential | Bedroom | w5 | 25.92 | 24.75 | 0.95 | 8.054742 | 81.320095 | 86.942569 | 1.07 | 9 | 9 | North | 0 | 0 | North |
| Second | R6 | Residential | Bedroom | w6 | 28.76 | 26.99 | 0.94 | 8.505716 | 80.974946 | 87.445712 | 1.08 | 10 | 10 | North | 1 | 1 | North |
| Second | R7 | Residential | Bedroom | W7 | 25.74 | 23.54 | 0.91 | 10.459045 | 73.954941 | 81.960345 | 1.11 | 4 | 4 | North | 0 | 0 | North |
| Second | R8 | Residential | LKD | w8 | 14.63 | 13.4 | 0.92 | 23.218426 | 65.773592 | 69.161297 | 1.05 | 10 | 10 | North | 1 | 1 | North |
| Second | R9 | Residential | LKD | w9 | 27.42 | 24.89 | 0.91 | 27.469237 | 99.309858 | 99.309858 | 1.00 | 7 | 7 | North | 1 | 1 | North |
| Second | R9 | Residential | LKD | W10 | 16.78 | 15.82 | 0.94 | 27.469237 | 99.309858 | 99.309858 | 1.00 | 10 | 10 | North | 2 | 2 | North |
| Second | R9 | Residential | LKD | W11 | 23.85 | 23.88 | 1.00 | 27.469237 | 99.309858 | 99.309858 | 1.00 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Third | R1 | Residential | Bedroom | W1 | 31.62 | 31.51 | 1.00 | 10.967508 | 74.395411 | 81.96691 | 1.10 | 9 | 8 | North | 0 | 0 | North |
| Third | R2 | Residential | Unknown | w2 | 28.17 | 28.43 | 1.01 | 6.268203 | 75.203469 | 88.430215 | 1.18 | 6 | 5 | North | 1 | 1 | North |
| Third | R3 | Residential | LKD | w3 | 14.42 | 14.48 | 1.00 | 17.718617 | 93.675039 | 96.256552 | 1.03 | 3 | 2 | North | 0 | 0 | North |
| Third | R4 | Residential | LKD | W4 | 14.19 | 14.02 | 0.99 | 28.024259 | 66.120776 | 90.229176 | 1.36 | 10 | 10 | North | 0 | 0 | North |
| Third | R5 | Residential | Bedroom | w5 | 26.86 | 25.48 | 0.95 | 8.054742 | 83.35471 | 86.94791 | 1.04 | 9 | 9 | North | 0 | 0 | North |
| Third | R6 | Residential | Bedroom | w6 | 29.72 | 27.73 | 0.93 | 8.505716 | 83.375113 | 87.407217 | 1.05 | 10 | 10 | North | 1 | 1 | North |
| Third | R7 | Residential | Bedroom | W7 | 26.69 | 24.3 | 0.91 | 10.459045 | 75.808823 | 82.041946 | 1.08 | 4 | 4 | North | 0 | 0 | North |
| Third | R8 | Residential | LKD | w8 | 15.57 | 13.54 | 0.87 | 23.218426 | 65.761841 | 69.233117 | 1.05 | 10 | 10 | North | 1 | 1 | North |
| Third | R9 | Residential | LKD | w9 | 28.28 | 25.64 | 0.91 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 7 | 7 | North | 1 | 1 | North |
| Third | R9 | Residential | LKD | W10 | 17.63 | 15.97 | 0.91 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 10 | 10 | North | 2 | 2 | North |
| Third | R9 | Residential | LKD | W11 | 24.27 | 24.29 | 1.00 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Fourth | R1 | Residential | Bedroom | W1 | 32.44 | 32.21 | 0.99 | 10.967508 | 76.635433 | 82.781243 | 1.08 | 9 | 8 | North | 0 | 0 | North |
| Fourth | R2 | Residential | Unknown | W2 | 29.03 | 29.07 | 1.00 | 6.268203 | 79.571105 | 89.837429 | 1.13 | 6 | 5 | North | 1 | 1 | North |
| Fourth | R3 | Residential | LKD | w3 | 15.34 | 14.76 | 0.96 | 17.718617 | 93.60059 | 96.272224 | 1.03 | 3 | 2 | North | 0 | 0 | North |
| Fourth | R4 | Residential | LKD | w4 | 15.13 | 14.23 | 0.94 | 28.024259 | 66.060344 | 90.232374 | 1.37 | 10 | 10 | North | 0 | 0 | North |
| Fourth | R5 | Residential | Bedroom | W5 | 27.84 | 26.29 | 0.94 | 8.054742 | 86.837153 | 87.086943 | 1.00 | 9 | 9 | North | 0 | 0 | North |
| Fourth | R6 | Residential | Bedroom | w6 | 30.71 | 28.59 | 0.93 | 8.505716 | 87.36454 | 87.410052 | 1.00 | 10 | 10 | North | 1 | 1 | North |
| Fourth | R7 | Residential | Bedroom | w7 | 27.67 | 25.16 | 0.91 | 10.459045 | 78.804641 | 82.02614 | 1.04 | 4 | 4 | North | 0 | 0 | North |
| Fourth | R8 | Residential | LKD | w8 | 16.51 | 13.74 | 0.83 | 23.218426 | 65.758867 | 69.175887 | 1.05 | 10 | 10 | North | 1 | 1 | North |


| Address/FIoor | Room Ref | Property Type | Room Usage | Window Ref | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Existing VSC \% | Proposed VSC \% |  | Room Area $\mathrm{m}^{2}$ | Existing NSC \% | Proposed NSC \% |  | Existing Sunlight Annual\% | Proposed Sunlight Annual\% |  | Existing Sunlight Winter\% | Proposed Sunlight Winter\% |  |
| Fourth | R9 | Residential | LKD | w9 | 29.14 | 26.47 | 0.91 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 7 | 7 | North | 1 | 1 | North |
| Fourth | R9 | Residential | LKD | W10 | 18.45 | 16.16 | 0.88 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 10 | 10 | North | 2 | 2 | North |
| Fourth | R9 | Residential | LKD | W11 | 24.35 | 24.37 | 1.00 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Fifth | R1 | Residential | Bedroom | W1 | 33.32 | 33 | 0.99 | 10.967508 | 81.401867 | 84.501525 | 1.04 | 9 | 8 | North | 0 | 0 | North |
| Fifth | R2 | Residential | Unknown | w2 | 29.93 | 29.73 | 0.99 | 6.268203 | 87.00531 | 91.208539 | 1.05 | 6 | 5 | North | 1 | 1 | North |
| Fifth | R3 | Residential | LKD | W3 | 16.3 | 15.61 | 0.96 | 17.718617 | 93.524163 | 96.25393 | 1.03 | 3 | 2 | North | 0 | 0 | North |
| Fifth | R4 | Residential | LKD | W4 | 16.14 | 15.11 | 0.94 | 28.024259 | 65.81406 | 90.207328 | 1.37 | 10 | 10 | North | 0 | 0 | North |
| Fifth | R5 | Residential | Bedroom | w5 | 28.9 | 27.27 | 0.94 | 8.054742 | 93.804632 | 87.734331 | 0.94 | 9 | 9 | North | 0 | 0 | North |
| Fifth | R6 | Residential | Bedroom | w6 | 31.8 | 29.64 | 0.93 | 8.505716 | 94.14368 | 87.764835 | 0.93 | 10 | 10 | North | 1 | 1 | North |
| Fifth | R7 | Residential | Bedroom | W7 | 28.72 | 26.21 | 0.91 | 10.459045 | 84.908256 | 82.14317 | 0.97 | 4 | 4 | North | 0 | 0 | North |
| Fifth | R8 | Residential | LKD | w8 | 17.49 | 14.74 | 0.84 | 23.218426 | 65.840003 | 69.103609 | 1.05 | 10 | 10 | North | 1 | 1 | North |
| Fifth | R9 | Residential | LKD | w9 | 30.09 | 27.48 | 0.91 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 7 | 7 | North | 1 | 1 | North |
| Fifth | R9 | Residential | LKD | W10 | 19.31 | 17.03 | 0.88 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 10 | 10 | North | 2 | 2 | North |
| Fifth | R9 | Residential | LKD | W11 | 24.37 | 24.39 | 1.00 | 27.469237 | 99.311053 | 99.311053 | 1.00 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Sixth | R1 | Residential | Bedroom | W1 | 34.2 | 33.83 | 0.99 | 10.967508 | 90.158475 | 87.684888 | 0.97 | 9 | 8 | North | 0 | 0 | North |
| Sixth | R2 | Residential | Unknown | W2 | 30.84 | 30.42 | 0.99 | 6.268203 | 98.404867 | 95.348726 | 0.97 | 6 | 5 | North | 1 | 1 | North |
| Sixth | R3 | Residential | LKD | w3 | 17.3 | 16.56 | 0.96 | 17.718617 | 94.59755 | 96.243564 | 1.02 | 3 | 2 | North | 0 | 0 | North |
| Sixth | R4 | Residential | LKD | W4 | 17.21 | 16.13 | 0.94 | 28.024259 | 66.441162 | 90.22551 | 1.36 | 10 | 10 | North | 0 | 0 | North |
| Sixth | R5 | Residential | Bedroom | w5 | 29.99 | 28.39 | 0.95 | 8.054742 | 98.81868 | 89.346802 | 0.90 | 9 | 9 | North | 0 | 0 | North |
| Sixth | R6 | Residential | Bedroom | w6 | 32.95 | 30.87 | 0.94 | 8.505716 | 98.944824 | 89.305747 | 0.90 | 10 | 10 | North | 1 | 1 | North |
| Sixth | R7 | Residential | Bedroom | W7 | 29.81 | 27.41 | 0.92 | 10.459045 | 95.027731 | 83.269831 | 0.88 | 4 | 4 | North | 0 | 0 | North |
| Sixth | R8 | Residential | LKD | W8 | 18.53 | 15.92 | 0.86 | 23.218426 | 66.667782 | 69.202414 | 1.04 | 10 | 10 | North | 1 | 1 | North |
| Sixth | R9 | Residential | LKD | w9 | 31.17 | 28.74 | 0.92 | 27.469237 | 99.349093 | 99.311053 | 1.00 | 7 | 7 | North | 1 | 1 | North |
| Sixth | R9 | Residential | LKD | W10 | 20.24 | 18.09 | 0.89 | 27.469237 | 99.349093 | 99.311053 | 1.00 | 10 | 10 | North | 2 | 2 | North |
| Sixth | R9 | Residential | LKD | W11 | 24.38 | 24.4 | 1.00 | 27.469237 | 99.349093 | 99.311053 | 1.00 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Seventh | R1 | Residential | Bedroom | W1 | 34.75 | 34.38 | 0.99 | 10.967508 | 97.493665 | 93.412044 | 0.96 | 11 | 10 | North | 0 | 0 | North |
| Seventh | R2 | Residential | Unknown | W2 | 31.94 | 31.46 | 0.98 | 6.268203 | 99.04076 | 98.942335 | 1.00 | 6 | 5 | North | 1 | 1 | North |
| Seventh | R3 | Residential | LKD | w3 | 18.28 | 17.57 | 0.96 | 17.718617 | 96.753785 | 96.348039 | 1.00 | 3 | 2 | North | 0 | 0 | North |
| Seventh | R4 | Residential | LKD | W4 | 18.27 | 17.24 | 0.94 | 28.024259 | 70.945523 | 90.203442 | 1.27 | 11 | 11 | North | 1 | 1 | North |
| Seventh | R5 | Residential | Bedroom | w5 | 31.3 | 29.84 | 0.95 | 8.054742 | 98.769655 | 93.439953 | 0.95 | 12 | 12 | North | 1 | 1 | North |
| Seventh | R6 | Residential | Bedroom | w6 | 33.77 | 31.9 | 0.94 | 8.505716 | 99.13966 | 93.662282 | 0.94 | 11 | 11 | North | 1 | 1 | North |
| Seventh | R7 | Residential | Bedroom | W7 | 31.13 | 28.98 | 0.93 | 10.459045 | 98.422089 | 85.867774 | 0.87 | 4 | 4 | North | 0 | 0 | North |
| Seventh | R8 | Residential | LKD | W8 | 19.64 | 17.29 | 0.88 | 23.218426 | 70.499589 | 69.077609 | 0.98 | 12 | 12 | North | 1 | 1 | North |
| Seventh | R9 | Residential | LKD | w9 | 32.78 | 30.64 | 0.93 | 27.469237 | 99.999998 | 99.311054 | 0.99 | 8 | 8 | North | 1 | 1 | North |
| Seventh | R9 | Residential | LKD | W10 | 21.21 | 19.29 | 0.91 | 27.469237 | 99.999998 | 99.311054 | 0.99 | 10 | 10 | North | 2 | 2 | North |
| Seventh | R9 | Residential | LKD | W11 | 24.37 | 24.38 | 1.00 | 27.469237 | 99.999998 | 99.311054 | 0.99 | 40 | 40 | 1.00 | 20 | 20 | 1.00 |
| Eighth | R1 | Residential | Bedroom | W1 | 30.16 | 29.85 | 0.99 | 10.967508 | 96.791998 | 96.791998 | 1.00 | 9 | 8 | North | 0 | 0 | North |
| Eighth | R2 | Residential | Unknown | W2 | 29.84 | 29.43 | 0.99 | 6.268203 | 97.999552 | 97.999552 | 1.00 | 9 | 8 | North | 0 | 0 | North |
| Eighth | R3 | Residential | LKD | W3 | 30.48 | 29.88 | 0.98 | 17.718617 | 98.651954 | 98.651955 | 1.00 | 5 | 4 | North | 0 | 0 | North |
| Eighth | R4 | Residential | LKD | W4 | 30.41 | 29.54 | 0.97 | 28.024259 | 84.702033 | 91.858295 | 1.08 | 9 | 9 | North | 1 | 1 | North |
| Eighth | R5 | Residential | Bedroom | w5 | 29.44 | 28.24 | 0.96 | 8.054742 | 98.00688 | 98.00688 | 1.00 | 9 | 9 | North | 0 | 0 | North |
| Eighth | R6 | Residential | Bedroom | w6 | 29.44 | 27.92 | 0.95 | 8.505716 | 97.986872 | 97.986872 | 1.00 | 10 | 10 | North | 1 | 1 | North |
| Eighth | R7 | Residential | Bedroom | W7 | 29.48 | 27.74 | 0.94 | 10.459045 | 97.783386 | 93.972593 | 0.96 | 10 | 10 | North | 1 | 1 | North |
| Eighth | R8 | Residential | LKD | w8 | 31.72 | 29.79 | 0.94 | 23.218426 | 86.129574 | 70.412221 | 0.82 | 10 | 10 | North | 1 | 1 | North |


|  |  |  |  |  | Vertical Sky Component |  |  | No Skyline |  |  |  | Annual Probable Sunlight Hours |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Address/Floor | Room Ref | Property Type | Room | $\begin{aligned} & \text { Window } \\ & \text { Ref } \end{aligned}$ | Existing vSC \% | Proposed vSC \% | Ratio Proposed /Existing VSC | $\underset{\mathrm{m}^{2}}{\text { Room Area }}$ | Existing NSC \% | Proposed NSC \% | Ratio Proposed IExisting NSC | Existing Sunlight Annual\% | Proposed Sunlight Annual\% | Ratio Proposed <br> /Existing <br> Annual | Existing <br> Sunlight Winter\% | Proposed Sunlight Winter\% | Ratio Proposed IExisting Winter |
| Eighth | R9 | Residential | LKD | w9 | 29.82 | 28.11 | 0.94 | 27.469237 | 99.999996 | 99.332818 | 0.99 | 11 | 11 | North | 2 | 2 | North |
| Eighth | R9 | Residential | LKD | W10 | 32.48 | 30.92 | 0.95 | 27.469237 | 99.999996 | 99.332818 | 0.99 | 16 | 16 | North | 2 | 2 | North |
| Eighth | R9 | Residential | LKD | W11 | 36.69 | 36.7 | 1.00 | 27.469237 | 99.999996 | 99.332818 | 0.99 | 53 | 53 | 1.00 | 20 | 20 | 1.00 |

## APPENDIX 3

Internal Daylight \& Sunlight Results

| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Room Area m2 | Effective Area | Median Lux | Area Meeting Req Lux | \% of Area Meeting Req Lux | Req Lux | Req \% of Effective Area | Req \% of Daylight Hours | Daylight Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PROPOSED |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First | R1 |  | Residential | LKD | 30.54 | 23.89 | 284 | 23.89 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 13.17 | 8.99 | 110 | 4.97 | 55\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 10.96 | 7.06 | 108 | 3.84 | 54\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | LKD | 25.75 | 19.58 | 353 | 19.58 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 10.69 | 7.05 | 154 | 5.94 | 84\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | Bedroom | 12.52 | 8.11 | 245 | 8.11 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R7 |  | Residential | LKD | 34.56 | 27.76 | 46 | 2.28 | 8\% | 150 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 29.63 | 21.59 | 66 | 6.04 | 28\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 9.74 | 6.32 | 269 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 13.31 | 9.05 | 160 | 8.11 | 90\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | Bedroom | 13.31 | 9.05 | 161 | 8.42 | 93\% | 100 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | LKD | 27.49 | 20.08 | 278 | 19.04 | 95\% | 150 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 12.02 | 8.03 | 89 | 3.46 | 43\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 9.66 | 6.00 | 76 | 2.14 | 36\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 23.44 | 17.46 | 221 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R16 |  | Residential | Bedroom | 11.88 | 8.02 | 121 | 4.78 | 60\% | 100 | 50\% | 50\% | 4380 |
|  | R17 |  | Residential | Bedroom | 11.91 | 7.86 | 116 | 4.39 | 56\% | 100 | 50\% | 50\% | 4380 |
|  | R18 |  | Residential | Bedroom | 12.10 | 8.23 | 131 | 5.32 | 65\% | 100 | 50\% | 50\% | 4380 |
|  | R19 |  | Residential | LKD | 28.28 | 22.04 | 89 | 6.10 | 28\% | 150 | 50\% | 50\% | 4380 |
|  | R20 |  | Residential | LKD | 24.61 | 18.52 | 16 | 0.07 | 0\% | 150 | 50\% | 50\% | 4380 |
|  | R21 |  | Residential | Bedroom | 13.14 | 9.09 | 159 | 7.85 | 86\% | 100 | 50\% | 50\% | 4380 |
|  | R22 |  | Residential | Bedroom | 13.31 | 9.15 | 141 | 7.02 | 77\% | 100 | 50\% | 50\% | 4380 |
|  | R23 |  | Residential | Bedroom | 9.38 | 6.04 | 126 | 4.46 | 74\% | 100 | 50\% | 50\% | 4380 |
|  | R24 |  | Residential | Bedroom | 8.95 | 5.49 | 125 | 3.29 | 60\% | 100 | 50\% | 50\% | 4380 |
| Second | R1 |  | Residential | LKD | 30.54 | 23.89 | 303 | 23.89 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 13.17 | 8.99 | 119 | 5.40 | 60\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 10.96 | 7.06 | 116 | 4.15 | 59\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | LKD | 25.75 | 19.58 | 377 | 19.58 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 10.69 | 7.05 | 168 | 6.98 | 99\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | Bedroom | 12.52 | 8.11 | 262 | 8.11 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R7 |  | Residential | LKD | 34.56 | 27.76 | 54 | 2.79 | 10\% | 150 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 29.63 | 21.59 | 76 | 6.55 | 30\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 9.74 | 6.32 | 291 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 13.31 | 9.05 | 176 | 8.90 | 98\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | Bedroom | 13.31 | 9.05 | 175 | 8.97 | 99\% | 100 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | LKD | 27.49 | 20.08 | 306 | 19.52 | 97\% | 150 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 12.02 | 8.03 | 96 | 4.03 | 50\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 9.66 | 6.00 | 81 | 2.31 | 39\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 23.44 | 17.46 | 272 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R16 |  | Residential | Bedroom | 11.88 | 8.02 | 152 | 6.32 | 79\% | 100 | 50\% | 50\% | 4380 |
|  | R17 |  | Residential | Bedroom | 11.91 | 7.86 | 144 | 5.76 | 73\% | 100 | 50\% | 50\% | 4380 |
|  | R18 |  | Residential | Bedroom | 12.10 | 8.23 | 180 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R19 |  | Residential | LKD | 28.26 | 22.02 | 114 | 7.85 | 36\% | 150 | 50\% | 50\% | 4380 |
|  | R20 |  | Residential | LKD | 24.60 | 18.51 | 27 | 0.80 | 4\% | 150 | 50\% | 50\% | 4380 |
|  | R21 |  | Residential | Bedroom | 13.16 | 9.10 | 192 | 8.95 | 98\% | 100 | 50\% | 50\% | 4380 |
|  | R22 |  | Residential | Bedroom | 13.30 | 9.14 | 169 | 8.92 | 98\% | 100 | 50\% | 50\% | 4380 |
|  | R23 |  | Residential | Bedroom | 9.38 | 6.04 | 141 | 5.67 | 94\% | 100 | 50\% | 50\% | 4380 |
|  | R24 |  | Residential | Bedroom | 8.95 | 5.49 | 141 | 3.89 | 71\% | 100 | 50\% | 50\% | 4380 |
| Third | R1 |  | Residential | LKD | 30.54 | 23.89 | 322 | 23.89 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 13.17 | 8.99 | 124 | 5.70 | 63\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 10.96 | 7.06 | 120 | 4.55 | 64\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | LKD | 25.75 | 19.58 | 395 | 19.58 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 10.69 | 7.05 | 180 | 7.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | Bedroom | 12.52 | 8.11 | 279 | 8.11 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R7 |  | Residential | LKD | 34.56 | 27.76 | 61 | 3.21 | 12\% | 150 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 29.63 | 21.59 | 82 | 7.06 | 33\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 9.74 | 6.32 | 315 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 13.31 | 9.05 | 190 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | Bedroom | 13.31 | 9.05 | 188 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | LKD | 27.49 | 20.08 | 329 | 19.79 | 99\% | 150 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 12.02 | 8.03 | 100 | 4.20 | 52\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 9.66 | 6.00 | 87 | 2.57 | 43\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 23.44 | 17.46 | 304 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R16 |  | Residential | Bedroom | 11.88 | 8.02 | 176 | 8.02 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R17 |  | Residential | Bedroom | 11.91 | 7.86 | 168 | 7.86 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R18 |  | Residential | Bedroom | 12.10 | 8.23 | 259 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R19 |  | Residential | LKD | 28.26 | 22.02 | 136 | 9.63 | 44\% | 150 | 50\% | 50\% | 4380 |
|  | R20 |  | Residential | LKD | 24.61 | 18.52 | 46 | 1.53 | 8\% | 150 | 50\% | 50\% | 4380 |
|  | R21 |  | Residential | Bedroom | 13.16 | 9.10 | 223 | 9.10 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R22 |  | Residential | Bedroom | 13.30 | 9.14 | 197 | 9.14 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R23 |  | Residential | Bedroom | 9.38 | 6.04 | 162 | 5.97 | 99\% | 100 | 50\% | 50\% | 4380 |
|  | R24 |  | Residential | Bedroom | 8.95 | 5.49 | 158 | 4.56 | 83\% | 100 | 50\% | 50\% | 4380 |
| Fourth | R1 |  | Residential | LKD | 30.54 | 23.89 | 446 | 23.89 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 13.17 | 8.99 | 127 | 5.85 | 65\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 10.96 | 7.06 | 123 | 4.55 | 64\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | LKD | 25.75 | 19.58 | 555 | 19.58 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 10.69 | 7.05 | 188 | 7.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | Bedroom | 12.52 | 8.11 | 309 | 8.11 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R7 |  | Residential | LKD | 34.56 | 27.76 | 119 | 10.56 | 38\% | 150 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 29.63 | 21.59 | 107 | 8.98 | 42\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 9.74 | 6.32 | 329 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 13.31 | 9.05 | 200 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | Bedroom | 13.31 | 9.05 | 199 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | LKD | 27.49 | 20.08 | 379 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 12.02 | 8.03 | 105 | 4.61 | 57\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 9.66 | 6.00 | 92 | 2.66 | 44\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 23.44 | 17.46 | 368 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R16 |  | Residential | Bedroom | 11.88 | 8.02 | 194 | 8.02 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R17 |  | Residential | LKD | 24.62 | 18.53 | 128 | 8.00 | 43\% | 150 | 50\% | 50\% | 4380 |
|  | R18 |  | Residential | Bedroom | 13.14 | 9.09 | 461 | 9.09 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R19 |  | Residential | Bedroom | 13.31 | 9.15 | 222 | 9.15 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R20 |  | Residential | Bedroom | 9.38 | 6.04 | 178 | 6.04 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R21 |  | Residential | Bedroom | 8.95 | 5.49 | 178 | 5.49 | 100\% | 100 | 50\% | 50\% | 4380 |
| Fifth | R1 |  | Residential | Bedroom | 12.02 | 8.03 | 203 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | LKD | 17.33 | 11.44 | 386 | 10.20 | 89\% | 150 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 9.74 | 6.32 | 339 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | Bedroom | 13.31 | 9.05 | 208 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 13.31 | 9.05 | 206 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | LKD | 27.49 | 20.08 | 368 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R7 |  | Residential | Bedroom | 12.02 | 8.03 | 112 | 4.77 | 59\% | 100 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | Bedroom | 9.66 | 6.00 | 97 | 3.00 | 50\% | 100 | 50\% | 50\% | 4380 |
|  | R9 R10 |  | Residential Residential | $\begin{gathered} \text { LKD } \\ \text { Bedroom } \end{gathered}$ | 23.44 11.88 | 17.46 8.02 | 343 205 | 17.46 8.02 | 100\% | 150 100 | 50\% | 50\% | 4380 4380 |


| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Room Area m2 | Effective Area | Median Lux | Area Meeting Req Lux | \% of Area Meeting Req Lux | Req Lux | Req \% of Effective Area | Req \% of Daylight Hours | Daylight Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R11 |  | Residential | Bedroom | 11.91 | 7.86 | 199 | 7.86 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | Bedroom | 12.10 | 8.23 | 272 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | LKD | 20.82 | 15.25 | 117 | 5.24 | 34\% | 150 | 50\% | 50\% | 4380 |
| sixth | ${ }^{\text {R1 }}$ |  | Residential | LKD | 22.09 | 16.13 | 321 | 15.49 | 96\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 10.46 | 6.69 | 236 | 6.69 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 12.02 | 8.03 | 236 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | LKD | 17.33 | 11.44 | 406 | 10.52 | 92\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 9.74 | 6.32 | 346 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R6 }}$ |  | Residential | Bedroom | 13.31 | 9.05 | 212 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R7 |  | Residential | Bedroom | 13.31 | 9.05 | 208 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 27.49 | 20.08 | 377 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 12.02 | 8.03 | 116 | 5.27 | 66\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 9.66 | 6.00 | 102 | 3.00 | 50\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | LKD | 23.44 | 17.46 | 364 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | Bedroom | 11.88 | 8.02 | 210 | 8.02 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 11.91 | 7.86 | 204 | 7.86 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 12.10 | 8.23 | 278 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 20.82 | 15.25 | 122 | 5.33 | 35\% | 150 | 50\% | 50\% | 4380 |
| Seventh | R1 |  | Residential | LKD | 22.09 | 16.13 | 331 | 15.60 | 97\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 10.46 | 6.69 | 243 | 6.69 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 12.02 | 8.03 | 243 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | LKD | 17.33 | 11.44 | 410 | 10.52 | 92\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 9.74 | 6.32 | 351 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | Bedroom | 13.31 | 9.05 | 214 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R7 }}$ |  | Residential | Bedroom | 13.31 | 9.05 | 209 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 27.49 | 20.08 | 385 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 12.02 | 8.03 | 122 | 5.60 | 70\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 9.66 | 6.00 | 110 | 3.43 | 57\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | LKD | 23.44 | 17.46 | 381 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | Bedroom | 11.88 | 8.02 | 213 | 8.02 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 11.91 | 7.86 | 209 | 7.86 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 12.10 | 8.23 | 282 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 20.82 | 15.25 | 126 | 5.42 | 36\% | 150 | 50\% | 50\% | 4380 |
| Eighth | R1 |  | Residential | LKD | 22.09 | 16.13 | 331 | 15.60 | 97\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 10.46 | 6.69 | 246 | 6.69 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 12.02 | 8.03 | 244 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | LKD | 17.33 | 11.44 | 413 | 10.52 | 92\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 9.74 | 6.32 | 351 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | Bedroom | 13.31 | 9.05 | 214 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R7 }}$ |  | Residential | Bedroom | 13.31 | 9.05 | 210 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 27.49 | 20.08 | 390 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 12.02 | 8.03 | 150 | 6.10 | 76\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 9.66 | 6.00 | 126 | 3.68 | 61\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | LKD | 23.44 | 17.46 | 400 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | Bedroom | 11.88 | 8.02 | 218 | 8.02 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 11.91 | 7.86 | 211 | 7.86 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 12.10 | 8.23 | 282 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 20.82 | 15.25 | 127 | 5.78 | 38\% | 150 | 50\% | 50\% | 4380 |
| Ninth | ${ }^{\text {R1 }}$ |  | Residential | LKD | 22.09 | 16.13 | 334 | 15.60 | 97\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 10.46 | 6.69 | 249 | 6.69 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 12.02 | 8.03 | 245 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R4 }}$ |  | Residential | LKD | 17.33 | 11.44 | 415 | 10.52 | 92\% | 150 | 50\% | 50\% | 4380 |
|  | ${ }^{2} 5$ |  | Residential | Bedroom | 9.74 | 6.32 | 353 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R6 }}$ |  | Residential | Bedroom | 13.31 | 9.05 | 215 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R7 |  | Residential | Bedroom | 13.31 | 9.05 | 212 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 27.49 | 20.08 | 403 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 12.02 | 8.03 | 185 | 6.96 | 87\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 9.66 | 6.00 | 162 | 4.28 | 71\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | LKD | 23.44 | 17.46 | 433 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | Bedroom | 11.88 | 8.02 | 220 | 8.02 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 11.91 | 7.86 | 213 | 7.86 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 12.10 | 8.23 | 285 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 20.82 | 15.25 | 129 | 5.78 | 38\% | 150 | 50\% | 50\% | 4380 |
| Tenth | R1 |  | Residential | LKD | 22.09 | 16.13 | 335 | 15.60 | 97\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 10.46 | 6.69 | 250 | 6.69 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 12.02 | 8.03 | 251 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R4 }}$ |  | Residential | LKD | 17.33 | 11.44 | 417 | 10.52 | 92\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 9.74 | 6.32 | 356 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | Bedroom | 13.31 | 9.05 | 217 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R7 }}$ |  | Residential | Bedroom | 13.31 | 9.05 | 213 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 27.49 | 20.08 | 419 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 12.02 | 8.03 | 221 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 9.66 | 6.00 | 202 | 5.40 | 90\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | LKD | 23.44 | 17.46 | 475 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | Bedroom | 11.88 | 8.02 | 223 | 8.02 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 11.91 | 7.86 | 215 | 7.86 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 12.10 | 8.23 | 286 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 20.82 | 15.25 | 130 | 5.78 | 38\% | 150 | 50\% | 50\% | 4380 |
| Eleventh | ${ }^{\text {R1 }}$ |  | Residential | LKD | 22.09 | 16.13 | 335 | 15.60 | 97\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 10.46 | 6.69 | 251 | 6.69 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 12.02 | 8.03 | 251 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R4 |  | Residential | LKD | 17.33 | 11.44 | 417 | 10.52 | 92\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 9.74 | 6.32 | 358 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R6 }}$ |  | Residential | Bedroom | 13.31 | 9.05 | 219 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R7 }}$ |  | Residential | Bedroom | 13.31 | 9.05 | 214 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 27.49 | 20.08 | 446 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 12.02 | 8.03 | 248 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R10 |  | Residential | Bedroom | 9.66 | 6.00 | 235 | 6.00 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | LKD | 23.44 | 17.46 | 513 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R12 |  | Residential | Bedroom | 11.88 | 8.02 | 225 | 8.02 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R13 |  | Residential | Bedroom | 11.91 | 7.86 | 217 | 7.86 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R14 |  | Residential | Bedroom | 12.10 | 8.23 | 287 | 8.23 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R15 |  | Residential | LKD | 20.82 | 15.25 | 130 | 5.78 | 38\% | 150 | 50\% | 50\% | 4380 |
| Twelth | ${ }^{\text {R1 }}$ |  | Residential | LKD | 22.09 | 16.13 | 476 | 16.13 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R2 |  | Residential | Bedroom | 10.46 | 6.69 | 252 | 6.69 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R3 |  | Residential | Bedroom | 12.02 | 8.03 | 252 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | ${ }^{\text {R4 }}$ |  | Residential | LKD | 17.33 | 11.44 | 681 | 11.44 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R5 |  | Residential | Bedroom | 9.74 | 6.32 | 361 | 6.32 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R6 |  | Residential | Bedroom | ${ }^{13.31}$ | 9.05 | 221 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R7 |  | Residential | Bedroom | 13.31 | 9.05 | 215 | 9.05 | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R8 |  | Residential | LKD | 27.49 | 20.08 | 635 | 20.08 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R9 |  | Residential | Bedroom | 12.02 | 8.03 | 273 | 8.03 | 100\% | 100 | 50\% | 50\% | 4380 4380 |
|  | R10 |  | Residential | Bedroom | ${ }^{9.66}$ | ${ }^{6.00}$ | 267 | ${ }_{6}^{6.00}$ | 100\% | 100 | 50\% | 50\% | 4380 |
|  | R11 |  | Residential | LKD | 23.44 | 17.46 | 755 | 17.46 | 100\% | 150 | 50\% | 50\% | 4380 |
|  | R12 R13 |  | Residential Residential | Bedroom Bedroom | 11.88 11.91 | 8.02 7.86 | 229 246 | 8.02 7.86 | 100\% | 100 100 | 50\% | 50\% | 4380 4380 |


| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Window Ref | Window Orientation | Proposed Sunlight <br> Exposure (Hours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PROPOSED |  |  |  |  |  |  |  |
| First | R1 |  | Residential | LKD | W9 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w10 | $23^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w11 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W12 | $339{ }^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| First | R2 |  | Residential | Bedroom | W13 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| First | R3 |  | Residential | Bedroom | W14 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| First | R4 |  | Residential | LKD | W15 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W16 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W17 | $294{ }^{\circ} \mathrm{N}$ | 0.6 |
|  |  |  |  |  | W18 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  |  |  | 3.3 |
| First | R5 |  | Residential | Bedroom | W19 | $248^{\circ}$ | 3.3 |
|  |  |  |  |  |  |  | 3.3 |
| First | R6 |  | Residential | Bedroom | W20 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  | W21 | $249^{\circ}$ | 3.2 |
|  |  |  |  |  | W22 | $159^{\circ}$ | 1.3 |
|  |  |  |  |  |  |  | 3.5 |
| First | R7 |  | Residential | LKD | W23 | $249^{\circ}$ | 1.4 |
|  |  |  |  |  |  |  | 1.4 |
| First | R8 |  | Residential | LKD | W24 | $294{ }^{\circ} \mathrm{N}$ | 1 |
|  |  |  |  |  |  |  | 1 |
| First | R9 |  | Residential | Bedroom | W25 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  |  |  | 3.3 |
| First | R10 |  | Residential | Bedroom | W26 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| First | R11 |  | Residential | Bedroom | W27 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| First | R12 |  | Residential | LKD | W28 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | W29 | $204{ }^{\circ}$ | 2.6 |
|  |  |  |  |  | w30 | $159^{\circ}$ | 1.5 |
|  |  |  |  |  |  |  | 5 |
| First | R13 |  | Residential | Bedroom | W31 | $159^{\circ}$ | 1.2 |
|  |  |  |  |  |  |  | 1.2 |
| First | R14 |  | Residential | Bedroom | W32 | $159^{\circ}$ | 0.9 |
|  |  |  |  |  |  |  | 0.9 |
| First | R15 |  | Residential | LKD | W33 | $159^{\circ}$ | 0.9 |
|  |  |  |  |  | W34 | $114^{\circ}$ | 1.9 |
|  |  |  |  |  | W35 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 2.3 |
| First | R16 |  | Residential | Bedroom | W36 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| First | R17 |  | Residential | Bedroom | W37 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | W38 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| First | R18 |  | Residential | Bedroom | W39 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| First | R19 |  | Residential | LKD | W40 | $69^{\circ} \mathrm{N}$ | 1.8 |
|  |  |  |  |  |  |  | 1.8 |
| First | R20 |  | Residential | LKD | W1 | $6^{\circ} \mathrm{N}$ | 0.9 |
|  |  |  |  |  |  |  | 0.9 |
| First | R21 |  | Residential | Bedroom | W3 | $159^{\circ}$ | 0.9 |
|  |  |  |  |  | W4 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.9 |
| First | R22 |  | Residential | Bedroom | W5 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| First | R23 |  | Residential | Bedroom | W6 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W7 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| First | R24 |  | Residential | Bedroom | W8 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Second | R1 |  | Residential | LKD | W1 | $23^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W3 | $339{ }^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W40 | $69^{\circ} \mathrm{N}$ | 0.2 |
|  |  |  |  |  |  |  | 0.2 |
| Second | R2 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Second | R3 |  | Residential | Bedroom | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Second | R4 |  | Residential | LKD | W6 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W7 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w8 | $294{ }^{\circ} \mathrm{N}$ | 0.6 |
|  |  |  |  |  | w9 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  |  |  | 3.3 |
| Second | R5 |  | Residential | Bedroom | W10 | $248^{\circ}$ | 3.3 |
|  |  |  |  |  |  |  | 3.3 |
| Second | R6 |  | Residential | Bedroom | W11 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  | W12 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  | w13 | $159^{\circ}$ | 1.3 |
|  |  |  |  |  |  |  | 3.5 |
| Second | R7 |  | Residential | LKD | W14 | $249^{\circ}$ | 1.6 |


| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Window Ref | Window Orientation | Proposed Sunlight Exposure (Hours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 1.6 |
| Second | R8 |  | Residential | LKD | W15 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Second | R9 |  | Residential | Bedroom | W16 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Second | R10 |  | Residential | Bedroom | W17 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Second | R11 |  | Residential | Bedroom | W18 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Second | R12 |  | Residential | LKD | W19 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | w20 | $204{ }^{\circ}$ | 2.6 |
|  |  |  |  |  | W21 | $159^{\circ}$ | 1.5 |
|  |  |  |  |  |  |  | 5 |
| Second | R13 |  | Residential | Bedroom | W22 | $159^{\circ}$ | 1.2 |
|  |  |  |  |  |  |  | 1.2 |
| Second | R14 |  | Residential | Bedroom | W23 | $159^{\circ}$ | 1.1 |
|  |  |  |  |  |  |  | 1.1 |
| Second | R15 |  | Residential | LKD | W24 | $159{ }^{\circ}$ | 1.2 |
|  |  |  |  |  | W25 | $114{ }^{\circ}$ | 1.9 |
|  |  |  |  |  | W26 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 2.3 |
| Second | R16 |  | Residential | Bedroom | W27 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Second | R17 |  | Residential | Bedroom | W28 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | W29 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Second | R18 |  | Residential | Bedroom | W30 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Second | R19 |  | Residential | LKD | W31 | $69^{\circ} \mathrm{N}$ | 1.8 |
|  |  |  |  |  |  |  | 1.8 |
| Second | R20 |  | Residential | LKD | W32 | $69^{\circ} \mathrm{N}$ | 1 |
|  |  |  |  |  |  |  | 1 |
| Second | R21 |  | Residential | Bedroom | W34 | $159^{\circ}$ | 1.2 |
|  |  |  |  |  | W35 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 1.2 |
| Second | R22 |  | Residential | Bedroom | W36 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Second | R23 |  | Residential | Bedroom | W37 | $69^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W38 | $69^{\circ} \mathrm{N}$ | 0.1 |
|  |  |  |  |  |  |  | 0.1 |
| Second | R24 |  | Residential | Bedroom | W39 | $69^{\circ} \mathrm{N}$ | 0.1 |
|  |  |  |  |  |  |  | 0.1 |
| Third | R1 |  | Residential | LKD | W1 | $23^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W3 | $339{ }^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W40 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Third | R2 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Third | R3 |  | Residential | Bedroom | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Third | R4 |  | Residential | LKD | W6 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W7 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W8 | $294{ }^{\circ}$ | 0.6 |
|  |  |  |  |  | w9 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  |  |  | 3.3 |
| Third | R5 |  | Residential | Bedroom | W10 | $248^{\circ}$ | 3.3 |
|  |  |  |  |  |  |  | 3.3 |
| Third | R6 |  | Residential | Bedroom | W11 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  | W12 | $249^{\circ}$ | 3.3 |
|  |  |  |  |  | w13 | $159^{\circ}$ | 1.5 |
|  |  |  |  |  |  |  | 3.7 |
| Third | R7 |  | Residential | LKD | W14 | $249^{\circ}$ | 1.6 |
|  |  |  |  |  |  |  | 1.6 |
| Third | R8 |  | Residential | LKD | W15 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Third | R9 |  | Residential | Bedroom | W16 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Third | R10 |  | Residential | Bedroom | W17 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Third | R11 |  | Residential | Bedroom | W18 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Third | R12 |  | Residential | LKD | W19 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | w20 | $204{ }^{\circ}$ | 2.6 |
|  |  |  |  |  | W21 | $159{ }^{\circ}$ | 1.5 |
|  |  |  |  |  |  |  | 5 |
| Third | R13 |  | Residential | Bedroom | W22 | $159^{\circ}$ | 1.2 |
|  |  |  |  |  |  |  | 1.2 |
| Third | R14 |  | Residential | Bedroom | W23 | $159^{\circ}$ | 1.2 |
|  |  |  |  |  |  |  | 1.2 |
| Third | R15 |  | Residential | LKD | W24 | $159{ }^{\circ}$ | 1.3 |
|  |  |  |  |  | W25 | $114^{\circ}$ | 1.9 |
|  |  |  |  |  | W26 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 2.4 |
| Third | R16 |  | Residential | Bedroom | W27 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Third | R17 |  | Residential | Bedroom | W28 | $69^{\circ} \mathrm{N}$ | 0.4 |


| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Window Ref | Window Orientation | Proposed Sunlight Exposure (Hours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | W29 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Third | R18 | Residential |  | Bedroom | W30 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  | 0.8 |  |  |
| Third | R19 | Residential |  |  | LKD | W31 | $69^{\circ} \mathrm{N}$ | 1.8 |
|  |  |  |  | 1.8 |  |  |  |
| Third | R20 | Residential |  | LKD | W32 | $69^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  | 1.3 |  |  |  |
| Third | R21 |  | Residential |  | Bedroom | W34 | $159{ }^{\circ}$ | 1.8 |
|  |  |  |  | W35 |  | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 1.8 |
| Third | R22 | Residential |  | Bedroom | W36 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  | 0.4 |  |  |  |
| Third | R23 |  | Residential |  | Bedroom | W37 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  | W38 |  | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Third | R24 | Residential |  | Bedroom | W39 | $69^{\circ} \mathrm{N}$ | 0.3 |
|  |  |  |  | 0.3 |  |  |  |
| Fourth | R1 | Residential |  |  | LKD | W1 | $23^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  | W2 |  | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  | w3 |  | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  | W36 |  | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Fourth | R2 | Residential |  | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  | 0 |  |  |  |
| Fourth | R3 | Residential |  |  | Bedroom | W5 | $3^{339}{ }^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  | 0 |  |  |  |
| Fourth | R4 | Residential |  | LKD | W6 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  | W7 | $339{ }^{\circ} \mathrm{N}$ | 0 |  |
|  |  |  |  | w8 | $294{ }^{\circ} \mathrm{N}$ | 0.6 |  |
|  |  |  |  | w9 | $249^{\circ}$ | 3.3 |  |
|  |  |  |  | 3.3 |  |  |  |
| Fourth | R5 | Residential |  |  | Bedroom | W10 | $248^{\circ}$ | 3.3 |
|  |  |  |  | 3.3 |  |  |  |
| Fourth | R6 | Residential |  | Bedroom | W11 | $249^{\circ}$ | 3.3 |
|  |  |  |  | W12 | $249^{\circ}$ | 3.3 |  |
|  |  |  |  | w13 | $159^{\circ}$ | 1.5 |  |
|  |  |  |  | 3.7 |  |  |  |
| Fourth | R7 | Residential |  |  | LKD | W14 | $249^{\circ}$ | 1.6 |
|  |  |  |  | 1.6 |  |  |  |
| Fourth | R8 | Residential |  | LKD | W15 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  | 1.3 |  |  |  |
| Fourth | R9 | Residential |  |  | Bedroom | W16 | $249^{\circ}$ | 3.5 |
|  |  |  |  | 3.5 |  |  |  |
| Fourth | R10 | Residential |  | Bedroom | W17 | $249^{\circ}$ | 3.5 |
|  |  |  |  | 3.5 |  |  |  |
| Fourth | R11 | Residential |  |  | Bedroom | W18 | $249^{\circ}$ | 3.5 |
|  |  |  |  | 3.5 |  |  |  |
| Fourth | R12 | Residential |  | LKD | W19 | $249^{\circ}$ | 3.5 |
|  |  |  |  | w20 | $204{ }^{\circ}$ | 4.5 |  |
|  |  |  |  | W21 | $159^{\circ}$ | 1.6 |  |
|  |  |  |  | 5.4 |  |  |  |
| Fourth | R13 | Residential |  |  | Bedroom | W22 | $159^{\circ}$ | 1.3 |
|  |  |  |  | 1.3 |  |  |  |
| Fourth | R14 | Residential |  | Bedroom | W23 | $159^{\circ}$ | 1.1 |
|  |  |  |  | 1.1 |  |  |  |
| Fourth | R15 | Residential |  |  | LKD | W24 | $159{ }^{\circ}$ | 1.2 |
|  |  |  |  | W25 |  | $114^{\circ}$ | 1.9 |
|  |  |  |  | W26 |  | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  | 2.4 |  |  |  |
| Fourth | R16 | Residential |  |  | Bedroom | W27 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Fourth | R17 | Residential |  | LKD | W28 | $69^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  | 1.3 |  |  |  |
| Fourth | R18 | Residential |  |  | Bedroom | W30 | $159^{\circ}$ | 3.8 |
|  |  |  |  |  | W31 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 3.8 |
| Fourth | R19 | Residential |  | Bedroom | W32 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Fourth | R20 | Residential |  | Bedroom | W33 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | W34 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Fourth | R21 |  | Residential | Bedroom | W35 | $69^{\circ} \mathrm{N}$ | 0.3 |
|  |  |  |  |  |  |  | 0.3 |
| Fifth | R1 |  | Residential | Bedroom | W1 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Fifth | R2 |  | Residential | LKD | W2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w3 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Fifth | R3 |  | Residential | Bedroom | W4 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Fifth | R4 |  | Residential | Bedroom | W5 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Fifth | R5 |  | Residential | Bedroom | W6 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Fifth | R6 |  | Residential | LKD | W7 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | w8 | $204{ }^{\circ}$ | 2.6 |


| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Window Ref | Window Orientation | Proposed Sunlight Exposure (Hours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | w9 | $159^{\circ}$ | 1.7 |
|  |  |  |  |  |  |  | 5.2 |
| Fifth | R7 |  | Residential | Bedroom | W10 | $159^{\circ}$ | 1.4 |
|  |  |  |  |  |  |  | 1.4 |
| Fifth | R8 |  | Residential | Bedroom | W11 | $159^{\circ}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Fifth | R9 |  | Residential | LKD | W12 | $159^{\circ}$ | 1.4 |
|  |  |  |  |  | W13 | $114^{\circ}$ | 1.9 |
|  |  |  |  |  | W14 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 2.5 |
| Fifth | R10 |  | Residential | Bedroom | W15 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Fifth | R11 |  | Residential | Bedroom | W16 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | W17 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Fifth | R12 |  | Residential | Bedroom | W18 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Fifth | R13 |  | Residential | LKD | W19 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 0.7 |
| Sixth | R1 |  | Residential | LKD | W1 | $24^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Sixth | R2 |  | Residential | Bedroom | W3 | $339{ }^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Sixth | R3 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Sixth | R4 |  | Residential | LKD | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w6 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Sixth | R5 |  | Residential | Bedroom | W7 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Sixth | R6 |  | Residential | Bedroom | w8 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Sixth | R7 |  | Residential | Bedroom | w9 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Sixth | R8 |  | Residential | LKD | W10 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | w11 | $204{ }^{\circ}$ | 2.6 |
|  |  |  |  |  | W12 | $159^{\circ}$ | 1.7 |
|  |  |  |  |  |  |  | 5.2 |
| Sixth | R9 |  | Residential | Bedroom | W13 | $159^{\circ}$ | 1.7 |
|  |  |  |  |  |  |  | 1.7 |
| Sixth | R10 |  | Residential | Bedroom | W14 | $159^{\circ}$ | 2.1 |
|  |  |  |  |  |  |  | 2.1 |
| Sixth | R11 |  | Residential | LKD | W15 | $159^{\circ}$ | 2.4 |
|  |  |  |  |  | W16 | $114^{\circ}$ | 1.8 |
|  |  |  |  |  | W17 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 3.4 |
| Sixth | R12 |  | Residential | Bedroom | W18 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Sixth | R13 |  | Residential | Bedroom | W19 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | W20 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Sixth | R14 |  | Residential | Bedroom | W21 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Sixth | R15 |  | Residential | LKD | W22 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 0.7 |
| Seventh | R1 |  | Residential | LKD | W1 | $24^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Seventh | R2 |  | Residential | Bedroom | W3 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Seventh | R3 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Seventh | R4 |  | Residential | LKD | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w6 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Seventh | R5 |  | Residential | Bedroom | W7 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Seventh | R6 |  | Residential | Bedroom | w8 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Seventh | R7 |  | Residential | Bedroom | w9 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Seventh | R8 |  | Residential | LKD | W10 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | w11 | $204{ }^{\circ}$ | 2.7 |
|  |  |  |  |  | W12 | $159^{\circ}$ | 3 |
|  |  |  |  |  |  |  | 6.5 |
| Seventh | R9 |  | Residential | Bedroom | W13 | $159^{\circ}$ | 3 |
|  |  |  |  |  |  |  | 3 |
| Seventh | R10 |  | Residential | Bedroom | W14 | $159^{\circ}$ | 3.2 |
|  |  |  |  |  |  |  | 3.2 |
| Seventh | R11 |  | Residential | LKD | W15 | $159^{\circ}$ | 3.7 |
|  |  |  |  |  | W16 | $114^{\circ}$ | 2.7 |
|  |  |  |  |  | W17 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 5.4 |
| Seventh | R12 |  | Residential | Bedroom | W18 | $6^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Seventh | R13 |  | Residential | Bedroom | W19 | $6^{\circ} \mathrm{N}$ | 0.4 |


| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Window Ref | Window Orientation | Proposed Sunlight Exposure (Hours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | W20 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Seventh | R14 |  | Residential | Bedroom | W21 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Seventh | R15 |  | Residential | LKD | W22 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 0.7 |
| Eighth | R1 |  | Residential | LKD | W1 | $24^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Eighth | R2 |  | Residential | Bedroom | W3 | $339{ }^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Eighth | R3 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Eighth | R4 |  | Residential | LKD | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w6 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Eighth | R5 |  | Residential | Bedroom | W7 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Eighth | R6 |  | Residential | Bedroom | w8 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Eighth | R7 |  | Residential | Bedroom | W9 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Eighth | R8 |  | Residential | LKD | W10 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | W11 | $204{ }^{\circ}$ | 2.7 |
|  |  |  |  |  | W12 | $159{ }^{\circ}$ | 4.3 |
|  |  |  |  |  |  |  | 7.8 |
| Eighth | R9 |  | Residential | Bedroom | W13 | $159^{\circ}$ | 4.3 |
|  |  |  |  |  |  |  | 4.3 |
| Eighth | R10 |  | Residential | Bedroom | W14 | $159^{\circ}$ | 4.5 |
|  |  |  |  |  |  |  | 4.5 |
| Eighth | R11 |  | Residential | LKD | W15 | $159^{\circ}$ | 4.9 |
|  |  |  |  |  | W16 | $114^{\circ}$ | 3.4 |
|  |  |  |  |  | W17 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 6 |
| Eighth | R12 |  | Residential | Bedroom | W18 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Eighth | R13 |  | Residential | Bedroom | W19 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | w20 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Eighth | R14 |  | Residential | Bedroom | W21 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Eighth | R15 |  | Residential | LKD | W22 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 0.7 |
| Ninth | R1 |  | Residential | LKD | W1 | $24^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Ninth | R2 |  | Residential | Bedroom | W3 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Ninth | R3 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Ninth | R4 |  | Residential | LKD | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w6 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Ninth | R5 |  | Residential | Bedroom | W7 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Ninth | R6 |  | Residential | Bedroom | w8 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Ninth | R7 |  | Residential | Bedroom | w9 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Ninth | R8 |  | Residential | LKD | W10 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | W11 | $204{ }^{\circ}$ | 2.7 |
|  |  |  |  |  | W12 | $159^{\circ}$ | 4.9 |
|  |  |  |  |  |  |  | 8.4 |
| Ninth | R9 |  | Residential | Bedroom | W13 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 5.2 |
| Ninth | R10 |  | Residential | Bedroom | W14 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 5.2 |
| Ninth | R11 |  | Residential | LKD | W15 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  | W16 | $114^{\circ}$ | 3.4 |
|  |  |  |  |  | W17 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 6 |
| Ninth | R12 |  | Residential | Bedroom | W18 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Ninth | R13 |  | Residential | Bedroom | W19 | $6^{6}{ }^{\circ}$ | 0.4 |
|  |  |  |  |  | w20 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Ninth | R14 |  | Residential | Bedroom | W21 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Ninth | R15 |  | Residential | LKD | W22 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 0.7 |
| Tenth | R1 |  | Residential | LKD | W1 | $24^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | W2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Tenth | R2 |  | Residential | Bedroom | W3 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Tenth | R3 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |


| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Window Ref | Window Orientation | Proposed Sunlight Exposure (Hours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tenth | R4 |  | Residential | LKD | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w6 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Tenth | R5 |  | Residential | Bedroom | W7 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Tenth | R6 |  | Residential | Bedroom | W8 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Tenth | R7 |  | Residential | Bedroom | W9 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Tenth | R8 |  | Residential | LKD | W10 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | W11 | $204{ }^{\circ}$ | 2.7 |
|  |  |  |  |  | W12 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 8.7 |
| Tenth | R9 |  | Residential | Bedroom | W13 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 5.2 |
| Tenth | R10 |  | Residential | Bedroom | W14 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 5.2 |
| Tenth | R11 |  | Residential | LKD | W15 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  | W16 | $114^{\circ}$ | 3.4 |
|  |  |  |  |  | W17 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 6 |
| Tenth | R12 |  | Residential | Bedroom | W18 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Tenth | R13 |  | Residential | Bedroom | W19 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | W20 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Tenth | R14 |  | Residential | Bedroom | W21 | $6^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Tenth | R15 |  | Residential | LKD | W22 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 0.7 |
| Eleventh | R1 |  | Residential | LKD | W1 | $24^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w2 | $339{ }^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Eleventh | R2 |  | Residential | Bedroom | W3 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Eleventh | R3 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Eleventh | R4 |  | Residential | LKD | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w6 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Eleventh | R5 |  | Residential | Bedroom | W7 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Eleventh | R6 |  | Residential | Bedroom | W8 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Eleventh | R7 |  | Residential | Bedroom | w9 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Eleventh | R8 |  | Residential | LKD | W10 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | w11 | $204{ }^{\circ}$ | 2.7 |
|  |  |  |  |  | W12 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 8.7 |
| Eleventh | R9 |  | Residential | Bedroom | W13 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 5.2 |
| Eleventh | R10 |  | Residential | Bedroom | W14 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 5.2 |
| Eleventh | R11 |  | Residential | LKD | W15 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  | W16 | $114^{\circ}$ | 3.4 |
|  |  |  |  |  | W17 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 6 |
| Eleventh | R12 |  | Residential | Bedroom | W18 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Eleventh | R13 |  | Residential | Bedroom | W19 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | W20 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Eleventh | R14 |  | Residential | Bedroom | W21 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Eleventh | R15 |  | Residential | LKD | W22 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 0.7 |
| Twelfth | R1 |  | Residential | LKD | W1 | $24^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w2 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Twelfth | R2 |  | Residential | Bedroom | W3 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Twelfth | R3 |  | Residential | Bedroom | W4 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0 |
| Twelfth | R4 |  | Residential | LKD | W5 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  | w6 | $294{ }^{\circ} \mathrm{N}$ | 1.3 |
|  |  |  |  |  |  |  | 1.3 |
| Twelfth | R5 |  | Residential | Bedroom | W7 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Twelfth | R6 |  | Residential | Bedroom | w8 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Twelfth | R7 |  | Residential | Bedroom | W9 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  |  |  | 3.5 |
| Twelfth | R8 |  | Residential | LKD | W10 | $249^{\circ}$ | 3.5 |
|  |  |  |  |  | w11 | $204{ }^{\circ}$ | 6 |
|  |  |  |  |  | W12 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 8.7 |


| Floor Ref | Room Ref | Room Attribute | Property Type | Room Use | Window Ref | Window Orientation | Proposed Sunlight Exposure (Hours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Twelfth | R9 |  | Residential | Bedroom | W13 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 5.2 |
| Twelfth | R10 |  | Residential | Bedroom | W14 | $159^{\circ}$ | 5.2 |
|  |  |  |  |  |  |  | 5.2 |
| Twelfth | R11 |  | Residential | LKD | W15 | $159{ }^{\circ}$ | 5.2 |
|  |  |  |  |  | W16 | $114^{\circ}$ | 3.7 |
|  |  |  |  |  | W17 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 6 |
| Twelfth | R12 |  | Residential | Bedroom | W18 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  |  |  | 0.4 |
| Twelfth | R13 |  | Residential | Bedroom | W19 | $69^{\circ} \mathrm{N}$ | 0.4 |
|  |  |  |  |  | W20 | $339^{\circ} \mathrm{N}$ | 0 |
|  |  |  |  |  |  |  | 0.4 |
| Twelfth | R14 |  | Residential | Bedroom | W21 | $69^{\circ} \mathrm{N}$ | 0.8 |
|  |  |  |  |  |  |  | 0.8 |
| Twelfth | R15 |  | Residential | LKD | W22 | $69^{\circ} \mathrm{N}$ | 0.7 |
|  |  |  |  |  |  |  | 0.7 |

## APPENDIX 4

Sunlight Amenity (Overshadowing) Results



## APPENDIX 5

Window Maps




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