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DAYLIGHT & SUNLIGHT REPORT

Campus East

Welwyn Garden City

Our Ref: 5163

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Contents

Report details

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1 Introduction

1.1.1 eb7 have been instructed to assess the effect of proposed development of the Campus East car park site in Welwyn Garden City on daylight and sunlight to the existing surrounding properties and neighbouring amenity spaces. These assessments consider the latest Saunders Architects scheme proposals dated October 2022.

1.1.2 The methodology and criteria used for these assessments is provided by Building Research Establishment's (BRE) guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (BRE 209 2nd edition, 2022).

1.1.3 In order to carry out an assessment, we have generated a 3D computer model (Test Environment) of the existing site, the key surrounding properties and the proposed scheme. Using this model and our specialist software, we have calculated the daylight and sunlight levels in both the existing and proposed conditions for the relevant neighbouring buildings.

1.1.4 The numerical criteria suggested within the BRE guidelines has been applied to each of the assessments mentioned above. It is important to note that these guidelines are not a rigid set of rules but are advisory and need to be applied flexibly according to the specific context of a site.

2 Guidance

2.1 Daylight & sunlight for planning

'Site layout planning for daylight and sunlight: A guide to good practice', BRE 2022

2.1.1 The Building Research Establishment (BRE) Report 209, *'Site layout planning for daylight and sunlight: A guide to good practice'*, is the reference document used by most local authorities for assessing daylight and sunlight in relation to new developments. Commonly referred to as 'the BRE guidelines', it provides various testing methodologies to calculate the potential light levels received by neighbours of a development site and provided within proposed new development.

2.1.2 The guidance given within the BRE document makes direct reference to the British Standard BS EN17037 (2018) and the CIBSE (Chartered Institute of Building Services Engineers) guide LG10: Daylighting – a guide for designers (2014). It is intended to be used in conjunction with these documents, which provide guidance on the assessment of daylight and sunlight within new buildings.

2.1.3 The 2022 update to the BRE guidance was published on 9th June 2022. The assessment methodologies and target metrics in respect of the impacts to neighbouring properties remain broadly unchanged from the earlier guidance save for some areas of clarification. The primary change relates to the assessment of internal daylight and sunlight amenity within the proposed habitable accommodation. The new guidance reflects the British Standard BS EN17037, published in 2018, which was based on the relevant European Standard but included a 'National Annex' clarifying the proposed application of the new internal guidance within the UK.

2.1.4 Detailed guidance on the updated internal amenity standards is set out below. It is however important to note that the standard set out in BS EN70137 / BRE 209 (2022) are generally harder to achieve than the previous Average Daylight Factor (ADF) assessments adopted under the 2011 version of the guidance. A lower compliance rate with the new targets is not therefore indicative of a less acceptable scheme as the difference in the assessment metrics should be noted. This is particularly so in respect of urban development where a number of important design factors such as the provision of balcony private amenity space and limiting solar gain / overheating may lead to a trade-off against achieving higher internal amenity levels.

2.1.5 As an informative, particularly during this early period of adoption of the 2022 guidance, we consider a comparative assessment with the 2011 ADF analysis to also be useful in assessing the acceptability of the internal daylight / sunlight provision. This supplementary study has been undertaken and is attached to this report at Appendix 3.

Daylight and Sunlight to Neighbouring Properties

Detailed daylight assessments

2.1.6 The BRE guidance outlines two detailed methods for calculating daylight within properties neighbouring a proposed development: the Vertical Sky Component (VSC) and the No-Sky Line (NSL) tests.

2.1.7 The VSC test measures the amount of sky that is visible to a specific point on the outside of a property, which is directly related to the amount of daylight that can be received. It is measured on the outside face of the external walls, usually at the centre point of a window.

2.1.8 The NSL test calculates the distribution of daylight within rooms by determining the area of the room at desk / work surface height (the 'working plane') which can and cannot receive a direct view of the sky and hence 'sky light'. The working plane height is set at 850mm above floor level within residential property.

2.1.9 For the above methods, the guidance suggests that existing daylight may be noticeably affected by new development if: -

- Windows achieve a VSC below 27% and are reduced to less than 0.8 times their former value; and / or
- Levels of NSL within rooms are reduced to less than 0.8 times their former values.

2.1.10 Where rooms are greater than 5m in depth and lit from only one side, the guidance recognises that *"a greater movement of the no sky-line may be unavoidable"* (page 16, paragraph 2.2.12).

Detailed sunlight assessments

2.1.11 For sunlight, the Annual Probable Sunlight Hours (APSH) test calculates the percentage of probable hours of sunlight received by a window or room over the course of a year.

2.1.12 In assessing sunlight effects to existing properties surrounding a new development, only those windows orientated within 90° of due south and which overlook the site require assessment. The main focus is on living rooms, with bedrooms and kitchens deemed less important.

2.1.13 The guide suggests that occupiers will notice the loss of sunlight if the APSH to main living rooms is both less than 25% annually (with 5% during winter) and that the amount of sunlight, following the proposed development, is reduced by more than 4%, to less than 0.8 times its former value.

Daylight to new buildings or consented developments (BRE2022)

2.1.14 The 2022 update to the BRE 209 document was published on June 9th 2022. The new guidance reflects the UK National Annex of the British Standard: BS EN17037 (2018) and provides two methodologies for assessing the internal daylight amenity to new

residential properties. These assessment methods are known as 'Daylight Illuminance' or 'Daylight Factor' and are described in more detail below:

Daylight Illuminance Assessment

2.1.15 The Daylight Illuminance method utilises climactic data for the location of the site, based on a weather file for a typical or average year, to calculate the illuminance at points within a room on at least hourly intervals across a year. The illuminance is calculated across an assessment grid sat at the reference plane (usually desk height).

2.1.16 The guidance provides target illuminance levels that should be achieved across at least half of the reference plane for half of the daylight hours within a year. The targets set out within the national annex are as follows:

- Bedrooms – 100 Lux
- Living Rooms – 150 Lux
- Kitchens – 200 Lux

2.1.17 For spaces with a shared use the higher target would generally apply such that it would be appropriate to adopt a target of 150 lux for a student bed sitting room if students would often spend time in their room during the day. The guidance notes that discretion should be used and, for example, a target of 150 lux may be appropriate in a Living / Kitchen / Dining Room within a modern flatted development where the kitchens are not 'habitable' space and small separate kitchens are to be avoided.

Daylight Factor Assessment

2.1.18 The Daylight Factor method involves the computation of the daylight factor at each calculation point on the assessment grid.

2.1.19 The daylight factor is a ratio between internal and external illuminance expressed as a percentage. The calculation uses the CIE overcast sky model and is independent of orientation and location. In order to account for different climatic conditions at different locations different daylight factor targets may be applied for different cities with targets varying throughout the UK.

2.1.20 The daylight factor targets are to be achieved over at least 50% of the room assessment grid and are expressed as a median figure. For London/south east these median daylight factor targets are:

- Bedrooms – 0.7%
- Living Rooms – 1.1%
- Kitchens – 1.4%

2.1.21 For multi-purpose living / kitchen / diner arrangements the higher 'kitchen' targets can be difficult to achieve due to the depth of internal space. In such cases, it is generally accepted that the 1.5% target for living rooms be used instead as this

represents the predominant use of the space. The BRE guide gives the following: -

> *"Non-daylit internal kitchens should be avoided wherever possible, especially if the kitchen is used as a dining area too. Daylight levels in kitchen areas should be checked. If the layout means that a small internal kitchen is inevitable, it should be directly linked to a well daylit room. Further guidance for assessment of this situation is given in Appendix C."*

Sunlight to new buildings or consented developments (BRE2022)

2.1.22 In respect of direct sunlight, the 2022 BRE guidance reflects the BS EN 17037 recommendation that a space should receive a minimum of 1.5 hours of direct sunlight on a selected date between 1 February and 21 March with cloudless conditions. It is suggested that 21 March (equinox) be used for the assessment.

2.1.23 The BS EN 17037 criterion can be applied to all rooms of a unit but it is preferable for the target to be achieved within a main living room. Rooms in all orientations may be assessed and the sunlight received by different windows may be added together providing there is no 'double-counting'.

2.1.24 Where a group of dwellings are planned the site layout and design should maximise the number of dwellings with main living rooms meeting these targets. It is also advised that a dwelling has at least one window wall facing within 90 degrees of due south.

Sunlight to gardens and outdoor spaces

2.1.25 Where sunlight to an amenity space may be affected by new development, the BRE guidelines recommend that an overshadowing assessment is conducted. The key analysis is the '2hr sun on ground' test, which quantifies the proportion of an amenity area (e.g. rear gardens, parks and playing fields, public squares etc.) receiving at least 2hrs of sun on the 21st of March.

2.1.26 For an amenity space within a proposal to be considered well sunlit throughout the year, the BRE guide suggests that at least 50% of the space should enjoy at least 2 hours of direct sunlight on March 21st.

2.1.27 The BRE guidance recognises that different types of amenity space may have different sunlighting requirements. Generally, if an existing neighbouring open space receives less than 50%, then the guidelines suggest that the loss in sunlight may be noticeable if it is reduced below 0.80 times its former value.

Daylight to new buildings or consented developments (BRE2011)

2.1.28 The previous 2011 edition of the BRE 209 document utilised the Average Daylight Factor method for calculating internal amenity. This formula assessed the mean average illuminance within a room as a proportion of the illuminance available to an unobstructed point outdoors under a sky of known luminance and luminance distribution. The 2011 BRE guidance and former British Standard 8206:II (2008) set the following recommended ADF levels for habitable room uses: -

- Bedrooms – 1% ADF
- Living Rooms – 1.5% ADF
- Kitchens – 2% ADF

2.1.29 For multi-purpose living/kitchen/diner arrangements the higher 2% 'kitchen' target could be difficult to achieve due to the depth of internal space. In such cases we consider the application of the living room 1.5% target to be acceptable as the predominant use of the space.

Sunlight Amenity

2.1.30 The impact to overshadowing and the provision of sunlight to open spaces is assessed using the Sunlight Amenity test. This looks at the proportion of an amenity area that receives at least 2 hours of sun on the 21st of March in the present condition and compares this with the proportion of the area that receives at least 2 hours of sun on the 21st of March with the proposal in place.

2.1.31 For an amenity space within a proposal to be considered well-sunlit throughout the year, the BRE guide suggests that at least 50% of the space should enjoy at least 2 hours of direct sunlight on March 21st.

2.1.32 When considering the overshadowing impacts to neighbouring amenity spaces, for the area to be considered well sunlit it is similarly recommended that at least half of the area should receive at least 2hrs of sunlight on the 21st March or that reductions are limited to 0.8 times their existing value.

3 Planning Policy

3.1.1 We have considered local, regional and national planning policy relating to daylight and sunlight. In general terms, planning policy advises that new development will only be permitted where it is shown not to cause unacceptable loss of daylight or sunlight amenity to neighbouring properties.

3.1.2 The need to protect amenity of neighbours is echoed within recent publications from the Mayor of London and the Secretary of State for Housing, Communities and Local Government. Although, these documents also stress that current guidance needs to be used flexibly where developments are located in urban areas and intend to achieve higher densities. Specifically, these documents suggest that the nationally applicable criteria given within the BRE guidance needs to be applied in consideration of the development's context.

3.2 Welwyn Hatfield Borough Council

Welwyn Hatfield Borough Council Draft Local Plan (Proposed Submission 2016) incorporating January 2021 Main Modifications

Policy SADM 11 – Amenity and Layout:

> *"All proposals will be required to create and protect a good standard of amenity for buildings and external open space in line with the Council's Supplementary Design Guidance, and in particular should ensure:*
>
> *a. The levels of sunlight and daylight within buildings and open spaces, and garden areas in particular, are satisfactory."*

Supplementary Design Guidance (adopted 2005)

Para. 3.18:

> *"This section supplements Policy D1 Quality of Design in the District Plan. All new developments should be designed and built to ensure that there is a satisfactory level of sunlight and daylight to both the new development and surrounding developments and/or open spaces. [...] Advice on site layout planning to achieve good sunlight and daylight within buildings and the open spaces between them is set out in the Building Research Establishment's document entitled, 'Site Layout Planning for Daylight and Sunlight: a guide to good practice', 1991."*

3.3 The National Planning Policy Framework - Department for Housing, Communities and Local Government (July 2021)

3.3.1 The latest version of the National Planning Policy Framework was issued in July 2021. The document sets out planning policies for England and how these are expected to be applied. In respect of daylight and sunlight it stresses the need to make optimal use of sites and to take a flexible approach to daylight and sunlight guidance. Para

125 States: -

11. Making effective use of land

Achieving appropriate densities

"125. Area-based character assessments, design guides and codes and masterplans can be used to help ensure that land is used efficiently while also creating beautiful and sustainable places. 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).

4 Application of the Guidance

4.1 Scope of assessment

Impact analysis for neighbouring buildings and outdoor spaces

4.1.1 The BRE guidelines advise that, when assessing any potential effects on surrounding properties, only those windows and rooms that have a 'reasonable expectation' of daylight and sunlight need to be considered. At paragraph 2.2.2 it states: -

> *"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."*

4.1.2 Our assessments of daylight and sunlight impact to neighbouring buildings therefore consider only residential properties, which the BRE recognises have the highest expectation for natural light. We have tested the impact on the habitable rooms in each residential property and ignored non-habitable space (e.g. staircases, hallways, bathrooms, toilets, stores etc.) as per BRE guidance.

4.1.3 Our assessment of impact to sunlight within outdoor spaces has considered any areas of public or shared amenity as well as private residential gardens, where the proposed development has some potential to impact sunlight. In some instances the geographical location of outdoor spaces, relative to the proposed development, may negate technical assessment.

4.2 Application of the numerical criteria

4.2.1 The opening paragraphs of the BRE guidelines state:

> *"1.6 The guide is intended for building designers and their clients, consultants, and planning officials. 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 since natural lighting is only one of many factors in site layout design (see Section5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."*

4.2.2 It is therefore very important to apply the BRE guidance sensibly and flexibly, with careful consideration of the specific site context. Its numerical targets theoretically apply to any built environment, from city centres to rural villages. However, in more tightly constrained environments, achieving the default BRE targets can be very challenging and conflict with other beneficial factors of site layout design.

5 Sources of Information & Assumptions

5.1.1 A topographic survey, site photographs and ordnance survey information have been used to create a 3D computer model of the proposed development in the context of the existing site and surrounding buildings.

5.1.2 Where survey or planning information was unavailable, the position of the neighbouring property elevations has been estimated based upon brick counts from site photographs. Window positions and dimensions used directly affect the results of all assessment methods.

5.1.3 We have not sought access to the surrounding properties and, unless we have been able to source floor layouts via public records, the internal configuration and floor levels have been estimated. Unless the building form dictates otherwise, we assume room depths of c. 4.2m for principal living space. Room layouts used directly affect the results of the NSL and ADF assessments.

5.1.4 Where possible neighbouring building use has been identified via online research, including Valuation Office Agency (VOA) searches, and/or external observation.

5.1.5 The full list of source of information used in this assessment is as follows: -

5.2 WYG Group Ltd

Topographic Survey

WYG Group Ltd
A115249 WYG001 - WYG007 - WGC Topographic Survey.dwg
Received 15/09/2021

5.3 Saunders Architecture+Urban Design

8375_Block Plans.dwg
Received 24/10/2022

5.4 Site inspection on 16th September 2021

Site photos

6 The Site and Proposal

6.1.1 The site is located to the north of Welwyn Garden City train station and currently contains two large car parks.

6.1.2 The proposals involve the demolition of all existing buildings and structures followed by the erection of five buildings to provide 313 residential units (Use Class C3) including 30% affordable housing, resident's car parking, cycle storage, refuse storage, hard and soft landscaping, external lighting, drainage, infrastructure and all associated works.

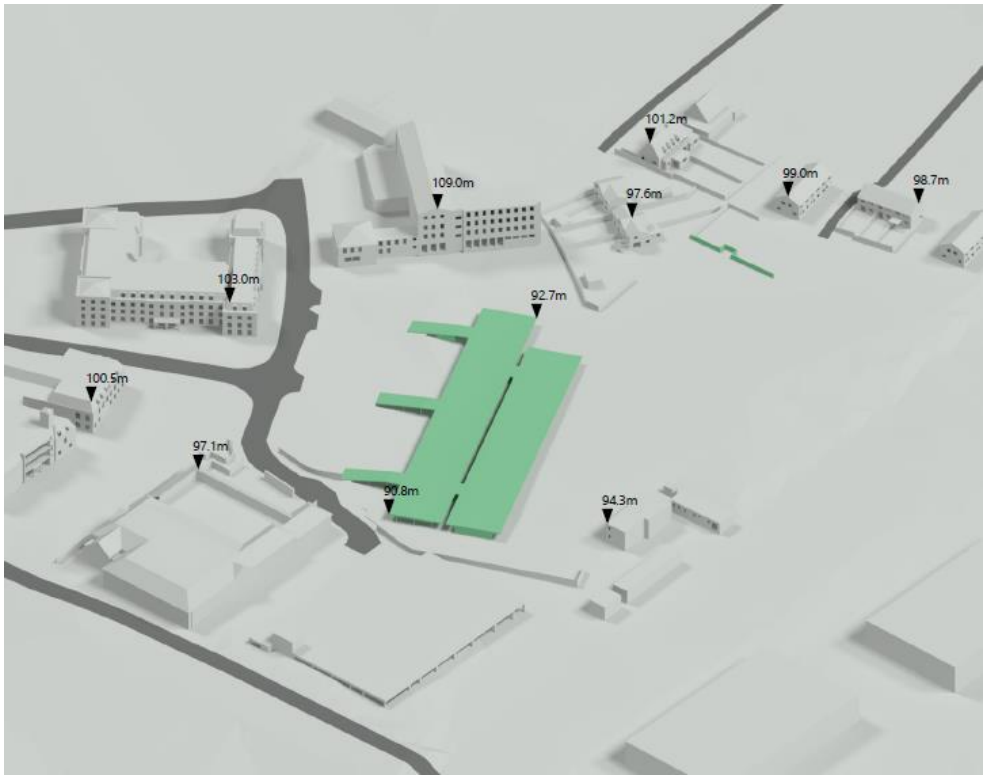


Image 1 - 3D isometric view of the existing site and context

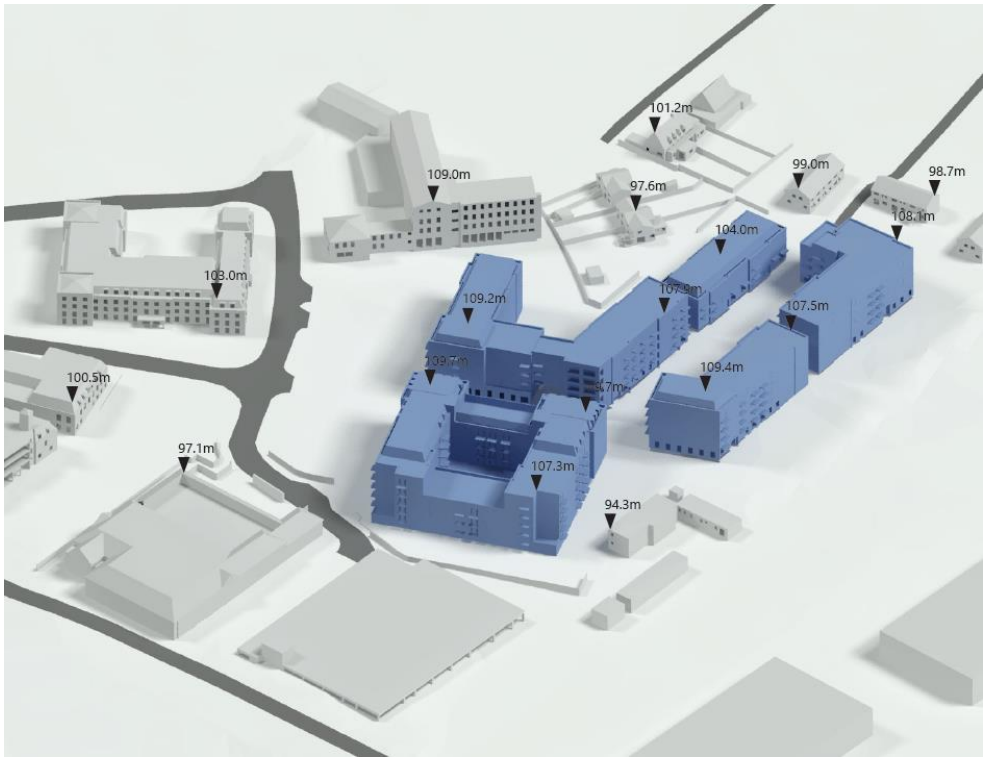


Image 2 - Isomtric view of the proposed development and context

7 Assessment results

7.1 Daylight and sunlight to neighbouring buildings

7.1.1 Full results of the daylight and sunlight assessments are attached within Appendix 2. Drawings to show the existing and proposed buildings in the context of the neighbouring properties are attached in Appendix 1.

7.1.2 Our assessment has considered all of the closest neighbouring residential properties with windows overlooking the proposed development. These are shown on the following image: -

1. Peel Court	2. Oaklands College
3. 1 - 3 Junction Cottages	4. 2 and 4 Blakemere Road
5. 78 - 94 (even) Gresley Close	6. 91 - 101 (odd) Gresley Close

Image 3 - Map showing site location and neighbouring residential properties

Peel Court

Image 4 - Site visit photo of Peel Court

7.1.3 This residential apartment building is located to the west of the proposal and is arranged over 3/4-storeys. The windows in the eastern elevation will have a direct view of the proposed scheme.

7.1.4 We have modelled the internal layouts of this property using drawings submitted as part of the planning application for the development of the site (REF: N6/2010/2456/MA).

Daylight

7.1.5 The results of the VSC for this block of flats indicate that the windows will retain proportional values of at least 0.90 times their former values, exceeding the BRE targets.

7.1.6 There are also no material changes in NSL levels to any room and, as such, the effects to this property fully meet the BRE targets.

Sunlight

7.1.7 In respect of direct sunlight levels, all of the main living spaces orientated within 90 degrees of due south will meet or exceed the BRE targets.

Oaklands College

Image 5 - Street view of Oaklands College

7.1.8 Oaklands College is located to the north-west of the development site and has many windows on its south-eastern elevation which will look directly towards the proposal.

7.1.9 We have modelled this property using the drawings contained in a 2016 planning application (REF: 6/2016/2231/FULL).

7.1.10 Whilst the neighbouring school is non-residential, the BRE suggests that the guidelines may also be applied to certain non-domestic neighbouring buildings where the occupants have a reasonable expectation of daylight, which includes schools. Therefore, we have considered the potential impacts of the proposals to Oaklands College.

Daylight

7.1.11 The results of both the VSC and NSL assessments for this school demonstrate full compliance with the BRE guidance. The retained VSC levels shown are well in excess of the suggested targets and we have recorded no material alterations in NSL levels.

Sunlight

7.1.12 The results of our APSH assessments show that all rooms with windows within 90° of due south retain good APSH levels remaining well in excess of the BRE target values.

1 - 3 Junction Cottages

Image 6 - Site visit photo of Junction Cottages

7.1.13 These three properties are located directly to the north of the proposals and currently enjoy unobstructed views over the open car park on the development site.

7.1.14 We have modelled these properties using planning drawings obtained from the local planning portal (REF: N6/2008/0434/FP, N6/2005/0879/FP and N6/2015/0890/FP).

Daylight

7.1.15 The results of the VSC assessments show that the majority of the windows within these neighbours fully comply with the BRE guidelines, retaining VSC levels of at least 0.81 times their former value.

7.1.16 A single window to the kitchen at 1 Junction Cottages marginally falls below the BRE target to 24.9% absolute VSC. This is an exceptionally minor deviation from the 27% target. The room is also served by two further windows which are fully compliant with the BRE. In such instances, paragraph 2.2.8 of the BRE guidance suggests that the mean weighted reduction factor may be considered where a room is served by multiple windows. The weighted retained VSC to this kitchen fully meets the BRE guidance.

7.1.17 In terms of daylight distribution, there are not material changes to any of the habitable rooms such that they all meet or exceed the BRE targets.

Sunlight

7.1.18 In respect of direct sunlight level, our assessment confirms that all of the main living spaces will achieve or exceed the BRE targets thus remaining fully complaint with the BRE guidelines.

2 and 4 Blackmere Road

Image 7 - Site visit photo of Blackmere Road

7.1.19 These two semi-detached houses are located to the north of the development and the windows in their rear facades will have a view of the proposals to the north of the site.

7.1.20 We have modelled the internal layout of 2 Blackmere Road using planning drawings (REF: 6/2021/1084/HOUSE). Whilst in the absence of any detailed plans for 4 Blackmere Road, we have used appropriate assumed room layouts.

Daylight

7.1.21 The results of the VSC and NSL assessments for these properties demonstrate full compliance with the BRE guidance. The retained VSC levels shown are well in excess of the suggested numerical targets and we record no alteration in NSL.

Sunlight

7.1.22 In respect of direct sunlight levels, our assessment confirms there is no material impact to any potentially relevant spaces as a result of the proposals, all main living spaces retain APSH values in excess of the BRE targets

78-94 (even) Gresley Close and 91-101 (odd) Gresley Close

Image 8 - Site photo of 78-82 Gresley Close

Image 9 - Site visit photo of 91-95 Gresley Close

7.1.23 These 15 properties are located to the north of the development site. They are arranged over two-storeys and will have an oblique view of the proposed development.

7.1.24 In the absence of detailed floorplans, we have modelled these properties using a

combination of estate agent information, photos from the site inspection and appropriate assumed room depths/layouts.

Daylight

7.1.25 The results of the VSC assessments for these properties, demonstrate almost full compliance with the BRE guidance, with all but two of the windows tested retaining VSC values well in excess of the BRE targets.

7.1.26 The deviations are to the rear window at ground floor level within 94 Gresley Close. Our understanding is that these rooms serve as a living space and kitchen and are located under and adjacent to a timber canopy which makes it more sensitive to light loss. Such obstructions limit the amount of light received from the sky and therefore will impact daylight levels within the room.

Image 10 - Canopy over the affected room to the rear of 94 Gresley Close

7.1.27 The NSL assessments confirm very limited changes in daylight distribution, with retained proportional values to all the rooms within these properties remaining above the BRE target.

Sunlight

7.1.28 The results of our APSH assessments show that all but one of the relevant rooms with windows within 90 degrees of due south retain good APSH levels remaining well in excess of the BRE target values. A marginal deviation is noted to affect the same room as above (R1) within 94 Gresley Close, which will fall 3% below the 25% APSH target. Again, this is due to the timber canopy which limits the amount of sunlight entering this living space.

7.2 Daylight and sunlight within the proposal

7.2.1 The daylight and sunlight amenity provided within the proposed residential accommodation has been assessed using both the Daylight Illuminance assessments following the methodology of the 2022 BRE guidance and the ADF and APSH tests of the 2011 BRE guidance.

7.2.2 Full results of the daylight and sunlight assessments within the proposed apartments, along with drawings to show the layout of rooms and windows, are attached within Appendix 3.

Daylight Illuminance (BRE 2022)

7.2.3 Under the new BRE 2022 guidelines, the recommendation is for the proposed habitable rooms to receive the following 'median' lux values to over at least 50% of the assessment points in the room for at least half of the daylight hours across the year:

- LKDs – 150 lux
- Bedrooms – 100 lux

7.2.4 Overall. the results of our daylight assessments show that 636 (76%) of the 836 habitable rooms will meet the illuminance targets for their respective room use across all of the proposed blocks. These results are summarised in the tables below.

Blocks A-H	Total no. of rooms	Meet the lux target (rooms)	Meet the lux target (%)
LKDs	314	190	61%
Bedrooms	522	446	85%
Total	**836**	**636**	**76%**

Table 1 - Summary of daylight results for the proposed accommodation

7.2.5 The majority of the LKDs that are below the recommended target level are located under balconies. The BRE guide recognises that balconies will reduce daylight to the rooms beneath them but provide the residents with valuable external space enhancing the overall quality and amenity of the apartments. There is therefore a common 'trade-off', particularly in large regeneration schemes, where a number of design factors such as the provision of well-lit private amenity space, protection from overheating and wind mitigation need to be balanced with internal daylight levels.

7.2.6 Furthermore, The LKDs are generally deep plan spaces with generous dining and kitchen areas that have been included within our assessment. Whilst the depth of the spaces reduces the level of light achieved over 50% of the assessment grid, the main living areas closest to the windows of these spaces will enjoy higher daylight levels.

7.2.7 As part of the design process eb7 has been actively involved in advising the applicant on opportunities to maximise daylight. As part of this process all of the windows

serving the LKDs within the scheme have been optimised in terms of dimensions to maximise the amount of daylight each room receives.

Results - Block A1-A4

Room	Total No. of Rooms	Rooms Meeting Target
LKDs	118	69 (59%)
Bedrooms	189	150 (80%)
Total	**307**	**219 (72%)**

Table 2 - Summary of the daylight results in Blocks A1-A4

7.2.8 The results of our Daylight Illuminance assessment indicate that 220(72%) of the 307 habitable rooms within Block A meet or exceed the BRE targets. Of the 87 rooms that do not meet the criteria, 49 of these are LKDs and 38 are bedrooms.

7.2.9 Many of the LKDs that fall below the targets face inwards into the courtyard and will be somewhat constrained by their position. They will however enjoy a pleasant aspect over the private amenity space. Of the 49 LKDs that fall below the target, 20 achieve over 75 lux to 50% of the floor area which is not considered to be a significant deviation from the target values.

7.2.10 Of the 38 bedrooms that fall below the target, 33 achieve over 50 lux to 50% of the floor area which again can be considered a moderate reduction below the BRE targets.

Results - Block B1 and B2

Room	Total No. of Rooms	Rooms Meeting Target
LKDs	44	31 (70%)
Bedrooms	86	77 (90%)
Total	**130**	**108 (83%)**

Table 3 - Summary of the daylight results in Blocks B1 and B2

7.2.11 The results of our Daylight Illuminance assessment indicate that 108 (83%) of the 130 habitable rooms within Block B1 and B2 meet or exceed the BRE targets. Of the 22 rooms that do not meet the criteria, 13 of these are LKDs and 9 are bedrooms.

7.2.12 Of the 13 LKDs that fail, 8 achieve 100 lux to 50% of the floor area which is not considered to be significant deviation from the target. Whilst all 9of the bedrooms that are below the target achieve at least 60 lux to 50% of the floor area.

Results - Block B3 and B4

Room	Total No. of Rooms	Rooms Meeting Target
LKDs	35	16 (47%)
Bedrooms	62	47 (76%)
Total	**97**	**63 (65%)**

Table 4 - Summary of the daylight results in Blocks B3 and B4

7.2.13 The results of our Daylight Illuminance assessment indicate that 63 (65%) of the 97 habitable rooms within Block B3 and B4 meet or exceed the BRE targets. Of the 34 rooms that do not meet the criteria, 19 of these are LKDs and 15 are bedrooms.

7.2.14 Of the 19 LKDs that fail, 9 achieve 100 lux to 50% of the floor area which is not considered to be a significant deviation from the target. Of the 15 bedrooms, 11 achieve at least 50 lux to 50% of the floor area.

Results - Block C and D

Room	Total No. of Rooms	Rooms Meeting Target
LKDs	20	6 (30%)
Bedrooms	34	25 (74%)
Total	**54**	**31 (57%)**

Table 5 - Summary of the daylight results in Blocks C and D

7.2.15 Within Block C and D, our results have indicated that 31 (57%) of the 54 habitable rooms will meet or exceed the BRE targets. Of the 20 rooms which fall below the targets, 14 of these are LKDs and 9 are bedrooms.

7.2.16 The 5 LKDs that fall below the targets at the ground floor level all face the internal courtyard to the north of the development site. Furthermore, as can be seen in the image below, these LKDs are deep-plan spaces with generous dining and kitchen areas that have been included in our assessment. Whilst the room as a whole will fall below the BRE target, the main living areas closest to the windows of these spaces will enjoy higher daylight levels.

Image 11 - The affected LKDs at the ground floor level within Block C and D

Results - Block E and F

Room	Total No. of Rooms	Rooms Meeting Target
LKDs	52	43 (83%)
Bedrooms	77	76 (99%)
Total	**129**	**119 (92%)**

Table 6 - Summary of the daylight results in Blocks E and F

7.2.17 The results of our Daylight Illuminance assessment indicate that 119 (92%) of the 129 habitable rooms within Block E meet or exceed the BRE targets. Of the 10 rooms that do not meet the criteria, 9 of these are LKDs and 1 is a bedroom.

7.2.18 6 of the 8 LKDs that fall below the target only marginally fall below the target and retain at least 100 lux to 50% of the floor area.

Results - Block G and H

Room	Total No. of Rooms	Rooms Meeting Target
LKDs	44	34 (77%)
Bedrooms	75	71 (95%)
Total	**119**	**105 (88%)**

Table 7 - Summary of the daylight results in Blocks G and H

7.2.19 The results of our Daylight Illuminance assessment indicate that 104 (92%) of the 119 habitable rooms within Block G meet or exceed the BRE targets. Of the 15 rooms that do not meet the criteria,11 of these are LKDs and 4 are bedrooms.

7.2.20 Of the 11 LKDs that fall below the target, 5 will achieve at least 100 lux to 50% of the floor area which is not considered to be a significant deviation from the target. The 4 bedrooms that fall below the 100 lux target are all located at ground floor level and achieve over 65 lux to 50% of the floor area. Again, this is not considered to be a significant deviation from the target.

ADF (BRE 2011)

7.2.21 Given the BRE guidelines have only very recently been published during the latter stages of the design development, we consider a comparative assessment with the ADF metric from BRE 2011 to also be useful in assessing the acceptability of the internal daylight provision.

All Blocks	Total no. of rooms	Meet the ADF target (rooms)	Meet the ADF target (%)
LKDs	313	275	88%
Bedrooms	523	518	99%
Total	**836**	**793**	**95%**

Table 8 - Summary of ADF daylight results for the proposed accommodation

7.2.22 Under the ADF assessment, our overall results show higher levels of compliance for internal daylight with a total of 793 (95%) of the 836 habitable rooms meeting the ADF recommendations for their specific room use. These targets are 1.5% for a living space and 1% for a bedroom. Again, there is a trade-off with balcony provision and other design factors but overall, a compliance rate of 88% is considered to be excellent for a scheme of this nature.

7.2.23 A breakdown of the ADF compliance levels across each individual block is provided below as a comparison and demonstrates compliance rates between 89% and 100% across all of the proposed blocks.

Block A1-A4

Block A1-A4	Total No. of Rooms	Rooms Meeting Target
LKDs	118	90 (76%)
Bedrooms	189	189 (100%
Total	**307**	**279 (91%)**

Table 9 - Summary of the ADF results within Blocks A1-A4

Block B1 and B2

Assessment Method	Total No. of Rooms	Rooms Meeting Target
LKDs	44	44 (100%)
Bedrooms	86	86 (100%)
Total	**130**	**130 (100%)**

Table 10 - Summary of the ADF results within Blocks B1 and B2

Block B3 and B4

Assessment Method	Total No. of Rooms	Rooms Meeting Target
LKDs	35	32 (91%)
Bedrooms	62	57 (92%)
Total	**97**	**89 (92%)**

Table 11 - Summary of the ADF results within Blocks B3 and B4

Block C and D

Assessment Method	Total No. of Rooms	Rooms Meeting Target
LKDs	20	16 (80%)
Bedrooms	34	32 (94%)
Total	**54**	**48 (89%)**

Table 12 - Summary of the ADF results within Blocks C and D

Block E and F

Assessment Method	Total No. of Rooms	Rooms Meeting Target
LKDs	52	51 (98%)
Bedrooms	77	77 (100%)
Total	**129**	**128 (99%)**

Table 13 - Summary of the ADF results within Blocks E and F

Block G and H

Assessment Method	Total No. of Rooms	Rooms Meeting Target
LKDs	44	42 (95%)
Bedrooms	75	75 (100%)
Total	**119**	**117 (98%)**

Table 14 - Summary of the ADF results within Blocks G and H

Sunlight Exposure (BRE 2022)

7.2.24 For sunlight to the proposed accommodation, the target is for a room, preferably a living space, to receive at least 1.5 hours of direct sunlight on the 21st of March.

7.2.25 The guidance suggests that north-facing living rooms should be minimised, and the scheme has been designed to optimise sunlight to the main living rooms providing dual / southerly aspects where possible. Notwithstanding this, the BRE guidelines acknowledges that, particularly for large, flatted developments, it may not be possible to have every main living room enjoying a southerly aspect. As such, the guidelines should be interpreted flexibly and viewed on balance with other site constraints.

7.2.26 The results of the sunlight exposure analysis can also be found in Appendix 5.

Block	Total No. of Units	No. LKDs which meet sunlight targets	No. units which meet sunlight targets
A1-A4	118	86 (72%)	87 (74%)
B1 and B2	44	40 (91%)	40 (91%)
B3 and B4	35	35 (100%)	35 (100%)
C and D	20	19 (95%)	20 (100%)
E and F	52	43 (83%)	44 (85%)
G and H	44	41 (93%)	41 (93%)
Total	**313**	**264 (84%)**	**267 (85%)**

Table 15 - Summary of the sunlight results to the proposed accommodation

7.2.27 The units which do not meet that target are generally located in the northern parts of the building and/or overhung by balconies. It is therefore very difficult for these units to meet the sunlight target.

7.2.28 Overall, 85% of the proposed units have a habitable room that will achieve at least 1.5 hours of sunlight on the 21st of March and meet the 2022 BBE targets. This is considered to be a very good level of compliance. Of the 267 units which meet the sun lightning target, 264 do so to the main living space. The remaining three units have a bedroom which will receive at least 1.5 hours of sunlight on the 21st March.

7.2.29 for a large scheme and given the deviations are localised to windows beneath balconies and thus inevitably lead to lower sunlight levels to the respective units, the future occupants will have access to sunlight from their private balconies which increases the overall quality of the apartments.

7.3 Sunlight within the proposed gardens and amenity areas

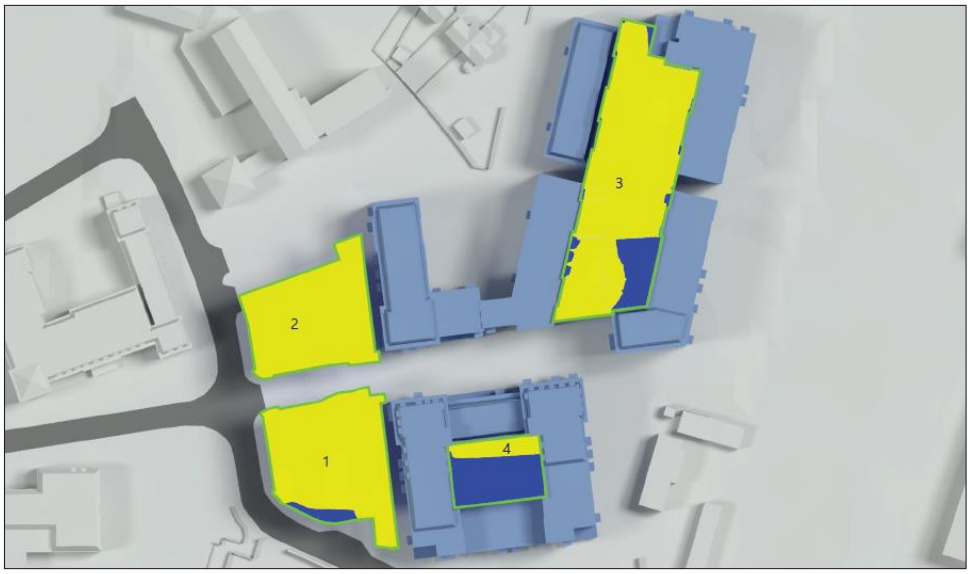
7.3.1 We have assessed the provision of sunlight to the proposed amenity / shared communal areas using the BRE's 2-hour sun on ground (sunlight amenity) assessment. This has considered the following amenity areas and opens spaces within the scheme: -

- Landscaped areas adjacent to the site entrance
- Courtyard space within Block A
- Central Amenity Space between blocks to the north

7.3.2 The results of this analysis are shown on our drawings labelled 5226-R04-SA03 within Appendix 5.

7.3.3 Overall, the results show that 86% of the overall amenity provision will achieve at least 2 hours of sunlight on the 21st of March, well above the BRE target.

7.3.4 The areas labelled 1-3 achieve direct sunlight to 88% of the space or more and are communal areas to be used by all residents of the development. The courtyard space within Block A will fall below the 50% target however residents here will have the opportunity to use the other communal areas which may enjoy more sunshine hours. This gives residents a choice between well sunlit and shaded areas.

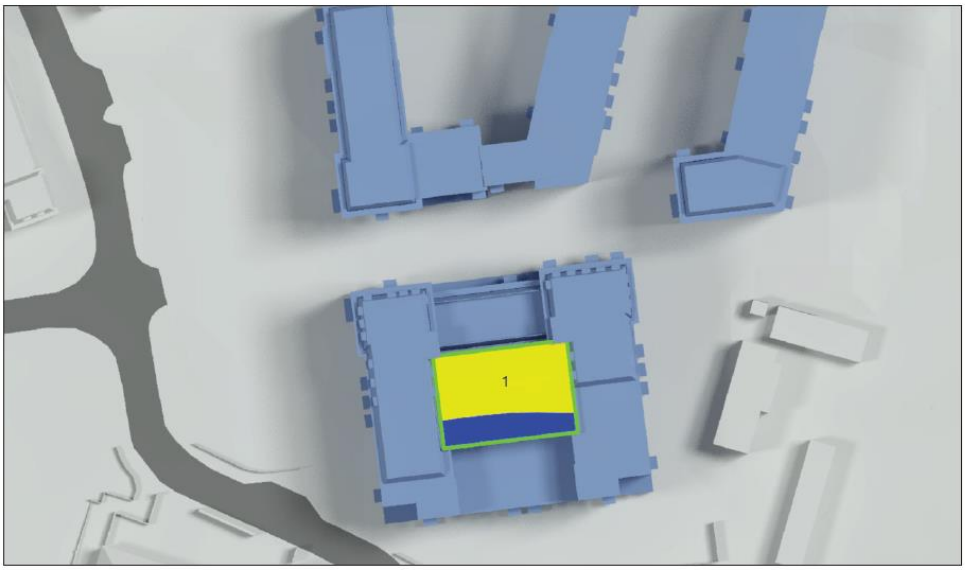


Area	Total Area (sq.m)	Area more than 2 hours (sq.m)	Area % more than 2 hours
1 - Ground	1238.90	1182.01	95.0
2 - Ground	1059.19	1059.19	100.0
3 - Ground	2037.32	1798.56	88.0
4- First	486.07	126.38	26.0
Total	4821.47	4166.15	86.0

Image 12 - Sunlight Amenity, site-wide March 21st

7.3.5 We have also considered the sunlight levels to the courtyard on June 21st in order to illustrate how the area performs during the warmer months when the space would

be used more regularly. The results of this assessment confirm that the courtyard space will enjoy at least 2 hours of sunlight on the 21st to 73% of the area affording residents the opportunity to enjoy private, well sunlight amenity space in the summer. This is shown in the image below:



Area	Total Area (sq.m)	Area more than 2 hours (sq.m)	Area % more than 2 hours
1 - First	486.07	353.81	73

Image 13 - Sunlight Amenity, courtyard June 21st

7.4 Planning Precedents

7.4.1 We have identified two local typologies where similar retained levels have been accepted in Welwyn Hatfield Borough Council.

BioPark, Broadwater Road

(REF: 6/2020/3420/MAJ)

7.4.2 This planning application involved the demolition of the existing buildings and the construction of 289 residential units. Whilst it was refused in December 2020, following a recent appeal decision in July 2022, planning permission has now been granted.

Internal Amenity

7.4.3 In Anstey Horne's detailed internal Daylight and Sunlight report, they have used the ADF metric from BRE 2011. Their results indicate that 422 (93%) of the 455 habitable rooms tested would meet or exceed the BRE guidelines.

7.4.4 This is very similar to the ADF results in this report, where we are recording a 94% ADF compliance rate within the proposed development at Campus East.

Former Shredded Wheat Factory Broadwater Road

(REF: 6/2021/0671/MAJ)

7.4.5 This planning application involved the construction of 317 dwellings with associated access, parking landscaping and other supporting infrastructure. The site is located at South Side, Broadwater Road, to the south of the proposed development at Campus East car park.

Internal Amenity

7.4.6 The GIA report indicates that the proposed development would lead to transgressions of the BRE guidance to a number of windows on the lowest floors within the proposal, with the most sensitive areas facing internal courtyards. Overall, 89.4% of all the rooms within this proposal meet or exceed the recommended ADF levels.

7.4.7 Again this application was assessed against the 2011 ADF assessment. Against this metric the Campus East proposals achieve 94% compliance and thus exceed the levels achieve in respect of this comparative application.

8 Conclusions

8.1.1 This practice has undertaken a detailed assessment of the potential daylight and sunlight effects of the proposed development at Campus East car park on the key neighbouring properties.

8.2 Daylight and sunlight impact to neighbouring properties

8.2.1 Our assessments have been undertaken using the VSC and NSL (daylight) and APSH (sunlight) tests set out within the BRE guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (2022). It is important to reiterate that alterations in daylight and sunlight to adjoining properties are often inevitable when undertaking any meaningful development, especially in an urban environment. Therefore, the BRE guide is meant to be interpreted flexibly because natural lighting is only one of many factors in site layout design. Indeed, the guidelines suggest that different criteria may be used based upon the requirements for natural lighting in an area viewed against other constraints.

8.2.2 The results of these tests have shown that, whilst there will be some reductions to individual windows, the amount of daylight received to almost all of the neighbouring habitable rooms will remain very high and in excess of the BRE criteria. The single deviation from the targets affects the ground floor rooms which sits beneath a large wooden canopy thus limiting light from the sky. The assessment of sunlight to neighbouring windows has also shown a very high level of compliance with the BRE criteria.

8.3 Daylight and sunlight within the proposed residential units

8.3.1 The assessment of daylight within the proposed residential units has shown that the majority of rooms receive good levels in excess of the relevant 2022 BRE targets. The Daylight Illuminance assessments have indicated that 76% of the proposed habitable rooms will meet or exceed the 2022 BRE targets. This is a high level of compliance against the recently introduced targets and reflects the high quality of the design. Where units fall below this level, they are deeper spaces with windows overhung by balconies that provide private amenity space.

8.3.2 When compared against the BRE 2011 Average Daylight Factor test, our comparative assessment shows a compliance rate of 95% which is considered to be excellent for a scheme of this nature.

8.3.3 Whilst direct sunlight levels are more orientation specific, 85% of the units have a habitable room that will achieve at least 1.5 hours of sunlight on the 21st of March and meet the 2022 BBE targets. Again, this is considered to be a very good level of compliance.

8.3.4 Overall, our daylight and sunlight results within the proposed residential units

indicate a high level of overall compliance and indicate that through careful design and optimising the site use the scheme will deliver high-quality accommodation with very good levels of internal amenity.

8.4 Sunlight amenity to the proposed amenity areas

8.4.1 The assessment of sunlight to the proposed amenity areas has shown that the majority of the shared communal areas will meet the BRE recommendations achieving at least 2 hours sunlight on the 21st of March. Whilst the courtyard serving Block A will fall below the target in March, it will enjoy 2 hours of sunlight to well over 50% of the space on 21st June when the space will be enjoyed more regularly.

8.4.2 Overall, the scheme responds very well to its surroundings and neighbouring properties. The results of the daylight assessments also indicate a very good level of compliance against both the 2022 and 2011 BRE guidance both in terms of the provision of high-quality spaces for future residents. The level of internal compliance under the Average Daylight Factor metric is similar of higher than those deemed satisfactory in recent applications of a similar scale within the borough and overall, the amenity effects of the scheme are considered to be fully acceptable.

Appendix 1

Drawings of the existing, proposed and surrounding buildings

4th Floor, Holborn Tower
137-144 High Holborn
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Sources of information

WYG Group Ltd
A115249 WYG001 - WYG007 - WGC Topographic Survey.dwg
Received 15/09/2021

Saunders Architecture+Urban Design
8375_Block Plans.dwg
8375_Blocks Elevations.dwg
Received 27/10/2022

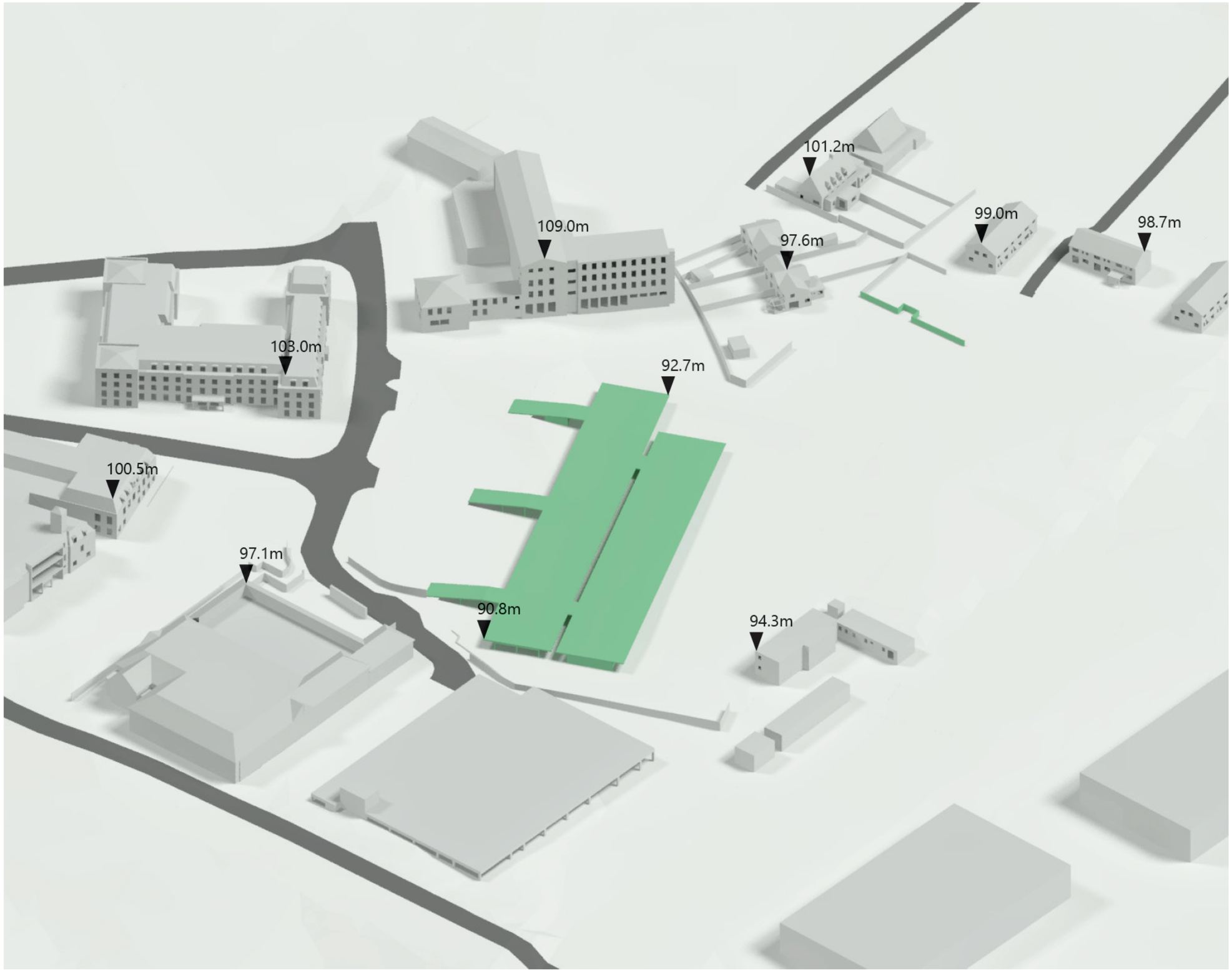
EB7 Ltd
Site Photographs
Ordnance Survey

Key:

Existing

NORTH

Project	Campus East, Welwyn Garden City
Title	Existing Condition Plan View
Drawn	MZ
Checked	--
Date	02/11/2022
Project	5163
Rel no.	08
Prefix	DS01
Page no.	01



Notes: All heights and dimensions are in AOD

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Key:

Existing

Project: Campus East, Welwyn Garden City

Title: Existing Condition 3D View

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Date	02/11/2022	Project	5163
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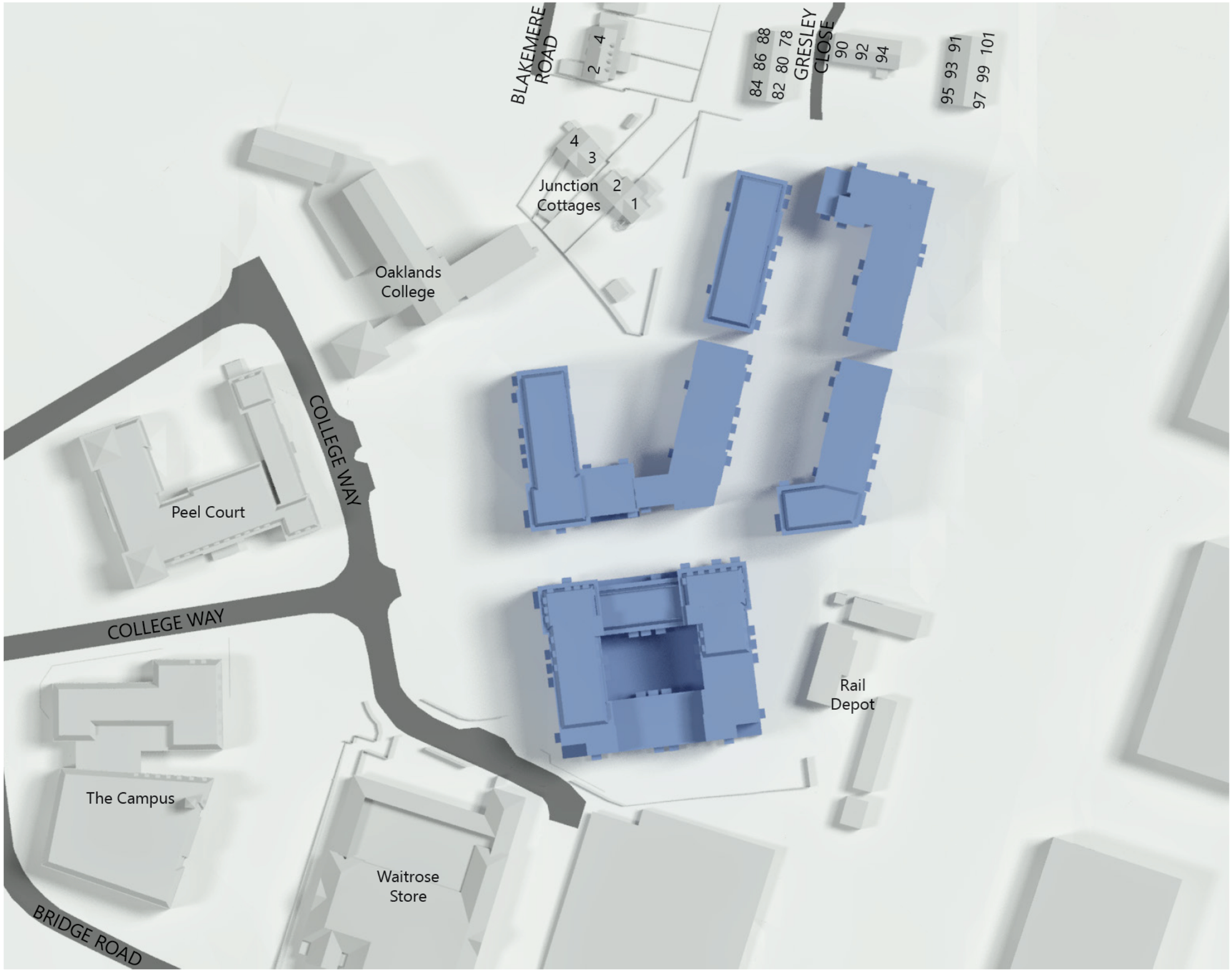

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Ordnance Survey

Key:

Proposed

NORTH

Project: Campus East, Welwyn Garden City

Title: Proposed Development Plan View

Drawn	Checked
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Date	Project
02/11/2022	5163
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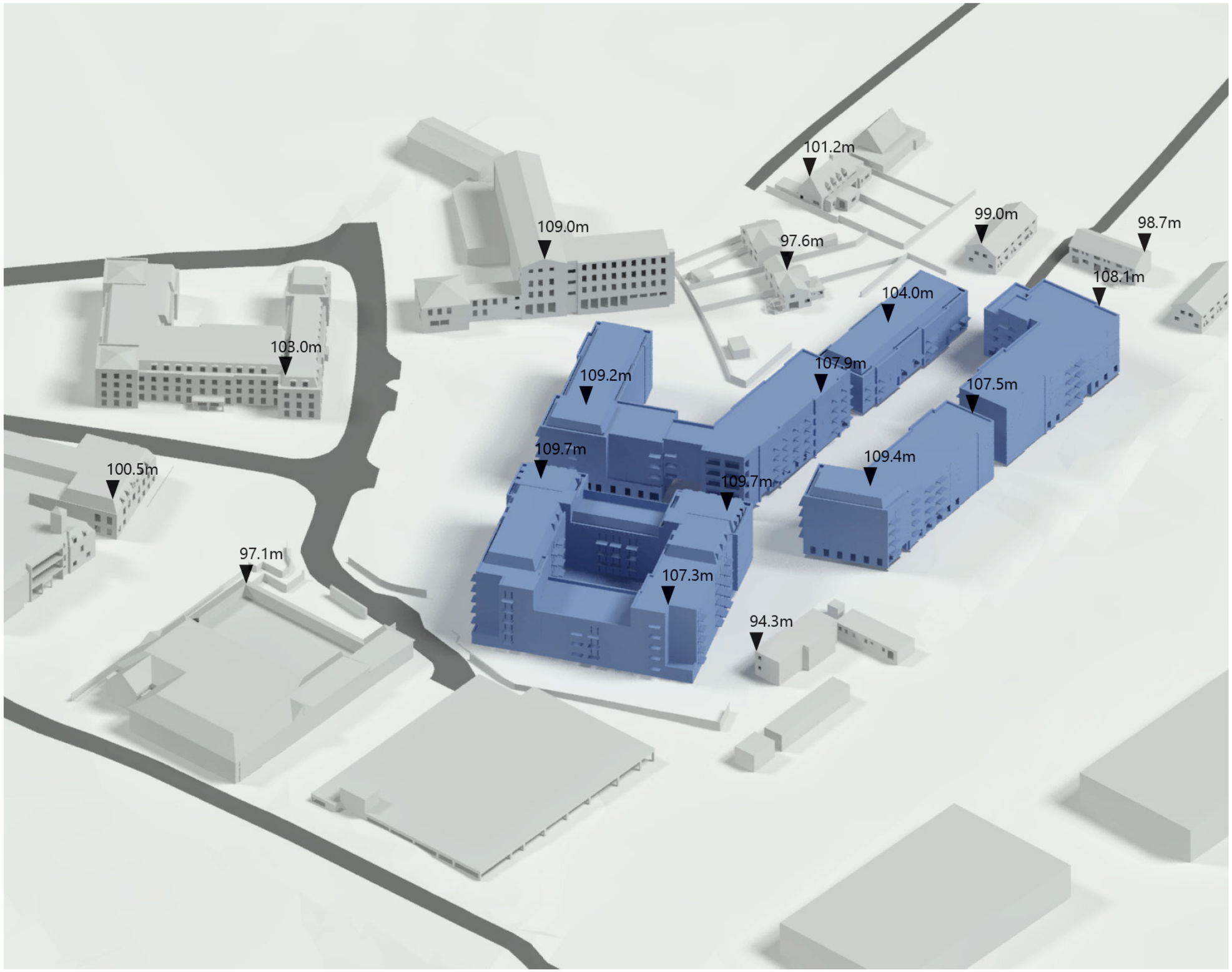

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Key:

Proposed

Project: Campus East, Welwyn Garden City

Title: Proposed Development 3D View

Drawn	MZ	Checked	--
Date	02/11/2022	Project	5163

Rel no.	Prefix	Page no.
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Appendix 2

Detailed results of the daylight and sunlight assessments within neighbouring properties

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Peel Court																		
Ground	R1	W1-L	Living Room	37.9	37.9	1.00												
		W1-U																
		W2-L		33.7	33.2	0.99												
		W2-U																
		W3-L		34.0	33.5	0.99												
		W3-U					26.6	26.5	99%	26.5	99%	1.00	97	28	97	28	1.00	1.00
Ground	R2	W4-L	Kitchen	34.4	33.9	0.99												
		W4-U					7.8	7.5	96%	7.5	96%	1.00	83	26	83	26	1.00	1.00
Ground	R3	W5-L	Hallway	22.9	22.4	0.98												
		W5-U					10.6	9.6	91%	9.6	91%	1.00	47	13	47	13	1.00	1.00
Ground	R4	W6-L	Kitchen	32.1	31.6	0.98												
		W6-U					9.7	9.5	98%	9.5	98%	1.00	67	23	67	23	1.00	1.00
Ground	R5	W7-L	Living Room	34.4	33.9	0.98												
		W7-U					18.1	17.8	99%	17.8	99%	1.00	73	26	73	26	1.00	1.00
Ground	R6	W8-L	Bedroom	34.0	33.5	0.99												
		W8-U					14.6	14.1	97%	14.1	97%	1.00	75	28	75	28	1.00	1.00
Ground	R7	W9-L	Bedroom	28.4	27.9	0.98												
		W9-U					16.5	16.3	99%	16.3	99%	1.00	60	26	60	26	1.00	1.00
Ground	R8	W10-L	Living Room	13.8	13.4	0.97												
		W10-U																
		W11-L		14.2	13.8	0.97												
		W11-U																
		W12-L		29.3	28.5	0.97												
		W12-U																
		W13-L		34.8	34.0	0.98												
		W13-U																
		W14-L		34.9	34.3	0.98												
		W14-U																
		W15-L		31.2	31.1	1.00												
		W15-U					129.0	128.1	99%	128.1	99%	1.00	79	28	78	27	0.99	0.96

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Ground	R9	W16-L	Stairwell	21.8	21.8	1.00												
		W16-U					15.9	14.9	94%	14.9	94%	1.00	49	21	49	21	1.00	1.00
Ground	R10	W17-L	Kitchen	38.3	36.9	0.96												
		W17-U					8.4	8.2	98%	8.2	98%	1.00	84	27	81	25	0.96	0.93
Ground	R11	W18-L	Living Room	38.4	36.9	0.96												
		W18-U																
		W19-L		38.4	36.8	0.96												
		W19-U																
		W20-L		38.0	33.8	0.89												
		W20-U					25.0	24.9	100%	24.9	100%	1.00	86	28	82	26	0.95	0.93
Ground	R12	W21-L	Bedroom	37.9	33.8	0.89												
		W21-U					12.8	12.7	99%	12.3	96%	0.97	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R13	W22-L	Bedroom	37.7	33.7	0.89												
		W22-U					15.9	15.7	99%	15.3	97%	0.98	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R14	W23-L	Kitchen	35.8	32.0	0.89												
		W23-U					8.8	8.7	99%	8.7	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R15	W24-L	Living Room	36.5	32.8	0.90												
		W24-U					17.9	17.4	97%	17.4	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R16	W25-L	Bedroom	37.1	33.6	0.91												
		W25-U					16.2	16.1	99%	15.9	98%	0.99	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R17	W26-L	Bedroom	34.5	31.2	0.90												
		W26-U					16.4	16.3	99%	16.0	98%	0.99	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R18	W27-L	Living Room	36.9	33.6	0.91												
		W27-U					22.1	22.0	99%	20.7	94%	0.94	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R19	W28-L	Kitchen	33.6	30.9	0.92												
		W28-U					9.5	9.4	99%	9.4	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R20	W29-L	Kitchen	36.4	33.5	0.92												
		W29-U					9.6	9.6	99%	9.6	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Ground	R21	W30-L	Living Room	35.1	32.3	0.92												
		W30-U					18.1	17.5	97%	17.5	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R22	W31-L	Bedroom	33.9	31.4	0.93												
		W31-U					15.5	15.0	97%	15.0	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R23	W32-L	Stairwell	34.6	32.3	0.94												
		W32-U					12.6	10.2	81%	10.2	81%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R24	W33-L	Storage	34.1	32.1	0.94												
		W33-U																
		W34-L		33.5	31.9	0.95												
		W34-U																
		W35-L		33.8	33.8	1.00												
		W35-U					63.3	59.9	95%	59.1	93%	0.99	86	20	84	18	0.98	0.90
First	R1	W1-L	Living Room	38.6	38.6	1.00												
		W1-U																
		W2-L		36.0	35.7	0.99												
		W2-U																
		W3-L		36.3	35.8	0.99												
		W3-U					26.6	26.4	99%	26.4	99%	1.00	99	30	99	30	1.00	1.00
First	R2	W4-L	Kitchen	36.5	36.1	0.99												
		W4-U					7.8	7.5	96%	7.5	96%	1.00	86	29	86	29	1.00	1.00
First	R3	W5-L	Hallway	23.9	23.5	0.98												
		W5-U					10.6	9.6	91%	9.6	91%	1.00	48	14	48	14	1.00	1.00
First	R4	W6-L	Kitchen	33.9	33.5	0.99												
		W6-U					9.7	9.5	98%	9.5	98%	1.00	67	23	67	23	1.00	1.00
First	R5	W7-L	Living Room	36.4	35.8	0.99												
		W7-U					18.1	17.8	99%	17.8	99%	1.00	76	26	76	26	1.00	1.00
First	R6	W8-L	Bedroom	36.3	35.8	0.99												
		W8-U					14.6	14.1	97%	14.1	97%	1.00	78	28	78	28	1.00	1.00
First	R7	W9-L	Bedroom	37.8	37.2	0.98												
		W9-U					16.5	16.3	99%	16.3	99%	1.00	83	28	83	28	1.00	1.00

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
First	R8	W10-L	Kitchen	38.0	37.4	0.98												
		W10-U					10.1	10.1	100%	10.1	100%	1.00	82	28	82	28	1.00	1.00
First	R9	W11-L	Living Room	38.1	37.4	0.98												
		W11-U					18.6	18.3	99%	18.3	99%	1.00	81	28	81	28	1.00	1.00
First	R10	W12-L	Bedroom	38.1	37.5	0.98												
		W12-U					16.8	16.6	99%	16.6	99%	1.00	81	28	81	28	1.00	1.00
First	R11	W13-L	Bedroom	36.6	35.9	0.98												
		W13-U					15.7	15.5	99%	15.5	99%	1.00	73	27	73	27	1.00	1.00
First	R12	W14-L	Living Room	36.5	36.0	0.99												
		W14-U					18.8	18.5	98%	18.5	98%	1.00	74	28	74	28	1.00	1.00
First	R13	W15-L	Kitchen	33.1	33.0	1.00												
		W15-U					9.2	9.1	99%	9.1	99%	1.00	65	26	64	25	0.98	0.96
First	R14	W16-L	Stairwell	22.8	22.8	1.00												
		W16-U					15.9	15.4	97%	15.4	97%	1.00	52	22	52	22	1.00	1.00
First	R15	W17-L	Kitchen	38.9	37.7	0.97												
		W17-U					8.9	8.7	98%	8.7	98%	1.00	86	29	84	27	0.98	0.93
First	R16	W18-L	Living Room	38.9	37.7	0.97												
		W18-U																
		W19-L		39.0	37.6	0.97												
		W19-U																
		W20-L		38.4	34.9	0.91												
		W20-U					24.4	24.4	100%	24.4	100%	1.00	87	29	84	27	0.97	0.93
First	R17	W21-L	Bedroom	38.3	34.9	0.91												
		W21-U					12.9	12.7	99%	12.7	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R18	W22-L	Bedroom	38.2	34.9	0.91												
		W22-U					14.0	13.8	98%	13.8	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R19	W23-L	Kitchen	36.4	33.3	0.91												
		W23-U					8.8	8.7	99%	8.7	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
First	R20	W24-L W24-U	Living Room	37.2	34.2	0.92	17.9	17.4	97%	17.4	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R21	W25-L W25-U	Bedroom	37.9	34.9	0.92	16.2	16.1	99%	16.1	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R22	W26-L W26-U	Bedroom	37.7	34.9	0.93	16.4	16.3	99%	16.3	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R23	W27-L W27-U	Living Room	37.6	34.9	0.93	19.7	19.5	99%	19.3	98%	0.99	N/F	N/F	N/F	N/F	N/F	N/F
First	R24	W28-L W28-U	Kitchen	37.5	34.9	0.93	9.5	9.4	99%	9.4	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R25	W29-L W29-U	Kitchen	37.3	34.9	0.93	9.6	9.6	100%	9.6	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R26	W30-L W30-U	Living Room	36.1	33.8	0.94	18.1	17.7	98%	17.7	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R27	W31-L W31-U	Bedroom	35.0	32.9	0.94	15.5	15.2	99%	15.2	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R28	W32-L W32-U	Stairwell	35.9	34.1	0.95	16.3	13.0	80%	13.0	80%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R29	W33-L W33-U	Bedroom	35.5	33.8	0.95	16.4	15.9	97%	15.9	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R30	W34-L W34-U	Living Room	35.1	33.7	0.96												
		W35-L W35-U		37.9	37.9	1.00												
		W36-L W36-U		38.1	38.1	1.00	25.2	25.1	100%	25.1	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R1	W1-L W1-U	Living Room	39.3	39.3	1.00												

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
		W2-L		38.3	38.0	0.99												
		W2-U																
		W3-L		38.4	38.1	0.99												
		W3-U					26.6	26.4	99%	26.4	99%	1.00	99	30	99	30	1.00	1.00
Second	R2	W4-L	Kitchen	38.5	38.1	0.99												
		W4-U					7.8	7.5	96%	7.5	96%	1.00	86	29	86	29	1.00	1.00
Second	R3	W5-L	Hallway	24.8	24.5	0.99												
		W5-U					10.6	9.6	91%	9.6	91%	1.00	48	14	48	14	1.00	1.00
Second	R4	W6-L	Kitchen	35.7	35.3	0.99												
		W6-U					9.7	9.5	98%	9.5	98%	1.00	69	23	69	23	1.00	1.00
Second	R5	W7-L	Living Room	38.0	37.6	0.99												
		W7-U					18.1	17.8	99%	17.8	99%	1.00	80	26	80	26	1.00	1.00
Second	R6	W8-L	Bedroom	37.6	37.3	0.99												
		W8-U					14.6	14.1	97%	14.1	97%	1.00	80	28	80	28	1.00	1.00
Second	R7	W9-L	Bedroom	38.9	38.4	0.99												
		W9-U					16.5	16.3	99%	16.3	99%	1.00	84	28	84	28	1.00	1.00
Second	R8	W10-L	Kitchen	39.0	38.5	0.99												
		W10-U					10.1	10.1	100%	10.1	100%	1.00	85	28	85	28	1.00	1.00
Second	R9	W11-L	Living Room	39.0	38.5	0.99												
		W11-U					18.6	18.3	99%	18.3	99%	1.00	85	28	85	28	1.00	1.00
Second	R10	W12-L	Bedroom	39.0	38.5	0.99												
		W12-U					16.8	16.6	99%	16.6	99%	1.00	84	29	84	29	1.00	1.00
Second	R11	W13-L	Bedroom	37.8	37.2	0.99												
		W13-U					15.7	15.5	99%	15.5	99%	1.00	73	27	73	27	1.00	1.00
Second	R12	W14-L	Living Room	38.1	37.7	0.99												
		W14-U					18.8	18.5	98%	18.5	98%	1.00	80	28	80	28	1.00	1.00
Second	R13	W15-L	Kitchen	35.8	35.8	1.00												
		W15-U					9.2	9.1	99%	9.1	99%	1.00	72	26	72	26	1.00	1.00

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Second	R14	W16-L	Stairwell	25.8	25.8	1.00												
		W16-U					15.9	15.7	99%	15.7	99%	1.00	57	23	57	23	1.00	1.00
Second	R15	W17-L	Kitchen	39.4	38.5	0.98												
		W17-U					8.9	8.7	98%	8.7	98%	1.00	86	29	86	29	1.00	1.00
Second	R16	W18-L	Living Room	39.4	38.4	0.98												
		W18-U																
		W19-L		39.4	38.4	0.97												
		W19-U																
		W20-L		38.8	36.1	0.93												
		W20-U					24.4	24.4	100%	24.4	100%	1.00	87	29	85	28	0.98	0.97
Second	R17	W21-L	Bedroom	38.7	36.0	0.93												
		W21-U					12.9	12.7	99%	12.7	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R18	W22-L	Bedroom	38.7	36.0	0.93												
		W22-U					15.1	14.9	99%	14.9	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R19	W23-L	Bedroom	34.1	32.0	0.94												
		W23-U					11.2	10.8	97%	10.8	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R20	W24-L	Bedroom	38.1	35.8	0.94												
		W24-U					12.9	12.5	97%	12.5	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R21	W25-L	Kitchen	38.3	36.1	0.94												
		W25-U					7.4	7.3	98%	7.3	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R22	W26-L	Living Room	38.3	36.1	0.94												
		W26-U					18.8	18.2	97%	18.2	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R23	W27-L	Bedroom	38.2	36.1	0.95												
		W27-U					13.1	12.8	98%	12.8	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R24	W28-L	Bathroom	38.1	36.1	0.95												
		W28-U					8.1	7.8	96%	7.8	96%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R25	W29-L	Bedroom	37.9	36.0	0.95												
		W29-U					9.6	9.4	97%	9.4	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Second	R26	W30-L	Kitchen	37.5	35.7	0.95												
		W30-U					7.4	7.3	99%	7.3	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R27	W31-L	Living Room	33.5	31.8	0.95												
		W31-U					18.5	17.0	92%	17.0	92%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R28	W32-L	Stairwell	37.2	35.7	0.96												
		W32-U					15.3	14.6	96%	14.6	96%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R29	W33-L	Bedroom	36.9	35.5	0.96												
		W33-U					16.4	16.1	98%	16.1	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Second	R30	W34-L	Living Room	36.6	35.4	0.97												
		W34-U																
		W35-L		38.4	38.4	1.00												
		W35-U																
		W36-L		38.6	38.6	1.00												
		W36-U					25.2	25.1	100%	25.1	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Third	R1	W1-L	Living Room	39.6	39.6	1.00												
		W1-U																
		W2-L		39.5	39.3	0.99												
		W2-U																
		W3-L		39.5	39.3	0.99												
		W3-U					26.6	26.4	99%	26.4	99%	1.00	99	30	99	30	1.00	1.00
Third	R2	W4-L	Kitchen	39.6	39.3	0.99												
		W4-U					7.8	7.5	96%	7.5	96%	1.00	86	29	86	29	1.00	1.00
Third	R3	W5-L	Kitchen	37.3	37.0	0.99												
		W5-U					7.1	6.8	95%	6.8	95%	1.00	78	23	78	23	1.00	1.00
Third	R4	W6-L	Living Room	39.0	38.7	0.99												
		W6-U					14.7	14.3	97%	14.3	97%	1.00	84	27	84	27	1.00	1.00
Third	R5	W7-L	Bedroom	39.4	39.0	0.99												
		W7-U					12.6	12.3	97%	12.3	97%	1.00	85	28	85	28	1.00	1.00
Third	R6	W8-L	Bedroom	39.5	39.1	0.99												

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
		W8-U					12.6	12.4	98%	12.4	98%	1.00	86	29	86	29	1.00	1.00
Third	R7	W9-L	Kitchen	39.5	39.1	0.99												
		W9-U					7.0	6.8	98%	6.8	98%	1.00	86	29	86	29	1.00	1.00
Third	R8	W10-L	Living Room	39.5	39.1	0.99												
		W10-U					15.1	14.6	97%	14.6	97%	1.00	86	29	86	29	1.00	1.00
Third	R9	W11-L	Bedroom	39.5	39.1	0.99												
		W11-U					12.6	12.3	98%	12.3	98%	1.00	86	29	86	29	1.00	1.00
Third	R10	W12-L	Bedroom	39.4	39.0	0.99												
		W12-U					12.6	12.4	98%	12.4	98%	1.00	86	29	86	29	1.00	1.00
Third	R11	W13-L	Living Room	39.2	38.8	0.99												
		W13-U					18.5	18.2	98%	18.2	98%	1.00	86	29	86	29	1.00	1.00
Third	R12	W14-L	Circulation	38.5	38.3	0.99												
		W14-U																
		W19-L		35.3	34.5	0.98												
		W19-U					22.7	22.4	99%	22.4	99%	1.00	87	29	87	29	1.00	1.00
Third	R13	W20-L	Bathroom	37.7	36.7	0.97												
		W20-U					6.9	6.7	97%	6.7	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Third	R14	W15-L	Kitchen	39.6	38.9	0.98												
		W15-U					8.9	8.4	94%	8.4	94%	1.00	86	29	86	29	1.00	1.00
Third	R15	W16-L	Living Room	39.6	38.9	0.98												
		W16-U																
		W17-L		39.0	37.1	0.95												
		W17-U					22.6	22.3	99%	22.3	99%	1.00	87	29	86	29	0.99	1.00
Third	R16	W18-L	Bedroom	39.0	37.1	0.95												
		W18-U					11.3	10.7	94%	10.7	94%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Third	R17	W21-L	Bedroom	38.0	36.9	0.97												
		W21-U					8.8	8.3	94%	8.3	94%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Third	R18	W22-L	LKD	37.9	36.8	0.97												

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
		W22-U																
		W23-L		39.0	39.0	1.00												
		W23-U																
		W24-L		39.0	39.0	1.00												
		W24-U					23.2	22.8	98%	22.8	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Oaklands College																		
Ground	R1	W1	School	33.6	33.6	1.00												
		W2		38.3	34.4	0.90												
		W3		38.4	34.3	0.89	42.1	42.0	100%	42.0	100%	1.00	95	26	91	23	0.96	0.88
Ground	R2	W4-L	School	30.9	26.2	0.85												
		W4-U																
		W5-L		36.6	31.7	0.87												
		W5-U																
		W7-L		21.6	21.6	1.00												
		W7-U																
		W8-L		25.5	25.5	1.00												
		W8-U																
		W9-L		22.6	22.6	1.00												
		W9-U					48.4	48.4	100%	48.4	100%	1.00	78	21	74	18	0.95	0.86
Ground	R3	W6	Bathroom	33.2	28.4	0.85	1.7	1.2	72%	1.2	72%	1.00	69	26	65	23	0.94	0.88
Ground	R4	W10-L	School	39.1	33.2	0.85												
		W10-U																
		W11-L		39.1	32.9	0.84												
		W11-U																
		W12-L		39.1	32.7	0.84												
		W12-U					54.5	54.4	100%	54.4	100%	1.00	81	27	78	24	0.96	0.89
Ground	R5	W13-L	School	39.2	32.3	0.82												
		W13-U																
		W14-L		39.2	32.2	0.82												
		W14-U																
		W30-L		26.7	26.7	1.00												
		W30-U																
		W31		27.4	27.4	1.00												
		W32-L		23.6	23.6	1.00												

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
		W32-U																
		W33		24.0	24.0	1.00	44.2	44.2	100%	44.2	100%	1.00	81	27	75	21	0.93	0.78
Ground	R6	W15-L	School	39.2	32.2	0.82												
		W15-U																
		W16-L		39.3	32.2	0.82												
		W16-U																
		W26-L		30.9	30.9	1.00												
		W26-U																
		W27		31.9	31.9	1.00												
		W28-L		29.1	29.1	1.00												
		W28-U																
		W29		30.0	30.0	1.00	44.5	44.5	100%	44.5	100%	1.00	81	27	76	22	0.94	0.81
Ground	R7	W17-L	School	39.3	32.2	0.82												
		W17-U																
		W18		39.4	32.8	0.83												
		W19		39.4	32.8	0.83												
		W20		39.4	32.8	0.83												
		W21		39.4	32.8	0.83												
		W22		33.9	33.9	1.00												
		W23		34.6	34.6	1.00												
		W24-L		32.5	32.5	1.00												
		W24-U																
		W25		33.4	33.4	1.00	99.9	98.5	99%	98.5	99%	1.00	85	28	82	25	0.96	0.89
First	R1	W1	School	35.0	35.0	1.00												
		W2		35.5	35.5	1.00												
		W3		35.8	35.8	1.00												
		W4		35.6	35.6	1.00												
		W5		35.5	35.5	1.00												
		W6		35.5	35.5	1.00												
		W7		38.0	35.1	0.92												
		W8		38.1	35.0	0.92	58.8	58.8	100%	58.8	100%	1.00	99	29	97	27	0.98	0.93
First	R2	W9	School	38.1	34.9	0.91	9.3	6.7	71%	6.7	71%	1.00	78	27	76	25	0.97	0.93
First	R3	W10-L	School	32.5	28.8	0.89												
		W10-U																
		W11-L		37.9	34.0	0.90												

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
		W11-U																
		W17-L		28.9	28.9	1.00												
		W17-U																
		W18-L		25.2	25.2	1.00												
		W18-U					28.7	28.7	100%	28.7	100%	1.00	88	23	84	20	0.95	0.87
First	R4	W12-L	School	38.7	34.7	0.90												
		W12-U																
		W13-L		38.7	34.4	0.89												
		W13-U																
		W15-L		24.9	24.9	1.00												
		W15-U																
		W16-L		27.7	27.7	1.00												
		W16-U					30.3	30.3	100%	30.3	100%	1.00	96	27	93	24	0.97	0.89
First	R5	W14	School	33.6	29.8	0.89	1.7	1.4	81%	1.4	81%	1.00	70	27	67	24	0.96	0.89
First	R6	W19	School	39.5	35.4	0.90												
		W20		39.5	35.2	0.89												
		W21		39.5	35.1	0.89												
		W37		38.3	38.2	1.00												
		W38		38.1	38.1	1.00												
		W39		37.3	37.3	1.00	54.5	54.4	100%	54.4	100%	1.00	100	30	98	28	0.98	0.93
First	R7	W22-L	Stairwell	30.1	25.3	0.84												
		W22-U					18.1	17.3	96%	5.2	29%	0.30	52	20	48	16	0.92	0.80
First	R8	W23	School	39.5	34.8	0.88												
		W24		39.5	34.8	0.88												
		W25		39.5	34.8	0.88												
		W26		39.5	34.8	0.88	70.1	69.7	99%	69.7	99%	1.00	82	28	80	26	0.98	0.93
First	R9	W27	School	39.5	34.8	0.88	8.5	8.2	97%	8.2	97%	1.00	82	28	77	23	0.94	0.82
First	R10	W28	School	39.6	34.8	0.88												
		W29		39.6	34.8	0.88												
		W30		39.6	34.8	0.88												
		W31		39.6	34.9	0.88												
		W32		37.5	37.5	1.00												
		W33		37.1	37.1	1.00												

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
		W34		36.6	36.6	1.00												
		W35		35.9	35.9	1.00												
		W36		35.0	35.0	1.00	110.9	110.9	100%	110.9	100%	1.00	95	28	92	25	0.97	0.89
Second	R1	W1	School	39.1	39.1	1.00												
		W2		39.1	39.0	1.00												
		W3		38.4	38.4	1.00												
		W4		39.6	36.9	0.93												
		W5		39.6	36.8	0.93	44.6	44.5	100%	44.5	100%	1.00	100	30	98	28	0.98	0.93
Second	R2	W6	School	39.6	36.7	0.93	9.1	9.1	100%	9.1	100%	1.00	82	28	81	27	0.99	0.96
Second	R3	W7-L	Stairwell	30.2	26.8	0.89												
		W7-U					18.1	15.6	86%	5.5	31%	0.36	52	20	51	19	0.98	0.95
Second	R4	W8	School	39.6	36.6	0.92												
		W9		39.6	36.6	0.92												
		W10		39.6	36.6	0.92												
		W11		39.6	36.6	0.92	76.0	75.6	99%	75.6	99%	1.00	82	28	82	28	1.00	1.00
Second	R5	W12	School	39.6	36.6	0.93												
		W13		39.6	36.6	0.93	30.8	30.7	100%	30.7	100%	1.00	82	28	82	28	1.00	1.00
Second	R6	W14	School	39.6	36.6	0.93												
		W15		39.6	36.7	0.93												
		W16		39.6	36.7	0.93												
		W17		38.3	38.3	1.00												
		W18		38.1	38.1	1.00												
		W19		37.8	37.8	1.00	73.7	73.7	100%	73.7	100%	1.00	97	28	97	28	1.00	1.00
Third	R1	W1	School	36.2	36.2	1.00												
		W2		36.2	36.2	1.00												
		W3		35.8	35.8	1.00												
		W4		39.6	38.5	0.97												
		W5		39.6	38.4	0.97												
		W6		39.6	38.4	0.97	55.1	55.0	100%	55.0	100%	1.00	100	30	99	29	0.99	0.97
Third	R2	W7-L	Stairwell	30.6	28.7	0.94												
		W7-U					18.1	14.1	78%	6.3	35%	0.45	52	20	51	19	0.98	0.95

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Third	R3	W8	School	39.6	38.2	0.96												
		W9		39.6	38.2	0.96												
		W10		39.6	38.2	0.96												
		W11		39.6	38.3	0.97												
		W12		39.6	38.3	0.97												
		W13		39.6	38.3	0.97												
		W14		39.6	38.3	0.97												
		W15		39.6	38.3	0.97												
		W16		39.6	38.3	0.97												
		W17		39.3	39.1	0.99												
		W18		39.5	39.3	0.99												
		W19		39.0	39.0	1.00												
		W20		38.9	38.9	1.00												
		W21		38.7	38.7	1.00												
		W22		38.7	38.7	1.00												
		W23		38.5	38.5	1.00												
		W24		38.1	38.1	1.00												
		W25		37.7	37.7	1.00												
		W26		36.6	36.6	1.00												
		W27		30.0	30.0	1.00	205.9	205.6	100%	205.6	100%	1.00	99	29	99	29	1.00	1.00
1 Junction Cottages																		
Ground	R1	W2-L	Living Room	20.2	20.2	1.00												
		W2-U																
		W3-L		31.4	30.6	0.98												
		W3-U																
		W4-L		34.3	30.7	0.89												
		W4-U																
		W5-L		38.1	30.1	0.79												
		W5-U																
		W6-L		39.0	28.3	0.73												
		W6-U																
		W7-L		38.8	27.9	0.72												
		W7-U																
		W8-L		39.1	28.1	0.72												
		W8-U																
		W9		69.0	68.9	1.00												
		W10		85.1	84.4	0.99												
		W11		87.5	84.8	0.97												

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
		W12		90.6	85.5	0.94												
		W13		79.8	74.9	0.94	10.6	10.6	100%	10.6	100%	1.00	96	28	87	23	0.91	0.82
Ground	R2	W1	LD	30.5	29.5	0.97												
		W14-L		38.9	27.5	0.71												
		W14-U					24.0	24.0	100%	23.7	99%	0.99	94	28	81	21	0.86	0.75
Ground	R3	W15	Bathroom	38.4	26.9	0.70	4.0	3.9	97%	3.9	97%	1.00	75	25	59	16	0.79	0.64
Ground	R4	W16	Bathroom	23.6	15.7	0.66	2.2	1.7	77%	1.7	77%	1.00	34	6	23	2	0.68	0.33
Ground	R5	W17	Hallway	31.2	21.5	0.69	1.6	1.4	90%	1.4	90%	1.00	52	14	38	7	0.73	0.50
Ground	R6	W18	Kitchen	35.7	24.9	0.70												
		W19		35.8	32.5	0.91												
		W20		35.4	32.7	0.93	19.0	18.9	100%	18.8	99%	0.99	62	19	52	11	0.84	0.58
First	R1	W1-L	Bedroom	34.2	31.4	0.92												
		W1-U					11.0	10.3	93%	10.2	93%	0.99	60	22	60	22	1.00	1.00
First	R2	W2	Bedroom	28.1	25.0	0.89												
		W3		39.1	30.2	0.77	8.9	8.9	100%	8.9	100%	1.00	96	28	88	24	0.92	0.86
First	R3	W4	Bathroom	30.0	26.8	0.89												
		W5-L		24.0	21.2	0.88												
		W5-U					5.2	5.1	98%	5.1	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R4	W6-L	Bedroom	38.0	35.7	0.94												
		W6-U					7.5	7.3	98%	7.3	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
2 Junction Cottages																		
Ground	R1	W1-L	Living Room	31.2	29.4	0.94												
		W1-U																
		W2-L		30.8	30.0	0.97												
		W2-U					24.6	24.3	99%	24.1	98%	0.99	64	23	63	22	0.98	0.96
Ground	R2	W3	Kitchen	28.5	28.5	1.00												
		W4		35.0	34.9	1.00	7.3	7.3	99%	7.3	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Ground	R3	W5	Bathroom	32.9	32.0	0.97	4.0	3.7	92%	3.7	92%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1-L	Bedroom	27.6	25.5	0.92												
		W1-U					7.7	7.0	90%	7.0	90%	1.00	52	19	51	18	0.98	0.95
First	R2	W2-L	Bedroom	33.2	30.9	0.93												
		W2-U					11.1	10.3	93%	10.3	93%	1.00	64	23	63	22	0.98	0.96
First	R3	W3-L	Bedroom	37.9	36.2	0.95												
		W3-U					7.5	7.2	96%	7.2	96%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R4	W4-L	Bathroom	21.3	21.3	1.00												
		W4-U																
		W5-L		32.4	32.1	0.99												
		W5-U					6.1	6.0	98%	6.0	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
3 Junction Cottages																		
Ground	R1	W1-L	Test	30.0	28.6	0.95												
		W1-U					11.2	11.0	99%	11.0	99%	1.00	58	17	58	17	1.00	1.00
Ground	R2	W2	Test	32.1	30.3	0.94	11.2	11.0	99%	11.0	99%	1.00	65	18	64	17	0.98	0.94
Ground	R3	W3	Residential	36.9	35.9	0.97												
		W4		36.8	35.8	0.97	10.8	10.6	99%	10.6	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R4	W5	Residential	36.2	35.4	0.98												
		W6		36.2	35.4	0.98												
		W7		36.4	35.5	0.98	11.6	11.5	99%	11.5	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1-L	Test	31.5	30.1	0.96												
		W1-U					11.6	11.3	98%	11.3	98%	1.00	56	17	56	17	1.00	1.00
First	R2	W2-L	Test	29.4	27.8	0.95												
		W2-U					7.9	7.8	99%	7.8	99%	1.00	55	18	55	18	1.00	1.00
First	R3	W3-L	Residential	32.7	31.9	0.98												
		W3-U																
		W4-L		22.1	21.3	0.97												
		W4-U					7.9	7.8	98%	7.8	98%	1.00	N/F	N/F	N/F	N/F	N/F	N/F

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
First	R4	W5-L	Residential	37.0	36.4	0.98												
		W5-U					11.6	11.2	97%	11.2	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
4 Junction Cottages																		
Ground	R1	W1-L	Living Room	28.9	28.4	0.98												
		W1-U					14.1	13.5	96%	13.5	96%	1.00	56	16	56	16	1.00	1.00
Ground	R2	W2	Kitchen	35.8	35.1	0.98												
		W3		35.2	34.5	0.98												
		W4		35.0	34.4	0.98	7.8	7.7	99%	7.7	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1-L	Bedroom	31.2	30.0	0.96												
		W1-U					11.3	11.1	98%	11.0	98%	1.00	61	18	61	18	1.00	1.00
First	R2	W2-L	Bedroom	36.6	36.1	0.98												
		W2-U					7.6	7.3	95%	7.3	95%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
2 Blakemere Road																		
Ground	R1	W1	Residential	34.5	33.4	0.97	13.1	12.5	95%	12.5	95%	1.00	83	27	81	25	0.98	0.93
Ground	R2	W2	Residential	35.0	33.7	0.96	13.1	12.9	98%	12.9	98%	1.00	84	28	82	26	0.98	0.93
Ground	R3	W3-L	Residential	31.1	28.9	0.93												
		W3-U					4.2	4.1	97%	4.1	97%	1.00	55	18	53	16	0.96	0.89
Ground	R4	W4-L	Residential	30.3	28.7	0.95												
		W4-U																
		W5		38.3	36.1	0.94	23.9	23.9	100%	23.9	100%	1.00	77	24	75	22	0.97	0.92
First	R1	W1	Residential	39.2	37.5	0.96	13.3	12.4	93%	12.4	93%	1.00	58	18	57	17	0.98	0.94
First	R2	W2	Residential	39.2	37.6	0.96												
		W3		39.2	37.7	0.96	13.7	13.5	99%	13.5	99%	1.00	58	18	57	17	0.98	0.94
4 Blakemere Road																		
Ground	R1	W1-L	Dining Room	31.2	30.8	0.99												

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
		W1-U					14.0	13.9	99%	13.9	99%	1.00	42	3	42	3	1.00	1.00
Ground	R2	W2	Kitchen	37.8	36.2	0.96												
		W3		37.9	36.3	0.96	12.2	12.0	98%	12.0	98%	1.00	58	18	57	17	0.98	0.94
First	R1	W1	Bedroom	39.2	37.7	0.96	9.5	9.2	97%	9.2	97%	1.00	58	18	57	17	0.98	0.94
78 Gresley Close																		
Ground	R1	W1	Kitchen	39.4	39.4	1.00												
		W2		31.9	30.2	0.95	6.4	6.3	99%	6.3	99%	1.00	31	5	30	4	0.97	0.80
Ground	R2	W3	Hallway	18.3	16.3	0.89	1.2	1.2	100%	1.2	100%	1.00	29	16	25	12	0.86	0.75
Ground	R3	W4-L	Living Room	34.4	32.2	0.94												
		W4-U					14.6	14.1	97%	13.8	94%	0.97	48	15	44	11	0.92	0.73
First	R1	W1	Bedroom	31.9	30.4	0.95	4.9	4.6	95%	4.6	95%	1.00	40	12	39	11	0.98	0.92
First	R2	W2	Bedroom	31.9	30.1	0.94	9.8	9.5	97%	9.5	97%	1.00	40	12	38	10	0.95	0.83
80 Gresley Close																		
Ground	R1	W1-L	Living Room	34.8	32.1	0.92												
		W1-U					14.6	14.1	97%	14.1	97%	1.00	40	10	37	7	0.93	0.70
Ground	R2	W2	Hallway	19.0	16.1	0.85	1.2	1.2	100%	1.2	100%	1.00	31	16	26	11	0.84	0.69
Ground	R3	W3	Kitchen	32.6	29.5	0.90	6.4	6.2	97%	6.2	97%	1.00	49	15	45	11	0.92	0.73
First	R1	W1	Bedroom	32.0	29.8	0.93	9.8	9.5	97%	9.5	97%	1.00	40	12	37	9	0.93	0.75
First	R2	W2	Bedroom	32.0	29.5	0.92	4.9	4.6	95%	4.6	95%	1.00	39	12	36	9	0.92	0.75
82 Gresley Close																		
Ground	R1	W1-L	Living Room	35.5	31.8	0.90												
		W1-U					14.6	14.1	97%	14.1	97%	1.00	43	10	38	5	0.88	0.50
Ground	R2	W2	Hallway	19.6	15.5	0.79	1.2	1.2	100%	1.2	100%	1.00	31	16	24	9	0.77	0.56

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Ground	R3	W3	Kitchen	33.2	28.8	0.87												
		W4		38.7	29.1	0.75	6.4	6.4	100%	6.4	100%	1.00	95	29	85	19	0.89	0.66
First	R1	W1	Bedroom	32.1	29.1	0.91	9.8	9.5	97%	9.5	97%	1.00	39	12	34	7	0.87	0.58
First	R2	W2	Bedroom	32.3	28.7	0.89	4.9	4.6	95%	4.6	95%	1.00	41	14	35	8	0.85	0.57
First	R3	W3	Bathroom	39.0	31.8	0.81	3.4	3.3	99%	3.3	99%	1.00	88	29	82	23	0.93	0.79
84 Gresley Close																		
Ground	R1	W1	Kitchen	38.6	30.3	0.79												
		W2		32.4	32.0	0.99	6.4	6.4	100%	6.4	100%	1.00	91	29	83	21	0.91	0.72
Ground	R2	W3	Hallway	18.8	18.5	0.98	1.2	1.2	100%	1.2	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W4-L	Living Room	34.9	34.6	0.99												
		W4-U					14.6	14.1	97%	14.1	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1	Bathroom	39.0	32.2	0.83	3.4	3.3	99%	3.3	99%	1.00	88	29	83	24	0.94	0.83
First	R2	W2	Bedroom	31.4	31.1	0.99	4.9	4.6	95%	4.6	95%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R3	W3	Bedroom	31.3	31.0	0.99	9.8	9.5	97%	9.5	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
86 Gresley Close																		
Ground	R1	W1	Kitchen	32.2	31.9	0.99	6.4	6.2	97%	6.2	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2	Hallway	18.8	18.5	0.99	1.2	1.2	100%	1.2	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3-L	Living Room	34.9	34.7	0.99												
		W3-U					14.6	14.1	97%	14.1	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1	Bedroom	31.3	31.1	0.99	4.9	4.6	95%	4.6	95%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R2	W2	Bedroom	31.3	31.1	0.99	9.8	9.5	97%	9.5	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
88 Gresley Close																		

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Ground	R1	W1-L	Living Room	35.0	34.8	0.99												
		W1-U					14.6	14.1	97%	14.1	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2	Hallway	19.0	18.8	0.99	1.2	1.2	100%	1.2	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3	Kitchen	32.5	32.3	0.99												
		W4		39.4	39.4	1.00	6.4	6.4	100%	6.4	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1	Bedroom	31.4	31.2	0.99	9.8	9.5	97%	9.5	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R2	W2	Bedroom	31.5	31.3	0.99	4.9	4.6	95%	4.6	95%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
90 Gresley Close																		
Ground	R1	W1-L	Residential	37.4	30.0	0.80												
		W1-U					9.9	9.8	100%	9.6	97%	0.97	81	28	74	21	0.91	0.75
Ground	R2	W2	Residential	37.8	30.4	0.80												
		W3		37.8	30.3	0.80	9.3	9.2	99%	8.8	94%	0.95	82	28	75	21	0.91	0.75
First	R1	W1	Residential	33.0	27.1	0.82	9.9	9.8	99%	9.6	97%	0.98	74	29	69	24	0.93	0.83
First	R2	W2	Residential	31.8	25.8	0.81												
		W3		31.8	25.7	0.81	9.3	9.0	97%	8.9	96%	0.99	69	29	63	23	0.91	0.79
92 Gresley Close																		
Ground	R1	W1-L	Residential	37.6	29.5	0.78												
		W1-U					9.9	9.8	100%	9.1	92%	0.93	80	26	72	18	0.90	0.69
Ground	R2	W2	Residential	36.9	28.9	0.78												
		W3		35.3	27.7	0.78	9.3	9.2	99%	8.3	89%	0.90	81	27	71	17	0.88	0.63
First	R1	W1	Bedroom	33.2	26.8	0.81	9.9	9.8	99%	9.2	93%	0.94	73	29	66	22	0.90	0.76
First	R2	W2	Bathroom	31.9	25.4	0.79												
		W3		31.9	25.3	0.79	9.3	9.0	97%	8.5	91%	0.94	70	30	62	22	0.89	0.73
94 Gresley Close																		

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Ground	R1	W1-L	Living Room	13.7	7.3	0.53												
		W1-U					9.9	9.8	100%	8.2	83%	0.84	33	18	25	10	0.76	0.56
Ground	R2	W2	Kitchen	30.1	23.3	0.77												
		W3		35.0	27.4	0.78	9.3	9.2	99%	8.0	86%	0.87	75	25	65	15	0.87	0.60
First	R1	W1	Bedroom	33.2	26.5	0.80	9.9	9.8	99%	9.1	92%	0.93	74	30	67	23	0.91	0.77
First	R2	W2	Bathroom	31.9	25.2	0.79												
		W3		32.0	25.3	0.79	9.3	9.0	97%	8.3	89%	0.92	72	30	66	24	0.92	0.80
91 Gresley Close																		
Ground	R1	W1	Kitchen	39.6	39.6	1.00												
		W2		32.6	31.5	0.97	6.4	6.4	100%	6.4	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W3	Hallway	18.9	17.3	0.92	1.2	1.2	100%	1.2	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W4-L	Living Room	34.7	33.0	0.95												
		W4-U					14.6	14.1	97%	14.0	96%	0.99	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1	Bedroom	31.9	30.7	0.96	4.9	4.6	95%	4.6	95%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R2	W2	Bedroom	31.6	30.2	0.96	9.8	9.5	97%	9.5	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
93 Gresley Close																		
Ground	R1	W1-L	Living Room	34.3	32.5	0.95												
		W1-U					14.6	14.1	97%	14.1	96%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2	Hallway	18.1	15.7	0.87	1.2	1.2	100%	1.2	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3	Kitchen	31.5	28.9	0.92	6.4	6.1	95%	6.1	95%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1	Bedroom	31.3	29.6	0.95	9.8	9.5	97%	9.5	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R2	W2	Bedroom	31.2	29.2	0.93	4.9	4.6	95%	4.6	94%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
95 Gresley Close																		

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
Ground	R1	W1-L	Living Room	34.2	31.7	0.93												
		W1-U					14.6	14.1	97%	14.1	96%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2	Hallway	18.4	14.9	0.81	1.2	1.2	100%	1.2	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3	Kitchen	32.0	28.2	0.88												
		W4		38.8	31.4	0.81	6.4	6.4	100%	6.4	100%	1.00	90	29	80	19	0.89	0.66
First	R1	W1	Bedroom	31.2	28.8	0.92	9.8	9.5	97%	9.5	97%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R2	W2	Bedroom	31.3	28.2	0.90	4.9	4.6	95%	4.6	93%	0.98	N/F	N/F	N/F	N/F	N/F	N/F
First	R3	W3	Bathroom	39.2	33.2	0.85	3.4	3.3	99%	3.3	99%	1.00	89	30	81	22	0.91	0.73
97 Gresley Close																		
Ground	R1	W1	Kitchen	38.8	32.7	0.84												
		W2		34.8	34.8	1.00	6.4	6.4	100%	6.4	99%	1.00	96	29	88	21	0.92	0.72
Ground	R2	W3	Hallway	21.3	21.3	1.00	1.2	1.2	100%	1.2	100%	1.00	32	16	32	16	1.00	1.00
Ground	R3	W4-L	Living Room	37.5	37.5	1.00												
		W4-U					14.6	14.1	97%	14.1	97%	1.00	44	10	44	10	1.00	1.00
First	R1	W1	Bathroom	39.2	33.7	0.86	3.4	3.3	99%	3.3	99%	1.00	89	30	81	22	0.91	0.73
First	R2	W2	Bedroom	33.0	33.0	1.00	4.9	4.6	95%	4.6	95%	1.00	42	14	42	14	1.00	1.00
First	R3	W3	Bedroom	33.0	33.0	1.00	9.8	9.5	97%	9.5	97%	1.00	40	12	40	12	1.00	1.00
99 Gresley Close																		
Ground	R1	W1	Kitchen	34.7	34.7	1.00	6.4	6.2	97%	6.2	97%	1.00	50	15	50	15	1.00	1.00
Ground	R2	W2	Hallway	21.4	21.4	1.00	1.2	1.2	100%	1.2	100%	1.00	32	16	32	16	1.00	1.00
Ground	R3	W3-L	Living Room	37.6	37.6	1.00												
		W3-U					14.6	14.1	97%	14.1	97%	1.00	44	10	44	10	1.00	1.00

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL m^2	Existing NSL %	Proposed NSL m^2	Proposed NSL %	Proportion Retained	Existing APSH Total	Existing APSH Winter	Proposed APSH Total	Proposed APSH Winter	Retained Total	Retained Winter
First	R1	W1	Bedroom	33.0	33.0	1.00	4.9	4.6	95%	4.6	95%	1.00	40	12	40	12	1.00	1.00
First	R2	W2	Bedroom	33.0	33.0	1.00	9.8	9.5	97%	9.5	97%	1.00	40	12	40	12	1.00	1.00
101 Gresley Close																		
Ground	R1	W1-L	Living Room	37.6	37.6	1.00												
		W1-U					14.6	14.1	97%	14.1	97%	1.00	51	15	51	15	1.00	1.00
Ground	R2	W2	Hallway	21.4	21.4	1.00	1.2	1.2	100%	1.2	100%	1.00	32	16	32	16	1.00	1.00
Ground	R3	W3	Kitchen	34.9	34.9	1.00												
		W4		39.6	39.6	1.00	6.4	6.4	100%	6.4	100%	1.00	35	7	35	7	1.00	1.00
First	R1	W1	Bedroom	33.0	33.0	1.00	9.8	9.5	97%	9.5	97%	1.00	40	12	40	12	1.00	1.00
First	R2	W2	Bedroom	33.0	33.0	1.00	4.9	4.6	95%	4.6	95%	1.00	40	12	40	12	1.00	1.00

Appendix 3

Detailed results of the daylight and sunlight assessments within the proposed scheme (BRE 2022)

Block	Floor	Room	Window	Room Use	Illuminance (SDA)			Sunlight Exposure	
					Target Lux	% of Room meeting target	Median Lux of Room	Target	Sunlight Exposure
					(Lux)	(%)	(Lux)	(Hrs)	(Hrs)
A	Ground	R1	W1 W2	LKD	150	86%	446	1.5	6.7
		R2	W3	Bedroom	100	100%	255	1.5	2.3
		R3	W4 W5	Bedroom	100	100%	319	1.5	2.6
		R4	W6	Bedroom	100	98%	158	1.5	3.1
		R5	W7	LKD	150	49%	148	1.5	3.1
		R6	W8	LKD	150	42%	87	1.5	2.3
		R7	W9	LKD	150	63%	187	1.5	2.3
		R8	W10	Bedroom	100	100%	234	1.5	2.3
		R9	W11	Bedroom	100	100%	174	1.5	2.6
		R10	W12	Bedroom	100	100%	227	1.5	2.6
		R11	W13 W14 W15	LKD	150	95%	251	1.5	2.6
		R12	W16 W17	LKD	150	10%	55	1.5	0.0
		R13	W18	Bedroom	100	11%	48	1.5	0.0
		R14	W19	Bedroom	100	21%	63	1.5	0.0
		R15	W20	LKD	150	4%	29	1.5	0.0
		R16	W21	LKD	150	6%	32	1.5	0.0
		R17	W22	Bedroom	100	28%	64	1.5	0.0
		R18	W23	Bedroom	100	32%	75	1.5	0.0
		R19	W24	Bedroom	100	31%	74	1.5	0.0
		R20	W25	Bedroom	100	37%	87	1.5	0.0

R21	W26	LKD	150	6%	29	1.5	0.0
R22	W27 W28 W29	LKD	150	100%	283	1.5	3.5
R23	W30	Bedroom	100	100%	259	1.5	3.5
R24	W31	Bedroom	100	100%	213	1.5	3.5
R25	W32	Bedroom	100	100%	260	1.5	3.5
R26	W33	LKD	150	71%	224	1.5	3.9
R27	W34	LKD	150	46%	110	1.5	3.9
R28	W35	LKD	150	57%	169	1.5	3.9
R29	W36	Bedroom	100	100%	288	1.5	3.5
R30	W37	Bedroom	100	100%	271	1.5	3.5
R31	W38	Bedroom	100	100%	263	1.5	3.5
R32	W39 W40	LKD	150	85%	456	1.5	7.6
R33	W41	LKD	150	80%	227	1.5	8.0
R34	W42	Bedroom	100	100%	312	1.5	6.6
R35	W43	Bedroom	100	100%	268	1.5	6.8
R36	W44	Bedroom	100	100%	331	1.5	6.8
R37	W45	Bedroom	100	100%	346	1.5	6.8
R38	W46	LKD	150	76%	217	1.5	7.3
R39	W47	Bedroom	100	100%	362	1.5	6.5
R40	W48	Bedroom	100	100%	336	1.5	6.8
R41	W49	LKD	150	68%	196	1.5	6.8
R42	W50	Bedroom	100	100%	325	1.5	6.8
R43	W51	Bedroom	100	21%	52	1.5	0.0
R44	W52	Bedroom	100	40%	88	1.5	0.0

	R45	W53	LKD	150	5%	32	1.5	0.0
	R46	W54	LKD	150	4%	26	1.5	0.0
	R47	W55	LKD	150	3%	31	1.5	0.0
	R48	W56	Bedroom	100	17%	47	1.5	0.0
	R49	W57	Bedroom	100	23%	55	1.5	0.0
	R50	W58	LKD	150	8%	40	1.5	0.0
	R52	W60	Bedroom	100	31%	64	1.5	0.9
	R53	W61	Bedroom	100	35%	70	1.5	3.3
	R54	W62	Bedroom	100	49%	97	1.5	3.6
	R55	W63	LKD	150	9%	26	1.5	3.7
	R56	W64	LKD	150	12%	42	1.5	3.7
	R57	W65	Bedroom	100	85%	139	1.5	3.6
	R58	W66	Bedroom	100	36%	68	1.5	3.4
	R59	W67	Bedroom	100	31%	64	1.5	1.6
	R60	W68	Bedroom	100	15%	45	1.5	1.7
	R61	W69	LKD	150	8%	40	1.5	0.0
	R62	W70	Bedroom	100	24%	53	1.5	0.0
	R51	W59	Bedroom	100	14%	44	1.5	0.0
First	R1	W1 W2	LKD	150	91%	464	1.5	6.6
	R2	W3	Bedroom	100	100%	291	1.5	2.2
	R3	W4 W5	Bedroom	100	100%	363	1.5	2.6
	R4	W6	Bedroom	100	100%	193	1.5	3.1
	R5	W7	LKD	150	57%	174	1.5	3.1
	R6	W8	LKD	150	45%	105	1.5	2.2

R7	W9	LKD	150	70%	211	1.5	2.2
R8	W10	Bedroom	100	100%	262	1.5	2.3
R9	W11	Bedroom	100	100%	241	1.5	2.6
R10	W12	Bedroom	100	100%	251	1.5	2.6
R11	W13 W14 W15	LKD	150	100%	368	1.5	2.6
R12	W16	LKD	150	11%	57	1.5	0.0
R13	W17	Bedroom	100	36%	75	1.5	0.0
R14	W18	Bedroom	100	26%	70	1.5	0.0
R15	W19	LKD	150	11%	54	1.5	0.0
R16	W20	Bedroom	100	27%	39	1.5	0.0
R17	W21	LKD	150	9%	49	1.5	0.0
R18	W22	Bedroom	100	87%	183	1.5	0.0
R19	W23	Bedroom	100	95%	160	1.5	0.0
R20	W24	Bedroom	100	45%	96	1.5	0.0
R21	W26	Bedroom	100	60%	113	1.5	0.0
R22	W27	Bedroom	100	35%	78	1.5	0.0
R23	W28	LKD	150	13%	47	1.5	0.0
R24	W29 W30 W31	LKD	150	100%	288	1.5	3.5
R25	W32	Bedroom	100	100%	316	1.5	3.5
R26	W33	Bedroom	100	100%	243	1.5	3.5
R27	W34	Bedroom	100	100%	281	1.5	3.5
R28	W35	LKD	150	73%	235	1.5	3.9
R29	W36	LKD	150	46%	113	1.5	3.9
R30	W37	LKD	150	61%	181	1.5	3.9

R31	W38	Bedroom	100	100%	309	1.5	3.5
R32	W39	Bedroom	100	100%	292	1.5	3.5
R33	W40	Bedroom	100	100%	290	1.5	3.5
R34	W41 W42	LKD	150	92%	486	1.5	7.6
R35	W43	LKD	150	84%	234	1.5	7.7
R36	W44	Bedroom	100	100%	337	1.5	6.6
R37	W45	Bedroom	100	100%	289	1.5	6.8
R38	W46	Bedroom	100	100%	353	1.5	6.8
R39	W47	Bedroom	100	100%	355	1.5	6.6
R40	W48	LKD	150	79%	222	1.5	7.0
R41	W49	Bedroom	100	100%	379	1.5	6.3
R42	W50	Bedroom	100	100%	356	1.5	6.8
R43	W51	LKD	150	70%	205	1.5	6.8
R44	W52	Bedroom	100	100%	326	1.5	6.6
R45	W53	Bedroom	100	32%	68	1.5	0.0
R46	W54	Bedroom	100	40%	77	1.5	0.0
R47	W55	LKD	150	7%	31	1.5	0.0
R48	W56	LKD	150	8%	32	1.5	0.0
R49	W57	LKD	150	10%	40	1.5	0.0
R50	W58	Bedroom	100	72%	118	1.5	0.0
R52	W60	Bedroom	100	44%	88	1.5	0.0
R53	W61	LKD	150	14%	54	1.5	0.0
R54	W62	Bedroom	100	30%	70	1.5	1.6
R55	W63	Bedroom	100	51%	101	1.5	1.3
R56	W64	Bedroom	100	55%	104	1.5	3.8

	R57	W65	Bedroom	100	93%	194	1.5	4.2
	R58	W25	Bedroom	100	28%	65	1.5	0.0
	R59	W66	LKD	150	28%	76	1.5	4.3
	R60	W67	LKD	150	26%	62	1.5	4.3
	R61	W68	LKD	150	19%	63	1.5	4.2
	R62	W69	Bedroom	100	100%	226	1.5	3.8
	R63	W70	Bedroom	100	64%	114	1.5	3.6
	R64	W71	Bedroom	100	52%	103	1.5	2.1
	R65	W72	Bedroom	100	28%	69	1.5	2.1
	R66	W73	LKD	150	14%	56	1.5	2.5
	R67	W74	Bedroom	100	43%	88	1.5	0.0
	R51	W59	Bedroom	100	27%	63	1.5	0.0
Second	R1	W1 W2	LKD	150	92%	473	1.5	6.6
	R2	W3	Bedroom	100	100%	301	1.5	2.2
	R3	W4 W5	Bedroom	100	100%	381	1.5	2.6
	R4	W6	Bedroom	100	100%	203	1.5	3.1
	R5	W7	LKD	150	62%	182	1.5	3.1
	R6	W8	LKD	150	46%	111	1.5	2.2
	R7	W9	LKD	150	72%	219	1.5	2.2
	R8	W10	Bedroom	100	100%	274	1.5	2.3
	R9	W11	Bedroom	100	100%	256	1.5	2.6
	R10	W12	Bedroom	100	100%	261	1.5	2.6
	R11	W13 W14 W15	LKD	150	100%	408	1.5	2.6

R12	W16	LKD	150	18%	72	1.5	0.0
R13	W17	Bedroom	100	49%	95	1.5	0.0
R14	W18	Bedroom	100	45%	89	1.5	0.0
R15	W19	LKD	150	23%	68	1.5	0.0
R16	W20	Bedroom	100	30%	51	1.5	0.0
R17	W21	LKD	150	17%	66	1.5	0.0
R18	W22	Bedroom	100	93%	235	1.5	0.0
R19	W23	Bedroom	100	100%	215	1.5	0.0
R20	W24	Bedroom	100	68%	142	1.5	0.0
R21	W25	Bedroom	100	48%	98	1.5	0.0
R22	W26	Bedroom	100	65%	154	1.5	0.0
R23	W27	Bedroom	100	48%	96	1.5	0.0
R24	W28	LKD	150	18%	56	1.5	0.0
R25	W29 W30 W31	LKD	150	100%	309	1.5	3.5
R26	W32	Bedroom	100	100%	333	1.5	3.5
R27	W33	Bedroom	100	100%	255	1.5	3.5
R28	W34	Bedroom	100	100%	295	1.5	3.5
R29	W35	LKD	150	74%	245	1.5	3.9
R30	W36	LKD	150	48%	119	1.5	3.9
R31	W37	LKD	150	67%	193	1.5	3.9
R32	W38	Bedroom	100	100%	325	1.5	3.5
R33	W39	Bedroom	100	100%	312	1.5	3.5
R34	W40	Bedroom	100	100%	307	1.5	3.5
R35	W41 W42	LKD	150	94%	507	1.5	7.6

R36	W43	LKD	150	88%	243	1.5	7.7
R37	W44	Bedroom	100	100%	350	1.5	6.6
R38	W45	Bedroom	100	100%	301	1.5	6.8
R39	W46	Bedroom	100	100%	370	1.5	6.8
R40	W47	Bedroom	100	100%	430	1.5	6.8
R41	W48	LKD	150	98%	249	1.5	8.0
R42	W49	Bedroom	100	100%	392	1.5	6.8
R43	W50	Bedroom	100	100%	363	1.5	6.8
R44	W51	LKD	150	70%	210	1.5	6.8
R45	W52	Bedroom	100	100%	330	1.5	6.6
R46	W53	Bedroom	100	50%	99	1.5	0.0
R47	W54	Bedroom	100	70%	116	1.5	0.0
R48	W55	LKD	150	24%	56	1.5	0.0
R49	W56	LKD	150	27%	62	1.5	0.0
R50	W57	LKD	150	31%	82	1.5	0.0
R52	W59	Bedroom	100	48%	95	1.5	0.0
R53	W60	Bedroom	100	89%	137	1.5	0.0
R54	W61	LKD	150	31%	100	1.5	2.6
R55	W62	Bedroom	100	71%	115	1.5	2.1
R56	W63	Bedroom	100	87%	145	1.5	1.8
R57	W64	Bedroom	100	71%	155	1.5	4.2
R58	W65	Bedroom	100	100%	277	1.5	5.1
R59	W66	LKD	150	43%	125	1.5	5.2
R60	W67	LKD	150	46%	111	1.5	5.1
R61	W68	LKD	150	33%	101	1.5	5.0
R62	W69	Bedroom	100	100%	311	1.5	4.2

	R63	W70	Bedroom	100	81%	175	1.5	3.8
	R64	W71	Bedroom	100	92%	150	1.5	2.6
	R65	W72	Bedroom	100	75%	121	1.5	2.6
	R66	W73	LKD	150	34%	102	1.5	3.0
	R67	W74	Bedroom	100	92%	143	1.5	1.5
	R51	W58	Bedroom	100	90%	175	1.5	0.0
Third	R1	W1	LKD	150	78%	289	1.5	7.7
	R2	W2	Bedroom	100	100%	376	1.5	6.6
	R3	W3	Bedroom	100	100%	363	1.5	6.8
	R4	W4	LKD	150	66%	192	1.5	6.6
	R5	W5 W6	LKD	150	92%	476	1.5	6.7
	R6	W7	Bedroom	100	100%	307	1.5	2.2
	R7	W8 W9	Bedroom	100	100%	390	1.5	2.6
	R8	W10	Bedroom	100	100%	207	1.5	3.1
	R9	W11	LKD	150	65%	189	1.5	3.1
	R10	W12	LKD	150	46%	116	1.5	2.2
	R11	W13	LKD	150	73%	228	1.5	2.2
	R12	W14	Bedroom	100	100%	281	1.5	2.3
	R13	W15	Bedroom	100	100%	263	1.5	2.6
	R14	W16	Bedroom	100	100%	268	1.5	2.6
	R15	W17 W18 W19	LKD	150	100%	457	1.5	2.6
	R16	W20	LKD	150	30%	98	1.5	0.0
	R17	W21	Bedroom	100	75%	145	1.5	0.0

R18	W22	Bedroom	100	69%	139	1.5	0.0
R19	W23	LKD	150	40%	102	1.5	0.0
R20	W24	Bedroom	100	36%	73	1.5	0.0
R21	W25	LKD	150	38%	118	1.5	0.0
R22	W26	Bedroom	100	100%	307	1.5	0.0
R23	W27	Bedroom	100	100%	270	1.5	0.0
R24	W28	Bedroom	100	100%	186	1.5	0.0
R25	W29	Bedroom	100	82%	139	1.5	0.0
R26	W30	Bedroom	100	76%	223	1.5	0.0
R27	W31	Bedroom	100	71%	140	1.5	0.0
R28	W32	LKD	150	28%	71	1.5	0.0
R29	W33 W34 W35	LKD	150	100%	331	1.5	3.5
R30	W36	Bedroom	100	100%	342	1.5	3.5
R31	W37	Bedroom	100	100%	262	1.5	3.5
R32	W38	Bedroom	100	100%	301	1.5	3.5
R33	W39	LKD	150	75%	253	1.5	3.9
R34	W40	LKD	150	48%	123	1.5	3.9
R35	W41	LKD	150	71%	197	1.5	3.9
R36	W42	Bedroom	100	100%	333	1.5	3.5
R37	W43	Bedroom	100	100%	320	1.5	3.5
R38	W44	Bedroom	100	100%	316	1.5	3.5
R39	W45 W46	LKD	150	95%	516	1.5	7.6
R40	W47	Bedroom	100	100%	227	1.5	2.6
R41	W48	LKD	150	56%	162	1.5	3.1

	R42	W49	Bedroom	100	100%	171	1.5	2.6
	R43	W50	Bedroom	100	100%	211	1.5	2.3
	R44	W51	Bedroom	100	100%	216	1.5	4.7
	R45	W52	Bedroom	100	100%	376	1.5	5.7
	R46	W53	LKD	150	70%	200	1.5	6.8
	R47	W54	LKD	150	56%	177	1.5	7.0
	R48	W55	LKD	150	59%	175	1.5	6.8
	R49	W56	Bedroom	100	100%	412	1.5	5.5
	R50	W57	Bedroom	100	100%	239	1.5	4.3
	R52	W59	Bedroom	100	100%	173	1.5	3.1
	R53	W60	LKD	150	57%	164	1.5	3.6
	R54	W61	Bedroom	100	100%	241	1.5	3.1
	R51	W58	Bedroom	100	100%	219	1.5	3.1
Fourth	R1	W1	LKD	150	87%	330	1.5	8.0
	R2	W2	Bedroom	100	100%	407	1.5	6.8
	R3	W3	Bedroom	100	100%	400	1.5	6.8
	R4	W4	LKD	150	73%	232	1.5	6.8
	R5	W5 W6	LKD	150	95%	553	1.5	7.3
	R6	W7	Bedroom	100	100%	325	1.5	2.6
	R7	W8 W9	Bedroom	100	100%	419	1.5	2.6
	R8	W10	Bedroom	100	100%	219	1.5	3.1
	R9	W11	LKD	150	78%	219	1.5	3.1
	R10	W12	LKD	150	50%	137	1.5	3.1
	R11	W13	LKD	150	78%	265	1.5	3.1
	R12	W14	Bedroom	100	100%	304	1.5	2.6

R13	W15	Bedroom	100	100%	285	1.5	2.6
R14	W16	Bedroom	100	100%	289	1.5	2.6
R15	W17 W18 W19	LKD	150	100%	549	1.5	2.6
R16	W20	LKD	150	64%	161	1.5	0.0
R17	W21	Bedroom	100	100%	204	1.5	0.0
R18	W22	Bedroom	100	100%	193	1.5	0.0
R19	W23	LKD	150	63%	172	1.5	0.0
R20	W24	Bedroom	100	100%	209	1.5	0.0
R21	W25	Bedroom	100	100%	198	1.5	0.0
R22	W26	LKD	150	47%	135	1.5	0.0
R23	W27 W28 W29	LKD	150	100%	402	1.5	3.5
R24	W30	Bedroom	100	100%	365	1.5	3.5
R25	W31	Bedroom	100	100%	278	1.5	3.5
R26	W32	Bedroom	100	100%	321	1.5	3.5
R27	W33	LKD	150	79%	291	1.5	3.9
R28	W34	LKD	150	51%	143	1.5	3.9
R29	W35	LKD	150	84%	227	1.5	3.9
R30	W36	Bedroom	100	100%	350	1.5	3.5
R31	W37	Bedroom	100	100%	337	1.5	3.5
R32	W38	Bedroom	100	100%	331	1.5	3.5
R33	W39 W40	LKD	150	95%	591	1.5	7.7
R34	W41	Bedroom	100	100%	280	1.5	2.6
R35	W42	LKD	150	72%	229	1.5	3.1

	R36	W43	Bedroom	100	100%	253	1.5	2.6
	R37	W44	Bedroom	100	100%	284	1.5	2.6
	R38	W45	Bedroom	100	100%	286	1.5	3.5
	R39	W46	Bedroom	100	100%	265	1.5	3.5
	R40	W47	LKD	150	72%	238	1.5	3.9
	R41	W48	Bedroom	100	100%	295	1.5	3.5
Fifth	R1	W1	Bedroom	100	100%	175	1.5	3.5
	R2	W2	Bedroom	100	100%	186	1.5	3.5
	R3	W3 W4	LKD	100	99%	165	1.5	2.6
	R4	W5	Bedroom	100	87%	152	1.5	2.6
	R5	W6	Bedroom	100	99%	198	1.5	2.6
	R6	W7 W8 W9 W10	LKD	100	100%	280	1.5	2.6
	R7	W11	Bedroom	100	96%	138	1.5	0.0
	R8	W12 W13 W14	LKD	100	100%	235	1.5	3.5
	R9	W15	Bedroom	100	100%	162	1.5	3.5
	R10	W16 W17	LKD	100	100%	172	1.5	3.5
	R11	W18	Bedroom	100	99%	176	1.5	2.6
	R12	W19	Bedroom	100	99%	171	1.5	2.6
	R13	W20 W21	Bedroom	100	100%	387	1.5	2.6
	R14	W22 W23	LKD	100	83%	166	1.5	0.0
	R15	W24	LKD	100	100%	276	1.5	3.5

			W25 W26						
		R16	W27	Bedroom	100	100%	227	1.5	3.5
B	Ground	R1	W1	LKD	150	52%	154	1.5	4.0
		R2	W2	Bedroom	100	100%	227	1.5	3.6
		R3	W3	LKD	150	54%	163	1.5	3.6
		R4	W4	Bedroom	100	100%	234	1.5	2.8
		R5	W5	LKD	150	75%	192	1.5	4.2
		R6	W6	LKD	150	60%	184	1.5	4.1
		R7	W7	Bedroom	100	100%	449	1.5	4.2
		R8	W8	Bedroom	100	100%	243	1.5	2.8
		R9	W9	Bedroom	100	100%	207	1.5	3.6
		R10	W10	Bedroom	100	100%	248	1.5	3.6
		R11	W11 W12 W13	LKD	150	100%	287	1.5	4.9
		R12	W14	LKD	150	19%	51	1.5	3.1
		R13	W15	Bedroom	100	41%	90	1.5	3.4
		R14	W16	Bedroom	100	40%	85	1.5	3.5
		R15	W17	Bedroom	100	34%	65	1.5	3.5
		R16	W18	Bedroom	100	34%	63	1.5	3.4
		R17	W19 W20	LKD	150	26%	98	1.5	5.4
		R18	W21 W22	LKD	150	45%	137	1.5	0.0
		R19	W23	Bedroom	100	98%	166	1.5	0.0
		R20	W24	Bedroom	100	92%	154	1.5	0.0
		R21	W25	Bedroom	100	33%	63	1.5	0.0

	R22	W26	Bedroom	100	60%	126	1.5	0.0
First	R1	W1	LKD	150	76%	182	1.5	3.8
	R2	W2	LKD	150	62%	190	1.5	4.2
	R3	W3	Bedroom	100	100%	232	1.5	3.6
	R4	W4	Bedroom	100	100%	308	1.5	3.6
	R5	W5	LKD	150	80%	213	1.5	4.2
	R6	W6	LKD	150	48%	126	1.5	4.2
	R7	W7	LKD	150	76%	271	1.5	4.2
	R8	W8	Bedroom	100	100%	261	1.5	2.8
	R9	W9	Bedroom	100	100%	240	1.5	3.6
	R10	W10	Bedroom	100	100%	306	1.5	3.6
	R11	W11 W12 W13	LKD	150	100%	291	1.5	6.3
	R12	W14	LKD	150	24%	71	1.5	6.0
	R13	W15	Bedroom	100	41%	86	1.5	4.7
	R14	W16	Bedroom	100	72%	134	1.5	6.3
	R15	W17	Bedroom	100	43%	71	1.5	4.5
	R16	W18	Bedroom	100	42%	79	1.5	6.0
	R17	W19 W20 W21	LKD	150	36%	100	1.5	8.6
	R18	W22 W23	LKD	150	37%	108	1.5	0.0
	R19	W24	Bedroom	100	100%	272	1.5	0.0
	R20	W25	Bedroom	100	100%	238	1.5	0.0
	R21	W26	Bedroom	100	53%	115	1.5	0.0
	R22	W27	Bedroom	100	56%	109	1.5	0.0

	R23	W28	Bedroom	100	61%	108	1.5	0.0
	R24	W29	Bedroom	100	49%	102	1.5	0.0
	R25	W30	Bedroom	100	92%	176	1.5	0.0
	R26	W31	Bedroom	100	98%	210	1.5	1.8
	R27	W32	Bedroom	100	84%	147	1.5	1.9
Second	R1	W1	LKD	150	84%	204	1.5	3.8
	R2	W2	LKD	150	65%	208	1.5	4.2
	R3	W3	Bedroom	100	100%	248	1.5	3.6
	R4	W4	Bedroom	100	100%	323	1.5	3.6
	R5	W5	LKD	150	83%	227	1.5	4.2
	R6	W6	LKD	150	50%	136	1.5	4.2
	R7	W7	LKD	150	78%	287	1.5	4.2
	R8	W8	Bedroom	100	100%	274	1.5	2.8
	R9	W9	Bedroom	100	100%	254	1.5	3.6
	R10	W10	Bedroom	100	100%	320	1.5	3.6
	R11	W11 W12 W13	LKD	150	100%	319	1.5	8.9
	R12	W14	LKD	150	30%	87	1.5	8.2
	R13	W15	Bedroom	100	59%	112	1.5	6.1
	R14	W16	Bedroom	100	100%	190	1.5	7.2
	R15	W17	Bedroom	100	59%	113	1.5	5.4
	R16	W18	Bedroom	100	60%	109	1.5	7.2
	R17	W19 W20	LKD	150	45%	129	1.5	8.7
	R18	W21	LKD	150	30%	94	1.5	0.0
	R19	W22	Bedroom	100	100%	297	1.5	0.0

	R20	W23	Bedroom	100	100%	261	1.5	0.0
	R21	W24	Bedroom	100	58%	124	1.5	0.0
	R22	W25	Bedroom	100	76%	132	1.5	0.0
	R23	W26	Bedroom	100	91%	132	1.5	0.0
	R24	W27	Bedroom	100	69%	135	1.5	0.4
	R25	W28	Bedroom	100	100%	217	1.5	2.2
	R26	W29	Bedroom	100	100%	251	1.5	2.3
	R27	W30	Bedroom	100	100%	176	1.5	2.4
Third	R1	W1	LKD	150	88%	216	1.5	4.0
	R2	W2	LKD	150	66%	222	1.5	4.2
	R3	W3	Bedroom	100	100%	260	1.5	3.6
	R4	W4	Bedroom	100	100%	332	1.5	3.6
	R5	W5	LKD	150	87%	236	1.5	4.2
	R6	W6	LKD	150	51%	143	1.5	4.2
	R7	W7	LKD	150	79%	299	1.5	4.2
	R8	W8	Bedroom	100	100%	284	1.5	2.8
	R9	W9	Bedroom	100	100%	262	1.5	3.6
	R10	W10	Bedroom	100	100%	334	1.5	3.6
	R11	W11 W12 W13	LKD	150	100%	355	1.5	8.9
	R12	W14	LKD	150	39%	115	1.5	8.7
	R13	W15	Bedroom	100	94%	170	1.5	6.1
	R14	W16	Bedroom	100	100%	259	1.5	7.2
	R15	W17	Bedroom	100	81%	162	1.5	5.4
	R16	W18	Bedroom	100	86%	154	1.5	7.2
	R17	W19	LKD	150	63%	199	1.5	8.7

		W20						
	R18	W21	LKD	150	36%	102	1.5	0.0
	R19	W22	Bedroom	100	100%	322	1.5	0.0
	R20	W23	Bedroom	100	100%	296	1.5	0.0
	R21	W24	Bedroom	100	67%	139	1.5	0.0
	R22	W25	Bedroom	100	100%	163	1.5	0.0
	R23	W26	Bedroom	100	99%	169	1.5	0.3
	R24	W27	Bedroom	100	100%	172	1.5	2.8
	R25	W28	Bedroom	100	100%	258	1.5	2.8
	R26	W29	Bedroom	100	100%	283	1.5	2.8
	R27	W30	Bedroom	100	100%	207	1.5	2.8
Fourth	R1	W1	LKD	150	100%	255	1.5	4.0
	R2	W2	LKD	150	67%	250	1.5	4.2
	R3	W3	Bedroom	100	100%	274	1.5	3.6
	R4	W4	Bedroom	100	100%	346	1.5	3.6
	R5	W5	LKD	150	100%	271	1.5	4.2
	R6	W6	LKD	150	54%	166	1.5	4.2
	R7	W7	LKD	150	86%	341	1.5	4.2
	R8	W8	Bedroom	100	100%	304	1.5	2.8
	R9	W9	Bedroom	100	100%	278	1.5	3.6
	R10	W10	Bedroom	100	100%	359	1.5	3.6
	R11	W11 W12 W13	LKD	150	100%	458	1.5	8.9
	R12	W14	LKD	150	57%	187	1.5	8.7
	R13	W15	Bedroom	100	100%	255	1.5	7.2
	R14	W16	Bedroom	100	100%	340	1.5	7.2

		R15	W17	Bedroom	100	99%	224	1.5	5.4
		R16	W18	Bedroom	100	95%	212	1.5	7.2
		R17	W19 W20	LKD	150	93%	292	1.5	8.7
		R18	W21	LKD	150	43%	127	1.5	0.0
		R19	W22	Bedroom	100	100%	369	1.5	0.0
		R20	W23	Bedroom	100	100%	363	1.5	0.0
		R21	W24	Bedroom	100	98%	189	1.5	0.0
		R22	W25	Bedroom	100	100%	230	1.5	0.0
		R23	W26	Bedroom	100	100%	233	1.5	2.8
		R24	W27	Bedroom	100	100%	228	1.5	2.8
		R25	W28	Bedroom	100	100%	322	1.5	2.8
		R26	W29	Bedroom	100	100%	345	1.5	2.8
		R27	W30	Bedroom	100	100%	244	1.5	2.8
B3	Ground	R1	W1	LKD	150	12%	55	1.5	1.1
		R2	W2	Bedroom	100	25%	55	1.5	0.0
		R3	W3	Bedroom	100	47%	87	1.5	0.3
		R4	W4	Bedroom	100	38%	79	1.5	1.1
		R5	W5	Bedroom	100	37%	67	1.5	0.6
		R6	W6	LKD	150	7%	33	1.5	1.2
		R7	W7	Bedroom	100	27%	61	1.5	1.7
		R8	W8	Bedroom	100	38%	68	1.5	1.7
		R9	W9	LKD	150	11%	48	1.5	1.7
		R10	W10 W11	LKD	150	23%	93	1.5	2.3
		R11	W12	Bedroom	100	100%	207	1.5	1.2

	R12	W13	Bedroom	100	100%	193	1.5	1.2
First	R1	W1	Bedroom	100	0%	32	1.5	0.0
	R2	W2	Bedroom	100	0%	26	1.5	0.0
	R3	W3 W4 W5	LKD	150	23%	102	1.5	2.9
	R4	W6	Bedroom	100	82%	142	1.5	1.9
	R5	W7	Bedroom	100	54%	110	1.5	1.9
	R6	W8	LKD	150	24%	66	1.5	2.3
	R7	W9	LKD	150	23%	80	1.5	1.7
	R8	W10	LKD	150	22%	76	1.5	3.2
	R9	W11	LKD	150	29%	82	1.5	3.2
	R10	W12	Bedroom	100	45%	89	1.5	2.5
	R11	W13	Bedroom	100	46%	87	1.5	2.5
	R12	W14	LKD	150	30%	79	1.5	3.1
	R13	W15 W16	LKD	150	40%	124	1.5	2.8
	R14	W17	Bedroom	100	100%	230	1.5	1.7
	R15	W18	Bedroom	100	100%	215	1.5	1.6
	R16	W20	Bedroom	100	89%	179	1.5	0.4
	R17	W19	Bedroom	100	100%	159	1.5	1.4
	R18	W21	Bedroom	100	56%	113	1.5	0.0
	R19	W22	Bedroom	100	72%	130	1.5	0.0
Second	R1	W1 W2	LKD	150	37%	127	1.5	6.9
	R2	W3	Bedroom	100	83%	161	1.5	5.7
	R3	W4	Bedroom	100	100%	187	1.5	6.1
	R4	W5	Bedroom	100	3%	47	1.5	0.0

	R5	W6	Bedroom	100	2%	36	1.5	0.0
	R6	W7 W8 W9	LKD	150	47%	143	1.5	2.9
	R7	W10	Bedroom	100	100%	191	1.5	2.4
	R8	W11	Bedroom	100	56%	117	1.5	2.3
	R9	W12	LKD	150	33%	84	1.5	2.6
	R10	W13	LKD	150	38%	113	1.5	2.9
	R11	W14	LKD	150	35%	112	1.5	3.8
	R12	W15	LKD	150	47%	130	1.5	3.8
	R13	W16	Bedroom	100	62%	128	1.5	3.2
	R14	W17	Bedroom	100	64%	126	1.5	3.2
	R15	W18	LKD	150	42%	110	1.5	3.7
	R16	W19 W20	LKD	150	66%	175	1.5	3.3
	R17	W21	Bedroom	100	100%	254	1.5	2.1
	R18	W22	Bedroom	100	100%	233	1.5	2.1
	R19	W23	Bedroom	100	100%	189	1.5	1.9
	R20	W24	Bedroom	100	96%	205	1.5	1.8
	R21	W25	Bedroom	100	77%	136	1.5	1.2
	R22	W26	Bedroom	100	99%	164	1.5	0.1
Third	R1	W1 W2	LKD	150	60%	159	1.5	6.9
	R2	W3	Bedroom	100	100%	221	1.5	5.7
	R3	W4	Bedroom	100	100%	253	1.5	6.1
	R4	W5	Bedroom	100	27%	65	1.5	0.0
	R5	W6	Bedroom	100	14%	54	1.5	0.0

	R6	W7 W8 W9	LKD	150	78%	199	1.5	3.2
	R7	W10	Bedroom	100	100%	242	1.5	3.0
	R8	W11	Bedroom	100	75%	158	1.5	2.9
	R9	W12	LKD	150	44%	117	1.5	3.5
	R10	W13	LKD	150	55%	158	1.5	4.0
	R11	W14	LKD	150	55%	154	1.5	4.5
	R12	W15	LKD	150	58%	180	1.5	4.5
	R13	W16	Bedroom	100	91%	167	1.5	3.9
	R14	W17	Bedroom	100	92%	169	1.5	3.9
	R15	W18	LKD	150	60%	166	1.5	4.4
	R16	W19 W20	LKD	150	92%	269	1.5	4.1
	R17	W21	Bedroom	100	100%	271	1.5	2.4
	R18	W22	Bedroom	100	100%	251	1.5	2.4
	R19	W23	Bedroom	100	100%	222	1.5	2.4
	R20	W24	Bedroom	100	100%	237	1.5	2.3
	R21	W25	Bedroom	100	95%	163	1.5	2.3
	R22	W26	Bedroom	100	100%	212	1.5	2.2
Fourth	R1	W1 W2	LKD	150	93%	215	1.5	7.0
	R2	W3	Bedroom	100	100%	295	1.5	7.1
	R3	W4	Bedroom	100	100%	315	1.5	6.1
	R4	W5	Bedroom	100	65%	116	1.5	0.0
	R5	W6	Bedroom	100	38%	89	1.5	0.0
	R6	W7 W8 W9	LKD	150	100%	282	1.5	3.9

		R7	W10	Bedroom	100	100%	309	1.5	3.8
		R8	W11	Bedroom	100	100%	210	1.5	3.9
		R9	W12	LKD	150	62%	184	1.5	4.3
		R10	W13	LKD	150	89%	235	1.5	4.0
		R11	W14	LKD	150	93%	224	1.5	4.5
		R12	W15	LKD	150	73%	260	1.5	4.5
		R13	W16	Bedroom	100	100%	218	1.5	3.9
		R14	W17	Bedroom	100	100%	225	1.5	3.9
		R15	W18	LKD	150	73%	246	1.5	4.5
		R16	W19 W20	LKD	150	100%	392	1.5	4.2
		R17	W21	Bedroom	100	100%	292	1.5	2.4
		R18	W22	Bedroom	100	100%	276	1.5	2.4
		R19	W23	Bedroom	100	100%	257	1.5	2.4
		R20	W24	Bedroom	100	100%	279	1.5	2.4
		R21	W25	Bedroom	100	100%	202	1.5	2.4
		R22	W26	Bedroom	100	100%	271	1.5	2.4
C	Ground	R1	W1	LKD	150	24%	66	1.5	2.9
		R2	W2	Bedroom	100	20%	64	1.5	1.5
		R3	W3	LKD	150	21%	58	1.5	1.3
		R4	W4	Bedroom	100	44%	81	1.5	2.6
		R5	W5	LKD	150	18%	58	1.5	2.3
		R6	W6	LKD	150	16%	57	1.5	2.6
		R7	W7	LKD	150	9%	44	1.5	1.6
		R8	W8	Bedroom	100	28%	62	1.5	0.4
		R9	W9	Bedroom	100	19%	57	1.5	1.6

	R10	W10	Bedroom	100	23%	55	1.5	0.8
	R11	W11	Bedroom	100	21%	53	1.5	1.2
	R12	W12 W13	LKD	150	64%	218	1.5	2.6
	R13	W14	Bedroom	100	100%	233	1.5	2.4
	R14	W15	Bedroom	100	100%	232	1.5	2.4
	R15	W16	Bedroom	100	100%	193	1.5	2.4
	R16	W17	Bedroom	100	100%	253	1.5	2.4
First	R1	W1	LKD	150	29%	97	1.5	3.6
	R2	W2	LKD	150	30%	83	1.5	4.1
	R3	W3	Bedroom	100	47%	99	1.5	1.9
	R4	W4	Bedroom	100	73%	151	1.5	2.6
	R5	W5	LKD	150	36%	99	1.5	2.9
	R6	W6	LKD	150	39%	101	1.5	3.1
	R7	W7	LKD	150	26%	78	1.5	3.0
	R8	W8	Bedroom	100	44%	83	1.5	1.4
	R9	W9	Bedroom	100	43%	84	1.5	2.6
	R10	W10	LKD	150	30%	92	1.5	2.7
	R11	W11 W12	LKD	150	88%	244	1.5	2.8
	R12	W13	Bedroom	100	100%	274	1.5	2.4
	R13	W14	Bedroom	100	100%	278	1.5	2.4
	R14	W15	Bedroom	100	100%	252	1.5	2.4
	R15	W16	Bedroom	100	100%	253	1.5	2.4
	R16	W17	Bedroom	100	100%	220	1.5	2.4
	R17	W18	Bedroom	100	100%	291	1.5	2.4

		R18	W19	Bedroom	100	100%	300	1.5	2.4
		R19	W20	Bedroom	100	100%	203	1.5	2.4
	Second	R1	W1	LKD	150	54%	156	1.5	4.4
		R2	W2	LKD	150	45%	125	1.5	4.1
		R3	W3	Bedroom	100	69%	142	1.5	3.2
		R4	W4	Bedroom	100	100%	202	1.5	3.2
		R5	W5	LKD	150	46%	136	1.5	3.5
		R6	W6	LKD	150	50%	138	1.5	3.7
		R7	W7	LKD	150	51%	133	1.5	3.7
		R8	W8	Bedroom	100	64%	132	1.5	3.2
		R9	W9	Bedroom	100	63%	126	1.5	3.2
		R10	W10	LKD	150	43%	122	1.5	3.3
		R11	W11 W12	LKD	150	92%	280	1.5	2.8
		R12	W13	Bedroom	100	100%	287	1.5	2.4
		R13	W14	Bedroom	100	100%	295	1.5	2.4
		R14	W15	Bedroom	100	100%	269	1.5	2.4
		R15	W16	Bedroom	100	100%	268	1.5	2.4
		R16	W17	Bedroom	100	100%	233	1.5	2.4
		R17	W18	Bedroom	100	100%	307	1.5	2.4
		R18	W19	Bedroom	100	100%	320	1.5	2.4
		R19	W20	Bedroom	100	100%	220	1.5	2.4
E	Ground	R1	W1	Bedroom	100	100%	289	1.5	3.9
		R2	W2	Bedroom	100	100%	331	1.5	3.9
		R3	W3 W4	Bedroom	100	100%	381	1.5	3.9
		R4	W5	LKD	150	92%	309	1.5	3.9

		W6						
	R5	W7	LKD	150	70%	225	1.5	0.0
	R6	W8	Bedroom	100	100%	229	1.5	0.0
	R7	W9	Bedroom	100	100%	228	1.5	0.0
	R8	W10	LKD	150	69%	221	1.5	0.0
	R9	W11	Bedroom	100	100%	267	1.5	0.0
	R10	W12 W24	Bedroom	100	100%	503	1.5	0.2
	R11	W13 W25	LKD	150	51%	146	1.5	4.3
	R12	W14	LKD	150	42%	127	1.5	4.1
	R13	W15	Bedroom	100	75%	138	1.5	3.8
	R14	W16	Bedroom	100	56%	104	1.5	1.7
	R15	W17	LKD	150	17%	65	1.5	1.4
	R16	W18	LKD	150	29%	78	1.5	1.1
	R17	W19	LKD	150	36%	83	1.5	1.6
	R18	W20	Bedroom	100	57%	117	1.5	1.1
	R19	W21	Bedroom	100	32%	72	1.5	1.0
	R20	W22 W23	LKD	150	38%	102	1.5	2.0
First	R1	W1	Bedroom	100	100%	313	1.5	3.9
	R2	W2	Bedroom	100	100%	316	1.5	3.9
	R3	W3	Bedroom	100	100%	306	1.5	3.9
	R4	W4	Bedroom	100	100%	339	1.5	3.9
	R5	W5	LKD	150	51%	146	1.5	4.5
	R6	W6	LKD	150	80%	299	1.5	4.5
	R7	W7	Bedroom	100	100%	308	1.5	3.9

	R8	W8	Bedroom	100	100%	335	1.5	3.9
	R9	W9	Bedroom	100	100%	330	1.5	3.9
	R10	W10 W11	LKD	150	97%	340	1.5	3.9
	R11	W12	LKD	150	73%	241	1.5	0.0
	R12	W13	Bedroom	100	100%	246	1.5	0.0
	R13	W14	Bedroom	100	100%	247	1.5	0.0
	R14	W15	LKD	150	73%	243	1.5	0.0
	R15	W16	Bedroom	100	100%	289	1.5	0.0
	R16	W17 W31	Bedroom	100	100%	565	1.5	0.9
	R17	W18 W32	LKD	150	75%	195	1.5	4.8
	R18	W19	LKD	150	44%	126	1.5	4.8
	R19	W20	Bedroom	100	82%	162	1.5	4.5
	R20	W30	Bedroom	100	58%	114	1.5	1.6
	R21	W21	Bedroom	100	88%	141	1.5	2.2
	R22	W22	Bedroom	100	97%	146	1.5	1.8
	R23	W23	LKD	150	39%	118	1.5	2.5
	R24	W24	LKD	150	46%	111	1.5	2.9
	R25	W25	Bedroom	100	67%	139	1.5	2.1
	R26	W26	Bedroom	100	67%	138	1.5	1.5
	R27	W27	LKD	150	47%	130	1.5	1.5
	R28	W28 W29	LKD	150	59%	169	1.5	2.3
Second	R1	W1	Bedroom	100	100%	317	1.5	3.9
	R2	W2	Bedroom	100	100%	319	1.5	3.9
	R3	W3	Bedroom	100	100%	311	1.5	3.9

R4	W4	Bedroom	100	100%	344	1.5	3.9
R5	W5	LKD	150	52%	149	1.5	4.5
R6	W6	LKD	150	80%	301	1.5	4.5
R7	W7	Bedroom	100	100%	313	1.5	3.9
R8	W8	Bedroom	100	100%	339	1.5	3.9
R9	W9	Bedroom	100	100%	333	1.5	3.9
R10	W10 W11	LKD	150	100%	348	1.5	3.9
R11	W12	LKD	150	76%	254	1.5	0.0
R12	W13	Bedroom	100	100%	257	1.5	0.0
R13	W14	Bedroom	100	100%	261	1.5	0.0
R14	W15	LKD	150	76%	259	1.5	0.0
R15	W16	Bedroom	100	100%	310	1.5	0.0
R16	W17 W31	Bedroom	100	100%	624	1.5	1.7
R17	W18 W32	LKD	150	100%	270	1.5	6.2
R18	W19	LKD	150	53%	154	1.5	5.5
R19	W20	Bedroom	100	100%	197	1.5	5.4
R20	W21	Bedroom	100	73%	135	1.5	2.0
R21	W22	Bedroom	100	100%	172	1.5	2.4
R22	W23	Bedroom	100	99%	187	1.5	2.0
R23	W24	LKD	150	56%	156	1.5	2.7
R24	W25	LKD	150	61%	158	1.5	3.1
R25	W26	Bedroom	100	99%	175	1.5	2.4
R26	W27	Bedroom	100	99%	175	1.5	2.4
R27	W28	LKD	150	58%	173	1.5	2.0

	R28	W29 W30	LKD	150	82%	214	1.5	2.8
Third	R1	W1	Bedroom	100	100%	318	1.5	3.9
	R2	W2	Bedroom	100	100%	319	1.5	3.9
	R3	W3	Bedroom	100	100%	313	1.5	3.9
	R4	W4	Bedroom	100	100%	346	1.5	3.9
	R5	W5	LKD	150	52%	149	1.5	4.5
	R6	W6	LKD	150	80%	303	1.5	4.5
	R7	W7	Bedroom	100	100%	314	1.5	3.9
	R8	W8	Bedroom	100	100%	340	1.5	3.9
	R9	W9	Bedroom	100	100%	335	1.5	3.9
	R10	W10 W11	LKD	150	99%	347	1.5	3.9
	R11	W12	LKD	150	74%	252	1.5	0.0
	R12	W13	Bedroom	100	100%	256	1.5	0.0
	R13	W14	Bedroom	100	100%	260	1.5	0.0
	R14	W15	LKD	150	76%	256	1.5	0.0
	R15	W16	Bedroom	100	100%	315	1.5	0.0
	R16	W17 W31	Bedroom	100	100%	659	1.5	2.4
	R17	W18 W32	LKD	150	100%	406	1.5	7.3
	R18	W19	LKD	150	65%	195	1.5	6.4
	R19	W20	Bedroom	100	100%	243	1.5	6.2
	R20	W21	Bedroom	100	98%	174	1.5	2.2
	R21	W22	Bedroom	100	100%	217	1.5	2.4
	R22	W23	Bedroom	100	100%	232	1.5	2.0

	R23	W24	LKD	150	79%	198	1.5	2.7
	R24	W25	LKD	150	72%	208	1.5	3.1
	R25	W26	Bedroom	100	100%	213	1.5	2.4
	R26	W27	Bedroom	100	100%	208	1.5	2.4
	R27	W28	LKD	150	66%	215	1.5	2.4
	R28	W29 W30	LKD	150	100%	267	1.5	4.5
Fourth	R1	W1	Bedroom	100	100%	349	1.5	3.9
	R2	W2	Bedroom	100	100%	354	1.5	3.9
	R3	W3	Bedroom	100	100%	345	1.5	3.9
	R4	W4	Bedroom	100	100%	384	1.5	3.9
	R5	W5	LKD	150	55%	176	1.5	4.5
	R6	W6	LKD	150	90%	357	1.5	4.5
	R7	W7	Bedroom	100	100%	349	1.5	3.9
	R8	W8	Bedroom	100	100%	372	1.5	3.9
	R9	W9	Bedroom	100	100%	370	1.5	3.9
	R10	W10 W11	LKD	150	100%	428	1.5	3.9
	R11	W12	LKD	150	80%	302	1.5	0.0
	R12	W13	Bedroom	100	100%	287	1.5	0.0
	R13	W14	Bedroom	100	100%	297	1.5	0.0
	R14	W15 W28	LKD	150	100%	537	1.5	2.4
	R15	W16 W29	LKD	150	100%	670	1.5	8.2
	R16	W17	Bedroom	100	100%	333	1.5	7.3
	R17	W18	Bedroom	100	100%	239	1.5	3.1
	R18	W19	Bedroom	100	100%	266	1.5	2.4

		R19	W20	Bedroom	100	100%	276	1.5	2.4
		R20	W21	LKD	150	100%	253	1.5	2.7
		R21	W22	LKD	150	76%	258	1.5	3.1
		R22	W23	Bedroom	100	100%	246	1.5	2.4
		R23	W24	Bedroom	100	100%	237	1.5	2.4
		R24	W25	LKD	150	78%	270	1.5	3.1
		R25	W26 W27	LKD	150	100%	418	1.5	7.4
G	Ground	R1	W1	LKD	150	23%	69	1.5	1.2
		R2	W2	LKD	150	17%	50	1.5	1.1
		R3	W3	Bedroom	100	36%	67	1.5	0.3
		R4	W4	LKD	150	15%	56	1.5	1.4
		R5	W5	Bedroom	100	44%	84	1.5	1.0
		R6	W6	Bedroom	100	45%	83	1.5	0.9
		R7	W7	Bedroom	100	44%	68	1.5	0.0
		R8	W8	Bedroom	100	57%	111	1.5	0.0
		R9	W9 W10 W11	LKD	150	44%	128	1.5	2.2
		R10	W12 W13 W14	LKD	150	79%	218	1.5	6.2
		R11	W15 W16	Bedroom	100	100%	343	1.5	6.4
		R12	W17	Bedroom	100	100%	352	1.5	6.8
		R13	W18 W19 W20	LKD	150	100%	616	1.5	7.8
		R14	W21	Bedroom	100	100%	272	1.5	2.7

	R15	W22	Bedroom	100	100%	275	1.5	3.3
	R16	W23	LKD	150	77%	273	1.5	4.5
	R17	W24	LKD	150	100%	245	1.5	4.5
	R18	W25	Bedroom	100	100%	234	1.5	3.9
	R19	W26	Bedroom	100	100%	325	1.5	3.9
First	R1	W1	LKD	150	32%	109	1.5	1.9
	R2	W2	LKD	150	31%	84	1.5	2.1
	R3	W3	Bedroom	100	53%	105	1.5	1.4
	R4	W4	Bedroom	100	67%	138	1.5	1.4
	R5	W5	LKD	150	26%	83	1.5	2.1
	R6	W6	Bedroom	100	83%	130	1.5	1.4
	R7	W7	Bedroom	100	72%	148	1.5	0.9
	R8	W8	Bedroom	100	55%	104	1.5	0.0
	R9	W9	Bedroom	100	72%	151	1.5	0.0
	R10	W10 W11 W12	LKD	150	56%	170	1.5	3.6
	R11	W13 W14 W15	LKD	150	77%	267	1.5	7.1
	R12	W16	Bedroom	100	100%	324	1.5	6.6
	R13	W17	Bedroom	100	100%	338	1.5	6.9
	R14	W18	Bedroom	100	100%	362	1.5	7.2
	R15	W19 W20 W21	LKD	150	100%	664	1.5	7.8
	R16	W22	Bedroom	100	100%	276	1.5	2.9
	R17	W23	Bedroom	100	100%	268	1.5	3.9
	R18	W24	LKD	150	79%	268	1.5	3.7

	R19	W25	Bedroom	100	100%	310	1.5	2.9
	R20	W26	LKD	150	78%	307	1.5	4.5
	R21	W27	LKD	150	100%	272	1.5	4.5
	R22	W28	Bedroom	100	100%	277	1.5	3.9
	R23	W29	Bedroom	100	100%	367	1.5	3.9
	R24	W30	Bedroom	100	100%	370	1.5	3.9
	R25	W31 W32	Bedroom	100	100%	366	1.5	3.9
Second	R1	W1	LKD	150	48%	141	1.5	2.3
	R2	W2	LKD	150	42%	111	1.5	2.6
	R3	W3	Bedroom	100	69%	146	1.5	1.9
	R4	W4	Bedroom	100	99%	185	1.5	1.9
	R5	W5	LKD	150	42%	125	1.5	2.5
	R6	W6	Bedroom	100	93%	168	1.5	1.9
	R7	W7	Bedroom	100	100%	192	1.5	1.4
	R8	W8	Bedroom	100	63%	127	1.5	0.0
	R9	W9	Bedroom	100	88%	180	1.5	0.0
	R10	W10 W11 W12	LKD	150	62%	214	1.5	3.6
	R11	W13 W14 W15	LKD	150	81%	315	1.5	8.9
	R12	W16	Bedroom	100	100%	341	1.5	7.1
	R13	W17	Bedroom	100	100%	355	1.5	7.2
	R14	W18	Bedroom	100	100%	375	1.5	7.2
	R15	W19 W20 W21	LKD	150	100%	693	1.5	7.8

	R16	W22	Bedroom	100	100%	280	1.5	2.9
	R17	W23	Bedroom	100	100%	272	1.5	3.9
	R18	W24	LKD	150	79%	269	1.5	3.7
	R19	W25	Bedroom	100	100%	313	1.5	2.9
	R20	W26	LKD	150	78%	313	1.5	4.5
	R21	W27	LKD	150	100%	275	1.5	4.5
	R22	W28	Bedroom	100	100%	281	1.5	3.9
	R23	W29	Bedroom	100	100%	373	1.5	3.9
	R24	W30	Bedroom	100	100%	376	1.5	3.9
	R25	W31 W32	Bedroom	100	100%	383	1.5	3.9
Third	R1	W1	LKD	150	71%	176	1.5	2.8
	R2	W2	LKD	150	52%	150	1.5	3.1
	R3	W3	Bedroom	100	97%	188	1.5	2.4
	R4	W4	Bedroom	100	100%	237	1.5	2.4
	R5	W5	LKD	150	59%	166	1.5	3.1
	R6	W6	Bedroom	100	100%	211	1.5	2.4
	R7	W7	Bedroom	100	100%	237	1.5	2.4
	R8	W8	Bedroom	100	72%	149	1.5	0.0
	R9	W9	Bedroom	100	99%	216	1.5	0.0
	R10	W10 W11 W12	LKD	150	70%	285	1.5	3.6
	R11	W13 W14 W15	LKD	150	89%	388	1.5	8.9
	R12	W16	Bedroom	100	100%	358	1.5	7.2
	R13	W17	Bedroom	100	100%	374	1.5	7.2

	R14	W18	Bedroom	100	100%	392	1.5	7.2
	R15	W19 W20 W21	LKD	150	100%	717	1.5	7.8
	R16	W22	Bedroom	100	100%	281	1.5	2.9
	R17	W23	Bedroom	100	100%	273	1.5	3.9
	R18	W24	LKD	150	79%	270	1.5	3.7
	R19	W25	Bedroom	100	100%	314	1.5	2.9
	R20	W26	LKD	150	78%	314	1.5	4.5
	R21	W27	LKD	150	100%	277	1.5	4.5
	R22	W28	Bedroom	100	100%	282	1.5	3.9
	R23	W29	Bedroom	100	100%	372	1.5	3.9
	R24	W30	Bedroom	100	100%	378	1.5	3.9
	R25	W31 W32	Bedroom	100	100%	416	1.5	3.9
Fourth	R1	W1	LKD	150	85%	231	1.5	2.8
	R2	W2	LKD	150	65%	206	1.5	3.1
	R3	W3	Bedroom	100	100%	231	1.5	2.4
	R4	W4	Bedroom	100	100%	286	1.5	2.4
	R5	W5	LKD	150	83%	228	1.5	3.1
	R6	W6	Bedroom	100	100%	273	1.5	2.4
	R7	W7	Bedroom	100	100%	294	1.5	2.4
	R8	W8	Bedroom	100	87%	181	1.5	0.0
	R9	W9	Bedroom	100	100%	264	1.5	0.0
	R10	W10 W11 W12	LKD	150	82%	388	1.5	3.6
	R11	W13	LKD	150	100%	522	1.5	8.9

	W14 W15						
R12	W16	Bedroom	100	100%	392	1.5	7.2
R13	W17	Bedroom	100	100%	403	1.5	7.2
R14	W18	Bedroom	100	100%	427	1.5	7.2
R15	W19 W20 W21	LKD	150	100%	795	1.5	7.8
R16	W22	Bedroom	100	100%	305	1.5	3.9
R17	W23	Bedroom	100	100%	291	1.5	3.9
R18	W24	LKD	150	84%	309	1.5	3.7
R19	W25	Bedroom	100	100%	341	1.5	3.9
R20	W26	LKD	150	79%	361	1.5	4.5
R21	W27	LKD	150	100%	319	1.5	4.5
R22	W28	Bedroom	100	100%	305	1.5	3.9
R23	W29	Bedroom	100	100%	403	1.5	3.9
R24	W30	Bedroom	100	100%	412	1.5	3.9
R25	W31 W32	Bedroom	100	100%	572	1.5	3.9

Block A

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Sources of information

WYG Group Ltd
A115249 WYG001 - WYG007 - WGC Topographic Survey.dwg
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NORTH

Project	Campus East, Welwyn Garden City
Title	Ground Floor Block A Room Layout
Drawn	MZ
Checked	--
Date	02/11/2022
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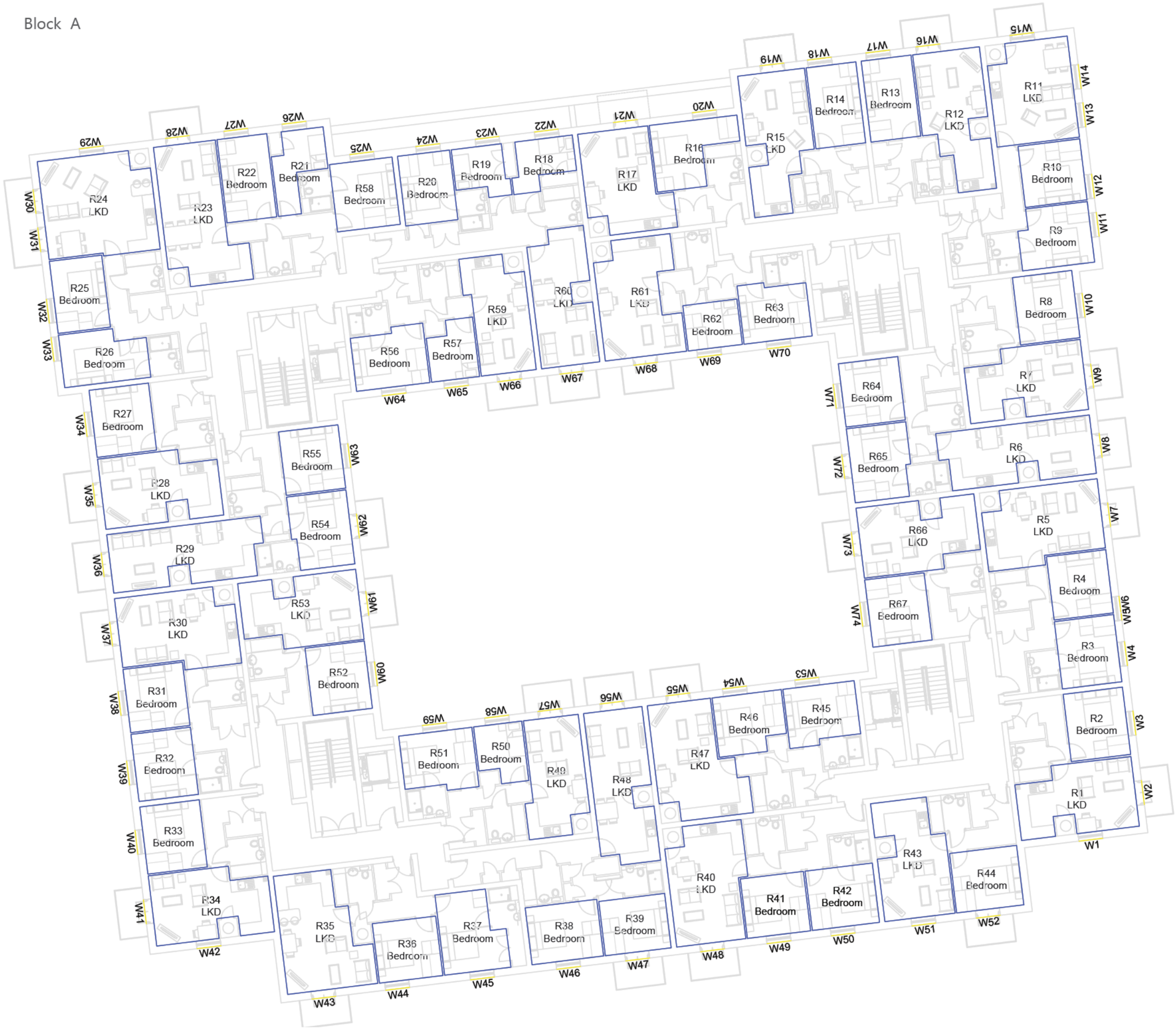
Block A



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NORTH

Project	Campus East, Welwyn Garden City
Title	First Floor Block A Room Layout
Drawn	MZ
Checked	--
Date	02/11/2022
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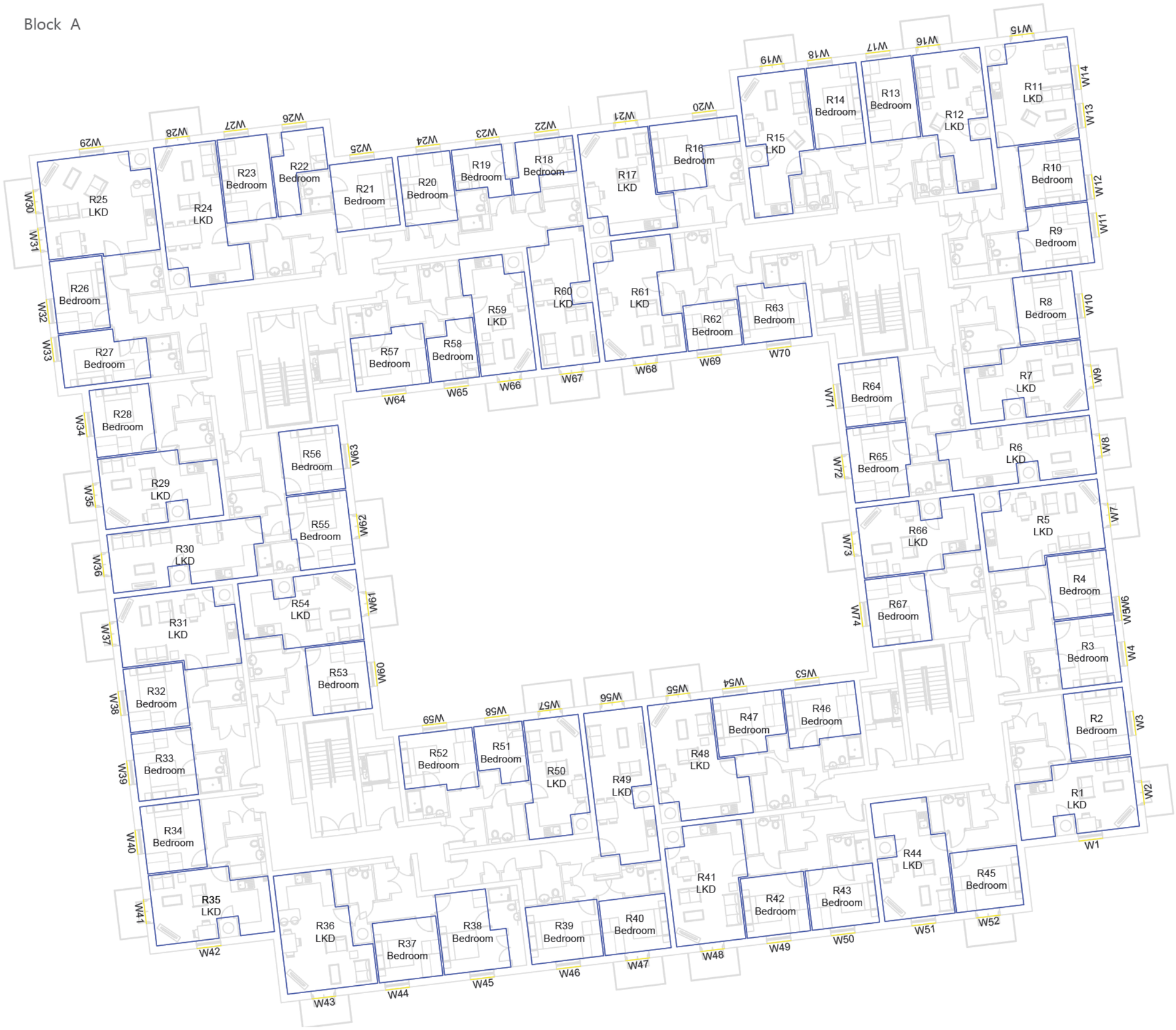
Block A



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NORTH

Project	Campus East, Welwyn Garden City
Title	Second Floor Block A Room Layout
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Block A

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Sources of information

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NORTH

Project: Campus East, Welwyn Garden City

Title: Third Floor Block A Room Layout

Drawn: MZ | Checked: --

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Block A

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Sources of information

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NORTH

Project: Campus East, Welwyn Garden City

Title: Fourth Floor Block A Room Layout

Drawn	MZ	Checked	--
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Block A

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Sources of information

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NORTH

Project: Campus East, Welwyn Garden City

Title: Fifth Floor Block A Room Layout

Drawn	MZ	Checked	--
Date	02/11/2022	Project	5163

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Block
B1 & B2

Block
B3 & B4

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Project	Campus East, Welwyn Garden City
Title	Ground Floor Block B-B3 Room Layout
Drawn	MZ
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Date	02/11/2022
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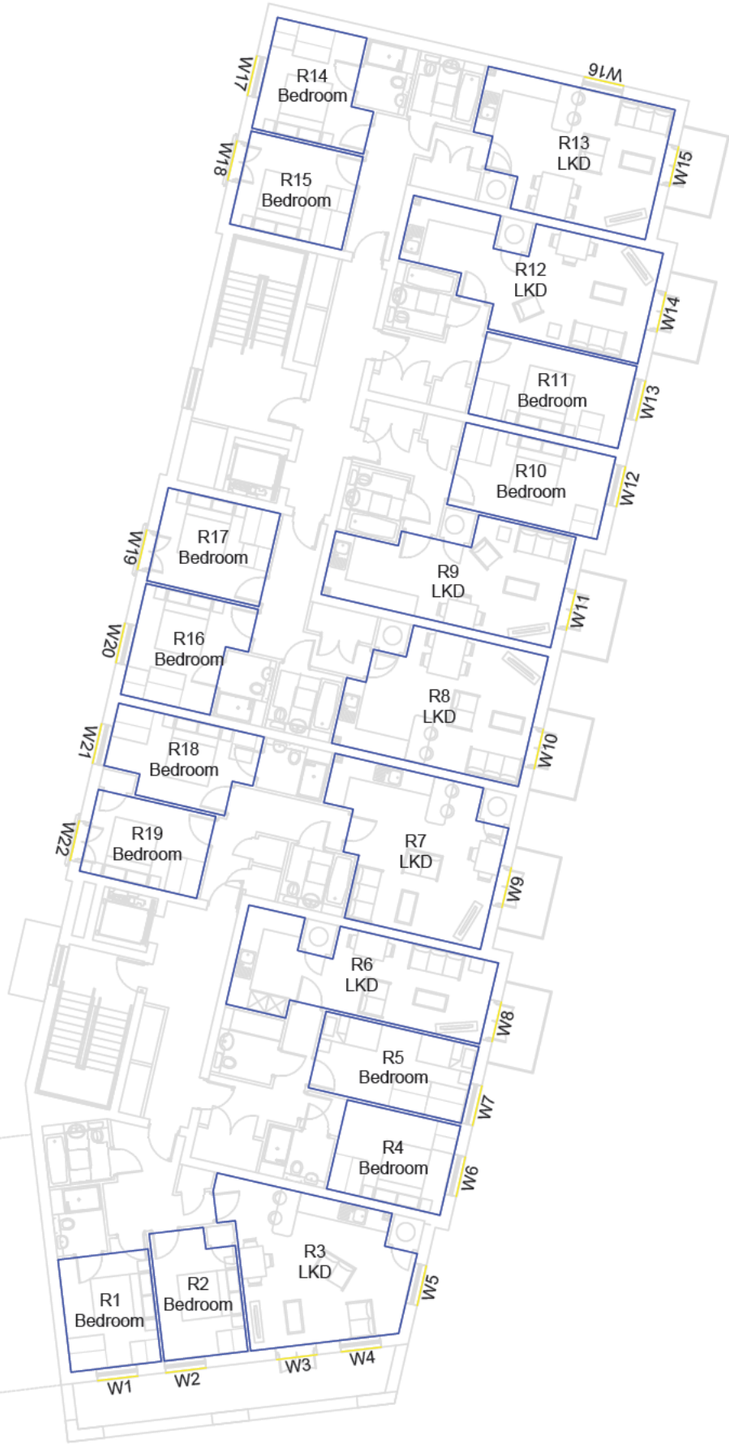
Block
B1 & B2

Block
B3 & B4



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NORTH

Project: Campus East, Welwyn Garden City

Title: First Floor Block B-B3 Room Layout

Drawn: MZ | Checked: --

Date: 02/11/2022 | Project: 5163

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Block
B1 & B2

Block
B3 & B4

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NORTH

Project	Campus East, Welwyn Garden City		
Title	Second Floor Block B-B3 Room Layout		
Drawn	MZ	Checked	--
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Block
B1 & B2

Block
B3 & B4

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NORTH

Project	Campus East, Welwyn Garden City		
Title	Third Floor Block B-B3 Room Layout		
Drawn	MZ	Checked	--
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Block
B1 & B2

Block
B3 & B4

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NORTH

Project	Campus East, Welwyn Garden City		
Title	Fourth Floor Block B-B3 Room Layout		
Drawn	MZ	Checked	--
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Block
C & D

Block
E & F

4th Floor, Holborn Tower
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Sources of information

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NORTH

Project: Campus East, Welwyn Garden City

Title: Ground Floor Block C-E Room Layout

Drawn: MZ | Checked: --

Date: 02/11/2022 | Project: 5163

Rel no.: 08 | Prefix: ID01 | Page no.: 12

Block
C & D

Block
E & F

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NORTH

Project: Campus East, Welwyn Garden City

Title: First Floor Block C-E Room Layout

Drawn: MZ | Checked: --

Date: 02/11/2022 | Project: 5163

Rel no.: 08 | Prefix: ID01 | Page no.: 13

Block
C & D

Block
E & F

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Sources of information

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8375_Blocks Elevations.dwg
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NORTH

Project	Campus East, Welwyn Garden City
Title	Second Floor Block C-E Room Layout
Drawn	MZ
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Date	02/11/2022
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Prefix	ID01
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Block
C & D

Block
E & F

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Sources of information

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NORTH

Project: Campus East, Welwyn Garden City

Title: Third Floor Block C-E Room Layout

Drawn	MZ	Checked	--
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Block
E & F

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Sources of information

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NORTH

Project: Campus East, Welwyn Garden City

Title: Fourth Floor Block C-E Room Layout

Drawn: MZ | Checked: --

Date: 02/11/2022 | Project: 5163

Rel no.: 08 | Prefix: ID01 | Page no.: 16

Block
G & H

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Sources of information

WYG Group Ltd
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8375_Blocks Elevations.dwg
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NORTH

Project: Campus East, Welwyn Garden City

Title: Ground Floor Block G-H Room Layout

Drawn	MZ	Checked	--
Date	02/11/2022	Project	5163
Rel no.	Prefix	Page no.	
08	ID01		17

Block
G & H

4th Floor, Holborn Tower
137-144 High Holborn
London WC1V 6PL
T: +44(0)20 7148 6290
E: info@eb7.co.uk
W: eb7.co.uk

Sources of information

WYG Group Ltd
A115249 WYG001 - WYG007 - WGC Topographic Survey.dwg
Received 15/09/2021

Saunders Architecture+Urban Design
8375_Block Plans.dwg
8375_Blocks Elevations.dwg
Received 27/10/2022

EB7 Ltd
Site Photographs
Ordnance Survey

NORTH

Project: Campus East, Welwyn Garden City

Title: First Floor Block G-H Room Layout

Drawn: MZ | Checked: --

Date: 02/11/2022 | Project: 5163

Rel no.: 08 | Prefix: ID01 | Page no.: 18

Block
G & H

4th Floor, Holborn Tower
137-144 High Holborn
London WC1V 6PL
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Sources of information

WYG Group Ltd
A115249 WYG001 - WYG007 - WGC Topographic Survey.dwg
Received 15/09/2021

Saunders Architecture+Urban Design
8375_Block Plans.dwg
8375_Blocks Elevations.dwg
Received 27/10/2022

EB7 Ltd
Site Photographs
Ordnance Survey

NORTH

Project	Campus East, Welwyn Garden City
Title	Second Floor Block G-H Room Layout
Drawn	MZ
Checked	--
Date	02/11/2022
Project	5163
Rel no.	08
Prefix	ID01
Page no.	19

Block
G & H

4th Floor, Holborn Tower
137-144 High Holborn
London WC1V 6PL
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Sources of information

WYG Group Ltd
A115249 WYG001 - WYG007 - WGC Topographic Survey.dwg
Received 15/09/2021

Saunders Architecture+Urban Design
8375_Block Plans.dwg
8375_Blocks Elevations.dwg
Received 27/10/2022

EB7 Ltd
Site Photographs
Ordnance Survey

NORTH

Project: Campus East, Welwyn Garden City

Title: Third Floor Block G-H Room Layout

Drawn: MZ | Checked: --

Date: 02/11/2022 | Project: 5163

Rel no.: 08 | Prefix: ID01 | Page no.: 20

Block
G & H

4th Floor, Holborn Tower
137-144 High Holborn
London WC1V 6PL
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Sources of information

WYG Group Ltd
A115249 WYG001 - WYG007 - WGC Topographic Survey.dwg
Received 15/09/2021

Saunders Architecture+Urban Design
8375_Block Plans.dwg
8375_Blocks Elevations.dwg
Received 27/10/2022

EB7 Ltd
Site Photographs
Ordnance Survey

NORTH

Project: Campus East, Welwyn Garden City

Title: Fourth Floor Block G-H Room Layout

Drawn: MZ | Checked: --

Date: 02/11/2022 | Project: 5163

Rel no.: 08 | Prefix: ID01 | Page no.: 21

Appendix 4

Detailed results of the daylight and sunlight assessments within the proposed scheme (BRE 2011)

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
A				
Ground	R1	W1-L	LKD	
		W1-U	LKD	
		W2-L	LKD	
		W2-U	LKD	**3.81**
Ground	R2	W3-L	Bedroom	
		W3-U	Bedroom	**3.17**
Ground	R3	W4-L	Bedroom	
		W4-U	Bedroom	
		W5-L	Bedroom	
		W5-U	Bedroom	**3.96**
Ground	R4	W6-L	Bedroom	
		W6-U	Bedroom	**2.17**
Ground	R5	W7-L	LKD	
		W7-U	LKD	**1.85**
Ground	R6	W8-L	LKD	
		W8-U	LKD	**1.68**
Ground	R7	W9-L	LKD	
		W9-U	LKD	**1.89**
Ground	R8	W10-L	Bedroom	
		W10-U	Bedroom	**2.88**
Ground	R9	W11-L	Bedroom	
		W11-U	Bedroom	**2.75**
Ground	R10	W12-L	Bedroom	
		W12-U	Bedroom	**2.83**
Ground	R11	W13-L	LKD	
		W13-U	LKD	
		W14-L	LKD	
		W14-U	LKD	
		W15-L	LKD	
		W15-U	LKD	**3.48**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Ground	R12	W16-L	LKD	
		W16-U	LKD	
		W17-L	LKD	
		W17-U	LKD	**1.66**
Ground	R13	W18-L	Bedroom	
		W18-U	Bedroom	**1.03**
Ground	R14	W19-L	Bedroom	
		W19-U	Bedroom	**1.69**
Ground	R15	W20-L	LKD	
		W20-U	LKD	**0.86**
Ground	R16	W21-L	LKD	
		W21-U	LKD	**1.09**
Ground	R17	W22-L	Bedroom	
		W22-U	Bedroom	**1.96**
Ground	R18	W23-L	Bedroom	
		W23-U	Bedroom	**2.15**
Ground	R19	W24-L	Bedroom	
		W24-U	Bedroom	**2.09**
Ground	R20	W25-L	Bedroom	
		W25-U	Bedroom	**2.54**
Ground	R21	W26-L	LKD	
		W26-U	LKD	**0.92**
Ground	R22	W27-L	LKD	
		W27-U	LKD	
		W28-L	LKD	
		W28-U	LKD	
		W29-L	LKD	
		W29-U	LKD	**3.56**
Ground	R23	W30-L	Bedroom	
		W30-U	Bedroom	**3.12**
Ground	R24	W31-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W31-U	Bedroom	**3.03**
Ground	R25	W32-L	Bedroom	
		W32-U	Bedroom	**2.94**
Ground	R26	W33-L	LKD	
		W33-U	LKD	**2.02**
Ground	R27	W34-L	LKD	
		W34-U	LKD	**1.77**
Ground	R28	W35-L	LKD	
		W35-U	LKD	**1.92**
Ground	R29	W36-L	Bedroom	
		W36-U	Bedroom	**3.35**
Ground	R30	W37-L	Bedroom	
		W37-U	Bedroom	**3.25**
Ground	R31	W38-L	Bedroom	
		W38-U	Bedroom	**3.19**
Ground	R32	W39-L	LKD	
		W39-U	LKD	
		W40-L	LKD	
		W40-U	LKD	**3.75**
Ground	R33	W41-L	LKD	
		W41-U	LKD	**1.96**
Ground	R34	W42-L	Bedroom	
		W42-U	Bedroom	**3.50**
Ground	R35	W43-L	Bedroom	
		W43-U	Bedroom	**2.93**
Ground	R36	W44-L	Bedroom	
		W44-U	Bedroom	**3.30**
Ground	R37	W45-L	Bedroom	
		W45-U	Bedroom	**2.81**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Ground	R38	W46-L	LKD	
		W46-U	LKD	**2.04**
Ground	R39	W47-L	Bedroom	
		W47-U	Bedroom	**3.52**
Ground	R40	W48-L	Bedroom	
		W48-U	Bedroom	**3.43**
Ground	R41	W49-L	LKD	
		W49-U	LKD	**1.93**
Ground	R42	W50-L	Bedroom	
		W50-U	Bedroom	**2.63**
Ground	R43	W51-L	Bedroom	
		W51-U	Bedroom	**1.60**
Ground	R44	W52-L	Bedroom	
		W52-U	Bedroom	**2.73**
Ground	R45	W53-L	LKD	
		W53-U	LKD	**0.75**
Ground	R46	W54-L	LKD	
		W54-U	LKD	**0.58**
Ground	R47	W55-L	LKD	
		W55-U	LKD	**0.69**
Ground	R48	W56-L	Bedroom	
		W56-U	Bedroom	**1.57**
Ground	R49	W57-L	Bedroom	
		W57-U	Bedroom	**1.67**
Ground	R50	W58-L	LKD	
		W58-U	LKD	**0.82**
Ground	R52	W60-L	Bedroom	
		W60-U	Bedroom	**1.72**
Ground	R53	W61-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W61-U	Bedroom	**1.92**
Ground	R54	W62-L	Bedroom	
		W62-U	Bedroom	**1.62**
Ground	R55	W63-L	LKD	
		W63-U	LKD	**0.77**
Ground	R56	W64-L	LKD	
		W64-U	LKD	**1.05**
Ground	R57	W65-L	Bedroom	
		W65-U	Bedroom	**2.57**
Ground	R58	W66-L	Bedroom	
		W66-U	Bedroom	**1.77**
Ground	R59	W67-L	Bedroom	
		W67-U	Bedroom	**1.70**
Ground	R60	W68-L	Bedroom	
		W68-U	Bedroom	**0.98**
Ground	R61	W69-L	LKD	
		W69-U	LKD	**0.79**
Ground	R62	W70-L	Bedroom	
		W70-U	Bedroom	**1.65**
Ground	R51	W59-L	Bedroom	
		W59-U	Bedroom	**1.00**
First	R1	W1-L	LKD	
		W1-U	LKD	
		W2-L	LKD	
		W2-U	LKD	**3.94**
First	R2	W3-L	Bedroom	
		W3-U	Bedroom	**3.42**
First	R3	W4-L	Bedroom	
		W4-U	Bedroom	
		W5-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W5-U	Bedroom	**4.29**
First	R4	W6-L	Bedroom	
		W6-U	Bedroom	**2.35**
First	R5	W7-L	LKD	
		W7-U	LKD	**1.93**
First	R6	W8-L	LKD	
		W8-U	LKD	**1.75**
First	R7	W9-L	LKD	
		W9-U	LKD	**1.96**
First	R8	W10-L	Bedroom	
		W10-U	Bedroom	**3.08**
First	R9	W11-L	Bedroom	
		W11-U	Bedroom	**3.07**
First	R10	W12-L	Bedroom	
		W12-U	Bedroom	**3.30**
First	R11	W13-L	LKD	
		W13-U	LKD	
		W14-L	LKD	
		W14-U	LKD	
		W15-L	LKD	
		W15-U	LKD	**4.67**
First	R12	W16-L	LKD	
		W16-U	LKD	**1.14**
First	R13	W17-L	Bedroom	
		W17-U	Bedroom	**2.17**
First	R14	W18-L	Bedroom	
		W18-U	Bedroom	**2.10**
First	R15	W19-L	LKD	
		W19-U	LKD	**1.05**
First	R16	W20-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W20-U	Bedroom	**1.70**
First	R17	W21-L	LKD	
		W21-U	LKD	**1.18**
First	R18	W22-L	Bedroom	
		W22-U	Bedroom	**3.04**
First	R19	W23-L	Bedroom	
		W23-U	Bedroom	**3.33**
First	R20	W24-L	Bedroom	
		W24-U	Bedroom	**2.45**
First	R21	W26-L	Bedroom	
		W26-U	Bedroom	**2.48**
First	R22	W27-L	Bedroom	
		W27-U	Bedroom	**2.09**
First	R23	W28-L	LKD	
		W28-U	LKD	**1.02**
First	R24	W29-L	LKD	
		W29-U	LKD	
		W30-L	LKD	
		W30-U	LKD	
		W31-L	LKD	
		W31-U	LKD	**3.32**
First	R25	W32-L	Bedroom	
		W32-U	Bedroom	**3.52**
First	R26	W33-L	Bedroom	
		W33-U	Bedroom	**3.24**
First	R27	W34-L	Bedroom	
		W34-U	Bedroom	**3.09**
First	R28	W35-L	LKD	
		W35-U	LKD	**2.03**
First	R29	W36-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W36-U	LKD	**1.78**
First	R30	W37-L	LKD	
		W37-U	LKD	**1.93**
First	R31	W38-L	Bedroom	
		W38-U	Bedroom	**3.54**
First	R32	W39-L	Bedroom	
		W39-U	Bedroom	**3.44**
First	R33	W40-L	Bedroom	
		W40-U	Bedroom	**3.38**
First	R34	W41-L	LKD	
		W41-U	LKD	
		W42-L	LKD	
		W42-U	LKD	**3.87**
First	R35	W43-L	LKD	
		W43-U	LKD	**1.95**
First	R36	W44-L	Bedroom	
		W44-U	Bedroom	**3.64**
First	R37	W45-L	Bedroom	
		W45-U	Bedroom	**3.05**
First	R38	W46-L	Bedroom	
		W46-U	Bedroom	**3.44**
First	R39	W47-L	Bedroom	
		W47-U	Bedroom	**2.80**
First	R40	W48-L	LKD	
		W48-U	LKD	**2.02**
First	R41	W49-L	Bedroom	
		W49-U	Bedroom	**3.66**
First	R42	W50-L	Bedroom	
		W50-U	Bedroom	**3.55**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
First	R43	W51-L	LKD	
		W51-U	LKD	**1.99**
First	R44	W52-L	Bedroom	
		W52-U	Bedroom	**2.61**
First	R45	W53-L	Bedroom	
		W53-U	Bedroom	**1.75**
First	R46	W54-L	Bedroom	
		W54-U	Bedroom	**1.97**
First	R47	W55-L	LKD	
		W55-U	LKD	**0.80**
First	R48	W56-L	LKD	
		W56-U	LKD	**0.78**
First	R49	W57-L	LKD	
		W57-U	LKD	**1.01**
First	R50	W58-L	Bedroom	
		W58-U	Bedroom	**2.55**
First	R52	W60-L	Bedroom	
		W60-U	Bedroom	**2.01**
First	R53	W61-L	LKD	
		W61-U	LKD	**1.07**
First	R54	W62-L	Bedroom	
		W62-U	Bedroom	**1.24**
First	R55	W63-L	Bedroom	
		W63-U	Bedroom	**2.02**
First	R56	W64-L	Bedroom	
		W64-U	Bedroom	**1.88**
First	R57	W65-L	Bedroom	
		W65-U	Bedroom	**2.82**
First	R58	W25-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W25-U	Bedroom	**1.84**
First	R59	W66-L	LKD	
		W66-U	LKD	**1.31**
First	R60	W67-L	LKD	
		W67-U	LKD	**1.14**
First	R61	W68-L	LKD	
		W68-U	LKD	**1.04**
First	R62	W69-L	Bedroom	
		W69-U	Bedroom	**3.08**
First	R63	W70-L	Bedroom	
		W70-U	Bedroom	**1.99**
First	R64	W71-L	Bedroom	
		W71-U	Bedroom	**1.99**
First	R65	W72-L	Bedroom	
		W72-U	Bedroom	**1.21**
First	R66	W73-L	LKD	
		W73-U	LKD	**1.05**
First	R67	W74-L	Bedroom	
		W74-U	Bedroom	**1.99**
First	R51	W59-L	Bedroom	
		W59-U	Bedroom	**1.69**
Second	R1	W1-L	LKD	
		W1-U	LKD	
		W2-L	LKD	
		W2-U	LKD	**3.96**
Second	R2	W3-L	Bedroom	
		W3-U	Bedroom	**3.45**
Second	R3	W4-L	Bedroom	
		W4-U	Bedroom	
		W5-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W5-U	Bedroom	**4.33**
Second	R4	W6-L	Bedroom	
		W6-U	Bedroom	**2.37**
Second	R5	W7-L	LKD	
		W7-U	LKD	**1.95**
Second	R6	W8-L	LKD	
		W8-U	LKD	**1.78**
Second	R7	W9-L	LKD	
		W9-U	LKD	**2.01**
Second	R8	W10-L	Bedroom	
		W10-U	Bedroom	**3.12**
Second	R9	W11-L	Bedroom	
		W11-U	Bedroom	**3.15**
Second	R10	W12-L	Bedroom	
		W12-U	Bedroom	**3.40**
Second	R11	W13-L	LKD	
		W13-U	LKD	
		W14-L	LKD	
		W14-U	LKD	
		W15-L	LKD	
		W15-U	LKD	**5.06**
Second	R12	W16-L	LKD	
		W16-U	LKD	**1.37**
Second	R13	W17-L	Bedroom	
		W17-U	Bedroom	**2.42**
Second	R14	W18-L	Bedroom	
		W18-U	Bedroom	**2.36**
Second	R15	W19-L	LKD	
		W19-U	LKD	**1.30**
Second	R16	W20-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W20-U	Bedroom	**1.92**
Second	R17	W21-L	LKD	
		W21-U	LKD	**1.45**
Second	R18	W22-L	Bedroom	
		W22-U	Bedroom	**3.42**
Second	R19	W23-L	Bedroom	
		W23-U	Bedroom	**3.74**
Second	R20	W24-L	Bedroom	
		W24-U	Bedroom	**2.75**
Second	R21	W25-L	Bedroom	
		W25-U	Bedroom	**2.08**
Second	R22	W26-L	Bedroom	
		W26-U	Bedroom	**2.80**
Second	R23	W27-L	Bedroom	
		W27-U	Bedroom	**2.35**
Second	R24	W28-L	LKD	
		W28-U	LKD	**1.22**
Second	R25	W29-L	LKD	
		W29-U	LKD	
		W30-L	LKD	
		W30-U	LKD	
		W31-L	LKD	
		W31-U	LKD	**3.47**
Second	R26	W32-L	Bedroom	
		W32-U	Bedroom	**3.59**
Second	R27	W33-L	Bedroom	
		W33-U	Bedroom	**3.30**
Second	R28	W34-L	Bedroom	
		W34-U	Bedroom	**3.15**
Second	R29	W35-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W35-U	LKD	**2.08**
Second	R30	W36-L	LKD	
		W36-U	LKD	**1.82**
Second	R31	W37-L	LKD	
		W37-U	LKD	**1.98**
Second	R32	W38-L	Bedroom	
		W38-U	Bedroom	**3.62**
Second	R33	W39-L	Bedroom	
		W39-U	Bedroom	**3.52**
Second	R34	W40-L	Bedroom	
		W40-U	Bedroom	**3.45**
Second	R35	W41-L	LKD	
		W41-U	LKD	
		W42-L	LKD	
		W42-U	LKD	**3.94**
Second	R36	W43-L	LKD	
		W43-U	LKD	**1.96**
Second	R37	W44-L	Bedroom	
		W44-U	Bedroom	**3.66**
Second	R38	W45-L	Bedroom	
		W45-U	Bedroom	**3.06**
Second	R39	W46-L	Bedroom	
		W46-U	Bedroom	**3.50**
Second	R40	W47-L	Bedroom	
		W47-U	Bedroom	**3.87**
Second	R41	W48-L	LKD	
		W48-U	LKD	**2.79**
Second	R42	W49-L	Bedroom	
		W49-U	Bedroom	**3.73**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Second	R43	W50-L	Bedroom	
		W50-U	Bedroom	**3.56**
Second	R44	W51-L	LKD	
		W51-U	LKD	**1.99**
Second	R45	W52-L	Bedroom	
		W52-U	Bedroom	**2.61**
Second	R46	W53-L	Bedroom	
		W53-U	Bedroom	**2.02**
Second	R47	W54-L	Bedroom	
		W54-U	Bedroom	**2.35**
Second	R48	W55-L	LKD	
		W55-U	LKD	**1.78**
Second	R49	W56-L	LKD	
		W56-U	LKD	**1.74**
Second	R50	W57-L	LKD	
		W57-U	LKD	**2.21**
Second	R52	W59-L	Bedroom	
		W59-U	Bedroom	**1.95**
Second	R53	W60-L	Bedroom	
		W60-U	Bedroom	**2.46**
Second	R54	W61-L	LKD	
		W61-U	LKD	**1.46**
Second	R55	W62-L	Bedroom	
		W62-U	Bedroom	**1.59**
Second	R56	W63-L	Bedroom	
		W63-U	Bedroom	**2.34**
Second	R57	W64-L	Bedroom	
		W64-U	Bedroom	**2.15**
Second	R58	W65-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W65-U	Bedroom	**3.27**
Second	R59	W66-L	LKD	
		W66-U	LKD	**1.60**
Second	R60	W67-L	LKD	
		W67-U	LKD	**1.46**
Second	R61	W68-L	LKD	
		W68-U	LKD	**1.32**
Second	R62	W69-L	Bedroom	
		W69-U	Bedroom	**3.54**
Second	R63	W70-L	Bedroom	
		W70-U	Bedroom	**2.27**
Second	R64	W71-L	Bedroom	
		W71-U	Bedroom	**2.28**
Second	R65	W72-L	Bedroom	
		W72-U	Bedroom	**1.55**
Second	R66	W73-L	LKD	
		W73-U	LKD	**1.43**
Second	R67	W74-L	Bedroom	
		W74-U	Bedroom	**2.45**
Second	R51	W58-L	Bedroom	
		W58-U	Bedroom	**3.08**
Third	R1	W1-L	LKD	
		W1-U	LKD	**2.12**
Third	R2	W2-L	Bedroom	
		W2-U	Bedroom	**3.53**
Third	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.50**
Third	R4	W4-L	LKD	
		W4-U	LKD	**1.47**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Third	R5	W5-L	LKD	
		W5-U	LKD	
		W6-L	LKD	
		W6-U	LKD	**3.99**
Third	R6	W7-L	Bedroom	
		W7-U	Bedroom	**3.48**
Third	R7	W8-L	Bedroom	
		W8-U	Bedroom	
		W9-L	Bedroom	
		W9-U	Bedroom	**4.36**
Third	R8	W10-L	Bedroom	
		W10-U	Bedroom	**2.38**
Third	R9	W11-L	LKD	
		W11-U	LKD	**1.98**
Third	R10	W12-L	LKD	
		W12-U	LKD	**1.81**
Third	R11	W13-L	LKD	
		W13-U	LKD	**2.04**
Third	R12	W14-L	Bedroom	
		W14-U	Bedroom	**3.17**
Third	R13	W15-L	Bedroom	
		W15-U	Bedroom	**3.23**
Third	R14	W16-L	Bedroom	
		W16-U	Bedroom	**3.50**
Third	R15	W17-L	LKD	
		W17-U	LKD	
		W18-L	LKD	
		W18-U	LKD	
		W19-L	LKD	
		W19-U	LKD	**5.46**
Third	R16	W20-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W20-U	LKD	**1.60**
Third	R17	W21-L	Bedroom	
		W21-U	Bedroom	**2.72**
Third	R18	W22-L	Bedroom	
		W22-U	Bedroom	**2.68**
Third	R19	W23-L	LKD	
		W23-U	LKD	**1.57**
Third	R20	W24-L	Bedroom	
		W24-U	Bedroom	**2.17**
Third	R21	W25-L	LKD	
		W25-U	LKD	**2.44**
Third	R22	W26-L	Bedroom	
		W26-U	Bedroom	**3.86**
Third	R23	W27-L	Bedroom	
		W27-U	Bedroom	**4.18**
Third	R24	W28-L	Bedroom	
		W28-U	Bedroom	**3.09**
Third	R25	W29-L	Bedroom	
		W29-U	Bedroom	**2.33**
Third	R26	W30-L	Bedroom	
		W30-U	Bedroom	**3.16**
Third	R27	W31-L	Bedroom	
		W31-U	Bedroom	**2.67**
Third	R28	W32-L	LKD	
		W32-U	LKD	**1.43**
Third	R29	W33-L	LKD	
		W33-U	LKD	
		W34-L	LKD	
		W34-U	LKD	
		W35-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W35-U	LKD	**3.62**
Third	R30	W36-L	Bedroom	
		W36-U	Bedroom	**3.65**
Third	R31	W37-L	Bedroom	
		W37-U	Bedroom	**3.34**
Third	R32	W38-L	Bedroom	
		W38-U	Bedroom	**3.19**
Third	R33	W39-L	LKD	
		W39-U	LKD	**2.11**
Third	R34	W40-L	LKD	
		W40-U	LKD	**1.85**
Third	R35	W41-L	LKD	
		W41-U	LKD	**2.01**
Third	R36	W42-L	Bedroom	
		W42-U	Bedroom	**3.67**
Third	R37	W43-L	Bedroom	
		W43-U	Bedroom	**3.55**
Third	R38	W44-L	Bedroom	
		W44-U	Bedroom	**3.51**
Third	R39	W45-L	LKD	
		W45-U	LKD	
		W46-L	LKD	
		W46-U	LKD	**3.98**
Third	R40	W47-L	Bedroom	
		W47-U	Bedroom	**3.02**
Third	R41	W48-L	LKD	
		W48-U	LKD	**1.77**
Third	R42	W49-L	Bedroom	
		W49-U	Bedroom	**1.95**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Third	R43	W50-L	Bedroom	
		W50-U	Bedroom	**2.83**
Third	R44	W51-L	Bedroom	
		W51-U	Bedroom	**2.45**
Third	R45	W52-L	Bedroom	
		W52-U	Bedroom	**3.86**
Third	R46	W53-L	LKD	
		W53-U	LKD	**2.78**
Third	R47	W54-L	LKD	
		W54-U	LKD	**2.46**
Third	R48	W55-L	LKD	
		W55-U	LKD	**2.24**
Third	R49	W56-L	Bedroom	
		W56-U	Bedroom	**4.10**
Third	R50	W57-L	Bedroom	
		W57-U	Bedroom	**2.58**
Third	R52	W59-L	Bedroom	
		W59-U	Bedroom	**1.90**
Third	R53	W60-L	LKD	
		W60-U	LKD	**1.74**
Third	R54	W61-L	Bedroom	
		W61-U	Bedroom	**2.99**
Third	R51	W58-L	Bedroom	
		W58-U	Bedroom	**2.66**
Fourth	R1	W1-L	LKD	
		W1-U	LKD	**2.89**
Fourth	R2	W2-L	Bedroom	
		W2-U	Bedroom	**3.57**
Fourth	R3	W3-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W3-U	Bedroom	**3.57**
Fourth	R4	W4-L	LKD	
		W4-U	LKD	**2.00**
Fourth	R5	W5-L	LKD	
		W5-U	LKD	
		W6-L	LKD	
		W6-U	LKD	**4.87**
Fourth	R6	W7-L	Bedroom	
		W7-U	Bedroom	**3.54**
Fourth	R7	W8-L	Bedroom	
		W8-U	Bedroom	
		W9-L	Bedroom	
		W9-U	Bedroom	**4.39**
Fourth	R8	W10-L	Bedroom	
		W10-U	Bedroom	**2.40**
Fourth	R9	W11-L	LKD	
		W11-U	LKD	**2.77**
Fourth	R10	W12-L	LKD	
		W12-U	LKD	**2.58**
Fourth	R11	W13-L	LKD	
		W13-U	LKD	**2.89**
Fourth	R12	W14-L	Bedroom	
		W14-U	Bedroom	**3.26**
Fourth	R13	W15-L	Bedroom	
		W15-U	Bedroom	**3.31**
Fourth	R14	W16-L	Bedroom	
		W16-U	Bedroom	**3.61**
Fourth	R15	W17-L	LKD	
		W17-U	LKD	
		W18-L	LKD	
		W18-U	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W19-L	LKD	
		W19-U	LKD	**6.58**
Fourth	R16	W20-L	LKD	
		W20-U	LKD	**2.51**
Fourth	R17	W21-L	Bedroom	
		W21-U	Bedroom	**3.17**
Fourth	R18	W22-L	Bedroom	
		W22-U	Bedroom	**3.16**
Fourth	R19	W23-L	LKD	
		W23-U	LKD	**2.49**
Fourth	R20	W24-L	Bedroom	
		W24-U	Bedroom	**3.00**
Fourth	R21	W25-L	Bedroom	
		W25-U	Bedroom	**3.06**
Fourth	R22	W26-L	LKD	
		W26-U	LKD	**2.29**
Fourth	R23	W27-L	LKD	
		W27-U	LKD	
		W28-L	LKD	
		W28-U	LKD	
		W29-L	LKD	
		W29-U	LKD	**4.71**
Fourth	R24	W30-L	Bedroom	
		W30-U	Bedroom	**3.71**
Fourth	R25	W31-L	Bedroom	
		W31-U	Bedroom	**3.35**
Fourth	R26	W32-L	Bedroom	
		W32-U	Bedroom	**3.27**
Fourth	R27	W33-L	LKD	
		W33-U	LKD	**2.94**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fourth	R28	W34-L	LKD	
		W34-U	LKD	**2.62**
Fourth	R29	W35-L	LKD	
		W35-U	LKD	**2.79**
Fourth	R30	W36-L	Bedroom	
		W36-U	Bedroom	**3.73**
Fourth	R31	W37-L	Bedroom	
		W37-U	Bedroom	**3.56**
Fourth	R32	W38-L	Bedroom	
		W38-U	Bedroom	**3.56**
Fourth	R33	W39-L	LKD	
		W39-U	LKD	
		W40-L	LKD	
		W40-U	LKD	**4.86**
Fourth	R34	W41-L	Bedroom	
		W41-U	Bedroom	**3.32**
Fourth	R35	W42-L	LKD	
		W42-U	LKD	**2.74**
Fourth	R36	W43-L	Bedroom	
		W43-U	Bedroom	**3.10**
Fourth	R37	W44-L	Bedroom	
		W44-U	Bedroom	**3.31**
Fourth	R38	W45-L	Bedroom	
		W45-U	Bedroom	**3.04**
Fourth	R39	W46-L	Bedroom	
		W46-U	Bedroom	**3.04**
Fourth	R40	W47-L	LKD	
		W47-U	LKD	**2.70**
Fourth	R41	W48-L	Bedroom	
		W48-U	Bedroom	**3.27**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fifth	R1	W1-L	Bedroom	
		W1-U	Bedroom	**2.36**
Fifth	R2	W2-L	Bedroom	
		W2-U	Bedroom	**2.48**
Fifth	R3	W3-L	LKD	
		W3-U	LKD	
		W4-L	LKD	
		W4-U	LKD	**2.49**
Fifth	R4	W5-L	Bedroom	
		W5-U	Bedroom	**2.30**
Fifth	R5	W6-L	Bedroom	
		W6-U	Bedroom	**2.72**
Fifth	R6	W7-L	LKD	
		W7-U	LKD	
		W8-L	LKD	
		W8-U	LKD	
		W9-L	LKD	
		W9-U	LKD	
		W10-L	LKD	
		W10-U	LKD	**4.81**
Fifth	R7	W11-L	Bedroom	
		W11-U	Bedroom	**2.74**
Fifth	R8	W12-L	LKD	
		W12-U	LKD	
		W13-L	LKD	
		W13-U	LKD	
		W14-L	LKD	
		W14-U	LKD	**4.04**
Fifth	R9	W15-L	Bedroom	
		W15-U	Bedroom	**2.31**
Fifth	R10	W16-L	LKD	
		W16-U	LKD	
		W17-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W17-U	LKD	**2.50**
Fifth	R11	W18-L	Bedroom	
		W18-U	Bedroom	**2.48**
Fifth	R12	W19-L	Bedroom	
		W19-U	Bedroom	**2.41**
Fifth	R13	W20-L	Bedroom	
		W20-U	Bedroom	
		W21-L	Bedroom	
		W21-U	Bedroom	**5.43**
Fifth	R14	W22-L	LKD	
		W22-U	LKD	
		W23-L	LKD	
		W23-U	LKD	**3.01**
Fifth	R15	W24-L	LKD	
		W24-U	LKD	
		W25-L	LKD	
		W25-U	LKD	
		W26-L	LKD	
		W26-U	LKD	**4.20**
Fifth	R16	W27-L	Bedroom	
		W27-U	Bedroom	**2.93**
B				
Ground	R1	W1-L	LKD	
		W1-U	LKD	**2.03**
Ground	R2	W2-L	Bedroom	
		W2-U	Bedroom	**2.58**
Ground	R3	W3-L	LKD	
		W3-U	LKD	**2.29**
Ground	R4	W4-L	Bedroom	
		W4-U	Bedroom	**2.64**
Ground	R5	W5-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W5-U	LKD	**2.16**
Ground	R6	W6-L	LKD	
		W6-U	LKD	**2.26**
Ground	R7	W7-L	Bedroom	
		W7-U	Bedroom	**4.41**
Ground	R8	W8-L	Bedroom	
		W8-U	Bedroom	**2.92**
Ground	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.02**
Ground	R10	W10-L	Bedroom	
		W10-U	Bedroom	**3.11**
Ground	R11	W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	
		W13-L	LKD	
		W13-U	LKD	**3.60**
Ground	R12	W14-L	LKD	
		W14-U	LKD	**1.76**
Ground	R13	W15-L	Bedroom	
		W15-U	Bedroom	**2.67**
Ground	R14	W16-L	Bedroom	
		W16-U	Bedroom	**2.23**
Ground	R15	W17-L	Bedroom	
		W17-U	Bedroom	**2.00**
Ground	R16	W18-L	Bedroom	
		W18-U	Bedroom	**2.09**
Ground	R17	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	**2.72**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Ground	R18	W21-L	LKD	
		W21-U	LKD	
		W22-L	LKD	
		W22-U	LKD	**2.37**
Ground	R19	W23-L	Bedroom	
		W23-U	Bedroom	**2.51**
Ground	R20	W24-L	Bedroom	
		W24-U	Bedroom	**2.29**
Ground	R21	W25-L	Bedroom	
		W25-U	Bedroom	**2.28**
Ground	R22	W26-L	Bedroom	
		W26-U	Bedroom	**2.71**
First	R1	W1-L	LKD	
		W1-U	LKD	**1.92**
First	R2	W2-L	LKD	
		W2-U	LKD	**2.27**
First	R3	W3-L	Bedroom	
		W3-U	Bedroom	**2.90**
First	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.51**
First	R5	W5-L	LKD	
		W5-U	LKD	**2.05**
First	R6	W6-L	LKD	
		W6-U	LKD	**2.15**
First	R7	W7-L	LKD	
		W7-U	LKD	**2.45**
First	R8	W8-L	Bedroom	
		W8-U	Bedroom	**3.08**
First	R9	W9-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W9-U	Bedroom	**3.24**
First	R10	W10-L	Bedroom	
		W10-U	Bedroom	**3.52**
First	R11	W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	
		W13-L	LKD	
		W13-U	LKD	**3.35**
First	R12	W14-L	LKD	
		W14-U	LKD	**1.48**
First	R13	W15-L	Bedroom	
		W15-U	Bedroom	**2.19**
First	R14	W16-L	Bedroom	
		W16-U	Bedroom	**2.62**
First	R15	W17-L	Bedroom	
		W17-U	Bedroom	**1.91**
First	R16	W18-L	Bedroom	
		W18-U	Bedroom	**2.09**
First	R17	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	
		W21-L	LKD	
		W21-U	LKD	**2.60**
First	R18	W22-L	LKD	
		W22-U	LKD	
		W23-L	LKD	
		W23-U	LKD	**1.99**
First	R19	W24-L	Bedroom	
		W24-U	Bedroom	**3.60**
First	R20	W25-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W25-U	Bedroom	**3.97**
First	R21	W26-L	Bedroom	
		W26-U	Bedroom	**2.30**
First	R22	W27-L	Bedroom	
		W27-U	Bedroom	**2.20**
First	R23	W28-L	Bedroom	
		W28-U	Bedroom	**2.26**
First	R24	W29-L	Bedroom	
		W29-U	Bedroom	**2.58**
First	R25	W30-L	Bedroom	
		W30-U	Bedroom	**3.06**
First	R26	W31-L	Bedroom	
		W31-U	Bedroom	**3.31**
First	R27	W32-L	Bedroom	
		W32-U	Bedroom	**2.96**
Second	R1	W1-L	LKD	
		W1-U	LKD	**2.02**
Second	R2	W2-L	LKD	
		W2-U	LKD	**2.37**
Second	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.01**
Second	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.64**
Second	R5	W5-L	LKD	
		W5-U	LKD	**2.12**
Second	R6	W6-L	LKD	
		W6-U	LKD	**2.22**
Second	R7	W7-L	LKD	
		W7-U	LKD	**2.52**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Second	R8	W8-L	Bedroom	
		W8-U	Bedroom	**3.15**
Second	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.31**
Second	R10	W10-L	Bedroom	
		W10-U	Bedroom	**3.60**
Second	R11	W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	
		W13-L	LKD	
		W13-U	LKD	**3.50**
Second	R12	W14-L	LKD	
		W14-U	LKD	**1.74**
Second	R13	W15-L	Bedroom	
		W15-U	Bedroom	**2.45**
Second	R14	W16-L	Bedroom	
		W16-U	Bedroom	**2.93**
Second	R15	W17-L	Bedroom	
		W17-U	Bedroom	**2.14**
Second	R16	W18-L	Bedroom	
		W18-U	Bedroom	**2.33**
Second	R17	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	**2.68**
Second	R18	W21-L	LKD	
		W21-U	LKD	**1.53**
Second	R19	W22-L	Bedroom	
		W22-U	Bedroom	**3.84**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Second	R20	W23-L	Bedroom	
		W23-U	Bedroom	**4.24**
Second	R21	W24-L	Bedroom	
		W24-U	Bedroom	**2.41**
Second	R22	W25-L	Bedroom	
		W25-U	Bedroom	**2.40**
Second	R23	W26-L	Bedroom	
		W26-U	Bedroom	**2.48**
Second	R24	W27-L	Bedroom	
		W27-U	Bedroom	**2.82**
Second	R25	W28-L	Bedroom	
		W28-U	Bedroom	**3.33**
Second	R26	W29-L	Bedroom	
		W29-U	Bedroom	**3.54**
Second	R27	W30-L	Bedroom	
		W30-U	Bedroom	**3.15**
Third	R1	W1-L	LKD	
		W1-U	LKD	**2.12**
Third	R2	W2-L	LKD	
		W2-U	LKD	**2.45**
Third	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.12**
Third	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.73**
Third	R5	W5-L	LKD	
		W5-U	LKD	**2.18**
Third	R6	W6-L	LKD	
		W6-U	LKD	**2.28**
Third	R7	W7-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W7-U	LKD	**2.58**
Third	R8	W8-L	Bedroom	
		W8-U	Bedroom	**3.22**
Third	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.37**
Third	R10	W10-L	Bedroom	
		W10-U	Bedroom	**3.68**
Third	R11	W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	
		W13-L	LKD	
		W13-U	LKD	**3.65**
Third	R12	W14-L	LKD	
		W14-U	LKD	**2.00**
Third	R13	W15-L	Bedroom	
		W15-U	Bedroom	**2.75**
Third	R14	W16-L	Bedroom	
		W16-U	Bedroom	**3.28**
Third	R15	W17-L	Bedroom	
		W17-U	Bedroom	**2.37**
Third	R16	W18-L	Bedroom	
		W18-U	Bedroom	**2.58**
Third	R17	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	**3.04**
Third	R18	W21-L	LKD	
		W21-U	LKD	**1.68**
Third	R19	W22-L	Bedroom	
		W22-U	Bedroom	**4.14**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Third	R20	W23-L	Bedroom	
		W23-U	Bedroom	**4.63**
Third	R21	W24-L	Bedroom	
		W24-U	Bedroom	**2.56**
Third	R22	W25-L	Bedroom	
		W25-U	Bedroom	**2.69**
Third	R23	W26-L	Bedroom	
		W26-U	Bedroom	**2.77**
Third	R24	W27-L	Bedroom	
		W27-U	Bedroom	**3.10**
Third	R25	W28-L	Bedroom	
		W28-U	Bedroom	**3.61**
Third	R26	W29-L	Bedroom	
		W29-U	Bedroom	**3.76**
Third	R27	W30-L	Bedroom	
		W30-U	Bedroom	**3.33**
Fourth	R1	W1-L	LKD	
		W1-U	LKD	**3.00**
Fourth	R2	W2-L	LKD	
		W2-U	LKD	**3.41**
Fourth	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.29**
Fourth	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.79**
Fourth	R5	W5-L	LKD	
		W5-U	LKD	**3.03**
Fourth	R6	W6-L	LKD	
		W6-U	LKD	**3.23**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fourth	R7	W7-L	LKD	
		W7-U	LKD	**3.62**
Fourth	R8	W8-L	Bedroom	
		W8-U	Bedroom	**3.31**
Fourth	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.40**
Fourth	R10	W10-L	Bedroom	
		W10-U	Bedroom	**3.75**
Fourth	R11	W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	
		W13-L	LKD	
		W13-U	LKD	**4.75**
Fourth	R12	W14-L	LKD	
		W14-U	LKD	**3.11**
Fourth	R13	W15-L	Bedroom	
		W15-U	Bedroom	**3.14**
Fourth	R14	W16-L	Bedroom	
		W16-U	Bedroom	**3.65**
Fourth	R15	W17-L	Bedroom	
		W17-U	Bedroom	**2.65**
Fourth	R16	W18-L	Bedroom	
		W18-U	Bedroom	**2.86**
Fourth	R17	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	**4.13**
Fourth	R18	W21-L	LKD	
		W21-U	LKD	**2.49**
Fourth	R19	W22-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W22-U	Bedroom	**4.56**
Fourth	R20	W23-L	Bedroom	
		W23-U	Bedroom	**5.09**
Fourth	R21	W24-L	Bedroom	
		W24-U	Bedroom	**2.93**
Fourth	R22	W25-L	Bedroom	
		W25-U	Bedroom	**3.17**
Fourth	R23	W26-L	Bedroom	
		W26-U	Bedroom	**3.12**
Fourth	R24	W27-L	Bedroom	
		W27-U	Bedroom	**3.40**
Fourth	R25	W28-L	Bedroom	
		W28-U	Bedroom	**3.90**
Fourth	R26	W29-L	Bedroom	
		W29-U	Bedroom	**3.97**
Fourth	R27	W30-L	Bedroom	
		W30-U	Bedroom	**3.50**
B3				
Ground	R1	W1-L	LKD	
		W1-U	LKD	**1.09**
Ground	R2	W2-L	Bedroom	
		W2-U	Bedroom	**1.44**
Ground	R3	W3-L	Bedroom	
		W3-U	Bedroom	**1.73**
Ground	R4	W4-L	Bedroom	
		W4-U	Bedroom	**1.49**
Ground	R5	W5-L	Bedroom	
		W5-U	Bedroom	**1.77**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Ground	R6	W6-L	LKD	
		W6-U	LKD	**0.83**
Ground	R7	W7-L	Bedroom	
		W7-U	Bedroom	**1.56**
Ground	R8	W8-L	Bedroom	
		W8-U	Bedroom	**1.83**
Ground	R9	W9-L	LKD	
		W9-U	LKD	**1.02**
Ground	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	**2.29**
Ground	R11	W12-L	Bedroom	
		W12-U	Bedroom	**2.85**
Ground	R12	W13-L	Bedroom	
		W13-U	Bedroom	**2.99**
First	R1	W1-L	Bedroom	
		W1-U	Bedroom	**0.59**
First	R2	W2-L	Bedroom	
		W2-U	Bedroom	**0.49**
First	R3	W3-L	LKD	
		W3-U	LKD	
		W4-L	LKD	
		W4-U	LKD	
		W5-L	LKD	
		W5-U	LKD	**2.09**
First	R4	W6-L	Bedroom	
		W6-U	Bedroom	**2.70**
First	R5	W7-L	Bedroom	
		W7-U	Bedroom	**2.22**
First	R6	W8-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W8-U	LKD	**1.60**
First	R7	W9-L	LKD	
		W9-U	LKD	**1.52**
First	R8	W10-L	LKD	
		W10-U	LKD	**1.64**
First	R9	W11-L	LKD	
		W11-U	LKD	**1.66**
First	R10	W12-L	Bedroom	
		W12-U	Bedroom	**2.30**
First	R11	W13-L	Bedroom	
		W13-U	Bedroom	**2.19**
First	R12	W14-L	LKD	
		W14-U	LKD	**1.52**
First	R13	W15-L	LKD	
		W15-U	LKD	
		W16-L	LKD	
		W16-U	LKD	**2.68**
First	R14	W17-L	Bedroom	
		W17-U	Bedroom	**3.07**
First	R15	W18-L	Bedroom	
		W18-U	Bedroom	**3.22**
First	R16	W20-L	Bedroom	
		W20-U	Bedroom	**2.72**
First	R17	W19-L	Bedroom	
		W19-U	Bedroom	**2.97**
First	R18	W21-L	Bedroom	
		W21-U	Bedroom	**2.62**
First	R19	W22-L	Bedroom	
		W22-U	Bedroom	**2.83**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Second	R1	W1-L	LKD	
		W1-U	LKD	
		W2-L	LKD	
		W2-U	LKD	**2.10**
Second	R2	W3-L	Bedroom	
		W3-U	Bedroom	**2.60**
Second	R3	W4-L	Bedroom	
		W4-U	Bedroom	**2.89**
Second	R4	W5-L	Bedroom	
		W5-U	Bedroom	**0.79**
Second	R5	W6-L	Bedroom	
		W6-U	Bedroom	**0.51**
Second	R6	W7-L	LKD	
		W7-U	LKD	
		W8-L	LKD	
		W8-U	LKD	
		W9-L	LKD	
		W9-U	LKD	**2.58**
Second	R7	W10-L	Bedroom	
		W10-U	Bedroom	**2.95**
Second	R8	W11-L	Bedroom	
		W11-U	Bedroom	**2.44**
Second	R9	W12-L	LKD	
		W12-U	LKD	**1.85**
Second	R10	W13-L	LKD	
		W13-U	LKD	**1.75**
Second	R11	W14-L	LKD	
		W14-U	LKD	**1.89**
Second	R12	W15-L	LKD	
		W15-U	LKD	**1.92**
Second	R13	W16-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W16-U	Bedroom	**2.53**
Second	R14	W17-L	Bedroom	
		W17-U	Bedroom	**2.42**
Second	R15	W18-L	LKD	
		W18-U	LKD	**1.75**
Second	R16	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	**3.25**
Second	R17	W21-L	Bedroom	
		W21-U	Bedroom	**3.19**
Second	R18	W22-L	Bedroom	
		W22-U	Bedroom	**3.36**
Second	R19	W23-L	Bedroom	
		W23-U	Bedroom	**3.16**
Second	R20	W24-L	Bedroom	
		W24-U	Bedroom	**2.91**
Second	R21	W25-L	Bedroom	
		W25-U	Bedroom	**2.82**
Second	R22	W26-L	Bedroom	
		W26-U	Bedroom	**3.08**
Third	R1	W1-L	LKD	
		W1-U	LKD	
		W2-L	LKD	
		W2-U	LKD	**2.32**
Third	R2	W3-L	Bedroom	
		W3-U	Bedroom	**2.90**
Third	R3	W4-L	Bedroom	
		W4-U	Bedroom	**3.20**
Third	R4	W5-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W5-U	Bedroom	**0.97**
Third	R5	W6-L	Bedroom	
		W6-U	Bedroom	**0.72**
Third	R6	W7-L	LKD	
		W7-U	LKD	
		W8-L	LKD	
		W8-U	LKD	
		W9-L	LKD	
		W9-U	LKD	**2.90**
Third	R7	W10-L	Bedroom	
		W10-U	Bedroom	**3.23**
Third	R8	W11-L	Bedroom	
		W11-U	Bedroom	**2.70**
Third	R9	W12-L	LKD	
		W12-U	LKD	**2.09**
Third	R10	W13-L	LKD	
		W13-U	LKD	**1.99**
Third	R11	W14-L	LKD	
		W14-U	LKD	**2.14**
Third	R12	W15-L	LKD	
		W15-U	LKD	**2.17**
Third	R13	W16-L	Bedroom	
		W16-U	Bedroom	**2.77**
Third	R14	W17-L	Bedroom	
		W17-U	Bedroom	**2.67**
Third	R15	W18-L	LKD	
		W18-U	LKD	**1.98**
Third	R16	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	**3.91**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Third	R17	W21-L	Bedroom	
		W21-U	Bedroom	**3.30**
Third	R18	W22-L	Bedroom	
		W22-U	Bedroom	**3.49**
Third	R19	W23-L	Bedroom	
		W23-U	Bedroom	**3.35**
Third	R20	W24-L	Bedroom	
		W24-U	Bedroom	**3.11**
Third	R21	W25-L	Bedroom	
		W25-U	Bedroom	**3.04**
Third	R22	W26-L	Bedroom	
		W26-U	Bedroom	**3.36**
Fourth	R1	W1-L	LKD	
		W1-U	LKD	
		W2-L	LKD	
		W2-U	LKD	**3.11**
Fourth	R2	W3-L	Bedroom	
		W3-U	Bedroom	**3.34**
Fourth	R3	W4-L	Bedroom	
		W4-U	Bedroom	**3.57**
Fourth	R4	W5-L	Bedroom	
		W5-U	Bedroom	**1.38**
Fourth	R5	W6-L	Bedroom	
		W6-U	Bedroom	**1.02**
Fourth	R6	W7-L	LKD	
		W7-U	LKD	
		W8-L	LKD	
		W8-U	LKD	
		W9-L	LKD	
		W9-U	LKD	**3.38**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fourth	R7	W10-L	Bedroom	
		W10-U	Bedroom	**3.52**
Fourth	R8	W11-L	Bedroom	
		W11-U	Bedroom	**3.07**
Fourth	R9	W12-L	LKD	
		W12-U	LKD	**3.19**
Fourth	R10	W13-L	LKD	
		W13-U	LKD	**3.09**
Fourth	R11	W14-L	LKD	
		W14-U	LKD	**3.31**
Fourth	R12	W15-L	LKD	
		W15-U	LKD	**3.32**
Fourth	R13	W16-L	Bedroom	
		W16-U	Bedroom	**3.01**
Fourth	R14	W17-L	Bedroom	
		W17-U	Bedroom	**3.01**
Fourth	R15	W18-L	LKD	
		W18-U	LKD	**3.00**
Fourth	R16	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	**5.26**
Fourth	R17	W21-L	Bedroom	
		W21-U	Bedroom	**3.40**
Fourth	R18	W22-L	Bedroom	
		W22-U	Bedroom	**3.60**
Fourth	R19	W23-L	Bedroom	
		W23-U	Bedroom	**3.53**
Fourth	R20	W24-L	Bedroom	
		W24-U	Bedroom	**3.30**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fourth	R21	W25-L	Bedroom	
		W25-U	Bedroom	**3.26**
Fourth	R22	W26-L	Bedroom	
		W26-U	Bedroom	**3.66**
C				
Ground	R1	W1-L	LKD	
		W1-U	LKD	**1.57**
Ground	R2	W2-L	Bedroom	
		W2-U	Bedroom	**1.41**
Ground	R3	W3-L	LKD	
		W3-U	LKD	**1.60**
Ground	R4	W4-L	Bedroom	
		W4-U	Bedroom	**1.91**
Ground	R5	W5-L	LKD	
		W5-U	LKD	**1.41**
Ground	R6	W6-L	LKD	
		W6-U	LKD	**1.35**
Ground	R7	W7-L	LKD	
		W7-U	LKD	**0.84**
Ground	R8	W8-L	Bedroom	
		W8-U	Bedroom	**1.54**
Ground	R9	W9-L	Bedroom	
		W9-U	Bedroom	**1.28**
Ground	R10	W10-L	Bedroom	
		W10-U	Bedroom	**1.33**
Ground	R11	W11-L	Bedroom	
		W11-U	Bedroom	**1.32**
Ground	R12	W12-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W12-U	LKD	
		W13-L	LKD	
		W13-U	LKD	**2.95**
Ground	R13	W14-L	Bedroom	
		W14-U	Bedroom	**3.25**
Ground	R14	W15-L	Bedroom	
		W15-U	Bedroom	**3.04**
Ground	R15	W16-L	Bedroom	
		W16-U	Bedroom	**3.15**
Ground	R16	W17-L	Bedroom	
		W17-U	Bedroom	**3.57**
First	R1	W1-L	LKD	
		W1-U	LKD	**1.51**
First	R2	W2-L	LKD	
		W2-U	LKD	**1.71**
First	R3	W3-L	Bedroom	
		W3-U	Bedroom	**2.29**
First	R4	W4-L	Bedroom	
		W4-U	Bedroom	**2.74**
First	R5	W5-L	LKD	
		W5-U	LKD	**2.18**
First	R6	W6-L	LKD	
		W6-U	LKD	**2.44**
First	R7	W7-L	LKD	
		W7-U	LKD	**1.41**
First	R8	W8-L	Bedroom	
		W8-U	Bedroom	**2.05**
First	R9	W9-L	Bedroom	
		W9-U	Bedroom	**2.10**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
First	R10	W10-L	LKD	
		W10-U	LKD	**2.29**
First	R11	W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	**4.17**
First	R12	W13-L	Bedroom	
		W13-U	Bedroom	**3.32**
First	R13	W14-L	Bedroom	
		W14-U	Bedroom	**3.52**
First	R14	W15-L	Bedroom	
		W15-U	Bedroom	**3.49**
First	R15	W16-L	Bedroom	
		W16-U	Bedroom	**3.27**
First	R16	W17-L	Bedroom	
		W17-U	Bedroom	**3.39**
First	R17	W18-L	Bedroom	
		W18-U	Bedroom	**3.85**
First	R18	W19-L	Bedroom	
		W19-U	Bedroom	**3.78**
First	R19	W20-L	Bedroom	
		W20-U	Bedroom	**3.31**
Second	R1	W1-L	LKD	
		W1-U	LKD	**2.49**
Second	R2	W2-L	LKD	
		W2-U	LKD	**2.78**
Second	R3	W3-L	Bedroom	
		W3-U	Bedroom	**2.65**
Second	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.03**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Second	R5	W5-L	LKD	
		W5-U	LKD	**2.41**
Second	R6	W6-L	LKD	
		W6-U	LKD	**2.72**
Second	R7	W7-L	LKD	
		W7-U	LKD	**2.45**
Second	R8	W8-L	Bedroom	
		W8-U	Bedroom	**2.43**
Second	R9	W9-L	Bedroom	
		W9-U	Bedroom	**2.40**
Second	R10	W10-L	LKD	
		W10-U	LKD	**2.64**
Second	R11	W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	**4.60**
Second	R12	W13-L	Bedroom	
		W13-U	Bedroom	**3.40**
Second	R13	W14-L	Bedroom	
		W14-U	Bedroom	**3.61**
Second	R14	W15-L	Bedroom	
		W15-U	Bedroom	**3.58**
Second	R15	W16-L	Bedroom	
		W16-U	Bedroom	**3.36**
Second	R16	W17-L	Bedroom	
		W17-U	Bedroom	**3.49**
Second	R17	W18-L	Bedroom	
		W18-U	Bedroom	**3.95**
Second	R18	W19-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W19-U	Bedroom	**3.90**
Second	R19	W20-L	Bedroom	
		W20-U	Bedroom	**3.41**
E				
Ground	R1	W1-L	Bedroom	
		W1-U	Bedroom	**3.55**
Ground	R2	W2-L	Bedroom	
		W2-U	Bedroom	**3.74**
Ground	R3	W3-L	Bedroom	
		W3-U	Bedroom	
		W4-L	Bedroom	
		W4-U	Bedroom	**4.48**
Ground	R4	W5-L	LKD	
		W5-U	LKD	
		W6-L	LKD	
		W6-U	LKD	**3.73**
Ground	R5	W7-L	LKD	
		W7-U	LKD	**2.56**
Ground	R6	W8-L	Bedroom	
		W8-U	Bedroom	**3.24**
Ground	R7	W9-L	Bedroom	
		W9-U	Bedroom	**3.22**
Ground	R8	W10-L	LKD	
		W10-U	LKD	**2.50**
Ground	R9	W11-L	Bedroom	
		W11-U	Bedroom	**2.91**
Ground	R10	W12-L	Bedroom	
		W12-U	Bedroom	
		W24-L	Bedroom	
		W24-U	Bedroom	**6.51**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Ground	R11	W13-L	LKD	
		W13-U	LKD	
		W25-L	LKD	
		W25-U	LKD	**2.74**
Ground	R12	W14-L	LKD	
		W14-U	LKD	**1.67**
Ground	R13	W15-L	Bedroom	
		W15-U	Bedroom	**2.00**
Ground	R14	W16-L	Bedroom	
		W16-U	Bedroom	**1.83**
Ground	R15	W17-L	LKD	
		W17-U	LKD	**1.22**
Ground	R16	W18-L	LKD	
		W18-U	LKD	**1.68**
Ground	R17	W19-L	LKD	
		W19-U	LKD	**1.60**
Ground	R18	W20-L	Bedroom	
		W20-U	Bedroom	**2.27**
Ground	R19	W21-L	Bedroom	
		W21-U	Bedroom	**1.31**
Ground	R20	W22-L	LKD	
		W22-U	LKD	
		W23-L	LKD	
		W23-U	LKD	**2.48**
First	R1	W1-L	Bedroom	
		W1-U	Bedroom	**3.48**
First	R2	W2-L	Bedroom	
		W2-U	Bedroom	**3.70**
First	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.70**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
First	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.81**
First	R5	W5-L	LKD	
		W5-U	LKD	**2.32**
First	R6	W6-L	LKD	
		W6-U	LKD	**2.61**
First	R7	W7-L	Bedroom	
		W7-U	Bedroom	**3.52**
First	R8	W8-L	Bedroom	
		W8-U	Bedroom	**3.74**
First	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.74**
First	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	**3.86**
First	R11	W12-L	LKD	
		W12-U	LKD	**2.62**
First	R12	W13-L	Bedroom	
		W13-U	Bedroom	**3.47**
First	R13	W14-L	Bedroom	
		W14-U	Bedroom	**3.46**
First	R14	W15-L	LKD	
		W15-U	LKD	**2.59**
First	R15	W16-L	Bedroom	
		W16-U	Bedroom	**3.13**
First	R16	W17-L	Bedroom	
		W17-U	Bedroom	
		W31-L	Bedroom	
		W31-U	Bedroom	**7.18**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
First	R17	W18-L	LKD	
		W18-U	LKD	
		W32-L	LKD	
		W32-U	LKD	**3.14**
First	R18	W19-L	LKD	
		W19-U	LKD	**2.02**
First	R19	W20-L	Bedroom	
		W20-U	Bedroom	**2.45**
First	R20	W30-L	Bedroom	
		W30-U	Bedroom	**2.05**
First	R21	W21-L	Bedroom	
		W21-U	Bedroom	**2.15**
First	R22	W22-L	Bedroom	
		W22-U	Bedroom	**2.27**
First	R23	W23-L	LKD	
		W23-U	LKD	**1.71**
First	R24	W24-L	LKD	
		W24-U	LKD	**1.72**
First	R25	W25-L	Bedroom	
		W25-U	Bedroom	**2.44**
First	R26	W26-L	Bedroom	
		W26-U	Bedroom	**2.56**
First	R27	W27-L	LKD	
		W27-U	LKD	**1.97**
First	R28	W28-L	LKD	
		W28-U	LKD	
		W29-L	LKD	
		W29-U	LKD	**2.78**
Second	R1	W1-L	Bedroom	
		W1-U	Bedroom	**3.50**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Second	R2	W2-L	Bedroom	
		W2-U	Bedroom	**3.72**
Second	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.72**
Second	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.83**
Second	R5	W5-L	LKD	
		W5-U	LKD	**2.33**
Second	R6	W6-L	LKD	
		W6-U	LKD	**2.62**
Second	R7	W7-L	Bedroom	
		W7-U	Bedroom	**3.54**
Second	R8	W8-L	Bedroom	
		W8-U	Bedroom	**3.76**
Second	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.76**
Second	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	**3.91**
Second	R11	W12-L	LKD	
		W12-U	LKD	**2.68**
Second	R12	W13-L	Bedroom	
		W13-U	Bedroom	**3.56**
Second	R13	W14-L	Bedroom	
		W14-U	Bedroom	**3.56**
Second	R14	W15-L	LKD	
		W15-U	LKD	**2.68**
Second	R15	W16-L	Bedroom	
		W16-U	Bedroom	**3.21**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Second	R16	W17-L	Bedroom	
		W17-U	Bedroom	
		W31-L	Bedroom	
		W31-U	Bedroom	**7.62**
Second	R17	W18-L	LKD	
		W18-U	LKD	
		W32-L	LKD	
		W32-U	LKD	**3.62**
Second	R18	W19-L	LKD	
		W19-U	LKD	**2.24**
Second	R19	W20-L	Bedroom	
		W20-U	Bedroom	**2.69**
Second	R20	W21-L	Bedroom	
		W21-U	Bedroom	**2.20**
Second	R21	W22-L	Bedroom	
		W22-U	Bedroom	**2.36**
Second	R22	W23-L	Bedroom	
		W23-U	Bedroom	**2.51**
Second	R23	W24-L	LKD	
		W24-U	LKD	**1.96**
Second	R24	W25-L	LKD	
		W25-U	LKD	**1.95**
Second	R25	W26-L	Bedroom	
		W26-U	Bedroom	**2.65**
Second	R26	W27-L	Bedroom	
		W27-U	Bedroom	**2.79**
Second	R27	W28-L	LKD	
		W28-U	LKD	**2.20**
Second	R28	W29-L	LKD	
		W29-U	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W30-L	LKD	
		W30-U	LKD	**3.14**
Third	R1	W1-L	Bedroom	
		W1-U	Bedroom	**3.50**
Third	R2	W2-L	Bedroom	
		W2-U	Bedroom	**3.72**
Third	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.72**
Third	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.84**
Third	R5	W5-L	LKD	
		W5-U	LKD	**2.33**
Third	R6	W6-L	LKD	
		W6-U	LKD	**2.63**
Third	R7	W7-L	Bedroom	
		W7-U	Bedroom	**3.56**
Third	R8	W8-L	Bedroom	
		W8-U	Bedroom	**3.76**
Third	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.76**
Third	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	**3.92**
Third	R11	W12-L	LKD	
		W12-U	LKD	**2.69**
Third	R12	W13-L	Bedroom	
		W13-U	Bedroom	**3.58**
Third	R13	W14-L	Bedroom	
		W14-U	Bedroom	**3.58**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Third	R14	W15-L	LKD	
		W15-U	LKD	**2.68**
Third	R15	W16-L	Bedroom	
		W16-U	Bedroom	**3.22**
Third	R16	W17-L	Bedroom	
		W17-U	Bedroom	
		W31-L	Bedroom	
		W31-U	Bedroom	**7.88**
Third	R17	W18-L	LKD	
		W18-U	LKD	
		W32-L	LKD	
		W32-U	LKD	**4.92**
Third	R18	W19-L	LKD	
		W19-U	LKD	**2.52**
Third	R19	W20-L	Bedroom	
		W20-U	Bedroom	**3.03**
Third	R20	W21-L	Bedroom	
		W21-U	Bedroom	**2.41**
Third	R21	W22-L	Bedroom	
		W22-U	Bedroom	**2.62**
Third	R22	W23-L	Bedroom	
		W23-U	Bedroom	**2.83**
Third	R23	W24-L	LKD	
		W24-U	LKD	**2.23**
Third	R24	W25-L	LKD	
		W25-U	LKD	**2.16**
Third	R25	W26-L	Bedroom	
		W26-U	Bedroom	**2.89**
Third	R26	W27-L	Bedroom	
		W27-U	Bedroom	**3.02**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Third	R27	W28-L	LKD	
		W28-U	LKD	**2.41**
Third	R28	W29-L	LKD	
		W29-U	LKD	
		W30-L	LKD	
		W30-U	LKD	**3.59**
Fourth	R1	W1-L	Bedroom	
		W1-U	Bedroom	**3.50**
Fourth	R2	W2-L	Bedroom	
		W2-U	Bedroom	**3.72**
Fourth	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.72**
Fourth	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.87**
Fourth	R5	W5-L	LKD	
		W5-U	LKD	**3.25**
Fourth	R6	W6-L	LKD	
		W6-U	LKD	**3.66**
Fourth	R7	W7-L	Bedroom	
		W7-U	Bedroom	**3.61**
Fourth	R8	W8-L	Bedroom	
		W8-U	Bedroom	**3.76**
Fourth	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.76**
Fourth	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	**4.75**
Fourth	R11	W12-L	LKD	
		W12-U	LKD	**3.66**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fourth	R12	W13-L	Bedroom	
		W13-U	Bedroom	**3.61**
Fourth	R13	W14-L	Bedroom	
		W14-U	Bedroom	**3.61**
Fourth	R14	W15-L	LKD	
		W15-U	LKD	
		W28-L	LKD	
		W28-U	LKD	**5.71**
Fourth	R15	W16-L	LKD	
		W16-U	LKD	
		W29-L	LKD	
		W29-U	LKD	**6.10**
Fourth	R16	W17-L	Bedroom	
		W17-U	Bedroom	**3.58**
Fourth	R17	W18-L	Bedroom	
		W18-U	Bedroom	**2.91**
Fourth	R18	W19-L	Bedroom	
		W19-U	Bedroom	**3.09**
Fourth	R19	W20-L	Bedroom	
		W20-U	Bedroom	**3.18**
Fourth	R20	W21-L	LKD	
		W21-U	LKD	**3.34**
Fourth	R21	W22-L	LKD	
		W22-U	LKD	**3.13**
Fourth	R22	W23-L	Bedroom	
		W23-U	Bedroom	**3.16**
Fourth	R23	W24-L	Bedroom	
		W24-U	Bedroom	**3.16**
Fourth	R24	W25-L	LKD	
		W25-U	LKD	**3.48**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fourth	R25	W26-L	LKD	
		W26-U	LKD	
		W27-L	LKD	
		W27-U	LKD	**5.14**
G				
Ground	R1	W1-L	LKD	
		W1-U	LKD	**1.39**
Ground	R2	W2-L	LKD	
		W2-U	LKD	**1.53**
Ground	R3	W3-L	Bedroom	
		W3-U	Bedroom	**1.77**
Ground	R4	W4-L	LKD	
		W4-U	LKD	**1.37**
Ground	R5	W5-L	Bedroom	
		W5-U	Bedroom	**2.20**
Ground	R6	W6-L	Bedroom	
		W6-U	Bedroom	**2.31**
Ground	R7	W7-L	Bedroom	
		W7-U	Bedroom	**1.96**
Ground	R8	W8-L	Bedroom	
		W8-U	Bedroom	**2.13**
Ground	R9	W9-L	LKD	
		W9-U	LKD	
		W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	**2.51**
Ground	R10	W12-L	LKD	
		W12-U	LKD	
		W13-L	LKD	
		W13-U	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W14-L	LKD	
		W14-U	LKD	**2.85**
Ground	R11	W15-L	Bedroom	
		W15-U	Bedroom	
		W16-L	Bedroom	
		W16-U	Bedroom	**4.23**
Ground	R12	W17-L	Bedroom	
		W17-U	Bedroom	**3.84**
Ground	R13	W18-L	LKD	
		W18-U	LKD	
		W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	**6.29**
Ground	R14	W21-L	Bedroom	
		W21-U	Bedroom	**2.85**
Ground	R15	W22-L	Bedroom	
		W22-U	Bedroom	**3.21**
Ground	R16	W23-L	LKD	
		W23-U	LKD	**2.65**
Ground	R17	W24-L	LKD	
		W24-U	LKD	**2.77**
Ground	R18	W25-L	Bedroom	
		W25-U	Bedroom	**3.36**
Ground	R19	W26-L	Bedroom	
		W26-U	Bedroom	**3.94**
First	R1	W1-L	LKD	
		W1-U	LKD	**1.66**
First	R2	W2-L	LKD	
		W2-U	LKD	**1.79**
First	R3	W3-L	Bedroom	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W3-U	Bedroom	**2.47**
First	R4	W4-L	Bedroom	
		W4-U	Bedroom	**2.87**
First	R5	W5-L	LKD	
		W5-U	LKD	**1.55**
First	R6	W6-L	Bedroom	
		W6-U	Bedroom	**2.59**
First	R7	W7-L	Bedroom	
		W7-U	Bedroom	**2.73**
First	R8	W8-L	Bedroom	
		W8-U	Bedroom	**2.26**
First	R9	W9-L	Bedroom	
		W9-U	Bedroom	**2.46**
First	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	**2.85**
First	R11	W13-L	LKD	
		W13-U	LKD	
		W14-L	LKD	
		W14-U	LKD	
		W15-L	LKD	
		W15-U	LKD	**2.83**
First	R12	W16-L	Bedroom	
		W16-U	Bedroom	**3.43**
First	R13	W17-L	Bedroom	
		W17-U	Bedroom	**3.52**
First	R14	W18-L	Bedroom	
		W18-U	Bedroom	**4.16**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
First	R15	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	
		W21-L	LKD	
		W21-U	LKD	**6.49**
First	R16	W22-L	Bedroom	
		W22-U	Bedroom	**3.23**
First	R17	W23-L	Bedroom	
		W23-U	Bedroom	**3.29**
First	R18	W24-L	LKD	
		W24-U	LKD	**2.62**
First	R19	W25-L	Bedroom	
		W25-U	Bedroom	**3.44**
First	R20	W26-L	LKD	
		W26-U	LKD	**2.57**
First	R21	W27-L	LKD	
		W27-U	LKD	**2.64**
First	R22	W28-L	Bedroom	
		W28-U	Bedroom	**3.67**
First	R23	W29-L	Bedroom	
		W29-U	Bedroom	**4.26**
First	R24	W30-L	Bedroom	
		W30-U	Bedroom	**4.26**
First	R25	W31-L	Bedroom	
		W31-U	Bedroom	
		W32-L	Bedroom	
		W32-U	Bedroom	**5.43**
Second	R1	W1-L	LKD	
		W1-U	LKD	**1.86**
Second	R2	W2-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W2-U	LKD	**2.01**
Second	R3	W3-L	Bedroom	
		W3-U	Bedroom	**2.69**
Second	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.12**
Second	R5	W5-L	LKD	
		W5-U	LKD	**1.77**
Second	R6	W6-L	Bedroom	
		W6-U	Bedroom	**2.83**
Second	R7	W7-L	Bedroom	
		W7-U	Bedroom	**2.99**
Second	R8	W8-L	Bedroom	
		W8-U	Bedroom	**2.40**
Second	R9	W9-L	Bedroom	
		W9-U	Bedroom	**2.67**
Second	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	**3.19**
Second	R11	W13-L	LKD	
		W13-U	LKD	
		W14-L	LKD	
		W14-U	LKD	
		W15-L	LKD	
		W15-U	LKD	**3.12**
Second	R12	W16-L	Bedroom	
		W16-U	Bedroom	**3.53**
Second	R13	W17-L	Bedroom	
		W17-U	Bedroom	**3.60**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Second	R14	W18-L	Bedroom	
		W18-U	Bedroom	**4.24**
Second	R15	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	
		W21-L	LKD	
		W21-U	LKD	**6.56**
Second	R16	W22-L	Bedroom	
		W22-U	Bedroom	**3.24**
Second	R17	W23-L	Bedroom	
		W23-U	Bedroom	**3.30**
Second	R18	W24-L	LKD	
		W24-U	LKD	**2.63**
Second	R19	W25-L	Bedroom	
		W25-U	Bedroom	**3.45**
Second	R20	W26-L	LKD	
		W26-U	LKD	**2.58**
Second	R21	W27-L	LKD	
		W27-U	LKD	**2.65**
Second	R22	W28-L	Bedroom	
		W28-U	Bedroom	**3.68**
Second	R23	W29-L	Bedroom	
		W29-U	Bedroom	**4.28**
Second	R24	W30-L	Bedroom	
		W30-U	Bedroom	**4.28**
Second	R25	W31-L	Bedroom	
		W31-U	Bedroom	
		W32-L	Bedroom	
		W32-U	Bedroom	**5.59**
Third	R1	W1-L	LKD	

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W1-U	LKD	**2.05**
Third	R2	W2-L	LKD	
		W2-U	LKD	**2.22**
Third	R3	W3-L	Bedroom	
		W3-U	Bedroom	**2.95**
Third	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.41**
Third	R5	W5-L	LKD	
		W5-U	LKD	**1.98**
Third	R6	W6-L	Bedroom	
		W6-U	Bedroom	**3.11**
Third	R7	W7-L	Bedroom	
		W7-U	Bedroom	**3.29**
Third	R8	W8-L	Bedroom	
		W8-U	Bedroom	**2.59**
Third	R9	W9-L	Bedroom	
		W9-U	Bedroom	**2.97**
Third	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	**3.61**
Third	R11	W13-L	LKD	
		W13-U	LKD	
		W14-L	LKD	
		W14-U	LKD	
		W15-L	LKD	
		W15-U	LKD	**3.46**
Third	R12	W16-L	Bedroom	
		W16-U	Bedroom	**3.65**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Third	R13	W17-L	Bedroom	
		W17-U	Bedroom	**3.70**
Third	R14	W18-L	Bedroom	
		W18-U	Bedroom	**4.34**
Third	R15	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	
		W21-L	LKD	
		W21-U	LKD	**6.64**
Third	R16	W22-L	Bedroom	
		W22-U	Bedroom	**3.27**
Third	R17	W23-L	Bedroom	
		W23-U	Bedroom	**3.31**
Third	R18	W24-L	LKD	
		W24-U	LKD	**2.64**
Third	R19	W25-L	Bedroom	
		W25-U	Bedroom	**3.52**
Third	R20	W26-L	LKD	
		W26-U	LKD	**2.60**
Third	R21	W27-L	LKD	
		W27-U	LKD	**2.66**
Third	R22	W28-L	Bedroom	
		W28-U	Bedroom	**3.71**
Third	R23	W29-L	Bedroom	
		W29-U	Bedroom	**4.28**
Third	R24	W30-L	Bedroom	
		W30-U	Bedroom	**4.28**
Third	R25	W31-L	Bedroom	
		W31-U	Bedroom	
		W32-L	Bedroom	

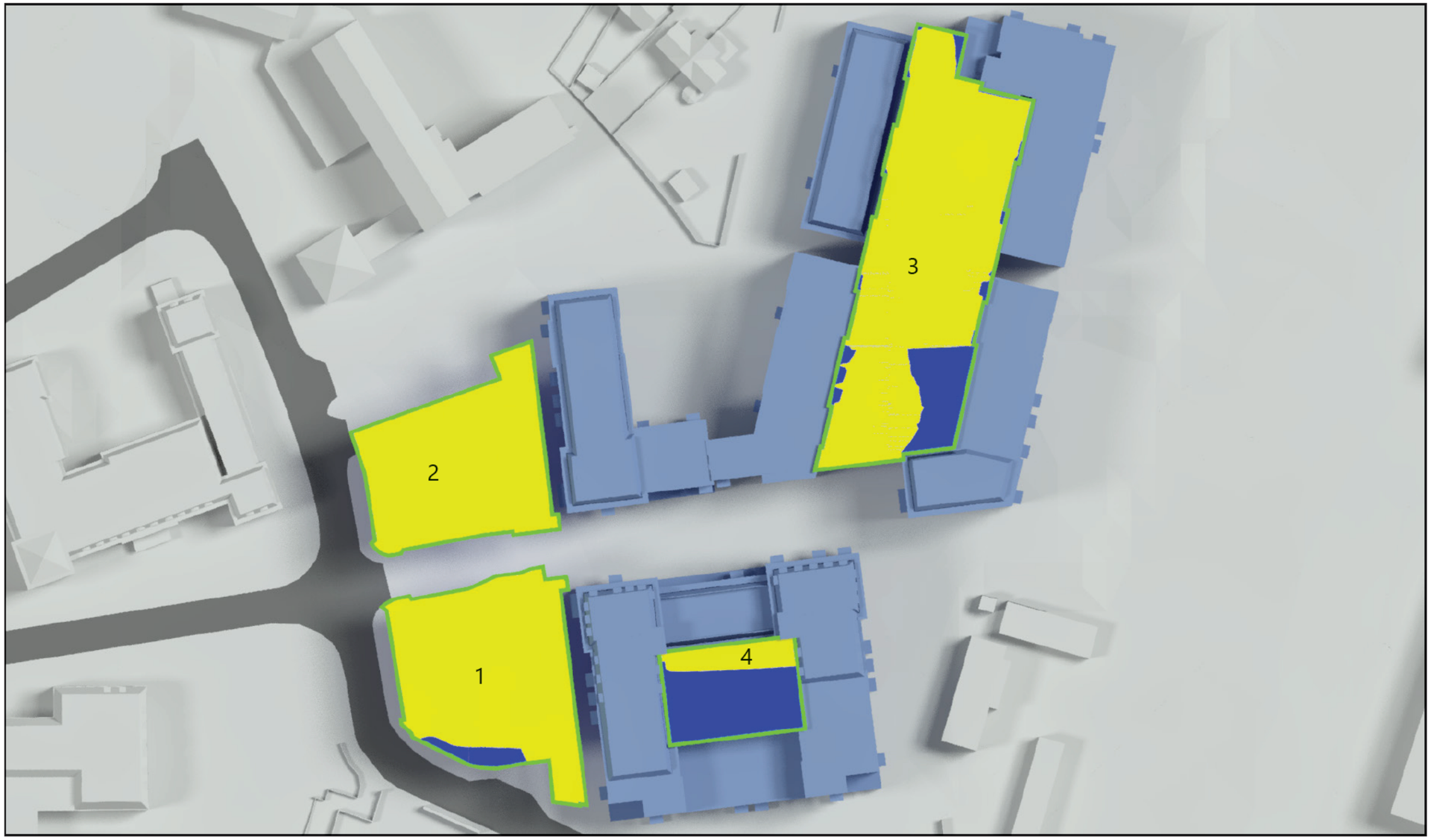
Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
		W32-U	Bedroom	**5.89**
Fourth	R1	W1-L	LKD	
		W1-U	LKD	**3.02**
Fourth	R2	W2-L	LKD	
		W2-U	LKD	**3.28**
Fourth	R3	W3-L	Bedroom	
		W3-U	Bedroom	**3.28**
Fourth	R4	W4-L	Bedroom	
		W4-U	Bedroom	**3.66**
Fourth	R5	W5-L	LKD	
		W5-U	LKD	**2.96**
Fourth	R6	W6-L	Bedroom	
		W6-U	Bedroom	**3.39**
Fourth	R7	W7-L	Bedroom	
		W7-U	Bedroom	**3.57**
Fourth	R8	W8-L	Bedroom	
		W8-U	Bedroom	**2.89**
Fourth	R9	W9-L	Bedroom	
		W9-U	Bedroom	**3.39**
Fourth	R10	W10-L	LKD	
		W10-U	LKD	
		W11-L	LKD	
		W11-U	LKD	
		W12-L	LKD	
		W12-U	LKD	**4.44**
Fourth	R11	W13-L	LKD	
		W13-U	LKD	
		W14-L	LKD	
		W14-U	LKD	
		W15-L	LKD	
		W15-U	LKD	**4.72**

Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fourth	R12	W16-L	Bedroom	
		W16-U	Bedroom	**3.75**
Fourth	R13	W17-L	Bedroom	
		W17-U	Bedroom	**3.78**
Fourth	R14	W18-L	Bedroom	
		W18-U	Bedroom	**4.41**
Fourth	R15	W19-L	LKD	
		W19-U	LKD	
		W20-L	LKD	
		W20-U	LKD	
		W21-L	LKD	
		W21-U	LKD	**7.65**
Fourth	R16	W22-L	Bedroom	
		W22-U	Bedroom	**3.40**
Fourth	R17	W23-L	Bedroom	
		W23-U	Bedroom	**3.33**
Fourth	R18	W24-L	LKD	
		W24-U	LKD	**3.59**
Fourth	R19	W25-L	Bedroom	
		W25-U	Bedroom	**3.74**
Fourth	R20	W26-L	LKD	
		W26-U	LKD	**3.59**
Fourth	R21	W27-L	LKD	
		W27-U	LKD	**3.67**
Fourth	R22	W28-L	Bedroom	
		W28-U	Bedroom	**3.76**
Fourth	R23	W29-L	Bedroom	
		W29-U	Bedroom	**4.27**
Fourth	R24	W30-L	Bedroom	
		W30-U	Bedroom	**4.27**

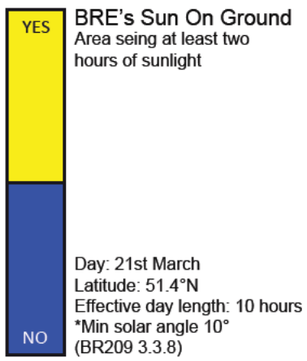
Floor	Room	Window	Room Use	Average Daylight Factor (ADF) Room Total (%)
Fourth	R25	W31-L	Bedroom	
		W31-U	Bedroom	
		W32-L	Bedroom	
		W32-U	Bedroom	**6.51**

Appendix 5

Results of the sunlight amenity assessments



Area	Total Area (sq.m)	Area more than 2 hours (sq.m)	Area % more than 2 hours
1 - Ground	1238.90	1182.01	95.0
2 - Ground	1059.19	1059.19	100.0
3 - Ground	2037.32	1798.56	88.0
4- First	486.07	126.38	26.0
Total	4821.47	4166.15	86.0



BRE's Sun On Ground
Area seing at least two hours of sunlight

Day: 21st March
Latitude: 51.4°N
Effective day length: 10 hours
*Min solar angle 10°
(BR209 3.3.8)

4th Floor, Holborn Tower
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London WC1V 6PL
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W: eb7.co.uk

Sources of information

WYG Group Ltd
A115249 WYG001 - WYG007 - WGC Topographic Survey.dwg
Received 15/09/2021

Saunders Architecture+Urban Design
8375_Block Plans.dwg
8375_Blocks Elevations.dwg
Received 27/10/2022

EB7 Ltd
Site Photographs
Ordnance Survey

Key:

Proposed

Area of assessment

NORTH

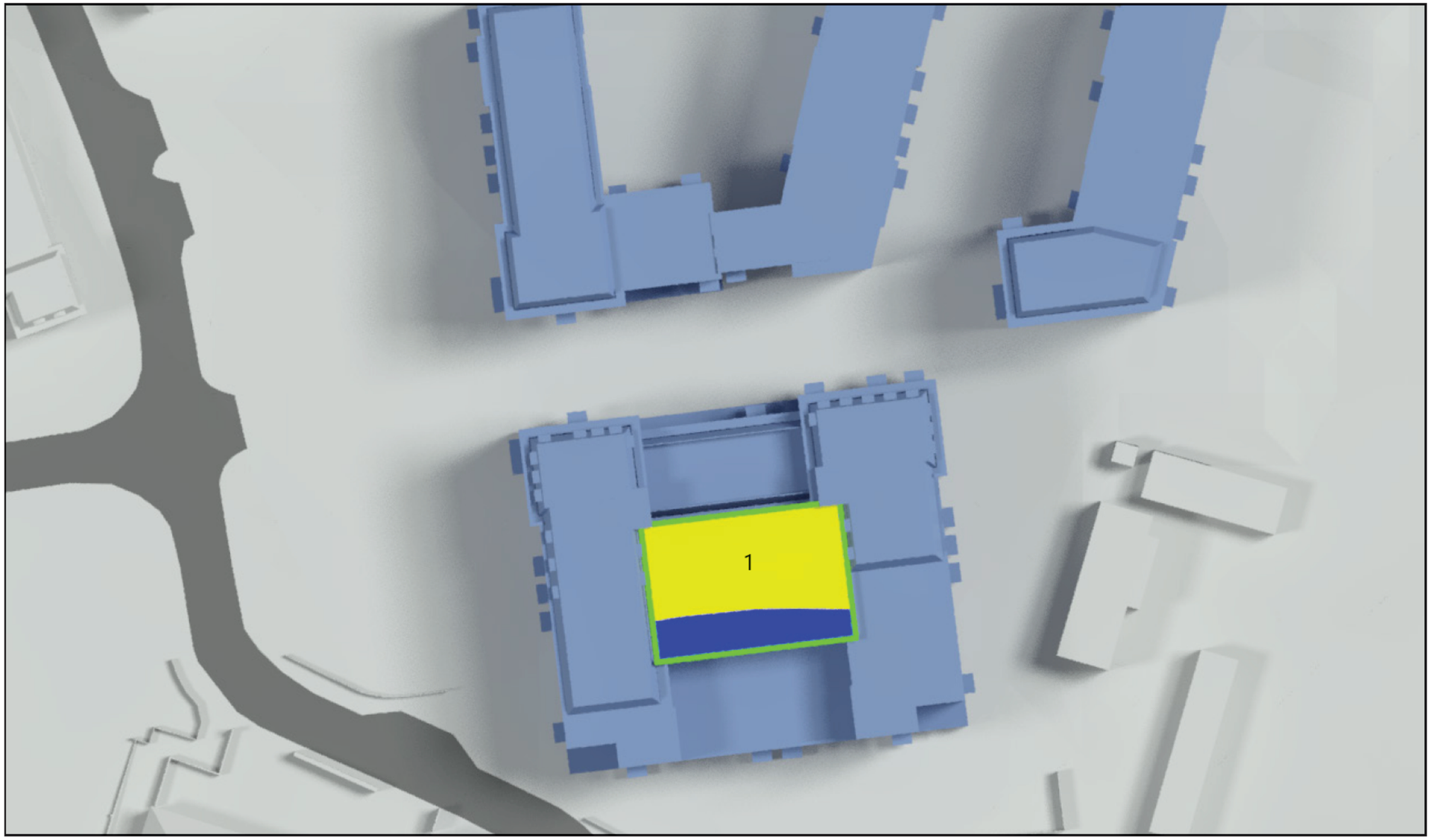
Project: Campus East, Welwyn Garden City

Title: Sunlight Amenity Study Proposed 21st March

Drawn: MZ | Checked: --

Date: 01/11/2022 | Project: 5163

Rel no.: 08 | Prefix: SA01 | Page no.: 01



Area	Total Area (sq.m)	Area more than 2 hours (sq.m)	Area % more than 2 hours
1 - First	486.07	353.81	73

YES

NO

BRE's Sun On Ground
Area seing at least two hours of sunlight

Day: 21st March
Latitude: 51.4°N
Effective day length: 10 hours
*Min solar angle 10°
(BR209 3.3.8)

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EB7 Ltd
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Key:

Proposed

Area of assessment

NORTH

Project: Campus East, Welwyn Garden City

Title: Sunlight Amenity Study Proposed 21st June

Drawn: MZ | Checked: --

Date: 01/11/2022 | Project: 5163

Rel no.: 08 | Prefix: SA02 | Page no.: 01

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