April 2025

Kinsale Road LRD, Cork

Daylight and Sunlight Assessment Report

Applicant: BML Duffy Property Group Limited

"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." - BR 209

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Report Contents

The following report has been prepared by 3D Design Bureau (3DDB). 3DDB have over 8 years experience in producing daylight and sunlight assessments for large scale planning applications and are recognised as experts in the field. This report has been reviewed and overseen by Nicholas Polley and Richard Dalton. Nicholas is CEO of 3D Design Bureau and is a qualified Building Services Engineer (B.Sc.(Eng) Dip Eng) with over 25 years experience in the industry. Richard is Associate Director of 3DDB and has a bachelors degree in Building Information Modelling (BIM) with over 20 years experience in the industry.

1.0 Executive Summary

1.1 Summary of Assessment

3D Design Bureau (3DDB) were commissioned to carry out a comprehensive daylight and sunlight assessment, along with an accompanying shadow study for the proposed Kinsale Road LRD in Cork.

The proposed development consists of four blocks featuring residential apartments, retail units, and a crèche. It is situated in a former commercial area where the buildings identified as an industrial factory have been demolished, leaving the site cleared for redevelopment. To the south lies a granted apartment block, referred to as the '*Part 8 App Development*' outlined in blue in Figure 1.1 below. Although construction of this Part 8 scheme has not yet commenced, enabling works have begun. As advised by the project architect, this Part 8 scheme is considered part of the baseline condition for the purposes of this report.

The surrounding context also includes the following schemes: the granted Creamfield's Medical Centre, the granted Creamfield's Site, and the proposed Sports Building in Musgrave Park. These surrounding future schemes have been included to allow for the most constrained scenario for the subject site. However, apart from the Part 8 scheme on the adjoining site, the separation distances to the other sites are considerable, and therefore the impact of these developments on the scheme performance assessments is negligible. Furthermore, they fall well outside the selection criteria for impact assessment.

Figure 1.1: Aerial montage of the proposed development prepared by 3DDB.

Assessments have been broken down into the following two main categories, 'Impact Assessment' and 'Scheme Performance', of which there are subcategories as summarise below and on the next page.

Scheme Performance

- **Daylight access:** Assessed for the habitable rooms of the apartments of the proposed development has been assessed through a Spatial Daylight Autonomy (SDA) study. The crèche includes three rooms that have been assessed, but they have not been included in the overall compliance rate.
- **Sunlight access:** Quantified through a Sunlight Exposure (SE) assessment for the same habitable rooms as for SDA, with the same approach regarding crèche
- **A Sun On Ground (SOG):** Assessed to indicate the level of sunlight on March 21st in the proposed external amenity spaces. It includes communal amenity space and public open space. The crèche playground have been assessed but not induced in the overall compliance rate.

The results of these scheme performance assessments, which are in accordance with the BRE Guidelines, can be found in section C.0 on page 64. These results are summarised in section 1.3 and explained in section "5.2 Analysis of Scheme Performance Results" on page 29.

Supplementary scheme performance studies have also been carried out. These include an SDA assessment under the I.S. EN 17037 criterion, and a No Sky Line (NSL) study within proposed habitable rooms. The results of the supplementary scheme performance assessments can be found in section D.0 on page 120.

Impact Assessment

Following advice within the BRE Guidelines, the surrounding context was carefully considered to ensure all properties and amenity spaces that may potentially experience a level of effect have been included in the study. A more detailed explanation of the criterion applied can be found in section “4.1 Impact Assessment, Window Selection Criteria” on page 14.

The impact assessment that was carried out for the purpose of this report is in accordance with the BRE Guidelines. The potential levels of effect that the proposed development would have on the surrounding existing environment and/or properties has been assessed. The assessed properties in the impact assessment are indicated in Figure 1.2 below.

Figure 1.2: Scope of surrounding properties and environment assessed.

The effects were assessed in the baseline state versus the proposed state. For definition of model states, including a visual representation of the model states, please refer to the ‘Methodology’ section on Page 16, but as noted in the executive summary, the baseline model state includes the adjoining Part 8 scheme in which enabling works appear to have commenced on the site.

This impact assessment covers the following metrics:

- Effect on daylight to surrounding properties. The effect to the Vertical Sky Component (VSC) of the windows of the following neighbouring properties was assessed:
  - 4 Pearse Road (1)
  - Lyman (2)
  - Bermartin (3)
  - Loretto (4)
  - Part 8 Scheme
- Effect on sunlight to surrounding properties. The effect to the annual and winter probable sunlight hours (APSH/WPSH) of the windows of the following neighbouring properties was assessed:*
  - 4 Pearse Road (1)
  - Lyman (2)
- Effect on sun on ground (SOG) to surrounding external amenity spaces such as gardens and public parks:
  - 4 Pearse Road (1)

The results of the impact assessments can be found in section A.0 on page 36. These results are summarised in section 1.2 and explained in section “5.1 Analysis of Impact Assessment Results” on page 25.

Qualitative Assessment

In addition to the quantitative assessments detailed in the ‘Impact Assessment’ and ‘Scheme Performance’ sections, this report includes a qualitative assessment. This is provided through the false colour plans of the proposed SOG assessment (section C.4 on page 118) and the hourly renderings of the shadow study (section B.0 on page 55).

* Note: as per the recommendations made in the BRE Guidelines, only windows/rooms with an orientation within 90° of due south need to be included in the APSH/WPSH impact assessment. Therefore, the number of windows assessed in this study is typically reduced when compared with the VSC impact assessment.

1.2 Impact Assessment Results Overview - Neighbouring Properties:

Effect to Daylight - Vertical Sky Component (VSC) :

Effect to Vertical Sky Component (VSC)	
Windows/Rooms Assessed	49
Negligible	33
Minor Adverse	7
Moderate Adverse	5
Major Adverse	3
Beneficial Impact*	1
n.a.**	0

Effect to Sunlight - Annual Probable Sunlight Hours (APSH):

Effect to Annual Probable Sunlight Hours (APSH)	
Windows/Rooms Assessed	9
Negligible	7
Minor Adverse	0
Moderate Adverse	0
Major Adverse	0
Beneficial Impact*	2
n.a.**	0

Effect to Sunlight - Winter Probable Sunlight Hours (WPSH):

Effect to Winter Probable Sunlight Hours (WPSH)	
Windows/Rooms Assessed	9
Negligible	9
Minor Adverse	0
Moderate Adverse	0
Major Adverse	0
Beneficial Impact*	0
n.a.**	0

Effect to Sun On Ground (SOG):

Effect to Sun On Ground (SOG)	
Areas Assessed	2
Negligible	1
Minor Adverse	0
Moderate Adverse	0
Major Adverse	0
Beneficial Impact*	1
n.a.**	0

No Sky Line (NSL):

Effect to No Sky Line (NSL)	
Rooms Assessed	36
Negligible	33
Minor Adverse	1
Moderate Adverse	1
Major Adverse	1
Beneficial Impact	0
n.a.	0

*'Beneficial Impact' will only be stated if the ratio of change is greater than 1.20 (an improvement of 20%). Should less perceptible improvements occur a 'Negligible' level of effect will be stated.

**In instances where a baseline value is particularly low, levels of effects can appear exaggerated. To mitigate such occurrences, If the baseline value in the VSC, APSH/WPSH or SOG studies is below 1%, 3DDB have categorised the level of effect as n.a. (not applicable). Where windows/ gardens/amenity areas are considered non-applicable, these instances are not included in the compliance rates calculation.

1.3 Scheme Performance Results Overview:

Spatial Daylight Autonomy (SDA):

Spatial Daylight Autonomy (SDA) BRE 209 Criteria	
Unit Count	170
Rooms Assessed	494
Without Trees	
Compliant	492
Non-compliant	2
Compliance Rate*	> 99%
With Trees (Proposed and Existing Trees)	
Compliant	492
Non-compliant	2
Compliance Rate*	> 99%
Note: It is the expert opinion of 3DDB that the appropriate criteria for SDA assessments are that of the BRE Guidelines (BRE 209)	

* Compliance rates stated for the SDA analysis are based on the rooms that have been assessed within the residential portion of the proposed development. Units which contain non-compliant rooms will have Compensatory Design Solutions provided by the project architects.

Sunlight Exposure (SE):

Sunlight Exposure (SE)	
Units Assessed	170
SE with trees as opaque objects	
Non-Compliant	34
Minimum	24
Medium	19
High	93
Compliance Rate*	c. 80%
SE without deciduous trees	
Non-Compliant	34
Minimum	24
Medium	18
High	94
Compliance Rate*	c. 80%

* Compliance rates stated for the SE analysis are based on the units that have been assessed.

Sun On Ground (SOG) in proposed gardens / amenity areas:

Sun On Ground (SOG) in proposed gardens / amenity areas	
Areas Assessed	2
Areas meeting the guidelines	2
Areas not meeting the guidelines	0
Compliance Rate*	100%

* Compliance rates stated for the SOG assessment are based on the public and communal open space only.

1.4 Supplementary Assessment Results Overview

Spatial Daylight Autonomy (SDA) under I.S. EN 17037 Criterion:

Spatial Daylight Autonomy (SDA) under I.S. EN 17037 Criterion	
Unit Count	170
Rooms Assessed	494
Without Trees	
Compliant	444
Non-compliant	50
Compliance Rate*	c. 90%
With Trees (Proposed and Existing Trees)	
Compliant	434
Non-compliant	60
Compliance Rate*	c. 88%
Note: The study under the I.S. EN 17037 criterion should be considered a supplementary assessment. It is the expert opinion of 3DDB that the appropriate criteria are that of the BRE Guidelines (BRE 209)	

* Compliance rates stated for the SDA analysis are based on the rooms that have been assessed.

No Sky Line (NSL):

No Sky Line (NSL):	
Unit Count	170
Rooms Assessed	494
Yes	455
No	39
Compliance Rate**	c. 92%
** As the BRE Guidelines do not provide a recommended minimum for NSL in proposed developments, compliance rates for NSL are calculated using a criteria applied by 3DDB.	

* Compliance rates stated for the NSL analysis are based on the rooms that have been assessed.

2.0 Guidelines / Standards

Overview

Neither the British Standard, European Standard, British Annex to the European Standard nor the BRE Guidelines (BR 209) set out rigid standards or limits. They are all considered advisory documents. The BRE Guide is preceded by the following very clear statement as to how the design advice contained therein should be used:

"*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.*"

That the recommendations of the BRE Guidelines are not suitable for rigid application to all developments in all contexts, is of particular importance in the context of national and local policies for the consolidation and densification of urban areas or when assessing applications for highly constrained sites (e.g. lands in close proximity or immediately to the south of residential lands). A compromise may have to be made concerning daylight and sunlight compliance to achieve national or local planning objectives.

It is the expert opinion of 3D Design Bureau, that the BRE Guidelines (*BR 209*) are the most appropriate guiding document for daylight and sunlight assessment. For daylight within proposed developments, a supplementary study has also been carried out under the criteria of *I.S. EN 17037*. The rationale for this opinion is outlined below.

Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities. (2023)

In July 2023, the Department of Housing, Planning and Local Government published an updated guidance document for new apartments, *Sustainable Urban Housing: Design Standards for New Apartments*. This document makes reference to, *EN 17037:2018: Daylight in Buildings* (the European Standard), *BS EN 17037:2018: Daylight in Buildings* (the UK National Annex to the European Standard) and to the 3rd edition of Building Research Establishment's *Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice* (BR 209 2022).

Paragraph 6.7 of the 2023 apartment guidelines states:

"Where an applicant cannot fully meet all of the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, which planning authorities should apply their discretion in accepting taking account of its assessment of specific. This may arise due to a design constraints [sic] associated with the site or location and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

As such, this report identifies where daylight and sunlight recommendations have and have not been achieved. Rationale and compensatory design solutions are the remits of the planning consultant and/or the project architect, these will also be included in this report where applicable.

Note: Section 3.2 of the Urban Development and Building Height Guidelines 2020, provides similar guidance as above. However, it should be noted that at the time of publication of the *Urban Development and Building Height Guidelines (2020),* BR 209 was in the 2nd edition, first published in 2011. Since then, a 3rd edition of BR 209 has been published (June 2022) and the 2nd edition has been withdrawn. BR 209 no longer references *BS 8206-2:2008*, which has also been withdrawn. The standard used as reference in BR 209 edition 3 is *BS EN 17037*.

BR 209 - Site Layout Planning for Daylight and Sunlight: a Guide to Good Practice (2022)

This document will be referred to as the *BRE Guidelines*, the *BRE Guide* or *BR 209* in this report.

At the time of writing this report, the BRE Guidelines are in the third edition (BR 209). The BRE Guidelines set out recommendations for appropriate levels of daylight and sunlight within a proposed development, as well as providing guidance on impacts arising from a proposed development to surrounding properties and amenity areas.

Upon publication of the 3rd Edition of the BR 209 (2022), the 2nd edition (2011) has been withdrawn. Among the updates from the 2nd to the 3rd edition are some changes in the recommended metrics to use for carrying out scheme performance assessments.

Daylight within proposed developments was previously assessed under the 2011 guidelines using an 'Average Daylight Factor' assessment (ADF). This has been replaced with a 'target illuminance assessment', also known as a 'Spatial Daylight Autonomy' assessment (SDA).

Sunlight within proposed developments was previously assessed under the 2011 guidelines using an 'Annual / Winter Probable Sunlight Hours' assessment (APSH/WPSH). This has been replaced with a 'Sunlight Exposure' assessment (SE). However, APSH/WPSH is still recommended for sunlight impact assessments.

As such, no ADF or APSH/WPSH assessment will be included as part of a scheme performance assessment under the updated guidelines.

Details of the criteria for new metrics, and all other relevant metrics, can be found in the methodology section on Page 14 of this report.

It is the expert opinion of 3D Design Bureau that the BRE Guidelines are the most appropriate guiding document for assessing daylight potential within a proposed development. The rationale for this opinion is outlined in the Dublin City Council development plan (2022-2028), which states:

"*Prior to 2018, Ireland had no standard for daylight. In 2018, the National Standards Authority of Ireland adopted EN 17037 to directly become IS EN 17037. It is important to note that no amendments were made to this document and unlike BS EN 317037, it does not contain a national annex. It offers only a single target for new buildings (there are no space by space targets – e.g. a kitchen would have the same target as a warehouse or office). It does not offer guidance on how new developments will impact on surrounding existing environments. These limitations make it unsuitable for use in planning policy or during planning applications. BR 209 must still be used for this purpose.*"

Whilst BRE Guidelines draws reference from BS EN 17037, there are some subtle differences between BR 209 and BS EN 17037. For the purposes of this report, the BRE Guidelines (BR 209) is considered the appropriate reference document.

A detailed description of the various recommendations for impact assessment and scheme performance is contained in section "4.3 Quantitative Impact Assessment Overview" on page 19 of this report.

EN 17037:2018: Daylight in Buildings (2018)

*EN 17037 i*s a European Standard that provides recommendations for daylight within spaces. (Emphasis added)

EN 17037:2018 recommends that 300 lux should be received across 50% of a hypothetical reference plane of any room for half of the daylight hours of the year, with no less than 100 lux received across 95% of the reference plane. No distinction is made for the function of the room for target lux levels within this standard.

It is the opinion of 3D Design Bureau that these target values are less appropriate for proposed residential developments than the recommendations made in the BRE Guidelines, which apply room-specific target values for appropriate LUX levels.

Recommendations made in EN 17037 regarding Sunlight Exposure for proposed developments have been incorporated into the BRE Guidelines. As such, Sunlight Exposure is deemed the appropriate assessment for sunlight within habitable rooms of the proposed development.

EN 17037 also makes recommendations related to glare and quality of view out. These aspects are not addressed in this report as these assessments have less relevance in a residential context where occupants have the freedom to move about in order to improve level of glare or alter the view out.

I.S. EN 17037:2018 Daylight in Buildings (2018)

*I.S. EN 17037 i*s a direct adoption of the European Standard *EN 17037:2018* that provides recommendations for daylight within spaces.

The target values given within *I.S. EN 17037* are directly adopted from *EN 17037*. As such, there are no room-specific recommendations for daylight. Because of these limitations, it is the expert opinion of 3D Design Bureau, that the recommendations made in the *BRE Guidelines* are more appropriate to use than those within *I.S. EN 17037*.

Regardless, a supplementary SDA study has been carried out on the proposed development using the criterion of *I.S. EN 17037*, with compliance rates stated. However, this should be considered a supplementary study.

BS EN 17037:2018: Daylight in Buildings (2018)

BS EN 17037 is the British Annex to the European Standard (see above). The British Annex acknowledges that a rigid application of the European Standard "may not be achievable". It states "*... it is the opinion of the UK committee that the recommendations for daylight provision in a space [...] may not be achievable for some buildings, particularly dwellings.*"

In BS EN 17037, daylight recommendations differ depending on the function of a room. Target lux levels are applied across 50% of the reference plane of a room for half of the daylight hours. The target lux levels are:

- 200 Lux for kitchens
- 150 Lux for living rooms
- 100 Lux for bedrooms

No minimum is stated to be achieved across 95% of the working plane. If a space has dual purposes it is advised that the higher target value should be applied.

Sustainable Residential Development and Compact Settlements Guidelines (2024)

Often referred to as "The Compact Growth Guidelines" this document advises on compact growth principles as a means to promote sustainable development, efficient land use, and infrastructure while minimizing sprawl and environmental degradation, contributing to sustainable urban growth, enhance liveability and support broader planning objectives.

In regard to daylight, section 5.3.7 states:

"The provision of acceptable levels of daylight in new residential developments is an important planning consideration, in the interests of ensuring a high quality living environment for future residents. It is also important to safeguard against a detrimental impact on the amenity of other sensitive occupiers of adjacent properties.

(a) The potential for poor daylight performance in a proposed development or for a material impact on neighbouring properties will generally arise in cases where the buildings are close together, where higher buildings are involved, or where there are other obstructions to daylight. Planning authorities do not need to undertake a detailed technical assessment in relation to daylight performance in all cases. It should be clear from the assessment of architectural drawings (including sections) in the case of low-rise housing with good separation from existing and proposed buildings that undue impact would not arise, and planning authorities may apply a level of discretion in this regard.

(b) In cases where a technical assessment of daylight performance is considered by the planning authority to be necessary regard should be had to quantitative performance approaches to daylight provision outlined in guides like A New European Standard for Daylighting in Buildings IS EN17037:2018, UK National Annex BS EN17037:2019 and the associated BRE Guide 209 2022 Edition (June 2022), or any relevant future standards or guidance specific to the Irish context.

In drawing conclusions in relation to daylight performance, planning authorities must weigh up the overall quality of the design and layout of the scheme and the measures proposed to maximise daylight provision, against the location of the site and the general presumption in favour of increased scales of urban residential development. Poor performance may arise due to design constraints associated with the site or location and there is a need to balance that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

The Compact Growth Guidelines should be applied within statutory development plans and during the consideration of individual planning applications. Flexibility in interpretation allows planning authorities to tailor recommendations to specific local contexts and planning objectives.

Cork City Development Plan 2022-2028

The assessments carried out in this report adhere to the principles outlined in the Cork City Development Plan 2022-2028, specifically Objective 11.4 and sections 11.95-11.99 regarding Daylight, Sunlight, and Overshadowing (DSO). While the Development Plan references the 2011 edition of the BRE guide 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice' and BS 8206-2:2008, it explicitly allows for the use of updated guidance (11.96). Therefore, this report primarily utilizes the recommendations within the 3rd edition of the BRE guide ('BR 209', 2022), which supersedes the previous editions and standards mentioned. It is important to note that the guidance within BR 209 is advisory and should be interpreted flexibly, particularly in urban contexts where achieving higher densities may necessitate balancing daylight objectives with wider planning goals (11.95).

Summary

According to the aforementioned guiding documents, the following assessments are typically conducted for a daylight and sunlight study, depending on the specific requirements of the project.

Performance of the Proposed Development

Annual Probable Sunlight Hours (APSH) and Winter Probable Sunlight Hours (WPSH) on all relevant windows: APSH and WPSH are no longer recommended for scheme performance assessments under BR 209. They have been replaced with Sunlight Exposure (SE). When conducting a scheme performance assessment for sunlight in the habitable rooms of the proposed development, Sunlight Exposure is the relevant metric. An APSH/WPSH assessment will not be carried out in the scheme performance assessment of the proposed development.

Sunlight on Ground (SOG) in all amenity spaces: A SOG assessment will be carried out, where appropriate, for the amenity spaces of the proposed development.

Average Daylight Factor (ADF) in all habitable rooms: BR 209 (2022) states that ADF is no longer recommended as a relevant method of assessment. ADF has been replaced with a target illuminance assessment. (See below). As such, no ADF assessment will be carried out on the proposed development.

No Sky Line (NSL) in all habitable rooms: An NSL assessment will be conducted for the habitable rooms of the proposed development as a supplementary study as part of a scheme performance assessment.

Target Illuminance in all habitable rooms: A target illuminance assessment, also known as a Spatial Daylight Autonomy (SDA) assessment, has replaced ADF as the relevant metric for assessing daylight within proposed habitable spaces. The two recommended methodologies for this assessment are detailed in section 4.5.1 on page 22. In a scheme performance assessment, the SDA will be calculated for the habitable rooms of the proposed development.

Impact on the Surrounding Properties

Vertical Sky Component (VSC) on all relevant surrounding windows: A VSC impact assessment will be conducted, where appropriate, on the relevant surrounding windows determined by the BRE decision chart as illustrated in Figure 4.2 on page 14.

Annual Probable Sunlight Hours (APSH) and Winter Probable Sunlight Hours (WPSH) on all relevant surrounding windows: An APSH/WPSH impact assessment will be conducted, where appropriate, on the relevant surrounding windows/rooms that have an orientation within 90° of due south.

Sunlight on Ground (SOG) in all surrounding amenity spaces: A SOG impact assessment will be carried out, where appropriate, on the neighbouring gardens/ amenity spaces located within close proximity and to the north of the subject site.

3.0 Glossary

3.1 Terms and Definitions

Below is a list of daylight and sunlight terminology that may be used in this report depending on the assessments carried out.

Skylight
Non directional ambient light cast from the sky and environment.

Sunlight
Direct parallel rays of light emitted from the sun.

Daylight
Combined skylight and sunlight.

Overcast sky model
A completely overcast sky model, used for daylight calculation.

Cloudless sky model
A completely cloudless sky model, used for sunlight exposure calculation.

Model State
The model state is a term used to describe the configuration of the digital model used to run analysis. Model states will typically reflect a baseline state and a proposed or cumulative state. For a definition of the model states used in the analysis carried out in this report, please refer to “Preparing the analytical model” on page 16.

Vertical Sky Component (VSC)
Ratio of that part of illuminance, at a point on a given vertical plane, that is received directly from an overcast sky model, to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. Usually the ‘given vertical plane’ is the outside of a window wall. The VSC does not include reflected light, either from the ground or from other buildings.

Annual Probable Sunlight Hours (APSH) / Winter Probable Sunlight Hours (WPSH)
Annual Probable Sunlight Hours (APSH) and Winter Probable Sunlight Hours (WPSH) are a measure of sunlight that a given window may expect over a year period (1 Jan - 31 Dec), or the winter period (21 Sep - 21 Mar) respectively.

North facing windows may receive sunlight on only a handful of occasions in a year, and windows facing eastwards or westwards will receive sunlight only at certain times of the day. Taking this into account, the BRE Guidelines suggest that windows with an orientation within 90 degrees of due south should be assessed.

Sun On Ground (SOG)
Assessment of what portion of a garden or amenity space is capable of receiving 2 hours or more of direct sunlight on March 21st.

Sunlight Exposure (SE)
The number of hours of direct sunlight a room can expect to receive on a given date between February 1st and March 21st at a determined point on the windows.

Spatial Daylight Autonomy (SDA)
Spatial Daylight Autonomy assesses whether a space receives sufficient daylight on a working plane during standard operating hours on an annual basis. For compliance, the target value is achieved across 50% of the working plane for half of the occupied period.

No Sky Line (NSL)
The no sky line divides points on the working plane which can and cannot see the sky.

Working plane
Horizontal, vertical or inclined plane in which a visual task lies. Normally the working plane may be taken to be horizontal, 850 mm above the floor in houses and factories, 700 mm above the floor in offices. The plane is offset 300mm from the room boundaries under BR 209 criteria, and 500mm from the room boundaries under I.S. EN 17037 criteria.

LKD
Living / Kitchen / Dining room.

BRE Target Value
When assessing the effect a proposed development would have on a neighbouring property, a target value will be applied. This applied target value is generated as per the criteria set out for each study in the BRE Guidelines.

Alternative Target Value
It could be appropriate to use alternative target values when conducting assessment of effect on existing properties. If such instances occur the rationale will be clearly explained and the instances where the alternative target values have been applied will be clearly identified.

Level of BRE Compliance
Each table in the study that has a column identified as “Level of BRE Compliance”, identifies how an assessed instance performs in relation to the appropriate target value. If the instance is in compliance with the recommendations as made in the BRE Guidelines the value will be expressed as “BRE Compliant”. If the instance does not meet the criteria as set out in the BRE Guidelines a percentage will be expressed to determine the level of compliance with the recommendation. This value determines the definition of effect.

LUX
Lux is a standardised unit of measurement of light level intensity. A measurement of 1 lux is equal to the illumination of a one metre square surface that is one metre away from a single candle.

3.2 Definition of Effects

The BRE Guidelines state that:

"Adverse impacts occur when there is a significant decrease in the amount of skylight and sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space. The assessment of impact will depend on a combination of factors, and there is no simple rule of thumb that can be applied."

As such, planning authorities should consider a range of localised factors when making decisions. The terminology suggested in the BRE Guidelines is as listed below, whilst the assessment of impact should depend on a combination of factors. The BRE Guidelines also state:

"Where a new development affects a number of existing buildings or open spaces, the clearest approach is usually to assess the impact on each one separately. It is also clearer to assess skylight and sunlight impacts separately."

Taking this advice, 3DDB have categorised the level of effect on each window/room/open space on an individual basis. In quantifying the levels of effect, 3DDB have assigned numerical values to the levels of compliance with the BRE recommendations. By applying a numerical logic to the terminology used in defining the levels of effect there is no ambiguity regarding how the levels of effect have been categorised within this report.

The list of definitions given below is taken from '*Appendix H: Environmental impact assessment*' of the BR 209 with a clear indication of how they have been applied in the context of this report.

Negligible
For the purposes of this Sunlight and Daylight Assessment Report a '*Negligible*' level of effect will be stated if the level of effect is within the criteria as recommended in the BRE Guidelines and the applied target value has been achieved.

Minor Adverse
For the purposes of this Sunlight and Daylight Assessment Report, a '*Minor Adverse*' level of effect will be stated if the level of effect is marginally outside of the criteria as stated in the BRE Guidelines. Typically a '*Minor Adverse*' level of effect will be applied if the level of daylight or sunlight is reduced to equal or greater than 80% and less than 100% of the applied target value.

Moderate Adverse
For the purposes of this Sunlight and Daylight Assessment Report, a 'Moderate Adverse' level of effect will be stated if the level of daylight or sunlight is reduced to equal or greater than 50% and less than 80% of the applied target value. '*Moderate Adverse*' levels of effect are quite typical in instances where a proposed development is planned on an under-developed plot of land.

Major Adverse
An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment. For the purposes of this Sunlight and Daylight Assessment Report a '*Major Adverse*' level of effect will be stated if the proposed development reduces the availability of daylight or sunlight of a neighbouring property to significantly below a baseline level. A '*Major Adverse*' level of effect will be stated if the level of daylight or sunlight is reduced to less than 50% of the applied target value.

Beneficial Impact
In relation to sunlight or daylight access, it is conceivable that a proposed development could yield positive effects on the neighbouring properties. In such circumstances the development would typically involve a reduction to the size or scale of built form (e.g. such as the demolition of a building or the removal of a large belt of evergreen trees, which might result in an increase in light access). Where such improvements occur, a '*Beneficial Impact*' will only be stated if the ratio of change is greater than 1.20 (an improvement of 20%). Should less perceptible improvements occur a '*Negligible*' level of effect will be stated.

Not Applicable (n.a.)
In instances where a baseline value is particularly low, levels of effects can appear exaggerated. To mitigate such occurrences, if the baseline value in the VSC, APSH/WPSH or SOG studies is below 1%, 3DDB have categorised the level of effect as n.a. (not applicable).

Averaged Windows (-)
If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window will be assessed and a weighted average will be calculated. In such instances the level of effect for the room will be stated, but the level of effect for the individual windows contributing towards the average will be left blank in the table. This will be indicated in the tables with the dash symbol. (-)

3.3 Definition of Levels of Sunlight Exposure

For interiors, access to sunlight can be quantified. BR 209 recommends 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. The medium level of recommendation is three hours and the high level of recommendation four hours. For dwellings, at least one habitable room, preferably a main living room, should meet at least the minimum criterion.

Level of Sunlight Exposure:

The level of sunlight exposure will be stated for each assessed room in the tables under section "C.3 Sunlight Exposure (SE) in Proposed Units" on page 98. Below is a list of the terms used to categorise the levels of sunlight exposure:

Below Minimum
Sunlight exposure will be categorised as 'below minimum' if the potential sunlight for the assessed room is less than 1.5 hours on March 21st. Note: the recommendation is that a room within a proposed unit is capable of receiving 1.5 hours of direct sunlight on March 21st. If an individual room does not achieve this recommendation, it does not mean that the unit is non compliant.

Minimum
A 'minimum' level of sunlight exposure will be stated if the potential sunlight for the assessed room is between 1.5 hours and 3 hours on March 21st.

Medium
A 'medium' level of sunlight exposure will be stated if the potential sunlight for the assessed room is between 3 hours and 4 hours on March 21st.

High
A 'high' level of sunlight exposure will be stated if the potential sunlight for the assessed room is greater than 4 hours on March 21st.

Unit Compliance:

In addition to the level of sunlight exposure expressed for each room, compliance will be stated on a unit-by-unit basis. A proposed unit is considered to be compliant if any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on the assessment date.

Non-Compliant
If no habitable rooms within a proposed unit can receive 1.5 hours of sunlight on the assessment date, the unit will be categorised as 'Non-Compliant'.

Compliant
If at least one habitable room within a proposed unit can receive 1.5 hours or more of sunlight on the assessment date, the unit will be categorised as 'Compliant'.

Typically unit compliance will be stated for the best performing room per unit only, with lesser performing rooms indicated with a dash (-). However, if more than one room in a given unit is considered to be the best performing room (i.e. they have the same number of SE hours on March 21st), then the unit compliance column will be populated in the first instance only.

4.0 Methodology

4.1 Impact Assessment, Window Selection Criteria

To determine the properties to be included in the impact assessment, the decision chart taken from the BRE Guidelines has been followed, as shown in Figure 4.2.

Accordingly, all properties within a distance of three times the height of the proposed development, as illustrated in Figure 4.1, have been considered for impact assessment.

Figure 4.1: Properties within three times the height of the proposed development

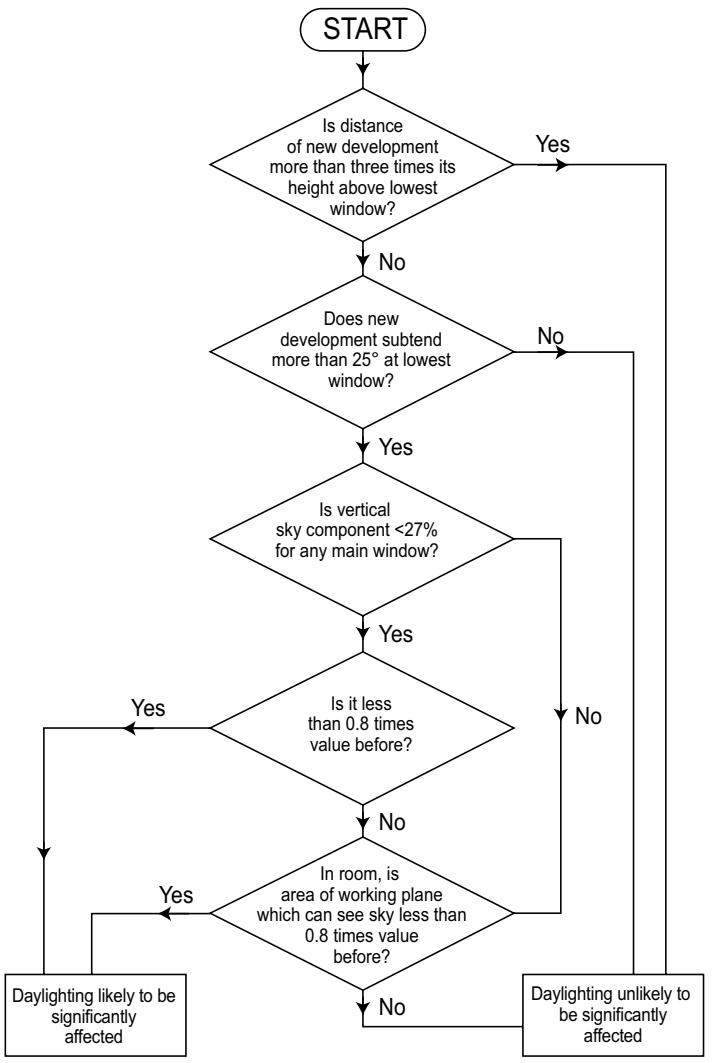

Figure 4.2: VSC decision chart, taken from BR 209.

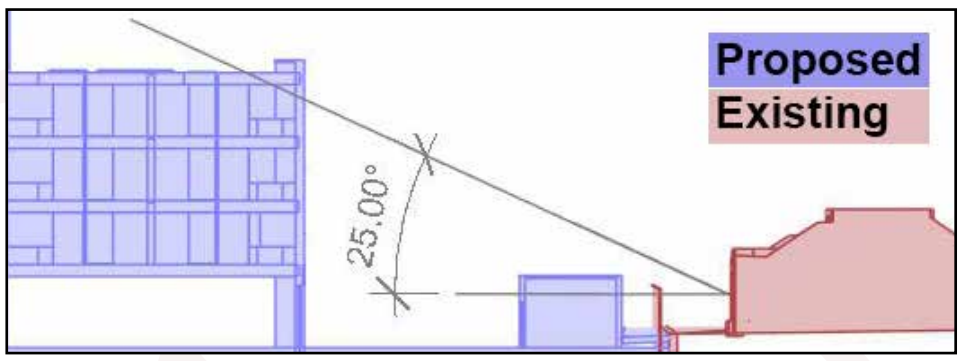

Figure 4.3: Example Section A-A taken through Lyman

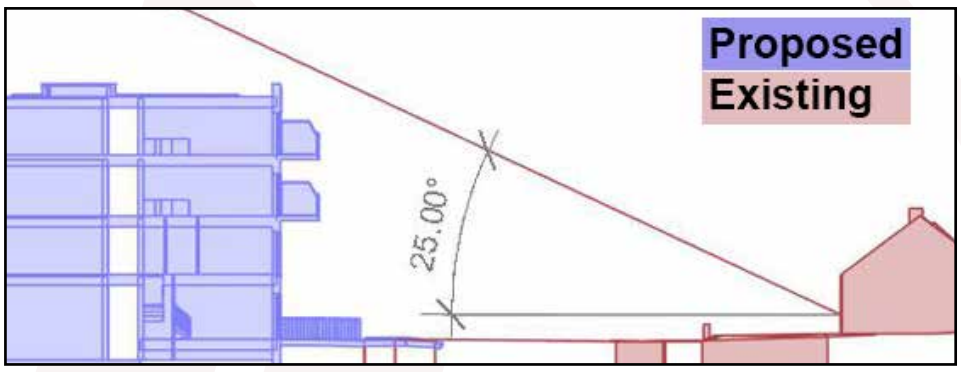

Figure 4.4: Example Section B-B taken through Grange Villa

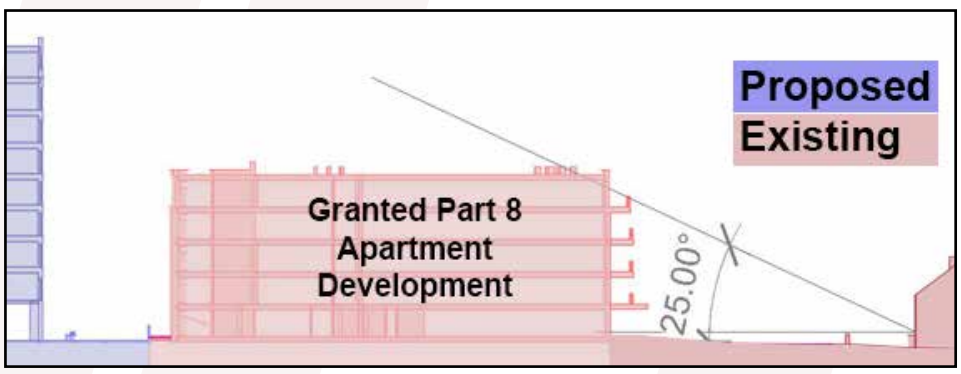

Figure 4.5: Example Section C-C taken through 4 Slieve Mish Park

As per the BRE Guidelines, a perpendicular section has been drawn from the main window wall of the potentially affected properties to determine if the proposed development subtends an angle of more than 25° at the lowest window.

If the proposed development subtends 25° in this section, then a VSC assessment should be conducted. Figure 4.3 shows a perpendicular section taken through Lyman which provides an example of where the proposed development subtends 25° when measured in a perpendicular section through an existing window.

However, if the proposed development does not subtend 25° in a perpendicular section, daylight is unlikely to be significantly affected and no further assessment will be carried out. Figure 4.4 and 4.5 show a perpendicular section taken through Grange Villa and 4 Slieve Mish Park which provide an examples of where an existing window is within 3 times the height of the proposed development but the proposed development does not subtend 25° when measured in a perpendicular section.

A detailed description regarding the methodology of the VSC assessment can be found in 4.3.1 on page 19.

It is advisable that where VSC assessments are conducted, a no sky line (NSL) assessment should also be carried out. However, an NSL assessment requires accurate dimensions and layouts of the existing rooms and windows. Due to common lack of availability regarding the required information, NSL assessments are often not feasible when assessing impact on existing properties.

In the case of this report, the NSL study was carried out for the ‘‘Part 8 Apartment Development’’ for which plans and elevation drawings were provided by the project architect.

The BRE Guidelines also apply the 25° rule to determine the need for an impact assessment for loss of sunlight (APSH/WPSH). They also advise that only windows with an orientation within 90° of due south should be assessed. It is recommended to assess the main living rooms of dwellings and conservatories, while APSH/WPSH assessments are typically not required for kitchens and bedrooms.

In practice, 3DDB include all windows meeting the proximity criteria in an APSH/WPSH assessment if they are reasonably assumed to serve habitable spaces. This approach avoids distinguishing whether the windows serve bedrooms or living areas, thereby eliminating the need to make assumptions about the specific functions of rooms in existing dwellings.

While the BRE Guidelines recommend conducting an impact assessment on the lowest window where daylight/sunlight is needed, if a property is found to have a window potentially affected by the proposed development, based on the previously explained criteria, other windows facing the proposed development on that property may also be assessed. This approach provides a more comprehensive understanding of the overall impact on the property.

4.2 Preparing the analytical model

4.2.1 Building the Model States

The project architect, BKD Architects supplied 3DDB with AutoCAD drawings of the proposed development from which a 3D analytical model was created. Landscape drawings were issued by BKD Architects on behalf of landscape architect, CSR Land Planning & Design

A site visit has not been conducted. A combination of survey information, aerial photography, available online photography and/or ordnance survey information were used to model the surrounding context and assessed buildings.

Note: as the information gathered from online sources is not as accurate as surveyed information, a reasonable tolerance should be allowed to the placement of windows, boundary treatments and the results generated.

Baseline model state

As illustrated in Figure 4.6, the baseline model state reflects the existing environment. It includes the surrounding context and the subject site in their current standing. This includes any structures that are to be demolished as part of this application.

The indicated 'Part 8 Apartment Development' has not yet been constructed but is considered part of the baseline state for this report, as advised by the project architect. At the time of writing this report, the construction site for this scheme has been cleared and excavation appears to have commenced.

Existing trees were placed using photogrammetry information, with assumptions made regarding exact size, position and species.

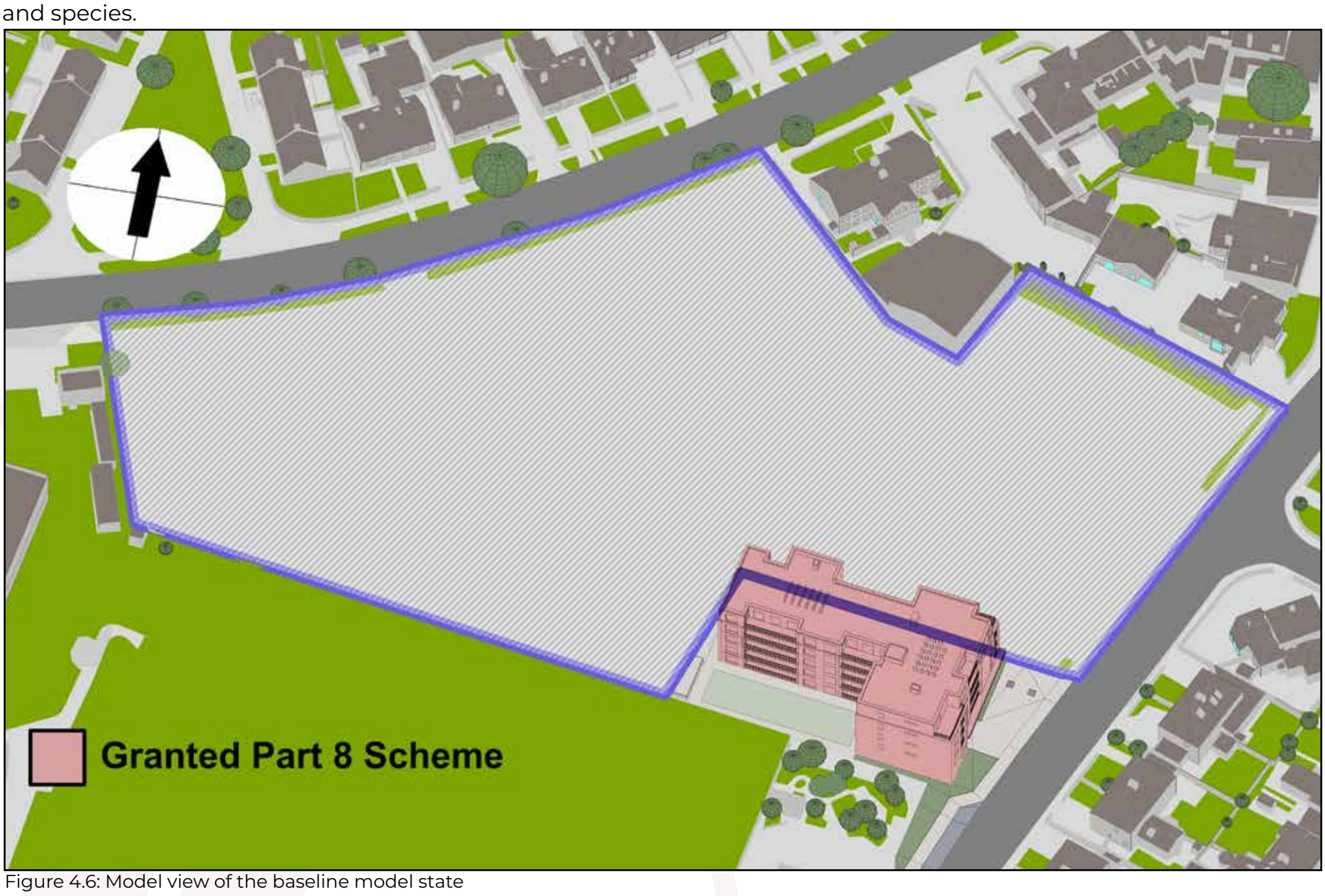

Figure 4.6: Model view of the baseline model state

As explained in section 4.1, the BRE Guidelines recommend that impact assessments should be carried out if any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle of more than 25° to the horizontal. This criteria has been used to ensure all windows that could possibly sustain an adverse level of effect have been included in the model when running VSC and APSH/WPSH assessments.

Proposed model state

As illustrated in Figure 4.7, the proposed model state reflects the subject site if the development is built as proposed. This includes proposed landscaping on the subject site and the demolition of existing structures, etc. Proposed buildings have been positioned in their location on the subject site with relevant surrounding context included. Models of proposed trees within the development have also been included according to the information provided by the project architect on behalf of landscape architect. All of the above information was subsequently used to prepare a digital analytical model in software specifically designed for daylight and sunlight analysis.

Relevant weather and climatic data has been obtained for this report using a localised EnergyPlus Weather File (IRL_ST_Cork.AP.039550_TMYx.2007-2021.epw).

Figure 4.7: Model view of the proposed model state

4.2.2 Trees

As referenced in the BRE Guidelines, the exact shapes of trees are “almost impossible to predict”. When modelling trees for this assessment tree geometry has been simplified. Where tree survey information was not provided, the position and size of existing trees have been estimated using photogrammetry information. The shape of the trees have been simplified and an average transmittance value has been applied using information from table G1 from the BRE Guidelines. Simplified models of proposed trees within the development have also been included according to the information provided by the project architect on behalf of the landscape architect.

BR 209 provides guidance on how trees should be treated depending on the study being carried out, as summarised below:

Impact to Vertical Sky Component (VSC) and Annual / Winter Probable Sunlight Hours (APSH / WPSH)

The BRE Guidelines state that when assessing the effect a new development would have on existing buildings, it is usual to ignore the effect of deciduous trees. This is because daylight is at its scarcest and most valuable in winter when most trees will not be in leaf. Evergreen trees should be included, particularly where a dense belt or group of evergreens is specifically planned as a windbreak or for privacy purposes.

Sun On Ground (SOG)

Regarding SOG assessments, the BRE Guidelines states:

“...trees and shrubs are not normally included in the calculation unless a dense belt or group of evergreens is specifically planned as a windbreak or for privacy purposes. This is partly because the dappled shade of a tree is more pleasant than the deep shadow of a building (this applies especially to deciduous trees).”

As such, deciduous trees have not been included in the calculation of SOG, unless there is a dense belt present or a group of trees specifically planned as a windbreak or for privacy purposes. Evergreen trees are included in the SOG assessment.

Sunlight Exposure (SE)

The BRE Guidelines state that as deciduous trees would not be in full leaf on the recommended assessment date (March 21st), sunlight would be expected to penetrate deciduous trees. However, as trees have so many variables, it is impossible to accurately represent how they would affect sunlight at a given time. The suggested methodology (BR 209) to allow for this is to run the sunlight exposure study in two states. Once with trees as opaque objects and secondly without deciduous trees in the assessment model. This gives a range of potential sunlight hours.

Spatial Daylight Autonomy (SDA)

BR 209 recommends when assessing daylight in a proposed building, it is appropriate to run the assessment with trees represented over the course of the whole year. Light transmittance values for the modelled trees are varied to account for summer and winter foliage.

Taking average dates from *BRE Digest 350*, appropriate light transmittance values have been applied to deciduous trees to represent the ‘full leaf’ and ‘bare branch’ states.

Evergreen trees are represented as ‘full leaf’ throughout the year.

Units have also been assessed without trees to give an understanding of how the architecture performs should trees not be factored into the calculation.

I.S. EN 17037 does not give any guidance on how trees should be represented. For the purpose of this report, the SDA calculation under the I.S. EN 17037 criteria has been carried out with trees represented in the same manner as the BR 209 assessment. Units have also been assessed without trees to give an understanding of how the architecture performs should trees not be factored into the calculation.

No Sky Line (NSL)

Because some sky can usually be seen through a tree canopy, deciduous trees have not been included in the No Sky Line assessment model. Evergreen trees may be included in this assessment, particularly if there is a dense belt or group planned for windbreak or for privacy purposes.

Shadow Study

The hourly renderings of the shadow study have been generated with evergreen trees represented as opaque objects, where applicable, and without deciduous trees. This method best represents the methodology used for the impact assessment and allows for a better understanding of potential shadows cast by the proposed development through the tree canopy.

4.3 Quantitative Impact Assessment Overview

4.3.1 Effect on Vertical Sky Component (VSC)

A proposed development could potentially have a negative effect on the level of daylight that a neighbouring property receives, if the obstructing building is large in relation to their distance from the existing dwelling.

Section 4.1 outlines the decision process which was used to determine the appropriate properties to be included in the VSC impact assessment.

For the proposed development, all properties within a radius of three times the height of the proposed development have been considered for impact assessment. Should the angle from the windows to the proposed development subtend 25° in a perpendicular section, then VSC is calculated in both the baseline and proposed model states, and a comparison made.

A no skyline assessment requires accurate dimensions and layouts of both rooms and windows. However, the required information is rarely available for existing dwellings. As such, it is not common practice to carry out a no sky line (NSL) impact assessment.

VSC can be defined as the amount of skylight that falls on a vertical wall or window.

This report assesses the percentage of direct sky illuminance that falls on the assessment point of neighbouring windows that could be affected by the proposed development.

The BRE Guidelines state that if the VSC is:

- At least 27%, then conventional window design will usually give reasonable results;
- Between 15% and 27%, then special measures (larger windows, changes to room layout) are usually needed to provide adequate daylight;
- Between 5% and 15%, then it is very difficult to provide adequate daylight unless very large windows are used;
- Less than 5%, then it is often impossible to achieve reasonable daylight, even if the whole window wall is glazed.

The VSC for each window/room will be calculated in the relevant model states, as outlined in section 4.2 on page 16. A comparison between the results generated with these model states will determine the level of effect.

A proposed development could possibly have a noticeable effect on the daylight received by an existing window, if the following occurs:

- The VSC value drops below the guideline value of 27%; **and**
- The VSC value is less than 0.8 times the existing value.

In instances where a baseline value is less than 1%, the impact will be considered '*non-applicable*' (n.a.).

Under BRE Guidelines, only habitable rooms need to be assessed for effect to VSC. In the absence of design layouts or floor plans, or information pertaining to the internal 'as-built' layouts, assumptions have been made regarding the function of the windows of the existing surrounding properties (i.e. what room type is served by the window being assessed).

Typically, the effect on ground floor windows is greater than the effect on windows of subsequent floors. However, floors above ground floor level have been included in this study to give a more comprehensive assessment.

Assessment Points

The VSC impact assessment has been carried out on the windows/rooms of the neighbouring properties that could be affected by the proposed development as highlighted in Figure 1.2 on page 4.

The assessment points for measuring VSC are taken from the centre point of a standard window. If the window being assessed is a full height window, the assessment point is taken at 1600 mm above the finished floor level.

Weighted Averages

If it can be determined or reasonably assumed that multiple windows are servicing the same room, each window has been assessed and a room VSC has been calculated by applying a weighted average calculation to the results.

When calculating weighted averages the proportion of the total glazing area represented for each window is taken into account. It should be noted that assumptions typically need to be made regarding window sizes, so a tolerance should be applied regarding calculated weighted averages.

In instances where weighted averages have been calculated, the VSC figures will be stated for each window on an individual basis as well as the calculated figure to be applied to the room, but the level of effect will only be stated for the room.

Project Assessment

Following the BRE decision chart, as illustrated in Figure 4.2 on page 14, a VSC impact assessment has been carried out on the windows/rooms of the neighbouring properties that could be affected by the proposed development as indicated in Figure 1.2 on page 4.

The assessed properties are: 4 Pearse Road, Lyman, Bermartin, Loretto and Part 8 Apartment Development

No VSC impact assessment was conducted for other properties that are within three times the height of the proposed development. This is because they do not have a window from which the proposed development would subtend an angle of 25° when measured in a perpendicular section.

The results for the VSC assessment can be found in the appendix results section A.1 on page 36, with analysis of the results in section 5.1.1 on page 25.

4.3.2 Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH)

Annual/Winter Probable Sunlight Hours (APSH/WPSH) is a measure of sunlight that a given window may expect to receive over the period of a year. The percentage of APSH/WPSH that windows in existing properties receive might be affected by a proposed development.

A proposed development could potentially have a negative effect on the level of sunlight that a neighbouring property receives, if the obstructing building is located to the south and is large in relation to their distance from the existing dwelling. This can be determined if the distance of a proposed development is less than three times its height from an existing dwelling, or if the angle from an existing window to the proposed development subtends 25° to the horizontal when measured in a perpendicular section.

Whether a window is considered for APSH/WPSH impact assessment is based on its orientation. A south-facing window will, in general, receive the most sunlight. North facing windows may receive sunlight on only a handful of occasions in a year, and windows facing eastwards or westwards will receive sunlight only at certain times of the day. Taking this into account, the BRE Guidelines suggest that windows with an orientation within 90 degrees of due south should be assessed.

Section 4.1 outlines the decision process which was used to determine the appropriate properties to be included in the APSH/WPSH impact assessment.

The APSH/WPSH for each of the assessed windows will be calculated in the relevant model states, as outlined in section 4.2 on page 16. A comparison between the results generated with these model states will determine the level of effect.

If it can be determined or reasonably assumed that multiple windows are servicing the same room, the APSH/WPSH has been assessed for the room as opposed to each individual window. When APSH/WPSH is assessed for a room it considers sunlight coming from all windows, but does not double count if sunlight is reaching multiple windows at the same time.

If a room can receive more than 25% of APSH, including at least 5% of the WPSH, then the room should receive enough sunlight.

A proposed development could possibly have a noticeable effect on the sunlight received by an existing window/room, if the following occurs:

- The APSH value drops below the annual (25%) or winter (5%) guidelines; **and**
- The APSH value is less than 0.8 times the baseline value; **and**
- There is a reduction of more than 4% to the annual APSH.

In some circumstances, the available sunlight during the winter period (WPSH) may both drop below the recommended minimum of 5% with a proposed value of less than 0.8 times the baseline value, but the reduction to annual probable sunlight (APSH) is less than 4%. Such occurrences are considered compliant with the BRE Guidelines, and the impact to WPSH will be stated as '*n.a.*' on that basis.

Additionally, where a baseline value is less than 1%, the impact will be considered '*non-applicable*' (n.a.)

Under BRE Guidelines, only main living-rooms need to be assessed for effect on sunlight. In the absence of design layouts or floor plans, or information pertaining to the internal 'as-built' layouts, all windows assumed to be servicing habitable rooms have been included in the APSH/WPSH assessment provided they are orientated within 90° of due south and are in relative close proximity to the proposed development.

Typically, the effect on ground floor windows is greater than the effect on windows of subsequent floors. However, floors above ground floor level have been included in this study to give a more comprehensive assessment.

Assessment Points

The assessment points for measuring APSH/WPSH are taken from the centre point of a standard window. If the window being assessed is a full height window, the assessment point is taken at 1600 mm above the finished floor level.

Project Assessment

The APSH/WPSH impact assessment has been carried out on the windows/rooms of the neighbouring properties that could be affected by the proposed development as indicated in Figure 1.2 on page 4. with an orientation within 90 degrees of due south.

4 Pearse Road and Lyman are the only properties assessed.

No APSH/WPSH assessment has been conducted for Bermartin, Loretto and Part 8 Apartment Development on the basis that the windows of this property that face the subject site do not have an orientation within 90° of due south.

No APSH/WPSH impact assessment was conducted for other properties that are within three times the height of the proposed development. This is because they do not have a window from which the proposed development would subtend an angle of 25° when measured in a perpendicular section.

The results for the APSH/WPSH assessment can be found in the appendix results section A.2 on page 45, with analysis of the results in section 5.1.3 on page 27.

4.3.3 Effect on Sun On Ground in Existing Gardens/Amenity Areas (SOG)

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least half the area should receive at least two hours of sunlight on March 21st. As the BRE Guidelines does not provide a clear criteria on which neighbouring properties should be included in an impact on SOG study, 3DDB have carefully considered the neighbouring properties that may be affected when running the impact assessment. Gardens or amenity areas included in this study are typically located within close proximity, to the north of the proposed development.

Where a quantitative assessment has not been carried out it is on the basis that the omitted areas are unlikely to be adversely affected. Such instances may be because the areas are not deemed to be in close proximity to the proposed development or because they are located to the south. Should there be any concerns over the potential impact on any areas that have not been included in the quantitative assessment, a qualitative assessment may be carried out using the shadow study and false colour plans included in the report.

March 21st, also known as the spring equinox, is chosen as the assessment date as daytime and night-time are of approximately equal duration on this date.

The analytical model for SOG impact assessment includes evergreen trees, where applicable, in accordance with the BRE Guidelines. Typically deciduous trees will not be included unless there is a particularly dense belt.

The percentage of assessed areas which can receive two hours or more of direct sunlight on March 21st will be calculated in the relevant model states, as outlined in section 4.2 on page 16. A comparison between the results generated with these model states will determine the level of effect.

A proposed development could possibly have a noticeable effect on the sunlight received by an existing garden and/or amenity area, if the following occurs:

- Half the area of the space does not receive at least two hours of sunlight during the spring equinox; **and**
- The area that receives more than two hours of sun on the spring equinox is less than 0.8 times its former value.

In instances where a baseline value is less than 1%, the impact will be considered '*non-applicable*' (n.a.)

Effect on sunlight to existing neighbouring gardens and/or amenity areas has been assessed to the north of the proposed development, as areas located to the south are unlikely to be affected due to sun direction. Overshadowing is highly unlikely to occur in areas that are due south of any proposed development.

Project Assessment

The SOG impact assessment has been carried out on the neighbouring gardens/amenity areas that could be affected by the proposed development as outlined above.

The false colour plans of the proposed SOG assessment section and the hourly renderings of the shadow study in section B.0 on page 55, allow for a qualitative sunlight assessment of the surrounding areas.

The results of the impact to sun on ground assessment in the neighbouring gardens/amenity areas (including a visual representation in the form of 2-hour false colour plans) can be found in the appendix results section A.4 on page 53, with analysis of the results in section 5.1.4 on page 28.

4.3.4 Effect on No Sky Line (NSL)

No Sky Line (NSL) is a study of whether or not the sky is visible from a hypothetical working plane within a room. In residential properties the working plane is assumed to be 850mm above the finished floor level, and for offices, it is set at 700mm.

The BRE advises that if, following the construction of a new development, the no sky line moves in such a way that the area of the existing room, which currently receives direct skylight, is reduced to less than 0.80 times its former value, this change will be noticeable to the occupants, and more of the room will appear poorly lit.

NSL assessment is recommended for main rooms where daylight is expected. In residential properties these include living rooms, dining rooms, and kitchens. The BRE Guidelines state that *"bedrooms should also be analysed although they are less important."*

A No Sky Line (NSL) assessment has been carried out in instances where impacts to VSC are above the recommended level and room layouts are known.

3D Design Bureau asserts that the No Sky Line (NSL) assessment is more informative than a Vertical Sky Component (VSC) assessment. This is because a VSC assessment considers only the light reaching a single point on a window, whereas an NSL assessment evaluates daylight distribution throughout the room. If a window or room fails to meet the BRE recommendation for VSC impact but meets the criteria for NSL impact, it indicates that while light intensity is reduced, its distribution will not be adversely affected.

Project Assessment

The daylight distribution assessment NSL is independent of the VSC and should be carried out where information on surrounding property layouts allows. In the case of this report, the NSL study was carried out for the ''Part 8 Apartment Development'' for which the plans and elevation drawings were provided by the project architect.

The results for the NSL assessment can be found in the appendix results sectionA.3 on page 50, with analysis of the results in section 5.1.2 on page 27

4.4 Qualitative Assessment - Shadow Study

A shadow study has been carried out to allow a qualitative comparison between the relevant model states, as outlined in section 4.2 on page 16. This visual representation of the shadows cast by the proposed development can be found in the hourly shadow diagrams in the appendix results section B.0 on page 55.

Hourly renderings have been shown from sunrise to sunset on the following dates in 2025:

- Spring equinox: March 21st Sunrise 6:39 | Sunset 18:43. (GMT)
- Summer solstice: June 21st. Sunrise 05:21 | Sunset 21:50. (BST)
- Winter solstice: December 21st Sunrise 8:46 | Sunset 16:18. (GMT)

The shadow study has been generated using the same model states as described in section 4.2.1. In certain cases, assumptions or estimations may have been made when modelling elements of the surrounding context and/or proposed site details when creating the various model states. Therefore, it is advisable for a reasonable tolerance to be applied when interpreting shadows in the qualitative assessment.

The hourly renderings of the shadow study will be generated without deciduous trees and with evergreen trees, where applicable, represented as opaque objects when present in the model states.

Note: The spring equinox (March 21st) and autumn equinox (21st September) yield similar shadows, albeit with a one hour difference as daylight saving time (BST) would be in effect. Only the spring equinox was included in the shadow study images in accordance with the BRE Guidelines.

4.5 Quantitative Scheme Performance Assessment Overview

4.5.1 Spatial Daylight Autonomy in Proposed Habitable Rooms (SDA)

Since the publication of the 3rd edition of the BRE Guidelines (BR 209 - 2022), Spatial Daylight Autonomy (SDA) is the recommended metric for assessing daylight access within a proposed development. Spatial Daylight Autonomy replaces Average Daylight Factor (ADF) in this regard, which was the recommended metric under the 2nd edition of the BRE Guidelines (BR 209 - 2011).

Spatial Daylight Autonomy assesses whether a room receives sufficient daylight on a working plane during standard operating hours on an annual basis. A given target value should be achieved across 50% of the working plane for half of the daylight hours.

There are two methods for calculating SDA:

- **Calculation method using illuminance level:** This requires the use of a detailed daylight calculation method where hourly (or sub-hourly) internal daylight illuminance values for a typical year are computed using hourly (or sub-hourly) sky and sun conditions derived from climate data appropriate to the site. This calculation method determines daylight provision directly from simulated illuminance values on the reference plane. The illuminance value of at least half the required area of the space should equal or exceed the target values.
- **Calculation method using daylight factor:** The daylight factor method assumes a constant ratio between internal and external illuminance. The daylight factors in the space shall be calculated by any reliable method that is based on the ISO 15469:2004 standard overcast sky (TYPE 1 or TYPE 16). Daylight factors are to be predicted across grid of points on a plane 0.85m above the floor of the space. The daylight factor of at least half the required area of the space should equal or exceed the target values.

It is the opinion of 3DDB that the calculation method using illuminance level better represents a real-world scenario as it accounts for the quality of daylight based on orientation. As such, the illuminance methodology has been adopted for all SDA assessments in this report using a localised EnergyPlus Weather File (IRL_ST_Cork.AP.039550_TMYx.2007-2021.epw) to apply the relevant climate information.

In terms of housing, *BR 209* provides target SDA values to be received across at least 50% of the working plane for at least half the daylight hours. The target values differ based on the function of the room assessed:

- 200 Lux for kitchens
- 150 Lux for living rooms
- 100 Lux for bedrooms

Where rooms serve more than one function, the higher SDA target value should been taken. In new developments, some internal spaces (e.g. studio apartments, shared communal areas etc.) can possibly be of a nature that do not have a predefined target value in BR 209. In such instances, 3DDB have applied a target value they deem to be appropriate. In the case of the proposed development there is a Crèche with three rooms that have been assessed. 3DDB recommend that an SDA target value of 150 Lux be applied to these spaces. These rooms have not been included in the calculated compliance rates.

Under I.S. EN 17037 at least 50% of the working plane should receive above 300 lux for at least half the daylight hours, with 95% of the working plane receiving above 100 Lux for all rooms. The target SDA values do not vary depending on the room function under this criteria.

This study has assessed the Spatial Daylight Autonomy (SDA) received in the habitable rooms of the proposed development under the BR 209 criterion. The SDA of the proposed development has been calculated under the I.S. EN 17037 criterion as part of a supplementary assessment.

Defining Rooms

Definition of rooms has been taken directly from the architectural drawings supplied by the project architect.

In accordance with the BRE Guidelines circulation spaces, corridors, bathrooms etc. have not been assessed.

Indication of the assessed space in each room is provided in the floor plans that correspond to the SDA results in the appendix section “Proposed Apartments Floor Plans” on page 64.

Working Plane

The calculation of SDA is carried out on a hypothetical working plane which lies 850 mm from the finished floor level in residential units and 700 mm in academic and office spaces.

In the BR 209 study the working plane is offset 300 mm from the room boundaries. Under the I.S. EN 17037 criteria the working plane is offset 500 mm from the room boundaries. The working plane has a grid density of c. 300 mm.

Material Palette

Following consultation with the project architect & design team, material values used for SDA calculations are as per the table below:

Table No. 4.5.1 - Material Palette for SDA Calculations

Object	Material	Reflectance	Object	Material	Reflectance / Transmittance
Exterior walls	Standard Brick	0.3	Interior Walls	Pastel paint	0.70
	Light Brick	0.4	Interior Ceiling	White paint	0.8
	Dark Brick	0.15	Interior Floor	Light timber	0.4
	Render	0.6	Miscellaneous	Miscellaneous	0.5
	Concrete	0.4	Glass	Double glazing	0.8
Ground cover	Paving	0.4		Maintenance factor	0.91
	Tarmac	0.2		Glass adjusted for maintenance	0.73
	Grass	0.2		Frosted glass	0.5

Project Assessment

The results for the study on SDA can be found in the appendix results section C.2 on page 78.

Analysis of the results can be found in section 5.2.1 on page 29.

The results of the supplementary SDA study under the I.S. EN 17037 criterion can be found in section D.0 on page 120.

4.5.2 Sunlight Exposure in Proposed Habitable Rooms (SE)

Since the publication of the 3rd edition of the BRE Guidelines (BR 209 - 2022), Sunlight Exposure (SE) is the recommended metric for assessing sunlight access within a proposed development. Sunlight Exposure replaces APSH/WPSH in this regard, which was the recommended metric under the 2nd edition of the BRE Guidelines (BR 209 - 2011).

Sunlight exposure (SE) is a measure of sunlight that a given window may expect to receive on a given date between the 1st of February and the 21st of March. The BRE guidelines suggest that March 21st (equinox) is used as the assessment date.

In the presence of trees, SE results have been generated, both with deciduous trees as opaque objects and without the inclusion of deciduous trees, in accordance with the BRE Guidelines. Evergreen trees have been included as opaque objects, where applicable, in both states.

The level of sunlight exposure is categorised as follows:

- 1.5 Hours - Minimum
- 3 Hours - Medium
- 4 Hours - High

The recommendation for dwellings is that at least one habitable room, preferably a main living room, should receive at least the minimum criterion. Should no room within a given unit meet the recommended minimum level of sunlight exposure, it will be stated as non-compliant.

Sunlight exposure is carried out on habitable rooms within a proposed development. The assessment point for windows is 1.2m above the finished floor level, or 0.3m above the sill level (which ever is higher). If a room has multiple windows, the amount of sunlight received by each can be added together provided they occur at different times and sunlight hours are not double counted.

The criterion applies to rooms of all orientations, although if a room faces significantly north of due east or west it is unlikely to be met. As such, it is not always possible to achieve full compliance, especially in developments that contain single aspect units.

The sunlight exposure assessment focuses on habitable residential rooms. Unless sunlight access is deemed important for the functionality of a non-residential room in a proposed development, it will not be included in the study, which remains limited to residential rooms. In the case of the proposed development, the three crèche rooms have been assessed for informational purposes only and have not been included in the overall compliance rate.

Project Assessment

The results for the study on sunlight exposure can be found in the appendix results section C.3 on page 98, with analysis of the results in section 5.2.2 on page 31.

4.5.3 Sun On Ground in Proposed Outdoor Amenity Areas (SOG)

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least half of it should receive at least two hours of sunlight on March 21st.

March 21st, also known as the spring equinox, is chosen as the assessment date as daytime and night-time are of approximately equal duration on this date.

The analytical model for SOG assessment in proposed amenity areas includes evergreen trees, where applicable, as per the BRE Guidelines. Typically deciduous trees will not be included unless there is a particularly dense belt.

A quantitative SOG assessment has been carried out on the areas as indicated by the project architect. The shadow study and false colour plans allow for a qualitative assessment for all other areas.

The portion of each assessed space capable of receiving 2 hours of direct sunlight on March 21st has been calculated individually. These areas can be combined to give the development average where appropriate.

Project Assessment

The levels of sunlighting to proposed amenity areas, as indicated by the architect, have been assessed. However, it should be noted that the numbering of these spaces in the Daylight and Sunlight Assessment Report has been assigned by 3DDB specifically for the purposes of this report. If other consultants are referencing these spaces in their own reports, it is unlikely they will be numbered the same.

The results for the study on sun on ground in the proposed outdoor amenity areas (including a visual representation in the form of 2-hour false colour plans) can be found in the appendix results section C.4 on page 118, with analysis of the results in section 5.2.3 on page 32.

4.5.4 No Sky Line in Proposed Habitable Rooms (NSL)

The no sky line divides the areas of the working plane which can receive direct skylight, from those which cannot. It indicates the distribution of direct daylight within a room.

The BRE Guidelines recommend the No Sky Line study as an appropriate metric for an impact assessment to daylight, but only where room layouts are known.

“The calculation can only be carried out where room layouts are known. Using estimated room layouts is likely to give inaccurate results and is not recommended.“

All advice regarding NSL in the BRE Guidelines is in relation to impact assessments. NSL is not mentioned in the BRE section regarding daylight in new developments. Nevertheless, an NSL assessment was carried out on the proposed development as a supplementary study as it is requested in the DCC Development Plan 2022-2028 (Section 5.1, Appendix 16). Although the proposed development is not under Dublin City Council’s jurisdiction, the NSL study has been included to provide consistency across 3DDB daylight and sunlight assessments.

As the BRE Guidelines does not give advice on target NSL values for proposed rooms, no compliance rate has been stated. However a no skyline of 80% could be considered an appropriate figure given that the BRE Guidelines state that supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.

The results of the supplementary NSL study can be found in section D.0 on page 120.

5.0 Analysis of Results

5.1 Analysis of Impact Assessment Results

5.1.1 Effect on Vertical Sky Component (VSC)

The effect on VSC has been assessed for 49 no. windows/rooms across the surrounding properties: 4 Pearse Road, Lyman, Bermartin, Loretto, Part 8 scheme.

Using the rationale explained in section 3.2 on page 12, the effect to VSC on 33 no. of these windows (or rooms if an average of multiple windows has been taken) would be considered *'negligible'*, 7 no. '*minor adverse'*, 5 no. '*moderate adverse'*, 3 no. '*major adverse'*, 1 no. 'Beneficial Impact'.

This analysis is focused on the three surrounding properties 4 Pearse Road, Lyman and Part 8 scheme as the remaining surrounding properties (Loretto and Bermartin) experience a *'negligible'* level of impact.

4 Pearse Road is a building located north of the proposed development as shown in Figure 5.1 below. Two windows (Ca, Cc) on the facade closest to the proposed building are predicted to experience a *'Moderate Adverse'* impact. Windows Cb#1 and Cb#2 serve one room, which is predicted to experience a *'Minor Adverse'* impact. The other windows of this building have not been assessed based on the criteria explained in paragraph 4.1 on page 14. Other studies, such as APSH/WPSH and SOG analyses, which show a *'negligible'* impact of the proposed building on this property, is explained in the relevant sections below.

With regard to the windows Cc and Ca, which experience the *'moderate adverse'* level of impact, it is unclear as to what type of room they service. However, it is likely to be a bedroom and kitchen space respectively. This could be reasonably assumed from what can be seen on Google maps globe view on the identical adjoining property.

Figure 5.1: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

Lyman, shown in image 5.2 below, a property located north of the proposed Block 4, would experience a '*negligible'* level of impact; notably, one window (Lya) would even experience a beneficial impact. This outcome is attributed to the planned replacement of a dense belt of evergreen trees, currently located on the edge of the proposed development site, with less dense deciduous trees.

Figure 5.2: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

With regard to the granted Part 8 scheme, located to the south of the subject site and in close proximity to the proposed development, multiple windows and rooms have been identified as affected by the proposed development. This is relevant to the façades presented in the images below.

Note: The grey windows visible on the façades have not been assessed because they serve non habitable rooms or do not meet the selection criteria explained in paragraph 4.1 on page 14.

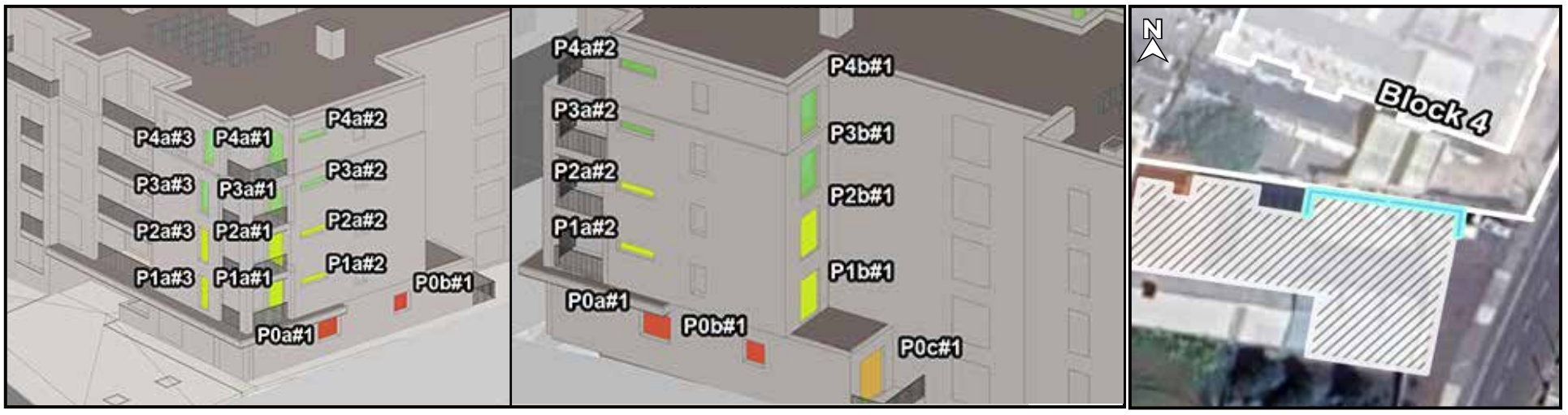

Figure 5.3: Part 8 Scheme VSC - rooms categorised as: ‘negligible’ In green, ‘minor adverse’ In yellow and ‘major adverse’ in red(L), Aerial view of assessed location (R)

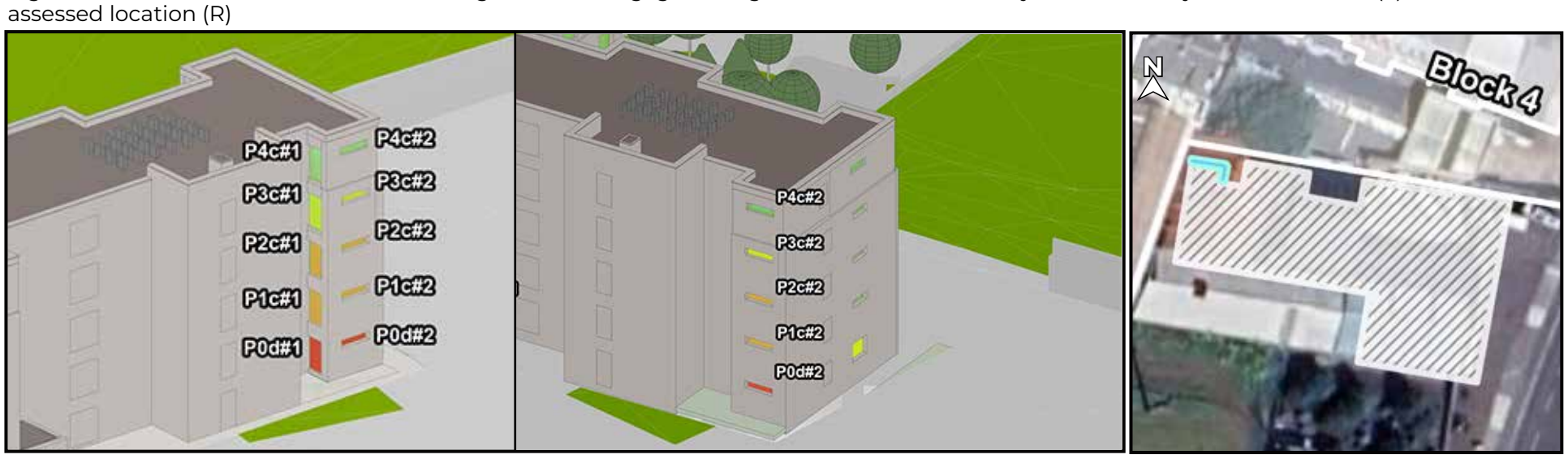

Figure 5.4: Part 8 Scheme VSC - rooms categorised as: ‘negligible’ In green, ‘minor adverse’ In yellow and ‘major adverse’ in red(L), Aerial view of assessed location (R)

Figure 5.5: Part 8 Scheme VSC - rooms categorised as: ‘negligible’ In green, ‘minor adverse’ In yellow and ‘major adverse’ in red(L), Aerial view of assessed location (R)

The majority of the rooms tested are dual-aspect and are served by multiple windows. Usually, in such situations, VSC values can be averaged. If one window in a room would be highly impacted, the overall impact could potentially be mitigated by another window with a higher VSC value which serve the same room. However, due to the close proximity to the proposed buildings (Blocks 3 & 4) and the Part 8 building’s own design specifics, VSC impacts would be difficult to avoid. For example, some windows experience relatively low VSC values in the baseline model state because their view is obstructed by the opposite wall (e.g., Windows P0d#1) or relatively big balconies above (e.g., Window P1a#1). In this situation, even a small obstruction caused by the proposed building would result in a notable impact.

It is also of important note, that the Part 8 scheme has been designed, and will be built, nearly directly along the shared boundary. However, the applicant of this subject site has stepped their scheme back from it (Block 4). Under the BRE Guidelines, there is a justification with regard to impact by a proposed development on a neighbouring property which is built along a boundary. A ‘Hypothetical Mirror Image’ study (HMI) can be carried out to demonstrate that the impact may be worse should a proposed development on the subject site be also designed and built up against the boundary. In this instance there was no requirement to carry out this study, as it is very evident that the HMI would lead to a high level of impact on the Part 8 scheme.

Note: The baseline state assumes no building exists in the area of the proposed development. This reflects the current site condition and results in higher VSC values in the baseline model state.

The results of the study on VSC can be found in section A.1 on page 36.

5.1.2 Effect on No Sky Line (NSL)

Several windows/rooms within the Part 8 apartment yielded non-compliant Vertical Sky Component (VSC) results. Following the sourcing of interior layouts for these affected areas, a No Sky Line (NSL) impact assessment was conducted for the same windows/rooms.

The effect on NSL has been assessed for 36 no. rooms of Part 8 apartment.

Using the rationale explained in section 3.2 on page 12, the effect to NSL on 33 no. of these rooms would be considered *'negligible'*, 1 no. '*minor adverse'*, 1 no. '*moderate adverse'* and 1 no. '*major adverse'*.

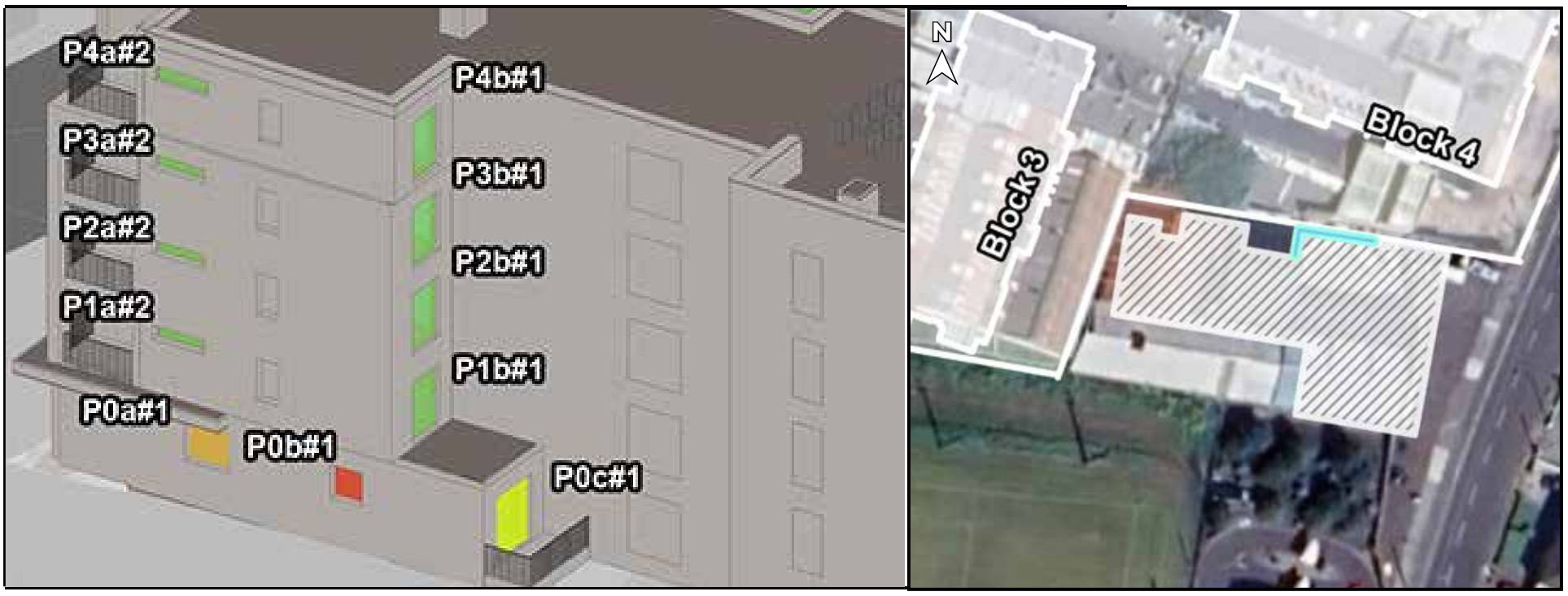

Figure 5.6: Part 8 Apartment building NSL rooms- categorised as 'negligible' In green, 'minor adverse' In yellow and 'major adverse' in red. (L), Aerial view of assessed location (R)

3D Design Bureau asserts that the No Sky Line (NSL) assessment is more informative than a Vertical Sky Component (VSC) assessment. This is because a VSC assessment considers only the light reaching a single point on a window, whereas an NSL assessment evaluates daylight distribution throughout the room. If a window or room fails to meet the BRE recommendation for VSC impact but meets the criteria for NSL impact, it indicates that while light intensity is reduced, its distribution will not be adversely affected.

Under this NSL assessment, only three rooms (P0a#1, P0b#1, P0c#1) have presented with an adverse level of effect with all others presenting as *'negligible'*. These rooms are related to one single aspect unit type located close to the site boundary, as shown in the Fig. 5.6 above.

Considering the specific characteristics of this particular unit, it is the opinion of 3DDB that achieving a lower level of impact would be challenging. The rest of the rooms affected in the VSC assessment show a '*negligible'* level of impact in the NSL analysis, which is a very positive outcome.

5.1.3 Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH)

The effect on APSH/WPSH has been assessed for 9 no. windows/rooms of the surrounding existing properties 4 Pearse Road and Lyman. Only windows that have an orientation within 90 degrees of due south have been included in this assessment.

No APSH/WPSH assessment has been carried out on the windows of Part 8 apartment as well as Loretto and Bermartin on the basis that the windows of these properties that face the proposed development are not orientated within 90° of due south.

Using the rationale explained in section 3.2 on page 12, the effect on the APSH of 7 no. of these windows or rooms would be considered *'negligible'*, 2 no. would experience *'beneficial impact'*.

All of the assessed windows are expected to experience a *'negligible'* level of impact in the (WPSH) study.

Compared to the VSC analysis, the APSH/WPSH results are more favourable, particularly for the 4 Pearse Road property, where all windows and rooms are assessed as having a *'negligible'* impact. This is largely because the APSH/WPSH studies focus solely on direct sunlight, which is effectively maintained through the open, unobstructed area to the south.

At the Lyman property, most windows and rooms also experience a *'negligible'* level of impact, with a beneficial impact recorded for two windows/rooms. This improvement is attributed to the replacement of a dense belt of evergreen trees at the edge of the proposed development with less dense, deciduous trees, allowing for improved access to direct sunlight.

The results of the study on APSH/WPSH can be found in Section A.2 on page 45.

5.1.4 Effect on Sun On Ground in Existing Gardens

This study has assessed the effect the proposed development would have on the level of sunlight on March 21st in the rear gardens of the neighbouring properties 4 Pearse Road. and Lyman. In total 2 no. spaces have been assessed. Using the rationale explained in section 3.2 on page 12, 1 no. of which would experience a *'negligible'* level of effect, with a further 1 no. recording a *'beneficial impact'*. The assessed areas have been indicated in Figure 5.7 below.

The results of the Sun On Ground study (SOG) on the neighbouring gardens can be found In section A.4 on page 53.

A visual representation of these readings can be seen in the 2 hour false colour plans in section A.4 and in the hourly shadow diagrams for March 21st in section B.1 on page 55.

The results of the Sun on Ground (SOG) analysis are positive. The private garden at 4 Pearse Road is divided into two sections by an internal fence. While these areas were assessed as a single space, both parts would experience a similar *'negligible'* level of impact as when measured separately.

The Lyman property experiences a *'beneficial'* level of impact, primarily due to the replacement of a dense belt of evergreen trees along the edge of the proposed development with less dense, deciduous trees.

The results of the Sun On Ground study (SOG) on the neighbouring gardens can be found in Section A.4 on page 53

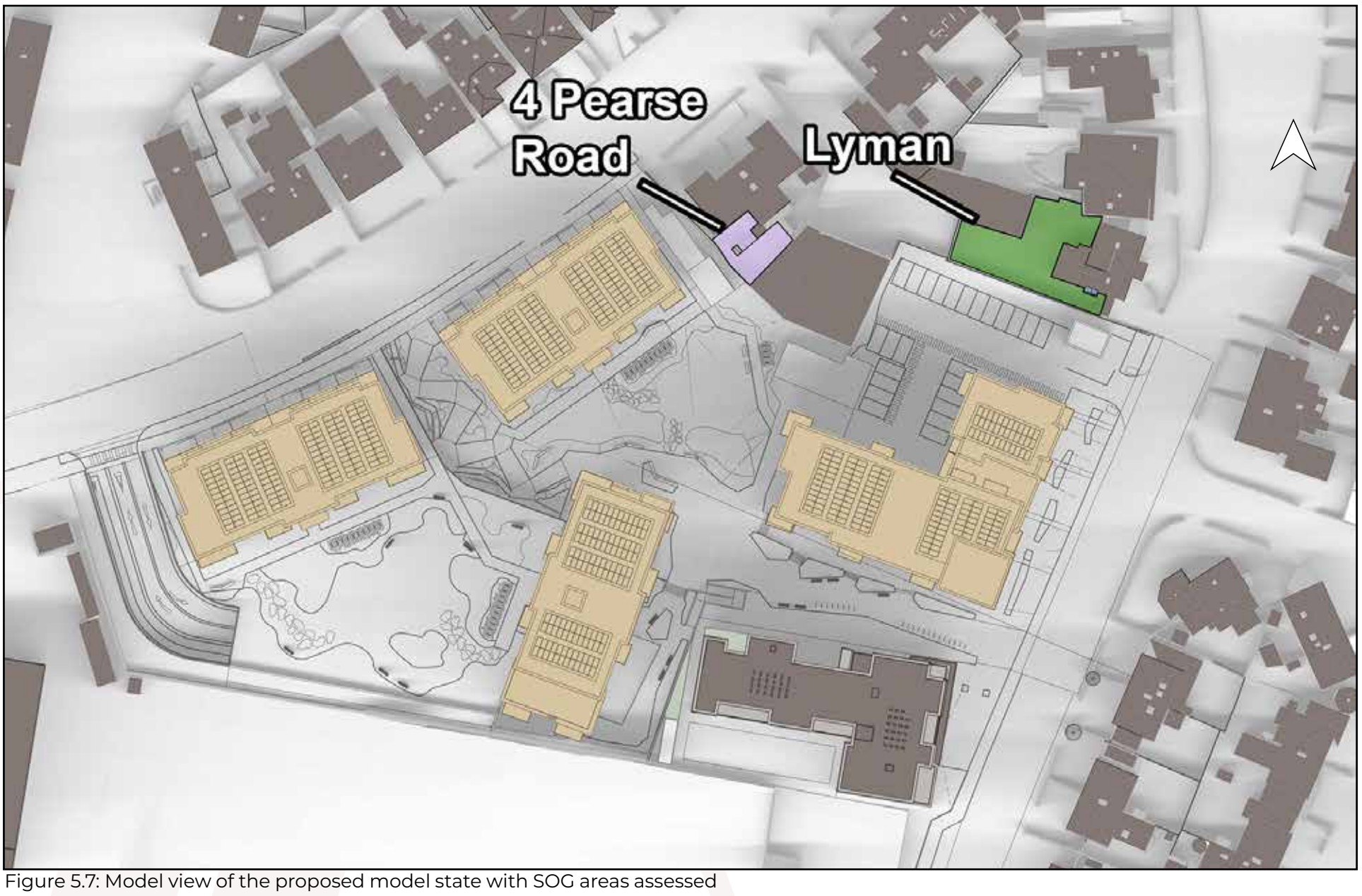

Figure 5.7: Model view of the proposed model state with SOG areas assessed

5.2 Analysis of Scheme Performance Results

5.2.1 Spatial Daylight Autonomy (SDA)

This study has assessed the Spatial Daylight Autonomy (SDA) received in all habitable rooms within the residential portion of the proposed development both with and without trees. This has ensured that a clear understanding has been obtained regarding the daylight performance of the proposed development.

This proposed development consists of 170 no. units, which makes up approximately 494 no. habitable rooms.

Under the criteria as set out in the BR 209 considering trees, the SDA value in 492 no. habitable rooms meets or exceeds the appropriate target values. This gives a circa compliance rate of above 99%. The additional SDA assessment, which excludes trees, has presented the same compliance rate confirming that none of the assessed rooms are adversely affected by tree coverage. For a development of this scale, this represents an excellent level of compliance, particularly given the minimal impact that the proposed trees have on daylight performance.

This positive outcome was achieved through effective design collaboration, during which the specific trees affecting compliance were identified and recommended for relocation/removal. The adjustments involved only a small number of trees located directly in front of windows, resulting in minimal changes to the proposed landscape plan. This is a significant consideration, as the inclusion of trees is an integral component of the development supporting environmental and planning objectives, as well as enhancing biodiversity.

I.S. EN 17037 sets out more onerous recommendations for SDA. As such, the number of habitable rooms achieving compliance under this standard is 434 in the assessment that includes trees. This gives a reduced circa compliance rate of c. 88%. The additional SDA assessment, under this standard, that does not include trees has shown a compliance rate of c. 90%.

In cases where rooms comply with the criteria of BR 209 but do not meet the criteria of I.S. EN 17037, it is the recommendation of 3D Design Bureau that these rooms will appear adequately daylit. This recommendation is based on the fact that BR 209 provides room-specific criteria, unlike I.S. EN 17037. BR 209 considers the varying daylight requirements for different room types, which I.S. EN 17037 does not account for.

With regards to internal daylighting, Section 6.7 of the Sustainable Urban Housing: Design Standards for New Apartments July 2023, states the following:

"Where an applicant cannot fully meet all of the requirements of the daylight provisions above, this must be clearly identified and a rationale for any alternative, compensatory design solutions must be set out, which planning authorities should apply their discretion in accepting taking account of its assessment of specific. This may arise due to a design constraints [sic] associated with the site or location and the balancing of that assessment against the desirability of achieving wider planning objectives. Such objectives might include securing comprehensive urban regeneration and or an effective urban design and streetscape solution."

Based on the above statements, compensatory design solutions have been provided by the project architect where rooms do not achieve the daylight provision targets as set out in the BRE Guidelines.

The two units that do not achieve the recommended level of daylight: LKD 4.04 and LKD 4.15 are located in block 4 on Level 01 and 02 correspondingly.

The location of these rooms within the block 4 is indicated in the Figure 5.8 below.

The project architect provided the following Compensatory Design Measures (CDMs) for Units 4.04 & 4.15:

- Enhanced Unit Area: Overall unit floor area is 11.8% larger than the minimum standard requirement.
- Quality of Outlook: Units possess views overlooking an active and pleasant pedestrian route, offering enhanced visual amenity and connection to the surrounding area.

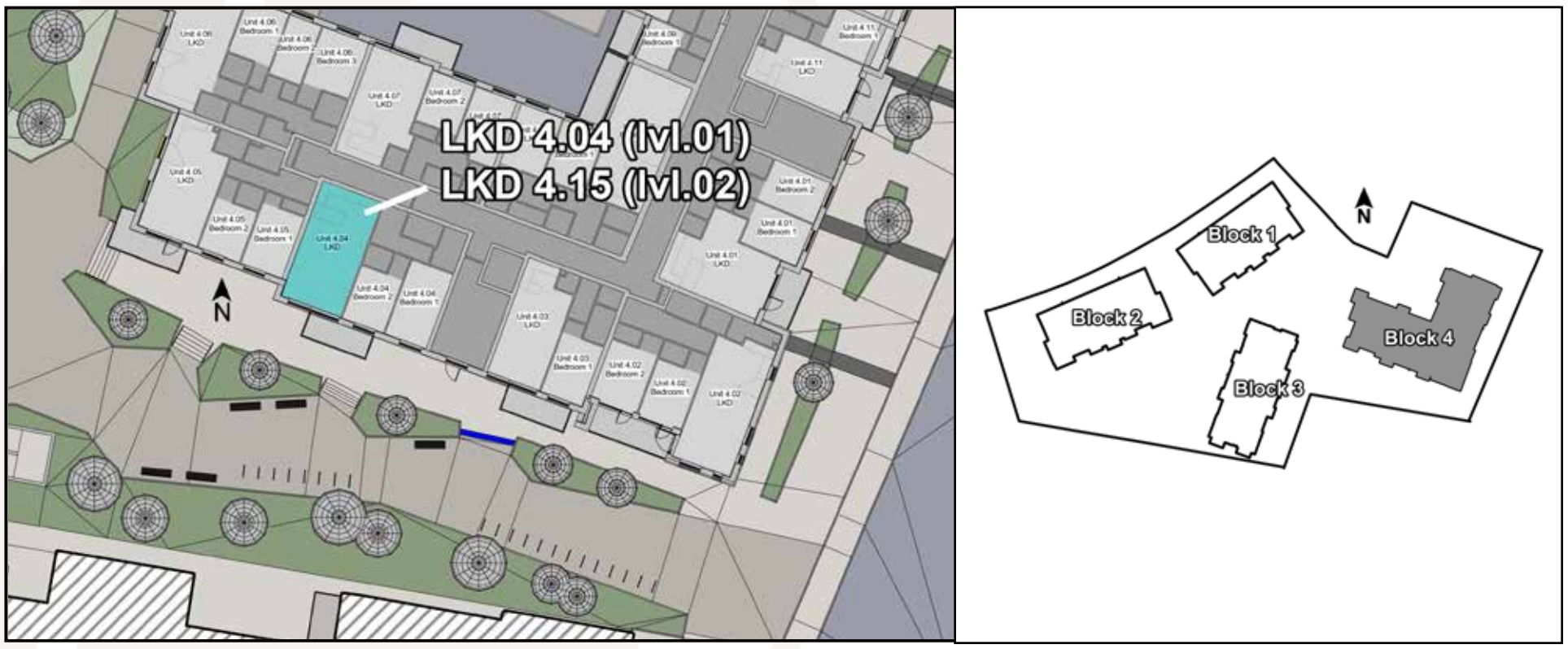

Figure 5.8: Location of the non compliant rooms of block 4.

The overall high SDA compliance has been achieved through careful design collaboration, which led to the optimisation of specific units to achieve higher SDA values. Actions taken included widening and repositioning windows, removing façade elements that obstructed daylight and sunlight, such as external balcony framing, and implementing substantial internal layout changes.

Examples of these layout modifications are shown in the images below.

Figure 5.9 illustrates a design change where the kitchen was swapped with the staircase and toilet, ensuring that more daylight reaches the areas where it is most needed.

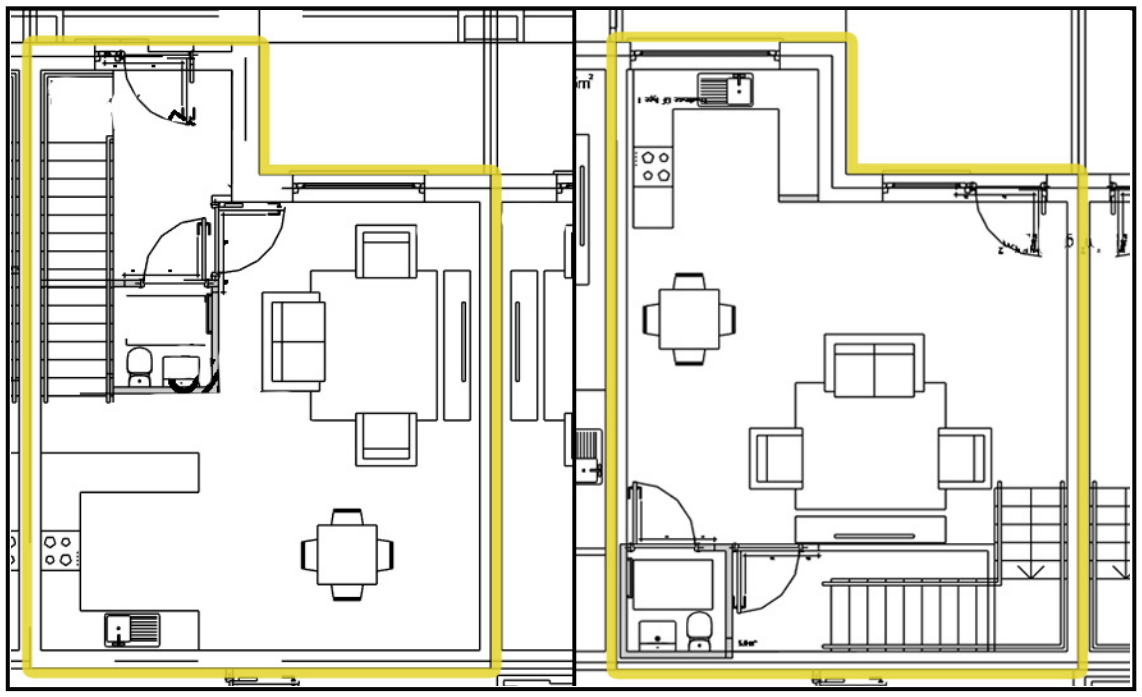

Figure 5.9: Example of design change: Block 1 Unit 1.03 before design changes(L) and after design changes (R)

Figure 5.10 shows another example where the living/kitchen/dining (LKD) area requiring greater daylight was swapped with the bedroom to a location less obstructed by external elements. Combined with balcony modifications, this change allowed the LKD to achieve the required daylight levels.

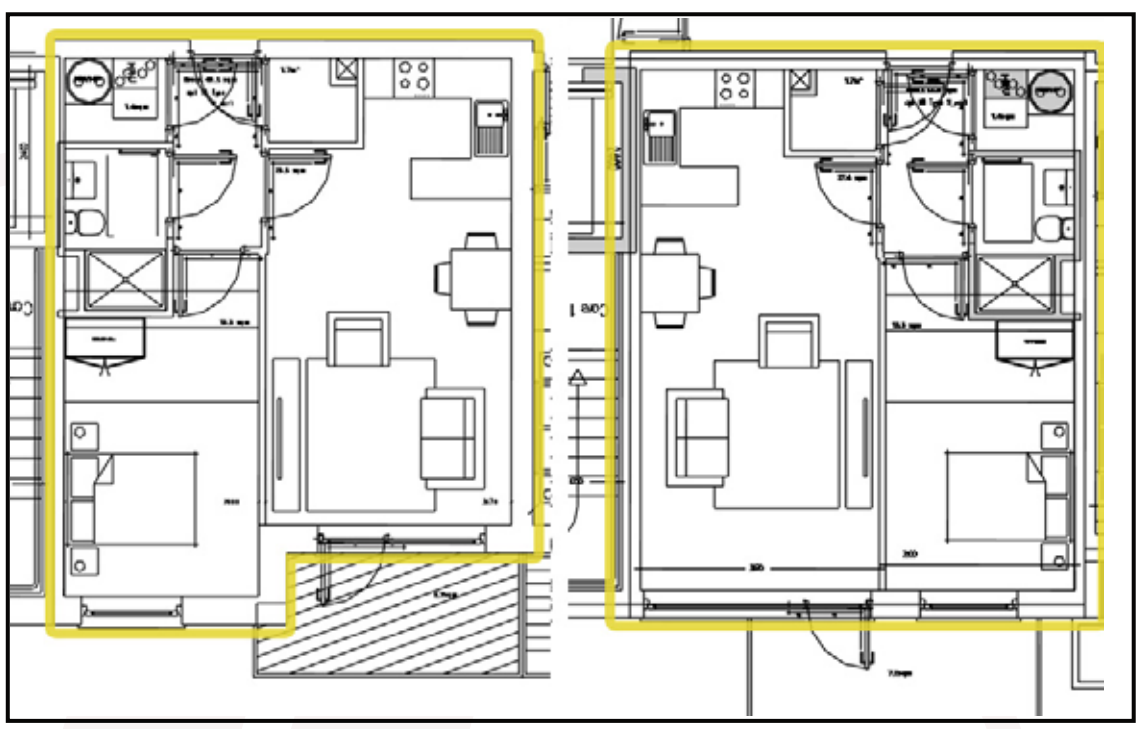

Figure 5.10: Example of design change: Block 4 Unit 4.14 before design changes(L) and after design changes (R)

The results for the study on SDA can be seen in section C.2 on page 78.

5.2.2 Sunlight Exposure (SE)

A sunlight exposure assessment has been carried out on all habitable rooms within the residential portion of the proposed development. For these assessments, trees have been included in the analytical model as opaque objects. The assessments have been carried out in two states:

- All trees (evergreen and deciduous) included in assessment model.
- Only evergreen trees included in the assessment model.

This approach is in accordance with the BRE Guidelines.

In total, 170 no. units have been assessed. Using the rationale explained in section 3.3 on page 13, the level of sunlight exposure for the assessed units is as follows:

• With all trees: 93 no. units are considered high, 19 no. medium, 24 no. have reached the minimum recommendation, and 34 no. below minimum.

• Without deciduous trees: 94 no. units are considered high, 18 no. medium, 24 no. have reached the minimum recommendation and 34 no. below minimum.

The SE assessment has shown that, regardless of the effect of trees, 80% of the assessed units meet the Sunlight Exposure

Note: For a unit to be compliant under BR 209, only one habitable room within the unit needs to meet the guideline values.

Whilst the criterion applies to rooms of all orientations, it should be noted that if a room faces significantly north of due east or west it is unlikely to be met. As such, it is not always possible to achieve full compliance, especially in developments that contain single aspect units.

In the opinion of 3DDB, achieving a compliance rate above 80% can be considered favourable. For the proposed development, most of the units falling below the recommended minimum are single-aspect, north-facing units, with a small number of dual-aspect units included. Through collaboration with the project architects design solutions have been implemented to ensure adequate sunlight access where possible. The tallest proposed building (Block 3) is particularly noteworthy, as it has no apartments below the recommended minimum, which is a very positive outcome in terms of compliance.

No recommendation is made regarding the performance of a development as a whole for SE performance within the BRE Guidelines. However, it is the opinion of 3DDB that the proposed development performs favourably in this regard.

The results for the study on SE in the habitable rooms of the proposed units can be seen in section C.3 on page 98.

5.2.3 Sun On Ground in Proposed Outdoor Amenity Areas

This study has assessed the level of sunlight on March 21st within the proposed amenity areas.

In total 2 no. spaces, as identified by the project architect, have been assessed,

The crèche playground has been assessed and meets the criteria set out in the BRE Guidelines; however, it is not included in the overall compliance rate.

The assessed external spaces include: (1) Communal Amenity Space, (2) Public Open Space (including the plaza), and (3) the Crèche Playground, as shown in Figure 5.11 below.

The layout of these amenity areas allows for excellent sunlight access, with only minimal overshadowing. Despite being located beneath a building overhang, the crèche playground still receives the recommended levels of sunlight.

The results for the study on sunlighting in the proposed outdoor amenity spaces can be found in section C.4 on page 118.

A visual representation of these readings can be seen in the false colour plan in section C.4 and in the hourly shadow diagrams for March 21st in section B.1 on page 55 of the appendix section of this report.

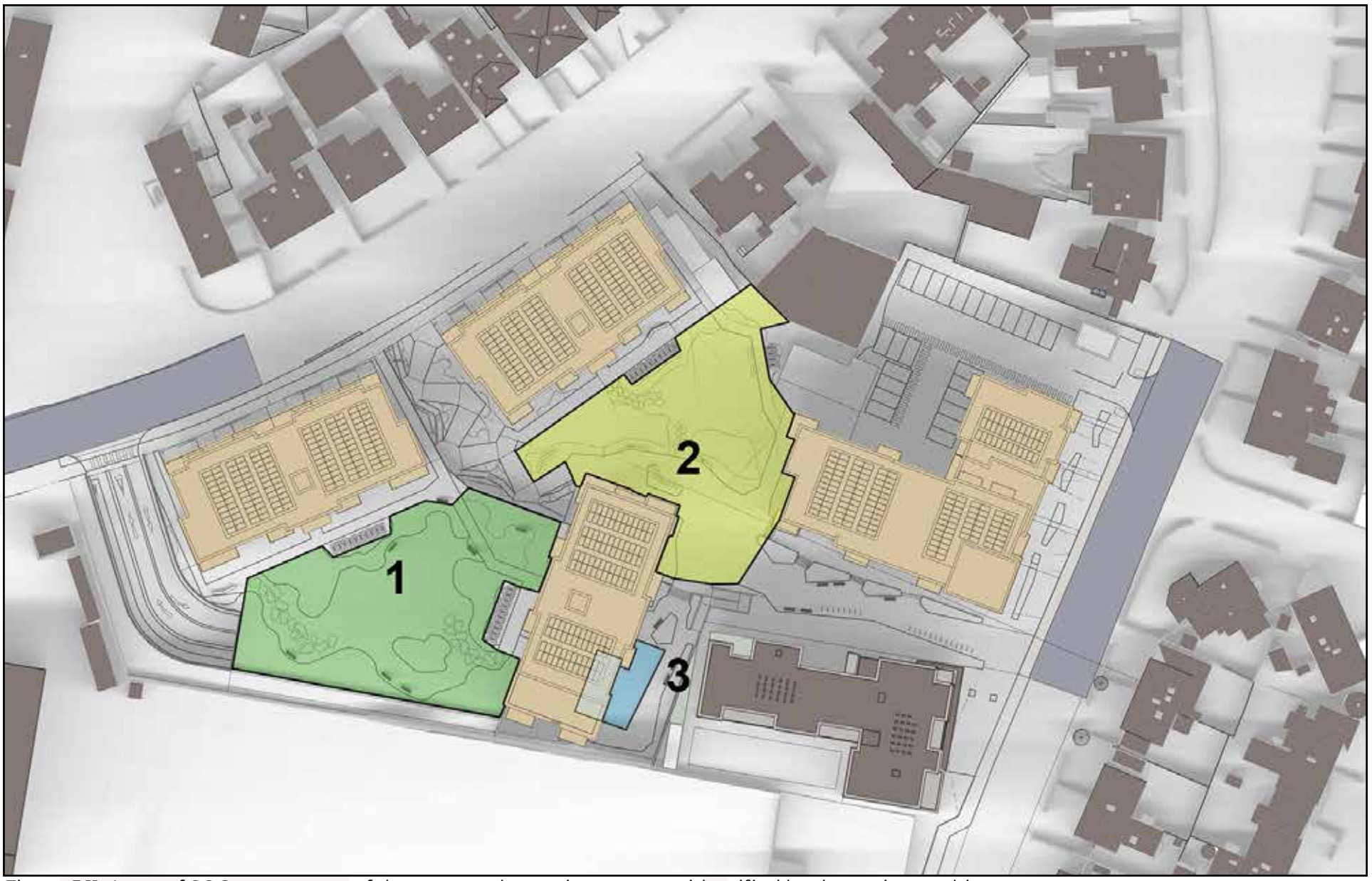

Figure 5.11: Areas of SOG assessment of the proposed amenity spaces as identified by the project architects.

6.0 Conclusion

3D Design Bureau (3DDB) were commissioned to carry out a daylight assessment, sunlight assessment and shadow study for Kinsale Road LRD in Cork.

The impact assessment for this report has quantified the effect the proposed development would have on the level of daylight and sunlight received by neighbouring properties/environment that fall under the criteria outlined in section “4.1 Impact Assessment, Window Selection Criteria” on page 14.

These include 4 Pearse Road (1), Lyman (2), Bermartin (3) Loretto (4) and Part 8 apartment building as indicated in Figure 6.1 below.

Figure 6.1: Scope of surrounding properties and environment assessed.

The Vertical Sky Component (VSC) analysis indicates adverse impacts on two properties: the granted Part 8 scheme and a house at 4 Pearse Road. A total of three adversely affected windows/rooms have been identified in the house at 4 Pearse Road, with two of the windows located on the gable wall that directly faces the proposed development. Most of the affected windows and rooms are associated with the granted Part 8 apartment. The severity of the impact, on this Part 8 scheme, ranges from *‘minor’* to *‘major’* (12 no. windows/rooms), depending on the specific façade and floor level. Notably, this building has inherent constraints such as large balconies or windows facing directly onto opposing walls within its own design, which increase its sensitivity to potential impacts from neighbouring developments.

Furthermore supplementary information on the internal layouts of the Part 8 scheme enabled an additional No Sky Line (NSL) assessment. The NSL results are very positive, with only three rooms shown to be adversely affected. All of these rooms are located on the ground floor and are part of single-aspect apartments facing directly toward the proposed development. However, and it is to be noted, that the Part 8 scheme is built right along the boundary of the two sites and it is evident that it would be impacted to a greater degree under a ‘Mirror Image’ study. Therefore the setback of Block 4 of the proposed scheme should be taken as a positive.

Regarding impact to sunlight levels, the Annual and Winter Probable Sunlight Hours (APSH/WPSH) studies show overwhelmingly positive results. No windows were found to be adversely affected in either study. In fact, two rooms/windows, of existing surrounding properties, demonstrated a beneficial impact in the APSH results.

The impact Sun on Ground (SOG) study also yielded positive outcomes. One of the two assessed areas experienced a negligible impact, while the other showed a beneficial impact due to the removal of existing evergreen trees.

Within the proposed development, the scheme’s daylight and sunlight performance was comprehensively assessed. The results demonstrate favourable compliance across all metrics. In the Spatial Daylight Autonomy (SDA) assessment, only two rooms fall below the recommended minimum threshold. This high level of compliance is the result of effective design collaboration and thoughtful architectural solutions, many of which improved conditions in rooms that initially did not meet standards. For those remaining below the recommended SDA, the project architect has provided compensatory design solutions. Additionally, no rooms were found to be affected by tree cover.

In terms of Sunlight Exposure (SE), the development achieves an 80% compliance rate across for both tree states. In the opinion of 3DDB, this represents a favourable outcome.

Finally, the SOG study confirms that all assessed external areas, as identified by the project architect, including the Communal Amenity Space, Public Open Space, and Crèche Playground receive sunlight levels that meet or exceed compliance standards

It can be concluded that the scheme is performing favourably from a daylight and sunlight perspective.

Appendix - Results

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Appendix Contents

Assessment criteria and detailed analysis of results can be found in the accompanying report.

A.0 Impact Assessment Results

A.1 Effect on Vertical Sky Component (VSC)

Below is an example of the table used to describe the effect on VSC.

Table Example. A.1 - VSC Impact Assessment						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended Minimum VSC	Level of Compliance with BRE Guidelines	Effect of Proposed Development
A	**B**	**C**	**D**	**E**	**F**	**G**

A: Window Number

The number in this column will identify the assessed window. All windows are represented visually in the corresponding figure.

B: Baseline VSC Value

The *Baseline VSC Value* represents the VSC value of the assessed window which is calculated in the existing baseline model state (as explained in the "Building the Model States" on page 16).

C: Proposed VSC Value

The *Proposed VSC Value* represents the VSC value of the assessed window which is calculated in the proposed model state (as explained in the "Building the Model States" on page 16).

D: Ratio of Proposed VSC to Baseline VSC

This column expresses the ratio of change between the baseline VSC value and the proposed VSC value. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction in daylight is more likely to be perceptible.

E: Recommended minimum VSC

The *BRE Target Value* for each window has been set according to the BRE Guidelines. The Guidelines state that a proposed development could possibly have a noticeable effect on the daylight received by an existing window, if the VSC value **both** drops below the guideline value of 27% **and** the VSC value is less than 0.8 times the baseline value.

Therefore, to determine the *recommended minimum Value*, 80% of the *Baseline VSC value* has been calculated. If this value is above the 27% threshold, a target value of 27% will be applied. If 80% of the baseline value is below 27%, then 80% of the baseline value is the appropriate target value.

F: Level of Compliance with the BRE Guidelines

This column states the compliance of the *Proposed VSC Value* with the *recommended minimum VSC* as per the BRE Guidelines. In essence, it shows whether or not the assessed window would experience a perceptible level of impact. If the window complies with the BRE Guidelines this cell will state "*BRE Compliant"*. If the window does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

G: Effect of Proposed Development

The levels of effect in this column describe the effect an assessed window will experience, based on its compliance with the *BRE Target Value*. A full list of definitions and a numerical rationale for each can be found in the section *"Definition of Effects"* on page 12.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

A.1.1 4 Pearse Road - Vertical Sky Component (VSC)

Table No. A.1.1 - VSC Results: 4 Pearse Road						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
Ca	30.04%	17.09%	0.57	24.03%	71%	Moderate Adverse
Cb#1	20.62%	16.02%	0.78	16.50%	97%	-
Cb#2	19.29%	14.94%	0.77	15.43%	97%	-
Cb#	19.94%	15.47%	0.78	15.95%	97%	Minor Adverse
Cc	38.08%	21.09%	0.55	27.00%	78%	Moderate Adverse

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.

If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

Figure A.1: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.1.2 Bermartin and Loretto - Vertical Sky Component (VSC)

Table No. A.1.2 - VSC Results: Bermartin (Ba) and Loretto (Lo)

Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
Ba#1	24.15%	24.18%	1.00	19.32%	BRE Compliant	-
Ba#2	36.67%	29.20%	0.80	27.00%	BRE Compliant	-
Ba#3	35.10%	25.28%	0.72	27.00%	94%	-
Ba#4	32.32%	27.30%	0.84	25.86%	BRE Compliant	-
Ba#5	32.09%	27.54%	0.86	25.67%	BRE Compliant	-
Ba#6	30.25%	25.98%	0.86	24.20%	BRE Compliant	-
Ba#	32.48%	26.74%	0.82	25.98%	BRE Compliant	Negligible
LOa	34.56%	26.95%	0.78	27.00%	>99%	Negligible
LOb	35.70%	28.20%	0.79	27.00%	BRE Compliant	Negligible
LOc	35.40%	28.39%	0.80	27.00%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.

If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

Figure A.2: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.1.3 Lyman - Vertical Sky Component (VSC)

Table No. A.1.3 - VSC Results: Lyman						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
LYa	24.35%	29.48%	1.21	19.48%	BRE Compliant	Beneficial Impact
LYb#1	15.84%	18.60%	1.17	12.67%	BRE Compliant	-
LYb#2	23.13%	29.35%	1.27	18.50%	BRE Compliant	-
LYb#3	10.79%	12.12%	1.12	8.63%	BRE Compliant	-
Lyb#4	80.82%	81.91%	1.01	27.00%	BRE Compliant	-
Lyb#5	77.49%	80.25%	1.04	27.00%	BRE Compliant	-
LYb#	36.36%	40.60%	1.12	27.00%	BRE Compliant	Negligible
LYc	28.80%	29.69%	1.03	23.04%	BRE Compliant	Negligible
LYd	27.29%	29.06%	1.06	21.83%	BRE Compliant	Negligible
LYe	27.78%	29.40%	1.06	22.22%	BRE Compliant	Negligible
LYf	29.97%	30.21%	1.01	23.98%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.

If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

Figure A.3: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.1.4 Part 8 Scheme - Vertical Sky Component (VSC)

Table No. A.1.5 - VSC Results: Part 8 Scheme (North-East Corner)

Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
P0a#1	22.71%	3.18%	0.14	18.17%	18%	-
P0a#	22.71%	3.18%	0.14	18.17%	18%	Major Adverse
P0b#1	28.58%	6.62%	1.00	22.86%	29%	-
P0b#	28.58%	6.62%	1.00	22.86%	29%	Major Adverse
P0c#1	16.08%	9.47%	0.59	12.86%	74%	-
P0c#	16.08%	9.47%	0.59	12.86%	74%	Moderate Adverse
P1a#1	7.54%	5.41%	0.72	6.03%	90%	-
P1a#2	18.51%	2.11%	0.11	14.81%	14%	-
P1a#3	33.89%	33.89%	1.00	27.00%	BRE Compliant	-
P1a#	17.61%	13.84%	0.79	14.09%	98%	Minor Adverse
P1b#1	17.94%	11.92%	0.66	14.35%	83%	-
P1b#	17.94%	11.92%	0.66	14.35%	83%	Minor Adverse
P2a#1	8.02%	5.85%	0.73	6.42%	91%	-
P2a#2	19.11%	2.91%	0.15	15.29%	19%	-
P2a#3	34.91%	34.91%	1.00	27.00%	BRE Compliant	-
P2a#	18.28%	14.52%	0.79	14.62%	99%	Minor Adverse
P2b#1	18.97%	14.00%	0.74	15.18%	92%	-
P2b#	18.97%	14.00%	0.74	15.18%	92%	Minor Adverse
P3a#1	6.80%	5.01%	0.74	5.44%	92%	-
P3a#2	19.34%	5.58%	0.29	15.47%	36%	-
P3a#3	35.05%	35.05%	1.00	27.00%	BRE Compliant	-
P3a#	17.72%	14.56%	0.82	14.18%	BRE Compliant	Negligible
P3b#1	21.50%	17.53%	0.82	17.20%	BRE Compliant	-
P3b#	21.50%	17.53%	0.82	17.20%	BRE Compliant	Negligible
P4a#1	27.22%	25.84%	0.95	21.78%	BRE Compliant	-
P4a#2	30.40%	21.40%	0.70	24.32%	88%	-
P4a#3	36.14%	35.98%	1.00	27.00%	BRE Compliant	-
P4a#	30.54%	28.31%	0.93	24.43%	BRE Compliant	Negligible
P4b#1	27.55%	23.76%	0.86	22.04%	BRE Compliant	-
P4b#	27.55%	23.76%	0.86	22.04%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.

If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

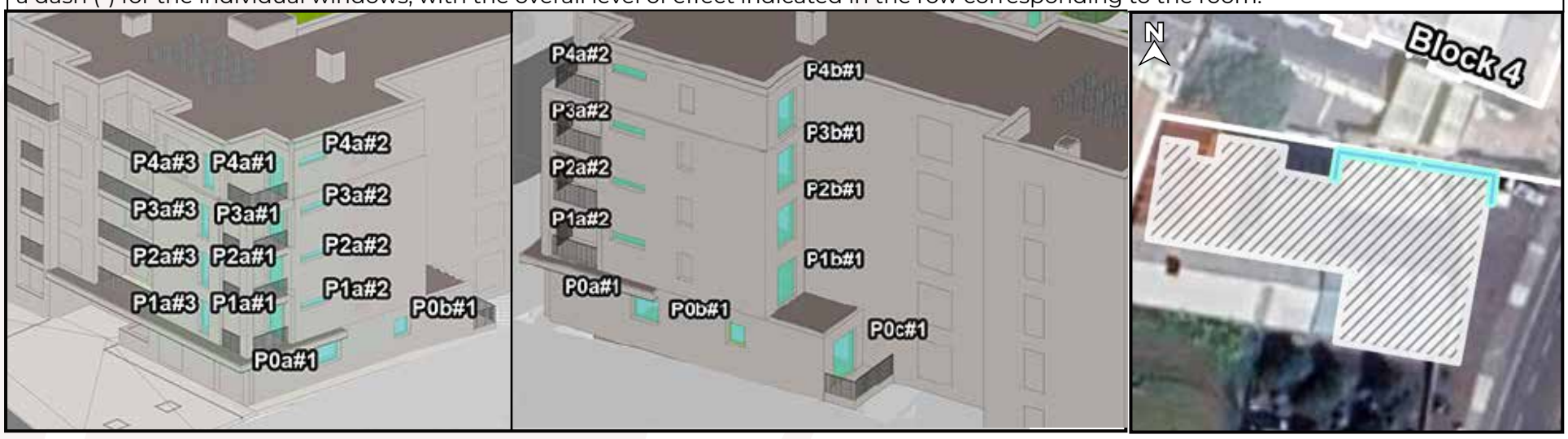


Figure A.4: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.1.6 Part 8 Scheme - Vertical Sky Component (VSC)

A.1.7

Table No. A.1.7 - VSC Results: Part 8 Scheme (North- West Corner)

Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
P1c#1	6.95%	3.78%	0.54	5.56%	68%	-
P1c#2	18.69%	7.80%	0.42	14.95%	52%	-
P1c#	10.18%	4.89%	0.48	8.15%	60%	Moderate Adverse
P2c#1	7.34%	4.75%	0.65	5.87%	81%	-
P2c#2	19.32%	9.59%	0.50	15.46%	62%	-
P2c#	10.64%	6.08%	0.57	8.51%	71%	Moderate Adverse
P3c#1	8.30%	6.50%	0.78	6.64%	98%	-
P3c#2	19.61%	11.45%	0.58	15.69%	73%	-
P3c#	11.41%	7.86%	0.69	9.13%	86%	Minor Adverse
P4c#1	14.88%	13.80%	0.93	11.90%	BRE Compliant	-
P4c#2	29.97%	21.95%	0.73	23.98%	92%	-
P4c#	19.04%	16.04%	0.84	15.23%	BRE Compliant	Negligible
P0d#1	6.24%	2.68%	0.43	4.99%	54%	-
P0d#2	17.85%	6.43%	0.36	14.28%	45%	-
P0d#	9.44%	3.71%	0.39	7.55%	49%	Major Adverse

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.

If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

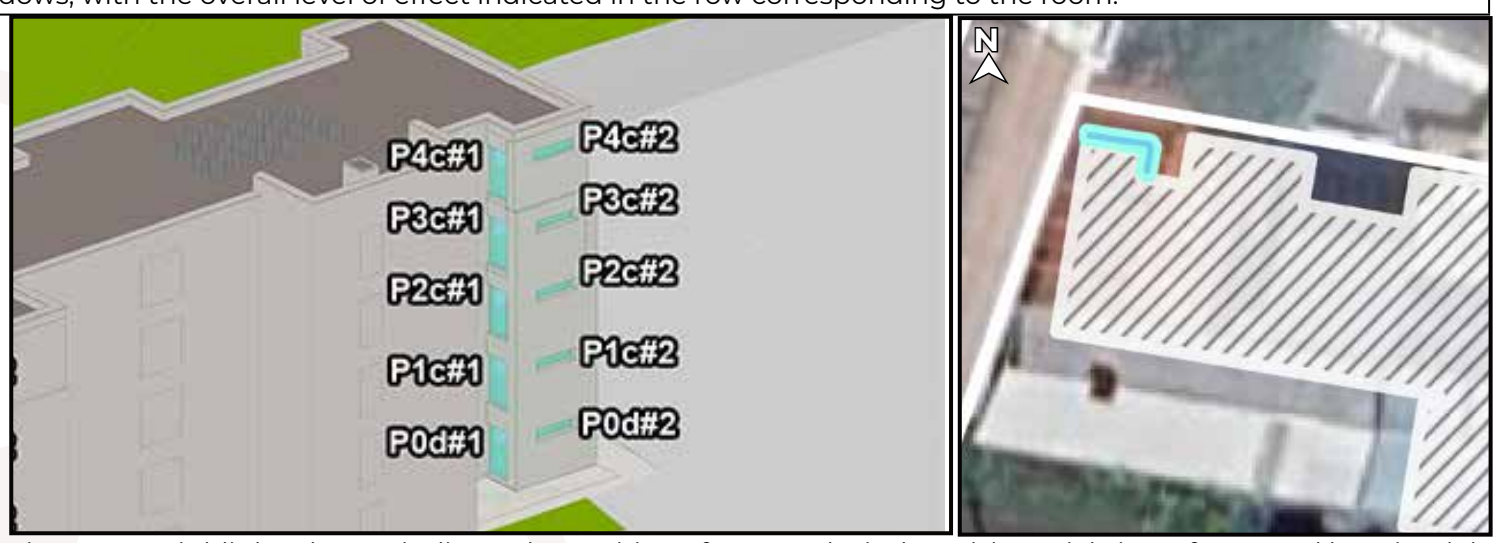


Figure A.5: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.1.8 Part 8 Scheme

Table No. A.1.8 - VSC Results: Part 8 Scheme (South- West Corner)						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
P0e#1	29.61%	5.47%	0.18	23.69%	23%	-
P0e#2	29.53%	29.25%	0.99	23.62%	BRE Compliant	-
P0e#3	4.93%	4.93%	1.00	3.94%	BRE Compliant	-
P0e#	21.22%	15.96%	0.75	16.98%	94%	Minor Adverse
P1d#1	18.08%	2.85%	0.16	14.46%	20%	-
P1d#2	34.61%	34.26%	0.99	27.00%	BRE Compliant	-
P1d#3	6.64%	6.64%	1.00	5.31%	BRE Compliant	-
P1d#	22.14%	20.47%	0.92	17.71%	BRE Compliant	Negligible
P2d#1	18.53%	2.93%	0.16	14.82%	20%	-
P2d#2	31.68%	31.42%	0.99	25.34%	BRE Compliant	-
P2d#3	5.37%	5.37%	1.00	4.30%	BRE Compliant	-
P2d#	20.19%	18.52%	0.92	16.15%	BRE Compliant	Negligible
P3d#1	18.90%	2.99%	0.16	15.12%	20%	-
P3d#2	31.92%	31.67%	0.99	25.54%	BRE Compliant	-
P3d#3	5.68%	5.68%	1.00	4.54%	BRE Compliant	-
P3d#	20.47%	18.78%	0.92	16.37%	BRE Compliant	Negligible
P4d#1	30.05%	10.80%	0.36	24.04%	45%	-
P4d#2	37.05%	36.51%	0.99	27.00%	BRE Compliant	-
P4d#3	23.58%	23.58%	1.00	18.86%	BRE Compliant	-
P4d#	31.14%	28.97%	0.93	24.91%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.

If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

Figure A.6: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.1.9 Part 8 Scheme

Table No. A.1.9 - VSC Results: Part 8 Scheme (South)						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
P0f#1	5.92%	5.70%	0.96	4.74%	BRE Compliant	-
P0f#2	30.72%	30.72%	1.00	24.58%	BRE Compliant	-
P0f#	20.03%	19.94%	1.00	16.03%	BRE Compliant	Negligible
P1f#1	7.81%	7.46%	0.96	6.25%	BRE Compliant	-
P1f#2	32.28%	32.28%	1.00	25.82%	BRE Compliant	-
P1f#	21.76%	21.61%	0.99	17.41%	BRE Compliant	Negligible
P2f#1	6.62%	6.34%	0.96	5.30%	BRE Compliant	-
P2f#2	33.31%	33.31%	1.00	26.65%	BRE Compliant	-
P2f#	21.83%	21.71%	0.99	17.47%	BRE Compliant	Negligible
P3f#1	6.78%	6.46%	0.95	5.42%	BRE Compliant	-
P3f#2	34.26%	34.26%	1.00	27.00%	BRE Compliant	-
P3f#	22.44%	22.31%	0.99	17.95%	BRE Compliant	Negligible
P4f#1	24.89%	22.78%	0.92	19.91%	BRE Compliant	-
P4f#2	37.63%	37.55%	1.00	27.00%	BRE Compliant	-
P4f#	32.15%	31.20%	0.97	25.72%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.

If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

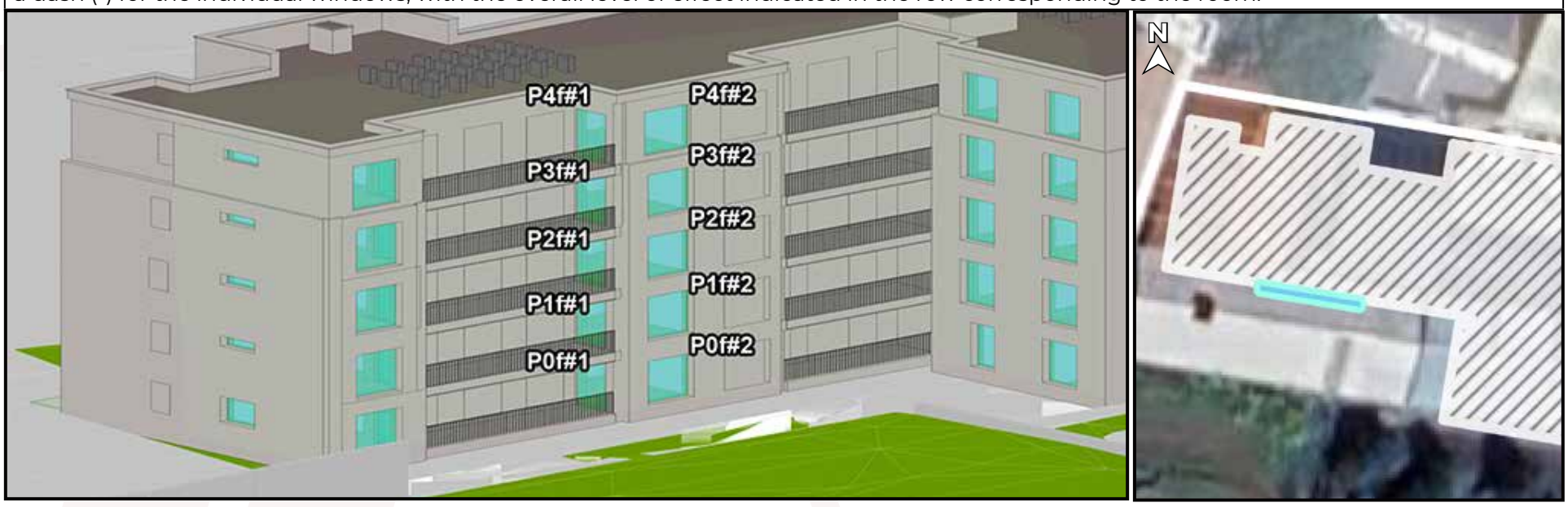


Figure A.7: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.1.10 Part 8 Scheme

Table No. A.1.10 - VSC Results: Part 8 Scheme (South)						
Window Number	Baseline VSC Value	Proposed VSC Value	Ratio of Proposed VSC to Baseline VSC	Recommended minimum VSC*	Level of Compliance with BRE Guidelines	Effect of Proposed Development**
P0g#1	17.89%	15.98%	0.89	14.31%	BRE Compliant	-
P0g#	17.89%	15.98%	0.89	14.31%	BRE Compliant	Negligible
P0h#1	21.78%	19.36%	0.89	17.42%	BRE Compliant	-
P0h#	21.78%	19.36%	0.89	17.42%	BRE Compliant	Negligible
P1g#1	21.75%	19.97%	0.92	17.40%	BRE Compliant	-
P1g#	21.75%	19.97%	0.92	17.40%	BRE Compliant	Negligible
P1h#1	26.31%	23.94%	0.91	21.05%	BRE Compliant	-
P1h#	26.31%	23.94%	0.91	21.05%	BRE Compliant	Negligible
P2g#1	20.98%	19.27%	0.92	16.78%	BRE Compliant	-
P2g#	20.98%	19.27%	0.92	16.78%	BRE Compliant	Negligible
P2h#1	25.28%	22.97%	0.91	20.22%	BRE Compliant	-
P2h#	25.28%	22.97%	0.91	20.22%	BRE Compliant	Negligible
P3g#1	24.13%	22.51%	0.93	19.30%	BRE Compliant	-
P3g#	24.13%	22.51%	0.93	19.30%	BRE Compliant	Negligible
P3h#1	27.88%	25.57%	0.92	22.30%	BRE Compliant	-
P3h#	27.88%	25.57%	0.92	22.30%	BRE Compliant	Negligible
P4g#1	34.15%	31.84%	0.93	27.00%	BRE Compliant	-
P4g#	34.15%	31.84%	0.93	27.00%	BRE Compliant	Negligible
P4h#1	35.74%	32.90%	0.92	27.00%	BRE Compliant	-
P4h#	35.74%	32.90%	0.92	27.00%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the VSC of an existing window, the value needs to both drop below the stated target value of 27% **and** be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to"3.2 Definition of Effects" on page 12.

If it can be determined or reasonably assumed that multiple windows serve the same room, each individual window is labelled with a hash-tag and a serial number (e.g. Xa#1, Xa#2). Each window is assessed, and a weighted average is calculated to determine the level of effect on the room. Rooms are identified with a hash-tag at the end (e.g. Xa#). In such cases, the 'effect of proposed development' column will display a dash (-) for the individual windows, with the overall level of effect indicated in the row corresponding to the room.

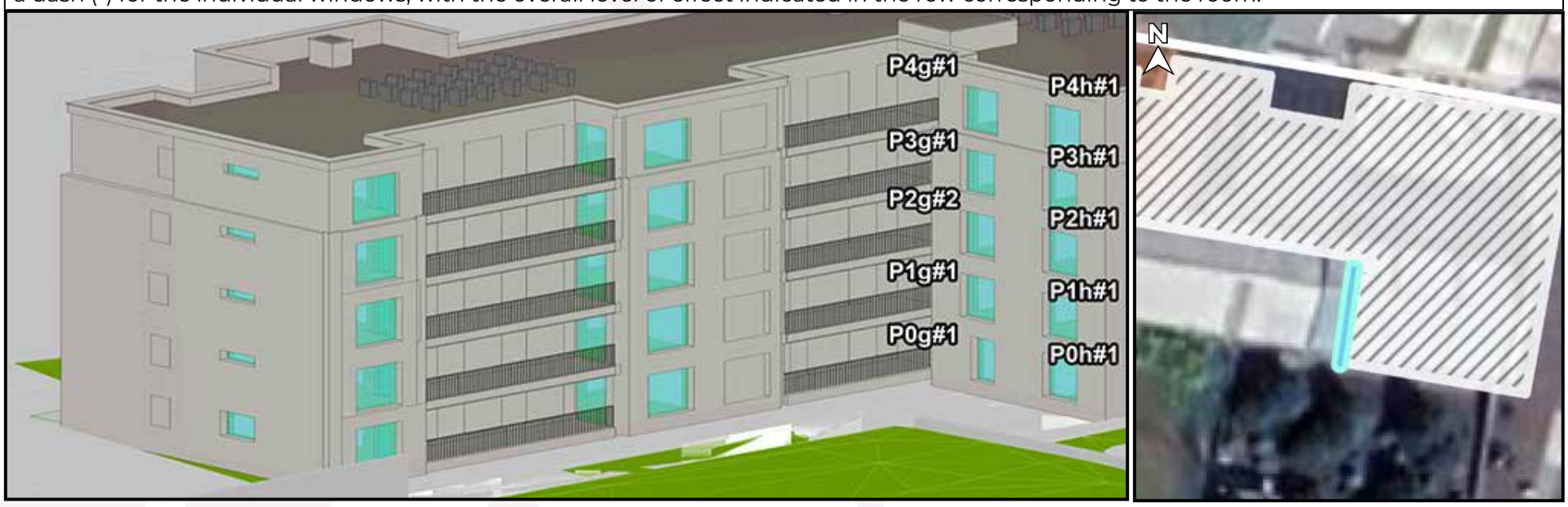


Figure A.8: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.2 Effect on Annual/Winter Probable Sunlight Hours (APSH/WPSH)

Below is an example of the table used to describe the effect to the APSH/WPSH of existing windows / rooms.

Table Example. A.2 - APSH/WPSH Impact Assessment						
Window / Room Number	Baseline APSH/WPSH	Proposed APSH/WPSH	Ratio of Proposed to Baseline APSH/ WPSH	Recommended Minimum APSH/WPSH	Level of Compliance with BRE Guidelines	Effect of Proposed Development
A	**B**	**C**	**D**	**E**	**F**	**G**

A: Window / Room Number

The number in this column will identify the assessed window / room. All windows / rooms are represented visually in the corresponding figure.

B: Baseline APSH/WPSH

The *Baseline APSH/WPSH Value* represents the percentage of the probable sunlight hours that the assessed window / room can receive, calculated in the existing baseline model state (as explained in the "Building the Model States" on page 16). The annual and winter assessments will be represented in separate tables.

C: Proposed APSH/WPSH

The *Proposed APSH/WPSH Value* represents the percentage of probable sunlight hours that the assessed window / room can receive, calculated in the proposed model state (as explained in the "Building the Model States" on page 16).

D: Ratio of Proposed to Baseline APSH/WPSH

This column expresses the ratio of change between the baseline APSH/WPSH value and the proposed APSH/WPSH value. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction to sunlight is more likely to be perceptible.

E: Recommended Minimum APSH/WPSH

The *BRE Target Value* for each window / room has been set according to the BRE Guidelines. The Guidelines state that a proposed development could possibly have a noticeable effect on the sunlight received by an existing window / room, if the APSH value drops below the annual (25%) or WPSH value below the winter (5%) guidelines; **and** the APSH/WPSH value is less than 0.8 times the baseline value; **and** there is a reduction of more than 4% to the APSH.

Therefore, to determine the *recommended minimum APSH Value* for the annual study, 80% of the *Baseline APSH value* has been calculated. If this value is above the 25% threshold, a target value of 25% will be applied. If 80% of the baseline value is below 25%, then 80% of the baseline value is the appropriate target value.

To determine the *recommended minimum WPSH Value* for the winter study, 80% of the *Baseline winter APSH value* has been calculated. If this value is above the 5% threshold, a target value of 5% will be applied. If 80% of the baseline value is below 5%, then 80% of the baseline value is the appropriate target value.

F: Level of Compliance with BRE Guidelines

This column states the compliance of the *Proposed APSH/WPSH Value* with the *recommended minimum APSH/WPSH* as per the BRE Guidelines. In essence, it shows whether or not the assessed window / room would experience a perceptible level of impact. If the window / room complies with the BRE Guidelines this cell will state "*BRE Compliant*". If the window / room does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

G: Effect of Proposed Development

The levels of effect in this column describe the effect an assessed window /room will experience, based on its compliance with the *BRE Target Value*. A full list of definitions and a numerical rationale for each can be found in the section *"Definition of Effects"* on page 12.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

A.2.1 4 Pearse Road - Annual Probable Sunlight Hours

Table No. A.2.1 - APSH Results: 4 Pearse Road

Window / Room Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
Ca	52.65%	29.72%	0.56	25.00%	BRE Compliant	Negligible
Cb#	47.35%	39.50%	0.83	25.00%	BRE Compliant	Negligible
Cc	60.94%	35.39%	0.58	25.00%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH/WPSH of an existing window / room, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

** For the interpretation of level of effects please refer to “3.2 Definition of Effects” on page 12.

If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH has been calculated for the room rather than the individual windows.

Figure A.9: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.2.2 Lyman - Annual Probable Sunlight Hours

Table No. A.2.2 - APSH Results: Lyman						
Window / Room Number	Baseline APSH	Proposed APSH	Ratio of Proposed APSH to Baseline APSH	Recommended minimum APSH*	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
LYa	50.25%	62.62%	1.25	25.00%	BRE Compliant	Beneficial Impact
LYb#	68.78%	82.73%	1.20	25.00%	BRE Compliant	Beneficial Impact
LYc	62.43%	65.24%	1.04	25.00%	BRE Compliant	Negligible
LYd	60.25%	62.95%	1.04	25.00%	BRE Compliant	Negligible
LYe	59.85%	63.63%	1.06	25.00%	BRE Compliant	Negligible
LYf	64.00%	65.67%	1.03	25.00%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH/WPSH of an existing window / room, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

** For the interpretation of level of effects please refer to “3.2 Definition of Effects” on page 12.

If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH has been calculated for the room rather than the individual windows.

Figure A.10: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.2.3 4 Pearse Road - Winter Probable Sunlight Hours

Table No. A.2.3 - WPSH Results: 4 Pearse Road						
Window / Room Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
Ca	16.55%	9.07%	0.55	5.00%	BRE Compliant	Negligible
Cb#	18.14%	12.69%	0.70	5.00%	BRE Compliant	Negligible
Cc	23.78%	10.35%	0.44	5.00%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH/WPSH of an existing window / room, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

** For the interpretation of level of effects please refer to "3.2 Definition of Effects" on page 12.

† Windows that have a reduction of less than 4% in the APSH assessment may be indicated as "n.a." in the WPSH assessment regardless of values.

If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH has been calculated for the room rather than the individual windows.

Figure A.11: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.2.4 Lyman - Winter Probable Sunlight Hours

Table No. A.2.4 - WPSH Results: Lyman						
Window / Room Number	Baseline WPSH	Proposed WPSH	Ratio of Proposed WPSH to Baseline WPSH	Recommended minimum WPSH*	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
LYa	9.27%	6.70%	0.72	5.00%	BRE Compliant	Negligible
LYb#	10.22%	7.95%	0.78	5.00%	BRE Compliant	Negligible
LYc	18.12%	14.49%	0.80	5.00%	BRE Compliant	Negligible
LYd	15.54%	12.16%	0.78	5.00%	BRE Compliant	Negligible
LYe	15.45%	12.31%	0.80	5.00%	BRE Compliant	Negligible
LYf	18.90%	14.18%	0.75	5.00%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the APSH/WPSH of an existing window / room, the value needs to drop below the stated target value of 25% (annual) / 5% (winter) **and** be less than 0.8 times the baseline value **and** it has to have a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

** For the interpretation of level of effects please refer to “3.2 Definition of Effects” on page 12.

† Windows that have a reduction of less than 4% in the APSH assessment may be indicated as “n.a.” in the WPSH assessment regardless of values.

If it can be determined or reasonably assumed that multiple windows are servicing the same room, APSH/WPSH has been calculated for the room rather than the individual windows.

Figure A.12: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.3 Effect on No Sky Line (NSL)

Below is an example of the table used to describe the effect on NSL.

Table Example. A.3 - NSL Impact Assessment						
Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines	Effect of Proposed Development
A	**B**	**C**	**D**	**E**	**F**	**G**

A: Room Number

The number in this column will identify the assessed room, which under-performs under the VSC criteria. The relevant façade of the assessed rooms are represented visually in the corresponding figure.

B: Baseline NSL Value

The *Baseline NSL Value* represents the NSL value of the assessed room which is calculated in the existing baseline model state (as explained in the “Building the Model States” on page 16).

C: Proposed NSL Value

The *Proposed NSL Value* represents the NSL value of the assessed room which is calculated in the proposed model state (as explained in the “Building the Model States” on page 16).

D: Ratio of Proposed NSL to Baseline NSL

This column expressed the ratio of change between the baseline NSL value and the proposed NSL value. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction in daylight is more likely to be perceptible.

E: Recommended minimum NSL

The *BRE Target Value* for each room has been set according to the BRE Guidelines. The Guidelines state that a proposed development could possibly have a noticeable effect on the daylight received by an existing room, if the NSL value **both** drops below the guideline value of 80% **and** the NSL value is less than 0.8 times the baseline value.

Therefore, to determine the *recommended minimum Value*, 80% of the *Baseline NSL value* has been calculated. If this value is above the 80% threshold, then 80% of the baseline value is the appropriate target value.

F: Level of Compliance with the BRE Guidelines

This column states the compliance of the *Proposed NSL Value* with the *recommended minimum NSL* as per the BRE Guidelines. In essence, it shows whether or not the assessed room would experience a perceptible level of impact. If the room complies with the BRE Guidelines this cell will state “*BRE Compliant*”. If the room does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

G: Effect of Proposed Development

The levels of effect in this column describe the effect an assessed room will experience, based on its compliance with the *BRE Target Value*. A full list of definitions and a numerical rationale for each can be found in the section “Definition of Effects” on page 12.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation on these figures may yield a negligible difference and should not be considered an error.

A.3.1 Part 8 Scheme - No Sky Line (NSL)

Table No. A.3.1 - NSL Impact Assessment: Part 8 Scheme: South facade

Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
P0a#	93.82%	43.01%	0.46	75.06%	57%	Moderate Adverse
P0b#	91.32%	32.31%	0.35	73.06%	44%	Major Adverse
P0c#	86.96%	62.37%	0.72	69.57%	90%	Minor Adverse
P0d#	71.47%	71.35%	1.00	57.18%	BRE Compliant	Negligible
P0e#	95.98%	94.04%	0.98	76.79%	BRE Compliant	Negligible
P1a#	99.14%	98.58%	0.99	79.31%	BRE Compliant	Negligible
P1b#	75.05%	59.57%	0.79	60.04%	>99%	Negligible
P1c#	71.59%	71.55%	1.00	57.27%	BRE Compliant	Negligible
P1d#	99.74%	97.85%	0.98	79.79%	BRE Compliant	Negligible
P2a#	99.16%	98.69%	1.00	79.33%	BRE Compliant	Negligible
P2b#	79.99%	73.78%	0.92	63.99%	BRE Compliant	Negligible
P2c#	71.22%	71.20%	1.00	56.98%	BRE Compliant	Negligible
P2d#	99.72%	98.41%	0.99	79.78%	BRE Compliant	Negligible
P3a#	99.16%	99.16%	1.00	79.33%	BRE Compliant	Negligible
P3b#	92.38%	92.37%	1.00	73.91%	BRE Compliant	Negligible
P3c#	73.59%	73.58%	1.00	58.87%	BRE Compliant	Negligible
P3d#	99.76%	98.49%	0.99	79.81%	BRE Compliant	Negligible
P4a#	98.60%	98.60%	1.00	78.88%	BRE Compliant	Negligible
P4b#	98.32%	98.31%	1.00	78.66%	BRE Compliant	Negligible
P4c#	93.06%	93.06%	1.00	74.45%	BRE Compliant	Negligible
P4d#	99.97%	99.08%	0.99	79.97%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to “3.2 Definition of Effects” on page 12.

The calculations have been made for the rooms, as individual windows are not considered in the NSL study

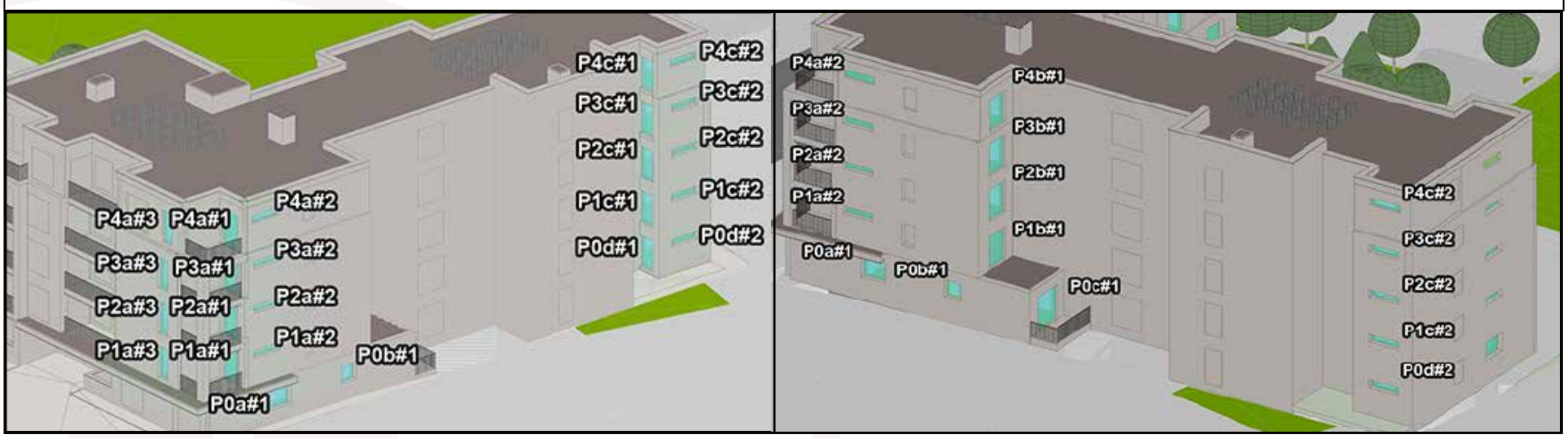


Figure A.13: Highlighted areas indicate the position of assessed windows

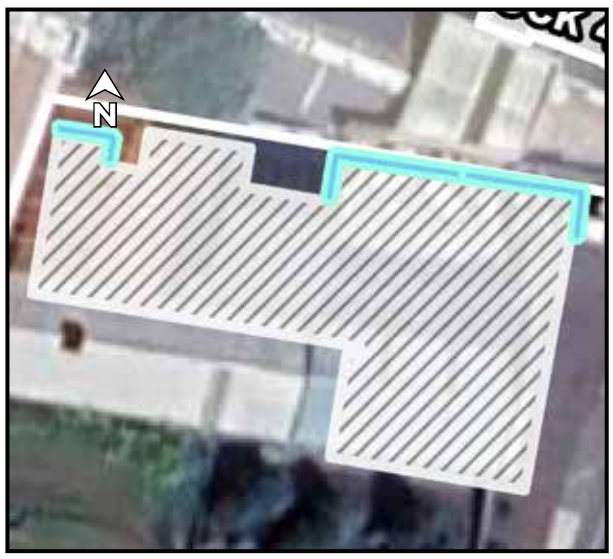


Figure A.14: Aerial view of assessed location

Table No. A.3.1 - NSL Impact Assessment: Part 8 Scheme: South facade						
Room Number	Baseline NSL Value	Proposed NSL Value	Ratio of Proposed NSL to Baseline NSL	Recommended minimum NSL	Level of Compliance with BRE Guidelines**	Effect of Proposed Development
P0f#	97.90%	97.58%	1.00	78.32%	BRE Compliant	Negligible
P0g#	54.03%	44.19%	0.82	43.23%	BRE Compliant	Negligible
P0h#	92.54%	77.80%	0.84	74.03%	BRE Compliant	Negligible
P1f#	97.87%	97.64%	1.00	78.30%	BRE Compliant	Negligible
P1g#	88.45%	80.43%	0.91	70.76%	BRE Compliant	Negligible
P1h#	93.47%	89.35%	0.96	74.78%	BRE Compliant	Negligible
P2f#	98.11%	97.94%	1.00	78.49%	BRE Compliant	Negligible
P2g#	93.88%	87.32%	0.93	75.10%	BRE Compliant	Negligible
P2h#	96.55%	96.50%	1.00	77.24%	BRE Compliant	Negligible
P3f#	98.15%	98.07%	1.00	78.52%	BRE Compliant	Negligible
P3g#	98.27%	96.54%	0.98	78.61%	BRE Compliant	Negligible
P3h#	97.32%	97.32%	1.00	77.85%	BRE Compliant	Negligible
P4f#	99.20%	99.08%	1.00	79.36%	BRE Compliant	Negligible
P4g#	99.11%	99.11%	1.00	79.28%	BRE Compliant	Negligible
P4h#	98.93%	98.93%	1.00	79.15%	BRE Compliant	Negligible

* The BRE Guidelines state that in order for a proposed development to have a noticeable effect on the daylight received by an existing room, the value needs to both drop below the guideline value of 80% and be less than 0.8 times the baseline value.

** For the interpretation of level of effects please refer to “3.2 Definition of Effects” on page 12.

The calculations have been made for the rooms, as individual windows are not considered in the NSL study

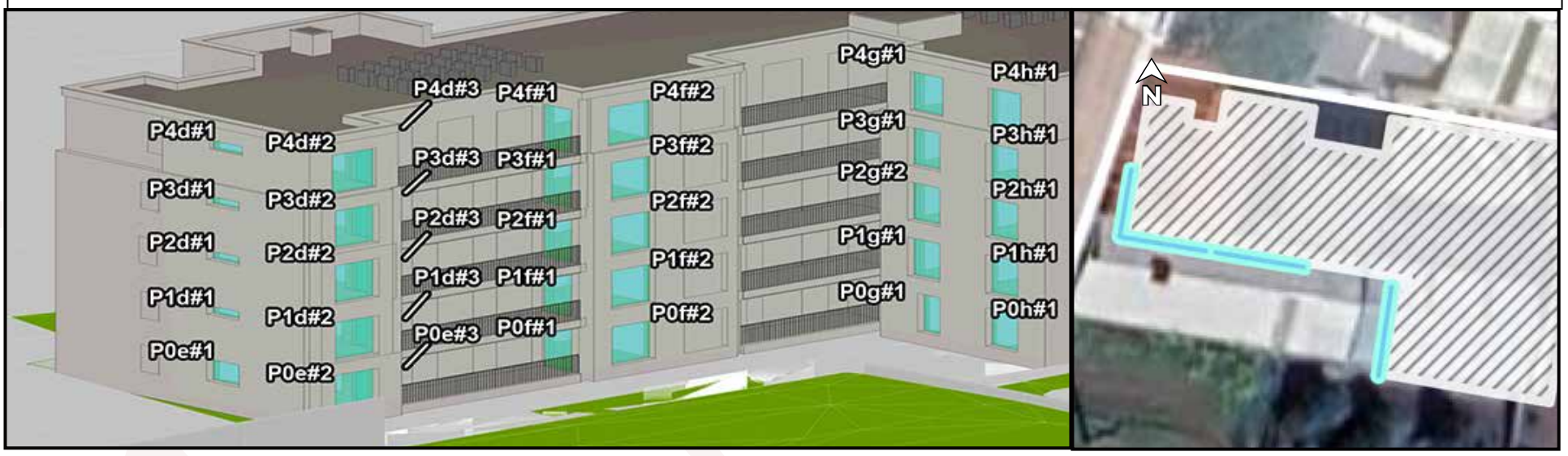


Figure A.15: Highlighted areas indicate the position of assessed windows (L), Aerial view of assessed location (R)

A.4 Effect on Sun On Ground (SOG) in Existing Gardens

Below is an example of the table used to describe the effect on SOG in existing gardens and amenity spaces.

Table Example. A.4 - SOG Impact Assessment							
Assigned Area Number	Address	% of Area to Receive Above 2 Hours Sunlight on March 21st (Target >50%)				Level of Compliance with BRE Guidelines	Effect of Proposed Development
		Baseline	Proposed	Ratio of Proposed to Baseline	Recommended Minimum as per BRE Guidelines		
A	**B**	**C**	**D**	**E**	**F**	**G**	**H**

A: Assigned Area Number

This column indicates the number that 3DDB have assigned to the assessed areas, which is included for the sole purpose of aiding in the identification of the corresponding space shown in the corresponding figure.

B: Address

This column contains the address of the assessed garden/amenity space. The locations of the gardens and amenity spaces assessed are visually represented in the corresponding figure.

C: Baseline

Baseline represents the percentage of the assessed space's area that can receive more than 2 hours of sunlight on March 21st, calculated in the existing baseline model state (as explained in the "Building the Model States" on page 16).

D: Proposed

Proposed represents the percentage of the assessed space's area that can receive more than 2 hours of sunlight on March 21st, calculated in the proposed model state (as explained in the "Building the Model States" on page 16).

E: Ratio of Proposed to Baseline

This column expresses the ratio of change between the baseline and the proposed values. The BRE Guidelines recommend that if the proposed value is less than 0.8 times the baseline value, then the reduction to sunlight is more likely to be perceptible.

F: Recommended Minimum as per the BRE Guidelines

The BRE Guidelines indicate that a proposed development could possibly have a noticeable effect on the sunlight received by an existing garden and/or amenity area, if half the area of the space does not receive at least two hours of sunlight during the spring equinox; **and** the area that receives more than two hours of sun on the spring equinox is less than 0.8 times its former value.

To determine the *recommended minimum*, 80% of the *Baseline* value has been calculated. If this value is above the 50% threshold, a target value of 50% will be applied. If 80% of the baseline value is below 50%, then 80% of the baseline value is the appropriate target value.

G: Level of BRE Compliance

This column states the compliance of the *Proposed* sunlight value with the *recommended minimum as per the BRE Guidelines*. In essence, it shows whether or not the assessed garden or amenity area would experience a perceptible level of impact. If the garden or amenity area complies with the BRE Guidelines this cell will state "*BRE Compliant*". If the garden or amenity area does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

H: Effect of Proposed Development

The levels of effect in this column describe the effect an assessed area will experience, based on its compliance with the *BRE Target Value*. A full list of definitions and a numerical rationale for each can be found in the section *"Definition of Effects"* on page 12.

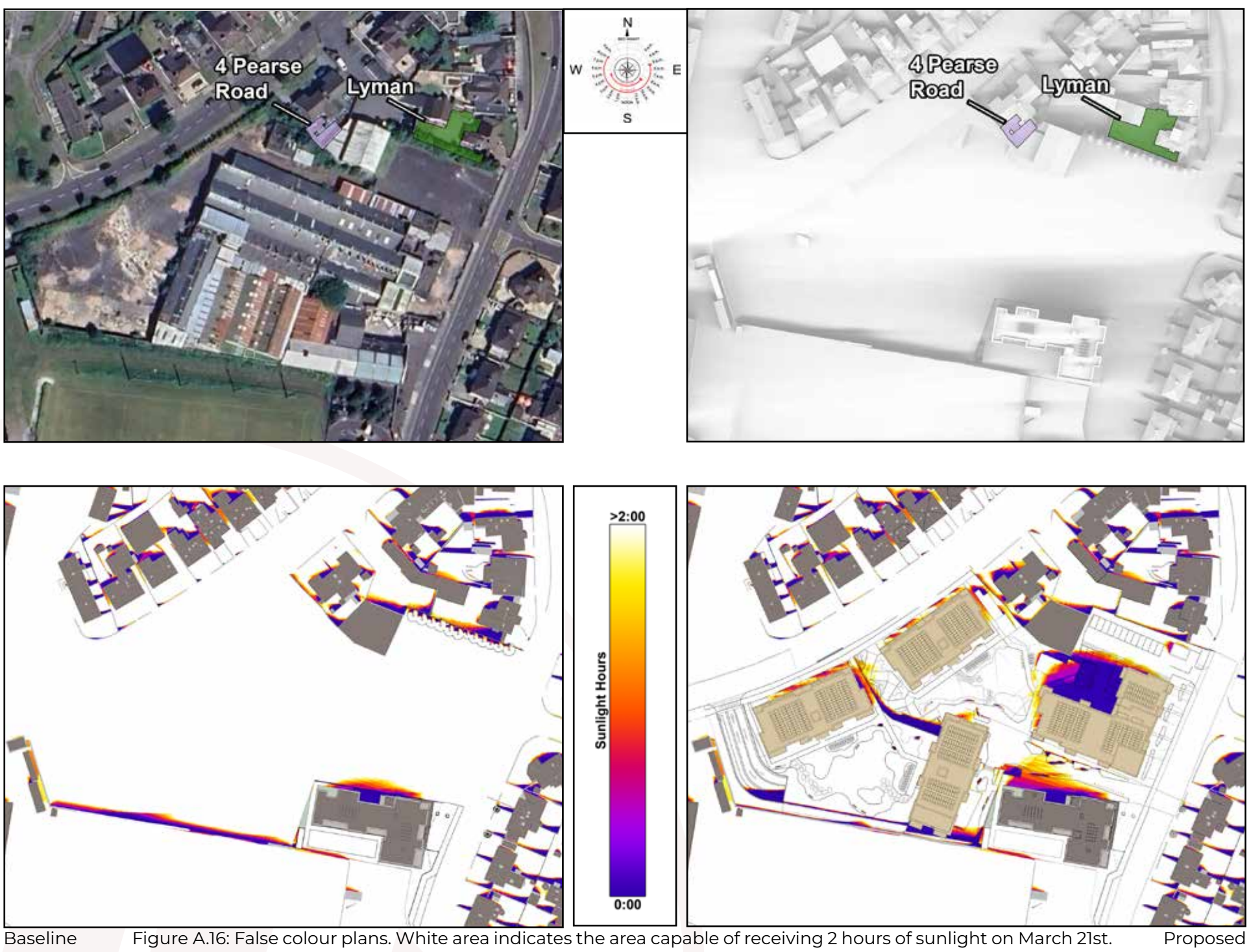
It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

A.4.1 4 Pearse Road: Sun on Ground

Table No. A.4.1 - SOG Results:							
Assigned Area Number	Address	% of Area to Receive Above 2 Hours Sunlight on March 21st (Target >50%)				Level of Compliance with BRE Guidelines*	Effect of Proposed Development**
		Baseline	Proposed	Ratio of Proposed to Baseline	Recommended minimum		
4 Pearse Road	4 Pearse Road	63.74%	57.38%	0.90	50.00%	BRE Compliant	Negligible
Lyman	Lyman	69.90%	85.42%	1.22	50.00%	BRE Compliant	Beneficial Impact

* The BRE guidelines state that in order for a proposed development to have a noticeable effect on the amount of sunlight received in an existing garden or amenity area, the value needs to both drop below the stated target value of 50% **and** be reduced by more than 20% of the existing value.

** For the interpretation of level of effects please refer to “3.2 Definition of Effects” on page 12.



Baseline Figure A.16: False colour plans. White area indicates the area capable of receiving 2 hours of sunlight on March 21st. Proposed

N

	Baseline	Proposed
March 21st 7:00		
March 21st 8:00		
March 21st 9:00		
March 21st 10:00		

B.0 **B.1**	**Shadow Studies** **Shadow Study 21 March**	**Project: Mixed Development, Kinsale Road, Cork**	**Proposed**
	March 21st **Sunrise 6:39 | Sunset 18:43**	**Applicant: Duffy Property Group**	3D DESIGN BUREAU

N

Baseline	Proposed
March 21st 11:00	
March 21st 12:00	
March 21st 13:00	
March 21st 14:00	

	Project: Mixed Development, Kinsale Road, Cork	**Proposed**
March 21st Sunrise 6:39 | Sunset 18:43	**Applicant: Duffy Property Group**	3D DESIGN BUREAU

N

Baseline	Proposed
March 21st 15:00	
March 21st 16:00	
March 21st 17:00	
March 21st 18:00	

	Project: Mixed Development, Kinsale Road, Cork	**Proposed**
March 21st Sunrise 6:39 | Sunset 18:43	**Applicant: Duffy Property Group**	3D DESIGN BUREAU

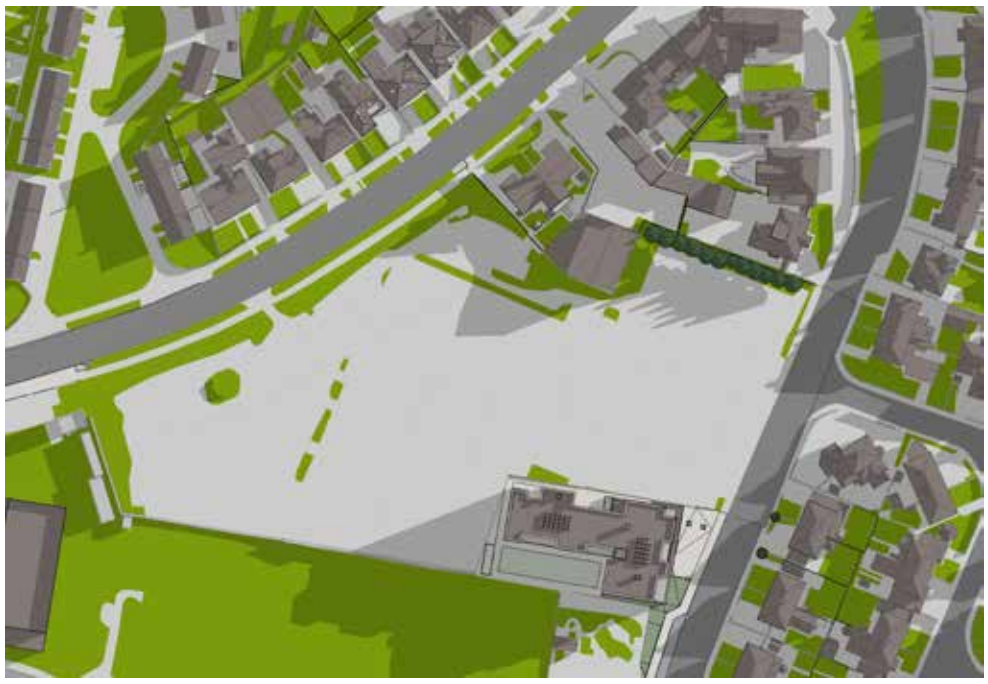
N

Baseline

Proposed

June 21st 6:00

June 21st 7:00



June 21st 8:00

June 21st 9:00

B.2 Shadow Study 21 June	**Project: Mixed Development, Kinsale Road, Cork**	**Proposed**
June 21st Sunrise 05:21 | Sunset 21:50	**Applicant: Duffy Property Group**	3D DESIGN BUREAU

N

Baseline	Proposed
June 21st 10:00	
June 21st 11:00	
June 21st 12:00	
June 21st 13:00	

	Project: Mixed Development, Kinsale Road, Cork	**Proposed**
June 21st Sunrise 05:21 | Sunset 21:50	**Applicant: Duffy Property Group**	3D DESIGN BUREAU

N

Baseline	Proposed
June 21st 14:00	
June 21st 15:00	
June 21st 16:00	
June 21st 17:00	

Project: Mixed Development, Kinsale Road, Cork

Proposed

June 21st
Sunrise 05:21 | Sunset 21:50

Applicant: Duffy Property Group

3D DESIGN BUREAU

N

Baseline	Proposed
June 21st 18:00	
June 21st 19:00	
June 21st 20:00	
June 21st 21:00	

	Project: Mixed Development, Kinsale Road, Cork	**Proposed**
June 21st Sunrise 05:21 | Sunset 21:50	**Applicant: Duffy Property Group**	3D DESIGN BUREAU

N

Baseline

Proposed

December 21st 9:00

December 21st 10:00

December 21st 11:00

December 21st 12:00

B.3	**Shadow Study 21 December**	**Project: Mixed Development, Kinsale Road, Cork**	**Proposed**
	December 21st Sunrise 8:46 | Sunset 16:18	**Applicant: Duffy Property Group**	3D DESIGN BUREAU

N

Baseline	Proposed
December 21st 13:00	
December 21st 14:00	
December 21st 15:00	
December 21st 16:00	

	Project: Mixed Development, Kinsale Road, Cork	Proposed
December 21st Sunrise 8:46 | Sunset 16:18	Applicant: Duffy Property Group	3D DESIGN BUREAU

C.0 Scheme Performance

C.1 Proposed Apartments Floor Plans

C.1.1 Proposed Apartments Floor Plans - Block 1

Figure C.1: Block 1 - Site Location

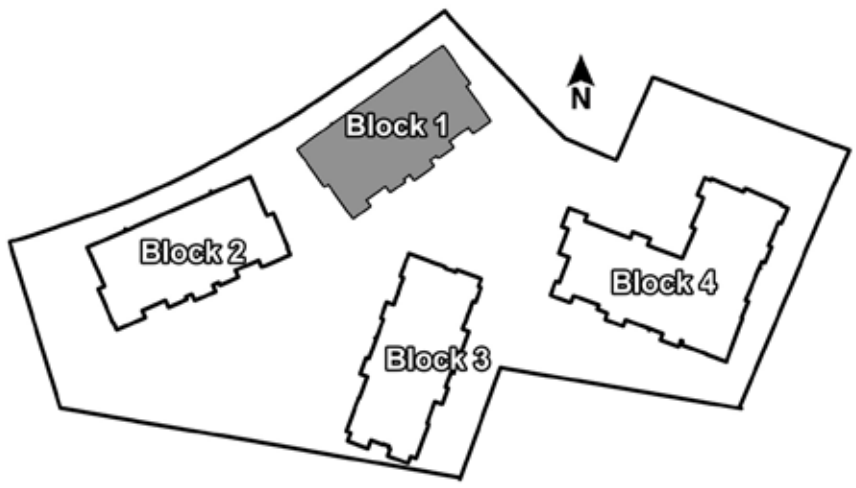


Figure C.2: Block 1 - Level 00

Figure C.3: Block 1 - Level 01

Figure C.4: Block 1 - Level 02

Figure C.5: Block 1 - Level 03

C.1.2 Proposed Apartments Floor Plans - Block 2

Figure C.6: Block 1 - Site Location

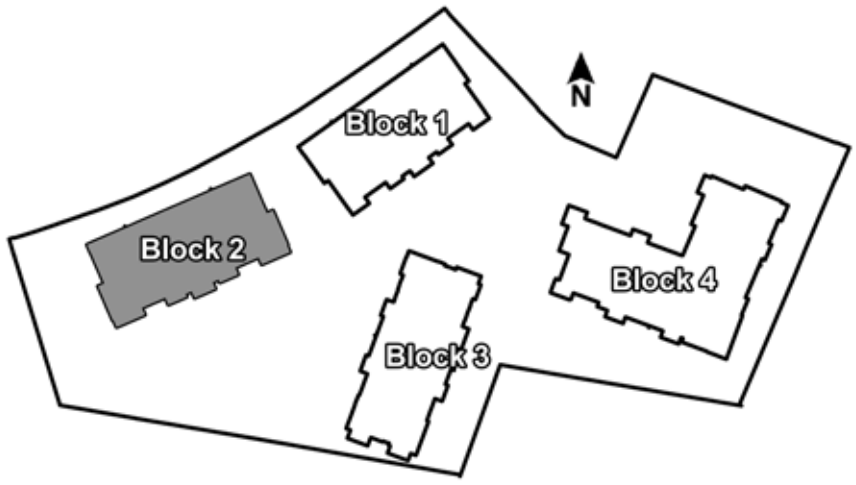


Figure C.7: Block 2 - Level 00

Figure C.8: Block 2 - Level 01

Figure C.9: Block 2 - Level 02

Figure C.10: Block 2 - Level 03

C.1.3 Proposed Apartments Floor Plans - Block 3

Figure C.12: Block 3 - Level 00

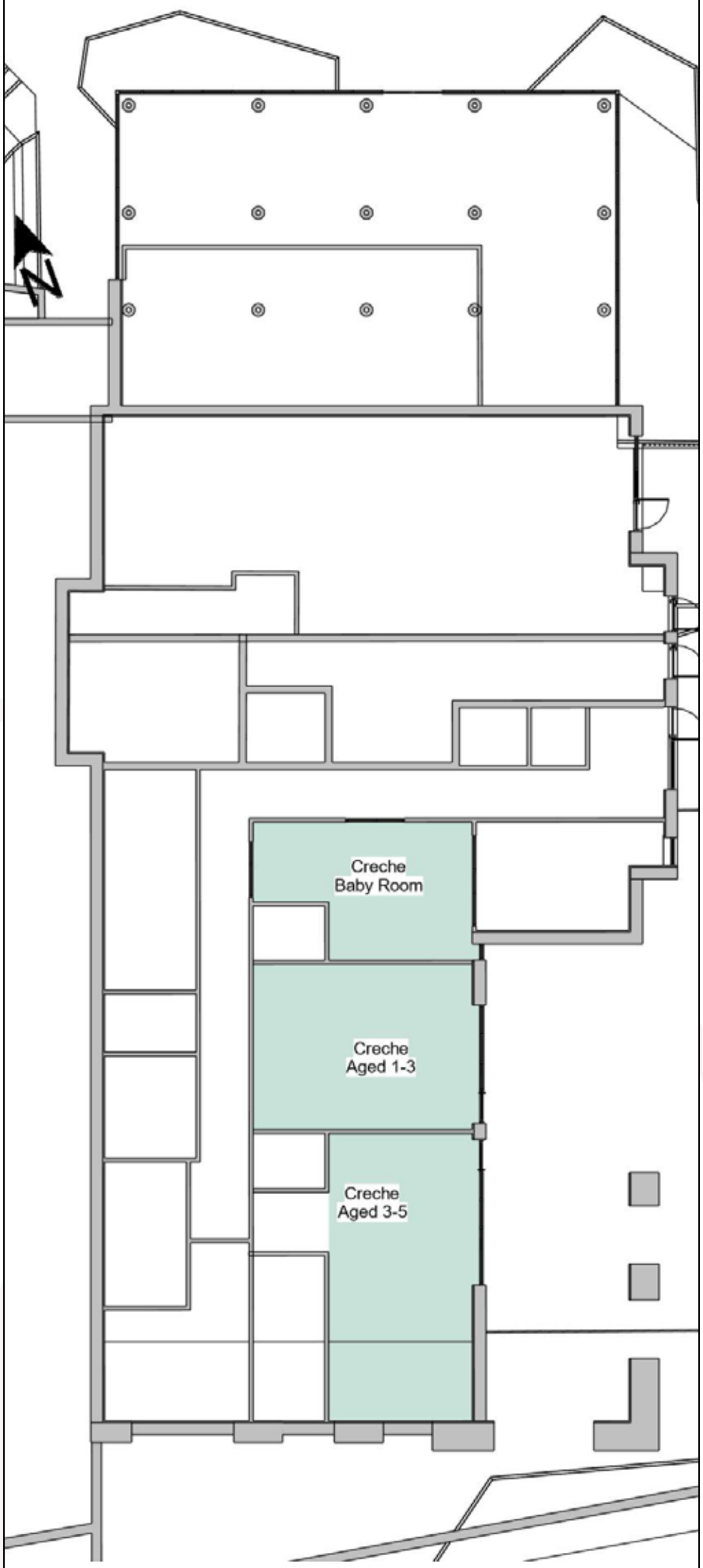


Figure C.11: Block 1 - Site Location

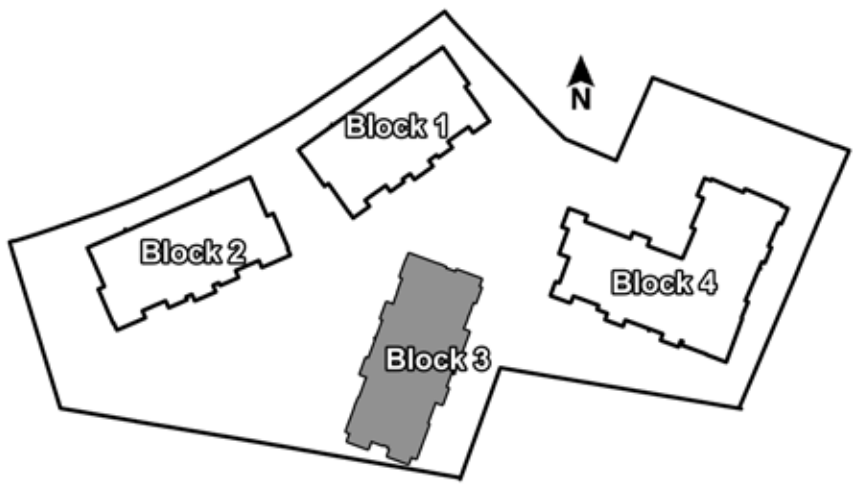


Figure C.13: Block 3 - Level 01

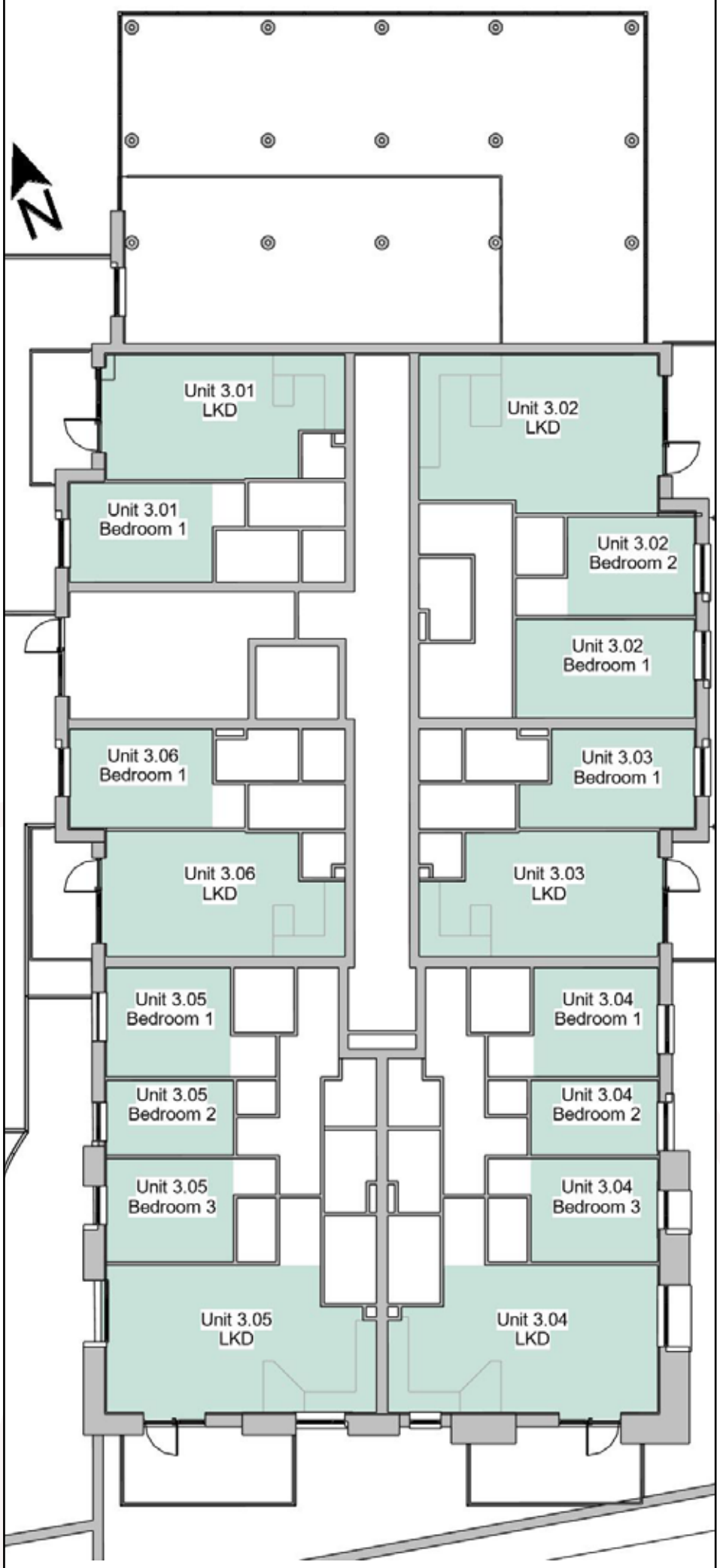


Figure C.14: Block 3 - Level 02

Figure C.15: Block 3 - Level 03

Figure C.16: Block 3 - Level 04

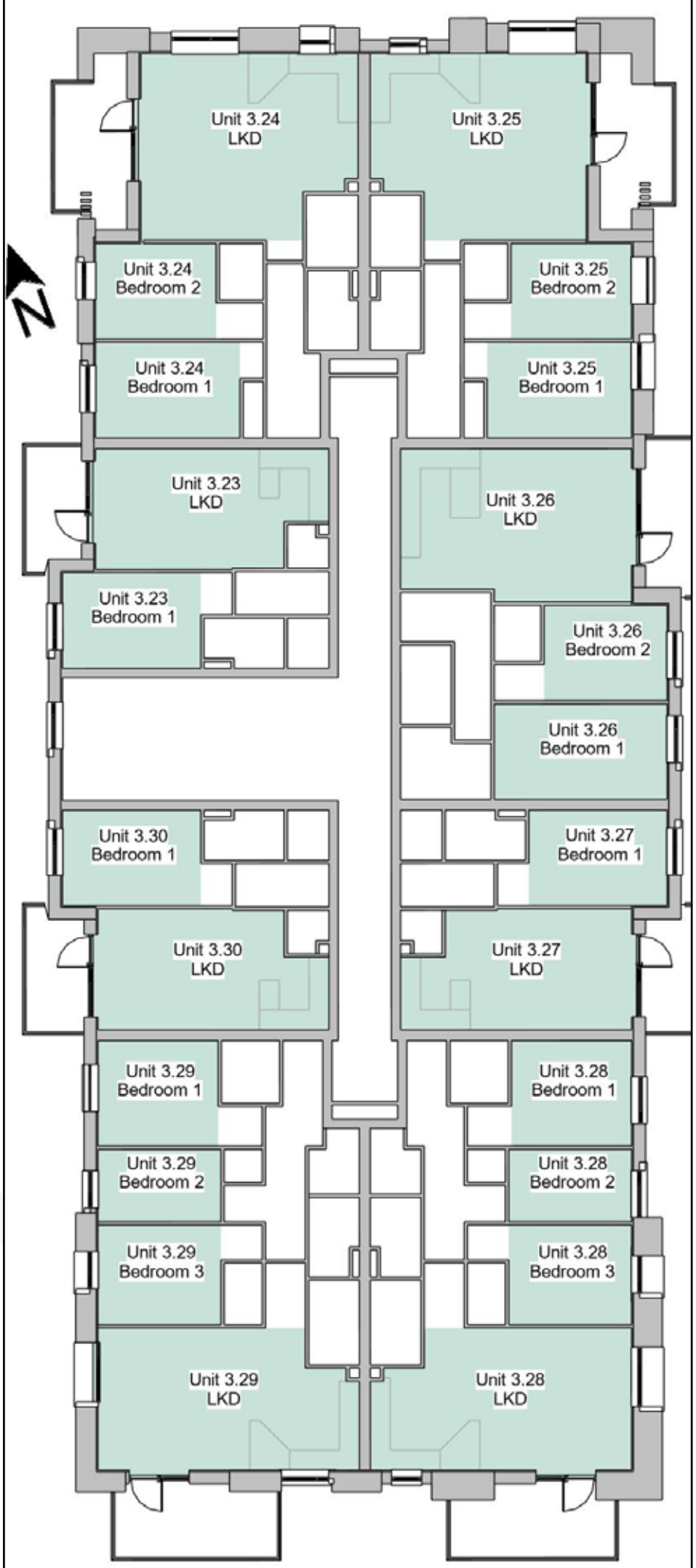
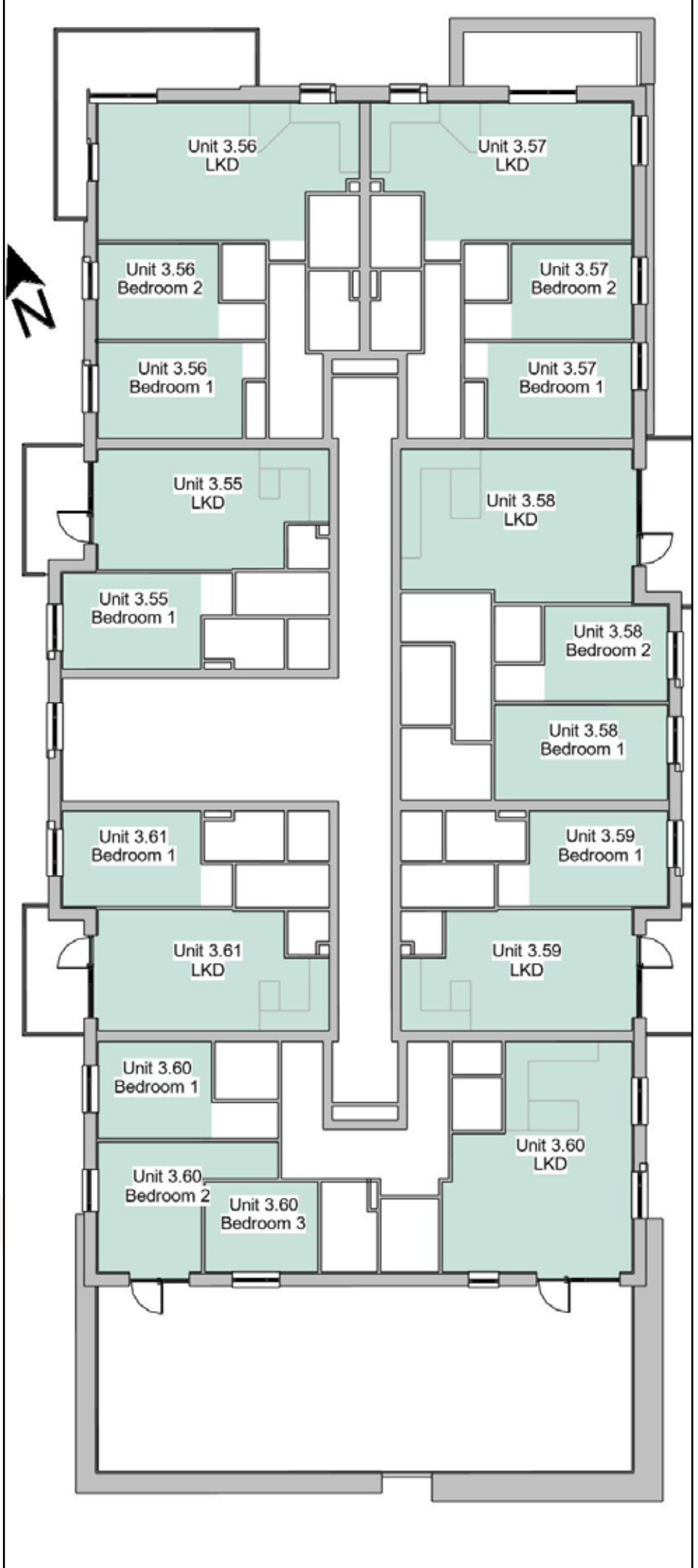


Figure C.17: Block 3 - Level 05

Figure C.18: Block 3 - Level 06

Figure C.19: Block 3 - Level 07

Figure C.20: Block 3 - Level 08



C.1.4 Proposed Apartments Floor Plans - Block 4

Figure C.21: Block 1 - Site Location

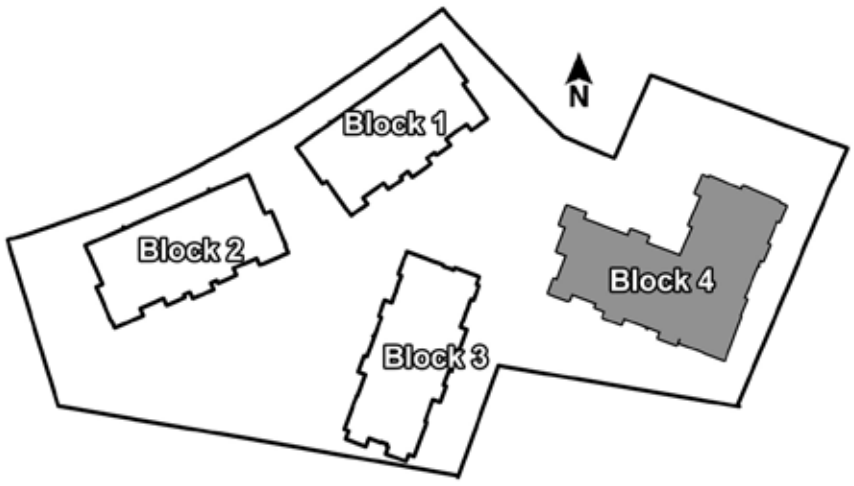


Figure C.22: Block 4 - Level 01

Figure C.23: Block 4 - Level 02

Figure C.24: Block 4 - Level 03

Figure C.25: Block 4 - Level 04

Figure C.26: Block 4 - Level 05

C.2 Spatial Daylight Autonomy (SDA) in Proposed Units

Below is an example of the table used to describe the spatial daylight autonomy results in proposed units.

Table Example. C.2 - Scheme Performance SDA					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria
			Without Trees	With Trees	
A	**B**	**C**	**D**	**E**	**F**

A: Unit Number

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

B: Room Description

Room Description details which room in the unit has been assessed, e.g. bedroom, LKD, etc.

C: Target Lux

Under BR 209 the appropriate target lux levels to be achieved across 50% of the working plane of a room differ depending on the room type. Kitchens have a target lux of 200, living rooms have a target lux of 150 and bedrooms have a target lux of 100. In a room providing more than one function, such as an LKD, the higher target value should be taken i.e. 200 Lux.

D: % of area above target Lux (Without Trees)

BR 209 recommends target lux levels to be achieved across at least 50% of the working plane for at least half the daylight hours. The target values differ depending on the room function, 200 lux for Kitchens, 150 lux for Living Rooms or 100 lux for Bedrooms.

This column states percentage of the working plane of the assessed room that is capable of receiving more than the appropriate target lux for at least half the daylight hours with trees excluded from the analytical model. The figures shown in this column should be considered part of a supplementary study that helps identify if trees are having an effect on daylight within the proposed units.

E: % of area above target Lux (With Trees)

BR 209 recommends target lux levels to be achieved across at least 50% of the working plane for at least half the daylight hours. The target values differ depending on the room function, 200 lux for Kitchens, 150 lux for Living Rooms or 100 lux for Bedrooms.

This column states percentage of the working plane of the assessed room that is capable of receiving more than the appropriate target lux for at least half the daylight hours with the foliage of deciduous trees varied to account for summer and winter conditions, i.e. full leaf and bare branch.

F: Compliance with BR 209 Criteria

This column states if the assessed room achieves the recommended level of daylight as per BR 209 with consideration to the various tree states.

If the target lux level is achieved across more than 50% of the working plane, for half the daylight hours, both with and without trees, this column will state: *'Compliant'*.

If the target lux level is not achieved across more than 50% of the working plane, for half the daylight hours, both with and without trees, this column will state: *'Non-compliant'*.

If the target lux level is achieved across more than 50% of the working plane, for half the daylight hours, without trees but is not achieved with trees, this column will state: *'Trees affecting compliance'*.

Compliance rates will be stated for SDA, both with and without trees.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

C.2.1 SDA Results: Block 1

Table No. C.2.1 - SDA Results: Block 1- Level 00&01					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 1.01	LKD	200	76%	60%	Compliant
Unit 1.01	Bedroom 1	100	100%	100%	Compliant
Unit 1.01	Bedroom 2	100	100%	100%	Compliant
Unit 1.01	Bedroom 3	100	100%	100%	Compliant
Unit 1.02	LKD	200	66%	57%	Compliant
Unit 1.02	Bedroom 1	100	100%	100%	Compliant
Unit 1.02	Bedroom 2	100	100%	100%	Compliant
Unit 1.03	LKD	200	79%	64%	Compliant
Unit 1.03	Bedroom 1	100	100%	100%	Compliant
Unit 1.03	Bedroom 2	100	100%	100%	Compliant
Unit 1.04	LKD	200	94%	90%	Compliant
Unit 1.04	Bedroom 1	100	100%	100%	Compliant
Unit 1.04	Bedroom 2	100	100%	100%	Compliant
Unit 1.05	LKD	200	77%	69%	Compliant
Unit 1.05	Bedroom 1	100	100%	100%	Compliant
Unit 1.05	Bedroom 2	100	100%	100%	Compliant
Unit 1.06	LKD	200	82%	63%	Compliant
Unit 1.06	Bedroom 1	100	100%	100%	Compliant
Unit 1.06	Bedroom 2	100	100%	100%	Compliant
Unit 1.06	Bedroom 3	100	100%	100%	Compliant
Unit 1.07	LKD	200	62%	61%	Compliant
Unit 1.07	Bedroom 1	100	100%	100%	Compliant
Unit 1.07	Bedroom 2	100	100%	100%	Compliant
Unit 1.08	LKD	200	65%	57%	Compliant
Unit 1.08	Bedroom 1	100	100%	97%	Compliant
Unit 1.09	LKD	200	64%	57%	Compliant
Unit 1.09	Bedroom 1	100	100%	100%	Compliant
Unit 1.10	LKD	200	63%	50%	Compliant
Unit 1.10	Bedroom 1	100	100%	100%	Compliant
Unit 1.10	Bedroom 2	100	100%	100%	Compliant
Unit 1.11	LKD	200	94%	94%	Compliant
Unit 1.11	Bedroom 1	100	100%	100%	Compliant
Unit 1.11	Bedroom 2	100	100%	100%	Compliant
Unit 1.12	LKD	200	79%	77%	Compliant
Unit 1.12	Bedroom 1	100	100%	100%	Compliant
Unit 1.13	LKD	200	75%	73%	Compliant
Unit 1.13	Bedroom 1	100	100%	100%	Compliant
Unit 1.14	LKD	200	92%	91%	Compliant
Unit 1.14	Bedroom 1	100	100%	100%	Compliant
Unit 1.14	Bedroom 2	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.
*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.
The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.1 - SDA Results: Block 1- Level 02					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 1.15	LKD	200	100%	100%	Compliant
Unit 1.15	Bedroom 1	100	100%	100%	Compliant
Unit 1.15	Bedroom 2	100	100%	100%	Compliant
Unit 1.16	LKD	200	89%	89%	Compliant
Unit 1.16	Bedroom 1	100	100%	100%	Compliant
Unit 1.17	LKD	200	86%	85%	Compliant
Unit 1.17	Bedroom 1	100	100%	100%	Compliant
Unit 1.18	LKD	200	97%	95%	Compliant
Unit 1.18	Bedroom 1	100	100%	100%	Compliant
Unit 1.18	Bedroom 2	100	100%	100%	Compliant
Unit 1.19	LKD	200	100%	100%	Compliant
Unit 1.19	Bedroom 1	100	100%	100%	Compliant
Unit 1.19	Bedroom 2	100	100%	100%	Compliant
Unit 1.20	LKD	200	70%	66%	Compliant
Unit 1.20	Bedroom 1	100	100%	100%	Compliant
Unit 1.20	Bedroom 2	100	100%	100%	Compliant
Unit 1.21	LKD	200	79%	72%	Compliant
Unit 1.21	Bedroom 1	100	100%	100%	Compliant
Unit 1.21	Bedroom 2	100	100%	100%	Compliant
Unit 1.22	LKD	200	100%	100%	Compliant
Unit 1.22	Bedroom 1	100	100%	100%	Compliant
Unit 1.22	Bedroom 2	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.1 - SDA Results: Block 1- Level 03					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 1.23	LKD	200	100%	100%	Compliant
Unit 1.23	Bedroom 1	100	100%	100%	Compliant
Unit 1.23	Bedroom 2	100	100%	100%	Compliant
Unit 1.24	LKD	200	100%	100%	Compliant
Unit 1.24	Bedroom 1	100	100%	100%	Compliant
Unit 1.25	LKD	200	99%	99%	Compliant
Unit 1.25	Bedroom 1	100	100%	100%	Compliant
Unit 1.26	LKD	200	100%	100%	Compliant
Unit 1.26	Bedroom 1	100	100%	100%	Compliant
Unit 1.26	Bedroom 2	100	100%	100%	Compliant
Unit 1.27	LKD	200	100%	100%	Compliant
Unit 1.27	Bedroom 1	100	100%	100%	Compliant
Unit 1.27	Bedroom 2	100	100%	100%	Compliant
Unit 1.28	LKD	200	100%	99%	Compliant
Unit 1.28	Bedroom 1	100	100%	100%	Compliant
Unit 1.28	Bedroom 2	100	100%	100%	Compliant
Unit 1.29	LKD	200	100%	100%	Compliant
Unit 1.29	Bedroom 1	100	100%	100%	Compliant
Unit 1.29	Bedroom 2	100	100%	100%	Compliant
Unit 1.30	LKD	200	100%	100%	Compliant
Unit 1.30	Bedroom 1	100	100%	100%	Compliant
Unit 1.30	Bedroom 2	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.2 - SDA Results: Block 2- Level 00&01					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 2.01	LKD	200	94%	84%	Compliant
Unit 2.01	Bedroom 1	100	100%	100%	Compliant
Unit 2.01	Bedroom 2	100	100%	100%	Compliant
Unit 2.01	Bedroom 3	100	100%	100%	Compliant
Unit 2.02	LKD	200	67%	54%	Compliant
Unit 2.02	Bedroom 1	100	100%	100%	Compliant
Unit 2.02	Bedroom 2	100	100%	100%	Compliant
Unit 2.03	LKD	200	92%	61%	Compliant
Unit 2.03	Bedroom 1	100	100%	100%	Compliant
Unit 2.03	Bedroom 2	100	100%	100%	Compliant
Unit 2.04	LKD	200	98%	77%	Compliant
Unit 2.04	Bedroom 1	100	100%	100%	Compliant
Unit 2.04	Bedroom 2	100	100%	100%	Compliant
Unit 2.05	LKD	200	99%	76%	Compliant
Unit 2.05	Bedroom 1	100	100%	100%	Compliant
Unit 2.05	Bedroom 2	100	100%	100%	Compliant
Unit 2.06	LKD	200	98%	98%	Compliant
Unit 2.06	Bedroom 1	100	100%	100%	Compliant
Unit 2.06	Bedroom 2	100	100%	100%	Compliant
Unit 2.06	Bedroom 3	100	100%	100%	Compliant
Unit 2.07	LKD	200	96%	84%	Compliant
Unit 2.07	Bedroom 1	100	100%	100%	Compliant
Unit 2.07	Bedroom 2	100	100%	100%	Compliant
Unit 2.07	Bedroom 3	100	100%	100%	Compliant
Unit 2.08	LKD	200	99%	92%	Compliant
Unit 2.08	Bedroom 1	100	100%	100%	Compliant
Unit 2.09	LKD	200	100%	95%	Compliant
Unit 2.09	Bedroom 1	100	100%	100%	Compliant
Unit 2.10	LKD	200	100%	100%	Compliant
Unit 2.10	Bedroom 1	100	100%	100%	Compliant
Unit 2.10	Bedroom 2	100	100%	100%	Compliant
Unit 2.10	Bedroom 3	100	100%	100%	Compliant
Unit 2.11	LKD	200	100%	96%	Compliant
Unit 2.11	Bedroom 1	100	100%	100%	Compliant
Unit 2.11	Bedroom 2	100	100%	100%	Compliant
Unit 2.11	Bedroom 3	100	100%	100%	Compliant
Unit 2.12	LKD	200	100%	99%	Compliant
Unit 2.12	Bedroom 1	100	100%	100%	Compliant
Unit 2.13	LKD	200	100%	100%	Compliant
Unit 2.13	Bedroom 1	100	100%	100%	Compliant
Unit 2.14	LKD	200	100%	100%	Compliant
Unit 2.14	Bedroom 1	100	100%	100%	Compliant
Unit 2.14	Bedroom 2	100	100%	100%	Compliant
Unit 2.14	Bedroom 3	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.2 - SDA Results: Block 2- Level 02					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 2.15	LKD	200	100%	100%	Compliant
Unit 2.15	Bedroom 1	100	100%	100%	Compliant
Unit 2.15	Bedroom 2	100	100%	100%	Compliant
Unit 2.15	Bedroom 3	100	100%	100%	Compliant
Unit 2.16	LKD	200	100%	100%	Compliant
Unit 2.16	Bedroom 1	100	100%	100%	Compliant
Unit 2.17	LKD	200	100%	100%	Compliant
Unit 2.17	Bedroom 1	100	100%	100%	Compliant
Unit 2.18	LKD	200	100%	100%	Compliant
Unit 2.18	Bedroom 1	100	100%	100%	Compliant
Unit 2.18	Bedroom 2	100	100%	100%	Compliant
Unit 2.18	Bedroom 3	100	100%	100%	Compliant
Unit 2.19	LKD	200	100%	100%	Compliant
Unit 2.19	Bedroom 1	100	100%	100%	Compliant
Unit 2.19	Bedroom 2	100	100%	100%	Compliant
Unit 2.20	LKD	200	65%	63%	Compliant
Unit 2.20	Bedroom 1	100	100%	100%	Compliant
Unit 2.20	Bedroom 2	100	100%	100%	Compliant
Unit 2.21	LKD	200	70%	66%	Compliant
Unit 2.21	Bedroom 1	100	100%	100%	Compliant
Unit 2.21	Bedroom 2	100	100%	100%	Compliant
Unit 2.22	LKD	200	99%	98%	Compliant
Unit 2.22	Bedroom 1	100	100%	100%	Compliant
Unit 2.22	Bedroom 2	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.2 - SDA Results: Block 2- Level 03					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 2.23	LKD	200	100%	100%	Compliant
Unit 2.23	Bedroom 1	100	100%	100%	Compliant
Unit 2.23	Bedroom 2	100	100%	100%	Compliant
Unit 2.23	Bedroom 3	100	100%	100%	Compliant
Unit 2.24	LKD	200	100%	100%	Compliant
Unit 2.24	Bedroom 1	100	100%	100%	Compliant
Unit 2.25	LKD	200	100%	100%	Compliant
Unit 2.25	Bedroom 1	100	100%	100%	Compliant
Unit 2.26	LKD	200	100%	100%	Compliant
Unit 2.26	Bedroom 1	100	100%	100%	Compliant
Unit 2.26	Bedroom 2	100	100%	100%	Compliant
Unit 2.26	Bedroom 3	100	100%	100%	Compliant
Unit 2.27	LKD	200	100%	100%	Compliant
Unit 2.27	Bedroom 1	100	100%	100%	Compliant
Unit 2.27	Bedroom 2	100	100%	100%	Compliant
Unit 2.28	LKD	200	95%	93%	Compliant
Unit 2.28	Bedroom 1	100	100%	100%	Compliant
Unit 2.28	Bedroom 2	100	100%	100%	Compliant
Unit 2.29	LKD	200	96%	95%	Compliant
Unit 2.29	Bedroom 1	100	100%	100%	Compliant
Unit 2.29	Bedroom 2	100	100%	100%	Compliant
Unit 2.30	LKD	200	100%	100%	Compliant
Unit 2.30	Bedroom 1	100	100%	100%	Compliant
Unit 2.30	Bedroom 2	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

C.2.3 SDA Results: Block 3

Table No. C.2.2 - SDA Results: Block 3- Level 00					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Creche	Aged 1-3	150	45%	41%	Non-compliant
Creche	Aged 3-5	150	17%	16%	Non-compliant
Creche	Baby Room	150	0%	0%	Non-compliant

Table No. C.2.2 - SDA Results: Block 3- Level 01					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 3.01	LKD	200	58%	55%	Compliant
Unit 3.01	Bedroom 1	100	100%	100%	Compliant
Unit 3.02	LKD	200	51%	51%	Compliant
Unit 3.02	Bedroom 1	100	100%	100%	Compliant
Unit 3.02	Bedroom 2	100	100%	100%	Compliant
Unit 3.03	LKD	200	66%	65%	Compliant
Unit 3.03	Bedroom 1	100	100%	100%	Compliant
Unit 3.04	LKD	200	100%	100%	Compliant
Unit 3.04	Bedroom 1	100	100%	100%	Compliant
Unit 3.04	Bedroom 2	100	100%	100%	Compliant
Unit 3.04	Bedroom 3	100	100%	100%	Compliant
Unit 3.05	LKD	200	100%	100%	Compliant
Unit 3.05	Bedroom 1	100	100%	100%	Compliant
Unit 3.05	Bedroom 2	100	100%	100%	Compliant
Unit 3.05	Bedroom 3	100	100%	100%	Compliant
Unit 3.06	LKD	200	75%	58%	Compliant
Unit 3.06	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.3 - SDA Results: Block 3- Level 02					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 3.07	LKD	200	68%	66%	Compliant
Unit 3.07	Bedroom 1	100	100%	100%	Compliant
Unit 3.08	LKD	200	100%	100%	Compliant
Unit 3.08	Bedroom 1	100	100%	100%	Compliant
Unit 3.08	Bedroom 2	100	100%	100%	Compliant
Unit 3.09	LKD	200	100%	100%	Compliant
Unit 3.09	Bedroom 1	100	100%	100%	Compliant
Unit 3.09	Bedroom 2	100	100%	100%	Compliant
Unit 3.10	LKD	200	58%	57%	Compliant
Unit 3.10	Bedroom 1	100	100%	100%	Compliant
Unit 3.10	Bedroom 2	100	100%	100%	Compliant
Unit 3.11	LKD	200	75%	75%	Compliant
Unit 3.11	Bedroom 1	100	100%	100%	Compliant
Unit 3.12	LKD	200	100%	100%	Compliant
Unit 3.12	Bedroom 1	100	100%	100%	Compliant
Unit 3.12	Bedroom 2	100	100%	100%	Compliant
Unit 3.12	Bedroom 3	100	100%	100%	Compliant
Unit 3.13	LKD	200	100%	100%	Compliant
Unit 3.13	Bedroom 1	100	100%	100%	Compliant
Unit 3.13	Bedroom 2	100	100%	100%	Compliant
Unit 3.13	Bedroom 3	100	100%	100%	Compliant
Unit 3.14	LKD	200	82%	79%	Compliant
Unit 3.14	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.3 - SDA Results: Block 3- Level 03					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 3.15	LKD	200	83%	82%	Compliant
Unit 3.15	Bedroom 1	100	100%	100%	Compliant
Unit 3.16	LKD	200	100%	100%	Compliant
Unit 3.16	Bedroom 1	100	100%	100%	Compliant
Unit 3.16	Bedroom 2	100	100%	100%	Compliant
Unit 3.17	LKD	200	100%	100%	Compliant
Unit 3.17	Bedroom 1	100	100%	100%	Compliant
Unit 3.17	Bedroom 2	100	100%	100%	Compliant
Unit 3.18	LKD	200	68%	68%	Compliant
Unit 3.18	Bedroom 1	100	100%	100%	Compliant
Unit 3.18	Bedroom 2	100	100%	100%	Compliant
Unit 3.19	LKD	200	84%	84%	Compliant
Unit 3.19	Bedroom 1	100	100%	100%	Compliant
Unit 3.20	LKD	200	100%	100%	Compliant
Unit 3.20	Bedroom 1	100	100%	100%	Compliant
Unit 3.20	Bedroom 2	100	100%	100%	Compliant
Unit 3.20	Bedroom 3	100	100%	100%	Compliant
Unit 3.21	LKD	200	100%	100%	Compliant
Unit 3.21	Bedroom 1	100	100%	100%	Compliant
Unit 3.21	Bedroom 2	100	100%	100%	Compliant
Unit 3.21	Bedroom 3	100	100%	100%	Compliant
Unit 3.22	LKD	200	87%	86%	Compliant
Unit 3.22	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.3 - SDA Results: Block 3- Level 04					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 3.23	LKD	200	88%	87%	Compliant
Unit 3.23	Bedroom 1	100	100%	100%	Compliant
Unit 3.24	LKD	200	100%	100%	Compliant
Unit 3.24	Bedroom 1	100	100%	100%	Compliant
Unit 3.24	Bedroom 2	100	100%	100%	Compliant
Unit 3.25	LKD	200	100%	100%	Compliant
Unit 3.25	Bedroom 1	100	100%	100%	Compliant
Unit 3.25	Bedroom 2	100	100%	100%	Compliant
Unit 3.26	LKD	200	92%	92%	Compliant
Unit 3.26	Bedroom 1	100	100%	100%	Compliant
Unit 3.26	Bedroom 2	100	100%	100%	Compliant
Unit 3.27	LKD	200	93%	92%	Compliant
Unit 3.27	Bedroom 1	100	100%	100%	Compliant
Unit 3.28	LKD	200	100%	100%	Compliant
Unit 3.28	Bedroom 1	100	100%	100%	Compliant
Unit 3.28	Bedroom 2	100	100%	100%	Compliant
Unit 3.28	Bedroom 3	100	100%	100%	Compliant
Unit 3.29	LKD	200	100%	100%	Compliant
Unit 3.29	Bedroom 1	100	100%	100%	Compliant
Unit 3.29	Bedroom 2	100	100%	100%	Compliant
Unit 3.29	Bedroom 3	100	100%	100%	Compliant
Unit 3.30	LKD	200	91%	91%	Compliant
Unit 3.30	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.3 - SDA Results: Block 3- Level 05					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 3.31	LKD	200	92%	91%	Compliant
Unit 3.31	Bedroom 1	100	100%	100%	Compliant
Unit 3.32	LKD	200	100%	100%	Compliant
Unit 3.32	Bedroom 1	100	100%	100%	Compliant
Unit 3.32	Bedroom 2	100	100%	100%	Compliant
Unit 3.33	LKD	200	100%	100%	Compliant
Unit 3.33	Bedroom 1	100	100%	100%	Compliant
Unit 3.33	Bedroom 2	100	100%	100%	Compliant
Unit 3.34	LKD	200	100%	100%	Compliant
Unit 3.34	Bedroom 1	100	100%	100%	Compliant
Unit 3.34	Bedroom 2	100	100%	100%	Compliant
Unit 3.35	LKD	200	100%	100%	Compliant
Unit 3.35	Bedroom 1	100	100%	100%	Compliant
Unit 3.36	LKD	200	100%	100%	Compliant
Unit 3.36	Bedroom 1	100	100%	100%	Compliant
Unit 3.36	Bedroom 2	100	100%	100%	Compliant
Unit 3.36	Bedroom 3	100	100%	100%	Compliant
Unit 3.37	LKD	200	100%	100%	Compliant
Unit 3.37	Bedroom 1	100	100%	100%	Compliant
Unit 3.37	Bedroom 2	100	100%	100%	Compliant
Unit 3.37	Bedroom 3	100	100%	100%	Compliant
Unit 3.38	LKD	200	95%	95%	Compliant
Unit 3.38	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.3 - SDA Results: Block 3- Level 06					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 3.39	LKD	200	96%	96%	Compliant
Unit 3.39	Bedroom 1	100	100%	100%	Compliant
Unit 3.40	LKD	200	100%	100%	Compliant
Unit 3.40	Bedroom 1	100	100%	100%	Compliant
Unit 3.40	Bedroom 2	100	100%	100%	Compliant
Unit 3.41	LKD	200	100%	100%	Compliant
Unit 3.41	Bedroom 1	100	100%	100%	Compliant
Unit 3.41	Bedroom 2	100	100%	100%	Compliant
Unit 3.42	LKD	200	100%	100%	Compliant
Unit 3.42	Bedroom 1	100	100%	100%	Compliant
Unit 3.42	Bedroom 2	100	100%	100%	Compliant
Unit 3.43	LKD	200	100%	100%	Compliant
Unit 3.43	Bedroom 1	100	100%	100%	Compliant
Unit 3.44	LKD	200	100%	100%	Compliant
Unit 3.44	Bedroom 1	100	100%	100%	Compliant
Unit 3.44	Bedroom 2	100	100%	100%	Compliant
Unit 3.44	Bedroom 3	100	100%	100%	Compliant
Unit 3.45	LKD	200	100%	100%	Compliant
Unit 3.45	Bedroom 1	100	100%	100%	Compliant
Unit 3.45	Bedroom 2	100	100%	100%	Compliant
Unit 3.45	Bedroom 3	100	100%	100%	Compliant
Unit 3.46	LKD	200	99%	99%	Compliant
Unit 3.46	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.3 - SDA Results: Block 3- Level 07					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 3.47	LKD	200	99%	99%	Compliant
Unit 3.47	Bedroom 1	100	100%	100%	Compliant
Unit 3.48	LKD	200	100%	100%	Compliant
Unit 3.48	Bedroom 1	100	100%	100%	Compliant
Unit 3.48	Bedroom 2	100	100%	100%	Compliant
Unit 3.49	LKD	200	100%	100%	Compliant
Unit 3.49	Bedroom 1	100	100%	100%	Compliant
Unit 3.49	Bedroom 2	100	100%	100%	Compliant
Unit 3.50	LKD	200	100%	100%	Compliant
Unit 3.50	Bedroom 1	100	100%	100%	Compliant
Unit 3.50	Bedroom 2	100	100%	100%	Compliant
Unit 3.51	LKD	200	100%	100%	Compliant
Unit 3.51	Bedroom 1	100	100%	100%	Compliant
Unit 3.52	LKD	200	100%	100%	Compliant
Unit 3.52	Bedroom 1	100	100%	100%	Compliant
Unit 3.52	Bedroom 2	100	100%	100%	Compliant
Unit 3.52	Bedroom 3	100	100%	100%	Compliant
Unit 3.53	LKD	200	100%	100%	Compliant
Unit 3.53	Bedroom 1	100	100%	100%	Compliant
Unit 3.53	Bedroom 2	100	100%	100%	Compliant
Unit 3.53	Bedroom 3	100	100%	100%	Compliant
Unit 3.54	LKD	200	100%	100%	Compliant
Unit 3.54	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.3 - SDA Results: Block 3- Level 08					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 3.55	LKD	200	100%	100%	Compliant
Unit 3.55	Bedroom 1	100	100%	100%	Compliant
Unit 3.56	LKD	200	100%	100%	Compliant
Unit 3.56	Bedroom 1	100	100%	100%	Compliant
Unit 3.56	Bedroom 2	100	100%	100%	Compliant
Unit 3.57	LKD	200	100%	100%	Compliant
Unit 3.57	Bedroom 1	100	100%	100%	Compliant
Unit 3.57	Bedroom 2	100	100%	100%	Compliant
Unit 3.58	LKD	200	100%	100%	Compliant
Unit 3.58	Bedroom 1	100	100%	100%	Compliant
Unit 3.58	Bedroom 2	100	100%	100%	Compliant
Unit 3.59	LKD	200	100%	100%	Compliant
Unit 3.59	Bedroom 1	100	100%	100%	Compliant
Unit 3.60	LKD	200	100%	100%	Compliant
Unit 3.60	Bedroom 1	100	100%	100%	Compliant
Unit 3.60	Bedroom 2	100	100%	100%	Compliant
Unit 3.60	Bedroom 3	100	100%	100%	Compliant
Unit 3.61	LKD	200	100%	100%	Compliant
Unit 3.61	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

C.2.4 SDA Results: Block 4

Table No. C.2.3 - SDA Results: Block 4- Level 01					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 4.01	LKD	200	86%	85%	Compliant
Unit 4.01	Bedroom 1	100	100%	100%	Compliant
Unit 4.01	Bedroom 2	100	100%	100%	Compliant
Unit 4.02	LKD	200	100%	100%	Compliant
Unit 4.02	Bedroom 1	100	100%	100%	Compliant
Unit 4.02	Bedroom 2	100	100%	100%	Compliant
Unit 4.03	LKD	200	52%	50%	Compliant
Unit 4.03	Bedroom 1	100	99%	99%	Compliant
Unit 4.04	LKD	200	35%	34%	Non-compliant
Unit 4.04	Bedroom 1	100	99%	95%	Compliant
Unit 4.04	Bedroom 2	100	100%	99%	Compliant
Unit 4.05	LKD	200	97%	96%	Compliant
Unit 4.05	Bedroom 1	100	89%	83%	Compliant
Unit 4.05	Bedroom 2	100	100%	100%	Compliant
Unit 4.06	LKD	200	100%	100%	Compliant
Unit 4.06	Bedroom 1	100	100%	100%	Compliant
Unit 4.06	Bedroom 2	100	100%	100%	Compliant
Unit 4.06	Bedroom 3	100	100%	100%	Compliant
Unit 4.07	LKD	200	62%	59%	Compliant
Unit 4.07	Bedroom 1	100	100%	100%	Compliant
Unit 4.07	Bedroom 2	100	100%	100%	Compliant
Unit 4.08	LKD	200	90%	80%	Compliant
Unit 4.08	Bedroom 1	100	100%	100%	Compliant
Unit 4.08	Bedroom 2	100	83%	82%	Compliant
Unit 4.09	LKD	200	82%	80%	Compliant
Unit 4.09	Bedroom 1	100	100%	100%	Compliant
Unit 4.09	Bedroom 2	100	100%	100%	Compliant
Unit 4.09	Bedroom 3	100	100%	100%	Compliant
Unit 4.10	LKD	200	100%	100%	Compliant
Unit 4.10	Bedroom 1	100	100%	100%	Compliant
Unit 4.11	LKD	200	100%	100%	Compliant
Unit 4.11	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.4 - SDA Results: Block 4- Level 02					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 4.12	LKD	200	94%	94%	Compliant
Unit 4.12	Bedroom 1	100	100%	100%	Compliant
Unit 4.12	Bedroom 2	100	100%	100%	Compliant
Unit 4.13	LKD	200	100%	100%	Compliant
Unit 4.13	Bedroom 1	100	100%	100%	Compliant
Unit 4.13	Bedroom 2	100	100%	100%	Compliant
Unit 4.14	LKD	200	60%	59%	Compliant
Unit 4.14	Bedroom 1	100	100%	100%	Compliant
Unit 4.15	LKD	200	48%	48%	Non-compliant
Unit 4.15	Bedroom 1	100	100%	100%	Compliant
Unit 4.15	Bedroom 2	100	100%	100%	Compliant
Unit 4.16	LKD	200	99%	99%	Compliant
Unit 4.16	Bedroom 1	100	100%	100%	Compliant
Unit 4.16	Bedroom 2	100	100%	100%	Compliant
Unit 4.17	LKD	200	100%	100%	Compliant
Unit 4.17	Bedroom 1	100	100%	100%	Compliant
Unit 4.17	Bedroom 2	100	100%	100%	Compliant
Unit 4.17	Bedroom 3	100	100%	100%	Compliant
Unit 4.18	LKD	200	79%	72%	Compliant
Unit 4.18	Bedroom 1	100	100%	100%	Compliant
Unit 4.18	Bedroom 2	100	100%	100%	Compliant
Unit 4.19	LKD	200	70%	70%	Compliant
Unit 4.19	Bedroom 1	100	100%	100%	Compliant
Unit 4.19	Bedroom 2	100	100%	100%	Compliant
Unit 4.20	LKD	200	86%	85%	Compliant
Unit 4.20	Bedroom 1	100	100%	100%	Compliant
Unit 4.20	Bedroom 2	100	100%	100%	Compliant
Unit 4.20	Bedroom 3	100	100%	100%	Compliant
Unit 4.21	LKD	200	100%	100%	Compliant
Unit 4.21	Bedroom 1	100	100%	100%	Compliant
Unit 4.22	LKD	200	100%	100%	Compliant
Unit 4.22	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.4 - SDA Results: Block 4- Level 03					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 4.23	LKD	200	95%	94%	Compliant
Unit 4.23	Bedroom 1	100	100%	100%	Compliant
Unit 4.23	Bedroom 2	100	100%	100%	Compliant
Unit 4.24	LKD	200	100%	100%	Compliant
Unit 4.24	Bedroom 1	100	100%	100%	Compliant
Unit 4.24	Bedroom 2	100	100%	100%	Compliant
Unit 4.25	LKD	200	77%	77%	Compliant
Unit 4.25	Bedroom 1	100	100%	100%	Compliant
Unit 4.26	LKD	200	64%	63%	Compliant
Unit 4.26	Bedroom 1	100	100%	100%	Compliant
Unit 4.26	Bedroom 2	100	100%	100%	Compliant
Unit 4.27	LKD	200	100%	100%	Compliant
Unit 4.27	Bedroom 1	100	100%	100%	Compliant
Unit 4.27	Bedroom 2	100	100%	100%	Compliant
Unit 4.28	LKD	200	100%	100%	Compliant
Unit 4.28	Bedroom 1	100	100%	100%	Compliant
Unit 4.28	Bedroom 2	100	100%	100%	Compliant
Unit 4.28	Bedroom 3	100	100%	100%	Compliant
Unit 4.29	LKD	200	97%	84%	Compliant
Unit 4.29	Bedroom 1	100	100%	100%	Compliant
Unit 4.29	Bedroom 2	100	100%	100%	Compliant
Unit 4.30	LKD	200	74%	73%	Compliant
Unit 4.30	Bedroom 1	100	100%	100%	Compliant
Unit 4.30	Bedroom 2	100	100%	100%	Compliant
Unit 4.31	LKD	200	91%	90%	Compliant
Unit 4.31	Bedroom 1	100	100%	100%	Compliant
Unit 4.31	Bedroom 2	100	100%	100%	Compliant
Unit 4.31	Bedroom 3	100	100%	100%	Compliant
Unit 4.32	LKD	200	100%	100%	Compliant
Unit 4.32	Bedroom 1	100	100%	100%	Compliant
Unit 4.33	LKD	200	100%	100%	Compliant
Unit 4.33	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.4 - SDA Results: Block 4- Level 05					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 4.34	LKD	200	95%	95%	Compliant
Unit 4.34	Bedroom 1	100	100%	100%	Compliant
Unit 4.34	Bedroom 2	100	100%	100%	Compliant
Unit 4.35	LKD	200	100%	100%	Compliant
Unit 4.35	Bedroom 1	100	100%	100%	Compliant
Unit 4.35	Bedroom 2	100	100%	100%	Compliant
Unit 4.36	LKD	200	93%	93%	Compliant
Unit 4.36	Bedroom 1	100	100%	100%	Compliant
Unit 4.37	LKD	200	87%	86%	Compliant
Unit 4.37	Bedroom 1	100	100%	100%	Compliant
Unit 4.37	Bedroom 2	100	100%	100%	Compliant
Unit 4.38	LKD	200	100%	100%	Compliant
Unit 4.38	Bedroom 1	100	100%	100%	Compliant
Unit 4.38	Bedroom 2	100	100%	100%	Compliant
Unit 4.39	LKD	200	100%	100%	Compliant
Unit 4.39	Bedroom 1	100	100%	100%	Compliant
Unit 4.39	Bedroom 2	100	100%	100%	Compliant
Unit 4.39	Bedroom 3	100	100%	100%	Compliant
Unit 4.40	LKD	200	100%	100%	Compliant
Unit 4.40	Bedroom 1	100	100%	100%	Compliant
Unit 4.40	Bedroom 2	100	100%	100%	Compliant
Unit 4.41	LKD	200	83%	83%	Compliant
Unit 4.41	Bedroom 1	100	100%	100%	Compliant
Unit 4.41	Bedroom 2	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.2.4 - SDA Results: Block 4- Level 06					
Unit Number	Room Description	Target Lux*	% of area above target Lux* (recommendation >50%)		Compliance with BR 209 Criteria*
			Without Trees***	With Trees**	
Unit 4.42	LKD	200	100%	100%	Compliant
Unit 4.42	Bedroom 1	100	100%	100%	Compliant
Unit 4.42	Bedroom 2	100	100%	100%	Compliant
Unit 4.43	LKD	200	100%	100%	Compliant
Unit 4.43	Bedroom 1	100	100%	100%	Compliant
Unit 4.43	Bedroom 2	100	100%	100%	Compliant
Unit 4.44	LKD	200	100%	100%	Compliant
Unit 4.44	Bedroom 1	100	100%	100%	Compliant
Unit 4.44	Bedroom 2	100	100%	100%	Compliant
Unit 4.44	Bedroom 3	100	100%	100%	Compliant
Unit 4.45	LKD	200	100%	100%	Compliant
Unit 4.45	Bedroom 1	100	100%	100%	Compliant
Unit 4.45	Bedroom 2	100	100%	100%	Compliant
Unit 4.46	LKD	200	61%	61%	Compliant
Unit 4.46	Bedroom 1	100	100%	100%	Compliant
Unit 4.46	Bedroom 2	100	100%	100%	Compliant
Unit 4.47	LKD	200	100%	100%	Compliant
Unit 4.47	Bedroom 1	100	100%	100%	Compliant
Unit 4.47	Bedroom 2	100	100%	100%	Compliant
Unit 4.48	LKD	200	100%	100%	Compliant
Unit 4.48	Bedroom 1	100	100%	100%	Compliant
Unit 4.48	Bedroom 2	100	100%	100%	Compliant
Unit 4.49	LKD	200	100%	100%	Compliant
Unit 4.49	Bedroom 1	100	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.

** Under the BR 209 study the SDA has been calculated with indicative trees represented accounting for annual foliage.

*** The SDA assessment without trees indicates the level of daylight within the proposed development when trees are not included in the analytical model. This study provides an understanding of how trees affect daylight within the proposed development.

The SDA circa compliance rates across the entire scheme can be found in section 5.2.1 on page 29.

For floor plans of the assessed units please refer to section C.1 on page 64.

C.3 Sunlight Exposure (SE) in Proposed Units

Below is an example of the table used to describe the SE performance of proposed habitable rooms.

Table Example. C.3 - Scheme Performance Sunlight Exposure							
Unit Number	Room Description	Deciduous Trees as Opaque Objects			Without Deciduous Trees		
		SE Hours on March 21st	Level of SE on March 21st	Unit compliance based on highest performing room	SE Hours on March 21st	Level of SE on March 21st	Unit compliance based on highest performing room
A	**B**	**C**	**D**	**E**	**F**	**G**	**H**

A: Unit Number

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

B: Room Description

Room Description details which room of the unit has been assessed, e.g. bedroom, living room, etc.

C: SE Hours on March 21st (Deciduous Trees as Opaque Objects)

This column will state the number of hours the assessed room can expect to receive on March 21st with the assessment carried out with deciduous trees as opaque objects.

D: Level of SE on March 21st (Deciduous Trees as Opaque Objects)

BR 209 recommends a minimum sunlight exposure of 1.5 hours for a proposed unit with preference given to main living rooms. BR 209 categorise sunlight exposure as minimum, medium and high, this column will categorise the level of sunlight exposure with deciduous trees as opaque objects based on the following:

- Less than 1.5 hours: *Below minimum,*
- Between 1.5 hours and 3 hours: *Minimum*
- Between 3 hours and 4 hours: *Medium*
- More than 4 hours: *High*

E: Unit compliance based on highest performing room (Deciduous Trees as Opaque Objects)

A proposed unit is considered to be compliant provided any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on the assessment date. This column will identify the highest performing room within a unit and state compliance for the associated unit based on that room with the assessment carried out with deciduous trees as opaque objects.

Typically unit compliance will be stated for the best performing room per unit only, with lesser performing rooms indicated with a dash (-).

F: SE Hours on March 21st (Without Deciduous Trees)

This column will state the number of hours the assessed room can expect to receive on March 21st with the assessment carried out without deciduous trees.

G: Level of SE on March 21st (Without Deciduous Trees)

BR 209 recommends a minimum sunlight exposure of 1.5 hours for a proposed unit with preference given to main living rooms. BR 209 categorise sunlight exposure as minimum, medium and high, this column will categorise the level of sunlight exposure without deciduous trees using the same criteria as the study with deciduous trees as opaque objects.

H: Unit compliance based on highest performing room (Without Deciduous Trees)

A proposed unit is considered to be compliant provided any habitable room within the unit is capable of receiving at least 1.5 hours of sunlight on March 21st. This column will identify the highest performing room within a unit and state compliance for the associated unit based on that room with the assessment carried out without deciduous trees. Typically only one room per unit will be populated in this column, with lesser performing rooms indicated with a dash (-).

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

C.3.1 SE Results: Block 1

Table No. C.3.1 - Sunlight Exposure Results: Block 1- Level 00							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 1.01	LKD	0.70	Below Minimum	-	0.70	Below Minimum	-
Unit 1.01	Bedroom 1	0.30	Below Minimum	-	0.30	Below Minimum	-
Unit 1.01	Bedroom 2	0.70	Below Minimum	-	0.70	Below Minimum	-
Unit 1.01	Bedroom 3	2.90	Minimum	Compliant	2.90	Minimum	Compliant
Unit 1.02	LKD	1.00	Below Minimum	Non-Compliant	1.00	Below Minimum	Non-Compliant
Unit 1.02	Bedroom 1	0.40	Below Minimum	-	0.40	Below Minimum	-
Unit 1.02	Bedroom 2	0.20	Below Minimum	-	0.20	Below Minimum	-
Unit 1.03	LKD	0.50	Below Minimum	Non-Compliant	0.70	Below Minimum	Non-Compliant
Unit 1.03	Bedroom 1	0.30	Below Minimum	-	0.30	Below Minimum	-
Unit 1.03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 1.04	LKD	0.80	Below Minimum	Non-Compliant	0.80	Below Minimum	Non-Compliant
Unit 1.04	Bedroom 1	0.30	Below Minimum	-	0.30	Below Minimum	-
Unit 1.04	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 1.05	LKD	1.00	Below Minimum	Non-Compliant	1.00	Below Minimum	Non-Compliant
Unit 1.05	Bedroom 1	0.30	Below Minimum	-	0.30	Below Minimum	-
Unit 1.05	Bedroom 2	0.40	Below Minimum	-	0.40	Below Minimum	-
Unit 1.06	LKD	0.80	Below Minimum	-	0.80	Below Minimum	-
Unit 1.06	Bedroom 1	0.30	Below Minimum	-	0.30	Below Minimum	-
Unit 1.06	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 1.06	Bedroom 3	1.60	Minimum	Compliant	1.60	Minimum	Compliant
Unit 1.07	LKD	6.70	High	Compliant	7.00	High	Compliant
Unit 1.07	Bedroom 1	4.20	High	-	4.40	High	-
Unit 1.07	Bedroom 2	4.70	High	-	5.70	High	-
Unit 1.08	LKD	3.30	Medium	Compliant	3.30	Medium	Compliant
Unit 1.08	Bedroom 1	1.90	Minimum	-	2.30	Minimum	-
Unit 1.09	LKD	3.60	Medium	Compliant	3.60	Medium	Compliant
Unit 1.09	Bedroom 1	3.40	Medium	-	3.50	Medium	-
Unit 1.10	LKD	3.60	Medium	Compliant	3.80	Medium	Compliant
Unit 1.10	Bedroom 1	2.50	Minimum	-	2.50	Minimum	-
Unit 1.10	Bedroom 2	2.30	Minimum	-	2.30	Minimum	-
Unit 1.11	LKD	3.80	Medium	-	3.80	Medium	-
Unit 1.11	Bedroom 1	5.50	High	-	5.50	High	-
Unit 1.11	Bedroom 2	6.90	High	Compliant	6.90	High	Compliant
Unit 1.12	LKD	3.80	Medium	-	3.80	Medium	-
Unit 1.12	Bedroom 1	5.10	High	Compliant	5.10	High	Compliant
Unit 1.13	LKD	3.10	Medium	-	3.10	Medium	-
Unit 1.13	Bedroom 1	3.50	Medium	Compliant	3.50	Medium	Compliant
Unit 1.14	LKD	4.80	High	Compliant	4.80	High	Compliant
Unit 1.14	Bedroom 1	3.80	Medium	-	3.80	Medium	-
Unit 1.14	Bedroom 2	1.30	Below Minimum	-	1.30	Below Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.1 - Sunlight Exposure Results: Block 1- Level 01							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 1.15	LKD	4.80	High	-	4.80	High	-
Unit 1.15	Bedroom 1	5.50	High	-	5.50	High	-
Unit 1.15	Bedroom 2	7.00	High	Compliant	7.00	High	Compliant
Unit 1.16	LKD	4.20	High	-	4.20	High	-
Unit 1.16	Bedroom 1	6.70	High	Compliant	6.70	High	Compliant
Unit 1.17	LKD	4.40	High	-	4.40	High	-
Unit 1.17	Bedroom 1	4.90	High	Compliant	4.90	High	Compliant
Unit 1.18	LKD	5.70	High	Compliant	5.70	High	Compliant
Unit 1.18	Bedroom 1	4.30	High	-	4.30	High	-
Unit 1.18	Bedroom 2	1.90	Minimum	-	1.90	Minimum	-
Unit 1.19	LKD	5.10	High	Compliant	5.10	High	Compliant
Unit 1.19	Bedroom 1	0.80	Below Minimum	-	0.80	Below Minimum	-
Unit 1.19	Bedroom 2	0.80	Below Minimum	-	0.80	Below Minimum	-
Unit 1.20	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 1.20	Bedroom 1	0.80	Below Minimum	Non-Compliant	0.80	Below Minimum	Non-Compliant
Unit 1.20	Bedroom 2	0.80	Below Minimum	-	0.80	Below Minimum	-
Unit 1.21	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 1.21	Bedroom 1	0.80	Below Minimum	Non-Compliant	0.80	Below Minimum	Non-Compliant
Unit 1.21	Bedroom 2	0.80	Below Minimum	-	0.80	Below Minimum	-
Unit 1.22	LKD	1.90	Minimum	Compliant	1.90	Minimum	Compliant
Unit 1.22	Bedroom 1	0.80	Below Minimum	-	0.80	Below Minimum	-
Unit 1.22	Bedroom 2	0.80	Below Minimum	-	0.80	Below Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.1 - Sunlight Exposure Results: Block 1- Level 02							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 1.23	LKD	7.30	High	Compliant	7.30	High	Compliant
Unit 1.23	Bedroom 1	6.80	High	-	6.80	High	-
Unit 1.23	Bedroom 2	6.90	High	-	6.90	High	-
Unit 1.24	LKD	5.70	High	-	5.70	High	-
Unit 1.24	Bedroom 1	6.80	High	Compliant	6.80	High	Compliant
Unit 1.25	LKD	6.80	High	Compliant	6.80	High	Compliant
Unit 1.25	Bedroom 1	6.70	High	-	6.70	High	-
Unit 1.26	LKD	7.30	High	Compliant	7.30	High	Compliant
Unit 1.26	Bedroom 1	5.60	High	-	5.60	High	-
Unit 1.26	Bedroom 2	5.20	High	-	5.20	High	-
Unit 1.27	LKD	5.80	High	Compliant	5.80	High	Compliant
Unit 1.27	Bedroom 1	0.40	Below Minimum	-	0.40	Below Minimum	-
Unit 1.27	Bedroom 2	0.30	Below Minimum	-	0.30	Below Minimum	-
Unit 1.28	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 1.28	Bedroom 1	0.50	Below Minimum	Non-Compliant	0.50	Below Minimum	Non-Compliant
Unit 1.28	Bedroom 2	0.40	Below Minimum	-	0.40	Below Minimum	-
Unit 1.29	LKD	0.30	Below Minimum	-	0.30	Below Minimum	-
Unit 1.29	Bedroom 1	3.80	Medium	Compliant	3.80	Medium	Compliant
Unit 1.29	Bedroom 2	3.80	Medium	-	3.80	Medium	-
Unit 1.30	LKD	1.70	Minimum	Compliant	1.70	Minimum	Compliant
Unit 1.30	Bedroom 1	0.50	Below Minimum	-	0.50	Below Minimum	-
Unit 1.30	Bedroom 2	0.40	Below Minimum	-	0.40	Below Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

C.3.2 SE Results: Block 2

Table No. C.3.1 - Sunlight Exposure Results: Block 2- Level 00							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 2.01	LKD	0.20	Below Minimum	-	0.20	Below Minimum	-
Unit 2.01	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.01	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.01	Bedroom 3	3.30	Medium	Compliant	3.30	Medium	Compliant
Unit 2.02	LKD	0.10	Below Minimum	Non-Compliant	0.10	Below Minimum	Non-Compliant
Unit 2.02	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.02	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.03	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 2.03	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.03	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.04	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 2.04	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.04	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.05	LKD	0.10	Below Minimum	Non-Compliant	0.10	Below Minimum	Non-Compliant
Unit 2.05	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.05	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.06	LKD	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.06	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.06	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.06	Bedroom 3	0.10	Below Minimum	Non-Compliant	0.10	Below Minimum	Non-Compliant
Unit 2.07	LKD	2.00	Minimum	-	2.00	Minimum	-
Unit 2.07	Bedroom 1	0.80	Below Minimum	-	3.20	Medium	-
Unit 2.07	Bedroom 2	2.00	Minimum	-	4.80	High	Compliant
Unit 2.07	Bedroom 3	3.50	Medium	Compliant	2.30	Check Trees	-
Unit 2.08	LKD	2.70	Minimum	Compliant	2.70	Minimum	Compliant
Unit 2.08	Bedroom 1	2.10	Minimum	-	2.10	Minimum	-
Unit 2.09	LKD	4.30	High	-	5.50	High	-
Unit 2.09	Bedroom 1	6.10	High	Compliant	6.10	High	Compliant
Unit 2.10	LKD	8.50	High	Compliant	8.50	High	Compliant
Unit 2.10	Bedroom 1	2.90	Minimum	-	5.90	High	-
Unit 2.10	Bedroom 2	0.90	Below Minimum	-	4.30	High	-
Unit 2.10	Bedroom 3	3.50	Medium	-	3.50	Medium	-
Unit 2.11	LKD	1.50	Minimum	-	1.50	Minimum	-
Unit 2.11	Bedroom 1	3.70	Medium	-	3.70	Medium	-
Unit 2.11	Bedroom 2	5.20	High	Compliant	5.20	High	Compliant
Unit 2.11	Bedroom 3	3.90	Medium	-	3.90	Medium	-
Unit 2.12	LKD	2.20	Minimum	-	2.20	Minimum	-
Unit 2.12	Bedroom 1	5.80	High	Compliant	5.80	High	Compliant
Unit 2.13	LKD	4.60	High	-	4.60	High	-
Unit 2.13	Bedroom 1	5.90	High	Compliant	5.90	High	Compliant
Unit 2.14	LKD	8.40	High	Compliant	8.40	High	Compliant
Unit 2.14	Bedroom 1	6.20	High	-	6.20	High	-
Unit 2.14	Bedroom 2	4.70	High	-	4.70	High	-
Unit 2.14	Bedroom 3	3.30	Medium	-	3.30	Medium	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.2 - Sunlight Exposure Results: Block 2- Level 01							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 2.15	LKD	2.50	Minimum	-	2.50	Minimum	-
Unit 2.15	Bedroom 1	4.00	High	-	4.00	High	-
Unit 2.15	Bedroom 2	5.50	High	Compliant	5.50	High	Compliant
Unit 2.15	Bedroom 3	5.00	High	-	5.00	High	-
Unit 2.16	LKD	3.20	Medium	-	3.20	Medium	-
Unit 2.16	Bedroom 1	6.20	High	Compliant	6.20	High	Compliant
Unit 2.17	LKD	5.90	High	-	5.90	High	-
Unit 2.17	Bedroom 1	6.40	High	Compliant	6.40	High	Compliant
Unit 2.18	LKD	9.00	High	Compliant	9.00	High	Compliant
Unit 2.18	Bedroom 1	6.30	High	-	6.30	High	-
Unit 2.18	Bedroom 2	4.70	High	-	4.70	High	-
Unit 2.18	Bedroom 3	4.00	High	-	4.00	High	-
Unit 2.19	LKD	5.00	High	Compliant	5.00	High	Compliant
Unit 2.19	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.19	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.20	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 2.20	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.20	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.21	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 2.21	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.21	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.22	LKD	1.40	Below Minimum	Non-Compliant	1.40	Below Minimum	Non-Compliant
Unit 2.22	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.22	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.2 - Sunlight Exposure Results: Block 2- Level 02							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 2.23	LKD	6.50	High	Compliant	6.50	High	Compliant
Unit 2.23	Bedroom 1	6.10	High	-	6.10	High	-
Unit 2.23	Bedroom 2	6.30	High	-	6.30	High	-
Unit 2.23	Bedroom 3	6.10	High	-	6.10	High	-
Unit 2.24	LKD	5.30	High	-	5.30	High	-
Unit 2.24	Bedroom 1	6.60	High	Compliant	6.60	High	Compliant
Unit 2.25	LKD	7.60	High	Compliant	7.60	High	Compliant
Unit 2.25	Bedroom 1	6.80	High	-	6.80	High	-
Unit 2.26	LKD	9.20	High	Compliant	9.20	High	Compliant
Unit 2.26	Bedroom 1	7.20	High	-	7.20	High	-
Unit 2.26	Bedroom 2	7.20	High	-	7.20	High	-
Unit 2.26	Bedroom 3	7.10	High	-	7.20	High	-
Unit 2.27	LKD	5.20	High	Compliant	5.20	High	Compliant
Unit 2.27	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.27	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.28	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 2.28	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.28	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.29	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 2.29	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.29	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.30	LKD	2.20	Minimum	Compliant	2.20	Minimum	Compliant
Unit 2.30	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 2.30	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

C.3.3 SE Results: Block 3

Table No. C.3.2 - Sunlight Exposure Results: Block 3- Level 00							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Creche	Aged 1-3	0.10	Below Minimum	Non-Compliant	0.10	Below Minimum	Non-Compliant
Creche	Aged 3-5	0.10	Below Minimum	-	0.10	Below Minimum	-
Creche	Baby Room	0.00	Below Minimum	-	0.00	Below Minimum	-

Table No. C.3.3 - Sunlight Exposure Results: Block 3- Level 01							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 3.01	LKD	1.30	Below Minimum	-	1.50	Minimum	-
Unit 3.01	Bedroom 1	2.70	Minimum	Compliant	2.70	Minimum	Compliant
Unit 3.02	LKD	0.70	Below Minimum	-	0.70	Below Minimum	-
Unit 3.02	Bedroom 1	2.40	Minimum	Compliant	2.40	Minimum	Compliant
Unit 3.02	Bedroom 2	2.20	Minimum	-	2.20	Minimum	-
Unit 3.03	LKD	3.40	Medium	Compliant	3.40	Medium	Compliant
Unit 3.03	Bedroom 1	1.90	Minimum	-	1.90	Minimum	-
Unit 3.04	LKD	8.90	High	Compliant	8.90	High	Compliant
Unit 3.04	Bedroom 1	4.10	High	-	4.10	High	-
Unit 3.04	Bedroom 2	3.10	Medium	-	3.10	Medium	-
Unit 3.04	Bedroom 3	3.10	Medium	-	3.10	Medium	-
Unit 3.05	LKD	7.40	High	Compliant	7.40	High	Compliant
Unit 3.05	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
Unit 3.05	Bedroom 2	0.40	Below Minimum	-	1.60	Minimum	-
Unit 3.05	Bedroom 3	0.50	Below Minimum	-	1.70	Minimum	-
Unit 3.06	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.06	Bedroom 1	1.80	Minimum	-	2.60	Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.3 - Sunlight Exposure Results: Block 3- Level 02							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 3.07	LKD	1.60	Minimum	-	1.60	Minimum	-
Unit 3.07	Bedroom 1	2.90	Minimum	Compliant	2.90	Minimum	Compliant
Unit 3.08	LKD	0.70	Below Minimum	-	0.70	Below Minimum	-
Unit 3.08	Bedroom 1	1.60	Minimum	Compliant	1.60	Minimum	Compliant
Unit 3.08	Bedroom 2	1.20	Below Minimum	-	1.20	Below Minimum	-
Unit 3.09	LKD	2.30	Minimum	-	2.30	Minimum	-
Unit 3.09	Bedroom 1	3.70	Medium	-	3.70	Medium	-
Unit 3.09	Bedroom 2	4.10	High	Compliant	4.10	High	Compliant
Unit 3.10	LKD	2.10	Minimum	-	2.10	Minimum	-
Unit 3.10	Bedroom 1	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.10	Bedroom 2	2.90	Minimum	-	2.90	Minimum	-
Unit 3.11	LKD	2.30	Minimum	Compliant	2.30	Minimum	Compliant
Unit 3.11	Bedroom 1	2.30	Minimum	-	2.30	Minimum	-
Unit 3.12	LKD	9.10	High	Compliant	9.10	High	Compliant
Unit 3.12	Bedroom 1	4.10	High	-	4.10	High	-
Unit 3.12	Bedroom 2	3.20	Medium	-	3.20	Medium	-
Unit 3.12	Bedroom 3	3.40	Medium	-	3.40	Medium	-
Unit 3.13	LKD	6.70	High	Compliant	6.70	High	Compliant
Unit 3.13	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
Unit 3.13	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
Unit 3.13	Bedroom 3	1.70	Minimum	-	1.70	Minimum	-
Unit 3.14	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.14	Bedroom 1	2.40	Minimum	-	2.40	Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.3 - Sunlight Exposure Results: Block 3- Level 03							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 3.15	LKD	1.60	Minimum	-	1.60	Minimum	-
Unit 3.15	Bedroom 1	2.90	Minimum	Compliant	2.90	Minimum	Compliant
Unit 3.16	LKD	0.70	Below Minimum	-	0.70	Below Minimum	-
Unit 3.16	Bedroom 1	1.60	Minimum	Compliant	1.60	Minimum	Compliant
Unit 3.16	Bedroom 2	1.20	Below Minimum	-	1.20	Below Minimum	-
Unit 3.17	LKD	2.30	Minimum	-	2.30	Minimum	-
Unit 3.17	Bedroom 1	3.70	Medium	-	3.70	Medium	-
Unit 3.17	Bedroom 2	4.10	High	Compliant	4.10	High	Compliant
Unit 3.18	LKD	2.80	Minimum	-	2.80	Minimum	-
Unit 3.18	Bedroom 1	4.10	High	Compliant	4.10	High	Compliant
Unit 3.18	Bedroom 2	4.10	High	-	4.10	High	-
Unit 3.19	LKD	3.20	Medium	-	3.20	Medium	-
Unit 3.19	Bedroom 1	3.30	Medium	Compliant	3.30	Medium	Compliant
Unit 3.20	LKD	9.10	High	Compliant	9.10	High	Compliant
Unit 3.20	Bedroom 1	4.30	High	-	4.30	High	-
Unit 3.20	Bedroom 2	3.30	Medium	-	3.30	Medium	-
Unit 3.20	Bedroom 3	3.40	Medium	-	3.40	Medium	-
Unit 3.21	LKD	6.70	High	Compliant	6.70	High	Compliant
Unit 3.21	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
Unit 3.21	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
Unit 3.21	Bedroom 3	1.70	Minimum	-	1.70	Minimum	-
Unit 3.22	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.22	Bedroom 1	2.40	Minimum	-	2.40	Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.3 - Sunlight Exposure Results: Block 3- Level 04							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 3.23	LKD	1.60	Minimum	-	1.60	Minimum	-
Unit 3.23	Bedroom 1	2.90	Minimum	Compliant	2.90	Minimum	Compliant
Unit 3.24	LKD	0.70	Below Minimum	-	0.70	Below Minimum	-
Unit 3.24	Bedroom 1	1.60	Minimum	Compliant	1.60	Minimum	Compliant
Unit 3.24	Bedroom 2	1.20	Below Minimum	-	1.20	Below Minimum	-
Unit 3.25	LKD	2.30	Minimum	-	2.30	Minimum	-
Unit 3.25	Bedroom 1	3.70	Medium	-	3.70	Medium	-
Unit 3.25	Bedroom 2	4.10	High	Compliant	4.10	High	Compliant
Unit 3.26	LKD	2.80	Minimum	-	2.80	Minimum	-
Unit 3.26	Bedroom 1	5.20	High	Compliant	5.20	High	Compliant
Unit 3.26	Bedroom 2	5.10	High	-	5.10	High	-
Unit 3.27	LKD	4.00	High	-	4.00	High	-
Unit 3.27	Bedroom 1	4.30	High	Compliant	4.30	High	Compliant
Unit 3.28	LKD	9.10	High	Compliant	9.10	High	Compliant
Unit 3.28	Bedroom 1	5.00	High	-	5.00	High	-
Unit 3.28	Bedroom 2	3.40	Medium	-	3.40	Medium	-
Unit 3.28	Bedroom 3	3.40	Medium	-	3.40	Medium	-
Unit 3.29	LKD	6.70	High	Compliant	6.70	High	Compliant
Unit 3.29	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
Unit 3.29	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
Unit 3.29	Bedroom 3	1.70	Minimum	-	1.70	Minimum	-
Unit 3.30	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.30	Bedroom 1	2.40	Minimum	-	2.40	Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.3 - Sunlight Exposure Results: Block 3- Level 05							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 3.31	LKD	1.60	Minimum	-	1.60	Minimum	-
Unit 3.31	Bedroom 1	2.90	Minimum	Compliant	2.90	Minimum	Compliant
Unit 3.32	LKD	0.70	Below Minimum	-	0.70	Below Minimum	-
Unit 3.32	Bedroom 1	1.60	Minimum	Compliant	1.60	Minimum	Compliant
Unit 3.32	Bedroom 2	1.20	Below Minimum	-	1.20	Below Minimum	-
Unit 3.33	LKD	2.30	Minimum	-	2.30	Minimum	-
Unit 3.33	Bedroom 1	3.70	Medium	-	3.70	Medium	-
Unit 3.33	Bedroom 2	4.10	High	Compliant	4.10	High	Compliant
Unit 3.34	LKD	2.80	Minimum	-	2.80	Minimum	-
Unit 3.34	Bedroom 1	5.20	High	Compliant	5.20	High	Compliant
Unit 3.34	Bedroom 2	5.10	High	-	5.10	High	-
Unit 3.35	LKD	4.00	High	-	4.00	High	-
Unit 3.35	Bedroom 1	4.30	High	Compliant	4.30	High	Compliant
Unit 3.36	LKD	9.10	High	Compliant	9.10	High	Compliant
Unit 3.36	Bedroom 1	5.00	High	-	5.00	High	-
Unit 3.36	Bedroom 2	3.40	Medium	-	3.40	Medium	-
Unit 3.36	Bedroom 3	3.40	Medium	-	3.40	Medium	-
Unit 3.37	LKD	6.70	High	Compliant	6.70	High	Compliant
Unit 3.37	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
Unit 3.37	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
Unit 3.37	Bedroom 3	1.70	Minimum	-	1.70	Minimum	-
Unit 3.38	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.38	Bedroom 1	2.40	Minimum	-	2.40	Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.3 - Sunlight Exposure Results: Block 3- Level 06							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 3.39	LKD	1.60	Minimum	-	1.60	Minimum	-
Unit 3.39	Bedroom 1	2.90	Minimum	Compliant	2.90	Minimum	Compliant
Unit 3.40	LKD	0.70	Below Minimum	-	0.70	Below Minimum	-
Unit 3.40	Bedroom 1	1.70	Minimum	Compliant	1.70	Minimum	Compliant
Unit 3.40	Bedroom 2	1.20	Below Minimum	-	1.20	Below Minimum	-
Unit 3.41	LKD	2.60	Minimum	-	2.60	Minimum	-
Unit 3.41	Bedroom 1	3.60	Medium	-	3.60	Medium	-
Unit 3.41	Bedroom 2	4.10	High	Compliant	4.10	High	Compliant
Unit 3.42	LKD	3.00	Medium	-	3.00	Medium	-
Unit 3.42	Bedroom 1	5.20	High	Compliant	5.20	High	Compliant
Unit 3.42	Bedroom 2	5.10	High	-	5.10	High	-
Unit 3.43	LKD	4.80	High	Compliant	4.80	High	Compliant
Unit 3.43	Bedroom 1	4.40	High	-	4.40	High	-
Unit 3.44	LKD	9.10	High	Compliant	9.10	High	Compliant
Unit 3.44	Bedroom 1	5.00	High	-	5.00	High	-
Unit 3.44	Bedroom 2	3.40	Medium	-	3.40	Medium	-
Unit 3.44	Bedroom 3	3.40	Medium	-	3.40	Medium	-
Unit 3.45	LKD	7.20	High	Compliant	7.20	High	Compliant
Unit 3.45	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
Unit 3.45	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
Unit 3.45	Bedroom 3	1.70	Minimum	-	1.70	Minimum	-
Unit 3.46	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.46	Bedroom 1	2.50	Minimum	-	2.50	Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.3 - Sunlight Exposure Results: Block 3- Level 07							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 3.47	LKD	1.50	Minimum	-	1.50	Minimum	-
Unit 3.47	Bedroom 1	2.90	Minimum	Compliant	2.90	Minimum	Compliant
Unit 3.48	LKD	2.60	Minimum	Compliant	2.60	Minimum	Compliant
Unit 3.48	Bedroom 1	1.60	Minimum	-	1.60	Minimum	-
Unit 3.48	Bedroom 2	2.60	Minimum	-	2.60	Minimum	-
Unit 3.49	LKD	2.60	Minimum	-	2.60	Minimum	-
Unit 3.49	Bedroom 1	3.60	Medium	-	3.60	Medium	-
Unit 3.49	Bedroom 2	4.10	High	Compliant	4.10	High	Compliant
Unit 3.50	LKD	3.00	Medium	-	3.00	Medium	-
Unit 3.50	Bedroom 1	5.20	High	Compliant	5.20	High	Compliant
Unit 3.50	Bedroom 2	5.10	High	-	5.10	High	-
Unit 3.51	LKD	4.80	High	Compliant	4.80	High	Compliant
Unit 3.51	Bedroom 1	4.40	High	-	4.40	High	-
Unit 3.52	LKD	9.50	High	Compliant	9.50	High	Compliant
Unit 3.52	Bedroom 1	5.00	High	-	5.00	High	-
Unit 3.52	Bedroom 2	3.40	Medium	-	3.40	Medium	-
Unit 3.52	Bedroom 3	3.40	Medium	-	3.40	Medium	-
Unit 3.53	LKD	8.10	High	Compliant	8.10	High	Compliant
Unit 3.53	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
Unit 3.53	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
Unit 3.53	Bedroom 3	1.70	Minimum	-	1.70	Minimum	-
Unit 3.54	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.54	Bedroom 1	2.50	Minimum	-	2.50	Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.3 - Sunlight Exposure Results: Block 3- Level 08							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 3.55	LKD	1.50	Minimum	-	1.50	Minimum	-
Unit 3.55	Bedroom 1	2.90	Minimum	Compliant	2.90	Minimum	Compliant
Unit 3.56	LKD	2.40	Minimum	-	2.40	Minimum	-
Unit 3.56	Bedroom 1	2.70	Minimum	Compliant	2.70	Minimum	Compliant
Unit 3.56	Bedroom 2	2.40	Minimum	-	2.40	Minimum	-
Unit 3.57	LKD	4.90	High	Compliant	4.90	High	Compliant
Unit 3.57	Bedroom 1	4.90	High	-	4.90	High	-
Unit 3.57	Bedroom 2	4.90	High	-	4.90	High	-
Unit 3.58	LKD	4.30	High	-	4.30	High	-
Unit 3.58	Bedroom 1	5.10	High	Compliant	5.10	High	Compliant
Unit 3.58	Bedroom 2	5.10	High	-	5.10	High	-
Unit 3.59	LKD	5.20	High	Compliant	5.20	High	Compliant
Unit 3.59	Bedroom 1	5.10	High	-	5.10	High	-
Unit 3.60	LKD	9.50	High	Compliant	9.50	High	Compliant
Unit 3.60	Bedroom 1	2.80	Minimum	-	2.80	Minimum	-
Unit 3.60	Bedroom 2	8.10	High	-	8.10	High	-
Unit 3.60	Bedroom 3	7.70	High	-	7.70	High	-
Unit 3.61	LKD	3.10	Medium	Compliant	3.10	Medium	Compliant
Unit 3.61	Bedroom 1	2.60	Minimum	-	2.60	Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.

For floor plans of the assessed units please refer to section C.1 on page 64.

C.3.4 SE Results: Block 4

Table No. C.3.3 - Sunlight Exposure Results: Block 4- Level 01							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 4.01	LKD	2.90	Minimum	-	2.90	Minimum	-
Unit 4.01	Bedroom 1	4.40	High	-	4.40	High	-
Unit 4.01	Bedroom 2	5.00	High	Compliant	5.00	High	Compliant
Unit 4.02	LKD	6.30	High	Compliant	6.30	High	Compliant
Unit 4.02	Bedroom 1	1.10	Below Minimum	-	1.10	Below Minimum	-
Unit 4.02	Bedroom 2	0.40	Below Minimum	-	0.40	Below Minimum	-
Unit 4.03	LKD	3.40	Medium	-	3.40	Medium	-
Unit 4.03	Bedroom 1	3.50	Medium	Compliant	3.50	Medium	Compliant
Unit 4.04	LKD	3.60	Medium	-	3.60	Medium	-
Unit 4.04	Bedroom 1	5.60	High	-	5.60	High	-
Unit 4.04	Bedroom 2	6.10	High	Compliant	6.10	High	Compliant
Unit 4.05	LKD	3.90	Medium	-	3.90	Medium	-
Unit 4.05	Bedroom 1	4.80	High	-	4.80	High	-
Unit 4.05	Bedroom 2	5.80	High	Compliant	5.80	High	Compliant
Unit 4.06	LKD	0.50	Below Minimum	Non-Compliant	0.50	Below Minimum	Non-Compliant
Unit 4.06	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.06	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.06	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.07	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.07	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.07	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.08	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.08	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.08	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.09	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.09	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.09	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.09	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.10	LKD	2.90	Minimum	-	2.90	Minimum	-
Unit 4.10	Bedroom 1	5.10	High	Compliant	5.10	High	Compliant
Unit 4.11	LKD	2.90	Minimum	-	2.90	Minimum	-
Unit 4.11	Bedroom 1	4.40	High	Compliant	4.40	High	Compliant

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.4 - Sunlight Exposure Results: Block 4- Level 02							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 4.12	LKD	2.90	Minimum	-	2.90	Minimum	-
Unit 4.12	Bedroom 1	4.40	High	-	4.40	High	-
Unit 4.12	Bedroom 2	5.00	High	Compliant	5.00	High	Compliant
Unit 4.13	LKD	9.20	High	Compliant	9.20	High	Compliant
Unit 4.13	Bedroom 1	3.60	Medium	-	3.60	Medium	-
Unit 4.13	Bedroom 2	2.10	Minimum	-	2.10	Minimum	-
Unit 4.14	LKD	4.30	High	-	4.30	High	-
Unit 4.14	Bedroom 1	5.30	High	Compliant	5.30	High	Compliant
Unit 4.15	LKD	3.60	Medium	-	3.60	Medium	-
Unit 4.15	Bedroom 1	6.80	High	Compliant	6.80	High	Compliant
Unit 4.15	Bedroom 2	6.60	High	-	6.60	High	-
Unit 4.16	LKD	4.10	High	-	4.10	High	-
Unit 4.16	Bedroom 1	5.00	High	-	5.00	High	-
Unit 4.16	Bedroom 2	6.00	High	Compliant	6.00	High	Compliant
Unit 4.17	LKD	0.70	Below Minimum	Non-Compliant	0.70	Below Minimum	Non-Compliant
Unit 4.17	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.17	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.17	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.18	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.18	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.18	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.19	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.19	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.19	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.20	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.20	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.20	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.20	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.21	LKD	2.90	Minimum	-	2.90	Minimum	-
Unit 4.21	Bedroom 1	5.10	High	Compliant	5.10	High	Compliant
Unit 4.22	LKD	2.90	Minimum	-	2.90	Minimum	-
Unit 4.22	Bedroom 1	4.40	High	Compliant	4.40	High	Compliant

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.4 - Sunlight Exposure Results: Block 4- Level 03							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 4.23	LKD	2.90	Minimum	-	2.90	Minimum	-
Unit 4.23	Bedroom 1	4.40	High	-	4.40	High	-
Unit 4.23	Bedroom 2	5.00	High	Compliant	5.00	High	Compliant
Unit 4.24	LKD	9.50	High	Compliant	9.50	High	Compliant
Unit 4.24	Bedroom 1	3.90	Medium	-	3.90	Medium	-
Unit 4.24	Bedroom 2	2.10	Minimum	-	2.10	Minimum	-
Unit 4.25	LKD	4.40	High	-	4.40	High	-
Unit 4.25	Bedroom 1	5.70	High	Compliant	5.70	High	Compliant
Unit 4.26	LKD	3.90	Medium	-	3.90	Medium	-
Unit 4.26	Bedroom 1	7.00	High	Compliant	7.00	High	Compliant
Unit 4.26	Bedroom 2	6.80	High	-	6.80	High	-
Unit 4.27	LKD	4.20	High	-	4.20	High	-
Unit 4.27	Bedroom 1	5.20	High	-	5.20	High	-
Unit 4.27	Bedroom 2	6.20	High	Compliant	6.20	High	Compliant
Unit 4.28	LKD	0.90	Below Minimum	Non-Compliant	0.90	Below Minimum	Non-Compliant
Unit 4.28	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.28	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.28	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.29	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.29	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.29	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.30	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.30	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.30	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.31	LKD	1.60	Minimum	Compliant	1.60	Minimum	Compliant
Unit 4.31	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.31	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.31	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.32	LKD	4.00	High	-	4.00	High	-
Unit 4.32	Bedroom 1	5.10	High	Compliant	5.10	High	Compliant
Unit 4.33	LKD	3.70	Medium	-	3.70	Medium	-
Unit 4.33	Bedroom 1	5.10	High	Compliant	5.10	High	Compliant

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.4 - Sunlight Exposure Results: Block 4- Level 04							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 4.34	LKD	3.30	Medium	-	3.30	Medium	-
Unit 4.34	Bedroom 1	5.00	High	Compliant	5.00	High	Compliant
Unit 4.34	Bedroom 2	5.00	High	-	5.00	High	-
Unit 4.35	LKD	9.50	High	Compliant	9.50	High	Compliant
Unit 4.35	Bedroom 1	4.80	High	-	4.80	High	-
Unit 4.35	Bedroom 2	2.90	Minimum	-	2.90	Minimum	-
Unit 4.36	LKD	5.30	High	-	5.30	High	-
Unit 4.36	Bedroom 1	6.20	High	Compliant	6.20	High	Compliant
Unit 4.37	LKD	4.90	High	-	4.90	High	-
Unit 4.37	Bedroom 1	7.20	High	Compliant	7.20	High	Compliant
Unit 4.37	Bedroom 2	7.10	High	-	7.10	High	-
Unit 4.38	LKD	5.80	High	-	5.80	High	-
Unit 4.38	Bedroom 1	5.40	High	-	5.40	High	-
Unit 4.38	Bedroom 2	6.40	High	Compliant	6.40	High	Compliant
Unit 4.39	LKD	1.10	Below Minimum	Non-Compliant	1.10	Below Minimum	Non-Compliant
Unit 4.39	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.39	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.39	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.40	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.40	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.40	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.41	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.41	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.41	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.
** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.
*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. C.3.4 - Sunlight Exposure Results: Block 4- Level 05							
Unit Number	Room Description	Deciduous Trees as Opaque Objects*			Without Deciduous Trees*		
		SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**	SE Hours on March 21st	Level of SE on March 21st***	Unit compliance based on highest performing room**
Unit 4.42	LKD	8.20	High	Compliant	8.20	High	Compliant
Unit 4.42	Bedroom 1	7.50	High	-	7.50	High	-
Unit 4.42	Bedroom 2	7.40	High	-	7.40	High	-
Unit 4.43	LKD	7.00	High	Compliant	7.00	High	Compliant
Unit 4.43	Bedroom 1	5.80	High	-	5.80	High	-
Unit 4.43	Bedroom 2	6.70	High	-	6.70	High	-
Unit 4.44	LKD	1.40	Below Minimum	Non-Compliant	1.40	Below Minimum	Non-Compliant
Unit 4.44	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.44	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.44	Bedroom 3	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.45	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.45	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.45	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.46	LKD	0.00	Below Minimum	Non-Compliant	0.00	Below Minimum	Non-Compliant
Unit 4.46	Bedroom 1	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.46	Bedroom 2	0.00	Below Minimum	-	0.00	Below Minimum	-
Unit 4.47	LKD	5.40	High	Compliant	5.40	High	Compliant
Unit 4.47	Bedroom 1	4.60	High	-	4.60	High	-
Unit 4.47	Bedroom 2	3.30	Medium	-	3.30	Medium	-
Unit 4.48	LKD	9.50	High	Compliant	9.50	High	Compliant
Unit 4.48	Bedroom 1	3.60	Medium	-	3.60	Medium	-
Unit 4.48	Bedroom 2	1.60	Minimum	-	1.60	Minimum	-
Unit 4.49	LKD	8.10	High	Compliant	8.10	High	Compliant
Unit 4.49	Bedroom 1	6.50	High	-	6.50	High	-

* Rooms are tested with deciduous trees as opaque objects and without deciduous trees to account for the range of possible sunlight hours.

** The BRE Guidelines recommend that for a unit to be compliant any room within the unit should receive a minimum of 1.5 hours of direct sunlight on March 21st, preferably a main living room. The SE circa compliance rates can be found in section 5.2.2 on page 31.

*** For the interpretation of levels of Sunlight Exposure please refer to “3.3 Definition of Levels of Sunlight Exposure” on page 13.

For floor plans of the assessed units please refer to section C.1 on page 64.

C.4 Sun On Ground (SOG) in Proposed Outdoor Amenity Areas

Below is an example of the table used to describe SOG in proposed gardens and amenity spaces.

	Table Example. C.4 - Scheme Performance SOG				
Assigned Area Number	Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended Minimum	Level of Compliance with BRE Guidelines	Meets BR 209 Criteria
A	**B**	**C**	**D**	**E**	**F**

A: Assigned Area Number

This column indicates the number that 3DDB have assigned to the assessed areas, which is included for the sole purpose of aiding in the identification of the corresponding space shown in the corresponding figure.

B: Assessed Area

This column identifies the assessed garden/amenity area.

C: Area Capable of Receiving 2 Hours of Sunlight on March 21st

The percentage of the proposed area that can receive more than 2 hours of sunlight on March 21st.

D: Recommended Minimum

The BRE Guidelines state that the percentage of a garden/amenity area that can receive more than 2 hours of sunlight on March 21st should be 50%. The target value for all spaces is set to 50%.

E: Level of Compliance with BRE Guidelines

This column states the compliance of the assessed space with the *BRE Target Value*. If the assessed garden or amenity area complies with the BRE Guidelines this cell will state "*BRE Compliant*". If the garden or amenity area does not meet the criteria as set out in the BRE Guidelines, a percentage of compliance with the *recommended minimum* will be stated.

F: Meets BR 209 Criteria

This column states if the assessed area achieves the recommended level of sunlight on March 21st as per BR 209.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

C.4.1 Sun On Ground in Proposed Outdoor Amenity Areas

Table No. C.4.1 - SOG in Proposed Outdoor Amenity Areas Results:					
Assigned Area Number	Assessed Area	Area Capable of Receiving 2 Hours of Sunlight on March 21st	Recommended minimum	Level of Compliance with BRE Guidelines*	Meets BR 209 Criteria*
1	Communal Amenity Space	97.81%	50.00%	BRE Compliant	Yes
2	Public Open Space (inc. Plaza)	94.35%	50.00%	BRE Compliant	Yes
3	Creche Play Area	72.88%	50.00%	BRE Compliant	Yes

* The BRE Guidelines recommend that for a garden or amenity to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on March 21st.

** Average values have been calculated by considering all the relevant areas as a singular area and calculating what portion of the spaces as a whole can receive at least two hours of sunlight on March 21st.

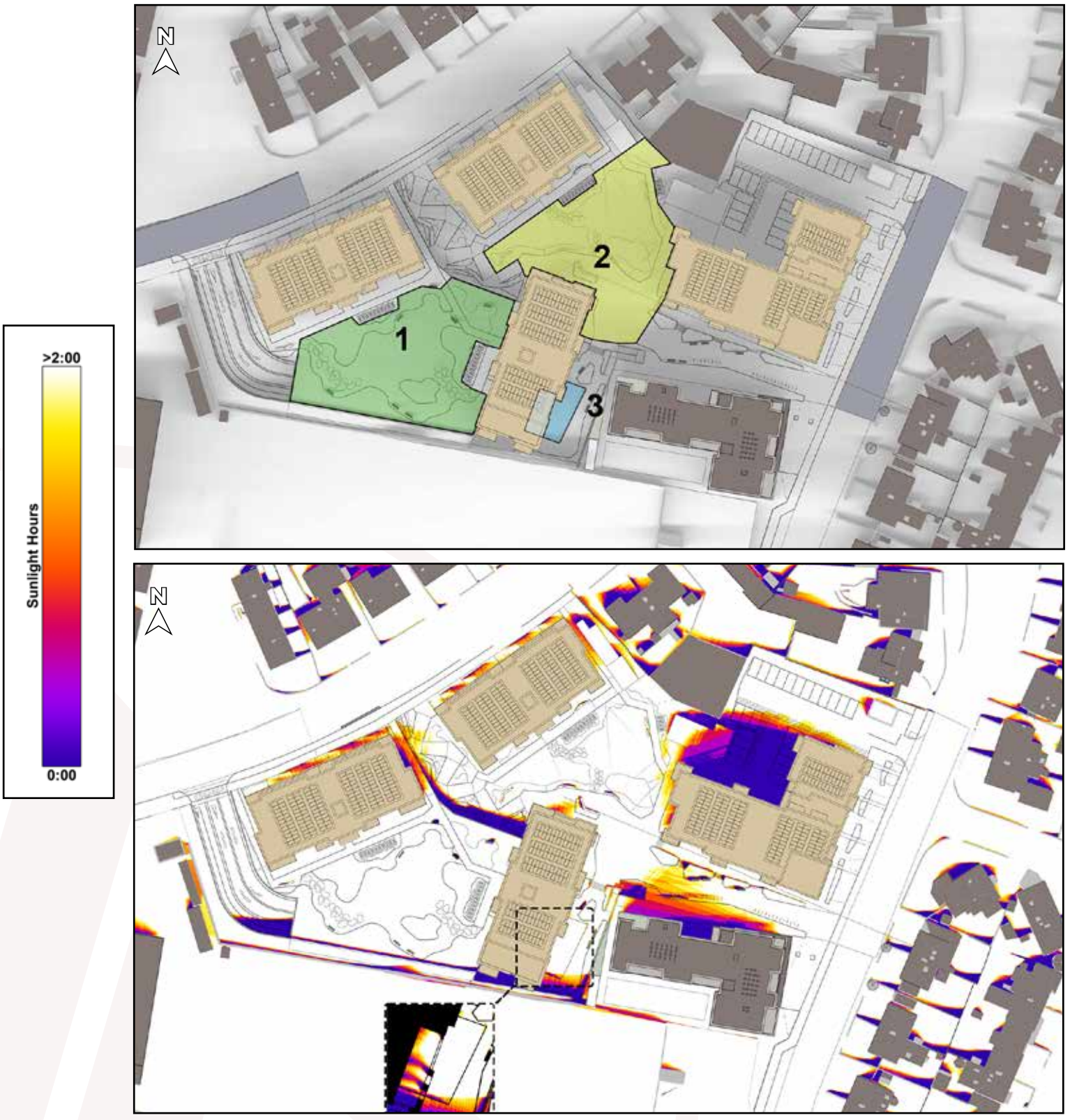


Figure C.27: Indication of the amenity areas that have been analysed (Top), Area capable of receiving 2 hours of sunlight on March 21st shown in white (Bottom)

D.0 Supplementary Study Results

D.1 SDA study, under the I.S. EN 17037 criteria

Below is an example of the table used to describe the supplementary study results for proposed units in the assessment of SDA under the I.S. EN 17037 criteria.

Table Example. D.1 - Supplementary SDA Results (I.S. EN 17037 criteria)						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria
		Area above 300 Lux	Area above 100 Lux	Area above 300 Lux	Area above 100 Lux	
A	**B**	**C**	**D**	**E**	**F**	**G**

A: Unit Number

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

B: Room Description

Room Description details which room in the unit has been assessed, e.g. bedroom, LKD, etc.

C: % of area above 300 Lux (No Trees)

I.S. EN 17037 recommends at least 50% of the working plane receives above 300 lux for at least half the daylight hours.

This column states percentage of the working plane of the assessed room that is capable of receiving more than 300 lux for at least half the daylight hours when the assessment is carried out without trees in the analytical model.

D: % of area above 100 Lux (No Trees)

I.S. EN 17037 recommends at least 95% of the working plane receives above 100 lux for at least half the daylight hours.

This column states percentage of the working plane of the assessed room that is capable of receiving more than 100 lux for at least half the daylight hours when the assessment is carried out without trees in the analytical model.

E: % of area above 300 Lux (Winter Trees)

I.S. EN 17037 recommends at least 50% of the working plane receives above 300 lux for at least half the daylight hours.

This column states percentage of the working plane of the assessed room that is capable of receiving more than 300 lux for at least half the daylight hours with the foliage of deciduous trees varied to account for summer and winter conditions, i.e. full leaf and bare branch.

F: % of area above 100 Lux (Winter Trees)

I.S. EN 17037 recommends at least 95% of the working plane receives above 100 lux for at least half the daylight hours.

This column states percentage of the working plane of the assessed room that is capable of receiving more than 100 lux for at least half the daylight hours with the foliage of deciduous trees varied to account for summer and winter conditions.

G: Compliance with I.S. EN 17037 Criteria

This column states if the assessed room achieves the recommended level of daylight as per I.S. EN 17037 with consideration to the various tree states.

If the recommended lux levels are achieved on the working plane, for half the daylight hours, both with and without trees, this column will state: *'Compliant'*.

If the recommended lux levels are not achieved on the working plane, for half the daylight hours, both with and without trees, this column will state: *'Non-compliant'*.

If the recommended lux levels are achieved on the working plane, for half the daylight hours, without trees but are not achieved with trees, this column will state: *'Trees affecting compliance'*.

Compliance rates will be stated for SDA compliance with trees in all of the above states.

It should be noted that the figures displayed in the table of results have been rounded off. A manual calculation of these figures may yield a negligible difference and should not be considered an error.

D.1.1 Supplementary SDA Results (I.S. EN 17037 criteria): Block 1

Table No. D.1.1 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 1- Level 00						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 1.01	LKD	42%	100%	26%	99%	Non-compliant
Unit 1.01	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.01	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.01	Bedroom 3	91%	100%	84%	100%	Compliant
Unit 1.02	LKD	38%	100%	27%	100%	Non-compliant
Unit 1.02	Bedroom 1	83%	100%	71%	100%	Compliant
Unit 1.02	Bedroom 2	100%	100%	99%	100%	Compliant
Unit 1.03	LKD	31%	100%	27%	100%	Non-compliant
Unit 1.03	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.03	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.04	LKD	41%	100%	36%	100%	Non-compliant
Unit 1.04	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.04	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.05	LKD	50%	100%	40%	100%	Trees affecting compliance
Unit 1.05	Bedroom 1	85%	100%	78%	100%	Compliant
Unit 1.05	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.06	LKD	48%	100%	29%	100%	Non-compliant
Unit 1.06	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.06	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.06	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 1.07	LKD	46%	100%	42%	99%	Non-compliant
Unit 1.07	Bedroom 1	45%	100%	26%	100%	Non-compliant
Unit 1.07	Bedroom 2	59%	100%	44%	100%	Trees affecting compliance
Unit 1.08	LKD	46%	100%	43%	100%	Non-compliant
Unit 1.08	Bedroom 1	30%	100%	24%	100%	Non-compliant
Unit 1.09	LKD	43%	100%	33%	96%	Non-compliant
Unit 1.09	Bedroom 1	29%	100%	12%	95%	Non-compliant
Unit 1.10	LKD	36%	94%	17%	77%	Non-compliant
Unit 1.10	Bedroom 1	32%	100%	17%	100%	Non-compliant
Unit 1.10	Bedroom 2	39%	100%	24%	100%	Non-compliant
Unit 1.11	LKD	83%	100%	82%	100%	Compliant
Unit 1.11	Bedroom 1	77%	100%	76%	100%	Compliant
Unit 1.11	Bedroom 2	98%	100%	96%	100%	Compliant
Unit 1.12	LKD	60%	100%	59%	100%	Compliant
Unit 1.12	Bedroom 1	86%	100%	80%	100%	Compliant
Unit 1.13	LKD	53%	100%	52%	100%	Compliant
Unit 1.13	Bedroom 1	85%	100%	76%	100%	Compliant
Unit 1.14	LKD	81%	100%	77%	100%	Compliant
Unit 1.14	Bedroom 1	62%	100%	55%	100%	Compliant
Unit 1.14	Bedroom 2	78%	100%	67%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.1 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 1- Level 01						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 1.15	LKD	92%	100%	92%	100%	Compliant
Unit 1.15	Bedroom 1	88%	100%	83%	100%	Compliant
Unit 1.15	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.16	LKD	69%	100%	68%	100%	Compliant
Unit 1.16	Bedroom 1	91%	100%	88%	100%	Compliant
Unit 1.17	LKD	60%	100%	60%	100%	Compliant
Unit 1.17	Bedroom 1	89%	100%	88%	100%	Compliant
Unit 1.18	LKD	88%	100%	86%	100%	Compliant
Unit 1.18	Bedroom 1	61%	100%	56%	100%	Compliant
Unit 1.18	Bedroom 2	87%	100%	81%	100%	Compliant
Unit 1.19	LKD	81%	100%	76%	100%	Compliant
Unit 1.19	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.19	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.20	LKD	40%	100%	38%	100%	Non-compliant
Unit 1.20	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.20	Bedroom 2	100%	100%	99%	100%	Compliant
Unit 1.21	LKD	47%	100%	43%	100%	Non-compliant
Unit 1.21	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.21	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.22	LKD	78%	100%	74%	100%	Compliant
Unit 1.22	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.22	Bedroom 2	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.1 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 1- Level 02						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 1.23	LKD	97%	100%	96%	100%	Compliant
Unit 1.23	Bedroom 1	74%	100%	72%	100%	Compliant
Unit 1.23	Bedroom 2	100%	100%	98%	100%	Compliant
Unit 1.24	LKD	87%	100%	87%	100%	Compliant
Unit 1.24	Bedroom 1	71%	100%	71%	100%	Compliant
Unit 1.25	LKD	79%	100%	79%	100%	Compliant
Unit 1.25	Bedroom 1	68%	100%	68%	100%	Compliant
Unit 1.26	LKD	93%	100%	93%	100%	Compliant
Unit 1.26	Bedroom 1	50%	100%	49%	100%	Trees affecting compliance
Unit 1.26	Bedroom 2	74%	100%	69%	100%	Compliant
Unit 1.27	LKD	80%	100%	77%	100%	Compliant
Unit 1.27	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.27	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.28	LKD	65%	100%	64%	100%	Compliant
Unit 1.28	Bedroom 1	98%	100%	98%	100%	Compliant
Unit 1.28	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.29	LKD	66%	100%	65%	100%	Compliant
Unit 1.29	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.29	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 1.30	LKD	72%	100%	72%	100%	Compliant
Unit 1.30	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 1.30	Bedroom 2	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.1 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 2- Level 00						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 2.01	LKD	64%	100%	55%	100%	Compliant
Unit 2.01	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.01	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.01	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 2.02	LKD	39%	100%	24%	100%	Non-compliant
Unit 2.02	Bedroom 1	76%	100%	64%	100%	Compliant
Unit 2.02	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.03	LKD	36%	100%	25%	100%	Non-compliant
Unit 2.03	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.03	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.04	LKD	47%	100%	28%	100%	Non-compliant
Unit 2.04	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.04	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.05	LKD	60%	100%	44%	100%	Trees affecting compliance
Unit 2.05	Bedroom 1	76%	100%	59%	100%	Compliant
Unit 2.05	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.06	LKD	72%	100%	65%	100%	Compliant
Unit 2.06	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.06	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.06	Bedroom 3	91%	100%	81%	100%	Compliant
Unit 2.07	LKD	75%	100%	65%	100%	Compliant
Unit 2.07	Bedroom 1	100%	100%	60%	100%	Compliant
Unit 2.07	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.07	Bedroom 3	87%	100%	73%	100%	Compliant
Unit 2.08	LKD	82%	100%	70%	100%	Compliant
Unit 2.08	Bedroom 1	89%	100%	77%	100%	Compliant
Unit 2.09	LKD	93%	100%	77%	100%	Compliant
Unit 2.09	Bedroom 1	100%	100%	74%	100%	Compliant
Unit 2.10	LKD	100%	100%	100%	100%	Compliant
Unit 2.10	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.10	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.10	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 2.11	LKD	78%	100%	75%	100%	Compliant
Unit 2.11	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.11	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.11	Bedroom 3	92%	100%	90%	100%	Compliant
Unit 2.12	LKD	85%	100%	84%	100%	Compliant
Unit 2.12	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.13	LKD	97%	100%	92%	100%	Compliant
Unit 2.13	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.14	LKD	100%	100%	100%	100%	Compliant
Unit 2.14	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.14	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.14	Bedroom 3	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.2 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 2- Level 01						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 2.15	LKD	85%	100%	84%	100%	Compliant
Unit 2.15	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.15	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.15	Bedroom 3	98%	100%	98%	100%	Compliant
Unit 2.16	LKD	90%	100%	87%	100%	Compliant
Unit 2.16	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.17	LKD	100%	100%	100%	100%	Compliant
Unit 2.17	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.18	LKD	100%	100%	100%	100%	Compliant
Unit 2.18	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.18	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.18	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 2.19	LKD	95%	100%	88%	100%	Compliant
Unit 2.19	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.19	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.20	LKD	36%	100%	34%	100%	Non-compliant
Unit 2.20	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.20	Bedroom 2	100%	100%	97%	100%	Compliant
Unit 2.21	LKD	42%	100%	41%	100%	Non-compliant
Unit 2.21	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.21	Bedroom 2	100%	100%	99%	100%	Compliant
Unit 2.22	LKD	70%	100%	67%	100%	Compliant
Unit 2.22	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.22	Bedroom 2	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.2 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 2- Level 02						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 2.23	LKD	95%	100%	94%	100%	Compliant
Unit 2.23	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.23	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.23	Bedroom 3	98%	100%	98%	100%	Compliant
Unit 2.24	LKD	97%	100%	97%	100%	Compliant
Unit 2.24	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.25	LKD	100%	100%	100%	100%	Compliant
Unit 2.25	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.26	LKD	100%	100%	100%	100%	Compliant
Unit 2.26	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.26	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.26	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 2.27	LKD	82%	100%	79%	100%	Compliant
Unit 2.27	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 2.27	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.28	LKD	59%	100%	58%	100%	Compliant
Unit 2.28	Bedroom 1	94%	100%	92%	100%	Compliant
Unit 2.28	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.29	LKD	63%	100%	61%	100%	Compliant
Unit 2.29	Bedroom 1	100%	100%	98%	100%	Compliant
Unit 2.29	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 2.30	LKD	70%	100%	68%	100%	Compliant
Unit 2.30	Bedroom 1	99%	100%	99%	100%	Compliant
Unit 2.30	Bedroom 2	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

D.1.3 Supplementary SDA Results (I.S. EN 17037 criteria): Block 3

Table No. D.1.2 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 00						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Creche	Aged 1-3	1%	99%	0%	98%	Non-compliant
Creche	Aged 3-5	0%	48%	0%	47%	Non-compliant
Creche	Baby Room	0%	1%	0%	1%	Non-compliant
Table No. D.1.2 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 01						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 3.01	LKD	41%	95%	21%	74%	Non-compliant
Unit 3.01	Bedroom 1	58%	100%	42%	100%	Trees affecting compliance
Unit 3.02	LKD	32%	96%	31%	95%	Non-compliant
Unit 3.02	Bedroom 1	40%	100%	39%	100%	Non-compliant
Unit 3.02	Bedroom 2	59%	100%	56%	100%	Compliant
Unit 3.03	LKD	45%	100%	44%	100%	Non-compliant
Unit 3.03	Bedroom 1	46%	100%	46%	100%	Non-compliant
Unit 3.04	LKD	100%	100%	100%	100%	Compliant
Unit 3.04	Bedroom 1	81%	100%	81%	100%	Compliant
Unit 3.04	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.04	Bedroom 3	54%	100%	40%	100%	Trees affecting compliance
Unit 3.05	LKD	100%	100%	100%	100%	Compliant
Unit 3.05	Bedroom 1	86%	100%	62%	100%	Compliant
Unit 3.05	Bedroom 2	75%	100%	64%	100%	Compliant
Unit 3.05	Bedroom 3	44%	100%	32%	100%	Non-compliant
Unit 3.06	LKD	52%	100%	41%	96%	Trees affecting compliance
Unit 3.06	Bedroom 1	68%	100%	55%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.3 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 02						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 3.07	LKD	48%	100%	43%	96%	Non-compliant
Unit 3.07	Bedroom 1	77%	100%	67%	100%	Compliant
Unit 3.08	LKD	90%	100%	87%	100%	Compliant
Unit 3.08	Bedroom 1	73%	100%	64%	100%	Compliant
Unit 3.08	Bedroom 2	65%	100%	50%	100%	Compliant
Unit 3.09	LKD	70%	100%	67%	100%	Compliant
Unit 3.09	Bedroom 1	44%	100%	32%	100%	Non-compliant
Unit 3.09	Bedroom 2	72%	100%	61%	100%	Compliant
Unit 3.10	LKD	38%	98%	37%	98%	Non-compliant
Unit 3.10	Bedroom 1	48%	100%	48%	100%	Non-compliant
Unit 3.10	Bedroom 2	76%	100%	74%	100%	Compliant
Unit 3.11	LKD	51%	100%	50%	100%	Compliant
Unit 3.11	Bedroom 1	61%	100%	61%	100%	Compliant
Unit 3.12	LKD	100%	100%	100%	100%	Compliant
Unit 3.12	Bedroom 1	92%	100%	90%	100%	Compliant
Unit 3.12	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.12	Bedroom 3	79%	100%	62%	100%	Compliant
Unit 3.13	LKD	100%	100%	100%	100%	Compliant
Unit 3.13	Bedroom 1	98%	100%	95%	100%	Compliant
Unit 3.13	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.13	Bedroom 3	70%	100%	48%	100%	Trees affecting compliance
Unit 3.14	LKD	57%	100%	54%	100%	Compliant
Unit 3.14	Bedroom 1	80%	100%	76%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.3 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 03						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 3.15	LKD	54%	100%	52%	100%	Compliant
Unit 3.15	Bedroom 1	94%	100%	89%	100%	Compliant
Unit 3.16	LKD	100%	100%	100%	100%	Compliant
Unit 3.16	Bedroom 1	85%	100%	80%	100%	Compliant
Unit 3.16	Bedroom 2	81%	100%	65%	100%	Compliant
Unit 3.17	LKD	94%	100%	92%	100%	Compliant
Unit 3.17	Bedroom 1	56%	100%	44%	100%	Trees affecting compliance
Unit 3.17	Bedroom 2	94%	100%	81%	100%	Compliant
Unit 3.18	LKD	49%	100%	49%	100%	Non-compliant
Unit 3.18	Bedroom 1	60%	100%	57%	100%	Compliant
Unit 3.18	Bedroom 2	100%	100%	98%	100%	Compliant
Unit 3.19	LKD	63%	100%	63%	100%	Compliant
Unit 3.19	Bedroom 1	80%	100%	76%	100%	Compliant
Unit 3.20	LKD	100%	100%	100%	100%	Compliant
Unit 3.20	Bedroom 1	98%	100%	98%	100%	Compliant
Unit 3.20	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.20	Bedroom 3	98%	100%	84%	100%	Compliant
Unit 3.21	LKD	100%	100%	100%	100%	Compliant
Unit 3.21	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.21	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.21	Bedroom 3	86%	100%	65%	100%	Compliant
Unit 3.22	LKD	64%	100%	62%	100%	Compliant
Unit 3.22	Bedroom 1	95%	100%	94%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.3 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 04						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 3.23	LKD	63%	100%	61%	100%	Compliant
Unit 3.23	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.24	LKD	100%	100%	100%	100%	Compliant
Unit 3.24	Bedroom 1	98%	100%	98%	100%	Compliant
Unit 3.24	Bedroom 2	94%	100%	87%	100%	Compliant
Unit 3.25	LKD	100%	100%	100%	100%	Compliant
Unit 3.25	Bedroom 1	73%	100%	61%	100%	Compliant
Unit 3.25	Bedroom 2	98%	100%	96%	100%	Compliant
Unit 3.26	LKD	61%	100%	61%	100%	Compliant
Unit 3.26	Bedroom 1	79%	100%	77%	100%	Compliant
Unit 3.26	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.27	LKD	79%	100%	79%	100%	Compliant
Unit 3.27	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.28	LKD	100%	100%	100%	100%	Compliant
Unit 3.28	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.28	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.28	Bedroom 3	100%	100%	98%	100%	Compliant
Unit 3.29	LKD	100%	100%	100%	100%	Compliant
Unit 3.29	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.29	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.29	Bedroom 3	98%	100%	78%	100%	Compliant
Unit 3.30	LKD	68%	100%	67%	100%	Compliant
Unit 3.30	Bedroom 1	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.3 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 05						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 3.31	LKD	66%	100%	64%	100%	Compliant
Unit 3.31	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.32	LKD	100%	100%	100%	100%	Compliant
Unit 3.32	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.32	Bedroom 2	100%	100%	94%	100%	Compliant
Unit 3.33	LKD	100%	100%	100%	100%	Compliant
Unit 3.33	Bedroom 1	95%	100%	79%	100%	Compliant
Unit 3.33	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.34	LKD	73%	100%	72%	100%	Compliant
Unit 3.34	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.34	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.35	LKD	86%	100%	86%	100%	Compliant
Unit 3.35	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.36	LKD	100%	100%	100%	100%	Compliant
Unit 3.36	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.36	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.36	Bedroom 3	100%	100%	98%	100%	Compliant
Unit 3.37	LKD	100%	100%	100%	100%	Compliant
Unit 3.37	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.37	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.37	Bedroom 3	100%	100%	92%	100%	Compliant
Unit 3.38	LKD	73%	100%	72%	100%	Compliant
Unit 3.38	Bedroom 1	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.3 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 06						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 3.39	LKD	69%	100%	68%	100%	Compliant
Unit 3.39	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.40	LKD	100%	100%	100%	100%	Compliant
Unit 3.40	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.40	Bedroom 2	100%	100%	98%	100%	Compliant
Unit 3.41	LKD	100%	100%	100%	100%	Compliant
Unit 3.41	Bedroom 1	100%	100%	92%	100%	Compliant
Unit 3.41	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.42	LKD	84%	100%	84%	100%	Compliant
Unit 3.42	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.42	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.43	LKD	91%	100%	90%	100%	Compliant
Unit 3.43	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.44	LKD	100%	100%	100%	100%	Compliant
Unit 3.44	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.44	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.44	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 3.45	LKD	100%	100%	100%	100%	Compliant
Unit 3.45	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.45	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.45	Bedroom 3	100%	100%	95%	100%	Compliant
Unit 3.46	LKD	79%	100%	77%	100%	Compliant
Unit 3.46	Bedroom 1	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.3 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 07						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 3.47	LKD	74%	100%	73%	100%	Compliant
Unit 3.47	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.48	LKD	100%	100%	100%	100%	Compliant
Unit 3.48	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.48	Bedroom 2	80%	100%	74%	100%	Compliant
Unit 3.49	LKD	100%	100%	100%	100%	Compliant
Unit 3.49	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.49	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.50	LKD	95%	100%	94%	100%	Compliant
Unit 3.50	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.50	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.51	LKD	94%	100%	94%	100%	Compliant
Unit 3.51	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.52	LKD	100%	100%	100%	100%	Compliant
Unit 3.52	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.52	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.52	Bedroom 3	100%	100%	98%	100%	Compliant
Unit 3.53	LKD	100%	100%	100%	100%	Compliant
Unit 3.53	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.53	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.53	Bedroom 3	100%	100%	97%	100%	Compliant
Unit 3.54	LKD	81%	100%	81%	100%	Compliant
Unit 3.54	Bedroom 1	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.3 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 3- Level 08						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 3.55	LKD	85%	100%	85%	100%	Compliant
Unit 3.55	Bedroom 1	98%	100%	98%	100%	Compliant
Unit 3.56	LKD	100%	100%	100%	100%	Compliant
Unit 3.56	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.56	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.57	LKD	100%	100%	100%	100%	Compliant
Unit 3.57	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.57	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.58	LKD	100%	100%	100%	100%	Compliant
Unit 3.58	Bedroom 1	94%	100%	92%	100%	Compliant
Unit 3.58	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.59	LKD	99%	100%	99%	100%	Compliant
Unit 3.59	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.60	LKD	100%	100%	100%	100%	Compliant
Unit 3.60	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 3.60	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 3.60	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 3.61	LKD	86%	100%	86%	100%	Compliant
Unit 3.61	Bedroom 1	95%	100%	95%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

D.1.4 Supplementary SDA Results (I.S. EN 17037 criteria): Block 4

Table No. D.1.4 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 4- Level 01						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 4.01	LKD	55%	100%	54%	100%	Compliant
Unit 4.01	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.01	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.02	LKD	100%	100%	100%	100%	Compliant
Unit 4.02	Bedroom 1	71%	100%	70%	100%	Compliant
Unit 4.02	Bedroom 2	70%	100%	63%	100%	Compliant
Unit 4.03	LKD	35%	89%	33%	89%	Non-compliant
Unit 4.03	Bedroom 1	23%	98%	18%	98%	Non-compliant
Unit 4.04	LKD	23%	64%	22%	63%	Non-compliant
Unit 4.04	Bedroom 1	31%	100%	27%	94%	Non-compliant
Unit 4.04	Bedroom 2	30%	100%	28%	100%	Non-compliant
Unit 4.05	LKD	93%	100%	92%	100%	Compliant
Unit 4.05	Bedroom 1	35%	92%	35%	85%	Non-compliant
Unit 4.05	Bedroom 2	54%	100%	54%	100%	Compliant
Unit 4.06	LKD	100%	100%	100%	100%	Compliant
Unit 4.06	Bedroom 1	80%	100%	74%	100%	Compliant
Unit 4.06	Bedroom 2	93%	100%	85%	100%	Compliant
Unit 4.06	Bedroom 3	73%	100%	64%	100%	Compliant
Unit 4.07	LKD	45%	100%	43%	100%	Non-compliant
Unit 4.07	Bedroom 1	41%	100%	38%	100%	Non-compliant
Unit 4.07	Bedroom 2	69%	100%	58%	100%	Compliant
Unit 4.08	LKD	50%	100%	45%	100%	Trees affecting compliance
Unit 4.08	Bedroom 1	38%	100%	33%	100%	Non-compliant
Unit 4.08	Bedroom 2	53%	85%	49%	83%	Non-compliant
Unit 4.09	LKD	66%	100%	61%	98%	Compliant
Unit 4.09	Bedroom 1	96%	100%	96%	100%	Compliant
Unit 4.09	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.09	Bedroom 3	69%	100%	65%	100%	Compliant
Unit 4.10	LKD	99%	100%	97%	100%	Compliant
Unit 4.10	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.11	LKD	84%	100%	77%	100%	Compliant
Unit 4.11	Bedroom 1	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.4 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 4- Level 02						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 4.12	LKD	58%	100%	58%	100%	Compliant
Unit 4.12	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.12	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.13	LKD	100%	100%	100%	100%	Compliant
Unit 4.13	Bedroom 1	87%	100%	87%	100%	Compliant
Unit 4.13	Bedroom 2	80%	100%	80%	100%	Compliant
Unit 4.14	LKD	43%	96%	43%	94%	Non-compliant
Unit 4.14	Bedroom 1	36%	100%	36%	100%	Non-compliant
Unit 4.15	LKD	36%	83%	35%	83%	Non-compliant
Unit 4.15	Bedroom 1	46%	100%	44%	100%	Non-compliant
Unit 4.15	Bedroom 2	56%	100%	56%	100%	Compliant
Unit 4.16	LKD	94%	100%	94%	100%	Compliant
Unit 4.16	Bedroom 1	45%	100%	45%	100%	Non-compliant
Unit 4.16	Bedroom 2	73%	100%	71%	100%	Compliant
Unit 4.17	LKD	100%	100%	97%	100%	Compliant
Unit 4.17	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.17	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.17	Bedroom 3	97%	100%	94%	100%	Compliant
Unit 4.18	LKD	54%	100%	51%	100%	Compliant
Unit 4.18	Bedroom 1	60%	100%	56%	100%	Compliant
Unit 4.18	Bedroom 2	96%	100%	85%	100%	Compliant
Unit 4.19	LKD	61%	92%	59%	90%	Non-compliant
Unit 4.19	Bedroom 1	48%	100%	41%	100%	Non-compliant
Unit 4.19	Bedroom 2	59%	100%	55%	100%	Compliant
Unit 4.20	LKD	77%	100%	72%	100%	Compliant
Unit 4.20	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.20	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.20	Bedroom 3	96%	100%	96%	100%	Compliant
Unit 4.21	LKD	100%	100%	100%	100%	Compliant
Unit 4.21	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.22	LKD	86%	100%	86%	100%	Compliant
Unit 4.22	Bedroom 1	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.4 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 4- Level 03						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 4.23	LKD	59%	100%	59%	100%	Compliant
Unit 4.23	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.23	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.24	LKD	100%	100%	100%	100%	Compliant
Unit 4.24	Bedroom 1	98%	100%	98%	100%	Compliant
Unit 4.24	Bedroom 2	97%	100%	97%	100%	Compliant
Unit 4.25	LKD	59%	100%	59%	100%	Compliant
Unit 4.25	Bedroom 1	65%	100%	65%	100%	Compliant
Unit 4.26	LKD	51%	100%	51%	100%	Compliant
Unit 4.26	Bedroom 1	65%	100%	63%	100%	Compliant
Unit 4.26	Bedroom 2	98%	100%	96%	100%	Compliant
Unit 4.27	LKD	98%	100%	98%	100%	Compliant
Unit 4.27	Bedroom 1	64%	100%	64%	100%	Compliant
Unit 4.27	Bedroom 2	96%	100%	96%	100%	Compliant
Unit 4.28	LKD	100%	100%	100%	100%	Compliant
Unit 4.28	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.28	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.28	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 4.29	LKD	62%	100%	59%	100%	Compliant
Unit 4.29	Bedroom 1	85%	100%	76%	100%	Compliant
Unit 4.29	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.30	LKD	64%	98%	64%	97%	Compliant
Unit 4.30	Bedroom 1	61%	100%	53%	100%	Compliant
Unit 4.30	Bedroom 2	85%	100%	74%	100%	Compliant
Unit 4.31	LKD	85%	100%	84%	100%	Compliant
Unit 4.31	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.31	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.31	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 4.32	LKD	100%	100%	100%	100%	Compliant
Unit 4.32	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.33	LKD	91%	100%	90%	100%	Compliant
Unit 4.33	Bedroom 1	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.4 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 4- Level 04						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 4.34	LKD	68%	100%	67%	100%	Compliant
Unit 4.34	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.34	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.35	LKD	100%	100%	100%	100%	Compliant
Unit 4.35	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.35	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.36	LKD	81%	100%	81%	100%	Compliant
Unit 4.36	Bedroom 1	93%	100%	93%	100%	Compliant
Unit 4.37	LKD	67%	100%	67%	100%	Compliant
Unit 4.37	Bedroom 1	85%	100%	85%	100%	Compliant
Unit 4.37	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.38	LKD	100%	100%	100%	100%	Compliant
Unit 4.38	Bedroom 1	80%	100%	80%	100%	Compliant
Unit 4.38	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.39	LKD	100%	100%	100%	100%	Compliant
Unit 4.39	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.39	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.39	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 4.40	LKD	72%	100%	67%	100%	Compliant
Unit 4.40	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.40	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.41	LKD	73%	100%	73%	100%	Compliant
Unit 4.41	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.41	Bedroom 2	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.1.4 - Supplementary SDA Results (I.S. EN 17037 criteria): Block 4- Level 05						
Unit Number	Room Description	No Trees		With Trees		Compliance with I.S. EN 17037 Criteria*
		Area above 300 Lux*	Area above 100 Lux*	Area above 300 Lux*	Area above 100 Lux*	
Unit 4.42	LKD	87%	100%	86%	100%	Compliant
Unit 4.42	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.42	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.43	LKD	100%	100%	100%	100%	Compliant
Unit 4.43	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.43	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.44	LKD	100%	100%	100%	100%	Compliant
Unit 4.44	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.44	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.44	Bedroom 3	100%	100%	100%	100%	Compliant
Unit 4.45	LKD	77%	100%	75%	100%	Compliant
Unit 4.45	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.45	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.46	LKD	43%	100%	43%	100%	Non-compliant
Unit 4.46	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.46	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.47	LKD	100%	100%	100%	100%	Compliant
Unit 4.47	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.47	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.48	LKD	100%	100%	100%	100%	Compliant
Unit 4.48	Bedroom 1	100%	100%	100%	100%	Compliant
Unit 4.48	Bedroom 2	100%	100%	100%	100%	Compliant
Unit 4.49	LKD	93%	100%	93%	100%	Compliant
Unit 4.49	Bedroom 1	100%	100%	100%	100%	Compliant

* For information regarding the criteria under the various guidelines including target Lux please refer to section 4.5.1 on page 22.
For floor plans of the assessed units please refer to section C.1 on page 64.

D.2 Supplementary No Sky Line (NSL) assessment in proposed units.

Below is an example of the table used to describe the supplementary assessment results for 'No Sky Line' in proposed units.

Table Example. D.2 - Supplementary NSL Results:			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%
A	**B**	**C**	**D**

A: Unit Number

This column identifies the assessed unit. All unit numbers are determined by the architect's drawings, unless otherwise stated.

B: Room Description

Room Description details which room in the unit has been assessed, e.g. bedroom, LKD, etc.

C: % of room where the sky is visible from the working plane

This column states the percentage of the room from which there is a direct line of sight to the sky when assessed at the working plane height, which is 850mm above the finished floor level in residential rooms or 700mm above the finished floor level in offices or classrooms.

D: Above 80%

Whilst the BRE Guidelines only provide recommendations for NSL in the context of an impact analysis, it states that "Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line."

If this column states: *'Yes'*, it signifies that the sky will be visible from more than 80% of the working plane.

If this column states: *'No'*, it signifies that the sky will be visible from less than 80% of the working plane and supplementary electric lighting may be required.

D.2.1 Supplementary NSL Results: Block 1

Table No. D.2.1 - Supplementary NSL Results: Block 1- Level 00-01			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 1.01	LKD	99%	Yes
Unit 1.01	Bedroom 1	99%	Yes
Unit 1.01	Bedroom 2	100%	Yes
Unit 1.01	Bedroom 3	60%	No
Unit 1.02	LKD	99%	Yes
Unit 1.02	Bedroom 1	99%	Yes
Unit 1.02	Bedroom 2	97%	Yes
Unit 1.03	LKD	98%	Yes
Unit 1.03	Bedroom 1	99%	Yes
Unit 1.03	Bedroom 2	99%	Yes
Unit 1.04	LKD	98%	Yes
Unit 1.04	Bedroom 1	99%	Yes
Unit 1.04	Bedroom 2	99%	Yes
Unit 1.05	LKD	99%	Yes
Unit 1.05	Bedroom 1	99%	Yes
Unit 1.05	Bedroom 2	97%	Yes
Unit 1.06	LKD	99%	Yes
Unit 1.06	Bedroom 1	99%	Yes
Unit 1.06	Bedroom 2	100%	Yes
Unit 1.06	Bedroom 3	97%	Yes
Unit 1.07	LKD	72%	No
Unit 1.07	Bedroom 1	88%	Yes
Unit 1.07	Bedroom 2	95%	Yes
Unit 1.08	LKD	92%	Yes
Unit 1.08	Bedroom 1	82%	Yes
Unit 1.09	LKD	82%	Yes
Unit 1.09	Bedroom 1	89%	Yes
Unit 1.10	LKD	72%	No
Unit 1.10	Bedroom 1	55%	No
Unit 1.10	Bedroom 2	59%	No
Unit 1.11	LKD	98%	Yes
Unit 1.11	Bedroom 1	95%	Yes
Unit 1.11	Bedroom 2	98%	Yes
Unit 1.12	LKD	99%	Yes
Unit 1.12	Bedroom 1	83%	Yes
Unit 1.13	LKD	83%	Yes
Unit 1.13	Bedroom 1	93%	Yes
Unit 1.14	LKD	83%	Yes
Unit 1.14	Bedroom 1	55%	No
Unit 1.14	Bedroom 2	58%	No

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.1 - Supplementary NSL Results: Block 1- Level 02			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 1.15	LKD	100%	Yes
Unit 1.15	Bedroom 1	98%	Yes
Unit 1.15	Bedroom 2	98%	Yes
Unit 1.16	LKD	100%	Yes
Unit 1.16	Bedroom 1	85%	Yes
Unit 1.17	LKD	86%	Yes
Unit 1.17	Bedroom 1	95%	Yes
Unit 1.18	LKD	83%	Yes
Unit 1.18	Bedroom 1	58%	No
Unit 1.18	Bedroom 2	61%	No
Unit 1.19	LKD	100%	Yes
Unit 1.19	Bedroom 1	100%	Yes
Unit 1.19	Bedroom 2	100%	Yes
Unit 1.20	LKD	99%	Yes
Unit 1.20	Bedroom 1	100%	Yes
Unit 1.20	Bedroom 2	100%	Yes
Unit 1.21	LKD	99%	Yes
Unit 1.21	Bedroom 1	100%	Yes
Unit 1.21	Bedroom 2	100%	Yes
Unit 1.22	LKD	100%	Yes
Unit 1.22	Bedroom 1	100%	Yes
Unit 1.22	Bedroom 2	100%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.1 - Supplementary NSL Results: Block 1- Level 03			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 1.23	LKD	100%	Yes
Unit 1.23	Bedroom 1	99%	Yes
Unit 1.23	Bedroom 2	98%	Yes
Unit 1.24	LKD	100%	Yes
Unit 1.24	Bedroom 1	88%	Yes
Unit 1.25	LKD	87%	Yes
Unit 1.25	Bedroom 1	96%	Yes
Unit 1.26	LKD	84%	Yes
Unit 1.26	Bedroom 1	62%	No
Unit 1.26	Bedroom 2	68%	No
Unit 1.27	LKD	100%	Yes
Unit 1.27	Bedroom 1	97%	Yes
Unit 1.27	Bedroom 2	98%	Yes
Unit 1.28	LKD	99%	Yes
Unit 1.28	Bedroom 1	98%	Yes
Unit 1.28	Bedroom 2	98%	Yes
Unit 1.29	LKD	99%	Yes
Unit 1.29	Bedroom 1	0%	No
Unit 1.29	Bedroom 2	0%	No
Unit 1.30	LKD	100%	Yes
Unit 1.30	Bedroom 1	98%	Yes
Unit 1.30	Bedroom 2	98%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

D.2.2 Supplementary NSL Results: Block 2

Table No. D.2.1 - Supplementary NSL Results: Block 2- Level 00-01			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 2.01	LKD	99%	Yes
Unit 2.01	Bedroom 1	99%	Yes
Unit 2.01	Bedroom 2	100%	Yes
Unit 2.01	Bedroom 3	97%	Yes
Unit 2.02	LKD	99%	Yes
Unit 2.02	Bedroom 1	99%	Yes
Unit 2.02	Bedroom 2	97%	Yes
Unit 2.03	LKD	98%	Yes
Unit 2.03	Bedroom 1	99%	Yes
Unit 2.03	Bedroom 2	99%	Yes
Unit 2.04	LKD	98%	Yes
Unit 2.04	Bedroom 1	99%	Yes
Unit 2.04	Bedroom 2	99%	Yes
Unit 2.05	LKD	99%	Yes
Unit 2.05	Bedroom 1	99%	Yes
Unit 2.05	Bedroom 2	97%	Yes
Unit 2.06	LKD	99%	Yes
Unit 2.06	Bedroom 1	99%	Yes
Unit 2.06	Bedroom 2	100%	Yes
Unit 2.06	Bedroom 3	82%	Yes
Unit 2.07	LKD	96%	Yes
Unit 2.07	Bedroom 1	90%	Yes
Unit 2.07	Bedroom 2	97%	Yes
Unit 2.07	Bedroom 3	77%	No
Unit 2.08	LKD	100%	Yes
Unit 2.08	Bedroom 1	98%	Yes
Unit 2.09	LKD	100%	Yes
Unit 2.09	Bedroom 1	89%	Yes
Unit 2.10	LKD	100%	Yes
Unit 2.10	Bedroom 1	97%	Yes
Unit 2.10	Bedroom 2	100%	Yes
Unit 2.10	Bedroom 3	99%	Yes
Unit 2.11	LKD	97%	Yes
Unit 2.11	Bedroom 1	93%	Yes
Unit 2.11	Bedroom 2	99%	Yes
Unit 2.11	Bedroom 3	77%	No
Unit 2.12	LKD	100%	Yes
Unit 2.12	Bedroom 1	98%	Yes
Unit 2.13	LKD	100%	Yes
Unit 2.13	Bedroom 1	98%	Yes
Unit 2.14	LKD	100%	Yes
Unit 2.14	Bedroom 1	98%	Yes
Unit 2.14	Bedroom 2	100%	Yes
Unit 2.14	Bedroom 3	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.2 - Supplementary NSL Results: Block 2- Level 02			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 2.15	LKD	98%	Yes
Unit 2.15	Bedroom 1	97%	Yes
Unit 2.15	Bedroom 2	100%	Yes
Unit 2.15	Bedroom 3	86%	Yes
Unit 2.16	LKD	100%	Yes
Unit 2.16	Bedroom 1	98%	Yes
Unit 2.17	LKD	100%	Yes
Unit 2.17	Bedroom 1	98%	Yes
Unit 2.18	LKD	100%	Yes
Unit 2.18	Bedroom 1	98%	Yes
Unit 2.18	Bedroom 2	100%	Yes
Unit 2.18	Bedroom 3	99%	Yes
Unit 2.19	LKD	100%	Yes
Unit 2.19	Bedroom 1	100%	Yes
Unit 2.19	Bedroom 2	100%	Yes
Unit 2.20	LKD	99%	Yes
Unit 2.20	Bedroom 1	100%	Yes
Unit 2.20	Bedroom 2	100%	Yes
Unit 2.21	LKD	99%	Yes
Unit 2.21	Bedroom 1	100%	Yes
Unit 2.21	Bedroom 2	100%	Yes
Unit 2.22	LKD	100%	Yes
Unit 2.22	Bedroom 1	100%	Yes
Unit 2.22	Bedroom 2	100%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.2 - Supplementary NSL Results: Block 2- Level 03			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 2.23	LKD	98%	Yes
Unit 2.23	Bedroom 1	99%	Yes
Unit 2.23	Bedroom 2	100%	Yes
Unit 2.23	Bedroom 3	97%	Yes
Unit 2.24	LKD	100%	Yes
Unit 2.24	Bedroom 1	98%	Yes
Unit 2.25	LKD	100%	Yes
Unit 2.25	Bedroom 1	98%	Yes
Unit 2.26	LKD	100%	Yes
Unit 2.26	Bedroom 1	99%	Yes
Unit 2.26	Bedroom 2	100%	Yes
Unit 2.26	Bedroom 3	99%	Yes
Unit 2.27	LKD	100%	Yes
Unit 2.27	Bedroom 1	97%	Yes
Unit 2.27	Bedroom 2	99%	Yes
Unit 2.28	LKD	95%	Yes
Unit 2.28	Bedroom 1	98%	Yes
Unit 2.28	Bedroom 2	99%	Yes
Unit 2.29	LKD	95%	Yes
Unit 2.29	Bedroom 1	98%	Yes
Unit 2.29	Bedroom 2	98%	Yes
Unit 2.30	LKD	100%	Yes
Unit 2.30	Bedroom 1	98%	Yes
Unit 2.30	Bedroom 2	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

D.2.3 Supplementary NSL Results: Block 3

Table No. D.2.2 - Supplementary NSL Results: Block 3- Level 00			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Creche	Aged 1-3	83%	Yes
Creche	Aged 3-5	48%	No
Creche	Baby Room	44%	No

Table No. D.2.3 - Supplementary NSL Results: Block 3- Level 01			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 3.01	LKD	77%	No
Unit 3.01	Bedroom 1	95%	Yes
Unit 3.02	LKD	87%	Yes
Unit 3.02	Bedroom 1	72%	No
Unit 3.02	Bedroom 2	77%	No
Unit 3.03	LKD	68%	No
Unit 3.03	Bedroom 1	66%	No
Unit 3.04	LKD	95%	Yes
Unit 3.04	Bedroom 1	82%	Yes
Unit 3.04	Bedroom 2	98%	Yes
Unit 3.04	Bedroom 3	84%	Yes
Unit 3.05	LKD	97%	Yes
Unit 3.05	Bedroom 1	98%	Yes
Unit 3.05	Bedroom 2	99%	Yes
Unit 3.05	Bedroom 3	95%	Yes
Unit 3.06	LKD	87%	Yes
Unit 3.06	Bedroom 1	96%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.3 - Supplementary NSL Results: Block 3- Level 02			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 3.07	LKD	89%	Yes
Unit 3.07	Bedroom 1	99%	Yes
Unit 3.08	LKD	99%	Yes
Unit 3.08	Bedroom 1	99%	Yes
Unit 3.08	Bedroom 2	97%	Yes
Unit 3.09	LKD	100%	Yes
Unit 3.09	Bedroom 1	94%	Yes
Unit 3.09	Bedroom 2	97%	Yes
Unit 3.10	LKD	92%	Yes
Unit 3.10	Bedroom 1	77%	No
Unit 3.10	Bedroom 2	85%	Yes
Unit 3.11	LKD	69%	No
Unit 3.11	Bedroom 1	72%	No
Unit 3.12	LKD	96%	Yes
Unit 3.12	Bedroom 1	89%	Yes
Unit 3.12	Bedroom 2	98%	Yes
Unit 3.12	Bedroom 3	90%	Yes
Unit 3.13	LKD	99%	Yes
Unit 3.13	Bedroom 1	98%	Yes
Unit 3.13	Bedroom 2	99%	Yes
Unit 3.13	Bedroom 3	95%	Yes
Unit 3.14	LKD	98%	Yes
Unit 3.14	Bedroom 1	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.3 - Supplementary NSL Results: Block 3- Level 03			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 3.15	LKD	100%	Yes
Unit 3.15	Bedroom 1	99%	Yes
Unit 3.16	LKD	100%	Yes
Unit 3.16	Bedroom 1	99%	Yes
Unit 3.16	Bedroom 2	97%	Yes
Unit 3.17	LKD	100%	Yes
Unit 3.17	Bedroom 1	97%	Yes
Unit 3.17	Bedroom 2	97%	Yes
Unit 3.18	LKD	98%	Yes
Unit 3.18	Bedroom 1	88%	Yes
Unit 3.18	Bedroom 2	99%	Yes
Unit 3.19	LKD	76%	No
Unit 3.19	Bedroom 1	93%	Yes
Unit 3.20	LKD	99%	Yes
Unit 3.20	Bedroom 1	98%	Yes
Unit 3.20	Bedroom 2	98%	Yes
Unit 3.20	Bedroom 3	94%	Yes
Unit 3.21	LKD	100%	Yes
Unit 3.21	Bedroom 1	98%	Yes
Unit 3.21	Bedroom 2	99%	Yes
Unit 3.21	Bedroom 3	95%	Yes
Unit 3.22	LKD	100%	Yes
Unit 3.22	Bedroom 1	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.3 - Supplementary NSL Results: Block 3- Level 04			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 3.23	LKD	100%	Yes
Unit 3.23	Bedroom 1	99%	Yes
Unit 3.24	LKD	100%	Yes
Unit 3.24	Bedroom 1	99%	Yes
Unit 3.24	Bedroom 2	97%	Yes
Unit 3.25	LKD	100%	Yes
Unit 3.25	Bedroom 1	97%	Yes
Unit 3.25	Bedroom 2	97%	Yes
Unit 3.26	LKD	99%	Yes
Unit 3.26	Bedroom 1	99%	Yes
Unit 3.26	Bedroom 2	99%	Yes
Unit 3.27	LKD	100%	Yes
Unit 3.27	Bedroom 1	99%	Yes
Unit 3.28	LKD	99%	Yes
Unit 3.28	Bedroom 1	98%	Yes
Unit 3.28	Bedroom 2	98%	Yes
Unit 3.28	Bedroom 3	94%	Yes
Unit 3.29	LKD	100%	Yes
Unit 3.29	Bedroom 1	98%	Yes
Unit 3.29	Bedroom 2	99%	Yes
Unit 3.29	Bedroom 3	95%	Yes
Unit 3.30	LKD	100%	Yes
Unit 3.30	Bedroom 1	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.3 - Supplementary NSL Results: Block 3- Level 05			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 3.31	LKD	100%	Yes
Unit 3.31	Bedroom 1	99%	Yes
Unit 3.32	LKD	100%	Yes
Unit 3.32	Bedroom 1	99%	Yes
Unit 3.32	Bedroom 2	97%	Yes
Unit 3.33	LKD	100%	Yes
Unit 3.33	Bedroom 1	97%	Yes
Unit 3.33	Bedroom 2	97%	Yes
Unit 3.34	LKD	99%	Yes
Unit 3.34	Bedroom 1	99%	Yes
Unit 3.34	Bedroom 2	99%	Yes
Unit 3.35	LKD	100%	Yes
Unit 3.35	Bedroom 1	99%	Yes
Unit 3.36	LKD	99%	Yes
Unit 3.36	Bedroom 1	98%	Yes
Unit 3.36	Bedroom 2	98%	Yes
Unit 3.36	Bedroom 3	94%	Yes
Unit 3.37	LKD	100%	Yes
Unit 3.37	Bedroom 1	98%	Yes
Unit 3.37	Bedroom 2	99%	Yes
Unit 3.37	Bedroom 3	95%	Yes
Unit 3.38	LKD	100%	Yes
Unit 3.38	Bedroom 1	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.3 - Supplementary NSL Results: Block 3- Level 06			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 3.39	LKD	100%	Yes
Unit 3.39	Bedroom 1	99%	Yes
Unit 3.40	LKD	100%	Yes
Unit 3.40	Bedroom 1	99%	Yes
Unit 3.40	Bedroom 2	97%	Yes
Unit 3.41	LKD	100%	Yes
Unit 3.41	Bedroom 1	97%	Yes
Unit 3.41	Bedroom 2	97%	Yes
Unit 3.42	LKD	99%	Yes
Unit 3.42	Bedroom 1	99%	Yes
Unit 3.42	Bedroom 2	99%	Yes
Unit 3.43	LKD	100%	Yes
Unit 3.43	Bedroom 1	99%	Yes
Unit 3.44	LKD	99%	Yes
Unit 3.44	Bedroom 1	98%	Yes
Unit 3.44	Bedroom 2	98%	Yes
Unit 3.44	Bedroom 3	94%	Yes
Unit 3.45	LKD	100%	Yes
Unit 3.45	Bedroom 1	98%	Yes
Unit 3.45	Bedroom 2	99%	Yes
Unit 3.45	Bedroom 3	95%	Yes
Unit 3.46	LKD	100%	Yes
Unit 3.46	Bedroom 1	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.3 - Supplementary NSL Results: Block 3- Level 07			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 3.47	LKD	100%	Yes
Unit 3.47	Bedroom 1	99%	Yes
Unit 3.48	LKD	99%	Yes
Unit 3.48	Bedroom 1	99%	Yes
Unit 3.48	Bedroom 2	97%	Yes
Unit 3.49	LKD	100%	Yes
Unit 3.49	Bedroom 1	97%	Yes
Unit 3.49	Bedroom 2	97%	Yes
Unit 3.50	LKD	99%	Yes
Unit 3.50	Bedroom 1	99%	Yes
Unit 3.50	Bedroom 2	99%	Yes
Unit 3.51	LKD	100%	Yes
Unit 3.51	Bedroom 1	99%	Yes
Unit 3.52	LKD	99%	Yes
Unit 3.52	Bedroom 1	98%	Yes
Unit 3.52	Bedroom 2	98%	Yes
Unit 3.52	Bedroom 3	94%	Yes
Unit 3.53	LKD	100%	Yes
Unit 3.53	Bedroom 1	98%	Yes
Unit 3.53	Bedroom 2	99%	Yes
Unit 3.53	Bedroom 3	95%	Yes
Unit 3.54	LKD	100%	Yes
Unit 3.54	Bedroom 1	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.3 - Supplementary NSL Results: Block 3- Level 08			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 3.55	LKD	100%	Yes
Unit 3.55	Bedroom 1	99%	Yes
Unit 3.56	LKD	100%	Yes
Unit 3.56	Bedroom 1	99%	Yes
Unit 3.56	Bedroom 2	97%	Yes
Unit 3.57	LKD	100%	Yes
Unit 3.57	Bedroom 1	98%	Yes
Unit 3.57	Bedroom 2	98%	Yes
Unit 3.58	LKD	100%	Yes
Unit 3.58	Bedroom 1	99%	Yes
Unit 3.58	Bedroom 2	99%	Yes
Unit 3.59	LKD	100%	Yes
Unit 3.59	Bedroom 1	98%	Yes
Unit 3.60	LKD	100%	Yes
Unit 3.60	Bedroom 1	99%	Yes
Unit 3.60	Bedroom 2	99%	Yes
Unit 3.60	Bedroom 3	97%	Yes
Unit 3.61	LKD	100%	Yes
Unit 3.61	Bedroom 1	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

D.2.4 Supplementary NSL Results: Block 4

Table No. D.2.3 - Supplementary NSL Results: Block 4- Level 01			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 4.01	LKD	93%	Yes
Unit 4.01	Bedroom 1	98%	Yes
Unit 4.01	Bedroom 2	97%	Yes
Unit 4.02	LKD	96%	Yes
Unit 4.02	Bedroom 1	79%	No
Unit 4.02	Bedroom 2	74%	No
Unit 4.03	LKD	37%	No
Unit 4.03	Bedroom 1	43%	No
Unit 4.04	LKD	31%	No
Unit 4.04	Bedroom 1	41%	No
Unit 4.04	Bedroom 2	50%	No
Unit 4.05	LKD	88%	Yes
Unit 4.05	Bedroom 1	63%	No
Unit 4.05	Bedroom 2	80%	No
Unit 4.06	LKD	100%	Yes
Unit 4.06	Bedroom 1	95%	Yes
Unit 4.06	Bedroom 2	100%	Yes
Unit 4.06	Bedroom 3	98%	Yes
Unit 4.07	LKD	99%	Yes
Unit 4.07	Bedroom 1	89%	Yes
Unit 4.07	Bedroom 2	90%	Yes
Unit 4.08	LKD	99%	Yes
Unit 4.08	Bedroom 1	97%	Yes
Unit 4.08	Bedroom 2	91%	Yes
Unit 4.09	LKD	95%	Yes
Unit 4.09	Bedroom 1	90%	Yes
Unit 4.09	Bedroom 2	97%	Yes
Unit 4.09	Bedroom 3	97%	Yes
Unit 4.10	LKD	100%	Yes
Unit 4.10	Bedroom 1	98%	Yes
Unit 4.11	LKD	99%	Yes
Unit 4.11	Bedroom 1	98%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.4 - Supplementary NSL Results: Block 4- Level 02			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 4.12	LKD	93%	Yes
Unit 4.12	Bedroom 1	98%	Yes
Unit 4.12	Bedroom 2	97%	Yes
Unit 4.13	LKD	96%	Yes
Unit 4.13	Bedroom 1	90%	Yes
Unit 4.13	Bedroom 2	81%	Yes
Unit 4.14	LKD	46%	No
Unit 4.14	Bedroom 1	64%	No
Unit 4.15	LKD	43%	No
Unit 4.15	Bedroom 1	62%	No
Unit 4.15	Bedroom 2	88%	Yes
Unit 4.16	LKD	89%	Yes
Unit 4.16	Bedroom 1	85%	Yes
Unit 4.16	Bedroom 2	96%	Yes
Unit 4.17	LKD	100%	Yes
Unit 4.17	Bedroom 1	97%	Yes
Unit 4.17	Bedroom 2	100%	Yes
Unit 4.17	Bedroom 3	98%	Yes
Unit 4.18	LKD	99%	Yes
Unit 4.18	Bedroom 1	97%	Yes
Unit 4.18	Bedroom 2	95%	Yes
Unit 4.19	LKD	91%	Yes
Unit 4.19	Bedroom 1	98%	Yes
Unit 4.19	Bedroom 2	99%	Yes
Unit 4.20	LKD	98%	Yes
Unit 4.20	Bedroom 1	93%	Yes
Unit 4.20	Bedroom 2	98%	Yes
Unit 4.20	Bedroom 3	97%	Yes
Unit 4.21	LKD	100%	Yes
Unit 4.21	Bedroom 1	99%	Yes
Unit 4.22	LKD	99%	Yes
Unit 4.22	Bedroom 1	98%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.4 - Supplementary NSL Results: Block 4- Level 03			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 4.23	LKD	93%	Yes
Unit 4.23	Bedroom 1	98%	Yes
Unit 4.23	Bedroom 2	97%	Yes
Unit 4.24	LKD	98%	Yes
Unit 4.24	Bedroom 1	100%	Yes
Unit 4.24	Bedroom 2	99%	Yes
Unit 4.25	LKD	70%	No
Unit 4.25	Bedroom 1	97%	Yes
Unit 4.26	LKD	70%	No
Unit 4.26	Bedroom 1	99%	Yes
Unit 4.26	Bedroom 2	98%	Yes
Unit 4.27	LKD	92%	Yes
Unit 4.27	Bedroom 1	98%	Yes
Unit 4.27	Bedroom 2	96%	Yes
Unit 4.28	LKD	100%	Yes
Unit 4.28	Bedroom 1	97%	Yes
Unit 4.28	Bedroom 2	100%	Yes
Unit 4.28	Bedroom 3	99%	Yes
Unit 4.29	LKD	100%	Yes
Unit 4.29	Bedroom 1	98%	Yes
Unit 4.29	Bedroom 2	98%	Yes
Unit 4.30	LKD	91%	Yes
Unit 4.30	Bedroom 1	99%	Yes
Unit 4.30	Bedroom 2	99%	Yes
Unit 4.31	LKD	99%	Yes
Unit 4.31	Bedroom 1	99%	Yes
Unit 4.31	Bedroom 2	98%	Yes
Unit 4.31	Bedroom 3	98%	Yes
Unit 4.32	LKD	100%	Yes
Unit 4.32	Bedroom 1	99%	Yes
Unit 4.33	LKD	99%	Yes
Unit 4.33	Bedroom 1	98%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.4 - Supplementary NSL Results: Block 4- Level 04			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 4.34	LKD	93%	Yes
Unit 4.34	Bedroom 1	98%	Yes
Unit 4.34	Bedroom 2	97%	Yes
Unit 4.35	LKD	100%	Yes
Unit 4.35	Bedroom 1	100%	Yes
Unit 4.35	Bedroom 2	99%	Yes
Unit 4.36	LKD	100%	Yes
Unit 4.36	Bedroom 1	99%	Yes
Unit 4.37	LKD	100%	Yes
Unit 4.37	Bedroom 1	99%	Yes
Unit 4.37	Bedroom 2	99%	Yes
Unit 4.38	LKD	100%	Yes
Unit 4.38	Bedroom 1	98%	Yes
Unit 4.38	Bedroom 2	96%	Yes
Unit 4.39	LKD	100%	Yes
Unit 4.39	Bedroom 1	97%	Yes
Unit 4.39	Bedroom 2	100%	Yes
Unit 4.39	Bedroom 3	99%	Yes
Unit 4.40	LKD	99%	Yes
Unit 4.40	Bedroom 1	99%	Yes
Unit 4.40	Bedroom 2	98%	Yes
Unit 4.41	LKD	97%	Yes
Unit 4.41	Bedroom 1	99%	Yes
Unit 4.41	Bedroom 2	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.

Table No. D.2.4 - Supplementary NSL Results: Block 4- Level 05			
Unit Number	Room Description	No Sky Line (NSL)	
		% of room where the sky is visible from the working plane	Above 80%*
Unit 4.42	LKD	100%	Yes
Unit 4.42	Bedroom 1	99%	Yes
Unit 4.42	Bedroom 2	99%	Yes
Unit 4.43	LKD	100%	Yes
Unit 4.43	Bedroom 1	98%	Yes
Unit 4.43	Bedroom 2	98%	Yes
Unit 4.44	LKD	100%	Yes
Unit 4.44	Bedroom 1	98%	Yes
Unit 4.44	Bedroom 2	100%	Yes
Unit 4.44	Bedroom 3	99%	Yes
Unit 4.45	LKD	100%	Yes
Unit 4.45	Bedroom 1	99%	Yes
Unit 4.45	Bedroom 2	98%	Yes
Unit 4.46	LKD	99%	Yes
Unit 4.46	Bedroom 1	99%	Yes
Unit 4.46	Bedroom 2	99%	Yes
Unit 4.47	LKD	100%	Yes
Unit 4.47	Bedroom 1	98%	Yes
Unit 4.47	Bedroom 2	97%	Yes
Unit 4.48	LKD	100%	Yes
Unit 4.48	Bedroom 1	99%	Yes
Unit 4.48	Bedroom 2	99%	Yes
Unit 4.49	LKD	100%	Yes
Unit 4.49	Bedroom 1	99%	Yes

* Whilst the BRE Guidelines do not provide target values for NSL in a proposed development, it states that “Supplementary electric lighting will be needed if a significant part of the working plane (20% of the room or more) lies beyond the no sky line.”

For floor plans of the assessed units please refer to section C.1 on page 64.