Daylight and Sunlight Analysis

Proposed Development at The Former Ford Distribution Site, fronting onto Centre Park Road, Ballintemple, Cork.

Prepared by Model Works Ltd

Date 15th November 2024

MODEL WORKS

Executive Summary

Model Works was commissioned to carry out a Daylight, Sunlight and Overshadowing assessment on the proposed development at The Former Ford Distribution Site, fronting onto Centre Park Road, Ballintemple, Cork.

The report assesses the proposal with respect to daylight and sunlight provision to the proposed development. Also assessed is the potential impact to daylight and sunlight of the proposal on neighbouring properties. The assessment was carried out in accordance with the BRE Site Layout Planning for Daylight and Sunlight: A guide to good practice, 3rd edition 2022, which incorporate the target values as set out in BS EN 17037 National Annex.

Proposed Development

- Daylight
  93% for the rooms meet the BRE criteria for daylight, 89% for Block A and 96% for Block B.
- Sunlight
  87% of the units meet the criteria for sunlight, 83% of units in Block A and 91% in Block.
- Amenities
  There are three amenity areas included in the proposal and all easily meet the BRE criteria for sunlight on the ground.

Neighbouring Environment

Only Blocks 11 and 12 of the earlier phases of the scheme required a detailed assessment for potential loss of daylight and sunlight.

- Daylight
  70% for the windows meet the BRE criteria for Vertical Sky Component (VSC), 49% for Block A and 95% for Block B.
  In situation such as this when a neighbouring building with balconies has a weak performance, the BRE Guide recommends that an additional calculation of VSC be made without the balconies. When this test was conducted, 87% of the Block 11 windows and 100% Block 12 windows meet the BRE criteria. Therefore, the impact on these buildings can be assessed as Minor and Negligible respectively.
- Sunlight
  87% of the windows meet the BRE criteria for Annual Probable Sunlight Hours and 100% meet the Winter Probable Sunlight Hours. The impacts on Blocks 11 and 12 were assessed as Minor and Negligible respectively.
- Amenities
  Only three existing amenity areas required assessment, two areas adjacent to Block 12 of the previously approved scheme and the wetlands area between the proposal and Páirc Uí Chaoimh. All three experienced negligible impacts.

Contents

1.0 Introduction

Marina Quarter Ltd. intends to apply for permission for a development at The Former Ford Distribution Site, fronting onto Centre Park Road, Ballintemple, Cork.

The development consists of the construction of 176 no. 1, 2 and 3 bed apartment units in 2 no. blocks, 1 no. creche, 1 no. gym, a retail/café space and all associated ancillary development works.

Model Works was commissioned to carry out a Daylight, Sunlight and Overshadowing assessment on the proposed scheme. The report has been compiled by Barry Murphy, Managing Director of Model Works, he holds a B Eng (hons) in Mechanical Engineering, is a member of Institute of Engineers Ireland and has 20 years' experience in the industry.

Specialist 3D software (Waldram Tools for Revit, Version 7) was used to analyse the proposal based on the 3D models, survey information and design details provided to Model Works by the project architects and other qualified professionals on the design team.

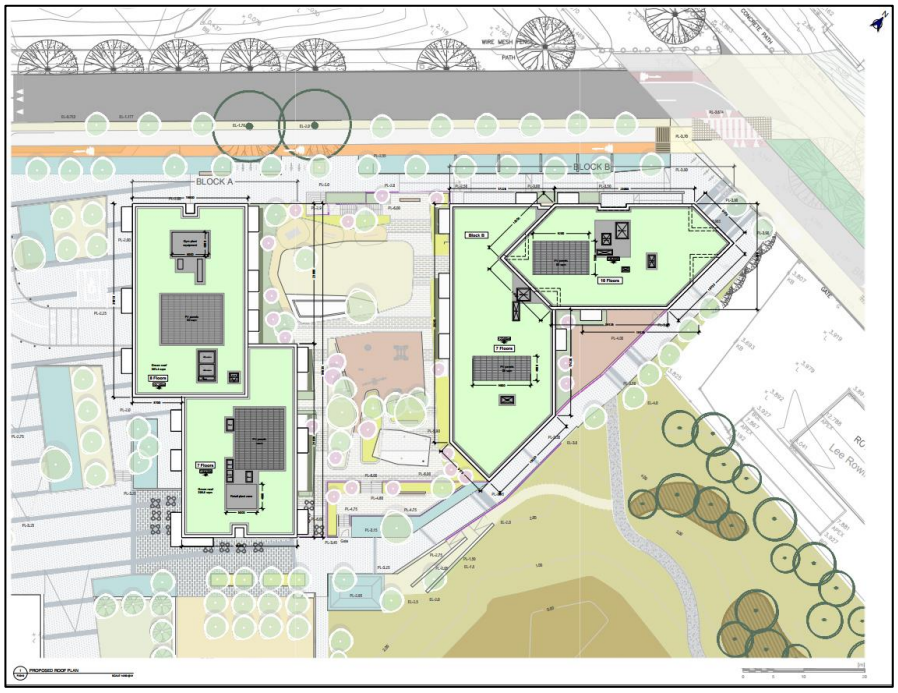


Figure 1 Site Plan

2.0 Standards and Guides Used in the Assessment

The following standards and guides will be used and referenced throughout the report.

- Building Research Establishment - BRE Site Layout Planning for Daylight and Sunlight: A guide to good practice, 3rd edition 2022 (**BRE Guide**)
- British Standard BS EN 17037:2018 – Daylight in Buildings. (**BS EN 17037**)
- Irish Standard EN 17037:2018 – Daylight in Buildings. (**EN 17037**)
- Sustainable Urban Housing: Design Standards for New Apartments (2023). These are guidelines issued under section 28 of the Planning and Development Act 2000. (**Sustainable Urban Housing)**
- Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024) **(Sustainable Residential Development)**
- Urban Development and Building Heights: Guidelines for Planning Authorities (2018). These are guidelines issued under section 28 of the 2000 Planning and Development Act 2000. **(Urban Development and Building Heights)**
- Cork City Development Plan 2022-2028, (2023) (**Cork City Development Plan**)

2.1. BRE Guide 2022

The BRE (Building Research Establishment) Guide to Daylight and Sunlight was first published in 1991 and has become the primary reference document for local authorities in Ireland and the UK for the assessment of Daylight and Sunlight. The 2022 edition is the third and most recent edition of the guide.

The BRE Guide's summary states:

"This guide gives advice on site layout planning to achieve good sunlighting and daylighting, both within buildings and in the open spaces between them. It is intended to be used in conjunction with the interior daylight recommendations for new buildings in the British Standard Daylight in buildings, BS EN 17037. It contains guidance on site layout to provide good natural lighting within a new development; safeguarding of daylight and sunlight within existing buildings nearby; and the protection of daylighting of adjoining land for future development."[1]

It also notes that it should be interpreted with a degree of flexibility, depending on the specifics of the development being assessed.

"The guide is intended for building designers and their clients, consultants, and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design. In special circumstances the developer or planning authority may wish to use different target values."[2]

The introduction also states that:
"The guidance here is intended for use in the United Kingdom and in the Republic of Ireland, though recommendations in the Irish Standard IS EN 17037 may vary from those in BS EN 17037."[3]

The BRE Guide will be the primary reference document used in this report.

[1] BRE Guide: Summary
[2] BRE Guide: 1.6
[3] BRE Guide: 1.7

2.2. BS EN 17037:2018+A1:2021 – Daylight in Buildings.

In 2018, a new European wide standard for daylight was introduced, being EN 17037. In the UK, this standard was published as BS EN 17037 and importantly, it contains a national annex. The national annex in BS EN 17037 (2018) attempts to align the guidance and expectations of the new European standard with the now superseded BS 8206-2. It gave daylight illuminance recommendations of 100 lux in bedrooms, 150 lux in living rooms and 200 lux in kitchens, which were to be exceeded over at least 50% of the assessment points in the room for at least half of the daylight hours.

The standard explains it reasoning behind the annex with:
"The UK committee supports the recommendations for daylight in buildings given in BS EN 17037:2018; however, it is the opinion of the UK committee that the recommendations for daylight provision in a space (see Clause A.2) may not be achievable for some buildings, particularly dwellings. The UK committee believes this could be the case for dwellings with basement rooms or those with significant external obstructions (for example, dwellings situated in a dense urban area or with tall trees outside), or for existing buildings being refurbished or converted into dwellings. This National Annex therefore provides the UK committee's guidance on minimum daylight provision in all UK dwellings."[4]

2.3. EN 17037:2018+A1:2021 – Daylight in Buildings.

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 and importantly it was not amended to include an equivalent to the BS National Annex. The Irish standard sets a target daylight illuminance of 300 lux which should be achieved across at least half of the reference plane in a daylit space for at least half of the daylight hours and an illuminance of 100 lux which should also be achieved across 95% of the reference plane for at least half of the daylight hours. These targets apply to all room types, regardless of use; kitchen, living, bedroom, office, commercial are all assessed to the same standard.

2.4. Sustainable Urban Housing: Design Standards for New Apartments July 2023

This document was prepared by the Department of Housing, Local Government and Heritage, and provides guidance to planners in relation to the built environment including Daylight and Sunlight.

"Planning authorities should avail of appropriate expert advice where necessary and have regard 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, when undertaken by development proposers which offer the capability to satisfy minimum standards of daylight provision."[5]

And

"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 specifics. This may arise due to design constraints 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."

[4] BS EN 17037: NA1

[5] Sustainable Urban Housing: 6.6 & 6.7

2.5. Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024)

These guidelines set national planning policy and guidance in relation to the planning and development of urban and rural settlements, with a focus on sustainable residential development and the creation of compact settlements.

In relation to daylight provision, it states:

"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."[6]

and

"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."

2.6. Urban Development and Building Heights: Guidelines for Planning Authorities (2018 version)

This document is intended to set out national planning policy guidelines on building heights in relation to urban areas.

"Appropriate and reasonable regard should be taken of quantitative performance approaches to daylight provision outlined in guides like the Building Research Establishment's 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting'."[7] (Note, this version of the BRE guideline has been superseded by the 2022 edition)

2.7. Cork City Development Plan 2022-2028

This City Development Plan sets out how Cork City will grow and develop over the next six years and continue to be an innovative, vibrant and healthy city.

In relation to daylight, sunlight and overshadowing (DSO) the plan states:

"It is very important that DSO assessment is clearly set out to aid the planning assessment and is legible to non-technical people. To this end assessments should include an assessment of the scheme utilising best practice tools, such as BRE guide 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting' to satisfy minimum standards of daylight provision."[8]

The 2nd edition of the BRE Guide has been replace with the 3rd edition, the 2022 version, and this will be the one used as a guide in this assessment.

[6] Sustainable Residential Development 5.3.7

[7] Urban Development and Building Heights 3.2

[8] Cork City Development Plan: 11.98

2.8. Summary of Standards and Guides

IS EN 17037 and BS EN 17037 provides different criteria for the assessment of daylight provision, however both Sustainable Urban Housing: Design Standards for New Apartments (2022), and Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024), explicitly state that planning authorities should have regard to the UK National Annex in BS EN 17037. Therefore, having reviewed all the applicable standards and guidelines it is Model Works' professional opinion that the assessment for daylight, sunlight and overshadowing be carried out in accordance with the BRE Guidelines (2022) which incorporate the target values as set out in BS EN 17037 National Annex.

2.9. Impact Assessment

Appendix H of the BRE Guide provides guidance on the classification of environmental impact assessment. It recommends that 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.

Impact	Description
Negligible	• loss of skylight or sunlight fully meets the BRE guidelines • Where the loss of light is well within the guidelines • only a small number of windows or limited area of open space lose light (within the guidelines)
Minor Adverse	Where loss of light is only just within the guidelines, and: • a larger number of windows or open space area are affected Where the loss of skylight or sunlight does not meet the guidelines, and: • only a small number of windows or limited area of open space are affected • the loss of light is only marginally outside the guidelines • an affected room has other sources of skylight or sunlight • the affected building or open space only has a low level requirement for skylight or sunlight • there are particular reasons why an alternative, less stringent, guideline should be applied, for example an overhang above the window or a window standing unusually close to the boundary.
Major Adverse	• a large number of windows or large area of open space are affected • the loss of light is substantially outside the guidelines • all the windows in a particular property are affected • the affected indoor or outdoor spaces have a particularly strong requirement for skylight or sunlight, e.g. a living room in a dwelling or a children's playground.
Beneficial	• Beneficial impacts occur when there is a significant increase 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.

Note: when buildings are assessed to fall between Minor and Major, they are categorised as Moderate.

3.0 Lighting in Buildings

Understanding Direct and Diffuse Daylight

Daylight is generally taken to be the totality of visible radiation originating from the sky, and when visible, the sun, during the hours of daytime. The source of all daylight is in fact the sun. Scattering of sunlight in the atmosphere by air, water vapour, dust, and so on gives the sky the appearance of a self-luminous hemispherical source of light. Sunlight is commonly referred to as direct light since it appears to originate from a small source and can be highly luminous, casting sharp shadows. The sky, however, is an extended source of illumination that casts only soft shadows, and so skylight is commonly referred to as diffuse light.

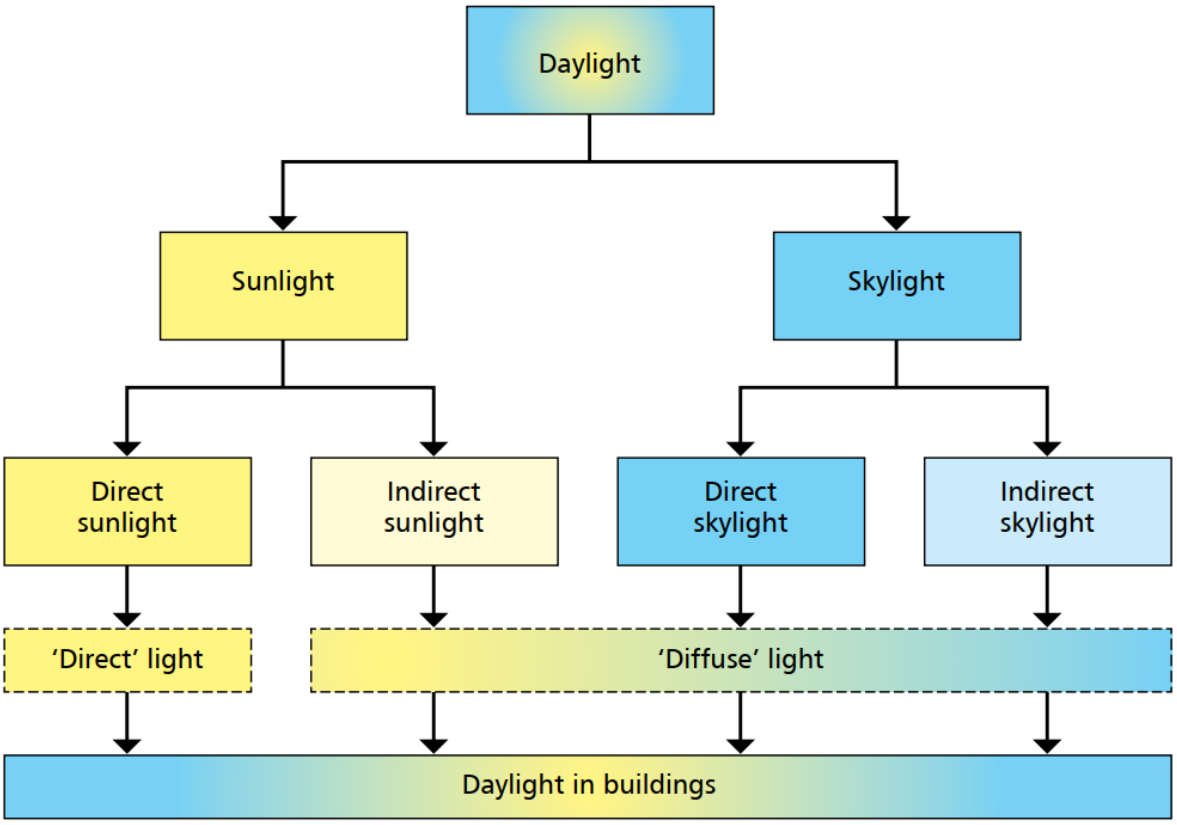


Figure 2 Contributions to Daylight in Buildings

4.0 Glossary

Term	Definition
Lumen	The lumen (symbol: lm) is the unit for luminous flux. It measures the total amount of light emitted by a light source in all directions. For reference, a standard 100-watt incandescent light bulb produces about 1,500-1,700 lumens.
Lux	The lux (symbol: lx), Latin for light, is a unit of illumination: 1 lux is the illuminance produced by 1 candela on a surface perpendicular to the light rays at a distance of 1 meter from the source.
Candela	Brightness is indicated by the candela (symbol: cd). The light intensity indicates how much light is in each piece of a light beam.
Luminance	The amount of light emitted, passing through or reflected from a surface.
Illuminance	A measure of the amount of light falling on a surface, usually measured in lux.
Target illuminance (ET)	Illuminance from daylight that should be achieved for at least half of annual daylight hours across a specified fraction of the reference plane in a daylit space.
Minimum target illuminance (E_{TM})	Illuminance from daylight that should be achieved for at least half of annual daylight hours across 95% of the reference plane in spaces with vertical and/or inclined daylight apertures
Daylight, natural light	Combined skylight and sunlight.
Climate Based Daylight Modelling (CBDM)	Climate-based daylight modelling (CBDM) is the predicted luminous levels within a space using sun and sky conditions that are derived from standard meteorological datasets. CBDM delivers predictions of absolute quantities (e.g. illuminance) that are dependent both on the building location (i.e. geographically-specific climate data is used) and the building orientation (i.e. the illumination effect of the sun and non-overcast sky conditions are included), in addition to the building's composition and configuration.
Spatial Daylight Autonomy (sDA)	Spatial Daylight Autonomy (sDA) uses CBDM to assesses whether a space receives sufficient daylight on a work plane during standard operating hours on an annual basis. The target is a percentage of floor area that exceeds a specified illuminance level (e.g. 200 lux) for a specified amount of annual hours (e.g. 50% of daylight hours).
CIE standard overcast sky	A completely overcast sky, such that light received by north facing windows is similar to that received by south facing windows. A Commission Internationale d'Eclairage (CIE) standard overcast sky is darkest at the horizon and brightest at the zenith (vertically overhead).
Annual Probable Sunlight Hours (APSH)	The probable sunlight hours' means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question (based on sunshine probability data).
Winter Probable Sunlight Hours (WPSH)	Winter probable sunlight hours' means the total number of hours between 21 September and 21 March that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question.
Vertical Sky Component (VSC)	The amount of skylight falling on a vertical wall or window can be quantified as the vertical sky component (VSC). The VSC for existing buildings is the illuminance on the outside of a window, divided by the illuminance falling on an unobstructed horizontal plane, under overcast sky conditions. The standard overcast sky is used, and the ratio is usually expressed as a percentage. The maximum value is almost 40% for a completely unobstructed vertical wall.
No Sky Line	The outline on the working plane of the area from which no sky can be seen.

5.0 Daylight and Sunlight Assessment of the Proposed Development

The are three assessments that must be made to determine daylight and sunlight that the dwellings and amenity space of a new development will enjoy:

1. Daylight provision in new development
2. Sunlight provision in new development
3. Sunlight Provision to amenity spaces in new development

5.1. Daylight Provision in New Development

"Daylight can contribute significantly to the lighting needs of any type of building. This means that daylight openings should have appropriate areas to provide sufficient daylight throughout the year."[9]

5.1.1. Assessment Method

This report will use the Illuminance Method to assess daylight provision. This method uses Climate Based Daylight Modelling (CBDM) with specific climatic data for the location of the site to calculate the illuminance from daylight across a grid on the reference plane at hourly, or sub-hourly, intervals for a typical year. The Perez all-weather sky model for Dublin (IRL_Dublin.039690_IWEC.epw) was used for daylight calculations, Dublin being the location closest to the site for which there was a data set available.

Specialist 3D software is used to carry out a Spatial Daylight Autonomy (sDA) assessment which uses CBDM to assesses whether a space receives sufficient daylight on a work plane during standard operating hours on an annual basis. The target is a percentage of the reference plane area that exceeds a specified illuminance level (e.g. 200 lux) for a specified number of annual hours, normally 50% of daylight hours.

"Internal and exterior surfaces and obstructions need to be modelled including appropriate surface reflectances. Fixtures and fittings need not be included. If trees would impact the daylight to the new development, they should be taken into account."[10]

The surface reflectance and glazing transmissibility values used in the calculations are shown in the table below.

Table 1 Reflectance & Transmittance Values

Surface Type	Reflectance
Interior walls	0.7
Ceilings	0.8
Floors	0.3
Exterior walls and obstructions	0.2
Exterior ground	0.2
Glazing	
Transmittance	0.68
Maintenance Factor	0.96

[9] EN 17037 : 5.1.1

[10] BRE Guide : C22

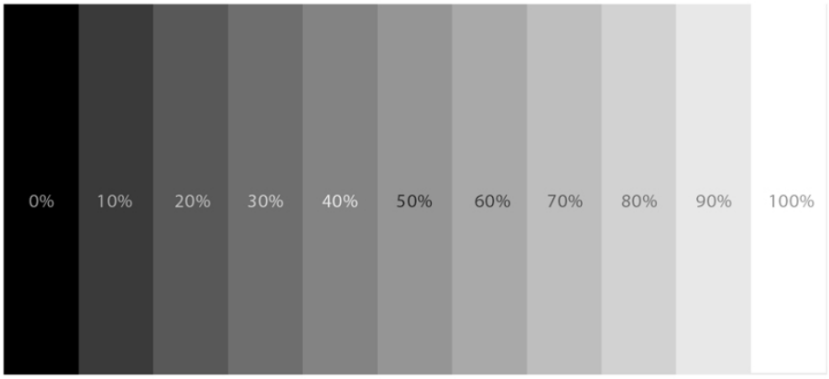


Figure 3 Reflectance Scale

Trees

Trees can have an impact on the daylight received by new developments and must be considered when making the assessment. The BRE Guides states:

"The calculation model should account for the obstruction to daylight caused by the trees. This needs to be done by modelling a representative shape of the trees."[11] and *"The assessment should account for the transparency and reflectance of the trees, which can vary across the seasons."*[12]

The BRE Guide includes transparency and reflectance values, both summer and winter states, for typical tree species found in Ireland and the UK. These values are included in the software's calculation methods, with summer and winter states each assigned to six months of the year.

5.1.2. Assessment Criteria

The assessment will be carried out in line with the guidance in BRE 209 and BS EN17037 National Annex: *"The UK National Annex gives illuminance recommendations of 100 lux in bedrooms, 150 lux in living rooms and 200 lux in kitchens. These are the median illuminances, to be exceeded over at least 50% of the assessment points in the room for at least half of the daylight hours. The recommended levels over 95% of a reference plane need not apply to dwellings in the UK."*[13]

Table 2 Daylight Provision Target Illuminance (BRE/BS EN 17037)

Room Type	Target Illuminance E_T (lx)
Bedroom	100
Living Room	150
Kitchen (or LKD)	200

The reference plane is at a height of 0.85m above the floor and offset from the perimeter of the room by 300mm.[14] This plane is then divided into grid points, at 250mm spacings, at which the lux levels are calculated, the median level is then used for assessment.

- In a room with a corridor, or annex entrance, this space need not be included in the assessment.
- Floor to ceiling cupboards can be excluded from the assessment area, but not kitchen units incorporating worktops.

[11] BRE Guide: G2.3
[12] BRE Guide: G2.4
[13] BRE Guide: C16
[14] BRE Guide: C28

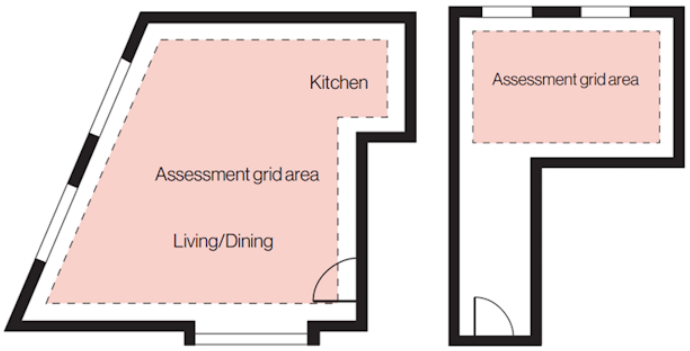


Figure 4 Assessment area examples for various room shapes.

5.1.3. Summary of Results

Daylight Provision summary of results based on BRE Guidelines/BS EN 17037: rooms meeting minimum target of 100 lux for bedrooms, 150 lux for living rooms and 200 lux for kitchens or LKD over 50% of the reference plane for at least half of the daylight hours.

The scheme performs very well with 93% of the rooms meeting the BRE criteria for daylight. The rooms which fail to meet the criteria are 36 LKDs; 25 in block A and 11 in block B. The target lux level for LKDs is twice that of bedrooms (200 lux v's 100 lux) and therefore more challenging to achieve. As is expected with a scheme of taller buildings, the units at lower levels have weaker results and this is the case with this scheme where the failing rooms are concentrated on the lower levels and where their windows are directly facing other buildings. The designers have included best practice approaches to increase the daylight reaching the LKDs, the glazing is floor to ceiling (2.4m) and with a typically width of 2.7m, it is almost the full width of the rooms. They have also positioned the LKDs at the corners of the buildings were possible, making them dual aspect.

100% of the bedrooms in both blocks meet the criteria.

Table 3 Daylight Provision Results Summary (BRE/BS EN 17037)

Building	No. of Units	No. of Rooms	Daylight - Meets BRE Criteria
All Dwellings	***176***	***498***	***93%***
Block A	89	235	89%
– LKDs		89	72%
– Bedrooms		146	100%
Block B	87	263	96%
– LKDs		87	87%
– Bedrooms		176	100%

Refer to **Appendix C** for a full schedule of results.

5.2. Sunlight Exposure in the Proposed Development

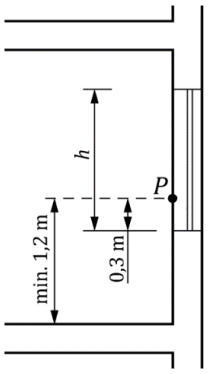
The BRE Guide states:

"In general a dwelling, or non-domestic building that has a particular requirement for sunlight, will appear reasonably sunlit provided:

- *at least one main window wall faces within 90° of due south and*
- *a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March. This is assessed at the inside centre of the window(s); sunlight received by different windows can be added provided they occur at different times and sunlight hours are not double counted."*[15]

5.2.1. Assessment Method

The assessment for **Sunlight Exposure** (SE) should be conducted for each opening of a space for a reference point P located on the inner surface of the aperture. Reference point P is located at the centre of the opening width and a minimum of 1.2m above the floor and 0.3m above the sill of the daylight opening. Where there is multiple opening of a space, it is possible to cumulate the time of sunlight availability if not occurring at the same time.



Trees

To assess the sunlight provision for new buildings BS EN 17037 recommends the calculation of sunlight hours be carried out on 21st March. At this time of the year deciduous trees will not be in full leaf and some sunlight would be expected to penetrate. However, it would be impossible to calculate this accurately. The BRE Guide recommends:

"It is therefore recommended that where trees may affect sunlight provision, the calculations should first be carried out with deciduous trees as opaque objects …. The calculations could then be repeated without deciduous trees entirely. This gives the range of potential sunlight hours. Buildings and other solid objects should always be included. Evergreen trees where no light can penetrate all year round should also always be included as solid."[16]

and

"If the minimum recommendation is met with opaque trees then sunlight would be adequate. If the minimum recommendation is not reached with either opaque trees or no trees then sunlight would be considered inadequate. For a room where the recommendation is exceeded without trees, but not with opaque trees, sunlight provision may be adequate, but the trees will have some effect on the sunlight received."[17]

5.2.2. Assessment Criteria

The BRE Guide recommends that a space should receive possible sunlight for a duration of a minimum of 1.5 hours on a selected date between February 1st and March 21st. The normal date used for the assessment is March 21st.

Table 4 Sunlight Exposure Recommendations Values

Level of Recommendation for Exposure to Sunlight	Sunlight Exposure
Minium	1.5 hrs
Medium	3.0 hrs
High	4.0 hrs

[15] BRE Guide: 3.1.15

[16] BRE Guide: G3.2

[17] BRE Guide: G3.4

5.2.3. Summary of Results

The scheme performs very well with respect to sunlight exposure, with 87% on the units meeting the criteria, 83% in clock A and 91% in block B. All large-scale developments include a portion of units where their LKDs face predominantly north and therefore will receive minimal daylight on the BRE assessment date of 21st March. In this scheme 19 of the 23 units which fail are north facing. If these were omitted from the assessment, 98% would meet the criteria.

Table 5 Sunlight Exposure Results Summary

Building	No. of Units	No. of Rooms	Sunlight - Meets BRE Criteria
All Dwellings	***176***	***498***	***87%***
Block A	89	235	83%
Block B	87	263	91%

Refer to **Appendix D** for a full schedule of results.

5.3. Sunlight Provision to Amenity Spaces in the Proposed Development

5.3.1. Assessment Method

BRE Guidelines recommend that for an external garden or amenity area to appear adequately sunlit throughout the year, at least half of the space should receive at least 2 hours of sunlight on 21st March, the equinox.

Trees

In general, trees do not need to be considered when assessing potential loss of light to gardens and amenity spaces.

*"In assessing the impact of buildings on sunlight in gardens …, **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)."*[18] [Emphasis added.]

5.3.2. Summary of Results

There are three amenity areas included in the proposed scheme and all three easily meet the BRE criteria for provision of sunlight.

Table 6 Sunlight Provision to Amenity Spaces Results Summary

Amenity Area	Area m^2	Area Receiving 2 Hrs of Sunlight - %	Meets BRE Criteria
Communal Open Space	923	82%	Yes
Public Open Space	1,952	100%	Yes
Creche Open Space	151	100%	Yes

Refer to **Appendix E** for a full schedule of results.

[18] BRE Guide 2022 : G4.1

6.0 Daylight and Sunlight Impacts on Existing Buildings

There are three assessments that must be made to determine if a proposal adversely affects the daylight and sunlight to existing buildings.

1. Daylight access to existing buildings
2. Sunlight access to existing buildings
3. Sunlight access to neighbouring amenity areas

6.1. Loss of daylight to existing buildings

6.1.1. Assessment Method

The amount of skylight falling on a vertical wall or window can be quantified as the **Vertical Sky Component** (VSC). The VSC for existing buildings is the illuminance on the outside of a window, divided by the illuminance falling on an unobstructed horizontal plane, under overcast sky conditions. The standard Commission Internationale d'Eclairage (CIE) overcast sky is used, and the ratio is usually expressed as a percentage. The maximum value is almost 40% for a completely unobstructed vertical wall and the reference point is in the external plane of the window wall.

"Loss of light to existing windows need not be analysed if the distance of each part of the new development from the existing window is three or more times its height above the centre of the existing window. In these cases the loss of light will be small." [19] Refer to Figure 6 below.

"Measure the angle to the horizontal subtended by the new development at the level of the centre of the lowest window. If this angle is less than 25° for the whole of the development then it is unlikely to have a substantial effect on the diffuse skylight enjoyed by the existing building. If, for any part of the new development, this angle is more than 25°, a more detailed check is needed to find the loss of skylight to the existing building."[20] Refer to Figure 7 *below.*

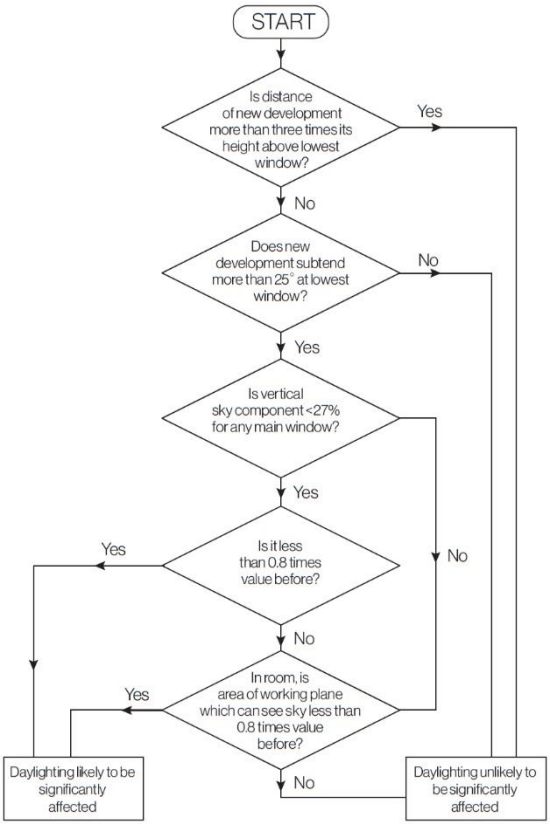


Figure 5 Decision chart: diffuse daylight in existing buildings

[19] BRE Guide: 2.2.4

[20] BRE Guide: 2.2.5

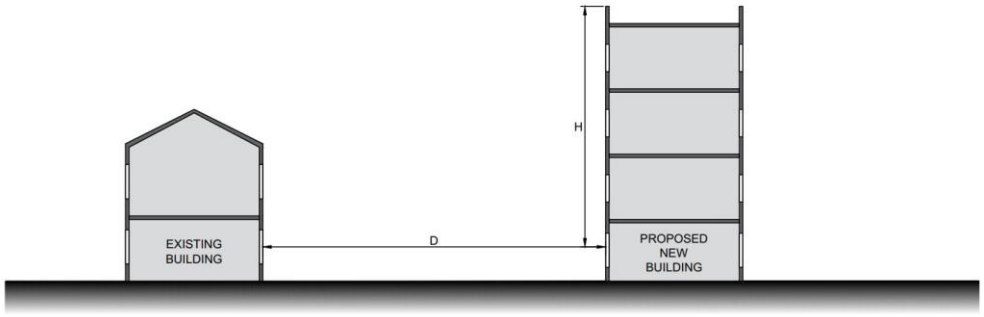


Figure 6 Distance test for Daylight Impact to Existing Buildings (Is D > 3xH)

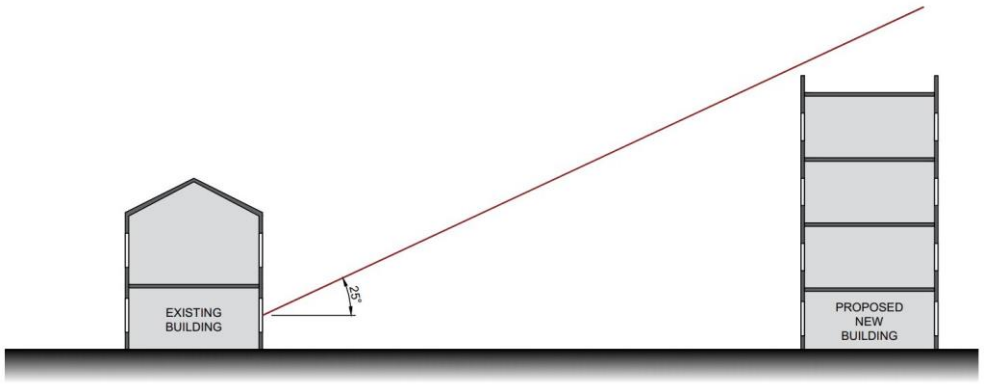


Figure 7 25° Angle test for Daylight Impact to Existing Buildings

Trees

While the potential impact of existing trees must be considered when assessing the daylight to proposed dwellings, trees do not need to be considered for existing buildings, unless a dense belt or group of evergreens is specifically planned as a windbreaker or for privacy purposes.

"It is generally more difficult to calculate the effects of trees on daylight because of their irregular shapes and because some light will generally penetrate through the tree crown. ***Where the effect of a new building on existing buildings nearby is being analysed, it is usual to ignore the effect of existing trees.*** *This is because daylight is at its scarcest and most valuable in winter when most trees will not be in leaf."*[21] [Emphasis added.]

6.1.2. Assessment Criteria

The daylight to an existing building may be adversely affected if:

- the VSC measured at the centre of an existing main window is less than 27%, and less than 0.80 times its former value.
- the area of the working plane, 0.85m high, in a room which can receive direct skylight is reduced to less than 0.80 times its former value.

The line that divides the points on the working plane which can and cannot see the sky is known as the No Sky Line (NSL). The NSL test can only be carried out when the internal room layout is known, which is seldom the case when assessing existing buildings.

[21] BRE Guide: G1.2

6.1.3. **Summary of Results**

The neighbouring buildings in the vicinity of the proposal were reviewed using the Decision Chart referenced in Figure 5 above to determine which ones required a more detailed assessment for potential loss of daylight.

Blocks 11 and 12 of the earlier phases of the scheme, having received planning permission, are treated as existing buildings and required assessment. The only existing buildings in the vicinity are The Lee Rowing Club, Presentation Brothers College Rowing Club and Páirc Uí Chaoimh. The rowing clubs are non-residential buildings which would only be in occasional use and do not require an assessment. Páirc Uí Chaoimh being a sports stadium does not require assessment.

Table 7 Daylight Provision to Existing Buildings

Buildings	No of Windows Assessed	Meets BRE Criteria	Meets BRE Criteria %	Building Use	Impact Assessment
All Buildings	171	119	70%		
Individual Buildings					
Block 11	95	47	49%	Apartments	Moderate
Block 12	76	72	95%	Apartments	Minor
Supplementary Assessment:					
Block 11 – Balconies Excluded	95	83	87%	Apartments	Minor
Block 12 – Balconies Excluded	76	76	100%	Apartments	Negligible

Across the two block 70% of the assessed windows meet the BRE criteria: 49% for block 11 and 95% for block 12. In situation such as this when a neighbouring building with balconies has a weak performance, the BRE Guide recommends that an additional calculation of VSC be made without the balconies. If the VSC reduction is then less than 0.8, it would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of light.

"Existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even a modest obstruction opposite may result in a large relative impact on the VSC, and on the area receiving direct skylight. One way to demonstrate this would be to carry out an additional calculation of the VSC and area receiving direct skylight, for both the existing and proposed situations, without the balcony in place."[22]

When this additional test was conducted, 87% of the block 11 windows and 100% Block 12 windows meet the BRE criteria. Therefore, the impact on these buildings can be assessed as **Minor** and **Negligible** respectively.

Refer to **Appendix G** for a full schedule of results.

[22] BRE Guide: 2.2.13

6.2. Loss of sunlight to existing buildings

6.2.1. Assessment Method

To determine the possible loss of sunlight to existing buildings the **Annual Probable Sunlight Hours** (APSH) is calculated. *"Here 'probable sunlight hours' means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question (based on sunshine probability data). The sunlight reaching a window is quantified as a percentage of this unobstructed annual total."*[23]

It is recommended that all living rooms and conservatory windows of existing dwellings be assessed if the new development is positioned within 90° of due south and it subtends an angle greater than 25° to the horizontal, measured from the centre of the window. The reference point is the centre of the window, or 1.6m above the floor for floor to ceiling windows or patio doors, on the plane of the outside surface of the wall.

Trees

Similar to the VSC assessment above, trees are not included, unless a dense belt or group of evergreens is specifically planned as a windbreaker or for privacy purposes.

6.2.2. Assessment Criteria

The sun lighting of an existing dwelling may be adversely affected, if the centre of the window:

- receives less than 25% of annual probable sunlight hours and less than 0.8 times its former annual value; or less than 5% of annual probable sunlight hours between 21 September and 21 March and less than 0.80 times its former value during that period;
- and also has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

`

"It is not always necessary to do a full calculation to check sunlight potential. The guideline above is met provided either of the following is true:

- *If the distance of each part of the new development from the existing window is three or more times its height above the centre of the existing window (note: obstructions within 90° of due north of the existing window need not count here).*
- *The window wall faces within 90° of due south and no obstruction, measured in the section perpendicular to the window wall, subtends an angle of more than 25° to the horizontal. Again, obstructions within 90° of due north of the existing window need not be counted.*
- *The window wall faces within 20° of due south and the reference point has a VSC of 27% or more."*[24]

6.2.3. Summary of Results

Blocks 11 and 12 of the earlier phases of the scheme, having received planning permission, are treated as existing buildings and required assessment.

[23] BRE Guide: 3.2.4

[24] BRE Guide: 3.2.9

Table 8 Sunlight Provision to Existing Buildings Results Summary

Buildings	No. of Windows	Meet APSH Criteria	Meet WPSH Criteria	Meet Both Criteria	Building Use	Impact Assessment
All Buildings	171	87%	100%	87%		
Individual Buildings						
Block 11	95	77%	100%	77%	Apartments	Minor
Block 12	76	100%	100%	100%	Apartments	Negligible

The proposed scheme has a limited effect on sunlight receive by blocks 11 and 12, and the impact is assessed as **Minor** and **Negligible** respectively.

Refer to **Appendix H** for a full schedule of results.

6.3. Loss of sunlight to existing gardens and amenity areas

6.3.1. Assessment Method

BRE Guidelines recommend that for an existing garden or amenity area to appear adequately sunlit throughout the year, at least half of the space should receive at least 2 hours of sunlight on 21 March, the equinox.

Trees

In general, trees do not need to be considered when assessing potential loss of light to existing gardens and amenity spaces.

"In assessing the impact of buildings on sunlight in gardens …, ***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)."*[25] [Emphasis added.]

6.3.2. Assessment Criteria

"If as a result of a new development an existing garden or amenity area does not meet the above, and the area that can receive two hours of sun on 21 March is less than 0.80 times its former value, then the loss of sunlight is likely to be noticeable. If a detailed calculation cannot be carried out, it is recommended that the centre of the area should receive at least two hours of sunlight on 21 March."[26]

6.3.3. Summary of Results

Only two existing amenity areas required assessment, the area adjacent to block 12 of the previously approved scheme and the wetlands area between the proposal and Páirc Uí Chaoimh. As the table below indicates, neither area is impacted by the proposal.

[25] BRE Guide 2022 : G4.1

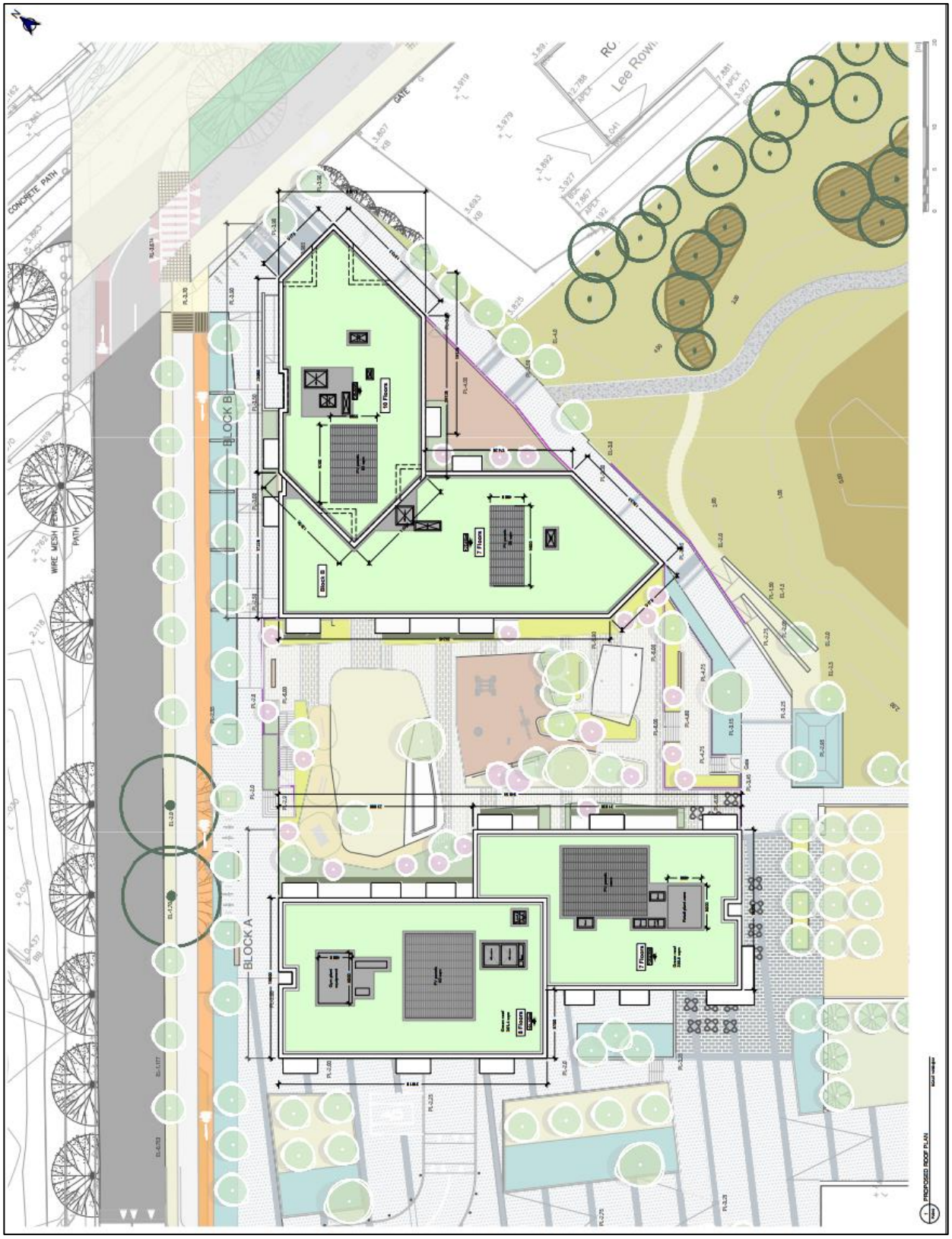
[26] BRE Guide 2022 : 3.3.17

Table 9 Sunlight to Existing Amenity Areas Results Summary.

Amenity Area	Area m^2	Area Receiving 2 Hrs of Sunlight - Existing %	Area Receiving 2 Hrs of Sunlight - Proposed %	Existing Vs Proposed	Meets BRE Criteria
OS Plaza	1,376	100%	100%	1.0	Yes
OS Block 12	1,511	100%	93%	0.93	Yes
Wetland	8,979	100%	100%	1.0	Yes

Refer to **Appendix I** for a full schedule of results.

Appendix A – Site Plan



Appendix B – Floor Plans with Room Reference Numbers

Block A-00 Floor

Block A-01 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Building
Block A

TITLE
BA 01 Floor

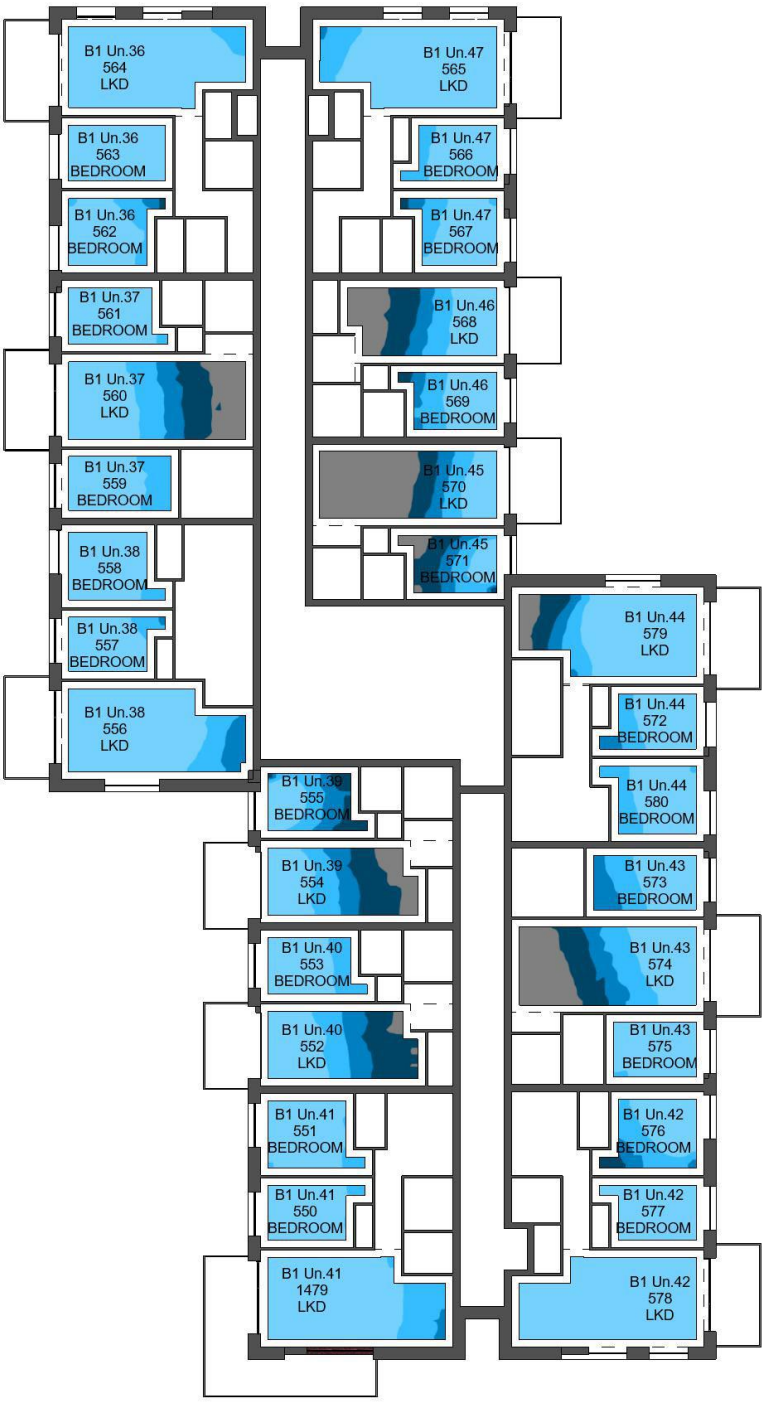
Block A-02 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Building
Block A

TITLE
BA 02 Floor



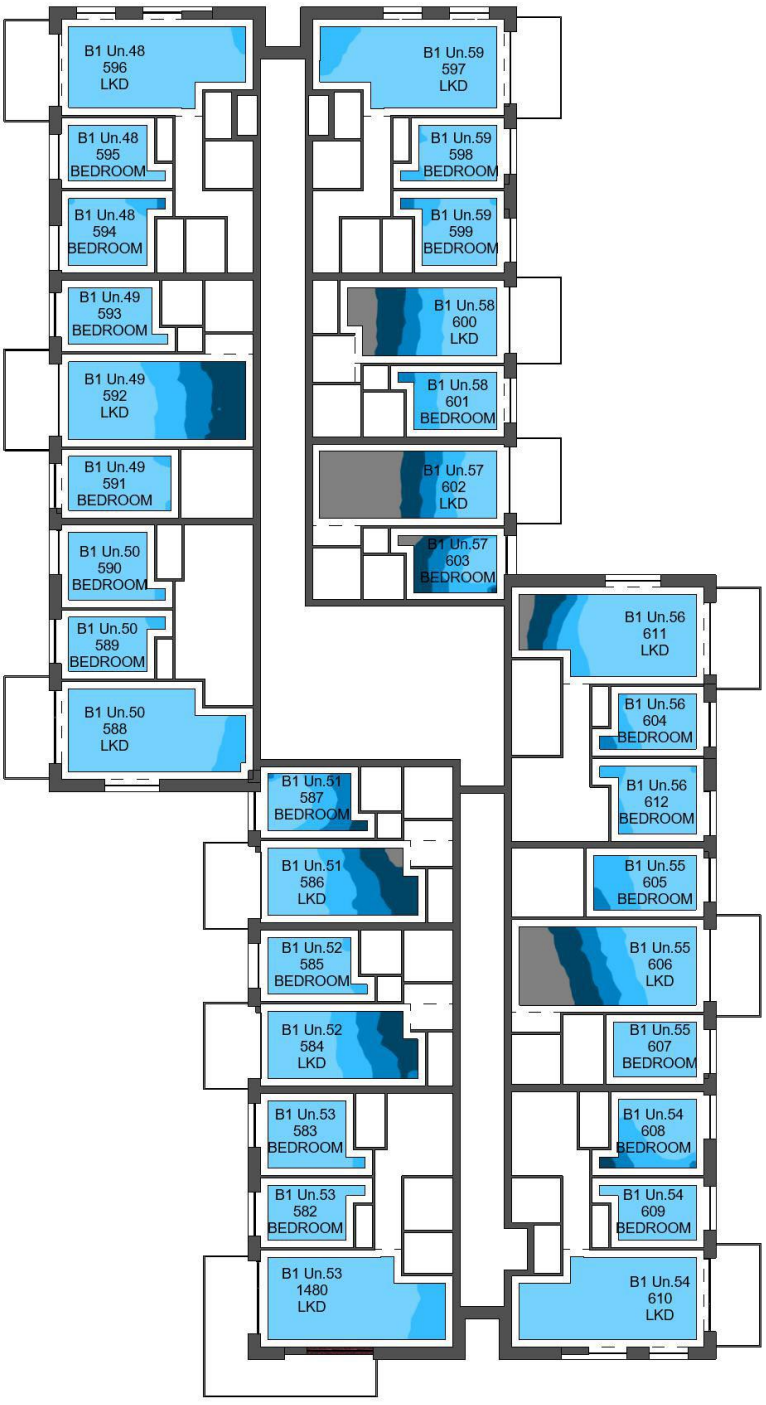
Block A-03 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Building
Block A

TITLE
BA 03 Floor



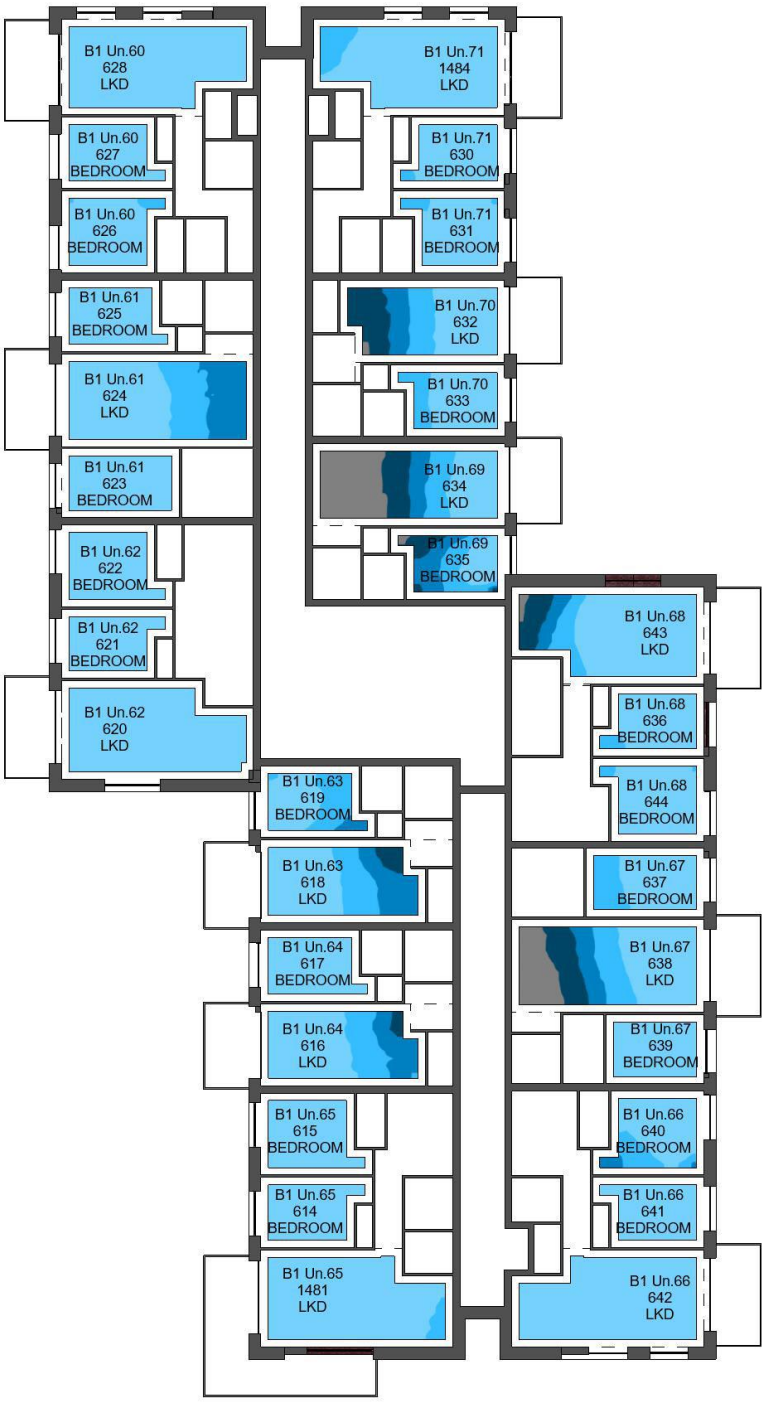
Block A-04 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Building
Block A

TITLE
BA 04 Floor



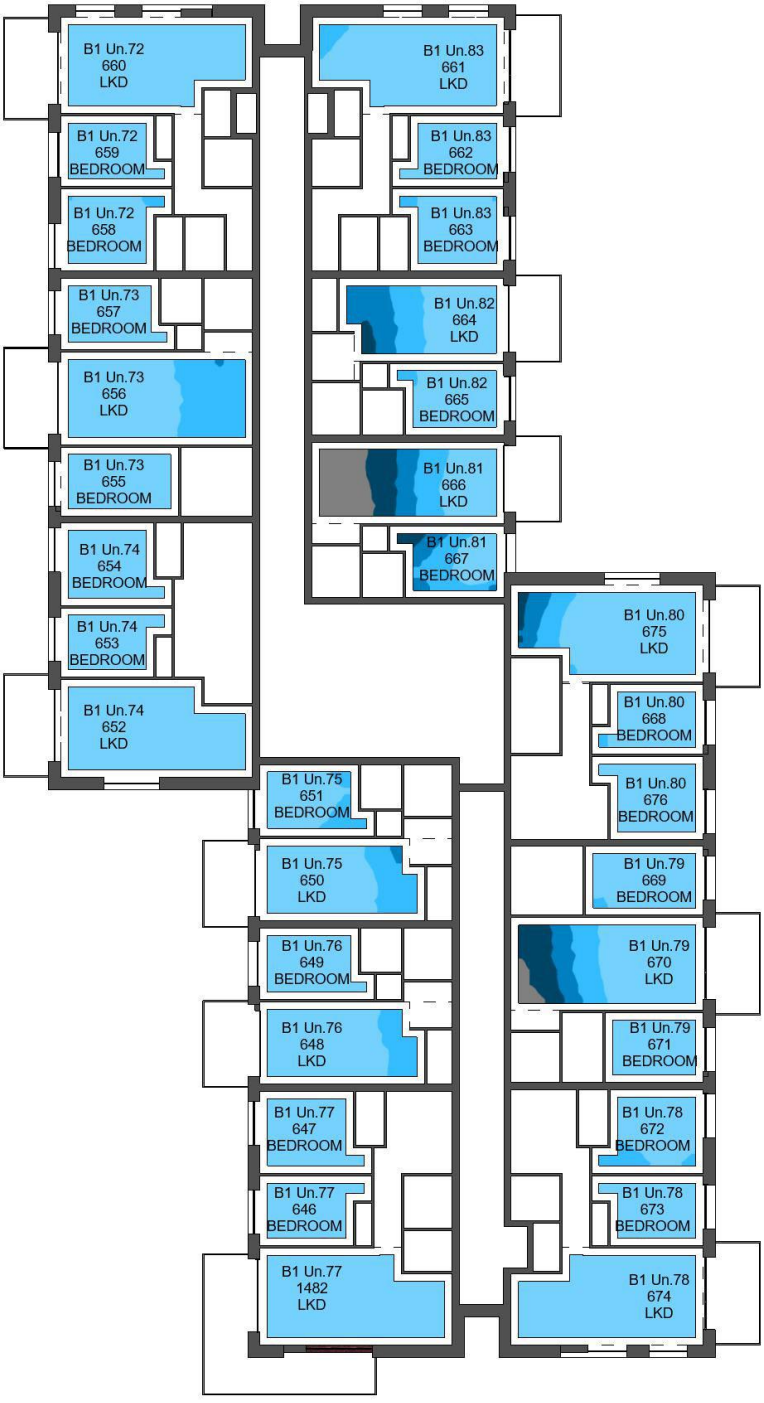
Block A-05 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Building
Block A

TITLE
BA 05 Floor

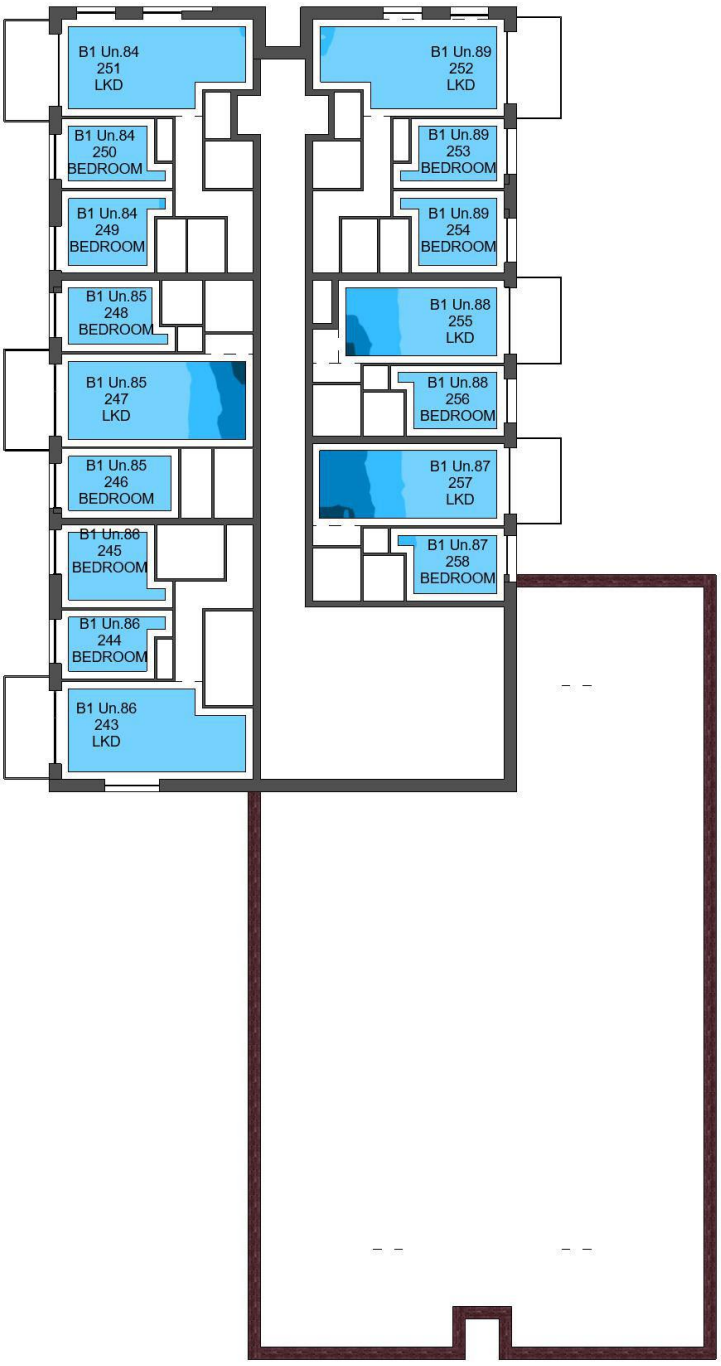


SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block A-06 Floor

Building
Block A
TITLE
BA 06 Floor



Block A-07 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Building
Block A

TITLE
BA 07 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-00 Floor

Building
Block B

TITLE
BB 00 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-01 Floor

Building
Block B

TITLE
BB 01 Floor

SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-02 Floor

Building
Block B

TITLE
BB 02 Floor

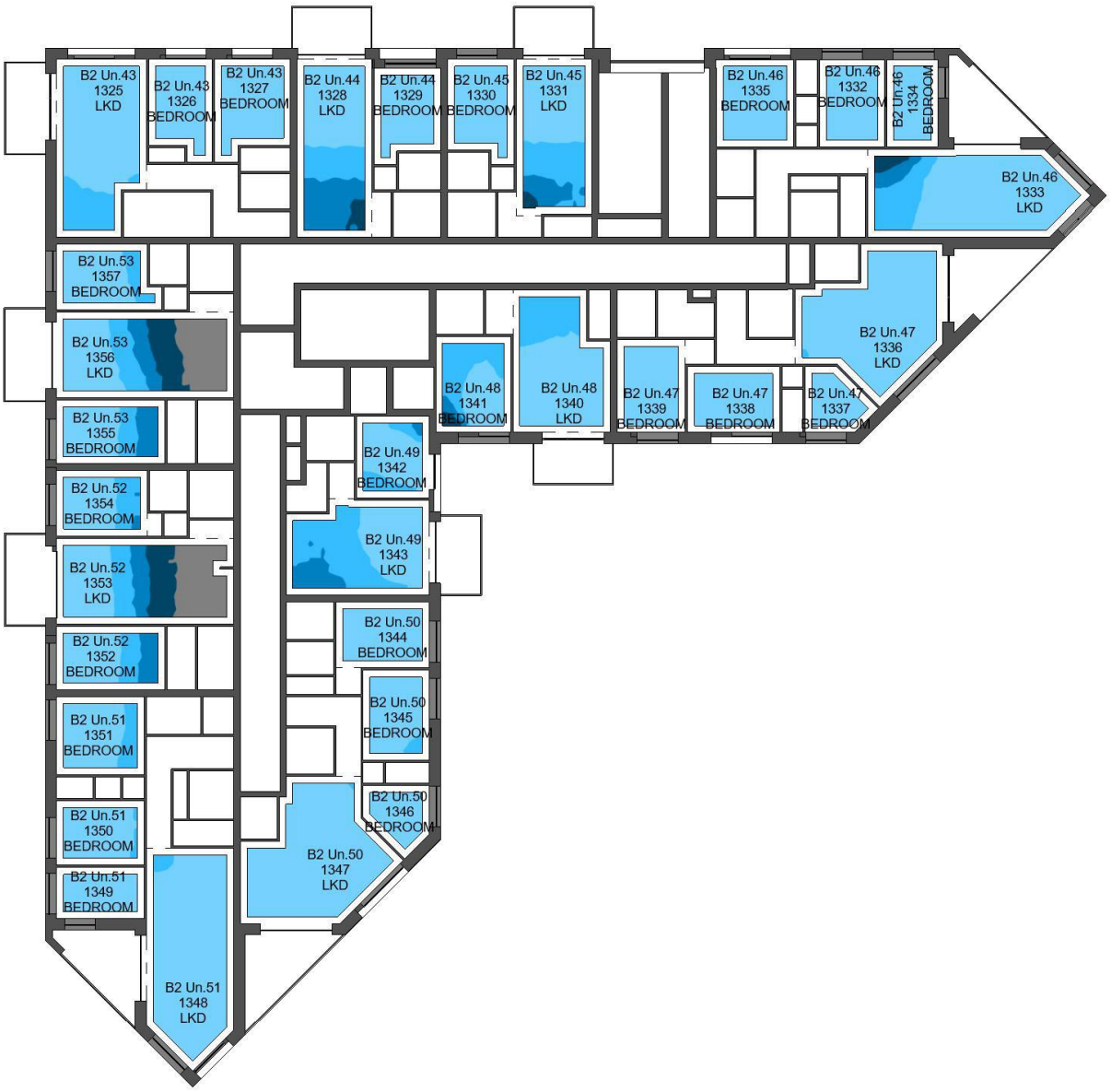
SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-03 Floor

Building
Block B

TITLE
BB 03 Floor



SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-04 Floor

Building
Block B

TITLE
BB 04 Floor

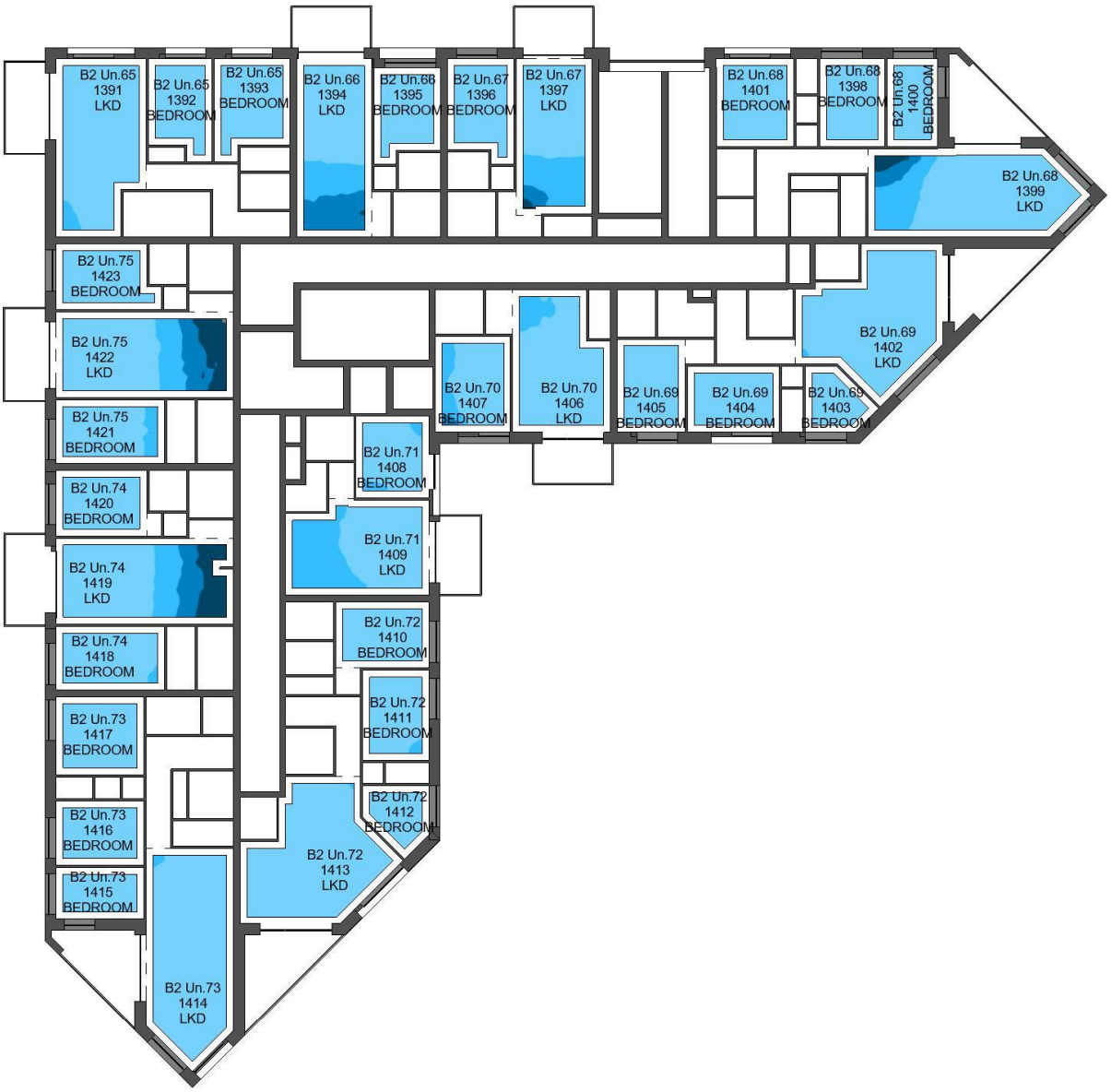
SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-05 Floor

Building
Block B

TITLE
BB 05 Floor



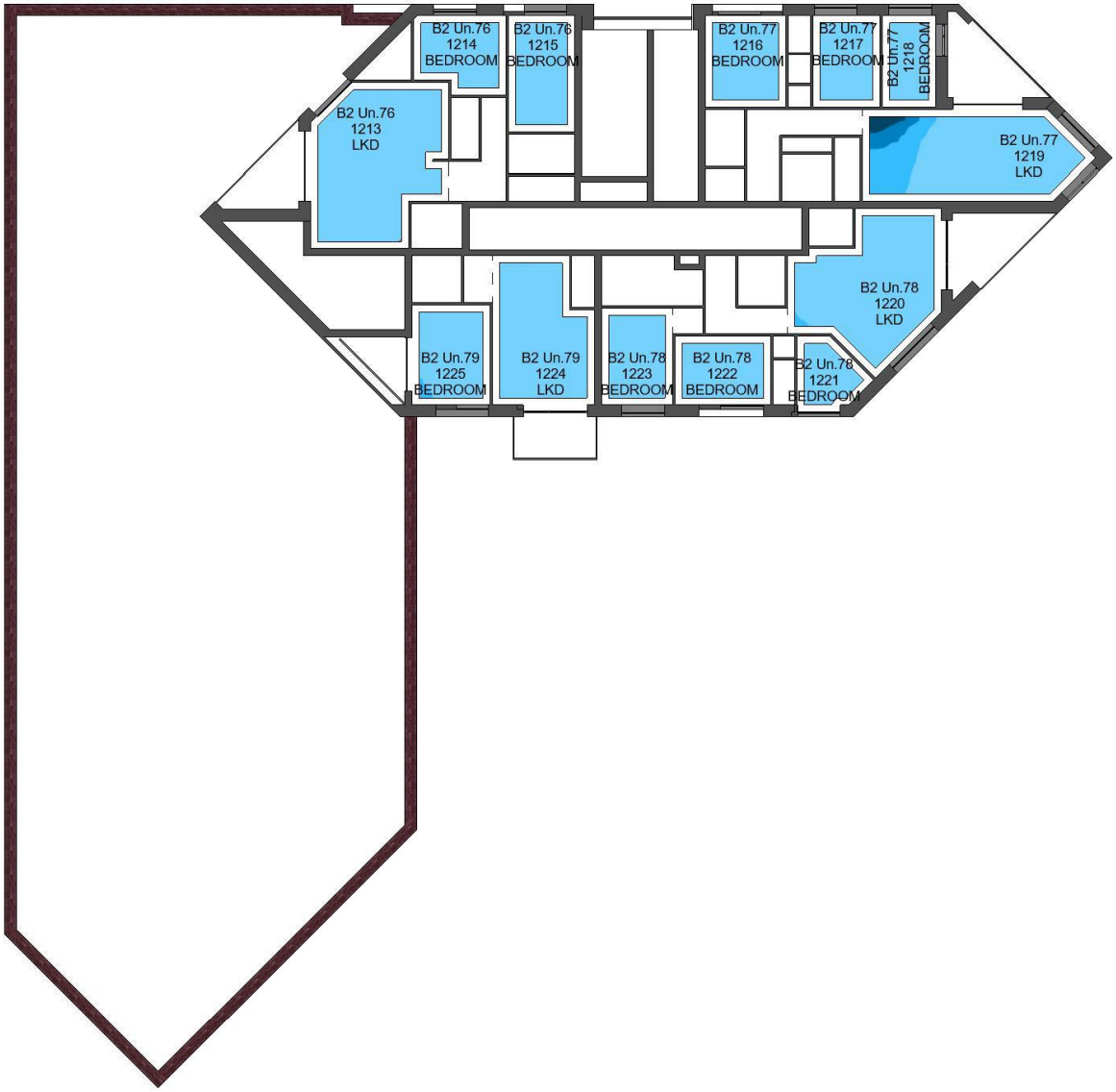
SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-06 Floor

Building
Block B

TITLE
BB 06 Floor



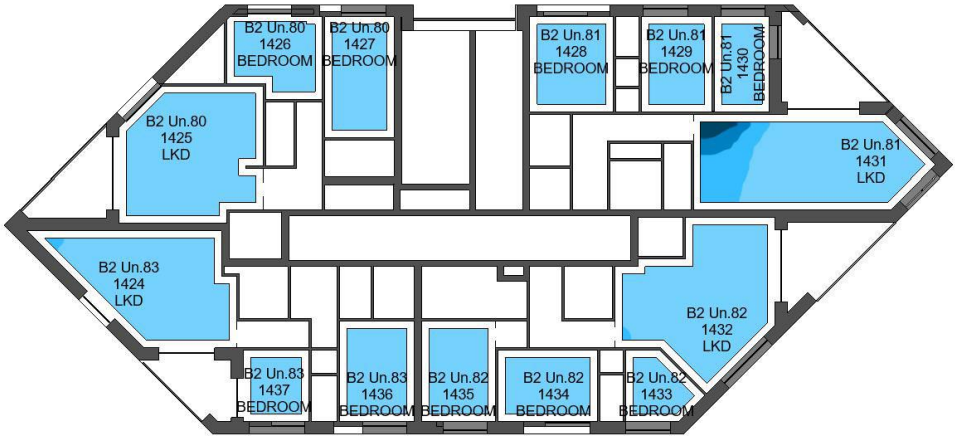
SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-07 Floor

Building
Block B

TITLE
BB 07 Floor



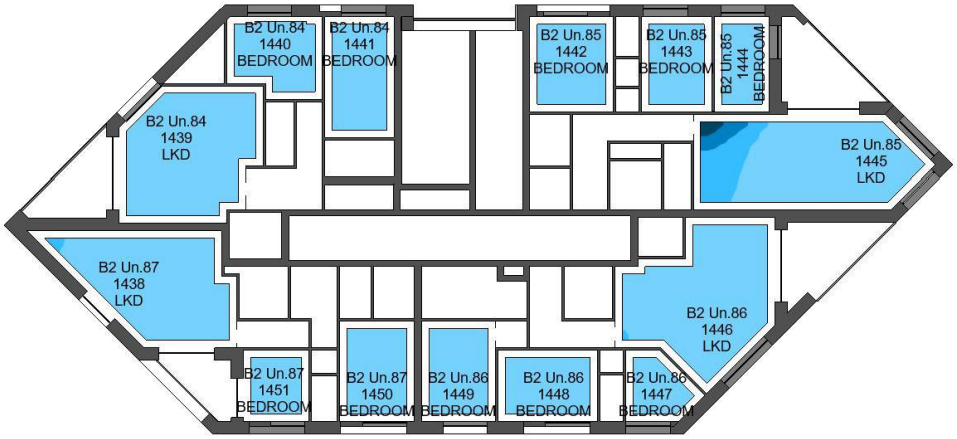
SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-08 Floor

Building
Block B

TITLE
BB 08 Floor



SDA (Spatial Daylight Autonomy)

- 300 Lux
- 200 Lux
- 150 Lux
- 100 Lux
- 0 Lux

Block B-09 Floor

Building
Block B

TITLE
BB 09 Floor

Appendix C – Daylight Provision in New Development Detailed Results

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block A	B1 Un.01	00 Floor	47	Bedroom	96%	100	Yes
Block A	B1 Un.01	00 Floor	48	Bedroom	100%	100	Yes
Block A	B1 Un.01	00 Floor	49	LKD	100%	200	Yes
Block A	B1 Un.02	00 Floor	44	Bedroom	100%	100	Yes
Block A	B1 Un.02	00 Floor	45	LKD	36%	200	No
Block A	B1 Un.02	00 Floor	46	Bedroom	100%	100	Yes
Block A	B1 Un.03	00 Floor	41	Bedroom	65%	100	Yes
Block A	B1 Un.03	00 Floor	42	LKD	68%	200	Yes
Block A	B1 Un.03	00 Floor	43	Bedroom	100%	100	Yes
Block A	B1 Un.04	00 Floor	39	LKD	27%	200	No
Block A	B1 Un.04	00 Floor	40	Bedroom	75%	100	Yes
Block A	B1 Un.05	00 Floor	36	Bedroom	100%	100	Yes
Block A	B1 Un.05	00 Floor	37	LKD	40%	200	No
Block A	B1 Un.05	00 Floor	38	Bedroom	99%	100	Yes
Block A	B1 Un.06	00 Floor	30	LKD	69%	200	Yes
Block A	B1 Un.06	00 Floor	31	Bedroom	100%	100	Yes
Block A	B1 Un.07	00 Floor	32	LKD	47%	200	No
Block A	B1 Un.07	00 Floor	33	Bedroom	100%	100	Yes
Block A	B1 Un.08	00 Floor	35	Bedroom	100%	100	Yes
Block A	B1 Un.08	00 Floor	538	LKD	78%	200	Yes
Block A	B1 Un.09	00 Floor	55	LKD	22%	200	No
Block A	B1 Un.09	00 Floor	56	Bedroom	66%	100	Yes
Block A	B1 Un.10	00 Floor	53	LKD	46%	200	No
Block A	B1 Un.10	00 Floor	54	Bedroom	97%	100	Yes
Block A	B1 Un.11	00 Floor	50	LKD	99%	200	Yes
Block A	B1 Un.11	00 Floor	51	Bedroom	100%	100	Yes
Block A	B1 Un.11	00 Floor	52	Bedroom	100%	100	Yes
Block A	B1 Un.12	01 Floor	70	Bedroom	98%	100	Yes
Block A	B1 Un.12	01 Floor	71	Bedroom	100%	100	Yes
Block A	B1 Un.12	01 Floor	72	LKD	99%	200	Yes
Block A	B1 Un.13	01 Floor	67	Bedroom	100%	100	Yes
Block A	B1 Un.13	01 Floor	68	LKD	35%	200	No
Block A	B1 Un.13	01 Floor	69	Bedroom	100%	100	Yes
Block A	B1 Un.14	01 Floor	64	LKD	79%	200	Yes
Block A	B1 Un.14	01 Floor	65	Bedroom	100%	100	Yes
Block A	B1 Un.14	01 Floor	66	Bedroom	100%	100	Yes
Block A	B1 Un.15	01 Floor	62	LKD	30%	200	No
Block A	B1 Un.15	01 Floor	63	Bedroom	80%	100	Yes
Block A	B1 Un.16	01 Floor	60	LKD	40%	200	No
Block A	B1 Un.16	01 Floor	61	Bedroom	100%	100	Yes
Block A	B1 Un.17	01 Floor	58	Bedroom	100%	100	Yes
Block A	B1 Un.17	01 Floor	59	Bedroom	100%	100	Yes
Block A	B1 Un.17	01 Floor	1477	LKD	89%	200	Yes
Block A	B1 Un.18	01 Floor	85	Bedroom	100%	100	Yes
Block A	B1 Un.18	01 Floor	86	Bedroom	100%	100	Yes
Block A	B1 Un.18	01 Floor	87	LKD	100%	200	Yes
Block A	B1 Un.19	01 Floor	82	Bedroom	100%	100	Yes
Block A	B1 Un.19	01 Floor	83	LKD	44%	200	No
Block A	B1 Un.19	01 Floor	84	Bedroom	100%	100	Yes
Block A	B1 Un.20	01 Floor	80	Bedroom	100%	100	Yes
Block A	B1 Un.20	01 Floor	541	LKD	77%	200	Yes
Block A	B1 Un.20	01 Floor	542	Bedroom	100%	100	Yes
Block A	B1 Un.21	01 Floor	78	LKD	20%	200	No
Block A	B1 Un.21	01 Floor	79	Bedroom	66%	100	Yes
Block A	B1 Un.22	01 Floor	76	LKD	41%	200	No
Block A	B1 Un.22	01 Floor	77	Bedroom	100%	100	Yes
Block A	B1 Un.23	01 Floor	73	LKD	96%	200	Yes

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block A	B1 Un.23	01 Floor	74	Bedroom	100%	100	Yes
Block A	B1 Un.23	01 Floor	75	Bedroom	100%	100	Yes
Block A	B1 Un.24	02 Floor	523	Bedroom	100%	100	Yes
Block A	B1 Un.24	02 Floor	524	Bedroom	100%	100	Yes
Block A	B1 Un.24	02 Floor	525	LKD	100%	200	Yes
Block A	B1 Un.25	02 Floor	520	Bedroom	100%	100	Yes
Block A	B1 Un.25	02 Floor	521	LKD	43%	200	No
Block A	B1 Un.25	02 Floor	522	Bedroom	100%	100	Yes
Block A	B1 Un.26	02 Floor	517	LKD	85%	200	Yes
Block A	B1 Un.26	02 Floor	518	Bedroom	100%	100	Yes
Block A	B1 Un.26	02 Floor	519	Bedroom	100%	100	Yes
Block A	B1 Un.27	02 Floor	515	LKD	30%	200	No
Block A	B1 Un.27	02 Floor	516	Bedroom	93%	100	Yes
Block A	B1 Un.28	02 Floor	513	LKD	48%	200	No
Block A	B1 Un.28	02 Floor	514	Bedroom	100%	100	Yes
Block A	B1 Un.29	02 Floor	511	Bedroom	100%	100	Yes
Block A	B1 Un.29	02 Floor	512	Bedroom	100%	100	Yes
Block A	B1 Un.29	02 Floor	1478	LKD	94%	200	Yes
Block A	B1 Un.30	02 Floor	544	Bedroom	100%	100	Yes
Block A	B1 Un.30	02 Floor	545	Bedroom	100%	100	Yes
Block A	B1 Un.30	02 Floor	546	LKD	100%	200	Yes
Block A	B1 Un.31	02 Floor	534	Bedroom	100%	100	Yes
Block A	B1 Un.31	02 Floor	535	LKD	45%	200	No
Block A	B1 Un.31	02 Floor	543	Bedroom	100%	100	Yes
Block A	B1 Un.32	02 Floor	533	Bedroom	100%	100	Yes
Block A	B1 Un.32	02 Floor	547	LKD	78%	200	Yes
Block A	B1 Un.32	02 Floor	548	Bedroom	100%	100	Yes
Block A	B1 Un.33	02 Floor	531	LKD	24%	200	No
Block A	B1 Un.33	02 Floor	532	Bedroom	79%	100	Yes
Block A	B1 Un.34	02 Floor	529	LKD	42%	200	No
Block A	B1 Un.34	02 Floor	530	Bedroom	100%	100	Yes
Block A	B1 Un.35	02 Floor	526	LKD	99%	200	Yes
Block A	B1 Un.35	02 Floor	527	Bedroom	100%	100	Yes
Block A	B1 Un.35	02 Floor	528	Bedroom	100%	100	Yes
Block A	B1 Un.36	03 Floor	562	Bedroom	100%	100	Yes
Block A	B1 Un.36	03 Floor	563	Bedroom	100%	100	Yes
Block A	B1 Un.36	03 Floor	564	LKD	100%	200	Yes
Block A	B1 Un.37	03 Floor	559	Bedroom	100%	100	Yes
Block A	B1 Un.37	03 Floor	560	LKD	53%	200	Yes
Block A	B1 Un.37	03 Floor	561	Bedroom	100%	100	Yes
Block A	B1 Un.38	03 Floor	556	LKD	92%	200	Yes
Block A	B1 Un.38	03 Floor	557	Bedroom	100%	100	Yes
Block A	B1 Un.38	03 Floor	558	Bedroom	100%	100	Yes
Block A	B1 Un.39	03 Floor	554	LKD	48%	200	No
Block A	B1 Un.39	03 Floor	555	Bedroom	100%	100	Yes
Block A	B1 Un.40	03 Floor	552	LKD	55%	200	Yes
Block A	B1 Un.40	03 Floor	553	Bedroom	100%	100	Yes
Block A	B1 Un.41	03 Floor	550	Bedroom	100%	100	Yes
Block A	B1 Un.41	03 Floor	551	Bedroom	100%	100	Yes
Block A	B1 Un.41	03 Floor	1479	LKD	98%	200	Yes
Block A	B1 Un.42	03 Floor	576	Bedroom	100%	100	Yes
Block A	B1 Un.42	03 Floor	577	Bedroom	100%	100	Yes
Block A	B1 Un.42	03 Floor	578	LKD	100%	200	Yes
Block A	B1 Un.43	03 Floor	573	Bedroom	100%	100	Yes
Block A	B1 Un.43	03 Floor	574	LKD	47%	200	No
Block A	B1 Un.43	03 Floor	575	Bedroom	100%	100	Yes
Block A	B1 Un.44	03 Floor	572	Bedroom	100%	100	Yes
Block A	B1 Un.44	03 Floor	579	LKD	79%	200	Yes
Block A	B1 Un.44	03 Floor	580	Bedroom	100%	100	Yes

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block A	B1 Un.45	03 Floor	570	LKD	28%	200	No
Block A	B1 Un.45	03 Floor	571	Bedroom	89%	100	Yes
Block A	B1 Un.46	03 Floor	568	LKD	48%	200	No
Block A	B1 Un.46	03 Floor	569	Bedroom	100%	100	Yes
Block A	B1 Un.47	03 Floor	565	LKD	99%	200	Yes
Block A	B1 Un.47	03 Floor	566	Bedroom	100%	100	Yes
Block A	B1 Un.47	03 Floor	567	Bedroom	100%	100	Yes
Block A	B1 Un.48	04 Floor	594	Bedroom	100%	100	Yes
Block A	B1 Un.48	04 Floor	595	Bedroom	100%	100	Yes
Block A	B1 Un.48	04 Floor	596	LKD	100%	200	Yes
Block A	B1 Un.49	04 Floor	591	Bedroom	100%	100	Yes
Block A	B1 Un.49	04 Floor	592	LKD	66%	200	Yes
Block A	B1 Un.49	04 Floor	593	Bedroom	100%	100	Yes
Block A	B1 Un.50	04 Floor	588	LKD	100%	200	Yes
Block A	B1 Un.50	04 Floor	589	Bedroom	100%	100	Yes
Block A	B1 Un.50	04 Floor	590	Bedroom	100%	100	Yes
Block A	B1 Un.51	04 Floor	586	LKD	58%	200	Yes
Block A	B1 Un.51	04 Floor	587	Bedroom	100%	100	Yes
Block A	B1 Un.52	04 Floor	584	LKD	66%	200	Yes
Block A	B1 Un.52	04 Floor	585	Bedroom	100%	100	Yes
Block A	B1 Un.53	04 Floor	582	Bedroom	100%	100	Yes
Block A	B1 Un.53	04 Floor	583	Bedroom	100%	100	Yes
Block A	B1 Un.53	04 Floor	1480	LKD	100%	200	Yes
Block A	B1 Un.54	04 Floor	608	Bedroom	100%	100	Yes
Block A	B1 Un.54	04 Floor	609	Bedroom	100%	100	Yes
Block A	B1 Un.54	04 Floor	610	LKD	100%	200	Yes
Block A	B1 Un.55	04 Floor	605	Bedroom	100%	100	Yes
Block A	B1 Un.55	04 Floor	606	LKD	50%	200	Yes
Block A	B1 Un.55	04 Floor	607	Bedroom	100%	100	Yes
Block A	B1 Un.56	04 Floor	604	Bedroom	100%	100	Yes
Block A	B1 Un.56	04 Floor	611	LKD	81%	200	Yes
Block A	B1 Un.56	04 Floor	612	Bedroom	100%	100	Yes
Block A	B1 Un.57	04 Floor	602	LKD	33%	200	No
Block A	B1 Un.57	04 Floor	603	Bedroom	95%	100	Yes
Block A	B1 Un.58	04 Floor	600	LKD	55%	200	Yes
Block A	B1 Un.58	04 Floor	601	Bedroom	100%	100	Yes
Block A	B1 Un.59	04 Floor	597	LKD	100%	200	Yes
Block A	B1 Un.59	04 Floor	598	Bedroom	100%	100	Yes
Block A	B1 Un.59	04 Floor	599	Bedroom	100%	100	Yes
Block A	B1 Un.60	05 Floor	626	Bedroom	100%	100	Yes
Block A	B1 Un.60	05 Floor	627	Bedroom	100%	100	Yes
Block A	B1 Un.60	05 Floor	628	LKD	100%	200	Yes
Block A	B1 Un.61	05 Floor	623	Bedroom	100%	100	Yes
Block A	B1 Un.61	05 Floor	624	LKD	78%	200	Yes
Block A	B1 Un.61	05 Floor	625	Bedroom	100%	100	Yes
Block A	B1 Un.62	05 Floor	620	LKD	100%	200	Yes
Block A	B1 Un.62	05 Floor	621	Bedroom	100%	100	Yes
Block A	B1 Un.62	05 Floor	622	Bedroom	100%	100	Yes
Block A	B1 Un.63	05 Floor	618	LKD	73%	200	Yes
Block A	B1 Un.63	05 Floor	619	Bedroom	100%	100	Yes
Block A	B1 Un.64	05 Floor	616	LKD	81%	200	Yes
Block A	B1 Un.64	05 Floor	617	Bedroom	100%	100	Yes
Block A	B1 Un.65	05 Floor	614	Bedroom	100%	100	Yes
Block A	B1 Un.65	05 Floor	615	Bedroom	100%	100	Yes
Block A	B1 Un.65	05 Floor	1481	LKD	100%	200	Yes
Block A	B1 Un.66	05 Floor	640	Bedroom	100%	100	Yes
Block A	B1 Un.66	05 Floor	641	Bedroom	100%	100	Yes
Block A	B1 Un.66	05 Floor	642	LKD	100%	200	Yes
Block A	B1 Un.67	05 Floor	637	Bedroom	100%	100	Yes

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block A	B1 Un.67	05 Floor	638	LKD	55%	200	Yes
Block A	B1 Un.67	05 Floor	639	Bedroom	100%	100	Yes
Block A	B1 Un.68	05 Floor	636	Bedroom	100%	100	Yes
Block A	B1 Un.68	05 Floor	643	LKD	83%	200	Yes
Block A	B1 Un.68	05 Floor	644	Bedroom	100%	100	Yes
Block A	B1 Un.69	05 Floor	634	LKD	40%	200	No
Block A	B1 Un.69	05 Floor	635	Bedroom	99%	100	Yes
Block A	B1 Un.70	05 Floor	632	LKD	63%	200	Yes
Block A	B1 Un.70	05 Floor	633	Bedroom	100%	100	Yes
Block A	B1 Un.71	05 Floor	630	Bedroom	100%	100	Yes
Block A	B1 Un.71	05 Floor	631	Bedroom	100%	100	Yes
Block A	B1 Un.71	05 Floor	1484	LKD	100%	200	Yes
Block A	B1 Un.72	06 Floor	658	Bedroom	100%	100	Yes
Block A	B1 Un.72	06 Floor	659	Bedroom	100%	100	Yes
Block A	B1 Un.72	06 Floor	660	LKD	100%	200	Yes
Block A	B1 Un.73	06 Floor	655	Bedroom	100%	100	Yes
Block A	B1 Un.73	06 Floor	656	LKD	100%	200	Yes
Block A	B1 Un.73	06 Floor	657	Bedroom	100%	100	Yes
Block A	B1 Un.74	06 Floor	652	LKD	100%	200	Yes
Block A	B1 Un.74	06 Floor	653	Bedroom	100%	100	Yes
Block A	B1 Un.74	06 Floor	654	Bedroom	100%	100	Yes
Block A	B1 Un.75	06 Floor	650	LKD	99%	200	Yes
Block A	B1 Un.75	06 Floor	651	Bedroom	100%	100	Yes
Block A	B1 Un.76	06 Floor	648	LKD	100%	200	Yes
Block A	B1 Un.76	06 Floor	649	Bedroom	100%	100	Yes
Block A	B1 Un.77	06 Floor	646	Bedroom	100%	100	Yes
Block A	B1 Un.77	06 Floor	647	Bedroom	100%	100	Yes
Block A	B1 Un.77	06 Floor	1482	LKD	100%	200	Yes
Block A	B1 Un.78	06 Floor	672	Bedroom	100%	100	Yes
Block A	B1 Un.78	06 Floor	673	Bedroom	100%	100	Yes
Block A	B1 Un.78	06 Floor	674	LKD	100%	200	Yes
Block A	B1 Un.79	06 Floor	669	Bedroom	100%	100	Yes
Block A	B1 Un.79	06 Floor	670	LKD	69%	200	Yes
Block A	B1 Un.79	06 Floor	671	Bedroom	100%	100	Yes
Block A	B1 Un.80	06 Floor	668	Bedroom	100%	100	Yes
Block A	B1 Un.80	06 Floor	675	LKD	90%	200	Yes
Block A	B1 Un.80	06 Floor	676	Bedroom	100%	100	Yes
Block A	B1 Un.81	06 Floor	666	LKD	45%	200	No
Block A	B1 Un.81	06 Floor	667	Bedroom	100%	100	Yes
Block A	B1 Un.82	06 Floor	664	LKD	73%	200	Yes
Block A	B1 Un.82	06 Floor	665	Bedroom	100%	100	Yes
Block A	B1 Un.83	06 Floor	661	LKD	100%	200	Yes
Block A	B1 Un.83	06 Floor	662	Bedroom	100%	100	Yes
Block A	B1 Un.83	06 Floor	663	Bedroom	100%	100	Yes
Block A	B1 Un.84	07 Floor	249	Bedroom	100%	100	Yes
Block A	B1 Un.84	07 Floor	250	Bedroom	100%	100	Yes
Block A	B1 Un.84	07 Floor	251	LKD	100%	200	Yes
Block A	B1 Un.85	07 Floor	246	Bedroom	100%	100	Yes
Block A	B1 Un.85	07 Floor	247	LKD	84%	200	Yes
Block A	B1 Un.85	07 Floor	248	Bedroom	100%	100	Yes
Block A	B1 Un.86	07 Floor	243	LKD	100%	200	Yes
Block A	B1 Un.86	07 Floor	244	Bedroom	100%	100	Yes
Block A	B1 Un.86	07 Floor	245	Bedroom	100%	100	Yes
Block A	B1 Un.87	07 Floor	257	LKD	72%	200	Yes
Block A	B1 Un.87	07 Floor	258	Bedroom	100%	100	Yes
Block A	B1 Un.88	07 Floor	255	LKD	93%	200	Yes
Block A	B1 Un.88	07 Floor	256	Bedroom	100%	100	Yes
Block A	B1 Un.89	07 Floor	252	LKD	100%	200	Yes
Block A	B1 Un.89	07 Floor	253	Bedroom	100%	100	Yes

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block A	B1 Un.89	07 Floor	254	Bedroom	100%	100	Yes
Block B	B2 Un.01	00 Floor	1470	Bedroom	100%	100	Yes
Block B	B2 Un.01	00 Floor	1471	Bedroom	100%	100	Yes
Block B	B2 Un.01	00 Floor	1483	LKD	96%	200	Yes
Block B	B2 Un.02	00 Floor	1472	LKD	72%	200	Yes
Block B	B2 Un.02	00 Floor	1473	Bedroom	100%	100	Yes
Block B	B2 Un.03	00 Floor	1474	Bedroom	100%	100	Yes
Block B	B2 Un.03	00 Floor	1475	LKD	94%	200	Yes
Block B	B2 Un.04	00 Floor	1452	LKD	100%	200	Yes
Block B	B2 Un.04	00 Floor	1453	Bedroom	99%	100	Yes
Block B	B2 Un.05	00 Floor	1454	Bedroom	100%	100	Yes
Block B	B2 Un.05	00 Floor	1455	LKD	82%	200	Yes
Block B	B2 Un.06	00 Floor	1456	Bedroom	100%	100	Yes
Block B	B2 Un.06	00 Floor	1457	Bedroom	100%	100	Yes
Block B	B2 Un.06	00 Floor	1458	LKD	100%	200	Yes
Block B	B2 Un.06	00 Floor	1459	Bedroom	100%	100	Yes
Block B	B2 Un.07	00 Floor	1460	LKD	100%	200	Yes
Block B	B2 Un.07	00 Floor	1461	Bedroom	100%	100	Yes
Block B	B2 Un.07	00 Floor	1462	Bedroom	100%	100	Yes
Block B	B2 Un.07	00 Floor	1463	Bedroom	100%	100	Yes
Block B	B2 Un.08	00 Floor	1464	Bedroom	100%	100	Yes
Block B	B2 Un.08	00 Floor	1465	LKD	31%	200	No
Block B	B2 Un.09	00 Floor	1466	Bedroom	100%	100	Yes
Block B	B2 Un.09	00 Floor	1467	Bedroom	100%	100	Yes
Block B	B2 Un.09	00 Floor	1468	LKD	39%	200	No
Block B	B2 Un.10	01 Floor	1226	LKD	97%	200	Yes
Block B	B2 Un.10	01 Floor	1227	Bedroom	100%	100	Yes
Block B	B2 Un.10	01 Floor	1228	Bedroom	100%	100	Yes
Block B	B2 Un.11	01 Floor	1229	LKD	66%	200	Yes
Block B	B2 Un.11	01 Floor	1230	Bedroom	100%	100	Yes
Block B	B2 Un.12	01 Floor	1231	Bedroom	100%	100	Yes
Block B	B2 Un.12	01 Floor	1232	LKD	74%	200	Yes
Block B	B2 Un.13	01 Floor	1233	Bedroom	100%	100	Yes
Block B	B2 Un.13	01 Floor	1234	LKD	92%	200	Yes
Block B	B2 Un.13	01 Floor	1235	Bedroom	100%	100	Yes
Block B	B2 Un.13	01 Floor	1236	Bedroom	100%	100	Yes
Block B	B2 Un.14	01 Floor	1237	LKD	100%	200	Yes
Block B	B2 Un.14	01 Floor	1238	Bedroom	100%	100	Yes
Block B	B2 Un.14	01 Floor	1239	Bedroom	100%	100	Yes
Block B	B2 Un.14	01 Floor	1240	Bedroom	100%	100	Yes
Block B	B2 Un.15	01 Floor	1241	LKD	99%	200	Yes
Block B	B2 Un.15	01 Floor	1242	Bedroom	100%	100	Yes
Block B	B2 Un.16	01 Floor	1243	Bedroom	100%	100	Yes
Block B	B2 Un.16	01 Floor	1244	LKD	75%	200	Yes
Block B	B2 Un.17	01 Floor	1245	Bedroom	100%	100	Yes
Block B	B2 Un.17	01 Floor	1246	Bedroom	100%	100	Yes
Block B	B2 Un.17	01 Floor	1247	Bedroom	100%	100	Yes
Block B	B2 Un.17	01 Floor	1248	LKD	100%	200	Yes
Block B	B2 Un.18	01 Floor	1249	LKD	100%	200	Yes
Block B	B2 Un.18	01 Floor	1250	Bedroom	100%	100	Yes
Block B	B2 Un.18	01 Floor	1251	Bedroom	100%	100	Yes
Block B	B2 Un.18	01 Floor	1252	Bedroom	100%	100	Yes
Block B	B2 Un.19	01 Floor	1253	Bedroom	100%	100	Yes
Block B	B2 Un.19	01 Floor	1254	LKD	33%	200	No
Block B	B2 Un.19	01 Floor	1255	Bedroom	100%	100	Yes
Block B	B2 Un.20	01 Floor	1256	Bedroom	100%	100	Yes
Block B	B2 Un.20	01 Floor	1257	LKD	36%	200	No
Block B	B2 Un.20	01 Floor	1258	Bedroom	100%	100	Yes
Block B	B2 Un.21	02 Floor	1259	LKD	100%	200	Yes

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block B	B2 Un.21	02 Floor	1260	Bedroom	100%	100	Yes
Block B	B2 Un.21	02 Floor	1261	Bedroom	100%	100	Yes
Block B	B2 Un.22	02 Floor	1262	LKD	68%	200	Yes
Block B	B2 Un.22	02 Floor	1263	Bedroom	100%	100	Yes
Block B	B2 Un.23	02 Floor	1264	Bedroom	100%	100	Yes
Block B	B2 Un.23	02 Floor	1265	LKD	79%	200	Yes
Block B	B2 Un.24	02 Floor	1266	Bedroom	100%	100	Yes
Block B	B2 Un.24	02 Floor	1267	LKD	92%	200	Yes
Block B	B2 Un.24	02 Floor	1268	Bedroom	100%	100	Yes
Block B	B2 Un.24	02 Floor	1269	Bedroom	100%	100	Yes
Block B	B2 Un.25	02 Floor	1270	LKD	100%	200	Yes
Block B	B2 Un.25	02 Floor	1271	Bedroom	100%	100	Yes
Block B	B2 Un.25	02 Floor	1272	Bedroom	100%	100	Yes
Block B	B2 Un.25	02 Floor	1273	Bedroom	100%	100	Yes
Block B	B2 Un.26	02 Floor	1274	LKD	99%	200	Yes
Block B	B2 Un.26	02 Floor	1275	Bedroom	100%	100	Yes
Block B	B2 Un.27	02 Floor	1276	Bedroom	100%	100	Yes
Block B	B2 Un.27	02 Floor	1277	LKD	81%	200	Yes
Block B	B2 Un.28	02 Floor	1278	Bedroom	100%	100	Yes
Block B	B2 Un.28	02 Floor	1279	Bedroom	100%	100	Yes
Block B	B2 Un.28	02 Floor	1280	Bedroom	100%	100	Yes
Block B	B2 Un.28	02 Floor	1281	LKD	100%	200	Yes
Block B	B2 Un.29	02 Floor	1282	LKD	100%	200	Yes
Block B	B2 Un.29	02 Floor	1283	Bedroom	100%	100	Yes
Block B	B2 Un.29	02 Floor	1284	Bedroom	100%	100	Yes
Block B	B2 Un.29	02 Floor	1285	Bedroom	100%	100	Yes
Block B	B2 Un.30	02 Floor	1286	Bedroom	100%	100	Yes
Block B	B2 Un.30	02 Floor	1287	LKD	35%	200	No
Block B	B2 Un.30	02 Floor	1288	Bedroom	100%	100	Yes
Block B	B2 Un.31	02 Floor	1289	Bedroom	100%	100	Yes
Block B	B2 Un.31	02 Floor	1290	LKD	38%	200	No
Block B	B2 Un.31	02 Floor	1291	Bedroom	100%	100	Yes
Block B	B2 Un.32	03 Floor	1292	LKD	100%	200	Yes
Block B	B2 Un.32	03 Floor	1293	Bedroom	100%	100	Yes
Block B	B2 Un.32	03 Floor	1294	Bedroom	100%	100	Yes
Block B	B2 Un.33	03 Floor	1295	LKD	69%	200	Yes
Block B	B2 Un.33	03 Floor	1296	Bedroom	100%	100	Yes
Block B	B2 Un.34	03 Floor	1297	Bedroom	100%	100	Yes
Block B	B2 Un.34	03 Floor	1298	LKD	83%	200	Yes
Block B	B2 Un.35	03 Floor	1299	Bedroom	100%	100	Yes
Block B	B2 Un.35	03 Floor	1300	LKD	92%	200	Yes
Block B	B2 Un.35	03 Floor	1301	Bedroom	100%	100	Yes
Block B	B2 Un.35	03 Floor	1302	Bedroom	100%	100	Yes
Block B	B2 Un.36	03 Floor	1303	LKD	100%	200	Yes
Block B	B2 Un.36	03 Floor	1304	Bedroom	100%	100	Yes
Block B	B2 Un.36	03 Floor	1305	Bedroom	100%	100	Yes
Block B	B2 Un.36	03 Floor	1306	Bedroom	100%	100	Yes
Block B	B2 Un.37	03 Floor	1307	LKD	100%	200	Yes
Block B	B2 Un.37	03 Floor	1308	Bedroom	100%	100	Yes
Block B	B2 Un.38	03 Floor	1309	Bedroom	100%	100	Yes
Block B	B2 Un.38	03 Floor	1310	LKD	86%	200	Yes
Block B	B2 Un.39	03 Floor	1311	Bedroom	100%	100	Yes
Block B	B2 Un.39	03 Floor	1312	Bedroom	100%	100	Yes
Block B	B2 Un.39	03 Floor	1313	Bedroom	100%	100	Yes
Block B	B2 Un.39	03 Floor	1314	LKD	100%	200	Yes
Block B	B2 Un.40	03 Floor	1315	LKD	100%	200	Yes
Block B	B2 Un.40	03 Floor	1316	Bedroom	100%	100	Yes
Block B	B2 Un.40	03 Floor	1317	Bedroom	100%	100	Yes
Block B	B2 Un.40	03 Floor	1318	Bedroom	100%	100	Yes

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block B	B2 Un.41	03 Floor	1319	Bedroom	100%	100	Yes
Block B	B2 Un.41	03 Floor	1320	LKD	38%	200	No
Block B	B2 Un.41	03 Floor	1321	Bedroom	100%	100	Yes
Block B	B2 Un.42	03 Floor	1322	Bedroom	100%	100	Yes
Block B	B2 Un.42	03 Floor	1323	LKD	40%	200	No
Block B	B2 Un.42	03 Floor	1324	Bedroom	100%	100	Yes
Block B	B2 Un.43	04 Floor	1325	LKD	100%	200	Yes
Block B	B2 Un.43	04 Floor	1326	Bedroom	100%	100	Yes
Block B	B2 Un.43	04 Floor	1327	Bedroom	100%	100	Yes
Block B	B2 Un.44	04 Floor	1328	LKD	69%	200	Yes
Block B	B2 Un.44	04 Floor	1329	Bedroom	100%	100	Yes
Block B	B2 Un.45	04 Floor	1330	Bedroom	100%	100	Yes
Block B	B2 Un.45	04 Floor	1331	LKD	85%	200	Yes
Block B	B2 Un.46	04 Floor	1332	Bedroom	100%	100	Yes
Block B	B2 Un.46	04 Floor	1333	LKD	92%	200	Yes
Block B	B2 Un.46	04 Floor	1334	Bedroom	100%	100	Yes
Block B	B2 Un.46	04 Floor	1335	Bedroom	100%	100	Yes
Block B	B2 Un.47	04 Floor	1336	LKD	100%	200	Yes
Block B	B2 Un.47	04 Floor	1337	Bedroom	100%	100	Yes
Block B	B2 Un.47	04 Floor	1338	Bedroom	100%	100	Yes
Block B	B2 Un.47	04 Floor	1339	Bedroom	100%	100	Yes
Block B	B2 Un.48	04 Floor	1340	LKD	100%	200	Yes
Block B	B2 Un.48	04 Floor	1341	Bedroom	100%	100	Yes
Block B	B2 Un.49	04 Floor	1342	Bedroom	100%	100	Yes
Block B	B2 Un.49	04 Floor	1343	LKD	88%	200	Yes
Block B	B2 Un.50	04 Floor	1344	Bedroom	100%	100	Yes
Block B	B2 Un.50	04 Floor	1345	Bedroom	100%	100	Yes
Block B	B2 Un.50	04 Floor	1346	Bedroom	100%	100	Yes
Block B	B2 Un.50	04 Floor	1347	LKD	100%	200	Yes
Block B	B2 Un.51	04 Floor	1348	LKD	100%	200	Yes
Block B	B2 Un.51	04 Floor	1349	Bedroom	100%	100	Yes
Block B	B2 Un.51	04 Floor	1350	Bedroom	100%	100	Yes
Block B	B2 Un.51	04 Floor	1351	Bedroom	100%	100	Yes
Block B	B2 Un.52	04 Floor	1352	Bedroom	100%	100	Yes
Block B	B2 Un.52	04 Floor	1353	LKD	44%	200	No
Block B	B2 Un.52	04 Floor	1354	Bedroom	100%	100	Yes
Block B	B2 Un.53	04 Floor	1355	Bedroom	100%	100	Yes
Block B	B2 Un.53	04 Floor	1356	LKD	45%	200	No
Block B	B2 Un.53	04 Floor	1357	Bedroom	100%	100	Yes
Block B	B2 Un.54	05 Floor	1358	LKD	100%	200	Yes
Block B	B2 Un.54	05 Floor	1359	Bedroom	100%	100	Yes
Block B	B2 Un.54	05 Floor	1360	Bedroom	100%	100	Yes
Block B	B2 Un.55	05 Floor	1361	LKD	70%	200	Yes
Block B	B2 Un.55	05 Floor	1362	Bedroom	100%	100	Yes
Block B	B2 Un.56	05 Floor	1363	Bedroom	100%	100	Yes
Block B	B2 Un.56	05 Floor	1364	LKD	85%	200	Yes
Block B	B2 Un.57	05 Floor	1365	Bedroom	100%	100	Yes
Block B	B2 Un.57	05 Floor	1366	LKD	93%	200	Yes
Block B	B2 Un.57	05 Floor	1367	Bedroom	100%	100	Yes
Block B	B2 Un.57	05 Floor	1368	Bedroom	100%	100	Yes
Block B	B2 Un.58	05 Floor	1369	LKD	100%	200	Yes
Block B	B2 Un.58	05 Floor	1370	Bedroom	100%	100	Yes
Block B	B2 Un.58	05 Floor	1371	Bedroom	100%	100	Yes
Block B	B2 Un.58	05 Floor	1372	Bedroom	100%	100	Yes
Block B	B2 Un.59	05 Floor	1373	LKD	100%	200	Yes
Block B	B2 Un.59	05 Floor	1374	Bedroom	100%	100	Yes
Block B	B2 Un.60	05 Floor	1375	Bedroom	100%	100	Yes
Block B	B2 Un.60	05 Floor	1376	LKD	90%	200	Yes
Block B	B2 Un.61	05 Floor	1377	Bedroom	100%	100	Yes

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block B	B2 Un.61	05 Floor	1378	Bedroom	100%	100	Yes
Block B	B2 Un.61	05 Floor	1379	Bedroom	100%	100	Yes
Block B	B2 Un.61	05 Floor	1380	LKD	100%	200	Yes
Block B	B2 Un.62	05 Floor	1381	LKD	100%	200	Yes
Block B	B2 Un.62	05 Floor	1382	Bedroom	100%	100	Yes
Block B	B2 Un.62	05 Floor	1383	Bedroom	100%	100	Yes
Block B	B2 Un.62	05 Floor	1384	Bedroom	100%	100	Yes
Block B	B2 Un.63	05 Floor	1385	Bedroom	100%	100	Yes
Block B	B2 Un.63	05 Floor	1386	LKD	48%	200	No
Block B	B2 Un.63	05 Floor	1387	Bedroom	100%	100	Yes
Block B	B2 Un.64	05 Floor	1388	Bedroom	100%	100	Yes
Block B	B2 Un.64	05 Floor	1389	LKD	52%	200	Yes
Block B	B2 Un.64	05 Floor	1390	Bedroom	100%	100	Yes
Block B	B2 Un.65	06 Floor	1391	LKD	100%	200	Yes
Block B	B2 Un.65	06 Floor	1392	Bedroom	100%	100	Yes
Block B	B2 Un.65	06 Floor	1393	Bedroom	100%	100	Yes
Block B	B2 Un.66	06 Floor	1394	LKD	80%	200	Yes
Block B	B2 Un.66	06 Floor	1395	Bedroom	100%	100	Yes
Block B	B2 Un.67	06 Floor	1396	Bedroom	100%	100	Yes
Block B	B2 Un.67	06 Floor	1397	LKD	95%	200	Yes
Block B	B2 Un.68	06 Floor	1398	Bedroom	100%	100	Yes
Block B	B2 Un.68	06 Floor	1399	LKD	93%	200	Yes
Block B	B2 Un.68	06 Floor	1400	Bedroom	100%	100	Yes
Block B	B2 Un.68	06 Floor	1401	Bedroom	100%	100	Yes
Block B	B2 Un.69	06 Floor	1402	LKD	100%	200	Yes
Block B	B2 Un.69	06 Floor	1403	Bedroom	100%	100	Yes
Block B	B2 Un.69	06 Floor	1404	Bedroom	100%	100	Yes
Block B	B2 Un.69	06 Floor	1405	Bedroom	100%	100	Yes
Block B	B2 Un.70	06 Floor	1406	LKD	100%	200	Yes
Block B	B2 Un.70	06 Floor	1407	Bedroom	100%	100	Yes
Block B	B2 Un.71	06 Floor	1408	Bedroom	100%	100	Yes
Block B	B2 Un.71	06 Floor	1409	LKD	100%	200	Yes
Block B	B2 Un.72	06 Floor	1410	Bedroom	100%	100	Yes
Block B	B2 Un.72	06 Floor	1411	Bedroom	100%	100	Yes
Block B	B2 Un.72	06 Floor	1412	Bedroom	100%	100	Yes
Block B	B2 Un.72	06 Floor	1413	LKD	100%	200	Yes
Block B	B2 Un.73	06 Floor	1414	LKD	100%	200	Yes
Block B	B2 Un.73	06 Floor	1415	Bedroom	100%	100	Yes
Block B	B2 Un.73	06 Floor	1416	Bedroom	100%	100	Yes
Block B	B2 Un.73	06 Floor	1417	Bedroom	100%	100	Yes
Block B	B2 Un.74	06 Floor	1418	Bedroom	100%	100	Yes
Block B	B2 Un.74	06 Floor	1419	LKD	73%	200	Yes
Block B	B2 Un.74	06 Floor	1420	Bedroom	100%	100	Yes
Block B	B2 Un.75	06 Floor	1421	Bedroom	100%	100	Yes
Block B	B2 Un.75	06 Floor	1422	LKD	73%	200	Yes
Block B	B2 Un.75	06 Floor	1423	Bedroom	100%	100	Yes
Block B	B2 Un.76	07 Floor	1213	LKD	100%	200	Yes
Block B	B2 Un.76	07 Floor	1214	Bedroom	100%	100	Yes
Block B	B2 Un.76	07 Floor	1215	Bedroom	100%	100	Yes
Block B	B2 Un.77	07 Floor	1216	Bedroom	100%	100	Yes
Block B	B2 Un.77	07 Floor	1217	Bedroom	100%	100	Yes
Block B	B2 Un.77	07 Floor	1218	Bedroom	100%	100	Yes
Block B	B2 Un.77	07 Floor	1219	LKD	93%	200	Yes
Block B	B2 Un.78	07 Floor	1220	LKD	100%	200	Yes
Block B	B2 Un.78	07 Floor	1221	Bedroom	100%	100	Yes
Block B	B2 Un.78	07 Floor	1222	Bedroom	100%	100	Yes
Block B	B2 Un.78	07 Floor	1223	Bedroom	100%	100	Yes
Block B	B2 Un.79	07 Floor	1224	LKD	100%	200	Yes
Block B	B2 Un.79	07 Floor	1225	Bedroom	100%	100	Yes

Block	Unit Reference	Floor	Room Ref	Type Room	% of Area Meeting Req Lux	Req Lux	Meets BRE Criteria
Block B	B2 Un.80	08 Floor	1425	LKD	100%	200	Yes
Block B	B2 Un.80	08 Floor	1426	Bedroom	100%	100	Yes
Block B	B2 Un.80	08 Floor	1427	Bedroom	100%	100	Yes
Block B	B2 Un.81	08 Floor	1428	Bedroom	100%	100	Yes
Block B	B2 Un.81	08 Floor	1429	Bedroom	100%	100	Yes
Block B	B2 Un.81	08 Floor	1430	Bedroom	100%	100	Yes
Block B	B2 Un.81	08 Floor	1431	LKD	93%	200	Yes
Block B	B2 Un.82	08 Floor	1432	LKD	100%	200	Yes
Block B	B2 Un.82	08 Floor	1433	Bedroom	100%	100	Yes
Block B	B2 Un.82	08 Floor	1434	Bedroom	100%	100	Yes
Block B	B2 Un.82	08 Floor	1435	Bedroom	100%	100	Yes
Block B	B2 Un.83	08 Floor	1424	LKD	100%	200	Yes
Block B	B2 Un.83	08 Floor	1436	Bedroom	100%	100	Yes
Block B	B2 Un.83	08 Floor	1437	Bedroom	100%	100	Yes
Block B	B2 Un.84	09 Floor	1439	LKD	100%	200	Yes
Block B	B2 Un.84	09 Floor	1440	Bedroom	100%	100	Yes
Block B	B2 Un.84	09 Floor	1441	Bedroom	100%	100	Yes
Block B	B2 Un.85	09 Floor	1442	Bedroom	100%	100	Yes
Block B	B2 Un.85	09 Floor	1443	Bedroom	100%	100	Yes
Block B	B2 Un.85	09 Floor	1444	Bedroom	100%	100	Yes
Block B	B2 Un.85	09 Floor	1445	LKD	95%	200	Yes
Block B	B2 Un.86	09 Floor	1446	LKD	100%	200	Yes
Block B	B2 Un.86	09 Floor	1447	Bedroom	100%	100	Yes
Block B	B2 Un.86	09 Floor	1448	Bedroom	100%	100	Yes
Block B	B2 Un.86	09 Floor	1449	Bedroom	100%	100	Yes
Block B	B2 Un.87	09 Floor	1438	LKD	100%	200	Yes
Block B	B2 Un.87	09 Floor	1450	Bedroom	100%	100	Yes
Block B	B2 Un.87	09 Floor	1451	Bedroom	100%	100	Yes
Total Meeting Criteria					Yes	462	93%
					No	36	7%
Total Rooms Analysed						498	100%

Appendix D – Sunlight Provision in New Development Detailed Results

Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block A	B1 Un.01	00 Floor	LKD	4.9	High	Compliance
Block A	B1 Un.01	00 Floor	Bedroom	4.1	High	
Block A	B1 Un.01	00 Floor	Bedroom	5.1	High	
Block A	B1 Un.02	00 Floor	LKD	3.2	Medium	Compliance
Block A	B1 Un.02	00 Floor	Bedroom	4	Medium	
Block A	B1 Un.02	00 Floor	Bedroom	2	Minimum	
Block A	B1 Un.03	00 Floor	LKD	1.2	Failed	Non-Compliance
Block A	B1 Un.03	00 Floor	Bedroom	3.3	Medium	
Block A	B1 Un.03	00 Floor	Bedroom	3.4	Medium	
Block A	B1 Un.04	00 Floor	LKD	3.1	Medium	Compliance
Block A	B1 Un.04	00 Floor	Bedroom	1.9	Minimum	
Block A	B1 Un.05	00 Floor	LKD	2.4	Minimum	Compliance
Block A	B1 Un.05	00 Floor	Bedroom	3	Medium	
Block A	B1 Un.05	00 Floor	Bedroom	1.9	Minimum	
Block A	B1 Un.06	00 Floor	LKD	1.7	Minimum	Compliance
Block A	B1 Un.06	00 Floor	Bedroom	1.9	Minimum	
Block A	B1 Un.07	00 Floor	LKD	2.1	Minimum	Compliance
Block A	B1 Un.07	00 Floor	Bedroom	1	Failed	
Block A	B1 Un.08	00 Floor	LKD	2	Minimum	Compliance
Block A	B1 Un.08	00 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.09	00 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.09	00 Floor	Bedroom	0	Failed	
Block A	B1 Un.10	00 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.10	00 Floor	Bedroom	0	Failed	
Block A	B1 Un.11	00 Floor	LKD	2.8	Minimum	Compliance
Block A	B1 Un.11	00 Floor	Bedroom	0.7	Failed	
Block A	B1 Un.11	00 Floor	Bedroom	0.3	Failed	
Block A	B1 Un.12	01 Floor	LKD	4.1	High	Compliance
Block A	B1 Un.12	01 Floor	Bedroom	5	High	
Block A	B1 Un.12	01 Floor	Bedroom	5.8	High	
Block A	B1 Un.13	01 Floor	LKD	2.6	Minimum	Compliance
Block A	B1 Un.13	01 Floor	Bedroom	4.8	High	
Block A	B1 Un.13	01 Floor	Bedroom	2.8	Minimum	
Block A	B1 Un.14	01 Floor	LKD	5.4	High	Compliance
Block A	B1 Un.14	01 Floor	Bedroom	2.6	Minimum	
Block A	B1 Un.14	01 Floor	Bedroom	4.4	High	
Block A	B1 Un.15	01 Floor	LKD	2.1	Minimum	Compliance
Block A	B1 Un.15	01 Floor	Bedroom	2.4	Minimum	
Block A	B1 Un.16	01 Floor	LKD	1.6	Minimum	Compliance
Block A	B1 Un.16	01 Floor	Bedroom	2.5	Minimum	
Block A	B1 Un.17	01 Floor	LKD	5.2	High	Compliance
Block A	B1 Un.17	01 Floor	Bedroom	2.1	Minimum	
Block A	B1 Un.17	01 Floor	Bedroom	3.9	Medium	
Block A	B1 Un.18	01 Floor	LKD	7.2	High	Compliance
Block A	B1 Un.18	01 Floor	Bedroom	1.5	Minimum	
Block A	B1 Un.18	01 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.19	01 Floor	LKD	2.1	Minimum	Compliance
Block A	B1 Un.19	01 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.19	01 Floor	Bedroom	1.8	Minimum	
Block A	B1 Un.20	01 Floor	LKD	2.1	Minimum	Compliance
Block A	B1 Un.20	01 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.20	01 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.21	01 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.21	01 Floor	Bedroom	0	Failed	

Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block A	B1 Un.22	01 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.22	01 Floor	Bedroom	0	Failed	
Block A	B1 Un.23	01 Floor	LKD	2.8	Minimum	Compliance
Block A	B1 Un.23	01 Floor	Bedroom	0.8	Failed	
Block A	B1 Un.23	01 Floor	Bedroom	0.3	Failed	
Block A	B1 Un.24	02 Floor	LKD	3.6	Medium	Compliance
Block A	B1 Un.24	02 Floor	Bedroom	5.6	High	
Block A	B1 Un.24	02 Floor	Bedroom	6.4	High	
Block A	B1 Un.25	02 Floor	LKD	3.4	Medium	Compliance
Block A	B1 Un.25	02 Floor	Bedroom	5.5	High	
Block A	B1 Un.25	02 Floor	Bedroom	3.4	Medium	
Block A	B1 Un.26	02 Floor	LKD	6.6	High	Compliance
Block A	B1 Un.26	02 Floor	Bedroom	3.3	Medium	
Block A	B1 Un.26	02 Floor	Bedroom	5	High	
Block A	B1 Un.27	02 Floor	LKD	3.4	Medium	Compliance
Block A	B1 Un.27	02 Floor	Bedroom	2.5	Minimum	
Block A	B1 Un.28	02 Floor	LKD	3.3	Medium	Compliance
Block A	B1 Un.28	02 Floor	Bedroom	3.5	Medium	
Block A	B1 Un.29	02 Floor	LKD	5.8	High	Compliance
Block A	B1 Un.29	02 Floor	Bedroom	2.9	Minimum	
Block A	B1 Un.29	02 Floor	Bedroom	4.8	High	
Block A	B1 Un.30	02 Floor	LKD	7.2	High	Compliance
Block A	B1 Un.30	02 Floor	Bedroom	1.5	Minimum	
Block A	B1 Un.30	02 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.31	02 Floor	LKD	2.1	Minimum	Compliance
Block A	B1 Un.31	02 Floor	Bedroom	0.8	Failed	
Block A	B1 Un.31	02 Floor	Bedroom	1.8	Minimum	
Block A	B1 Un.32	02 Floor	LKD	2.1	Minimum	Compliance
Block A	B1 Un.32	02 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.32	02 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.33	02 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.33	02 Floor	Bedroom	0	Failed	
Block A	B1 Un.34	02 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.34	02 Floor	Bedroom	0	Failed	
Block A	B1 Un.35	02 Floor	LKD	2.5	Minimum	Compliance
Block A	B1 Un.35	02 Floor	Bedroom	0.8	Failed	
Block A	B1 Un.35	02 Floor	Bedroom	0.3	Failed	
Block A	B1 Un.36	03 Floor	LKD	3.3	Medium	Compliance
Block A	B1 Un.36	03 Floor	Bedroom	5.8	High	
Block A	B1 Un.36	03 Floor	Bedroom	5.9	High	
Block A	B1 Un.37	03 Floor	LKD	3.8	Medium	Compliance
Block A	B1 Un.37	03 Floor	Bedroom	6.1	High	
Block A	B1 Un.37	03 Floor	Bedroom	4.1	High	
Block A	B1 Un.38	03 Floor	LKD	7.5	High	Compliance
Block A	B1 Un.38	03 Floor	Bedroom	4	Medium	
Block A	B1 Un.38	03 Floor	Bedroom	5.6	High	
Block A	B1 Un.39	03 Floor	LKD	2.9	Minimum	Compliance
Block A	B1 Un.39	03 Floor	Bedroom	2.5	Minimum	
Block A	B1 Un.40	03 Floor	LKD	3.2	Medium	Compliance
Block A	B1 Un.40	03 Floor	Bedroom	4.2	High	
Block A	B1 Un.41	03 Floor	LKD	6.3	High	Compliance
Block A	B1 Un.41	03 Floor	Bedroom	3.8	Medium	
Block A	B1 Un.41	03 Floor	Bedroom	5.6	High	
Block A	B1 Un.42	03 Floor	LKD	7.2	High	Compliance
Block A	B1 Un.42	03 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.42	03 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.43	03 Floor	LKD	2.1	Minimum	Compliance
Block A	B1 Un.43	03 Floor	Bedroom	0.9	Failed	

Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block A	B1 Un.43	03 Floor	Bedroom	1.8	Minimum	
Block A	B1 Un.44	03 Floor	LKD	2.1	Minimum	Compliance
Block A	B1 Un.44	03 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.44	03 Floor	Bedroom	1.5	Minimum	
Block A	B1 Un.45	03 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.45	03 Floor	Bedroom	0	Failed	
Block A	B1 Un.46	03 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.46	03 Floor	Bedroom	0	Failed	
Block A	B1 Un.47	03 Floor	LKD	2.8	Minimum	Compliance
Block A	B1 Un.47	03 Floor	Bedroom	0.8	Failed	
Block A	B1 Un.47	03 Floor	Bedroom	0.3	Failed	
Block A	B1 Un.48	04 Floor	LKD	3.4	Medium	Compliance
Block A	B1 Un.48	04 Floor	Bedroom	5.8	High	
Block A	B1 Un.48	04 Floor	Bedroom	5.9	High	
Block A	B1 Un.49	04 Floor	LKD	3.4	Medium	Compliance
Block A	B1 Un.49	04 Floor	Bedroom	6.3	High	
Block A	B1 Un.49	04 Floor	Bedroom	4.1	High	
Block A	B1 Un.50	04 Floor	LKD	7.8	High	Compliance
Block A	B1 Un.50	04 Floor	Bedroom	4.1	High	
Block A	B1 Un.50	04 Floor	Bedroom	5.8	High	
Block A	B1 Un.51	04 Floor	LKD	3.5	Medium	Compliance
Block A	B1 Un.51	04 Floor	Bedroom	2.5	Minimum	
Block A	B1 Un.52	04 Floor	LKD	3.3	Medium	Compliance
Block A	B1 Un.52	04 Floor	Bedroom	4	Medium	
Block A	B1 Un.53	04 Floor	LKD	7	High	Compliance
Block A	B1 Un.53	04 Floor	Bedroom	4.2	High	
Block A	B1 Un.53	04 Floor	Bedroom	6	High	
Block A	B1 Un.54	04 Floor	LKD	7.7	High	Compliance
Block A	B1 Un.54	04 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.54	04 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.55	04 Floor	LKD	2.6	Minimum	Compliance
Block A	B1 Un.55	04 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.55	04 Floor	Bedroom	1.8	Minimum	
Block A	B1 Un.56	04 Floor	LKD	2.6	Minimum	Compliance
Block A	B1 Un.56	04 Floor	Bedroom	1.8	Minimum	
Block A	B1 Un.56	04 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.57	04 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.57	04 Floor	Bedroom	0	Failed	
Block A	B1 Un.58	04 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.58	04 Floor	Bedroom	0	Failed	
Block A	B1 Un.59	04 Floor	LKD	3.7	Medium	Compliance
Block A	B1 Un.59	04 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.59	04 Floor	Bedroom	0.3	Failed	
Block A	B1 Un.60	05 Floor	LKD	3.4	Medium	Compliance
Block A	B1 Un.60	05 Floor	Bedroom	5.8	High	
Block A	B1 Un.60	05 Floor	Bedroom	5.9	High	
Block A	B1 Un.61	05 Floor	LKD	4.6	High	Compliance
Block A	B1 Un.61	05 Floor	Bedroom	6.6	High	
Block A	B1 Un.61	05 Floor	Bedroom	4.1	High	
Block A	B1 Un.62	05 Floor	LKD	8.2	High	Compliance
Block A	B1 Un.62	05 Floor	Bedroom	4.1	High	
Block A	B1 Un.62	05 Floor	Bedroom	6	High	
Block A	B1 Un.63	05 Floor	LKD	3.1	Medium	Compliance
Block A	B1 Un.63	05 Floor	Bedroom	2.5	Minimum	
Block A	B1 Un.64	05 Floor	LKD	3.3	Medium	Compliance
Block A	B1 Un.64	05 Floor	Bedroom	4	Medium	
Block A	B1 Un.65	05 Floor	LKD	7.5	High	Compliance
Block A	B1 Un.65	05 Floor	Bedroom	4.5	High	

Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block A	B1 Un.65	05 Floor	Bedroom	6.7	High	
Block A	B1 Un.66	05 Floor	LKD	7.7	High	Compliance
Block A	B1 Un.66	05 Floor	Bedroom	2	Minimum	
Block A	B1 Un.66	05 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.67	05 Floor	LKD	2.6	Minimum	Compliance
Block A	B1 Un.67	05 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.67	05 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.68	05 Floor	LKD	2.6	Minimum	Compliance
Block A	B1 Un.68	05 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.68	05 Floor	Bedroom	1.8	Minimum	
Block A	B1 Un.69	05 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.69	05 Floor	Bedroom	0	Failed	
Block A	B1 Un.70	05 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.70	05 Floor	Bedroom	0	Failed	
Block A	B1 Un.71	05 Floor	LKD	3.7	Medium	Compliance
Block A	B1 Un.71	05 Floor	Bedroom	1.5	Minimum	
Block A	B1 Un.71	05 Floor	Bedroom	0.4	Failed	
Block A	B1 Un.72	06 Floor	LKD	3.4	Medium	Compliance
Block A	B1 Un.72	06 Floor	Bedroom	6.6	High	
Block A	B1 Un.72	06 Floor	Bedroom	5.9	High	
Block A	B1 Un.73	06 Floor	LKD	3.4	Medium	Compliance
Block A	B1 Un.73	06 Floor	Bedroom	6.9	High	
Block A	B1 Un.73	06 Floor	Bedroom	4.1	High	
Block A	B1 Un.74	06 Floor	LKD	8.8	High	Compliance
Block A	B1 Un.74	06 Floor	Bedroom	4.1	High	
Block A	B1 Un.74	06 Floor	Bedroom	6.9	High	
Block A	B1 Un.75	06 Floor	LKD	6.6	High	Compliance
Block A	B1 Un.75	06 Floor	Bedroom	5.2	High	
Block A	B1 Un.76	06 Floor	LKD	6.2	High	Compliance
Block A	B1 Un.76	06 Floor	Bedroom	5.9	High	
Block A	B1 Un.77	06 Floor	LKD	9.5	High	Compliance
Block A	B1 Un.77	06 Floor	Bedroom	6.7	High	
Block A	B1 Un.77	06 Floor	Bedroom	6.7	High	
Block A	B1 Un.78	06 Floor	LKD	7.7	High	Compliance
Block A	B1 Un.78	06 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.78	06 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.79	06 Floor	LKD	1.8	Minimum	Compliance
Block A	B1 Un.79	06 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.79	06 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.80	06 Floor	LKD	2.6	Minimum	Compliance
Block A	B1 Un.80	06 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.80	06 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.81	06 Floor	LKD	0	Failed	Non-Compliance
Block A	B1 Un.81	06 Floor	Bedroom	0	Failed	
Block A	B1 Un.82	06 Floor	LKD	1.3	Failed	Non-Compliance
Block A	B1 Un.82	06 Floor	Bedroom	0	Failed	
Block A	B1 Un.83	06 Floor	LKD	4.2	High	Compliance
Block A	B1 Un.83	06 Floor	Bedroom	2	Minimum	
Block A	B1 Un.83	06 Floor	Bedroom	0.9	Failed	
Block A	B1 Un.84	07 Floor	LKD	6.3	High	Compliance
Block A	B1 Un.84	07 Floor	Bedroom	6.9	High	
Block A	B1 Un.84	07 Floor	Bedroom	6.9	High	
Block A	B1 Un.85	07 Floor	LKD	6.9	High	Compliance
Block A	B1 Un.85	07 Floor	Bedroom	6.9	High	
Block A	B1 Un.85	07 Floor	Bedroom	6.9	High	
Block A	B1 Un.86	07 Floor	LKD	9.5	High	Compliance
Block A	B1 Un.86	07 Floor	Bedroom	6.9	High	
Block A	B1 Un.86	07 Floor	Bedroom	6.9	High	

Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block A	B1 Un.87	07 Floor	LKD	2.3	Minimum	Compliance
Block A	B1 Un.87	07 Floor	Bedroom	1	Failed	
Block A	B1 Un.88	07 Floor	LKD	2.3	Minimum	Compliance
Block A	B1 Un.88	07 Floor	Bedroom	1.4	Failed	
Block A	B1 Un.89	07 Floor	LKD	3.4	Medium	Compliance
Block A	B1 Un.89	07 Floor	Bedroom	1.3	Failed	
Block A	B1 Un.89	07 Floor	Bedroom	1.3	Failed	
Block B	B2 Un.01	00 Floor	LKD	4.2	High	Compliance
Block B	B2 Un.01	00 Floor	Bedroom	0.6	Failed	
Block B	B2 Un.01	00 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.02	00 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.02	00 Floor	Bedroom	1	Failed	
Block B	B2 Un.03	00 Floor	LKD	1.2	Failed	Non-Compliance
Block B	B2 Un.03	00 Floor	Bedroom	0.7	Failed	
Block B	B2 Un.04	00 Floor	LKD	3.7	Medium	Compliance
Block B	B2 Un.04	00 Floor	Bedroom	3	Medium	
Block B	B2 Un.05	00 Floor	LKD	2.6	Minimum	Compliance
Block B	B2 Un.05	00 Floor	Bedroom	1.2	Failed	
Block B	B2 Un.06	00 Floor	LKD	4.5	High	Compliance
Block B	B2 Un.06	00 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.06	00 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.06	00 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.07	00 Floor	LKD	6.5	High	Compliance
Block B	B2 Un.07	00 Floor	Bedroom	5.2	High	
Block B	B2 Un.07	00 Floor	Bedroom	2.2	Minimum	
Block B	B2 Un.07	00 Floor	Bedroom	2.2	Minimum	
Block B	B2 Un.08	00 Floor	LKD	3.1	Medium	Compliance
Block B	B2 Un.08	00 Floor	Bedroom	2.2	Minimum	
Block B	B2 Un.09	00 Floor	LKD	2.4	Minimum	Compliance
Block B	B2 Un.09	00 Floor	Bedroom	0.7	Failed	
Block B	B2 Un.09	00 Floor	Bedroom	2.1	Minimum	
Block B	B2 Un.10	01 Floor	LKD	2.3	Minimum	Compliance
Block B	B2 Un.10	01 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.10	01 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.11	01 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.11	01 Floor	Bedroom	0.1	Failed	
Block B	B2 Un.12	01 Floor	LKD	1.2	Failed	Non-Compliance
Block B	B2 Un.12	01 Floor	Bedroom	0.7	Failed	
Block B	B2 Un.13	01 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.13	01 Floor	Bedroom	1.4	Failed	
Block B	B2 Un.13	01 Floor	Bedroom	1.5	Minimum	
Block B	B2 Un.13	01 Floor	Bedroom	0.8	Failed	
Block B	B2 Un.14	01 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.14	01 Floor	Bedroom	5.2	High	
Block B	B2 Un.14	01 Floor	Bedroom	4.7	High	
Block B	B2 Un.14	01 Floor	Bedroom	4.2	High	
Block B	B2 Un.15	01 Floor	LKD	3.7	Medium	Compliance
Block B	B2 Un.15	01 Floor	Bedroom	2.9	Minimum	
Block B	B2 Un.16	01 Floor	LKD	2.6	Minimum	Compliance
Block B	B2 Un.16	01 Floor	Bedroom	0.9	Failed	
Block B	B2 Un.17	01 Floor	LKD	4.4	High	Compliance
Block B	B2 Un.17	01 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.17	01 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.17	01 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.18	01 Floor	LKD	7	High	Compliance
Block B	B2 Un.18	01 Floor	Bedroom	5.7	High	
Block B	B2 Un.18	01 Floor	Bedroom	3.8	Medium	
Block B	B2 Un.18	01 Floor	Bedroom	3.8	Medium	

Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block B	B2 Un.19	01 Floor	LKD	0.6	Failed	Non-Compliance
Block B	B2 Un.19	01 Floor	Bedroom	3.8	Medium	
Block B	B2 Un.19	01 Floor	Bedroom	0.8	Failed	
Block B	B2 Un.20	01 Floor	LKD	1.1	Failed	Non-Compliance
Block B	B2 Un.20	01 Floor	Bedroom	2.8	Minimum	
Block B	B2 Un.20	01 Floor	Bedroom	2.2	Minimum	
Block B	B2 Un.21	02 Floor	LKD	2.8	Minimum	Compliance
Block B	B2 Un.21	02 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.21	02 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.22	02 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.22	02 Floor	Bedroom	0.4	Failed	
Block B	B2 Un.23	02 Floor	LKD	1.2	Failed	Non-Compliance
Block B	B2 Un.23	02 Floor	Bedroom	0.7	Failed	
Block B	B2 Un.24	02 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.24	02 Floor	Bedroom	1.4	Failed	
Block B	B2 Un.24	02 Floor	Bedroom	1.5	Minimum	
Block B	B2 Un.24	02 Floor	Bedroom	0.6	Failed	
Block B	B2 Un.25	02 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.25	02 Floor	Bedroom	5.7	High	
Block B	B2 Un.25	02 Floor	Bedroom	5.1	High	
Block B	B2 Un.25	02 Floor	Bedroom	4.3	High	
Block B	B2 Un.26	02 Floor	LKD	3.7	Medium	Compliance
Block B	B2 Un.26	02 Floor	Bedroom	2.9	Minimum	
Block B	B2 Un.27	02 Floor	LKD	2.6	Minimum	Compliance
Block B	B2 Un.27	02 Floor	Bedroom	0.9	Failed	
Block B	B2 Un.28	02 Floor	LKD	4.5	High	Compliance
Block B	B2 Un.28	02 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.28	02 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.28	02 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.29	02 Floor	LKD	7.6	High	Compliance
Block B	B2 Un.29	02 Floor	Bedroom	6.3	High	
Block B	B2 Un.29	02 Floor	Bedroom	4.4	High	
Block B	B2 Un.29	02 Floor	Bedroom	4.4	High	
Block B	B2 Un.30	02 Floor	LKD	1.1	Failed	Non-Compliance
Block B	B2 Un.30	02 Floor	Bedroom	4.4	High	
Block B	B2 Un.30	02 Floor	Bedroom	1.4	Failed	
Block B	B2 Un.31	02 Floor	LKD	1.5	Minimum	Compliance
Block B	B2 Un.31	02 Floor	Bedroom	3.6	Medium	
Block B	B2 Un.31	02 Floor	Bedroom	2.7	Minimum	
Block B	B2 Un.32	03 Floor	LKD	3.3	Medium	Compliance
Block B	B2 Un.32	03 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.32	03 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.33	03 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.33	03 Floor	Bedroom	0.4	Failed	
Block B	B2 Un.34	03 Floor	LKD	1.2	Failed	Non-Compliance
Block B	B2 Un.34	03 Floor	Bedroom	0.7	Failed	
Block B	B2 Un.35	03 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.35	03 Floor	Bedroom	1.4	Failed	
Block B	B2 Un.35	03 Floor	Bedroom	1.5	Minimum	
Block B	B2 Un.35	03 Floor	Bedroom	0.6	Failed	
Block B	B2 Un.36	03 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.36	03 Floor	Bedroom	6.5	High	
Block B	B2 Un.36	03 Floor	Bedroom	5.8	High	
Block B	B2 Un.36	03 Floor	Bedroom	4.7	High	
Block B	B2 Un.37	03 Floor	LKD	3.8	Medium	Compliance
Block B	B2 Un.37	03 Floor	Bedroom	2.9	Minimum	
Block B	B2 Un.38	03 Floor	LKD	2.6	Minimum	Compliance
Block B	B2 Un.38	03 Floor	Bedroom	0.9	Failed	

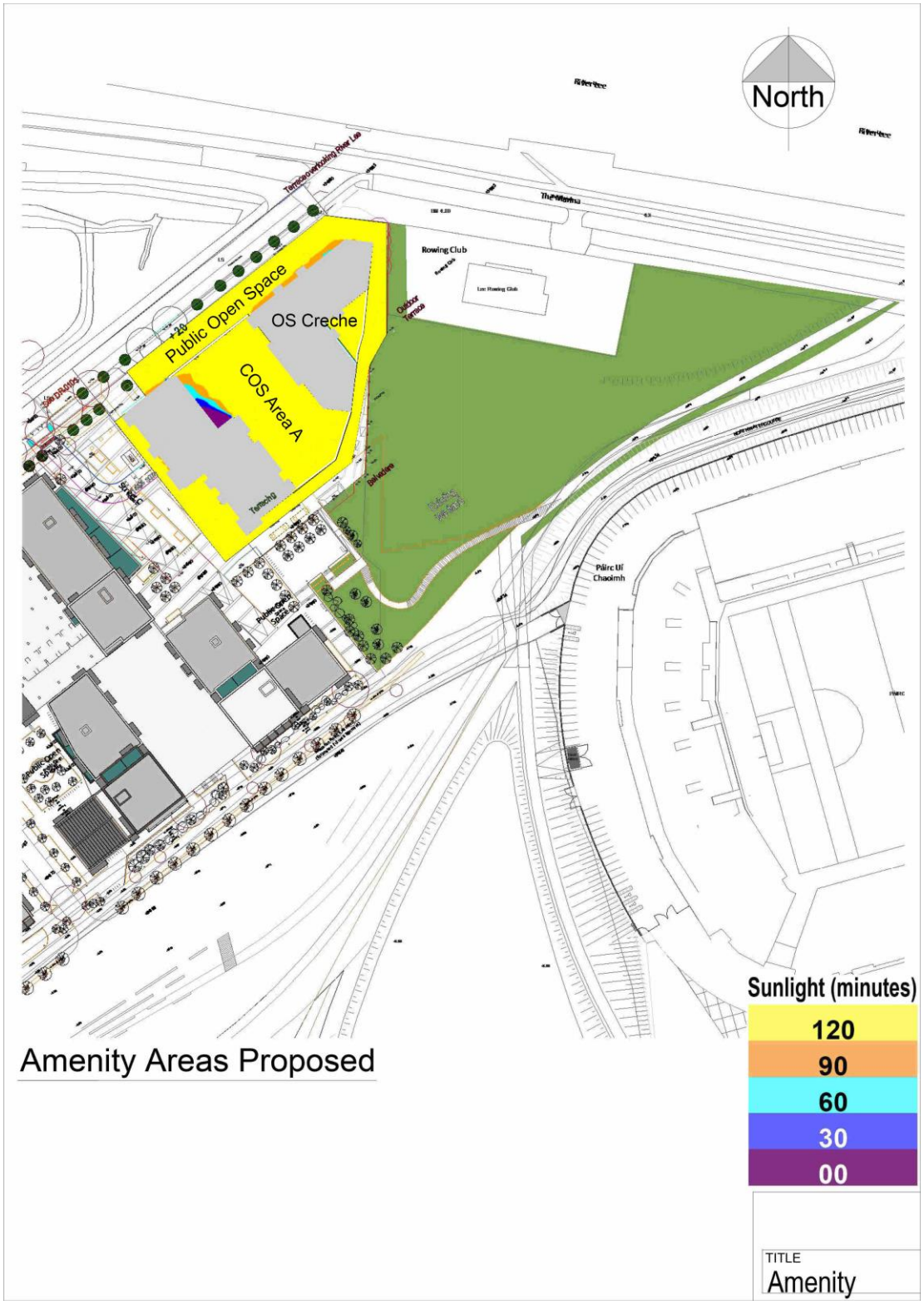
Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block B	B2 Un.39	03 Floor	LKD	4.5	High	Compliance
Block B	B2 Un.39	03 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.39	03 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.39	03 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.40	03 Floor	LKD	8.3	High	Compliance
Block B	B2 Un.40	03 Floor	Bedroom	7	High	
Block B	B2 Un.40	03 Floor	Bedroom	5.1	High	
Block B	B2 Un.40	03 Floor	Bedroom	5.1	High	
Block B	B2 Un.41	03 Floor	LKD	1.8	Minimum	Compliance
Block B	B2 Un.41	03 Floor	Bedroom	5.1	High	
Block B	B2 Un.41	03 Floor	Bedroom	2.1	Minimum	
Block B	B2 Un.42	03 Floor	LKD	1.5	Minimum	Compliance
Block B	B2 Un.42	03 Floor	Bedroom	4.1	High	
Block B	B2 Un.42	03 Floor	Bedroom	3.3	Medium	
Block B	B2 Un.43	04 Floor	LKD	3.9	Medium	Compliance
Block B	B2 Un.43	04 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.43	04 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.44	04 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.44	04 Floor	Bedroom	0.4	Failed	
Block B	B2 Un.45	04 Floor	LKD	1.2	Failed	Non-Compliance
Block B	B2 Un.45	04 Floor	Bedroom	0.7	Failed	
Block B	B2 Un.46	04 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.46	04 Floor	Bedroom	1.4	Failed	
Block B	B2 Un.46	04 Floor	Bedroom	1.6	Minimum	
Block B	B2 Un.46	04 Floor	Bedroom	0.6	Failed	
Block B	B2 Un.47	04 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.47	04 Floor	Bedroom	7.4	High	
Block B	B2 Un.47	04 Floor	Bedroom	6.5	High	
Block B	B2 Un.47	04 Floor	Bedroom	5.3	High	
Block B	B2 Un.48	04 Floor	LKD	3.9	Medium	Compliance
Block B	B2 Un.48	04 Floor	Bedroom	2.9	Minimum	
Block B	B2 Un.49	04 Floor	LKD	2.6	Minimum	Compliance
Block B	B2 Un.49	04 Floor	Bedroom	0.9	Failed	
Block B	B2 Un.50	04 Floor	LKD	4.5	High	Compliance
Block B	B2 Un.50	04 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.50	04 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.50	04 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.51	04 Floor	LKD	8.9	High	Compliance
Block B	B2 Un.51	04 Floor	Bedroom	7.6	High	
Block B	B2 Un.51	04 Floor	Bedroom	5.7	High	
Block B	B2 Un.51	04 Floor	Bedroom	5.7	High	
Block B	B2 Un.52	04 Floor	LKD	2.4	Minimum	Compliance
Block B	B2 Un.52	04 Floor	Bedroom	5.7	High	
Block B	B2 Un.52	04 Floor	Bedroom	2.7	Minimum	
Block B	B2 Un.53	04 Floor	LKD	2.2	Minimum	Compliance
Block B	B2 Un.53	04 Floor	Bedroom	4.7	High	
Block B	B2 Un.53	04 Floor	Bedroom	3.9	Medium	
Block B	B2 Un.54	05 Floor	LKD	4.2	High	Compliance
Block B	B2 Un.54	05 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.54	05 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.55	05 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.55	05 Floor	Bedroom	0.4	Failed	
Block B	B2 Un.56	05 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.56	05 Floor	Bedroom	0.7	Failed	
Block B	B2 Un.57	05 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.57	05 Floor	Bedroom	1.6	Minimum	
Block B	B2 Un.57	05 Floor	Bedroom	1.6	Minimum	
Block B	B2 Un.57	05 Floor	Bedroom	0.6	Failed	

Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block B	B2 Un.58	05 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.58	05 Floor	Bedroom	7.6	High	
Block B	B2 Un.58	05 Floor	Bedroom	6.5	High	
Block B	B2 Un.58	05 Floor	Bedroom	5.3	High	
Block B	B2 Un.59	05 Floor	LKD	3.9	Medium	Compliance
Block B	B2 Un.59	05 Floor	Bedroom	3.3	Medium	
Block B	B2 Un.60	05 Floor	LKD	2.6	Minimum	Compliance
Block B	B2 Un.60	05 Floor	Bedroom	0.9	Failed	
Block B	B2 Un.61	05 Floor	LKD	4.5	High	Compliance
Block B	B2 Un.61	05 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.61	05 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.61	05 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.62	05 Floor	LKD	9.2	High	Compliance
Block B	B2 Un.62	05 Floor	Bedroom	8.2	High	
Block B	B2 Un.62	05 Floor	Bedroom	6.3	High	
Block B	B2 Un.62	05 Floor	Bedroom	6.3	High	
Block B	B2 Un.63	05 Floor	LKD	2.8	Minimum	Compliance
Block B	B2 Un.63	05 Floor	Bedroom	6.3	High	
Block B	B2 Un.63	05 Floor	Bedroom	3.3	Medium	
Block B	B2 Un.64	05 Floor	LKD	3.9	Medium	Compliance
Block B	B2 Un.64	05 Floor	Bedroom	5.9	High	
Block B	B2 Un.64	05 Floor	Bedroom	4.4	High	
Block B	B2 Un.65	06 Floor	LKD	6.9	High	Compliance
Block B	B2 Un.65	06 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.65	06 Floor	Bedroom	0.5	Failed	
Block B	B2 Un.66	06 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.66	06 Floor	Bedroom	0.4	Failed	
Block B	B2 Un.67	06 Floor	LKD	1.9	Minimum	Compliance
Block B	B2 Un.67	06 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.68	06 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.68	06 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.68	06 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.68	06 Floor	Bedroom	0.8	Failed	
Block B	B2 Un.69	06 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.69	06 Floor	Bedroom	7.5	High	
Block B	B2 Un.69	06 Floor	Bedroom	6.5	High	
Block B	B2 Un.69	06 Floor	Bedroom	5.3	High	
Block B	B2 Un.70	06 Floor	LKD	5.8	High	Compliance
Block B	B2 Un.70	06 Floor	Bedroom	4.6	High	
Block B	B2 Un.71	06 Floor	LKD	2.6	Minimum	Compliance
Block B	B2 Un.71	06 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.72	06 Floor	LKD	4.5	High	Compliance
Block B	B2 Un.72	06 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.72	06 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.72	06 Floor	Bedroom	2.6	Minimum	
Block B	B2 Un.73	06 Floor	LKD	9.5	High	Compliance
Block B	B2 Un.73	06 Floor	Bedroom	8.9	High	
Block B	B2 Un.73	06 Floor	Bedroom	6.9	High	
Block B	B2 Un.73	06 Floor	Bedroom	6.9	High	
Block B	B2 Un.74	06 Floor	LKD	6.1	High	Compliance
Block B	B2 Un.74	06 Floor	Bedroom	6.9	High	
Block B	B2 Un.74	06 Floor	Bedroom	6.9	High	
Block B	B2 Un.75	06 Floor	LKD	6.9	High	Compliance
Block B	B2 Un.75	06 Floor	Bedroom	6.9	High	
Block B	B2 Un.75	06 Floor	Bedroom	6.9	High	
Block B	B2 Un.76	07 Floor	LKD	3.6	Medium	Compliance
Block B	B2 Un.76	07 Floor	Bedroom	1	Failed	
Block B	B2 Un.76	07 Floor	Bedroom	1.9	Minimum	

Block	Unit No.	Block2	Type Room	Sunlight Exposure (Hours)	Rating	Compliance
Block B	B2 Un.77	07 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.77	07 Floor	Bedroom	0.8	Failed	
Block B	B2 Un.77	07 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.77	07 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.78	07 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.78	07 Floor	Bedroom	7.6	High	
Block B	B2 Un.78	07 Floor	Bedroom	6.5	High	
Block B	B2 Un.78	07 Floor	Bedroom	5.3	High	
Block B	B2 Un.79	07 Floor	LKD	6	High	Compliance
Block B	B2 Un.79	07 Floor	Bedroom	9	High	
Block B	B2 Un.80	08 Floor	LKD	3.6	Medium	Compliance
Block B	B2 Un.80	08 Floor	Bedroom	1	Failed	
Block B	B2 Un.80	08 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.81	08 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.81	08 Floor	Bedroom	0.8	Failed	
Block B	B2 Un.81	08 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.81	08 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.82	08 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.82	08 Floor	Bedroom	7.7	High	
Block B	B2 Un.82	08 Floor	Bedroom	7.1	High	
Block B	B2 Un.82	08 Floor	Bedroom	5.3	High	
Block B	B2 Un.83	08 Floor	LKD	9.5	High	Compliance
Block B	B2 Un.83	08 Floor	Bedroom	4.9	High	
Block B	B2 Un.83	08 Floor	Bedroom	9.3	High	
Block B	B2 Un.84	09 Floor	LKD	3.6	Medium	Compliance
Block B	B2 Un.84	09 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.84	09 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.85	09 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.85	09 Floor	Bedroom	0.8	Failed	
Block B	B2 Un.85	09 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.85	09 Floor	Bedroom	1.9	Minimum	
Block B	B2 Un.86	09 Floor	LKD	5.1	High	Compliance
Block B	B2 Un.86	09 Floor	Bedroom	7.7	High	
Block B	B2 Un.86	09 Floor	Bedroom	7.1	High	
Block B	B2 Un.86	09 Floor	Bedroom	6.5	High	
Block B	B2 Un.87	09 Floor	LKD	9.5	High	Compliance
Block B	B2 Un.87	09 Floor	Bedroom	7.1	High	
Block B	B2 Un.87	09 Floor	Bedroom	9.3	High	
Total Units Assessed						**176**
Total Units Compliant						**153**
Total Units Compliant (%)						**87%**

Appendix E – Sunlight to Amenity Areas within New Development

Amenity Area	Area m²	Area Receiving 2 Hrs of Sunlight - %	Meets BRE Criteria
Communal Open Space A	923	82%	Yes
Public Open Space	1,952	100%	Yes
Creche Open Space	151	100%	Yes



Appendix F – Neighbouring Buildings Assessed

Figure 8 Block 11

Figure 9 Block 12

Appendix G – Daylight Access to Existing Buildings Results

Table 10 Daylight to Existing Buildings Results

Building Reference	Window Ref	VSC Existing	VSC Proposed	Ratio of VSC Proposed to VSC Existing	Meets BRE Criteria
Block 11 01F	3554	34%	21%	0.62	No
Block 11 01F	3874	36%	24%	0.68	No
Block 11 01F	3875	24%	12%	0.49	No
Block 11 01F	3876	27%	14%	0.53	No
Block 11 01F	3877	35%	23%	0.65	No
Block 11 01F	3878	36%	23%	0.64	No
Block 11 01F	3879	25%	13%	0.50	No
Block 11 01F	3880	25%	15%	0.61	No
Block 11 01F	3881	37%	26%	0.71	No
Block 11 01F	3882	27%	15%	0.55	No
Block 11 01F	3929	25%	15%	0.60	No
Block 11 01F	3930	25%	14%	0.56	No
Block 11 01F	5743	22%	12%	0.53	No
Block 11 01F	3549	34%	22%	0.66	No
Block 11 01F	3819	36%	26%	0.72	No
Block 11 01F	3820	25%	14%	0.56	No
Block 11 01F	3821	27%	16%	0.58	No
Block 11 01F	3822	35%	24%	0.70	No
Block 11 01F	3823	36%	24%	0.68	No
Block 11 01F	3824	25%	14%	0.56	No
Block 11 01F	3825	26%	17%	0.66	No
Block 11 01F	3826	36%	27%	0.74	Yes
Block 11 01F	3827	27%	16%	0.60	No
Block 11 01F	3895	30%	23%	0.77	No
Block 11 01F	3896	32%	25%	0.77	No
Block 11 01F	3897	23%	14%	0.61	No
Block 11 01F	3898	25%	15%	0.61	No
Block 11 01F	3550	34%	24%	0.71	No
Block 11 01F	3831	36%	27%	0.76	Yes
Block 11 01F	3833	27%	17%	0.64	No
Block 11 01F	3551	33%	25%	0.76	No
Block 11 01F	3847	36%	28%	0.77	Yes
Block 11 01F	3835	36%	26%	0.73	No
Block 11 01F	3900	33%	27%	0.81	Yes
Block 11 01F	3837	26%	18%	0.70	No
Block 11 01F	3838	36%	28%	0.77	Yes
Block 11 01F	3839	27%	18%	0.65	No
Block 11 01F	3843	36%	29%	0.80	Yes
Block 11 01F	3844	25%	17%	0.69	No
Block 11 01F	3901	23%	16%	0.67	No
Block 11 01F	3902	25%	17%	0.67	No
Block 11 01F	3836	25%	16%	0.62	No
Block 11 01F	3832	25%	15%	0.62	No
Block 11 01F	3834	35%	26%	0.74	No
Block 11 01F	3845	27%	19%	0.70	No
Block 11 01F	3846	35%	27%	0.79	Yes
Block 11 01F	3899	31%	25%	0.81	Yes
Block 11 01F	3848	25%	17%	0.68	No
Block 11 01F	3849	26%	19%	0.75	No
Block 11 01F	3850	37%	30%	0.81	Yes
Block 11 01F	3851	27%	19%	0.71	No
Block 11 01F	3903	32%	27%	0.85	Yes
Block 11 01F	3904	34%	29%	0.85	Yes
Block 11 01F	3905	24%	18%	0.74	No
Block 11 01F	3906	25%	18%	0.73	No
Block 11 01F	3552	26%	19%	0.75	No
Block 11 01F	3861	26%	21%	0.80	Yes

Building Reference	Window Ref	VSC Existing	VSC Proposed	Ratio of VSC Proposed to VSC Existing	Meets BRE Criteria
Block 11 01F	3855	35%	30%	0.84	Yes
Block 11 01F	3862	37%	32%	0.85	Yes
Block 11 01F	3863	37%	31%	0.83	Yes
Block 11 01F	3856	26%	19%	0.76	No
Block 11 01F	3907	32%	28%	0.89	Yes
Block 11 01F	3908	34%	30%	0.88	Yes
Block 11 01F	3857	37%	30%	0.83	Yes
Block 11 01F	3909	24%	20%	0.80	Yes
Block 11 01F	3910	25%	20%	0.80	Yes
Block 11 01F	3858	26%	21%	0.78	No
Block 11 01F	3859	34%	28%	0.81	Yes
Block 11 01F	3553	39%	35%	0.88	Yes
Block 11 01F	3860	26%	19%	0.75	No
Block 11 01F	3883	38%	34%	0.90	Yes
Block 11 01F	3884	39%	35%	0.89	Yes
Block 11 01F	3885	39%	35%	0.88	Yes
Block 11 01F	3886	39%	35%	0.89	Yes
Block 11 01F	3887	39%	35%	0.88	Yes
Block 11 01F	3888	39%	35%	0.88	Yes
Block 11 01F	3889	39%	36%	0.90	Yes
Block 11 01F	3890	39%	35%	0.90	Yes
Block 11 01F	3891	39%	35%	0.88	Yes
Block 11 01F	3911	23%	20%	0.89	Yes
Block 11 01F	3912	25%	22%	0.89	Yes
Block 11 01F	3913	34%	30%	0.90	Yes
Block 11 01F	3914	26%	22%	0.86	Yes
Block 11 01F	3915	24%	23%	0.94	Yes
Block 11 01F	3916	26%	24%	0.93	Yes
Block 11 01F	3925	27%	25%	0.92	Yes
Block 11 01F	3926	36%	34%	0.94	Yes
Block 11 01F	3917	26%	25%	0.97	Yes
Block 11 01F	3918	27%	26%	0.97	Yes
Block 11 01F	3921	27%	27%	0.97	Yes
Block 11 01F	3924	37%	36%	0.98	Yes
Block 11 01F	3919	39%	39%	0.99	Yes
Block 11 01F	3920	39%	39%	0.99	Yes
Block 11 01F	3922	39%	39%	0.99	Yes
Block 11 01F	3923	39%	39%	0.99	Yes
Block 12 02F	2431	23%	17%	0.73	No
Block 12 02F	3639	22%	19%	0.87	Yes
Block 12 02F	5186	18%	15%	0.83	Yes
Block 12 02F	5188	22%	17%	0.80	Yes
Block 12 02F	5599	33%	27%	0.83	Yes
Block 12 02F	5600	28%	25%	0.87	Yes
Block 12 02F	5609	7%	5%	0.70	No
Block 12 02F	1915	31%	27%	0.87	Yes
Block 12 02F	1918	29%	25%	0.87	Yes
Block 12 02F	1919	26%	22%	0.86	Yes
Block 12 02F	1927	33%	28%	0.87	Yes
Block 12 02F	2937	6%	6%	1.00	Yes
Block 12 02F	3641	23%	20%	0.90	Yes
Block 12 02F	5189	19%	16%	0.86	Yes
Block 12 02F	5190	29%	26%	0.89	Yes
Block 12 02F	5191	22%	18%	0.84	Yes
Block 12 02F	5618	24%	18%	0.77	No
Block 12 02F	5619	33%	28%	0.86	Yes
Block 12 02F	5620	22%	18%	0.84	Yes
Block 12 02F	5623	18%	15%	0.82	Yes
Block 12 02F	1928	32%	29%	0.90	Yes
Block 12 02F	1929	30%	27%	0.90	Yes
Block 12 02F	1933	27%	24%	0.89	Yes
Block 12 02F	1936	34%	30%	0.90	Yes
Block 12 02F	3642	24%	22%	0.92	Yes

Building Reference	Window Ref	VSC Existing	VSC Proposed	Ratio of VSC Proposed to VSC Existing	Meets BRE Criteria
Block 12 02F	5192	19%	17%	0.89	Yes
Block 12 02F	5193	30%	27%	0.92	Yes
Block 12 02F	5194	23%	20%	0.87	Yes
Block 12 02F	5611	7%	5%	0.76	No
Block 12 02F	5621	24%	20%	0.82	Yes
Block 12 02F	5622	34%	30%	0.89	Yes
Block 12 02F	5626	22%	20%	0.88	Yes
Block 12 02F	5629	19%	16%	0.86	Yes
Block 12 02F	5918	6%	6%	1.00	Yes
Block 12 02F	1938	34%	31%	0.93	Yes
Block 12 02F	1939	31%	29%	0.93	Yes
Block 12 02F	1941	28%	26%	0.92	Yes
Block 12 02F	1943	35%	32%	0.93	Yes
Block 12 02F	3643	25%	24%	0.94	Yes
Block 12 02F	5195	20%	18%	0.92	Yes
Block 12 02F	5196	31%	29%	0.94	Yes
Block 12 02F	5197	23%	21%	0.91	Yes
Block 12 02F	5613	7%	5%	0.82	Yes
Block 12 02F	5624	26%	23%	0.87	Yes
Block 12 02F	5625	35%	32%	0.92	Yes
Block 12 02F	5632	23%	21%	0.91	Yes
Block 12 02F	5633	20%	18%	0.90	Yes
Block 12 02F	5919	6%	6%	1.00	Yes
Block 12 02F	1945	35%	34%	0.95	Yes
Block 12 02F	1946	34%	32%	0.95	Yes
Block 12 02F	1947	31%	29%	0.95	Yes
Block 12 02F	1950	36%	35%	0.95	Yes
Block 12 02F	3644	28%	27%	0.96	Yes
Block 12 02F	5198	21%	20%	0.95	Yes
Block 12 02F	5199	33%	32%	0.96	Yes
Block 12 02F	5200	25%	23%	0.94	Yes
Block 12 02F	5615	7%	6%	0.87	Yes
Block 12 02F	5627	25%	23%	0.91	Yes
Block 12 02F	5628	35%	33%	0.95	Yes
Block 12 02F	5634	26%	24%	0.94	Yes
Block 12 02F	5635	21%	20%	0.93	Yes
Block 12 02F	5920	6%	6%	1.00	Yes
Block 12 02F	1952	37%	36%	0.97	Yes
Block 12 02F	1953	36%	35%	0.97	Yes
Block 12 02F	1954	34%	33%	0.97	Yes
Block 12 02F	1956	38%	37%	0.97	Yes
Block 12 02F	3645	35%	34%	0.98	Yes
Block 12 02F	4779	37%	36%	0.98	Yes
Block 12 02F	4780	38%	37%	0.98	Yes
Block 12 02F	4781	39%	38%	0.98	Yes
Block 12 02F	5617	7%	6%	0.92	Yes
Block 12 02F	5630	39%	38%	0.97	Yes
Block 12 02F	5631	39%	38%	0.97	Yes
Block 12 02F	5636	30%	29%	0.97	Yes
Block 12 02F	5637	24%	23%	0.96	Yes
Block 12 02F	5923	6%	6%	1.00	Yes
Total meets criteria			Yes	119	70%
			No	52	30%
Total Windows Analysed				171	

Table 11 Daylight to Existing Buildings Results – Balconies Excluded

Building Reference	Window Ref	VSC Existing	VSC Proposed	Ratio of VSC Proposed to VSC Existing	Meets BRE Criteria
Block 11 01F	3554	39%	26%	0.67	No
Block 11 01F	3874	38%	26%	0.69	No
Block 11 01F	3875	38%	26%	0.68	No
Block 11 01F	3876	38%	26%	0.67	No
Block 11 01F	3877	38%	26%	0.68	No
Block 11 01F	3878	39%	26%	0.67	No
Block 11 01F	3879	39%	26%	0.68	No
Block 11 01F	3880	39%	29%	0.75	Yes
Block 11 01F	3881	39%	28%	0.72	Yes
Block 11 01F	3882	39%	27%	0.69	Yes
Block 11 01F	3929	35%	25%	0.71	No
Block 11 01F	3930	37%	26%	0.70	No
Block 11 01F	5743	35%	25%	0.70	No
Block 11 01F	3549	39%	28%	0.71	Yes
Block 11 01F	3819	38%	28%	0.73	Yes
Block 11 01F	3820	38%	27%	0.72	Yes
Block 11 01F	3821	39%	27%	0.71	Yes
Block 11 01F	3822	38%	28%	0.72	Yes
Block 11 01F	3823	39%	27%	0.71	Yes
Block 11 01F	3824	39%	28%	0.71	Yes
Block 11 01F	3825	39%	31%	0.78	Yes
Block 11 01F	3826	39%	30%	0.76	Yes
Block 11 01F	3827	39%	28%	0.72	Yes
Block 11 01F	3895	31%	24%	0.78	No
Block 11 01F	3896	33%	25%	0.77	No
Block 11 01F	3897	36%	27%	0.75	Yes
Block 11 01F	3898	37%	27%	0.74	Yes
Block 11 01F	3550	39%	29%	0.75	Yes
Block 11 01F	3831	38%	29%	0.77	Yes
Block 11 01F	3833	39%	29%	0.75	Yes
Block 11 01F	3551	39%	31%	0.79	Yes
Block 11 01F	3847	39%	31%	0.79	Yes
Block 11 01F	3835	39%	29%	0.75	Yes
Block 11 01F	3900	34%	27%	0.81	Yes
Block 11 01F	3837	39%	32%	0.81	Yes
Block 11 01F	3838	39%	31%	0.79	Yes
Block 11 01F	3839	39%	30%	0.76	Yes
Block 11 01F	3843	38%	31%	0.81	Yes
Block 11 01F	3844	39%	31%	0.80	Yes
Block 11 01F	3901	36%	29%	0.79	Yes
Block 11 01F	3902	37%	29%	0.78	Yes
Block 11 01F	3836	39%	29%	0.75	Yes
Block 11 01F	3832	39%	29%	0.76	Yes
Block 11 01F	3834	38%	29%	0.76	Yes
Block 11 01F	3845	39%	31%	0.79	Yes
Block 11 01F	3846	39%	31%	0.81	Yes
Block 11 01F	3899	31%	26%	0.82	Yes
Block 11 01F	3848	39%	31%	0.79	Yes
Block 11 01F	3849	39%	33%	0.84	Yes
Block 11 01F	3850	39%	32%	0.82	Yes
Block 11 01F	3851	39%	31%	0.80	Yes
Block 11 01F	3903	32%	28%	0.86	Yes
Block 11 01F	3904	35%	29%	0.85	Yes
Block 11 01F	3905	37%	31%	0.83	Yes
Block 11 01F	3906	38%	31%	0.82	Yes
Block 11 01F	3552	39%	33%	0.84	Yes
Block 11 01F	3861	39%	34%	0.87	Yes
Block 11 01F	3855	39%	33%	0.86	Yes
Block 11 01F	3862	39%	34%	0.86	Yes
Block 11 01F	3863	39%	33%	0.84	Yes
Block 11 01F	3856	39%	33%	0.85	Yes

Building Reference	Window Ref	VSC Existing	VSC Proposed	Ratio of VSC Proposed to VSC Existing	Meets BRE Criteria
Block 11 01F	3907	34%	30%	0.90	Yes
Block 11 01F	3908	36%	32%	0.89	Yes
Block 11 01F	3857	39%	33%	0.84	Yes
Block 11 01F	3909	38%	33%	0.87	Yes
Block 11 01F	3910	38%	33%	0.87	Yes
Block 11 01F	3858	39%	33%	0.85	Yes
Block 11 01F	3859	39%	33%	0.84	Yes
Block 11 01F	3553	39%	35%	0.88	Yes
Block 11 01F	3860	39%	33%	0.84	Yes
Block 11 01F	3883	39%	35%	0.90	Yes
Block 11 01F	3884	39%	35%	0.89	Yes
Block 11 01F	3885	39%	35%	0.88	Yes
Block 11 01F	3886	39%	35%	0.89	Yes
Block 11 01F	3887	39%	35%	0.88	Yes
Block 11 01F	3888	39%	35%	0.88	Yes
Block 11 01F	3889	39%	36%	0.90	Yes
Block 11 01F	3890	39%	35%	0.90	Yes
Block 11 01F	3891	39%	35%	0.88	Yes
Block 11 01F	3911	35%	33%	0.93	Yes
Block 11 01F	3912	37%	34%	0.92	Yes
Block 11 01F	3913	38%	35%	0.91	Yes
Block 11 01F	3914	39%	35%	0.91	Yes
Block 11 01F	3915	37%	36%	0.96	Yes
Block 11 01F	3916	38%	36%	0.96	Yes
Block 11 01F	3925	39%	37%	0.94	Yes
Block 11 01F	3926	39%	37%	0.95	Yes
Block 11 01F	3917	39%	38%	0.98	Yes
Block 11 01F	3918	39%	38%	0.98	Yes
Block 11 01F	3921	39%	38%	0.98	Yes
Block 11 01F	3924	39%	38%	0.98	Yes
Block 11 01F	3919	39%	39%	0.99	Yes
Block 11 01F	3920	39%	39%	0.99	Yes
Block 11 01F	3922	39%	39%	0.99	Yes
Block 11 01F	3923	39%	39%	0.99	Yes
Block 12 02F	2431	37%	31%	0.83	Yes
Block 12 02F	3639	25%	23%	0.89	Yes
Block 12 02F	5186	29%	25%	0.89	Yes
Block 12 02F	5188	34%	30%	0.87	Yes
Block 12 02F	5599	37%	31%	0.84	Yes
Block 12 02F	5600	32%	28%	0.88	Yes
Block 12 02F	5609	12%	10%	0.83	Yes
Block 12 02F	1915	31%	27%	0.87	Yes
Block 12 02F	1918	29%	25%	0.87	Yes
Block 12 02F	1919	26%	22%	0.86	Yes
Block 12 02F	1927	33%	28%	0.87	Yes
Block 12 02F	2937	13%	12%	1.00	Yes
Block 12 02F	3641	26%	24%	0.91	Yes
Block 12 02F	5189	30%	27%	0.91	Yes
Block 12 02F	5190	33%	30%	0.90	Yes
Block 12 02F	5191	35%	31%	0.90	Yes
Block 12 02F	5618	38%	32%	0.85	Yes
Block 12 02F	5619	37%	32%	0.87	Yes
Block 12 02F	5620	23%	19%	0.85	Yes
Block 12 02F	5623	21%	17%	0.84	Yes
Block 12 02F	1928	32%	29%	0.90	Yes
Block 12 02F	1929	30%	27%	0.90	Yes
Block 12 02F	1933	27%	24%	0.89	Yes
Block 12 02F	1936	34%	30%	0.90	Yes
Block 12 02F	3642	27%	25%	0.93	Yes
Block 12 02F	5192	31%	28%	0.93	Yes
Block 12 02F	5193	34%	31%	0.93	Yes
Block 12 02F	5194	35%	33%	0.92	Yes
Block 12 02F	5611	12%	11%	0.87	Yes

Building Reference	Window Ref	VSC Existing	VSC Proposed	Ratio of VSC Proposed to VSC Existing	Meets BRE Criteria
Block 12 02F	5621	38%	34%	0.88	Yes
Block 12 02F	5622	38%	34%	0.90	Yes
Block 12 02F	5626	23%	20%	0.88	Yes
Block 12 02F	5629	21%	18%	0.87	Yes
Block 12 02F	5918	13%	13%	1.00	Yes
Block 12 02F	1938	34%	31%	0.93	Yes
Block 12 02F	1939	32%	29%	0.93	Yes
Block 12 02F	1941	28%	26%	0.92	Yes
Block 12 02F	1943	35%	33%	0.93	Yes
Block 12 02F	3643	28%	27%	0.95	Yes
Block 12 02F	5195	32%	30%	0.95	Yes
Block 12 02F	5196	35%	33%	0.95	Yes
Block 12 02F	5197	36%	34%	0.94	Yes
Block 12 02F	5613	12%	11%	0.90	Yes
Block 12 02F	5624	38%	35%	0.91	Yes
Block 12 02F	5625	38%	35%	0.92	Yes
Block 12 02F	5632	24%	22%	0.91	Yes
Block 12 02F	5633	21%	19%	0.91	Yes
Block 12 02F	5919	13%	13%	1.00	Yes
Block 12 02F	1945	35%	34%	0.95	Yes
Block 12 02F	1946	34%	32%	0.95	Yes
Block 12 02F	1947	31%	29%	0.95	Yes
Block 12 02F	1950	36%	35%	0.95	Yes
Block 12 02F	3644	31%	30%	0.97	Yes
Block 12 02F	5198	34%	33%	0.97	Yes
Block 12 02F	5199	37%	35%	0.97	Yes
Block 12 02F	5200	38%	36%	0.96	Yes
Block 12 02F	5615	13%	12%	0.93	Yes
Block 12 02F	5627	39%	37%	0.94	Yes
Block 12 02F	5628	39%	37%	0.95	Yes
Block 12 02F	5634	26%	24%	0.94	Yes
Block 12 02F	5635	22%	21%	0.94	Yes
Block 12 02F	5920	15%	15%	1.00	Yes
Block 12 02F	1952	37%	36%	0.97	Yes
Block 12 02F	1953	36%	35%	0.97	Yes
Block 12 02F	1954	34%	33%	0.97	Yes
Block 12 02F	1956	38%	37%	0.97	Yes
Block 12 02F	3645	35%	34%	0.98	Yes
Block 12 02F	4779	37%	36%	0.98	Yes
Block 12 02F	4780	38%	37%	0.98	Yes
Block 12 02F	4781	39%	38%	0.98	Yes
Block 12 02F	5617	16%	15%	0.96	Yes
Block 12 02F	5630	39%	38%	0.97	Yes
Block 12 02F	5631	39%	38%	0.97	Yes
Block 12 02F	5636	30%	29%	0.97	Yes
Block 12 02F	5637	25%	24%	0.96	Yes
Block 12 02F	5923	18%	18%	1.00	Yes
Total meets criteria			Yes	159	93%
			No	12	7%
Total Windows Analysed				171	

Appendix H – Sunlight Access to Existing Buildings Results

Table 12 Sunlight to Existing Buildings Results

Building Ref	Window Ref	APSH Existing	APSH Proposed	APSH Existing/ Proposed	APSH Meets BRE Criteria	WPSH Existing	WPSH Proposed	WPSH Existing/ Proposed	WPSH Meets BRE Criteria	Meets APSH & WPSH Criteria
Block 11 01F	3554	19%	14%	0.74	No	1%	1%	1.00	Yes	No
Block 11 01F	3874	14%	12%	0.86	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3875	15%	13%	0.87	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3876	11%	7%	0.64	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3877	16%	14%	0.88	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3878	13%	8%	0.62	No	0%	0%	1.00	Yes	No
Block 11 01F	3879	18%	12%	0.67	No	1%	1%	1.00	Yes	No
Block 11 01F	3880	17%	9%	0.53	No	2%	2%	1.00	Yes	No
Block 11 01F	3881	20%	13%	0.65	No	2%	2%	1.00	Yes	No
Block 11 01F	3882	13%	7%	0.54	No	2%	2%	1.00	Yes	No
Block 11 01F	3929	9%	8%	0.89	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3930	9%	8%	0.89	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	5743	9%	8%	0.89	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3549	19%	14%	0.74	No	1%	1%	1.00	Yes	No
Block 11 01F	3819	14%	12%	0.86	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3820	16%	14%	0.88	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3821	11%	7%	0.64	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3822	17%	15%	0.88	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3823	13%	8%	0.62	No	0%	0%	1.00	Yes	No
Block 11 01F	3824	18%	12%	0.67	No	1%	1%	1.00	Yes	No
Block 11 01F	3825	20%	12%	0.60	No	2%	2%	1.00	Yes	No
Block 11 01F	3826	21%	14%	0.67	No	2%	2%	1.00	Yes	No
Block 11 01F	3827	13%	7%	0.54	No	2%	2%	1.00	Yes	No
Block 11 01F	3895	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3896	4%	4%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3897	12%	11%	0.92	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3898	9%	8%	0.89	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3550	19%	14%	0.74	No	1%	1%	1.00	Yes	No
Block 11 01F	3831	14%	12%	0.86	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3832	17%	15%	0.88	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3833	11%	8%	0.73	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3834	17%	15%	0.88	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3835	13%	8%	0.62	No	0%	0%	1.00	Yes	No
Block 11 01F	3836	19%	13%	0.68	No	1%	1%	1.00	Yes	No
Block 11 01F	3837	22%	15%	0.68	No	3%	3%	1.00	Yes	No
Block 11 01F	3838	23%	16%	0.70	No	2%	2%	1.00	Yes	No
Block 11 01F	3839	13%	7%	0.54	No	2%	2%	1.00	Yes	No
Block 11 01F	3899	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3900	7%	6%	0.86	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3901	13%	12%	0.92	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3902	9%	8%	0.89	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3551	23%	20%	0.87	Yes	2%	2%	1.00	Yes	Yes
Block 11 01F	3843	14%	12%	0.86	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3844	17%	15%	0.88	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3845	11%	9%	0.82	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3846	18%	16%	0.89	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3847	15%	12%	0.80	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3848	21%	17%	0.81	Yes	2%	2%	1.00	Yes	Yes
Block 11 01F	3849	23%	17%	0.74	No	3%	3%	1.00	Yes	No
Block 11 01F	3850	25%	19%	0.76	No	2%	2%	1.00	Yes	No
Block 11 01F	3851	14%	10%	0.71	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3903	4%	4%	1.00	Yes	0%	0%	1.00	Yes	Yes

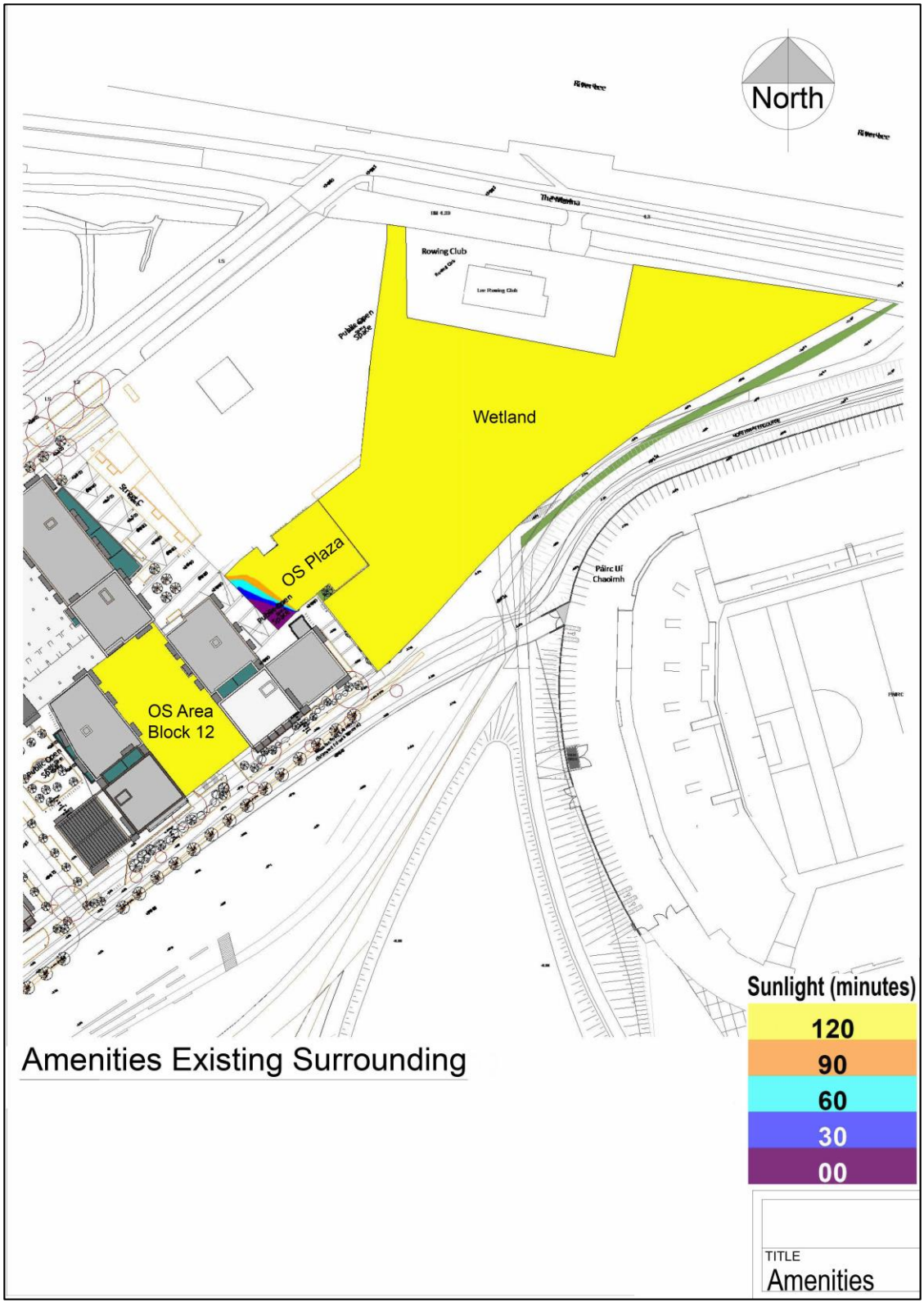
Building Ref	Window Ref	APSH Existing	APSH Proposed	APSH Existing/ Proposed	APSH Meets BRE Criteria	WPSH Existing	WPSH Proposed	WPSH Existing/ Proposed	WPSH Meets BRE Criteria	Meets APSH & WPSH Criteria
Block 11 01F	3904	10%	9%	0.90	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3905	17%	16%	0.94	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3906	10%	9%	0.90	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3552	23%	21%	0.91	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3855	14%	13%	0.93	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3856	12%	11%	0.92	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3857	14%	13%	0.93	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3858	19%	18%	0.95	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3859	25%	23%	0.92	Yes	2%	2%	1.00	Yes	Yes
Block 11 01F	3860	14%	10%	0.71	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3861	23%	17%	0.74	No	3%	3%	1.00	Yes	No
Block 11 01F	3862	26%	20%	0.77	No	3%	3%	1.00	Yes	No
Block 11 01F	3863	14%	10%	0.71	Yes	2%	2%	1.00	Yes	Yes
Block 11 01F	3907	6%	6%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3908	14%	13%	0.93	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3909	17%	16%	0.94	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3910	11%	10%	0.91	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3553	26%	25%	0.96	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3883	15%	14%	0.93	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3884	25%	24%	0.96	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3885	26%	25%	0.96	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3886	19%	18%	0.95	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3887	26%	25%	0.96	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3888	26%	24%	0.92	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3889	26%	23%	0.88	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3890	26%	24%	0.92	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3891	26%	24%	0.92	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3911	15%	15%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3912	9%	9%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3913	19%	18%	0.95	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3914	15%	14%	0.93	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3915	17%	17%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 11 01F	3916	11%	11%	1.00	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3925	15%	15%	1.00	Yes	2%	2%	1.00	Yes	Yes
Block 11 01F	3926	20%	20%	1.00	Yes	1%	1%	1.00	Yes	Yes
Block 11 01F	3917	22%	22%	1.00	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3918	14%	14%	1.00	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3921	16%	16%	1.00	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3924	23%	23%	1.00	Yes	2%	2%	1.00	Yes	Yes
Block 11 01F	3919	24%	24%	1.00	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3920	24%	24%	1.00	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3922	24%	24%	1.00	Yes	3%	3%	1.00	Yes	Yes
Block 11 01F	3923	24%	24%	1.00	Yes	3%	3%	1.00	Yes	Yes
Block 12 02F	2431	11%	11%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	3639	1%	1%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5186	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5188	6%	6%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5599	12%	12%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5600	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5609	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1915	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1918	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1919	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1927	1%	1%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	2937	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	3641	1%	1%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5189	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes

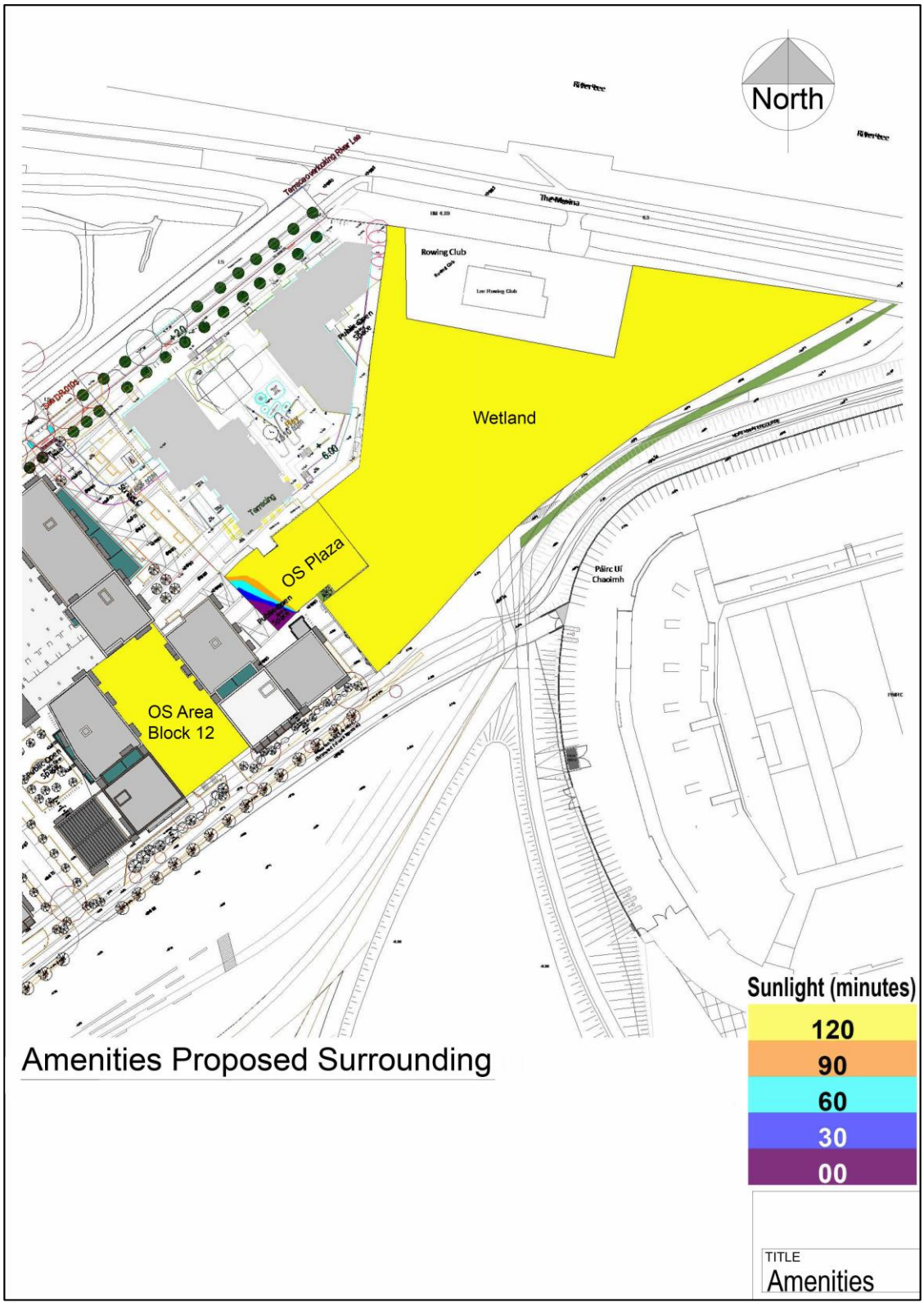
Building Ref	Window Ref	APSH Existing	APSH Proposed	APSH Existing/ Proposed	APSH Meets BRE Criteria	WPSH Existing	WPSH Proposed	WPSH Existing/ Proposed	WPSH Meets BRE Criteria	Meets APSH & WPSH Criteria
Block 12 02F	5190	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5191	6%	6%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5618	13%	13%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5619	14%	14%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5620	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5623	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1928	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1929	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1933	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1936	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	3642	1%	1%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5192	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5193	3%	3%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5194	8%	8%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5611	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5621	14%	14%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5622	16%	16%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5626	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5629	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5918	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1938	3%	3%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1939	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1941	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1943	6%	6%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	3643	1%	1%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5195	2%	2%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5196	8%	8%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5197	12%	12%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5613	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5624	16%	16%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5625	19%	19%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5632	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5633	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5919	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1945	10%	10%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1946	3%	3%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1947	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1950	16%	16%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	3644	1%	1%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5198	8%	8%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5199	13%	13%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5200	16%	16%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5615	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5627	19%	19%	1.00	Yes	2%	2%	1.00	Yes	Yes
Block 12 02F	5628	24%	24%	1.00	Yes	1%	1%	1.00	Yes	Yes
Block 12 02F	5634	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5635	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5920	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1952	16%	16%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1953	15%	15%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1954	5%	5%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	1956	18%	18%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	3645	18%	18%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	4779	21%	21%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	4780	24%	24%	1.00	Yes	2%	2%	1.00	Yes	Yes
Block 12 02F	4781	24%	24%	1.00	Yes	2%	2%	1.00	Yes	Yes
Block 12 02F	5617	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes

Building Ref	Window Ref	APSH Existing	APSH Proposed	APSH Existing/ Proposed	APSH Meets BRE Criteria	WPSH Existing	WPSH Proposed	WPSH Existing/ Proposed	WPSH Meets BRE Criteria	Meets APSH & WPSH Criteria
Block 12 02F	5630	25%	25%	1.00	Yes	2%	2%	1.00	Yes	Yes
Block 12 02F	5631	25%	25%	1.00	Yes	2%	2%	1.00	Yes	Yes
Block 12 02F	5636	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5637	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
Block 12 02F	5923	0%	0%	1.00	Yes	0%	0%	1.00	Yes	Yes
								Total Meeting Annual Criteria	Yes	149	87%
								Total Meeting Winter Criteria	Yes	171	100%
								Total Meeting Both Criteria	Yes	149	87%
								Total Windows Analysed		171	

Appendix I – Loss of Sunlight to Existing Amenity Areas

Amenity Area	Area m²	Area Receiving 2 Hrs of Sunlight - Existing %	Area Receiving 2 Hrs of Sunlight - Proposed %	Existing Vs Proposed	Meets BRE Criteria
OS Plaza	1,376	100%	100%	1.0	Yes
OS Block 12	1,511	100%	100%	1.0	Yes
Wetland	8,979	100%	100%	1.0	Yes





Amenities Proposed Surrounding

Appendix J – Site Shadow Diagrams

A shadow study was conducted to indicate the shadows cast by the proposal throughout the year. The analysis was run at hourly intervals during daylight hours on:

- 21st March – Spring Equinox
- 21st June – Summer Solstice
- 21st December – Winter Solstice

The BRE Guide recommends:

"If a space is used all year round, the equinox (21 March) is the best date for which to prepare shadow plots as it gives an average level of shadowing. Lengths of shadows at the autumn equinox (21 September) will be the same as those for 21 March, so a separate set of plots for September is not required."[27]

And

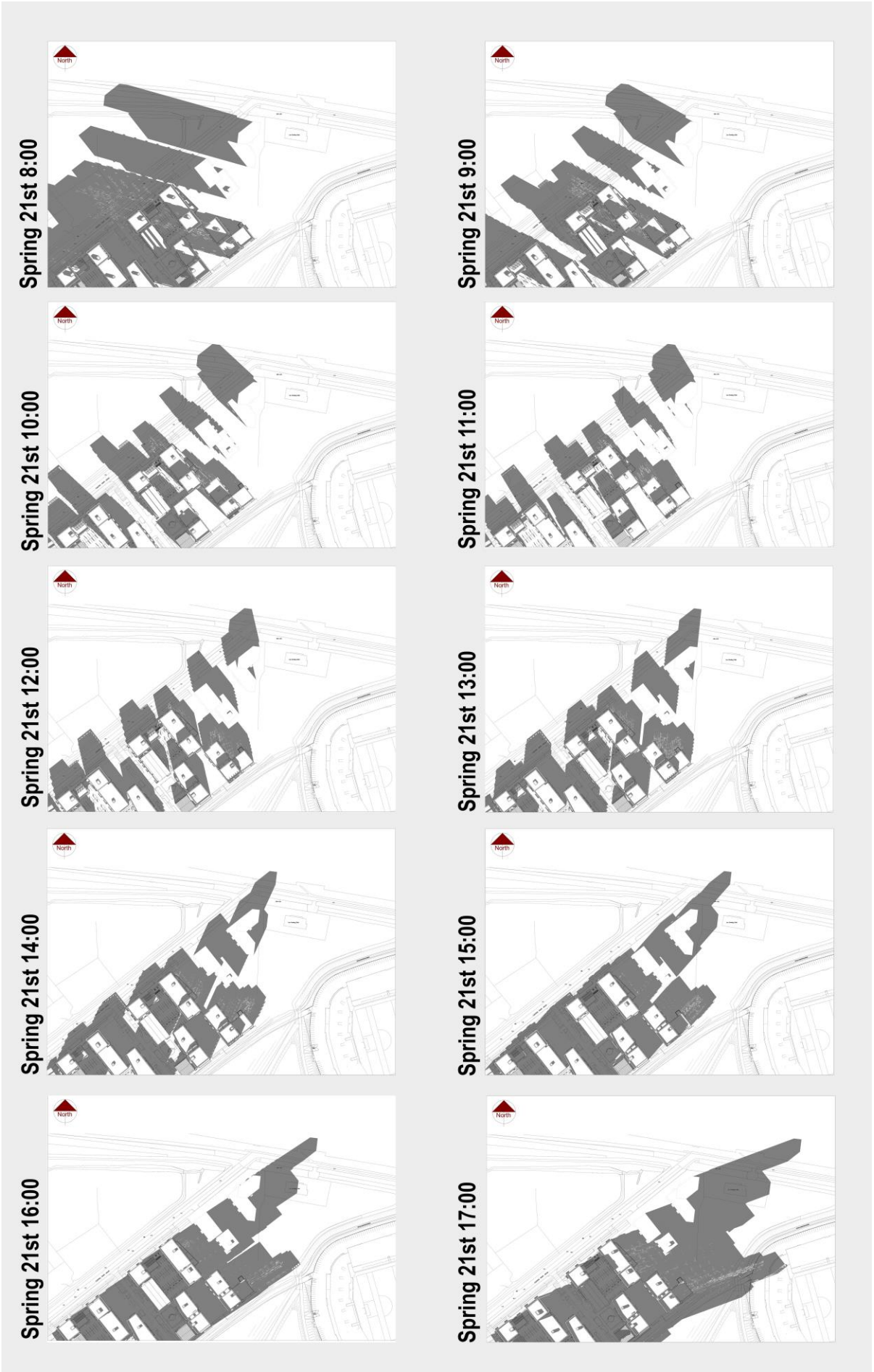
"As an optional addition, plots for summertime (for example 21 June) may be helpful as they will show the reduced shadowing then, although it should be borne in mind that 21 June represents the best case of minimum shadow, and that shadows for the rest of the year will be longer. Conversely if winter shadows (e.g. 21 December) are plotted, even low buildings will cast long shadows. In a built-up area, it is common for large areas of the ground to be in shadow in December."[28]

See Next Page.

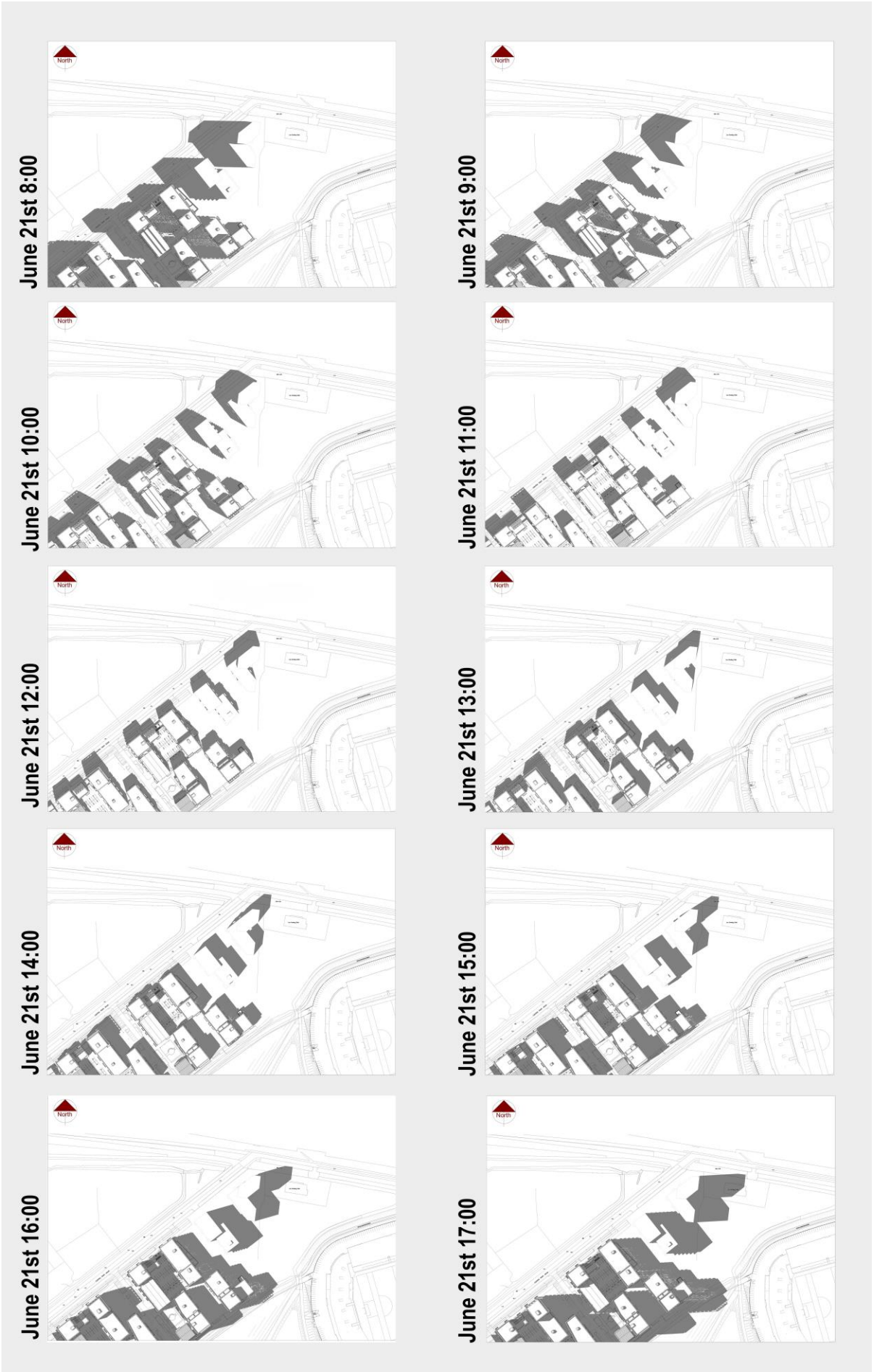
[27] BRE Guide: 3.3.14

[28] BRE Guide: 3.3.15

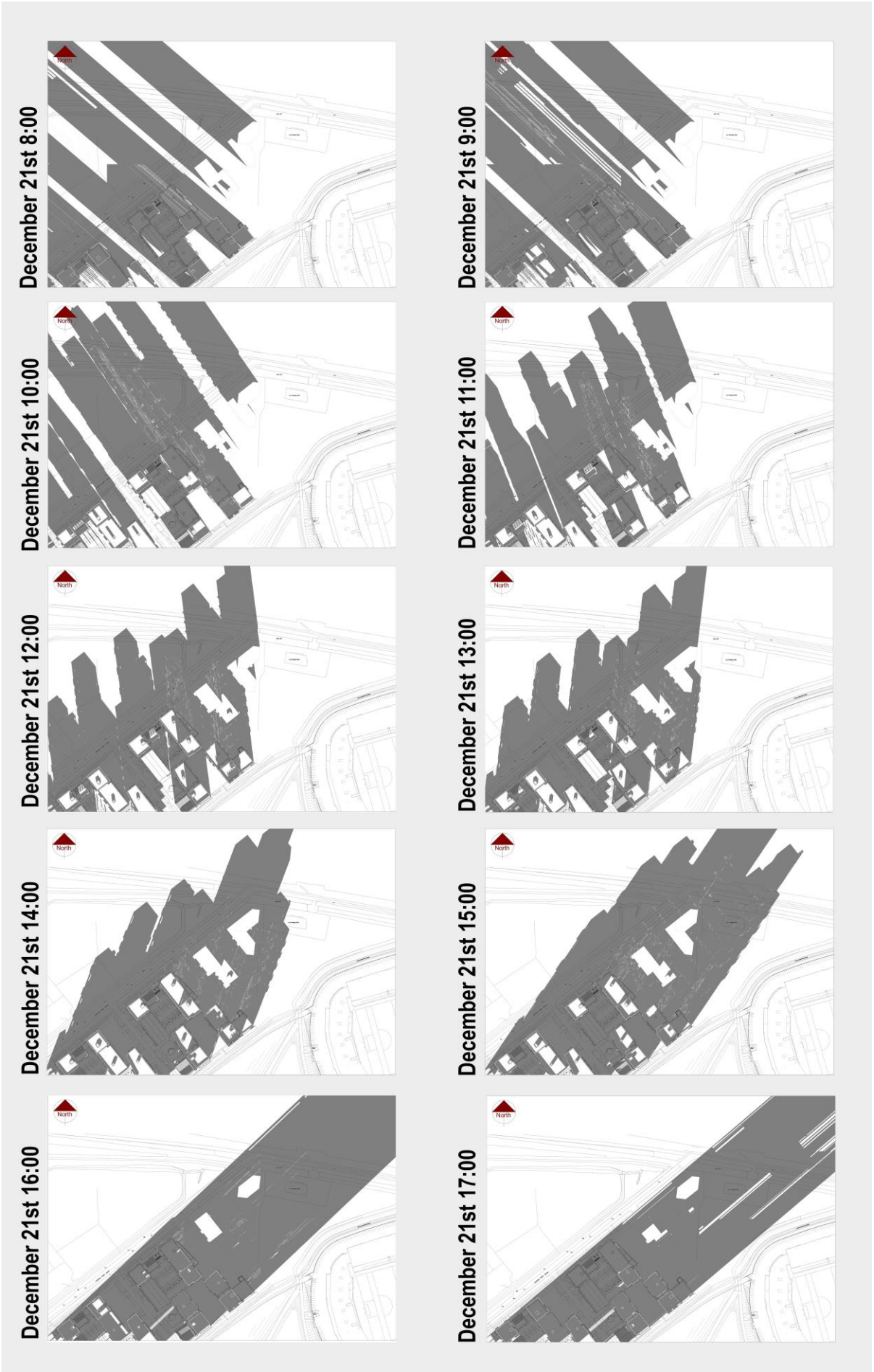
Equinox March 21st



Summer Solstice June 21st



Winter Solstice December 21st



End of Report