

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

> T: +44(0)20 7148 6290 E: info@eb7.co.uk W: eb7.co.uk

# DAYLIGHT & SUNLIGHT REPORT

Francis Gardner Hall 89-91 West End Lane, West Hampstead, London, NW6 4SY

20<sup>th</sup> May 2022



	Contents
1.	Introduction3
2.	Guidance4
3.	Application of the guidance6
4.	Planning Policy Context8
5.	Sources of information & assumptions9
6.	The site and proposal12
7.	Assessment results13
8.	Conclusions23



## 1. Introduction

- 1.1. eb7 have been instructed to assess the effect of proposed development at Francis Gardner Hall, West Hampstead on daylight and sunlight to the existing surrounding properties and neighbouring amenity spaces as well as daylight and sunlight within the proposal itself. These assessments consider the latest scheme proposals by White Red Architects received in May 2022.
- 1.2. The methodology and criteria used for these assessments is provided by Building Research Establishment's (BRE) guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (BRE 209 2nd edition, 2011).
- 1.3. In order to carry out an assessment, we have generated a 3D computer model (Test Environment) of the existing site, the key surrounding properties and the proposed scheme. Using this model and our specialist software, we have calculated the daylight and sunlight levels in both the existing and proposed conditions for the relevant neighbouring buildings.
- 1.4. As well as considering the daylight and sunlight to neighbouring properties, we have also quantified the overshadowing effects to neighbouring amenity areas and gardens, again considering both the existing and proposed conditions.
- 1.5. As the proposed development includes residential accommodation, the daylight and sunlight to rooms within the proposal has also been considered for lower ground to fourth floor level.
- 1.6. The numerical criteria suggested within the BRE guidelines has been applied to each of the assessments mentioned above. It is important to note that these guidelines are not a rigid set of rules, but are advisory and need to be applied flexibly according to the specific context of a site.



## 2. Guidance

#### **Daylight & sunlight for planning**

'Site layout planning for daylight and sunlight: A guide to good practice', BRE 2011

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

#### **Detailed daylight assessments**

- 2.2. The guidance outline three detailed methods for calculating daylight: the Vertical Sky Component (VSC), the No-Sky Line (NSL) and the Average Daylight Factor (ADF).
- 2.3. The VSC and NSL are primarily used for the assessment of existing buildings, while the ADF test is generally recommended for proposed rather than existing dwellings. The ADF may sometimes be useful as a supplementary analysis for existing buildings, particularly newer ones, and a number of local authorities request this as a standard measurement for impact assessments. It can help in judging whether an impact on daylight, which might otherwise be deemed 'noticeable', is nonetheless acceptable, when considered in the broader town planning context.
- 2.4. The VSC test measures the amount of sky that is visible to a specific point on the outside of a property, which is directly related to the amount of daylight that can be received. It is measured on the outside face of the external walls, usually at the centre point of a window.
- 2.5. The NSL test calculates the distribution of daylight within rooms by determining the area of the room at desk / work surface height (the 'working plane') which can and cannot receive a direct view of the sky and hence 'sky light'. The working plane height is set at 850mm above floor level within residential property.
- 2.6. For the above methods, the guidance suggests that existing daylight may be noticeably affected by new development if: -
  - Windows achieve a VSC below 27% and are reduced to less than 0.8 times their former value; and / or
  - Levels of NSL within rooms are reduced to less than 0.8 times their former values.
- 2.7. Where rooms are greater than 5m in depth and lit from only one side, the guidance recognises that "a greater movement of the no sky line may be unavoidable" (page 8, paragraph 2.2.10).



#### **Daylight to new buildings**

- 2.8. The ADF method calculates the average illuminance within a room as a proportion of the illuminance available to an unobstructed point outdoors under a sky of known luminance and luminance distribution. This is the most detailed of the daylight calculations and considers the physical nature of the room behind the window, including; window transmittance, and surface reflectivity. The BRE guidance and British Standard sets the following recommended ADF levels for habitable room uses: -
  - Bedrooms 1% ADF
  - Living Rooms 1.5% ADF
  - Kitchens 2% ADF
- 2.9. For multi-purpose arrangements, BRE guidance state that a higher target to be used depending on the predominant use of the space.

#### **Detailed sunlight assessments**

- 2.10. For sunlight, the Annual Probable Sunlight Hours (APSH) test calculates the percentage of probable hours of sunlight received by a window or room over the course of a year.
- 2.11. In assessing sunlight effects to existing properties surrounding a new development, only those windows orientated within 90° of due south and which overlook the site require assessment. The main focus is on living rooms, with bedrooms and kitchens deemed less important.
- 2.12. The guidelines suggest that the main living rooms within new buildings should achieve at least 25% of annual sunlight hours, with 5% during the winter period. For neighbouring buildings, the guide suggests that occupiers will notice the loss of sunlight if the APSH to main living rooms is both less than 25% annually (with 5% during winter) and that the amount of sunlight, following the proposed development, is reduced by more than 4%, to less than 0.8 times its former value.

#### Sunlight to gardens and outdoor spaces

- 2.13. Where sunlight to an amenity space may be affected by new development, the BRE guidelines recommend that an overshadowing assessment is conducted. The key analysis is the '2hr sun on ground' test, which quantifies the proportion of an amenity area (e.g. rear gardens, parks and playing fields, public squares etc.) receiving at least 2hrs of sun on the 21st of March.
- 2.14. The BRE guidance recognises that different types of amenity space may have different sunlighting requirements. Generally, the guidelines suggest that if at least 50% of an amenity area receives at least 2hrs of sun on 21st March, then it is likely to be adequately lit throughout the year. If an existing neighbouring open space receives less than 50%, then the guidelines suggest that it should not be reduced below 0.8 times its former value.



# 3. Application of the guidance

#### Scope of assessment

#### Impact analysis for neighbouring buildings

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

"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed."

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

#### Assessment for proposed accommodation

- 3.3. Our assessment has considered all of the proposed residential units within the scheme. The daylight assessment considers all of the main habitable rooms (bedrooms, living rooms, kitchens etc.), toilets, hallways and staircases are not considered habitable use.
- 3.4. For sunlight the BRE acknowledges that windows with a predominantly northern orientation are unlikely to satisfy its targets and that main living rooms are most important. Therefore, our sunlight assessment focusses on the relevant living areas with windows facing within 90° of due south only.

#### Application of the numerical criteria

3.5. The opening paragraphs of the BRE guidelines state:

"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. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".



- 3.6. It is therefore very important to apply the BRE guidance sensibly and flexibly, with careful consideration of the specific site context. Its numerical targets theoretically apply to any built environment, from city centres to rural villages. However, in more tightly constrained environments, achieving the default BRE targets can be very challenging and conflict with other beneficial factors of site layout design.
- 3.7. With the above in mind, rigid adherence to the BRE in certain situations could easily result in an inappropriate form of development. In which case it may be appropriate to adopt lower target values more appropriate to the location concerned. This is acknowledged in the BRE guidance at paragraph 2.2.3 (page 7):

"Note that numerical values given here are purely advisory. Different criteria maybe used, based on the requirements for daylighting in an area viewed against other site layout constraints.



# 4. Planning Policy Context

- 4.1. We have considered local, regional and national planning policy relating to daylight and sunlight. In general terms, planning policy advises that new development will only be permitted where it is shown not to cause unacceptable loss of daylight or sunlight amenity to neighbouring properties.
- 4.2. The need to protect the amenity of neighbours is echoed within recent publications from the Mayor of London and the Secretary of State for Housing, Communities and Local Government. Although, these documents also stress that current guidance needs to be used flexibly where developments are located in urban areas and intend to achieve higher densities. Specifically, these documents suggest that the nationally applicable criteria given within the BRE guidance needs to be applied carefully and in consideration of the development's context.

#### The London Plan – The Mayor of London (March 2021)

1.1.1 The Mayor of London's New London Plan gives the following: -

#### Policy D6 Housing quality and standards

"C. Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating."

"D. The design of development should provide sufficient daylight and sunlight to new and surrounding housing that is appropriate for its context, whilst avoiding overheating, minimising overshadowing and maximising the usability of outside amenity space."

#### The Housing SPG – The Mayor of London (March 2016)

#### Standards for privacy, daylight and sunlight

"1.3.45 Policy 7.6Bd requires new development to avoid causing 'unacceptable harm' to the amenity of surrounding land and buildings, particularly in relation to privacy and overshadowing and where tall buildings are proposed. An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets. This should take into account local circumstances; the need to optimise housing capacity; and scope for the character and form of an area to change over time.



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

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

1.1.2 The latest version of the National Planning Policy Framework was issued in July 2021. The document sets out planning policies for England and how these are expected to be applied. In respect of daylight and sunlight it stresses the need to make optimal use of sites and to take a flexible approach to daylight and sunlight guidance. Para 125 States:

#### 11. Making effective use of land

#### **Achieving appropriate densities**

"125. Area-based character assessments, design guides and codes and masterplans can be used to help ensure that land is used efficiently while also creating beautiful and sustainable places. Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site. In these circumstances:

c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards).



# 5. Sources of information & assumptions

- 5.1. We have used the architects 2d drawings, survey information and site visit photos to create a 3D computer model of the proposed development in the context of the existing site and surrounding buildings. Where survey or planning information was unavailable, the position of the neighbouring property elevations has been estimated based upon brick counts from site photographs. Window positions and dimensions used directly affect the results of all assessment methods.
- 5.2. We have not sought access to the surrounding properties and, unless we have been able to source floor layouts via public records, the internal configuration and floor levels have been estimated. Unless the building form dictates otherwise, we assume room depths of c. 4.2m for principal living space. Room layouts used directly affect the results of the NSL.
- 5.3. Where possible neighbouring building use has been identified via online research, including Valuation Office Agency (VOA) searches, and/or external observation.
- 5.4. The full list of source information used in this assessment is as follows: -

#### **Sumo Services Ltd**

#### Topographical survey

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

#### **White Red Architects**

#### 3D model and 2D drawings of the proposed development

```
5408_07_099 - Proposed - Basement plan_DRAFT_220425.dwg
5408_07_100 - Proposed - Ground floor plan_DRAFT_220425.dwg
5408_07_101 - Proposed - First floor plan_DRAFT_220425.dwg
5408_07_102 - Proposed - Second floor plan_DRAFT_220425.dwg
5408_07_103 - Proposed - Third floor plan_DRAFT_220425.dwg
5408_07_104 - Proposed - Fourth floor plan_DRAFT_220425.dwg
5408_07_105 - Proposed - Fifth floor plan_DRAFT_220425.dwg
5408_07_106 - Proposed - Roof plan_DRAFT_220425.dwg
5408_07_200 - Proposed - North Elevation_DRAFT_220425.dwg
5408_07_201 - Proposed - East Elevation_DRAFT_220425.dwg
5408_07_202 - Proposed - South Elevation_DRAFT_220425.dwg
5408_07_203 - Proposed - West Elevation_DRAFT_220425.dwg
5408_Francis Gardner_Proposed 3DView_220425.dwg
Received 26/04/2022
```



## Local authority planning research

76 Gascony Avenue - 2017/5148/P Kings Gardens - 2016/1143/P 12 Smyrna Road – Ref. 2006/0748/P

#### **Estate agent website**

Kings Gardens - Flat 35, Flat 38, Flat 44, Flat 49, Flat 50 internal layouts have been located through zoopla.com and rightmove.com



# 6. The site and proposal

- 6.1. The development site is situated at Francis Gardner Hall, West Hampstead. It is currently occupied by a five-storey building containing student residencies.
- 6.2. Proposed refurbishment of existing student accommodation building including replacement recessed windows and façade cleaning, and erection of roof extension to accommodate four studios and internal and external communal amenity space.



Image 1 – 3D view of the existing (green) and proposed development (blue)



## 7. Assessment results

#### Daylight and sunlight to neighbouring buildings

- 7.1. Full results of the daylight and sunlight assessments within neighbouring properties are attached within Appendix 2. Drawings to show the existing and proposed buildings in the context of the neighbouring properties are attached within Appendix 1
- 7.2. Our assessment has considered all of the closest neighbouring residential properties with windows overlooking the proposed development. These are shown on the following image: -



Image 2 – site and neighbouring properties assessed

- 1. 93 West End Lane, London, NW6 4SY
- 2. 15 to 64 Sidney Boyd Court, NW6 4QZ
- 3. Kings Gardens
- 4. 1 to 8 Smyrna Mansions
- 5. 12 Smyrna Road
- 6. 76 Gascony Avenue



#### 93 West End Lane, NW6 4SY

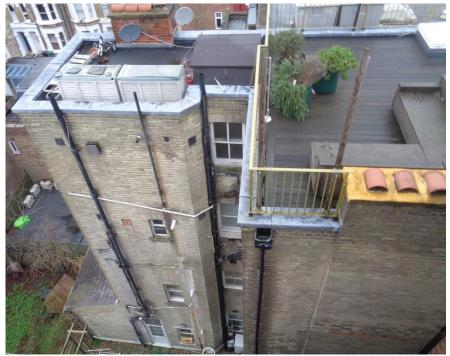


Image 6 – 93 West End Lane, flank south-facing elevation

- 7.3. This is a four-storey residential property located directly to the north of the site. It has a number of windows within its flank, south-facing elevation which have a direct view of the proposed development.
- 7.4. We have modelled this property using an estate agent floorplan and we have assumed the same layout applies to each floor level. Our assessments may be updated if more accurate plans become available.

#### Daylight and Sunlight

7.5. The results confirm that in all locations the VSC, NSC and APSH would retain levels of daylight and sunlight above the standard BRE targets.



#### 15 to 64 Sidney Boyd Court, West End Lane



Image 7 – Sidney Boyd Court, front west-facing elevation

- 7.6. This is a six to seven-storey residential block located to the east of the site, across West End Lane. It has a number of windows within its front, west-facing elevation, many of which have a direct view of the proposed development.
- 7.7. We have modelled these properties using the survey information that has been provided by the client.

#### Daylight

7.8. The results of the VSC assessment have shown that in all location the levels of daylight remain above the standard BRE target (either 27% VSC or 0.8 times the former value). The proposed VSC results remain very close to the existing condition (between 0.99 and 0.97), and the building remains a fair distance away from the proposal. It is reasonable to assume that the NSC values for daylight distribution would be similar in this location and there is no further consideration needed.

#### Sunlight

7.9. The results for the ASPH assessment have shown that all windows would retain levels of sunlight above the standard BRE targets.



#### 1-50 King's Gardens



Image 8 – 1-50 King's Gardens, flank north-facing elevation

- 7.10. This is a six-storey residential block located directly to the south of the site. It has a number of windows within its flank, north-facing elevation which have a direct view of the proposed development.
- 7.11. We have modelled these properties using a combination of the survey elevation, estate agent floorplans and planning documents obtained through the local planning portal (REF: 2016/1143/P & 2005/1400/P).

#### Daylight and Sunlight

7.12. The results confirm that in all locations the VSC, NSC and APSH would retain levels of daylight and sunlight above the standard BRE targets.



#### 1-8 Smyma Mansions



Image 3 – 1-8 Smyrna Mansions, rear east-facing elevation

- 7.13. This is a four-storey residential block located directly to the west of the site. It has a number of windows within its rear, east-facing elevation which have a direct view of the proposed development.
- 7.14. We have modelled this property using the survey elevation and an estate agent floorplan for the second floor and it is reasonable to assume that the same layout applies to all floor levels.

#### Daylight and Sunlight

7.15. The results confirm that in all locations the VSC, NSC and APSH would retain levels of daylight and sunlight above the standard BRE targets.



#### 12 Smyrna Road



Image 4 – 12 Smyrna Road, rear east-facing elevation

- 7.16. This is a three-storey residential block located directly to the west of the site. It has a number of windows within its rear, east-facing elevation which have a direct view of the proposed development.
- 7.17. We have modelled this property based on survey information and planning documents obtained through the local planning portal (REF: 2006/0748/P).

#### **Daylight**

7.18. The results confirm that in all locations the VSC and NSC would retain levels of daylight above the standard BRE targets.

#### Sunlight

7.19. In this location the windows are within 90 degrees of due north and BRE guidance confirms that sunlight need not be analysed under these circumstances. The assessment of the development on this property is fully consistent with BRE guidance.



#### 76 Gascony Avenue



Image 5 – 70-78 Gascony Avenue, rear south-facing elevation

- 7.20. This is an end of terrace property located to the northwest of the site. They have a number of windows on the flank elevation which have an oblique view of the proposed development.
- 7.21. We have modelled this property using floorplans obtained through the local planning portal (REF: 2017/5148/P).

#### Daylight and Sunlight

7.22. The results confirm that in all locations the VSC, NSC and APSH would retain levels of daylight and sunlight above the standard BRE targets.



#### Overshadowing to neighbouring amenity

- 7.23. In order to assess the impact upon sunlight within neighbouring gardens and amenity spaces, we have used the BRE '2-hour sun on ground ' analysis. For both the existing and proposed scenarios, this involves dividing the areas that can receive at least two hours of sunlight on ground (shaded in yellow on the drawings) from those that receive less than two hours (shaded in blue) on 21 March (the equinox). The percentage of each amenity space receiving at least two hours sunlight is shown in the tables on the two drawings.
- 7.24. Our assessment has considered the following garden amenity areas: -
  - 93 West End Lane
  - 1 to 8 Smyna Mansions
  - 76 Gascony Avenue
- 7.25. The results of the analysis are shown on our drawings labelled 4012-SA01 within Appendix 1.
- 7.26. The results of our overshadowing assessment show that within all locations there will be minimal change to the existing sunlight values and the BRE guidelines will be fully satisfied.



#### Daylight and sunlight within the proposal

- 7.27. The daylight and sunlight amenity provided within the proposed residential accommodation has been assessed using the ADF and APSH tests following the methodology of the BRE guidance and British Standard document BS8206 pt2.
- 7.28. Full results of the daylight and sunlight assessments within the proposed apartments, along with drawings to show the layout of rooms and windows, are attached within Appendix 3.

#### **Daylight**

Room Type	ADF Target	Total No. of Rooms	Rooms That Meet ADF Target
Studio	1.5%	72	44 (61%)
Studio (1% target)			57 (79%)
Communal Lounge/ Dining	2%	2	2 (100%)
Communal Study	1%	4	1 (25%)
Total  Total with Studios at	1%	78	47 (60%) 61 (78%)

Table 1 – Summary ADF results for proposed accommodation

- 7.29. The results of our ADF assessment within the proposed apartments have shown that 47 (60%) of the 78 habitable rooms surpass the BRE and British Standard guidance criteria. There are however 28 studios and 3 study that fall below the target levels (i.e. 1.5% for Studios and 1% for Studies). We recognise that the kitchens are separate from the studios and we have therefore applied a 1.5% target value.
- 7.30. The 28 studios that fall below that target values are mostly located to the rear (west) of the property and have been provided with communal living rooms at the front (east) of the property, which provide very good levels of daylight. Therefore, it is reasonable to assume that in terms of the ADF target, the predominant use of a studio apartment will be as a bedroom (1%). The results show that 57 (78%) would achieve an ADF in excess of the 1% target for bedrooms. 15 studios would still remain below the target value, however these are located on the side elevations where light is heavily restricted by the existing neighbouring and adjacent buildings.
- 7.31. The 3 communal study rooms that would fall below the target level of 1% are all located within the courtyard area within the centre of the building where daylight at lower levels would be restricted. Alternative working spaces are available within the individual studios and also the top floor lounge area where daylight levels are well in excess of the 2% target. As such, the overall levels of daylight within these apartments should be considered as acceptable.



#### Sunlight

Room Type	Total No. of rooms	Rooms that meet APSH criteria	Rooms that meet WPSH criteria
Communal Lounge/Dining	2	2 (100%)	1 (50%)

Table 02 – Summary APSH results for proposed accommodation

- 7.32. The results have shown that both communal lounge/dining rooms would achieve annual sunlight levels well in excess of the 25% target, with values of 33% (R1, Lower Ground floor) and 92% (R1, Fifth Floor).
- 7.33. In one location the result for WPSH is below the 5% target (R1, Lower Ground). This is mainly due to the lower ground location where sunlight can be more restricted especially in winter. With the combination of very good annual sunlight results, the overall set of results should be seen as acceptable.



## 8. Conclusions

- 8.1. This practice has undertaken a detailed assessment of the potential daylight and sunlight effects of the proposed development at Francis Gardener Hall on the key neighbouring properties. We have also undertaken an assessment of the provision of daylight and sunlight within the proposed residential units.
- 8.2. Our assessments have been undertaken using the VSC, NSL, (daylight) and APSH (sunlight) tests set out within the BRE guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (2011). It is important to reiterate that alterations in daylight and sunlight to adjoining properties are often inevitable when undertaking any meaningful development, especially in an urban environment. Therefore, the BRE guide is meant to be interpreted flexibly because natural lighting is only one of many factors in site layout design. Indeed, the guidelines suggest that different criteria may be used based upon the requirements for natural lighting in an area viewed against other constraints.

#### Daylight and sunlight impact to neighbouring properties

8.3. The results demonstrate that all neighbouring properties assessed would remain fully compliant in response to the BRE guidance. This is a very good outcome considering the existing site constraints.

#### Overshadowing impact to neighbouring properties

- 8.4. The assessment of sunlight amenity (overshadowing) within the rear gardens of 93 West End Lane, 1 to 8 Smyrna Mansions and 76 Gascony Avenue have shown values that will retain sufficient levels of sunlight on March 21st to remain compliant with BRE quidance.
- 8.5. The developments impact upon the neighbouring properties is therefore considered to be entirely consistent with the BRE guidance and relevant planning policy in terms of daylight and sunlight.

#### Daylight and sunlight within the proposed residential units

- 8.6. The assessment of daylight amenity within the proposed apartments has been assessed for all floor levels. 61 (78%) out of 78 rooms are shown to achieve levels of daylight commensurate with their predominant use. The rooms that fall below the target values, do so only marginally.
- 8.7. The sunlight assessment has shown that both communal lounge/dining rooms would achieve sunlight levels well in excess of the recommended 25% APSH. 1 out of 2 rooms would achieve sunlight levels well in excess of the recommended 5% winter sunlight. The single exception is located at lower ground floor where access to good sunlight is restricted. As such, the overall levels of daylight and sunlight provided within the proposed accommodation should be considered as acceptable in response to BRE quidance.



# Appendix 1

Drawings of the existing, proposed and surrounding buildings





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

#### White Red Architects

5408\_Francis Gardner\_Proposed 3D View\_220512.dwg Received 12/05/2022

#### EB7 Ltd

Site Photographs Ordnance Survey

Key:



02

Existing



NORTH

01

Project Francis Gardner Hall

**Existing Condition** Plan View

Checked MZ 11/05/2022 4012 Rel no. Page no.

DS01





Sources of information

#### SUMO SERVICES Ltd

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

#### White Red Architects

5408\_Francis Gardner\_Proposed 3D View\_220512.dwg Received 12/05/2022

#### EB7 Ltd

Site Photographs Ordnance Survey

Key:



Existing

Project Francis Gardner Hall

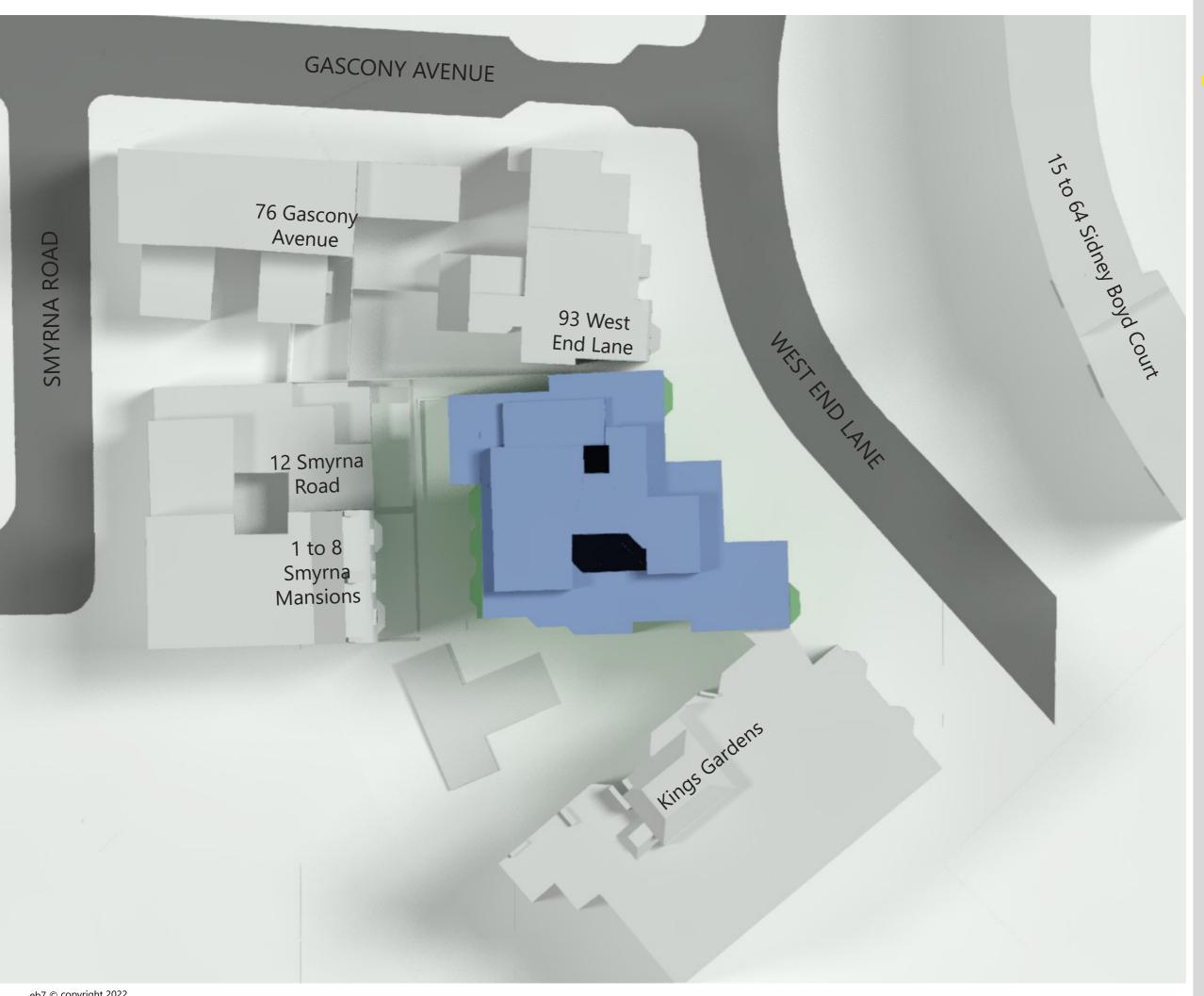
Existing Condition 3D View

 Drawn
 MZ
 Checked
 - 

 Date
 11/05/2022
 Project
 4012

 Rel no.
 Prefix
 Page no.

 02
 DS01
 02





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

#### White Red Architects

5408\_Francis Gardner\_Proposed 3D View\_220512.dwg Received 12/05/2022

#### EB7 Ltd

Site Photographs Ordnance Survey

Key:



Proposed



NORTH

Project Francis Gardner Hall

Proposed Development Plan View

ΜZ 4012 11/05/2022

Rel no. Page no.

02

DS01 03

eb7 © copyright 2022





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

#### White Red Architects

5408\_Francis Gardner\_Proposed 3D View\_220512.dwg Received 12/05/2022

#### EB7 Ltd

Site Photographs Ordnance Survey

Key:



Proposed

Project Francis Gardner Hall

Proposed Development 3D View

Checked MZ 4012 11/05/2022

DS01

Rel no. 02 Page no. 04



# Appendix 2

Results of the daylight and sunlight assessments within neighbouring properties

				Ver	tical Sky Comp	oonent (VSC)	No-Sky Line (NSL)				Annual Probable Sunlight Hours (APSH) by Room							
Address	Room	Windov	v Room use	Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existin m <sup>2</sup>	g NSL %	Propos m <sup>2</sup>	sed NSL %	Proportion Retained	Existin Total	g APSH Winter	Propose Total	ed APSH Winter	Retai Total	ned Winter
93 West E	nd Lane																	
Ground	R1	W1 W2	Bedroom	27.0 8.4	27.0 8.0	1.0 1.0	19.9	19.8	100%	19.8	100%	1.0	41	10	41	10	1.00	1.00
Ground	R2	W4	Bedroom	13.6	13.4	1.0	16.4	9.1	55%	9.0	55%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W5	Bedroom	1.2	1.1	1.0	9.8	0.0	0%	0.0	0%	0.0	5	0	5	0	1.00	0.00
Ground	R4	W6	Stairwell	0.4	0.3	0.9	4.3	0.0	0%	0.0	0%	0.0	3	0	3	0	1.00	0.00
Ground	R5	W7-L W7-U	LKD	16.8	16.7	1.0												
		W8-L W8-U		29.3	29.2	1.0												
		W9-L W9-U		26.6	26.6	1.0	22.9	21.5	94%	21.5	94%	1.0	32	6	32	6	1.00	1.00
Ground	R6	W3	Hallway	3.5	3.2	0.9	1.9	0.8	42%	0.6	34%	0.8	6	2	6	2	1.00	1.00
First	R1	W1-L	Bedroom	34.7	34.7	1.0												
		W1-U W2-L		10.4	9.7	0.9	10.5	40.5	000/	40.5	000/	1.0	40	0	20	8	0.05	1.00
First	R2	W2-U W4-L	Bedroom	16.6	16.2	1.0	10.6	10.5	99%	10.5	99%	1.0	40	8	38	8	0.95	1.00
riist	ΝZ	W4-U	Bedroom	10.0	10.2	1.0	16.4	13.5	82%	13.4	82%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
First	R3	W5	Bedroom	1.4	1.3	0.9	9.8	0.0	0%	0.0	0%	0.0	5	0	5	0	1.00	0.00
First	R4	W6	Stairwell	0.5	0.5	0.9	4.3	0.0	0%	0.0	0%	0.0	3	0	3	0	1.00	0.00
First	R5	W7-L W7-U	LKD	30.9	30.7	1.0												
		W8-L W8-U		31.7	31.5	1.0	20.7	20.4	98%	20.4	98%	1.0	36	7	36	7	1.00	1.00
First	R6	W3-L	Hallway	4.7	4.1	0.9												
Second	R1	W3-U W1-L	Bedroom	38.6	38.5	1.0	1.9	0.8	40%	0.6	32%	0.8	9	2	6	2	0.67	1.00
Second	KI	W1-U W2	Bedroom	15.3	13.1	0.9	10.6	10.5	99%	10.5	99%	1.0	51	10	47	10	0.92	1.00
Second	R2	W4-L	Bedroom	18.9	18.1	1.0	10.0	10.3	3370	10.3	3370	1.0	31	10	77	10	0.32	1.00
		W4-U					16.4	14.1	85%	13.7	83%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Second	R3	W5	Bedroom	1.7	1.6	0.9	9.8	0.0	0%	0.0	0%	0.0	7	0	5	0	0.71	0.00
Second	R4	W6	Stairwell	0.9	0.8	0.9	4.3	0.0	0%	0.0	0%	0.0	5	0	4	0	0.80	0.00
Second	R5	W7-L W7-U	LKD	32.9	32.6	1.0												
		W8-L W8-U		33.9	33.6	1.0	20.7	20.4	98%	20.4	98%	1.0	39	8	38	7	0.97	0.88
Second	R6	W3	Hallway	7.5	6.0	0.8	1.9	1.3	70%	1.0	53%	0.8	17	3	14	3	0.82	1.00
Third	R1	W1	Kitchen	39.5	39.3	1.0	5.5	5.4	98%	5.4	98%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Third	R2	W2	Bathroom	13.8	10.6	0.8	4.7	1.8	37%	1.7	36%	1.0	28	4	22	3	0.79	0.75
Third	R3	W3-L W3-U	Bedroom	26.4	24.9	0.9	16.4	15.0	91%	14.1	86%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Third	R4	W4	Bedroom	2.5	2.2	0.9	9.8	0.0	0%	0.0	0%	0.0	8	0	7	0	0.88	0.00
Third	R5	W5	Stairwell	2.4	2.1	0.9	4.3	0.0	0%	0.0	0%	0.0	9	0	9	0	1.00	0.00
Third	R6	W6 W7	LKD	34.4 35.9	33.9 35.5	1.0 1.0	18.9	18.5	98%	18.4	98%	1.0	43	9	42	8	0.98	0.89
1 to 8 Smy	yrna Man																	
Ground	R1	W1	Bedroom	17.9	17.8	1.0												
		W2 W3		12.8 9.8	12.0 8.7	0.9 0.9	16.7	9.9	59%	9.9	59%	1.0	38	10	38	10	1.00	1.00
Ground	R2	W4 W5	Bedroom	10.7 9.9	9.6 9.0	0.9 0.9												
		W6		9.9	9.0	0.9	5.1	2.6	51%	2.3	45%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W7 W8	Bedroom	9.9 9.3	8.8 8.4	0.9 0.9												
		W9		8.9	8.0	0.9	5.1	2.3	45%	2.0	40%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R4	W10 W11-L	Bedroom	12.3 8.3	11.9 7.4	1.0 0.9												
		W11-U W12		5.7	4.7	0.8	17.0	7.0	41%	7.0	41%	1.0	23	8	23	8	1.00	1.00
First	R1	W1	Bedroom	23.3	23.0	1.0												
		W2 W3		16.0 12.9	14.8 11.1	0.9 0.9	16.7	13.1	78%	13.0	78%	1.0	46	14	46	14	1.00	1.00
First	R2	W4	Bedroom	13.2	11.7	0.9	5.1	3.3	66%	3.1	61%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
First	R3	W5	Bedroom	12.3	10.6	0.9	5.1	3.1	60%	2.8	56%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
First	R4	W6 W7	Bedroom	14.9 11.4	14.2 9.7	1.0 0.9												
		W8		15.1	13.3	0.9	17.0	8.1	48%	8.1	48%	1.0	24	8	24	8	1.00	1.00
Second	R1	W1 W2	Bedroom	25.9 19.9	25.4 17.9	1.0 0.9												
•	<b>B</b> .C	W3	D. J	17.3	14.6	0.8	16.7	14.0	84%	13.6	82%	1.0	49 N/5	15 N/5	49 N /5	15 N/5	1.00	1.00
Second	R2	W4	Bedroom	17.6	15.1	0.9	5.1	3.7	72%	3.3	64%	0.9	N/F	N/F	N/F	N/F	N/F	N/F

Second	R3	W5	Bedroom	16.7	13.9	0.8	5.1	3.4	67%	3.0	60%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Second	R4	W6 W7	Bedroom	18.6 15.4	17.3 12.4	0.9 0.8												
Third	D4	W8	<b>D</b> ada a	19.1	16.1	0.8	17.0	9.2	54%	9.1	54%	1.0	30	11	29	11	0.97	1.00
Third	R1	W1-L W1-U	Bedroom	25.6	22.6	0.9	15.0	11.8	78%	10.6	70%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Third	R2	W2	Bedroom	24.1	20.2	0.8	5.1	3.9	76%	3.3	65%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Third	R3	W3	Bedroom	23.3	18.9	0.8	5.1	3.7	72%	3.1	60%	0.8	N/F	N/F	N/F	N/F	N/F	N/F
Third	R4	W4-L W4-U	Bedroom	22.6	17.5	0.8	15.1	8.1	54%	6.2	41%	0.8	N/F	N/F	N/F	N/F	N/F	N/F
12 Smyrna	a Road																	
Ground	R1	W1-L W1-U	Bedroom	6.0	5.2	0.9	9.3	3.2	35%	3.1	33%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2-L W2-U	Bedroom	6.7	6.0	0.9	8.0	2.8	35%	2.7	34%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3-L W3-U	Bedroom	7.1	6.4	0.9	7.7	4.0	53%	4.0	53%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R4	W4-L	Bedroom	6.0	5.4	0.9												
First	R1	W4-U W1-L	Bedroom	14.4	12.7	0.9	7.7	3.3	43%	3.1	40%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
		W1-U					11.4	5.1	45%	5.1	44%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Second	R1	W1	Kitchen	25.2	23.7	0.9	13.8	12.9	94%	12.3	89%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
<b>76 Gascon</b> Ground	R1	w1	Living Room	14.7	13.9	0.9												
Ground	KI	W3-L W3-U	LIVING NOOM	21.2	20.5	1.0	17.5	13.7	79%	13.1	75%	1.0	53	10	50	10	0.94	1.00
Ground	R2	W2-L	Kitchen	10.3	10.3	1.0												
First	R1	W2-U	Dodroom	19.9	18.9	0.0	6.0 9.6	4.0 8.3	67% 86%	3.9 8.3	65% 86%	1.0	18	4	18	4	1.00	1.00
First First	R2	W1 W2	Bedroom Bathroom	13.5	12.6	0.9 0.9	2.4	1.9	76%	1.9	76%	1.0	34 35	8	30	8	0.88	1.00
First	R3	W3	Kitchen	26.2	25.3	1.0	6.0	5.4	91%	5.4	90%	1.0	61	16	59	16	0.97	1.00
Kings Gard	dens																	
Ground	R1	W1-L W1-U	Bedroom	16.8	16.8	1.0	9.3	9.0	98%	9.0	98%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2-L W2-U	Bedroom	21.2	21.2	1.0	9.9	9.1	92%	9.1	92%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R3	W3-L	Bedroom	7.9	7.7	1.0							,	·	·	·	,	·
		W3-U W4-L W4-U		12.1	11.8	1.0	18.2	12.6	69%	12.5	69%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R4	W5-L	Kitchen	12.0	11.6	1.0	10.2	12.0	09%	12.5	09%	1.0	Nyr	IN/ F	N/ F	N/F	N/F	IN/ F
	25	W5-U	II las Bassa	45.4	44.0	1.0	20.9	7.1	34%	7.0	33%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R5	W6-L W6-U W7	Living Room	15.4 22.8	14.9 22.6	1.0 1.0	13.6	12.0	88%	11.9	87%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R6	W8	Bedroom	17.7	17.2	1.0								. 7	, .	.,,	.,	
		W9		18.6	18.0	1.0	11.9	9.8	83%	9.7	82%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground Ground	R7 R8	W10 W11	Bedroom Bedroom	7.2 12.8	7.0 12.0	1.0 0.9	8.5	3.5	42%	3.5	41%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	No	W12-L W12-U	вешоот	24.0	23.5	1.0	15.3	9.8	64%	9.5	62%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R9	W13-L W13-U	Bedroom	27.5	27.1	1.0	10.0	9.6	97%	9.6	97%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1-L W1-U	Bedroom	18.2	18.2	1.0	9.3	9.1	98%	9.1	98%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
First	R2	W2-L	Bedroom	22.7	22.7	1.0												
First	R3	W2-U W3-L	Bedroom	8.8	8.5	1.0	9.9	9.1	92%	9.1	92%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
11130	5	W3-U W4	bedroom	13.6	13.2	1.0	18.2	12.9	71%	12.7	70%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
First	R4	W5-L W5-U	Kitchen	14.2	13.5	0.9	20.9	8.1	39%	7.8	38%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
First	R5	W6-L	Bedroom	18.2	17.3	1.0	20.3	5.1	3370	, .0	30/0	1.0	14/1	14/1	14/1	14/1	14/1	14/1
		W6-U W7		24.6	24.2	1.0	13.6	12.4	91%	12.2	90%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
First	R6	W8 W9	Bedroom	20.5 21.6	19.7 20.7	1.0 1.0	11.9	10.4	88%	10.2	86%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
First	R7	W10	Bedroom	8.6	8.2	1.0	8.5	4.4	52%	4.1	49%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
First	R8	W11	Bedroom	16.3	15.1	0.9												
		W12-L W12-U		27.3	26.5	1.0	15.3	10.9	71%	10.5	68%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
First	R9	W13-L W13-U	Bedroom	30.4	29.8	1.0	10.0	9.6	97%	9.6	97%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Second	R1	W1-L W1-U	Bedroom	19.8	19.7	1.0	9.3	9.1	98%	9.1	98%	1.0	N/F	N/F	N/F	N/F	N/F	N/F

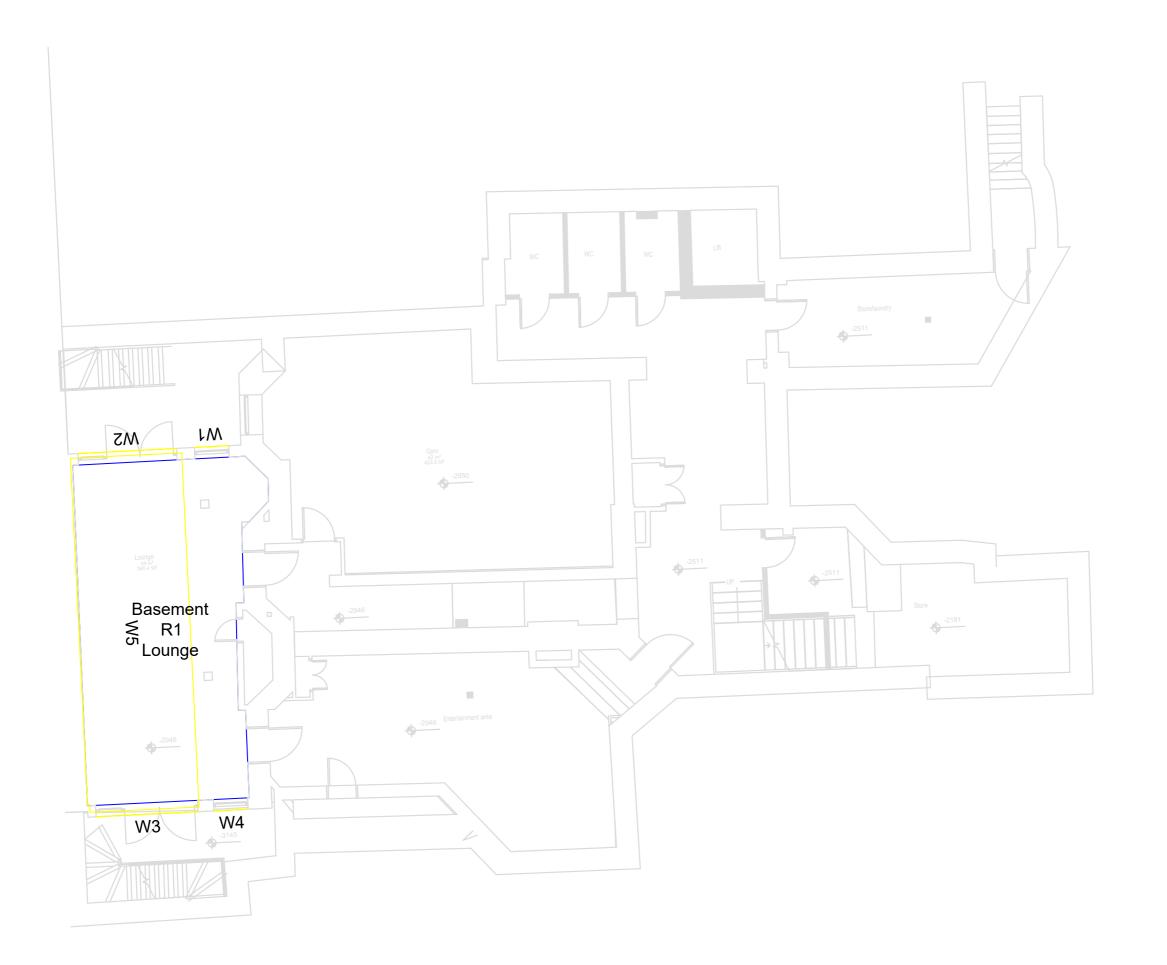
Second	R2	W2-L	Bedroom	24.4	24.3	1.0												
Second	ΝZ	W2-U	Bedroom	24.4	24.3	1.0	9.9	9.1	92%	9.1	92%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Second	R3	W3-L W3-U	Bedroom	10.3	9.7	0.9												
		W4		15.7	14.8	0.9	18.2	13.8	76%	13.4	73%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Second	R4	W5-L W5-U	Kitchen	17.6	16.3	0.9	20.9	9.4	45%	8.7	42%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Second	R5	W6-L	Bedroom	22.1	20.7	0.9												
		W6-U W6a-L W6a-U		26.8	26.2	1.0	13.6	13.0	96%	12.7	94%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Second	R6	woa-0 W7	Bedroom	23.8	22.6	1.0	13.6	13.0	90%	12.7	94%	1.0	IN/F	IN/F	N/F	N/F	N/F	IN/F
Second	No	W8	bearoom	25.2	23.9	0.9	11.9	11.3	96%	10.8	91%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Second	R7	W9	Bedroom	9.9	9.5	1.0	8.5	5.5	65%	4.7	56%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Second	R8	W10 W11-L	Bedroom	20.5 30.7	18.9 29.6	0.9 1.0												
		W11-U					15.3	12.7	83%	11.7	77%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Second	R9	W12-L W12-U	Bedroom	33.3	32.4	1.0	10.0	9.6	97%	9.6	97%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Third	R1	W1-L W1-U	Bedroom	22.1	21.7	1.0	9.3	9.2	99%	9.1	99%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Third	R2	W2-L	Bedroom	28.0	27.6	1.0							,.	.,,	,	.,,	.,	.,,
		W2-U					9.9	9.2	93%	9.2	93%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Third	R3	W3-L W3-U	Bedroom	13.4	12.1	0.9												
		W4-L W4-U		19.0	17.5	0.9	18.2	15.9	87%	14.8	81%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Third	R4	W5-L W5-U	Kitchen	23.2	20.8	0.9	20.9	13.2	63%	11.0	52%	0.8	N/F	N/F	N/F	N/F	N/F	N/F
Third	R5	W6-L	Bedroom	27.6	25.4	0.9	20.0	20.2	3370		5270	0.0	,.			, .	,	,.
		W6-U W6a-L		29.7	28.9	1.0												
		W6a-U					13.6	13.4	98%	13.2	97%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Third	R6	W7-L W7-U	Bedroom	27.9	26.2	0.9												
		W8-L W8-U		29.4	27.7	0.9	11.9	11.7	99%	11.5	97%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Third	R7	W9-L W9-U	Bedroom	11.4	10.7	0.9	8.5	6.5	76%	5.8	68%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Third	R8	W10-L	Bedroom	25.6	23.5	0.9												
		W10-U W11-L		34.4	32.9	1.0												
<b>71.</b> 1. 1	<b>D</b> O	W11-U	Podes or	26.2	25.4	1.0	15.3	14.7	96%	13.4	88%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Third	R9	W12-L W12-U	Bedroom	36.2	35.1	1.0	10.0	9.6	97%	9.6	97%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Fourth	R1	W1-L W1-U	Bedroom	26.3	25.7	1.0	9.3	9.2	99%	9.2	99%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Fourth	R2	W2-L	Bedroom	33.5	32.5	1.0												
		W2-U					9.9	9.8	99%	9.8	99%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Fourth	R3	W3-L W3-U	Bedroom	21.4	17.9	0.8												
		W4-L W4-U		24.3	22.1	0.9	18.2	18.2	100%	17.6	97%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Fourth	R4	W5-L W5-U	Kitchen	31.8	28.0	0.9	20.9	20.6	99%	17.7	85%	0.9	N/F	N/F	N/F	N/F	N/F	N/F
Fourth	R5	W6-L	Bedroom	34.3	31.0	0.9							,	·	,	,	·	·
		W6-U W6a-L		33.5	32.4	1.0												
Farmth	D.C.	W6a-U	Dadasan	22.2	20.0	0.0	13.6	13.6	100%	13.6	100%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Fourth	R6	W7-L W7-U W8-L	Bedroom	32.2	29.9 31.8	0.9												
		W8-U		34.1	31.0	0.5	11.9	11.7	99%	11.7	99%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Fourth	R7	W9-L W9-U	Bedroom	12.5	11.8	0.9	8.5	6.5	77%	6.5	76%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
Fourth	R8	W10-L	Bedroom	31.3	28.6	0.9												
		W10-U W11-L		37.5	35.7	1.0	45.2	44.7	0504	44.7	0504	1.0	N/5	N/5	N/5	NI / E	N/5	N/5
Fourth	R9	W11-U W12-L	Bedroom	38.3	37.0	1.0	15.3	14.7	96%	14.7	96%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
i Jui til	NЭ	W12-L W12-U	Scaroull	50.5	37.0	1.0	10.0	9.6	96%	9.6	96%	1.0	N/F	N/F	N/F	N/F	N/F	N/F
15 to 64 S	Sidney Bo	oyd Court																
Ground	R1	W1-L W1-U	Bedroom	16.3	15.7	1.0	10.5	8.0	76%	7.5	72%	0.9	26	3	26	3	1.00	1.00
Ground	R2	W2-L	Bedroom	31.6	30.9	1.0		0.5	001	2.5	001	0.7	F2	4.5			0.05	0.55
Ground	R3	W2-U W3-L	Bedroom	31.5	30.8	1.0	3.7	0.0	0%	0.0	0%	0.0	53	15	52	14	0.98	0.93
J. Juliu		W3-U	_ 54100111	31.3	55.5	2.0	4.0	0.0	0%	0.0	0%	0.0	51	15	51	15	1.00	1.00
Ground	R4	W4-L W4-U	Bedroom	18.6	17.9	1.0	13.3	10.1	76%	9.8	74%	1.0	30	7	30	7	1.00	1.00
Ground	R5	W5-L	Bedroom	31.6	31.0	1.0												

		W5-U				4.0	1.1	27%	1.1	27%	1.0	55	17	55	17	1.00	1.00
Ground	R6	W6-L Bedroom W6-U	32.0	31.4	1.0	1.8	0.1	7%	0.1	7%	1.0	54	17	53	17	0.98	1.00
Ground	R7	W6a-L Bedroom W6a-U	19.4	19.0	1.0	2.1	0.0	0%	0.0	0%	0.0	36	10	35	10	0.97	1.00
Ground	R8	W7-L Bedroom W7-U	32.9	32.5	1.0	1.0	0.5	47%	0.5	47%	1.0	59	20	58	20	0.98	1.00
First	R1	W1-L Bedroom W1-U	18.0	17.4	1.0	10.5	9.8	93%	8.8	83%	0.9	31	6	29	5	0.94	0.83
First	R2	W2-L Bedroom W2-U	33.4	32.7	1.0	3.7	0.0	0%	0.0	0%	0.0	57	17	56	17	0.98	1.00
First	R3	W3-L Bedroom W3-U	33.3	32.6	1.0	4.0	0.0	0%	0.0	0%	0.0	55	17	54	17	0.98	1.00
First	R4	W4-L Bedroom W4-U	20.3	19.7	1.0	13.3	12.4	93%	11.8	88%	1.0	32	7	31	7	0.97	1.00
First	R5	W5-L Bedroom W5-U	33.4	32.8	1.0	4.0	1.1	27%	1.1	27%	1.0	58	18	57	18	0.98	1.00
First	R6	W6-L Bedroom W6-U	33.7	33.2	1.0	1.8	0.1	7%	0.1	7%	1.0	58	18	56	18	0.97	1.00
First	R7	W6a-L Bedroom W6a-U	20.8	20.4	1.0	2.1	0.0	0%	0.0	0%	0.0	39	11	38	11	0.97	1.00
First	R8	W7-L Bedroom W7-U	34.5	34.0	1.0	1.0	0.5	47%	0.5	47%	1.0	63	21	62	21	0.98	1.00
Second	R1	W1-L Bedroom W1-U	19.9	19.2	1.0	10.5	10.5	100%	10.2	97%	1.0	33	7	32	6	0.97	0.86
Second	R2	W2-L Bedroom W2-U	35.2	34.5	1.0	3.7	0.0	0%	0.0	0%	0.0	58	17	58	17	1.00	1.00
Second	R3	W3-L Bedroom W3-U	35.1	34.4	1.0	4.0	0.0	0%	0.0	0%	0.0	57	18	56	17	0.98	0.94
Second	R4	W4-L Bedroom W4-U	22.1	21.5	1.0	13.3	13.3	100%	13.3	100%	1.0	35	9	34	8	0.97	0.89
Second	R5	W5-L Bedroom W5-U	35.2	34.6	1.0	4.0	1,1	27%	1.1	27%	1.0	59	19	59	19	1.00	1.00
Second	R6	W6-L Bedroom W6-U	35.5	34.9	1.0	1.8	0.1	7%	0.1	7%	1.0	60	20	59	19	0.98	0.95
Second	R7	W6a-L Bedroom W6a-U	22.3	21.8	1.0	2.1	0.0	0%	0.0	0%	0.0	40	13	39	12	0.98	0.92
Second	R8	W7-L Bedroom W7-U	36.0	35.5	1.0	1.0	0.5	47%	0.5	47%	1.0	64	22	64	22	1.00	1.00
Third	R1	W1-L Bedroom W1-U	21.4	20.7	1.0	10.5	10.5	100%	10.5	100%	1.0	34	8	33	7	0.97	0.88
Third	R2	W2-L Bedroom W2-U	37.0	36.2	1.0	3.7	0.0	0%	0.0	0%	0.0	60	19	60	19	1.00	1.00
Third	R3	W3-L Bedroom W3-U	36.9	36.2	1.0	4.0	0.0	0%	0.0	0%	0.0	59	19	58	18	0.98	0.95
Third	R4	W4-L Bedroom W4-U	23.9	23.2	1.0	13.3	13.3	100%	13.3	100%	1.0	37	10	36	9	0.97	0.90
Third	R5	W5-L Bedroom W5-U	37.0	36.3	1.0	4.0	1.1	27%	1.1	27%	1.0	64	22	64	22	1.00	1.00
Third	R6	W6-L Bedroom W6-U	37.1	36.6	1.0	1.8	0.1	7%	0.1	7%	1.0	62	21	62	21	1.00	1.00
Third	R7	W6a-L Bedroom W6a-U	23.7	23.2	1.0	2.1	0.0	0%	0.0	0%	0.0	42	13	41	13	0.98	1.00
Third	R8	W7-L Bedroom W7-U	37.4	36.9	1.0	1.0	0.5	47%	0.5	47%	1.0	65	22	64	22	0.98	1.00
Fourth	R1	W1-L Bedroom W1-U	22.7	22.1	1.0	10.5	10.5	100%	10.5	100%	1.0	36	10	34	8	0.94	0.80
Fourth	R2	W2-L Bedroom W2-U	38.4	37.7	1.0	3.7	0.0	0%	0.0	0%	0.0	62	21	60	19	0.97	0.90
Fourth	R3	W3-L Bedroom W3-U	38.6	37.9	1.0	4.0	0.0	0%	0.0	0%	0.0	62	21	61	20	0.98	0.95
Fourth	R4	W4-L Bedroom W4-U	27.3	26.6	1.0	13.3	13.3	100%	13.3	100%	1.0	40	12	39	11	0.98	0.92
Fourth	R5	W5-L Bedroom W5-U	38.6	37.9	1.0	4.0	1.1	27%	1.1	27%	1.0	65	23	64	22	0.98	0.96
Fourth	R6	W6-L Bedroom W6-U	38.6	38.1	1.0	1.8	0.1	7%	0.1	7%	1.0	66	24	65	23	0.98	0.96
Fourth	R7	W6a-L Bedroom W6a-U	26.0	25.6	1.0	2.1	0.0	0%	0.0	0%	0.0	46	15	45	14	0.98	0.93
Fourth	R8	W7-L Bedroom W7-U	38.7	38.3	1.0	1.0	0.5	47%	0.5	47%	1.0	67	24	43 67	24	1.00	1.00
		0				I <sup>1.0</sup>	0.5	77/0	0.5	7//0	1.0	0/	27	07	<b>4</b> 7	1.00	1.00



# Appendix 3

Results of the daylight and sunlight assessments within the proposed dwellings





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

White Red Architects 5408\_07\_099 - Proposed - Basement plan\_ DRAFT\_220425.dwg 5408\_07\_100 - Proposed - Ground floor plan\_DRAFT\_220425.dwg 5408\_07\_101 - Proposed - First floor plan\_ DRAFT\_220425.dwg 5408\_07\_102 - Proposed - Second floor plan\_DRAFT\_220425.dwg 5408\_07\_103 - Proposed - Third floor plan\_DRAFT\_220425.dwg 5408\_07\_104 - Proposed - Fourth floor plan\_DRAFT\_220425.dwg 5408\_07\_105 - Proposed - Fifth floor plan\_ DRAFT\_220425.dwg 5408\_07\_106 - Proposed - Roof plan\_ DRAFT\_220425.dwg 5408\_07\_200 - Proposed - North Elevation\_DRAFT\_220425.dwg 5408\_07\_201 - Proposed - East Elevation\_ DRAFT\_220425.dwg 5408\_07\_202 - Proposed - South Elevation\_DRAFT\_220425.dwg 5408\_07\_203 - Proposed - West Elevation\_DRAFT\_220425.dwg 5408\_Francis Gardner\_Proposed 3D View\_220425.dwg

#### EB7 Ltd

Site Photographs Ordnance Survey

Received 26/04/2022



Project Francis Gardner Hall

Title Basement Room Layout

Drawn	MZ	Checked		
Date	09/05/2022	Project	4012	
Rel no.	Prefix ID01	Page no.	01	





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

**White Red Architects** 5408\_07\_099 - Proposed - Basement plan\_ DRAFT\_220425.dwg 5408\_07\_100 - Proposed - Ground floor plan\_DRAFT\_220425.dwg 5408\_07\_101 - Proposed - First floor plan\_ DRAFT 220425.dwg 5408\_07\_102 - Proposed - Second floor plan\_DRAFT\_220425.dwg 5408\_07\_103 - Proposed - Third floor plan\_DRAFT\_220425.dwg 5408\_07\_104 - Proposed - Fourth floor plan\_DRAFT\_220425.dwg 5408\_07\_105 - Proposed - Fifth floor plan\_ DRAFT\_220425.dwg 5408\_07\_106 - Proposed - Roof plan\_ DRAFT\_220425.dwg 5408\_07\_200 - Proposed - North Elevation\_DRAFT\_220425.dwg 5408\_07\_201 - Proposed - East Elevation\_ DRAFT\_220425.dwg 5408\_07\_202 - Proposed - South Elevation\_DRAFT\_220425.dwg 5408\_07\_203 - Proposed - West Eleva-

#### EB7 Ltd

Site Photographs
Ordnance Survey

View\_220425.dwg

Received 26/04/2022

tion\_DRAFT\_220425.dwg

5408\_Francis Gardner\_Proposed 3D



Project Francis Gardner Hall

Ground Floor Room Layout

Drawn	MZ	Checked		
Date	09/05/2022	Project	4012	
Rel no.	Prefix ID01	Page no.	02	





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

#### **White Red Architects**

5408\_07\_099 - Proposed - Basement plan\_ DRAFT\_220425.dwg 5408\_07\_100 - Proposed - Ground floor plan\_DRAFT\_220425.dwg 5408\_07\_101 - Proposed - First floor plan\_ DRAFT\_220425.dwg 5408\_07\_102 - Proposed - Second floor plan\_DRAFT\_220425.dwg 5408\_07\_103 - Proposed - Third floor

plan\_DRAFT\_220425.dwg 5408\_07\_104 - Proposed - Fourth floor plan\_DRAFT\_220425.dwg

5408\_07\_105 - Proposed - Fifth floor plan\_ DRAFT\_220425.dwg

5408\_07\_106 - Proposed - Roof plan\_ DRAFT\_220425.dwg

5408\_07\_200 - Proposed - North Elevation\_DRAFT\_220425.dwg

5408\_07\_201 - Proposed - East Elevation\_ DRAFT\_220425.dwg

5408\_07\_202 - Proposed - South Elevation\_DRAFT\_220425.dwg 5408\_07\_203 - Proposed - West Eleva-

tion\_DRAFT\_220425.dwg 5408\_Francis Gardner\_Proposed 3D View\_220425.dwg Received 26/04/2022

EB7 Ltd

Site Photographs
Ordnance Survey



Project Francis Gardner Hall

Title First Floor Room Layout

	Claration of		
MZ	Checked		
09/05/2022	Project	4012	
Prefix ID01	Page no.	03	
	Prefix	MZ  09/05/2022 Project  Prefix Page no.	MZ 09/05/2022 Project 4012  Prefix Page no.





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

#### **White Red Architects**

5408\_07\_099 - Proposed - Basement plan\_ DRAFT\_220425.dwg 5408\_07\_100 - Proposed - Ground floor plan\_DRAFT\_220425.dwg 5408\_07\_101 - Proposed - First floor plan\_

DRAFT\_220425.dwg 5408\_07\_102 - Proposed - Second floor

plan\_DRAFT\_220425.dwg 5408\_07\_103 - Proposed - Third floor plan\_DRAFT\_220425.dwg

5408\_07\_104 - Proposed - Fourth floor plan\_DRAFT\_220425.dwg

5408\_07\_105 - Proposed - Fifth floor plan\_ DRAFT\_220425.dwg 5408\_07\_106 - Proposed - Roof plan\_

DRAFT\_220425.dwg 5408\_07\_200 - Proposed - North Eleva-

tion\_DRAFT\_220425.dwg 5408\_07\_201 - Proposed - East Elevation\_

DRAFT\_220425.dwg 5408\_07\_202 - Proposed - South Elevation\_DRAFT\_220425.dwg

5408\_07\_203 - Proposed - West Elevation\_DRAFT\_220425.dwg
5408\_Francis Gardner\_Proposed 3D

View\_220425.dwg Received 26/04/2022

## EB7 Ltd

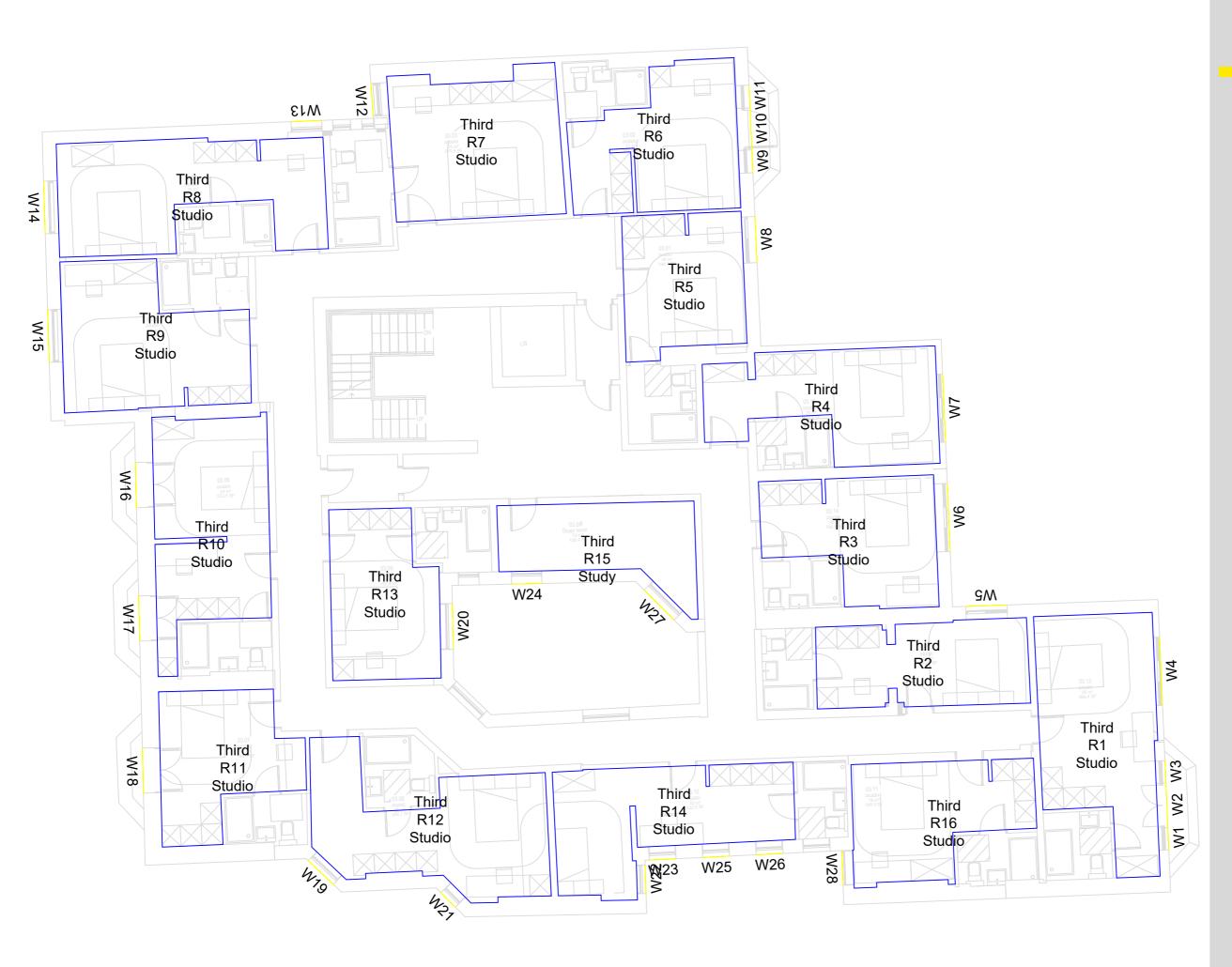
Site Photographs Ordnance Survey



Project Francis Gardner Hall

Title Second Floor Room Layout

Drawn	MZ	Checked	
Date	09/05/2022	Project	4012
Rel no.	Prefix ID01	Page no.	0.4
02	1001		04





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

**White Red Architects** 5408\_07\_099 - Proposed - Basement plan\_ DRAFT\_220425.dwg 5408\_07\_100 - Proposed - Ground floor plan\_DRAFT\_220425.dwg 5408\_07\_101 - Proposed - First floor plan\_ DRAFT 220425.dwg 5408\_07\_102 - Proposed - Second floor plan\_DRAFT\_220425.dwg 5408\_07\_103 - Proposed - Third floor plan\_DRAFT\_220425.dwg 5408\_07\_104 - Proposed - Fourth floor plan\_DRAFT\_220425.dwg 5408\_07\_105 - Proposed - Fifth floor plan\_ DRAFT\_220425.dwg 5408\_07\_106 - Proposed - Roof plan\_ DRAFT\_220425.dwg 5408\_07\_200 - Proposed - North Elevation\_DRAFT\_220425.dwg 5408\_07\_201 - Proposed - East Elevation\_ DRAFT\_220425.dwg 5408\_07\_202 - Proposed - South Elevation\_DRAFT\_220425.dwg 5408\_07\_203 - Proposed - West Elevation\_DRAFT\_220425.dwg 5408\_Francis Gardner\_Proposed 3D View\_220425.dwg

## EB7 Ltd

Site Photographs Ordnance Survey

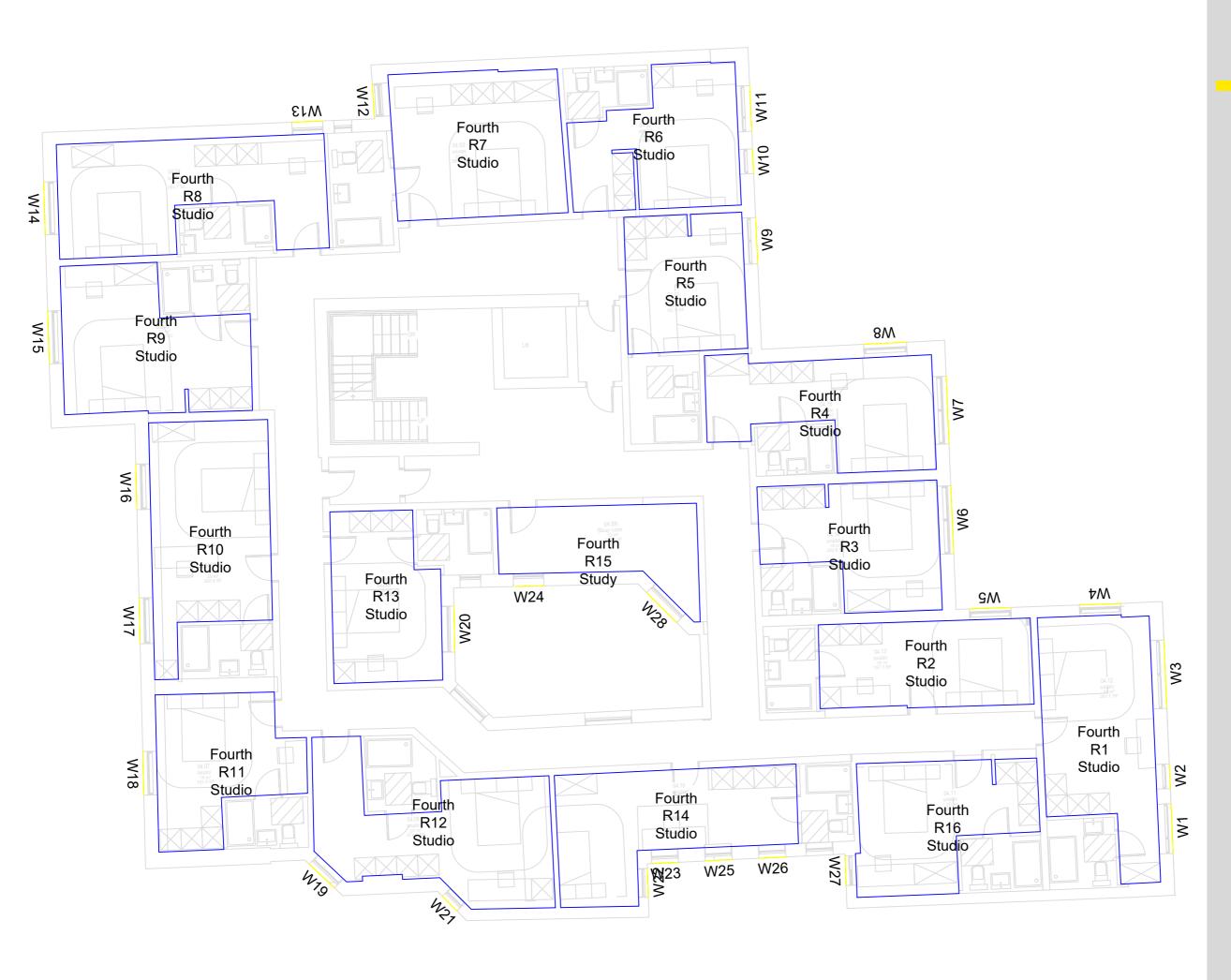
Received 26/04/2022



Project Francis Gardner Hall

Third Floor Room Layout

Drawn	MZ	Checked		
Date	09/05/2022	Project	4012	
Rel no.	Prefix ID01	Page no.	05	





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

**White Red Architects** 5408\_07\_099 - Proposed - Basement plan\_ DRAFT\_220425.dwg 5408\_07\_100 - Proposed - Ground floor plan\_DRAFT\_220425.dwg 5408\_07\_101 - Proposed - First floor plan\_ DRAFT 220425.dwg 5408\_07\_102 - Proposed - Second floor plan\_DRAFT\_220425.dwg 5408\_07\_103 - Proposed - Third floor plan\_DRAFT\_220425.dwg 5408\_07\_104 - Proposed - Fourth floor plan\_DRAFT\_220425.dwg 5408\_07\_105 - Proposed - Fifth floor plan\_ DRAFT\_220425.dwg 5408\_07\_106 - Proposed - Roof plan\_ DRAFT\_220425.dwg 5408\_07\_200 - Proposed - North Elevation\_DRAFT\_220425.dwg 5408\_07\_201 - Proposed - East Elevation\_ DRAFT\_220425.dwg 5408\_07\_202 - Proposed - South Elevation\_DRAFT\_220425.dwg 5408\_07\_203 - Proposed - West Elevation\_DRAFT\_220425.dwg 5408\_Francis Gardner\_Proposed 3D View\_220425.dwg

## EB7 Ltd

Site Photographs
Ordnance Survey

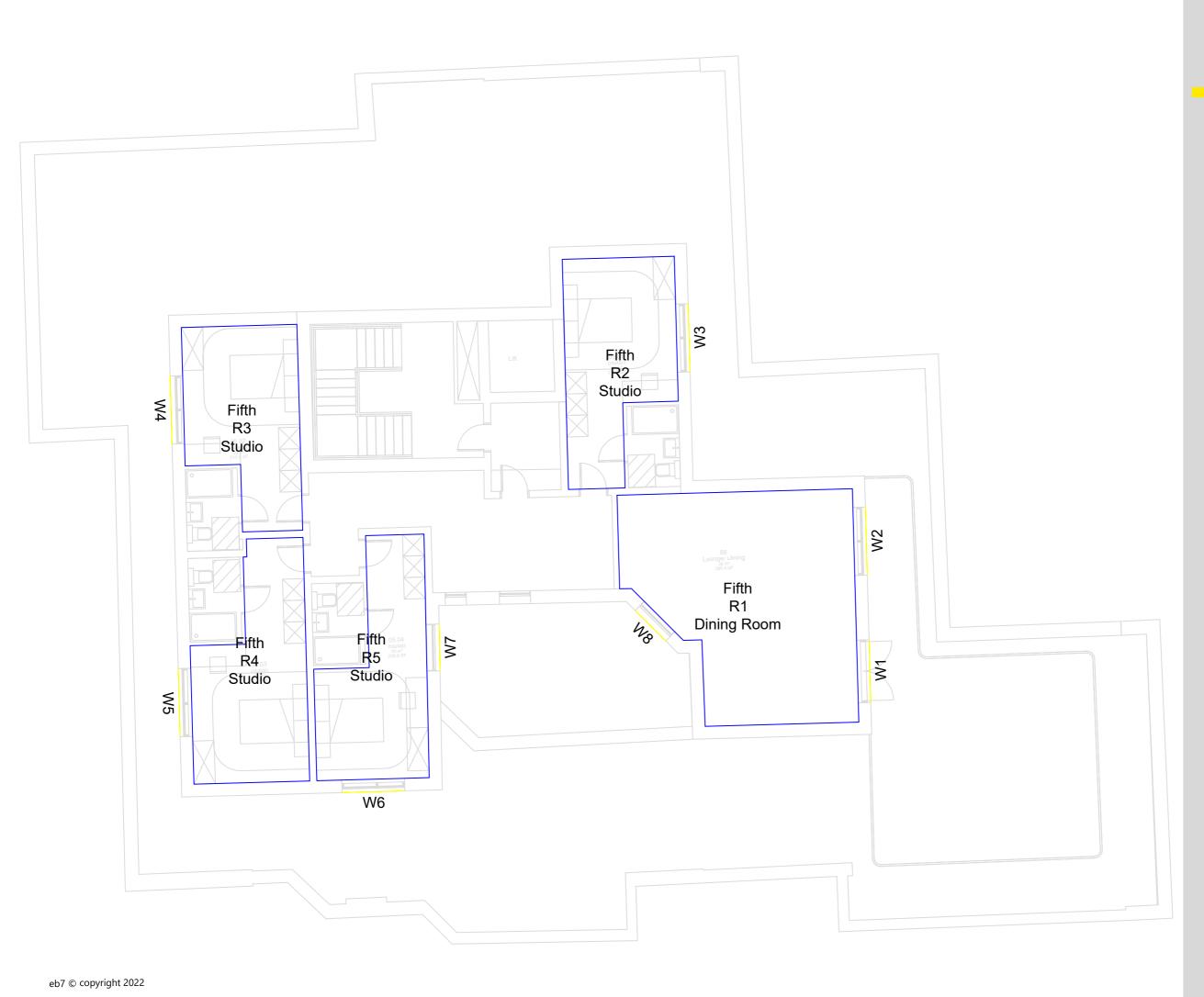
Received 26/04/2022



Project Francis Gardner Hall

Fourth Floor Room Layout

Drawn	MZ	Checked		
Date	09/05/2022	Project	4012	
Rel no.	Prefix ID01	Page no.	06	





Sources of information

#### **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

White Red Architects 5408\_07\_099 - Proposed - Basement plan\_ DRAFT\_220425.dwg 5408\_07\_100 - Proposed - Ground floor plan\_DRAFT\_220425.dwg 5408\_07\_101 - Proposed - First floor plan\_ DRAFT 220425.dwg 5408\_07\_102 - Proposed - Second floor plan\_DRAFT\_220425.dwg 5408\_07\_103 - Proposed - Third floor plan\_DRAFT\_220425.dwg 5408\_07\_104 - Proposed - Fourth floor plan\_DRAFT\_220425.dwg 5408\_07\_105 - Proposed - Fifth floor plan\_ DRAFT\_220425.dwg 5408\_07\_106 - Proposed - Roof plan\_ DRAFT\_220425.dwg 5408\_07\_200 - Proposed - North Elevation\_DRAFT\_220425.dwg 5408\_07\_201 - Proposed - East Elevation\_ DRAFT\_220425.dwg 5408\_07\_202 - Proposed - South Elevation\_DRAFT\_220425.dwg 5408\_07\_203 - Proposed - West Elevation\_DRAFT\_220425.dwg 5408\_Francis Gardner\_Proposed 3D View\_220425.dwg Received 26/04/2022

## EB7 Ltd

Site Photographs Ordnance Survey



Project Francis Gardner Hall

Title Fifth Floor Room Layout

Drawn	MZ	Checked		
Date	09/05/2022	Project	4012	
Rel no.	Prefix ID01	Page no.	07	

				Average Daviliabt	Annual Probal	ole Sunlight
Floor	Room	Window	Room Use	Average Daylight Factor (ADF)	Hours (APSH	
				Room Total (%)	Annual APSH	Winter WPSH
Proposed				(10)		
Basement	R1	W1-L	Lounge			
Basement		W1-U	Lounge			
		W2-L	Lounge			
		W2-U	Lounge			
		W3-L	Lounge			
		W3-U	Lounge			
		W4-L	Lounge			
		W4-U	Lounge			
		W5	Lounge	14.37	33	1
Ground	R1	W1-L	Studio			
		W1-U	Studio			
		W2-L	Studio			
		W2-U	Studio	1.12	11	2
Ground	R2	W3-L	Studio			
		W3-U	Studio			
		W4-L	Studio			
		W4-U	Studio			
		W5-L	Studio			
		W5-U	Studio	3.35	26	5
Ground	R3	W6-L	Studio			
		W6-U	Studio	0.56	7	0
Cround	D.4	14/7	Chudia			
Ground	R4	W7 W8-L	Studio Studio			
		W8-U	Studio			
		W9-L	Studio			
		W9-U	Studio	1.78	24	0
Ground	R5	W10 I	Studio			
Ground	KS	W10-L W10-U	Studio Studio			
		W11-L	Studio			
		W11-U	Studio	1.71	19	0
Ground	R6	W12-L	Studio			
		W12-U	Studio			
		W13-L W13-U	Studio Studio			
		W13-U	Studio			
		W14-U	Studio			
		W15-L	Studio			
		W15-U	Studio			
		W16-L	Studio			
		W16-U	Studio			
		W17-L	Studio			
		W17-U	Studio	2.49	30	7
Ground	R7	W18-L	Studio			
		W18-U	Studio			
		W19-L	Studio			
		W19-U	Studio			
		W20-L	Studio	244	20	4.0
		W20-U	Studio	2.14	28	10
Ground	R8	W21-L	Studio			
		W21-U	Studio	0.70	40	13
First	R1	W1-L	Studio			
		W1-U	Studio			
		W2-L	Studio			
		W2-U	Studio			
		W3-L	Studio			
		W3-U	Studio			
		W4-L	Studio	2.22	24	-
		W4-U	Studio	3.90	31	5
First	R2	W5-L	Studio			
		W5-U	Studio	1.05	0	0
First	R3	W6-L	Studio			
		W6-U	Studio	1.71	11	0
First	R4	W7-L	Studio			
11136	114	W7-L W7-U	Studio	1.78	22	3
_						
First	R5	W8-L W8-U	Studio Studio	0.91	13	2
		**************************************	Stadio	I 0.51	l <sub>13</sub>	۷

First	R6	W9-L	Studio			
FIISL	KO					
		W9-U	Studio			
		W10	Studio			
		W11-L	Studio			
		W11-U	Studio			
		W12-L	Studio			
				2.40	20	-
		W12-U	Studio	2.48	28	5
First	R7	W13-L	Studio			
		W13-U	Studio	0.53	8	0
First	R8	W14	Studio			
		W15-L	Studio			
		W15-U	Studio			
		W16-L	Studio			
		W16-U	Studio	2.15	27	2
		W10 0	Stadio	2.13		-
First	R9	W17-L	Studio			
		W17-U	Studio			
		W18-L	Studio			
		W18-U	Studio	2.18	25	0
C:unt	D10	W/40 I	Carrelia			
First	R10	W19-L	Studio			
		W19-U	Studio			
		W20-L	Studio			
		W20-U	Studio			
		W21-L	Studio			
		W21-U	Studio			
		W22-L	Studio			
		W22-U	Studio			
		W23-L	Studio			
		W23-U	Studio			
		W24-L	Studio			
		W24-U	Studio	3.03	35	7
						·
First	R11	W25-L	Studio			
FIISL	VII					
		W25-U	Studio			
		W26-L	Studio			
		W26-U	Studio			
		W27-L	Studio			
		W27-U	Studio	2.56	31	10
First	R12	W28-L	Studio			
		W28-U	Studio			
		W30-L	Studio			
				1 11	42	15
		W30-U	Studio	1.11	43	15
Circ+	D12	W/20 I	C+udio			
First	R13	W29-L	Studio	0.26		0
		W29-U	Studio	0.26	0	0
Et	D4.4	14/24 1	Cr. II.			
First	R14	W31-L	Studio			
		W31-U	Studio			
		W32-L	Studio			
		W32-U	Studio			
		W34-L	Studio			
		W34-U	Studio			
		W35-L	Studio			
				1.29	25	4
		W35-U	Studio	1.29	25	4
First	R15	W33-L	Study			
FIISU	KID		•			
		W33-U	Study	0.24		0
		W36	Study	0.34	0	0
Eirc+	R16	W37-L	Studio			
First	KTP			0.50	22	
		W37-U	Studio	0.69	22	6
Second	R1	W1-L	Studio			
		W1-U	Studio			
		W2-L	Studio			
		W2-U	Studio			
		W3-L	Studio			
		W3-U	Studio			
		W4-L	Studio			
				4.30	33	-
		W4-U	Studio	4.26	33	5
			<b>.</b>			
Second	R2	W5-L	Studio			
		W5-U	Studio	1.03	0	0
Second	R3	W6-L	Studio			
		W6-U	Studio	1.89	12	0
Second	R4	W7-L	Studio			
Second	IV.T	W7-L W7-U	Studio	1.91	24	3
		vv / -U	Studio	1.31		3
Coccerd	D.F.	VA/O !	C+l:			
Second	R5	W8-L	Studio	I	l	

		W8-U	Studio	1.39	17	2
Second	R6	W9-L	Studio			
		W9-U	Studio			
		W10-L	Studio			
		W10-U	Studio			
		W11-L	Studio			
		W11-U	Studio	2.67	29	5
Second	R7	W12-L	Studio		_	
		W12-U	Studio	0.58	8	0
Coccad	DO	W/4.2	Churdia			
Second	R8	W13 W14-L	Studio Studio			
		W14-L W14-U	Studio			
		W15-L	Studio			
		W15-U	Studio	2.58	30	5
C I	<b>DO</b>	14461	Ct. It.			
Second	R9	W16-L	Studio			
		W16-U	Studio			
		W17-L	Studio	2.54	20	_
		W17-U	Studio	2.54	30	5
Second	R10	W18-L	Studio			
		W18-U	Studio			
		W19-L	Studio			
		W19-U	Studio			
		W20-L	Studio			
		W20-U	Studio			
		W21-L	Studio			
		W21-U	Studio			
		W22-L	Studio			
		W22-U	Studio			
		W23-L	Studio			
		W23-U	Studio	3.59	41	9
Second	R11	W24-L	Studio			
		W24-U	Studio			
		W25-L	Studio			
		W25-U	Studio			
		W26-L	Studio			
		W26-U	Studio	3.11	37	11
Second	R12	W27-L	Studio			
		W27-U	Studio			
		W29-L	Studio			
		W29-U	Studio	1.46	45	17
Second	R13	W28-L	Studio			
Second	KIS	W28-U	Studio	0.41	0	0
		W20 0	Studio	0.41	Ü	Ü
Second	R14	W30	Studio			
		W31-L	Studio			
		W31-U	Studio			
		W33-L	Studio			
		W33-U	Studio			
		W34-L	Studio			
		W34-U	Studio	1.63	42	7
6	D45	14/22 1	C			
Second	R15	W32-L	Study			
		W32-U	Study			
		W35-L W35-U	Study	0.57	0	0
		W35-U	Study	0.57	O	U
Second	R16	W36-L	Studio			
		W36-U	Studio	0.76	22	6
The book	5.4	1446	Ch. alta			
Third	R1	W1	Studio			
		W2-L	Studio			
		W2-U	Studio			
		W3 W4	Studio Studio	3.23	50	15
		VV4	Studio	3.23	30	13
Third	R2	W5-L	Studio			
		W5-U	Studio	1.11	0	0
Third	R3	W6	Studio	1.37	12	0
Third	R4	W7	Studio	1.36	25	3
Third	R5	W8-L	Studio			
		W8-U	Studio	1.28	19	2
Third	R6	W9	Studio			
		W10-L	Studio			
		W10-U	Studio			

		W11	Studio	1.81	50	15
Third	R7	W12-L W12-U	Studio Studio	0.69	8	0
Thind	DO	W/12	Ctudio			
Third	R8	W13 W14-L	Studio Studio			
		W14-U	Studio	1.95	36	9
Third	R9	W15-L	Studio			
		W15-U	Studio	1.46	36	9
Third	R10	W16-L	Studio			
		W16-U	Studio			
		W17-L W17-U	Studio Studio	2.42	32	7
		VV17-0	Studio	2.42	32	,
Third	R11	W18-L	Studio			_
		W18-U	Studio	1.99	32	7
Third	R12	W19-L	Studio			
		W19-U	Studio			
		W21-L W21-U	Studio Studio	1.62	45	17
		VV21-0	Studio	1.02	43	17
Third	R13	W20-L	Studio			
		W20-U	Studio	0.54	2	0
Third	R14	W22	Studio			
		W23-L	Studio			
		W23-U	Studio			
		W25-L W25-U	Studio Studio			
		W26-L	Studio			
		W26-U	Studio	2.14	56	15
Third	R15	W24-L	Study			
mu	N13	W24-U	Study			
		W27-L	Study			
		W27-U	Study	0.90	18	0
Third	R16	W28-L	Studio			
		W28-U	Studio	0.85	23	7
Fourth	R1	W1-L	Studio			
Tourth	IVI	W1-U	Studio			
		W2-L	Studio			
		W2-U	Studio			
		W3-L W3-U	Studio Studio			
		W4-L	Studio			
		W4-U	Studio	4.95	38	9
Fourth	R2	W5-L	Studio			
		W5-U	Studio	1.07	0	0
Fourth	R3	W6-L	Studio			
		W6-U	Studio	2.09	26	0
Fourth	R4	W7-L	Studio			
		W7-U	Studio			
		W8-L	Studio	2.25	26	7
		W8-U	Studio	3.25	36	7
Fourth	R5	W9-L	Studio			
		W9-U	Studio	1.64	29	2
Fourth	R6	W10-L	Studio			
		W10-U	Studio			
		W11-L	Studio Studio	1.95	33	6
		W11-U	Studio	1.95	33	б
Fourth	R7	W12-L	Studio			
		W12-U	Studio	0.73	9	0
Fourth	R8	W13-L	Studio			
		W13-U	Studio			
		W14-L	Studio	3.45	36	^
		W14-U	Studio	2.15	36	9
Fourth	R9	W15-L	Studio			
		W15-U	Studio	1.52	36	9
Fourth	R10	W16-L	Studio			
		W16-U	Studio			
		W17-L	Studio	1		

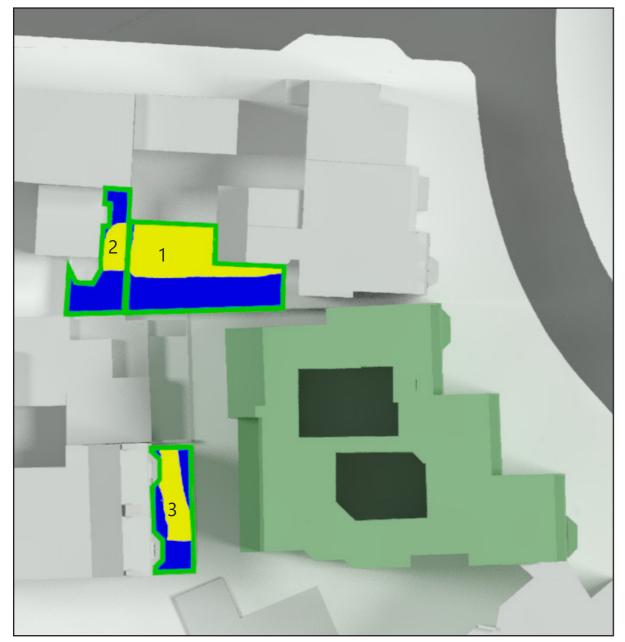
4012\_R02\_ID01

		W17-U	Studio	2.29	32	7
Fourth	R11	W18-L	Studio			
		W18-U	Studio	1.53	32	7
Fourth	R12	W19-L	Studio			
		W19-U	Studio			
		W21-L	Studio			
		W21-U	Studio	1.60	47	18
Fourth	R13	W20-L	Studio			
		W20-U	Studio	0.87	17	1
Fourth	R14	W22	Studio			
		W23-L	Studio			
		W23-U	Studio			
		W25-L	Studio			
		W25-U	Studio			
		W26-L	Studio			
		W26-U	Studio	2.91	68	25
Fourth	R15	W24-L	Study			
Tourth	KIS	W24-U	Study			
		W24-0	Study			
		W28-U	Study	1.59	50	14
Fourth	R16	W27-L	Studio			
rourtii	KIO	W27-L W27-U	Studio	0.47	24	6
		W27-0	Studio	0.47	24	O
Fifth	R1	W1-L	Dining Room			
		W1-U	Dining Room			
		W2-L	Dining Room			
		W2-U	Dining Room			
		W8-L	Dining Room			
		W8-U	Dining Room	3.25	92	28
Fifth	R2	W3-L	Studio			
		W3-U	Studio	2.15	36	7
Fifth	R3	W4-L	Studio			
		W4-U	Studio	2.40	38	10
Fifth	R4	W5-L	Studio			
		W5-U	Studio	2.16	38	10
		- <del>-</del>				
Fifth	R5	W6-L	Studio			
		W6-U	Studio			
		W7-L	Studio			
		W7-U	Studio	3.17	81	28



# Appendix 4

Results of the sunlight amenity assessment





Existing Scenario - March 21st

Proposed Scenario - March 21st

Area	Total Area (sq.m)	Existing Scenario Area recieving more than two hours of sun		Proposed Scenario Area recieving more than two hours of sun		Proportion Retained	Loss (%)
		(m²)	%	(m²)	%		
1	93.53	44.65	48	43.94	47	0.98	1
2	36.46	9.58	26	9.58	26	1	0
3	38.97	17.78	46	17.78	46	1	0



Sources of information

# **SUMO SERVICES Ltd**

SOR016587 Elevation Location.dwg SOR16587 Elevations.dwg SOR016587 Topographic\_Utility.dwg Received 24/12/2019

# White Red Architects

5408\_Francis Gardner\_Proposed 3D View\_220425.dwg Received 26/04/2022

#### EB7 Ltd

Site Photographs Ordnance Survey



Key:



Existing building



Proposed development



Area of assessment



Area receiving more than two hours of sun on March 21st



Area receiving less than two hours of sun on March 21st

Project Francis Gardner Hall

Sunlight Amenity Study Existing vs Proposed 21st March

Checked MZ 11/05/2022 4012 Rel no. Page no. 02 SA01 01