SYNTEGRA CONSULTING

Daylight, Sunlight & Overshadowing Report

10 Highfield Mews, Compayne Gardens, London, NW6 3GB

April 2016

Ref: 16-2233

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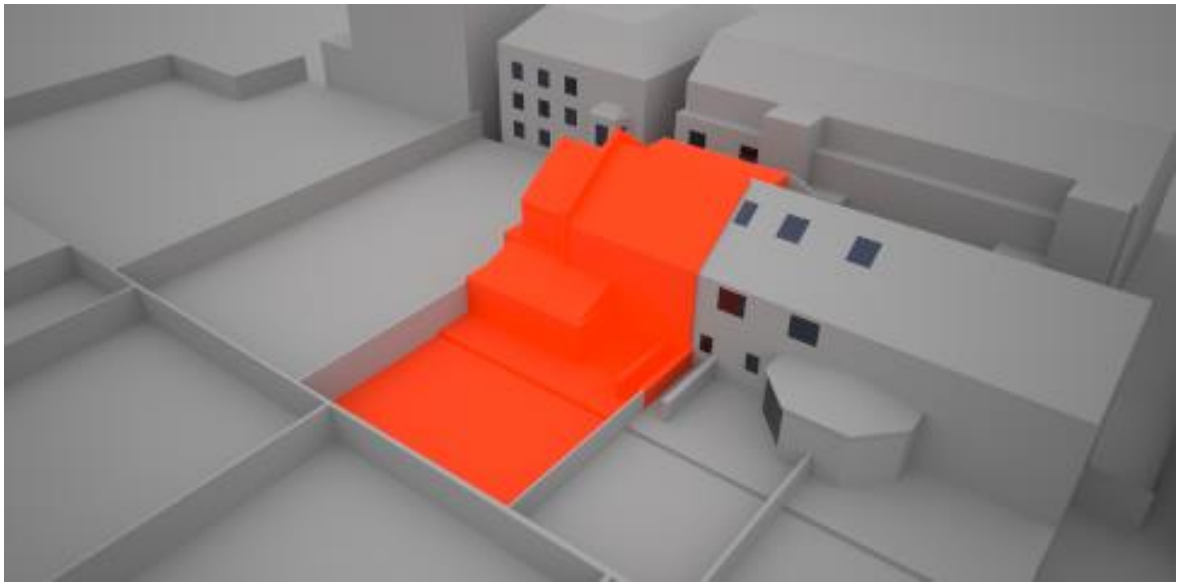
14/04/2016	YC	DC



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1. Executive summary

This report demonstrates the impact of the proposed development **on the surrounding buildings and amenity areas/gardens/open spaces**.

The results of the assessment show that in terms of:

- Daylight, this report demonstrates that the levels of daylight for the surrounding buildings located at **1-9 Highfield Mews, 75 Compayne Gardens, and 11 Highfield Mews** will not be adversely affected by the proposed development.

  BRE criteria are met: ☑

- Sunlight, this report demonstrates that the levels of sunlight for the surrounding buildings located at **1-9 Highfield Mews, 75 Compayne Gardens, and 11 Highfield Mews** will not be adversely affected by the proposed development.

  BRE criteria are met: ☑

- Overshadowing, the existing amenity area/garden/open spaces located at **the rear of 1-9 Highfield Mews, 11 Highfield Mews, 6 Cleve Road, 8 Cleve Road, and 75 Compayne Gardens** will not be adversely affected by the proposed development.

  BRE criteria are met: ☑

On balance, it can be concluded that the surrounding building located at **1-9 Highfield Mews, 11 Highfield Mews, 6 Cleve Road, 8 Cleve Road, and 75 Compayne Gardens** will not be adversely affected by the proposed development.

↳ **The proposed scheme is acceptable.**

2. Introduction

This report has been prepared to support the planning application for the proposed development at **10 Highfield Mews, Compayne Gardens, London, NW6 3GB**. The proposed scheme involves the extension on the first floor. The report assesses the daylight, sunlight and overshadowing effect of the proposed development on the surrounding buildings. The assessment is undertaken in accordance with ***"BRE 209 Digest: Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice".***
The existing & proposed drawings (in AutoCAD format) of the project were provided by **4D Planning** on the **17th March 2016** and have been used in preparing this report.
The study has been undertaken by constructing a 3D IES model of the existing and proposed site and surrounding buildings in order to analyse the daylight, sunlight and overshadowing impact of the new development on the affected buildings. All images used in this report are technical 3D models created using 2D AutoCAD Drawings (floor plans, sections and elevations) and not 3D visualisation images.

3. Planning policy

Where the proposed development has the potential to negatively impact the existing levels of daylight or sunlight on neighbouring properties, a daylight and sunlight assessment has to accompany the planning application.

The daylight and sunlight assessment includes the necessary information to meet the criteria outlined in the Site layout planning for daylight and sunlight: a guide to good practice published by the Building Research Establishment (BRE).

4. Guidance document

4.1. Building Research Establishment (BRE) report (BRE 209): "Site layout planning for daylight and sunlight: A guide to good practice" Second Edition (2011)

The Second Edition of the report replaces the 1991 document of the same name and came into effect from October 2011.

It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict and rigid set of rules. It also recommends that it may be appropriate to adopt a flexible approach and alternative target values in dealing with *"special circumstances"* 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".* This is amplified by the following extracts from the introduction (p1, para. 6) and Section 2.2:

"The advice given here is not mandatory and this document 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 because natural lighting is only one of many factors in site layout design". (p1, para. 1.6)

"In special circumstances the Developer or Planning Authority may wish to use different target values". (p1, para. 1.6)

"Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylight in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light". (p7 para. 2.2.3)

The examples given in the report can be applied to any part of the country: suburban, urban and rural areas. The inflexible application of the target values given in the report may make reaching the BRE criteria difficult in a tight, urban environment where there is unlikely to be the same expectation of daylight and sunlight amenity as in a suburban or rural environment.

5. Assessment methodology

5.1. General

When assessing any potential effects on the surrounding properties, the BRE guidelines suggest that only those windows that have a reasonable expectation of daylight or sunlight need be assessed. In particular the BRE guidelines at paragraph 2.2.2 state:

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

Further to the above statement, it is considered that the vast majority of commercial properties do not have a reasonable expectation of daylight or sunlight. This is because they are generally designed to rely on electric lighting rather than natural daylight or sunlight.

This report assesses the potential impact of the proposed development in relation to daylight, sunlight and overshadowing on the surrounding building at **1-9 Highfield Mews, 11 Highfield Mews, 6 Cleve Road, 8 Cleve Road, and 75 Compayne Gardens**. Specifically, it takes into consideration the possible effect and influence that the new development would have on the property and on the amenity area.

Eight surfaces (S1-S8) for external levels of daylight VSCs (Vertical Sky Components) and sunlight availability, as shown in section 9.4 in Appendix, have been selected based on anticipated worse case impact judged from professional experience and also following guidance within the BRE guidelines *"Site layout planning for daylight and sunlight".*

Five existing amenity area/garden/open spaces have been identified on the drawings and/or site plan at the rear of 1-9 Highfield Mews, 11 Highfield Mews, 6 Cleve Road, 8 Cleve Road, and 75 Compayne Gardens.

The IES Virtual Environment modelling software utilised for the compilation of this report has been accredited by CIBSE and acknowledged by the BRE as a suitable software tool for undertaking daylight, sunlight and overshadowing assessments in accordance with the BRE Good Practice guidelines. The specific IES software modules utilised for this assessment are the following:

- ☐ ModelIT: enables you to create a 3D "Virtual Environment" model without CAD data, or alternatively allows you to create a 3D model from 2D CAD data. Interfaces with AutoCAD and Google Sketchup.

- ☐ Radiance: is a detailed 3D simulation tool designed to predict daylight and electric light levels, and the appearance of a space prior to construction. Vertical Sky Components (VSC) and Average Daylight Factors (ADF) can be simulated using Radiance.

- ☐ SunCast: produces visual, graphical and numerical information that can be used to explain to colleagues, clients and planning authorities how the sun impacts on and inside the building, and on the site.

If a property is considered to have a reasonable expectation of daylight or sunlight the following methodology to assess the impacts has been used.

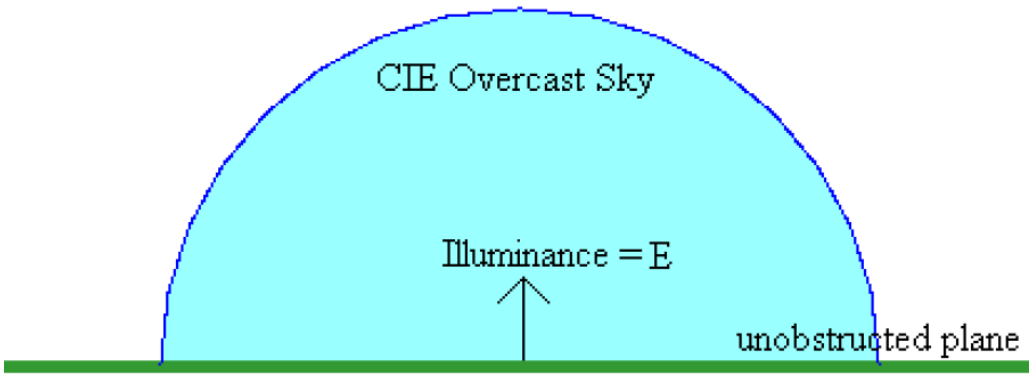
5.2. BRE Digest 209: "Site layout planning for daylight and sunlight"

This section provides a brief description of the calculating methods for the daylight, sunlight and overshadowing to gardens and open spaces criteria presented in BRE Digest 209.

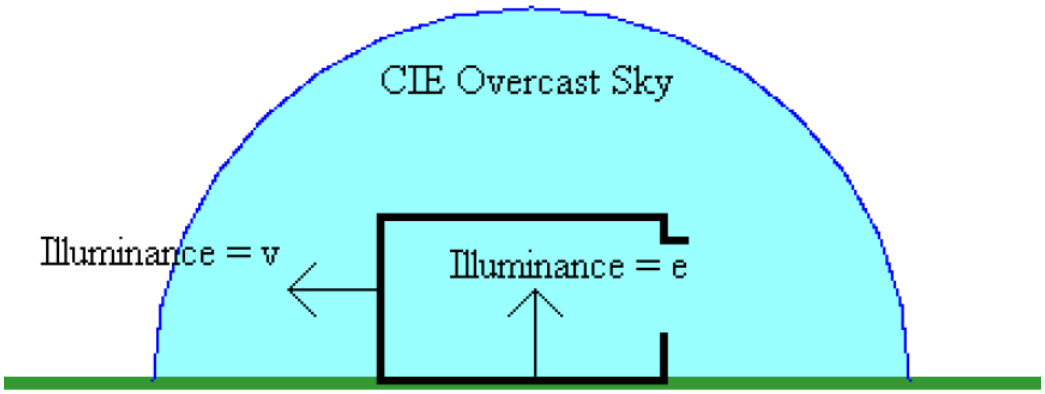
5.2.1. Daylight

The BRE guidelines *"Site layout planning for daylight and sunlight"* incorporate two main methods of calculating daylight: the Vertical Sky Component (VSC) method and the Average Daylight Factor (ADF) method.

The VSC method measures the amount of light available on the outside plane at the centre of a window, as a ratio (expressed as a percentage) of the amount of total unobstructed sky visible following the introduction of visible barriers such as buildings.



E = Illuminance on unobstructed plane



e = Illuminance at point in interior

Sky component = e/E (often expressed as a percentage %)

Vertical Sky Component (VSC) = v/E %

In this assessment, VSC is selected and more details on the numerical criteria for the VSC method are presented in section 9.6.

5.2.2. Sunlight

The BRE guidelines "*Site layout planning for daylight and sunlight*" recommend that access to sunlight is assessed with a development proposal. Potential impacts on available sunlight were assessed using the BRE's Annual Probable Sunlight Hours (APSH) method. This method involves the forecasting of sunlight availability throughout the year and in the winter months, for the main window of each habitable room that faces within 90° of due south. The buildings surrounding the site that do not contain windows that face within 90° of due south has been excluded from the sunlight assessment.

To provide a concise and comprehensive indicative analysis, the closest surfaces within the surrounding properties were analysed for both daylight and sunlight. Their locations are shown in section 9.4.1 in Appendix.

More details on the numerical criteria for the APSH method are presented in section 9.7.

5.2.3. Overshadowing to gardens and open spaces

The BRE guidelines *"Site layout planning for daylight and sunlight"* provide sunlight availability criteria for open spaces. In particular it gives guidance for calculating any areas of open space that may be in permanent shadow on 21st March.

In summary the BRE document states:

"It is suggested that, for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21st March. If as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive two hours of sun on 21st March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".

For this assessment the IES "Virtual Environment" SunCast software package has been used. A 3D model of the proposed and surrounding buildings was first modelled and the sunlight-tracking feature within the software used to view the shadow results. The study illustrated the extent of the shadow on one key date:

- March 21 (Spring Equinox)

More details on the numerical criteria for the overshadowing method are presented in section 9.8.

6. BRE Digest 209: Significant criteria

6.1. Daylight

The daylight criteria given within the BRE guidelines have been used as a basis to assess the potential impacts of the development:

"The daylighting is not considered to be substantially affected when the Vertical Sky Component (VSC) measured at the centre of a window is >27%. A window may be adversely affected if the VSC measured at the centre of the window is less than 27% and less than 0.8 times its former value".

In the assessment, the reduction between existing and proposed situations is expressed as a percentage, where a change in daylight levels above 20% equates to a figure of less than 0.8 times its former value.

Assessment points that do not meet the above criteria require further considerations to show the level of impact likely to be incurred.

6.2. Sunlight

The sunlight criteria given within the BRE guidelines have been used as a basis to assess the potential impacts of the development:

"A window may be adversely affected if a point at the centre of the window receives in the year less than 25% of the Annual Probable Sunlight Hours (APSH) including at least 5% of the APSH during the winter months (21st October to 21st March)".

Assessment points that do not meet the above criteria require further considerations to show the level of impact likely to be incurred.

6.3. Overshadowing to gardens and open spaces

The sunlight criteria given within the BRE guidelines have been used as a basis to assess the potential impacts of the development:

"It is suggested that, for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21st March. If as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive two hours of sun on 21st March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".

Assessment points that do not meet the above criteria require further considerations to show the level of impact likely to be incurred.

6.4. Criteria for assessing daylight, sunlight and overshadowing effects

The table 1 is a summary of the criteria to assess daylight, sunlight and overshadowing impacts:

Magnitude of effect	Criteria		
Beneficial	An improvement ratio > 1.3 of the baseline value		
Negligible	Daylight A VSC of 27% or above in the proposed scenario with adequate daylight distribution Or A reduction ratio <1.0 and ≥ 0.8 of the baseline value	Sunlight An APSH of 25%, of which 5% are in the winter months Or A reduction ratio <1.0 and ≥ 0.8 of the baseline value	Overshadowing 50% of any amenity areas receiving at least 2 hours of direct sunlight on 21st March Or A reduction ratio <1.0 and ≥ 0.8 of the baseline value
Minor adverse	A reduction ratio <0.8 and ≥ 0.7 of the baseline value		
Moderate adverse	A reduction ratio <0.7 and ≥ 0.6 of the baseline value		
Major adverse	A reduction ratio <0.6 of the baseline value		

Table 1: Criteria for assessing daylight, sunlight and overshadowing effects

Please note that in terms of daylight and sunlight BRE considers that a reduction in daylight or sunlight of less than 20% is not likely to be materially noticeable to occupiers of buildings. Our report then uses 10% increments of exceedance above the relevant threshold to be able to make the difference between minor, moderate and major adverse impact.

7. Assessment

7.1. BS 8206-2: 1992

The foreword to BS 8206-2: 1992 states that:

"The aim of the standard is to give guidance to architects, builders and others who carry out lighting design. It is recognised that lighting is only one of many matters that influence fenestration. These include other aspects of environmental performance (such as noise, thermal equilibrium and the control of energy use), fire hazards, constructional requirements, the external appearance and the surroundings of the site. The best design for a building does not necessarily incorporate the ideal solution for any individual function. For this reason, careful judgement should be exercised when using the criteria given in the standards for other purposes, particularly town planning control."

7.2. Daylight

The daylight results are presented in section 9.6 in Appendix. The images and results show and compare the external levels of daylight (VSC – Vertical Sky Components) on the surfaces at **1-9 Highfield Mews, 75 Compayne Gardens, and 11 Highfield Mews** with and without the proposed development.

A summary of results is displayed in the table 2 below:

Daylight assessment (Surrounding buildings)				
Building Target surface	**VSC (existing) >27%**	**VSC (proposed) >27%**	**Ratio**	**Result**
S1 - 1-9 Highfield Mews - South Elevation - 1F	8.53	7.30	0.86	Negligible
S2 - 1-9 Highfield Mews - South Elevation - 1F	24.68	22.85	0.93	Negligible
S3 - 75 Compayne Gardens - East Elevation- 1F	14.23	13.57	0.95	Negligible
S4 - 75 Compayne Gardens - South Elevation- 1F	31.14	30.13	0.97	Negligible
S5 - 75 Compayne Gardens - South Elevation- 1F	33.44	32.82	0.98	Negligible
S6 – 11 Highfield Mews -South Elevation- 1F	35.40	35.41	1.00	Negligible
S7 - 11 Highfield Mews -South Elevation- 1F	32.63	32.63	1.00	Negligible
S8 - 11 Highfield Mews -West Elevation- 1F	34.23	34.33	1.00	Negligible

Table 2: Daylight results

Note: For location of target surfaces, see Appendix section 9.4 "Site plan and location"

As can be seen in the above table, none of the surfaces will be adversely impacted by the proposed development.

- ✓ **The slight loss in daylight for the surfaces S1-S5 are not considered of concern as the proposed VSC levels are either above 27% or more than 0.8 times their former values and will provide adequate levels of daylight.**

→ **In terms of daylight the proposed scheme is considered acceptable.**

It should be noted that the values provided in the BRE 209 are for guidance purposes only.

7.3. Sunlight

Where necessary (as defined in the Assessment Methodology section of this report) Annual Probable Sunlight Hours (APSH) tests have been undertaken with the results presented in section 9.7 in the appendix.

The table below indicates the likely levels of sunlight on the surfaces at **1-9 Highfield Mews, 75 Compayne Gardens, and 11 Highfield Mews** with and without the proposed development.

A summary of results is displayed in the table 3 below:

Building Target surface	Total APSH >25%		Winter APSH >5%		Ratio Annual	Result
	Existing	Proposed	Existing	Proposed		
S1 - 1-9 Highfield Mews - South Elevation - 1F	20.0	19.0	7.0	6.0	0.95	Negligible
S2 - 1-9 Highfield Mews - South Elevation - 1F	56.0	52.0	12.0	8.0	0.93	Negligible
S3 - 75 Compayne Gardens - East Elevation- 1F	39.0	38.0	15.0	14.0	0.97	Negligible
S4 - 75 Compayne Gardens - South Elevation- 1F	72.0	69.0	23.0	20.0	0.96	Negligible
S5 - 75 Compayne Gardens - South Elevation- 1F	71.0	70.0	25.0	24.0	0.99	Negligible
S6 – 11 Highfield Mews - South Elevation- 1F	80.0	80.0	26.0	26.0	1.00	Negligible
S7 - 11 Highfield Mews - South Elevation- 1F	69.0	69.0	24.0	24.0	1.00	Negligible
S8 - 11 Highfield Mews -West Elevation- 1F	66.0	66.0	24.0	24.0	1.00	Negligible

Table 3: Sunlight results

Note: For location of target surfaces, see Appendix section 9.4 "Site plan and location"

The table above demonstrates that, none of the surfaces at 1-9 Highfield Mews, 75 Compayne Gardens, and 11 Highfield Mews facing south, east, and west will be adversely impacted by the proposed development.

N/A: Not applicable. The buildings surrounding or adjacent to the site that do not contain windows within 90° of due south have been excluded from the sunlight assessments. This is because sunlight is directional and North-facing windows in this location will only receive sunlight at the height of summer at occasional times. As such, pursuant to the BRE guide, North-facing windows are not considered to have a reasonable expectation of sunlight and do not require assessment.

- ✓ **The slight loss in sunlight for the surfaces S1-S5 are not considered of concern as the proposed total APSH is above >25% of which more than 5% is in winter months or more than 0.8 times their former values and will provide adequate levels of sunlight.**

→ **In terms of sunlight the proposed scheme is considered acceptable.**

It should be noted that the values provided in the BRE 209 are for guidance purposes only.

7.4. Overshadowing

The following results represent the cumulative overshadowing impacts of the proposed development. As identified from the AutoCAD drawings and/or site plan, two existing amenity areas are located at **the rear of 1-9 Highfield Mews, 11 Highfield Mews, 6 Cleve Road, 8 Cleve Road, and 75 Compayne Gardens**. In accordance with the BRE guidelines, overshadowing has been assessed during times of the day where the sun's altitude is above 10º (from 7:30am to 5:00pm).

"It is suggested that, for it to appear adequately sunlit throughout the year, at least half of a garden or amenity area should receive at least two hours of sunlight on 21st March. If as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive two hours of sun on 21st March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".

The pictures showing the overshadowing impact are indicated in section 9.9 of the Appendix.

A summary of results is displayed in the table 6 below:

Overshadowing assessment from 7.30am to 5.00pm % of area receiving sunlight on 21st March				
Amenity area	**Existing (%)**	**Proposed (%)**	**Ratio**	**Result**
A1 - 1-9 Highfield Mews - Terrace	10.98	8.13	0.74	Minor adverse
A2 - 11 Highfield Mews - Garden	39.06	39.06	1.00	Negligible
A3 - 6 Cleve Road - Garden	42.64	42.64	1.00	Negligible
A4 - 8 Cleve Road - Garden	41.68	41.68	1.00	Negligible
A5 - 75 Compayne Gardens - Garden	54.79	53.94	0.98	Negligible

Table 6: Overshadowing results

Note: For location of target surfaces, see Appendix section 9.4 "Site plan and location"

As can be seen in the table above, the only one existing amenity area/garden/open spaces will be impacted by the proposed development.

Impact on A1 - 1-9 Highfield Mews - Terrace *as per BRE criteria stated above:*

With the proposed development, at least half of the amenity area never receives direct sunlight on 21st March as shown below (see also Appendix section 9.8 "Overshadowing results and pictures").

Month	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00
Mar	0.00	13.50	3.20	0.00	0.00	12.80	22.60	26.60	18.20	0.60	0.00	0.00

The results are expressed as a percentage of area receiving direct sunlight on the 21st March

Another simulation has been carried out on 21st June (summer month) when the gardens are more likely to be used by the occupants.

Month	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00
Jun	**60.30**	**68.80**	**62.30**	**58.50**	**65.10**	**73.90**	**70.00**	**60.30**	48.10	31.40	6.00	0.00

The results are expressed as a percentage of area receiving direct sunlight on the 21st June

- ✓ With the proposed development, at least half of the amenity area receives direct sunlight from **7:00am to 12:00pm** (8 hours, as opposed to the 2 required by BRE) **on 21st June, month in which the amenity would be most used by occupants**, as shown above (*see also Appendix section 9.8 "Overshadowing results and pictures"*).

- ✓ **The slight loss in sunlight for the amenity A5 is not considered of concern as at least half of its area will receive at least two hours of sunlight on 21st March or have a ratio existing/proposed more than 0.8 and will provide adequate levels of sunlight.**

→ **In terms of overshadowing the proposed scheme is considered acceptable.**

It should be noted that the values provided in the BRE 209 are for guidance purposes only.

8. Conclusion

8.1. Daylight

This report demonstrates that the levels of daylight at the surrounding buildings at **1-9 Highfield Mews, 75 Compayne Gardens, and 11 Highfield Mews** will not be adversely affected by the proposed development.

BRE criteria are met: ☑

8.2. Sunlight

This report demonstrates that the levels of sunlight at the surrounding buildings at **1-9 Highfield Mews, 75 Compayne Gardens, and 11 Highfield Mews** will not be adversely affected by the proposed development.

BRE criteria are met: ☑

8.3. Overshadowing

This report demonstrates that the existing amenity area/garden/open spaces located at **the rear of 1-9 Highfield Mews, 11 Highfield Mews, 6 Cleve Road, 8 Cleve Road, and 75 Compayne Gardens** will not be adversely affected by the proposed development.

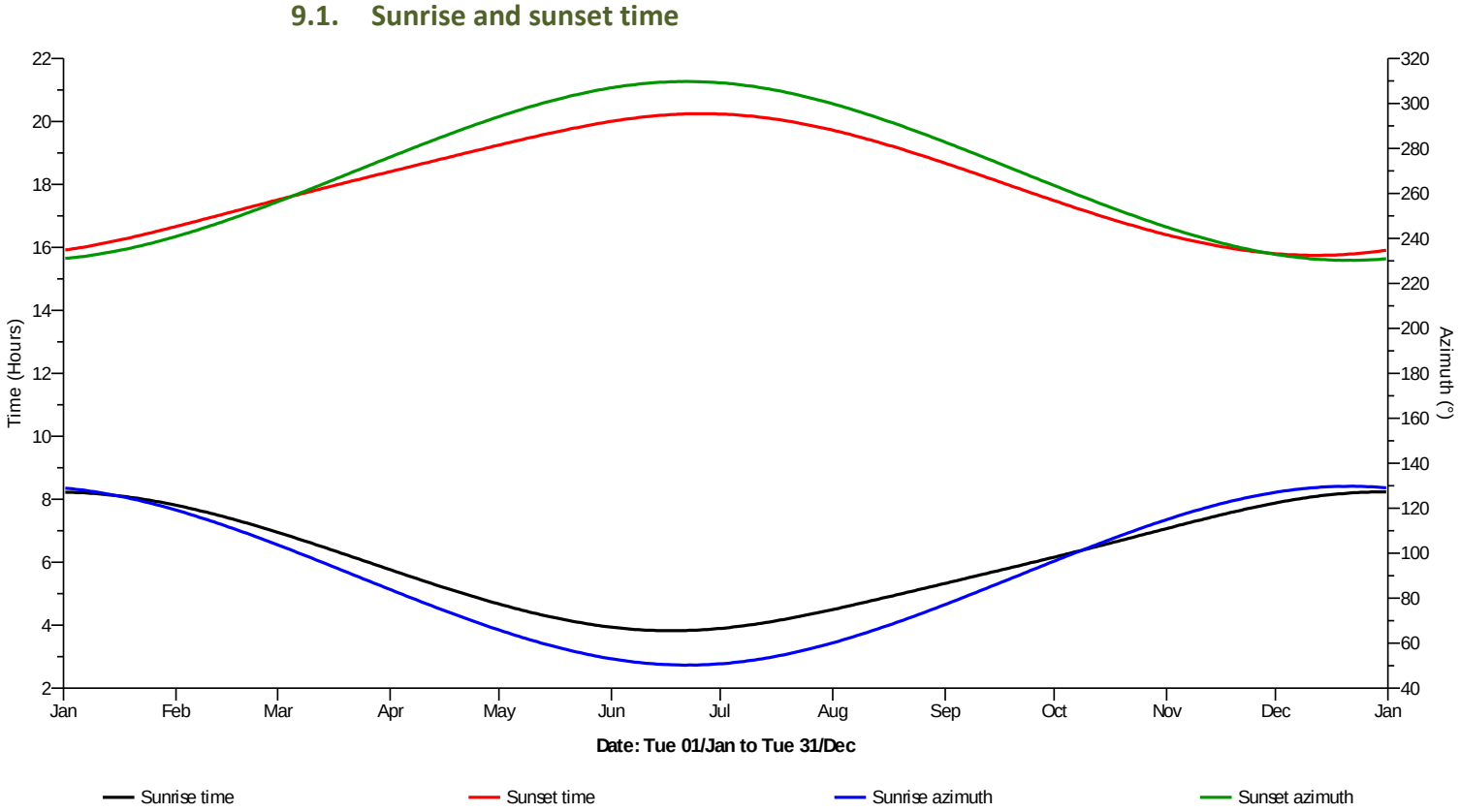
BRE criteria are met: ☑

On balance, it can be concluded that the surroundings buildings at **1-9 Highfield Mews, 11 Highfield Mews, 6 Cleve Road, 8 Cleve Road, and 75 Compayne Gardens** will not be adversely affected by the proposed development.

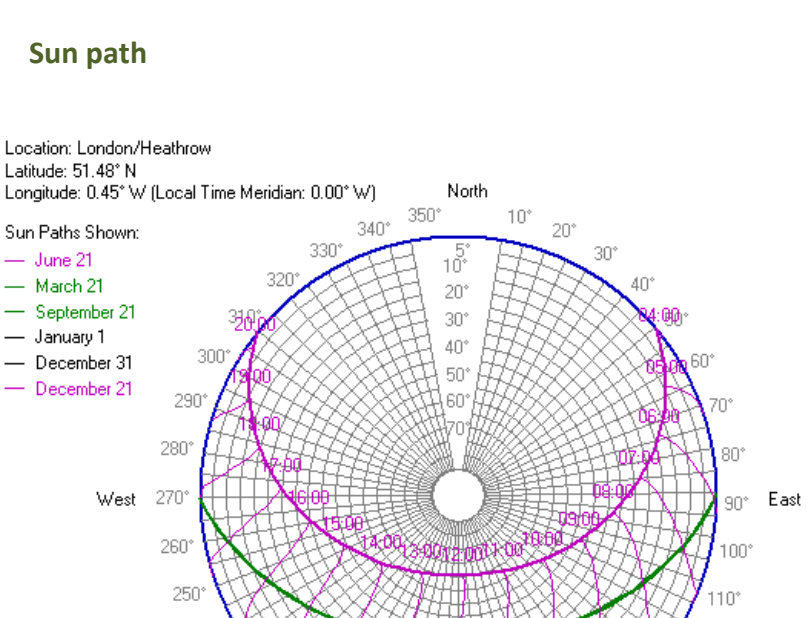
↳ **The proposed scheme is acceptable.**

9. Appendix

9.1. Sunrise and sunset time

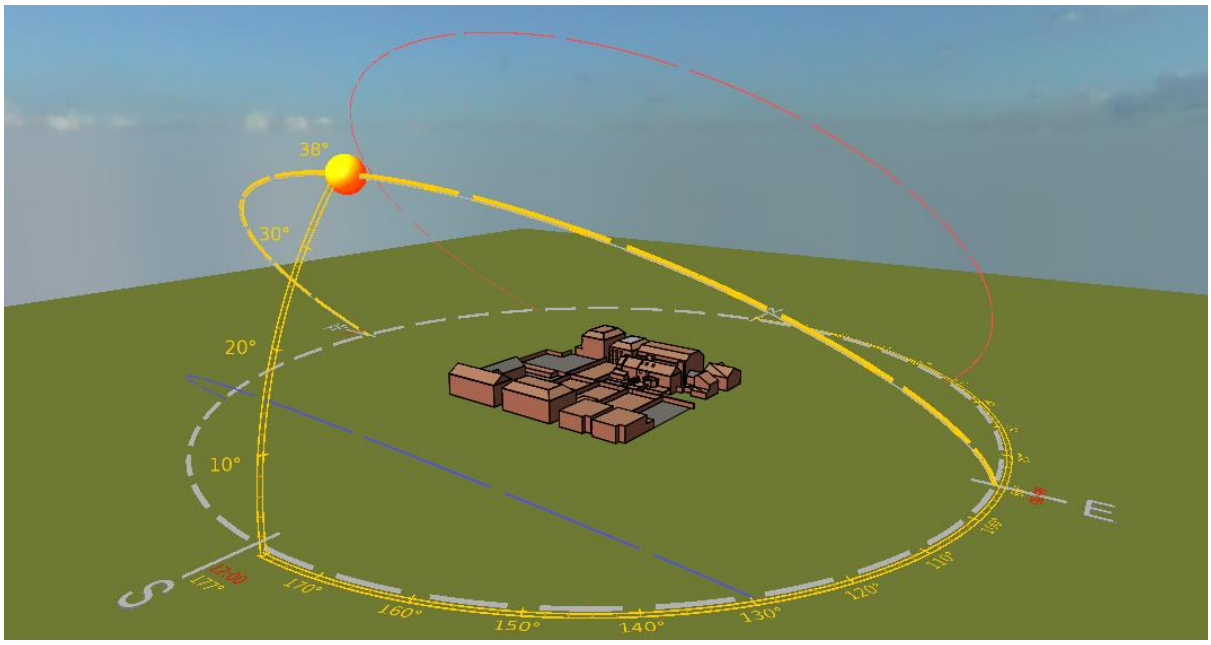


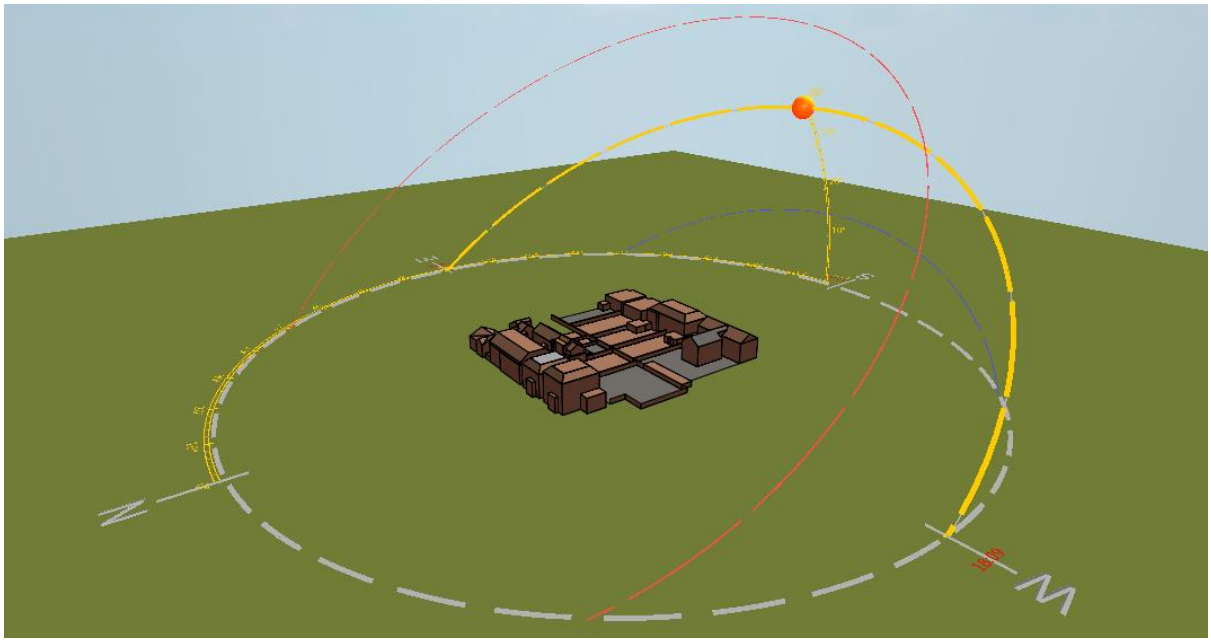
9.2. Sun path



9.3. Suntrace

- The red line represents the sun's path during June.
- The yellow line represents the sun's path during March/September.
- The blue line represents the sun's path during December.



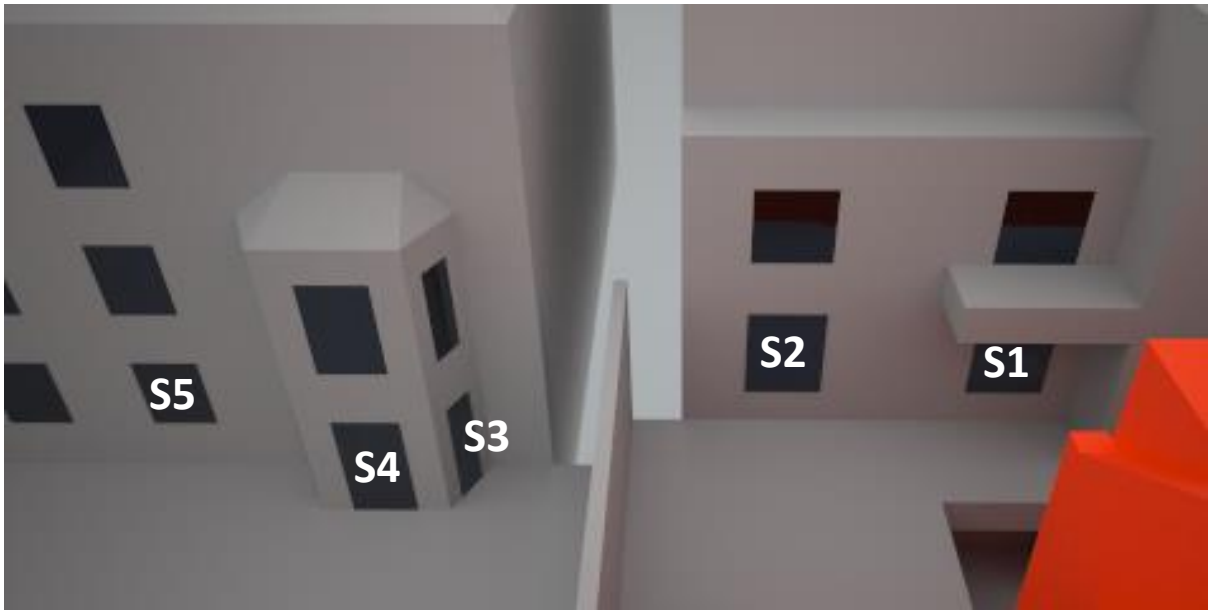


9.4. Site plan and location

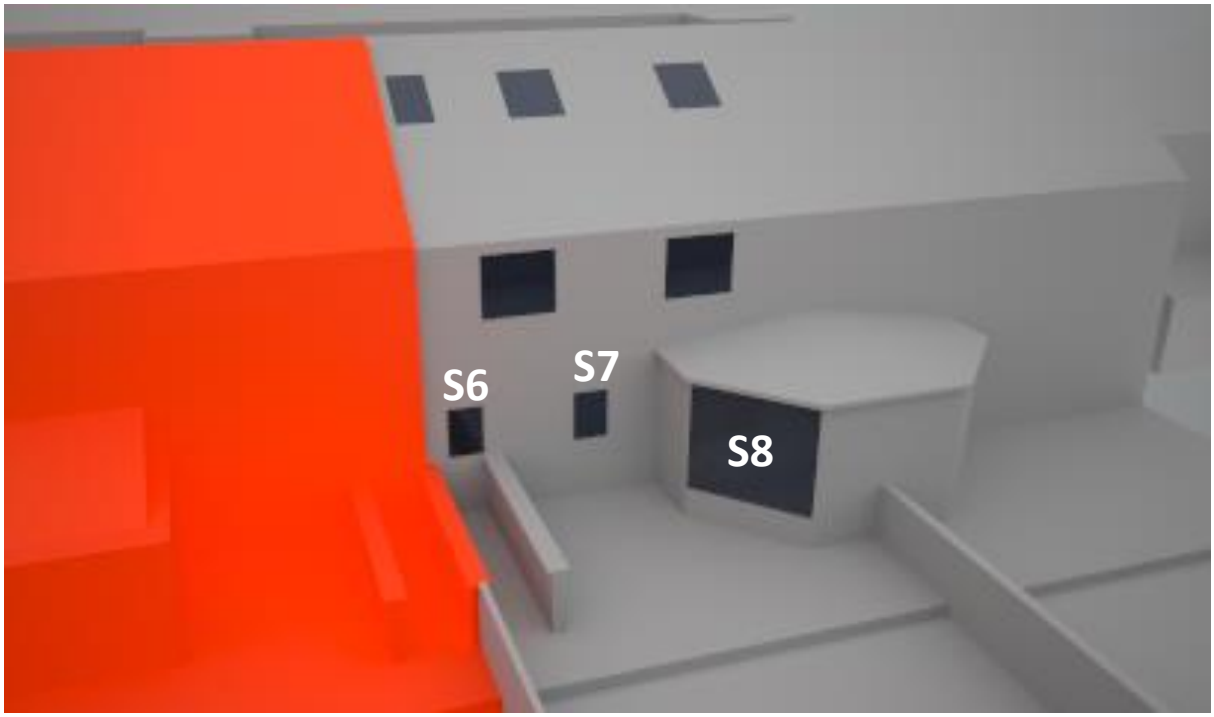
9.4.1. Existing site layout

9.4.2. Proposed site layout

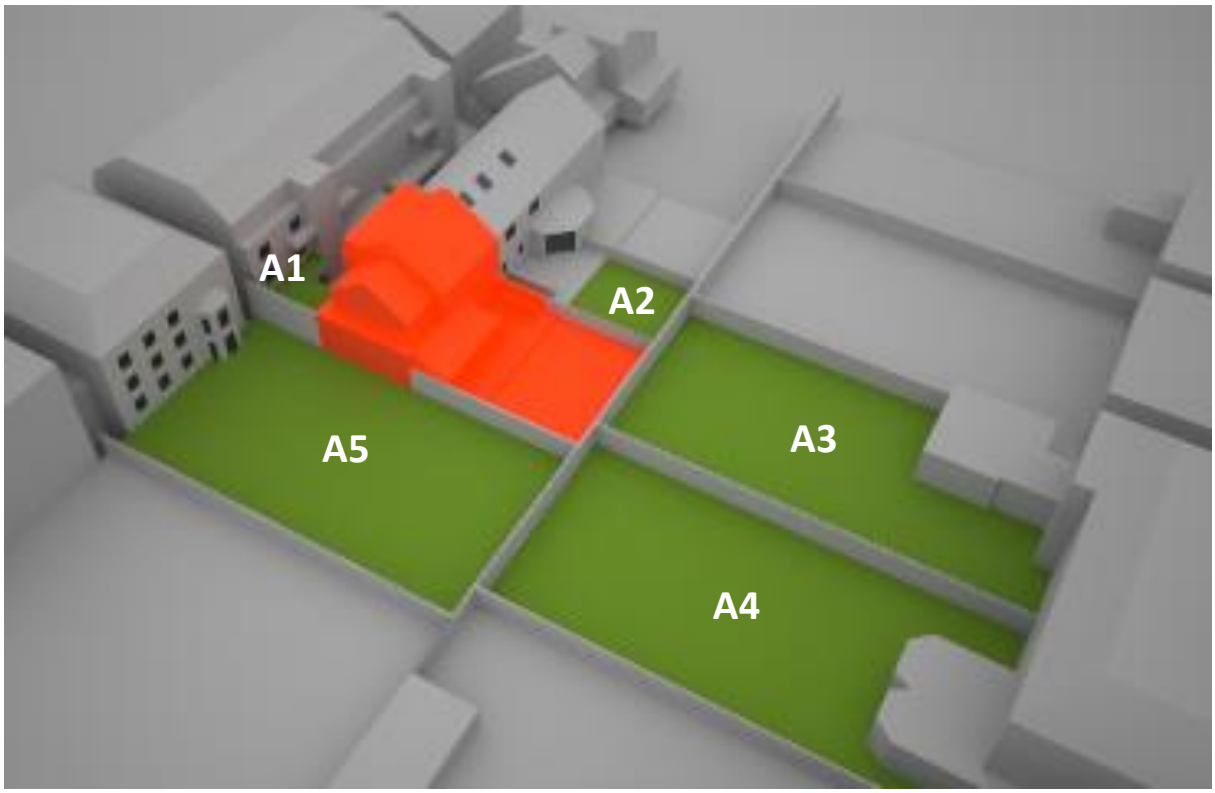
Location	10 Highfield Mews, Compayne Gardens, London, NW6 3GB
Latitude (°)	51.54 N
Longitude (°)	0.19 W



75 Compayne Gardens, 1-9 Highfield Mews – South elevation

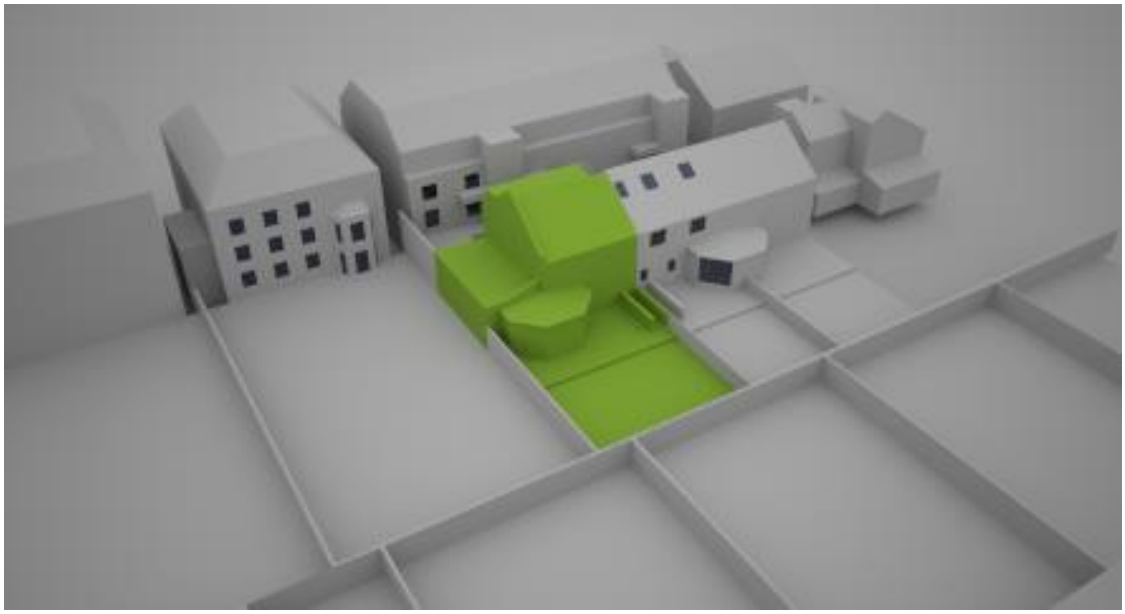


11 Highfield Mews – South elevation

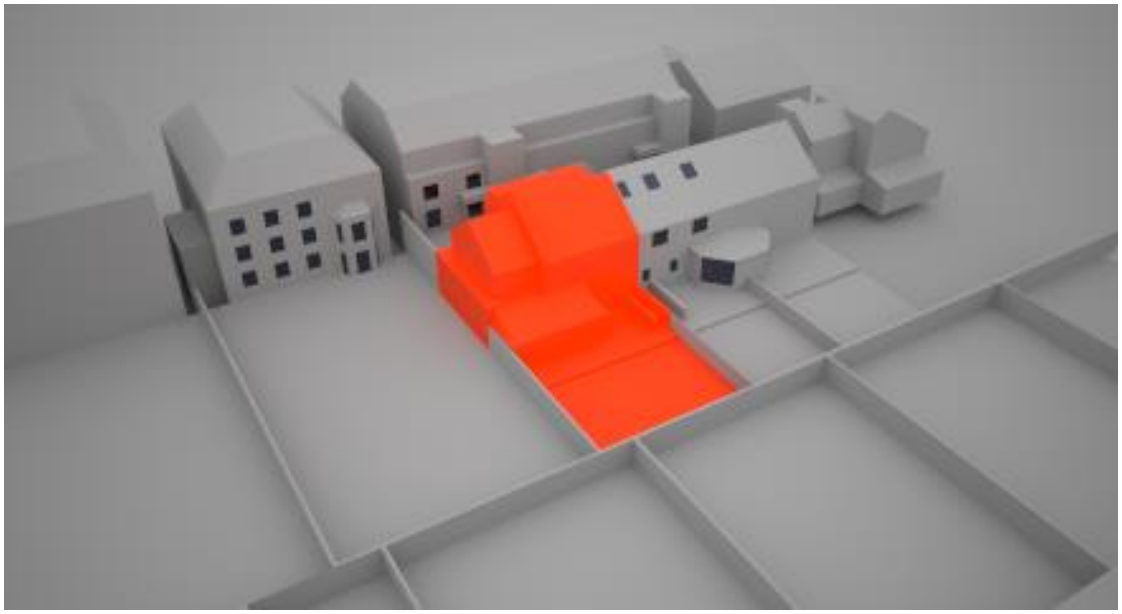


Terrace / Garden / amenities

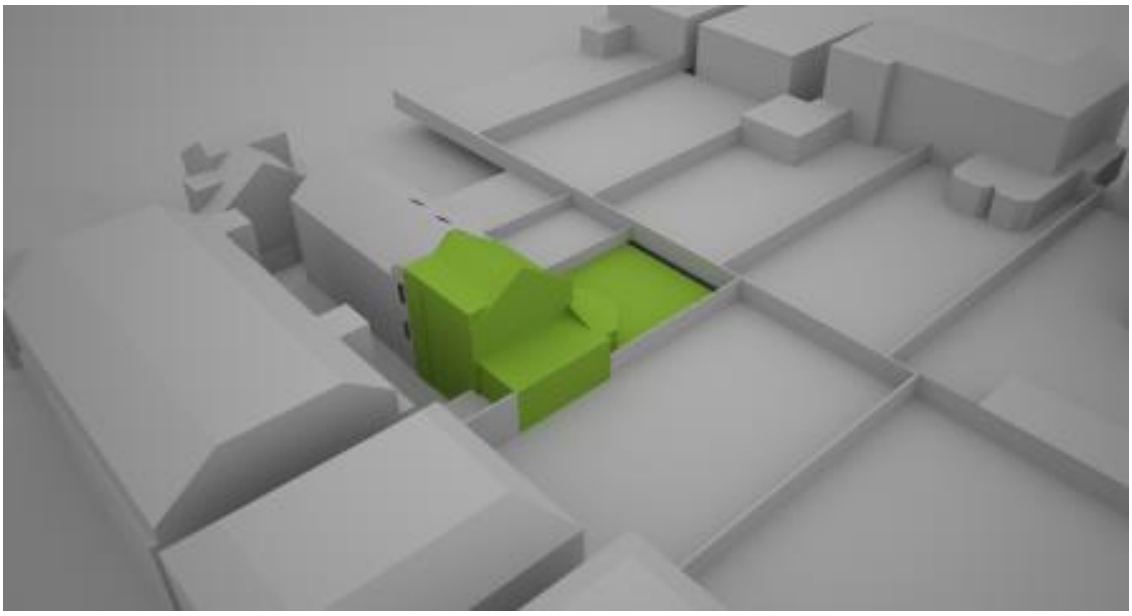
9.5. Model images



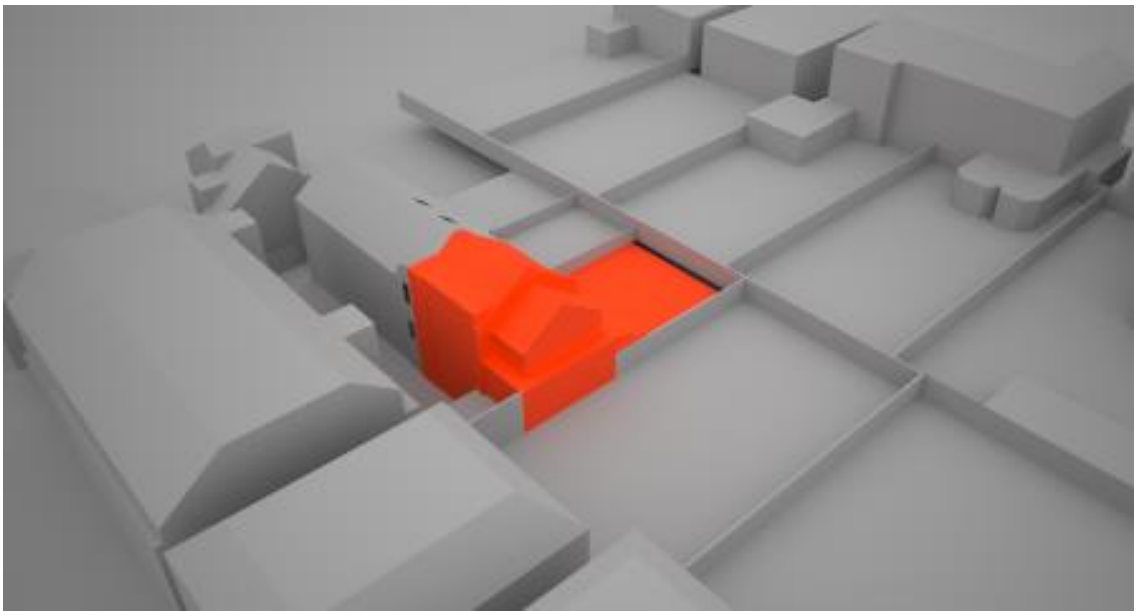
Existing site layout



Proposed site layout



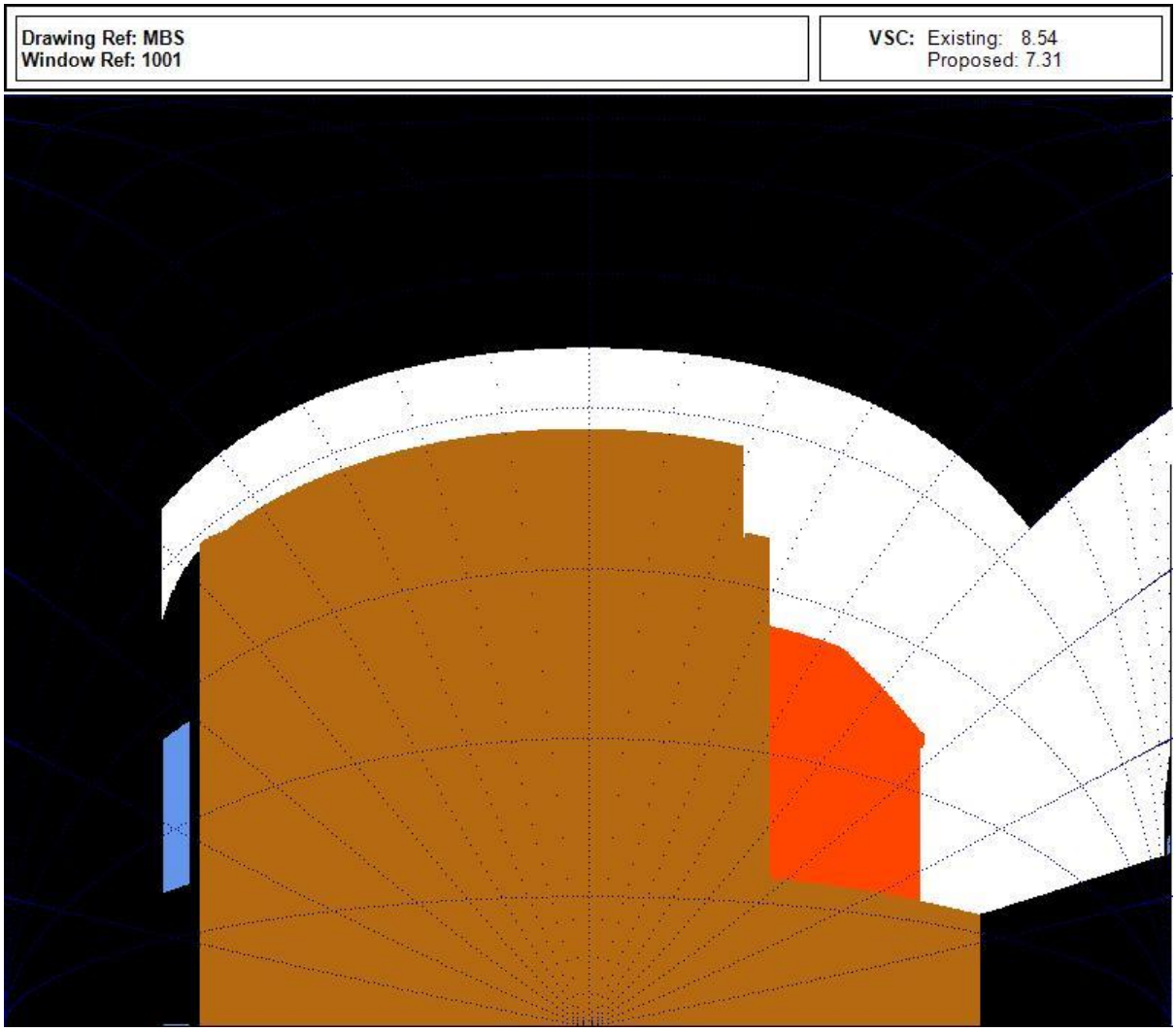
Existing site layout



Proposed site layout

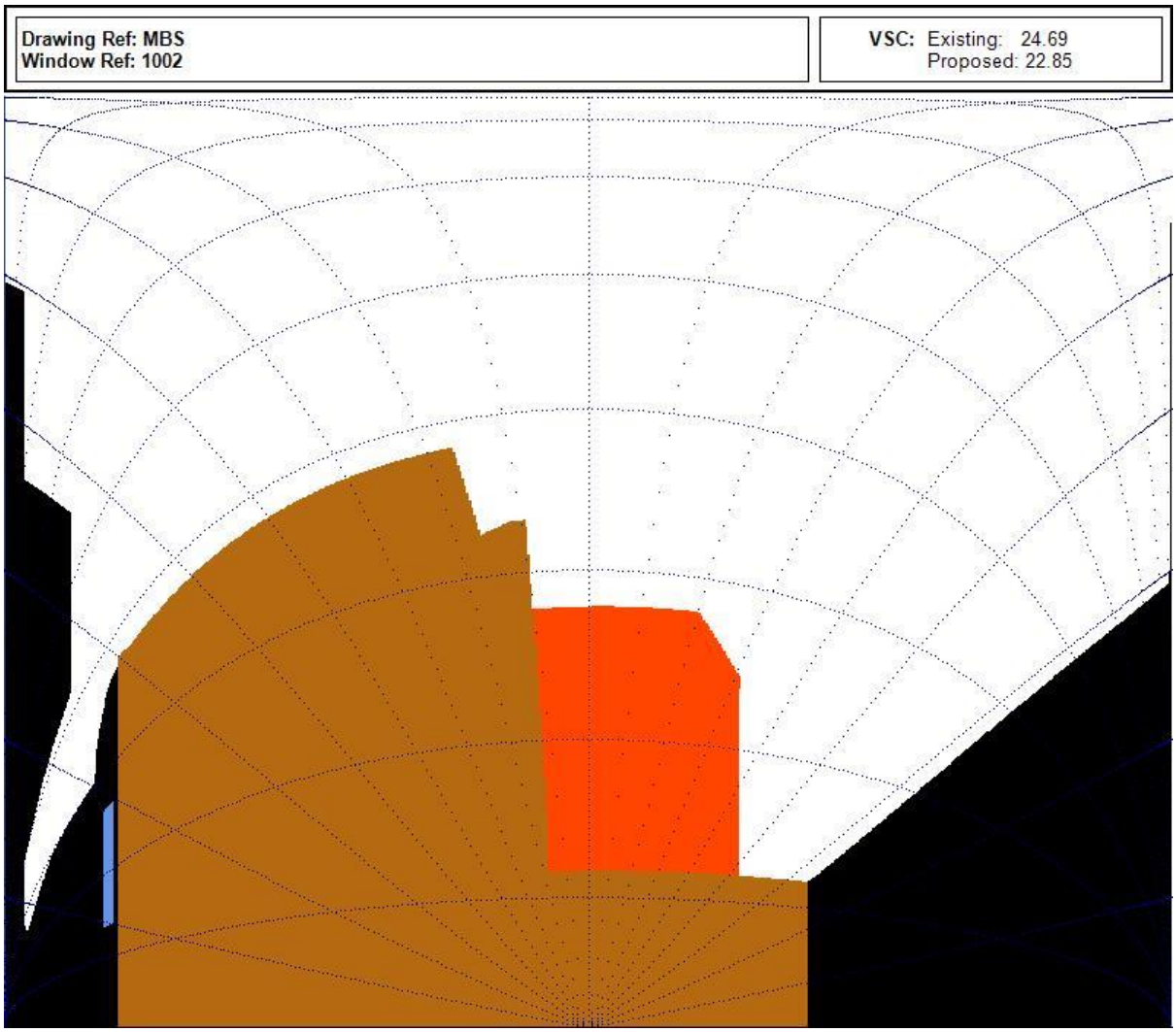
9.6. Daylight results

S1 - 1-9 Highfield Mews - South Elevation - 1F



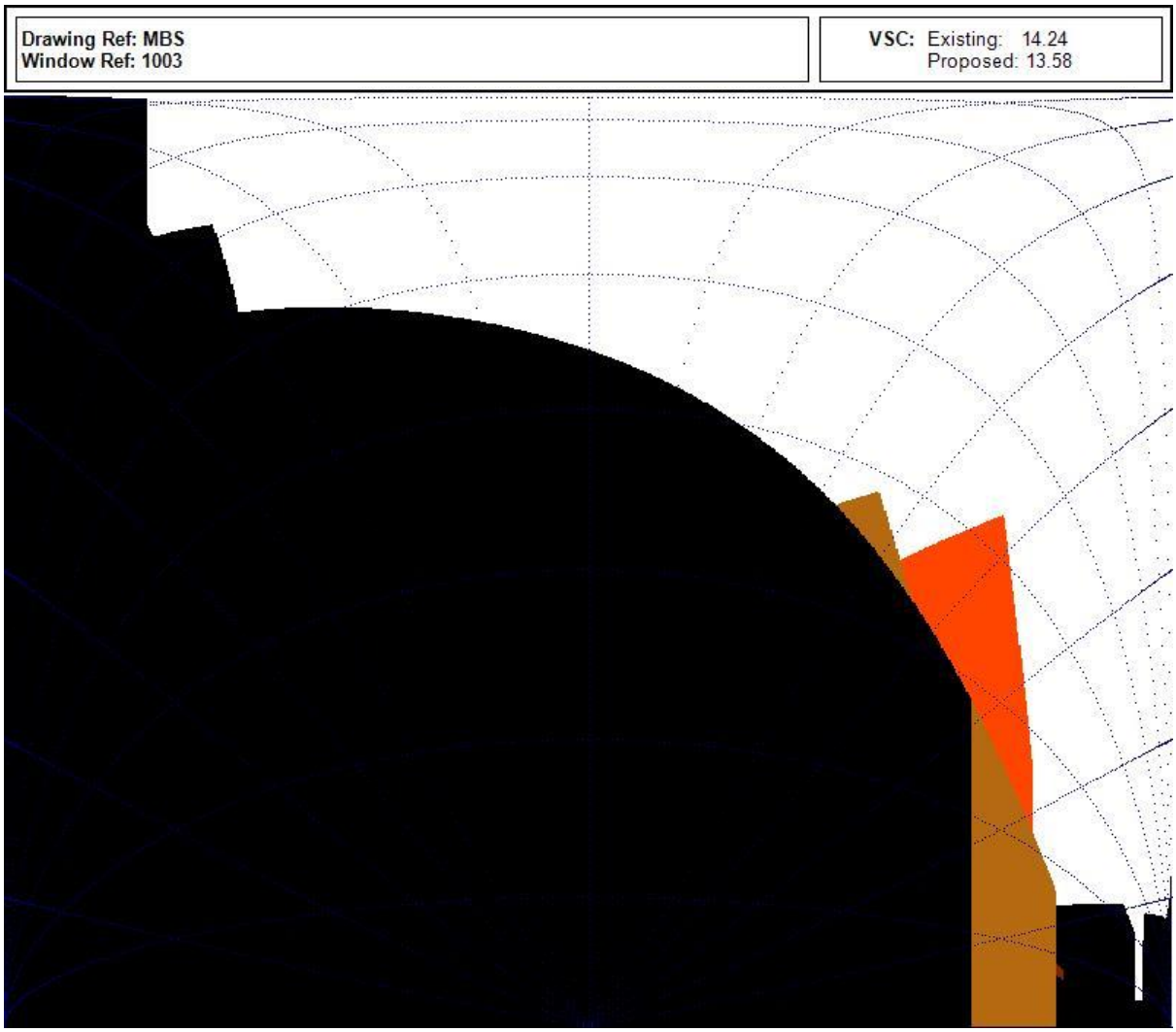
The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

S2 - 1-9 Highfield Mews - South Elevation - 1F



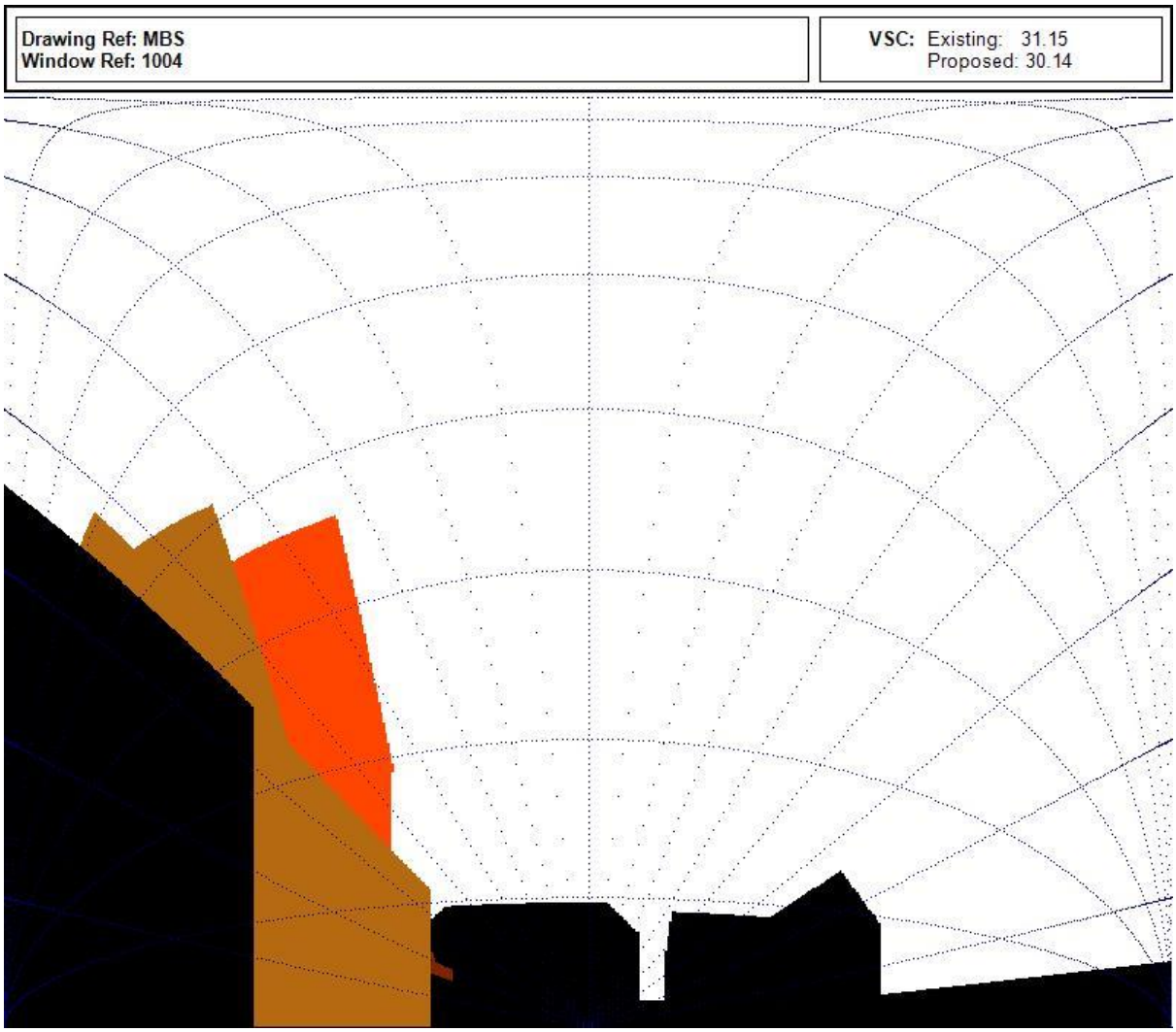
The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

S3 - 75 Compayne Gardens - East Elevation- 1F



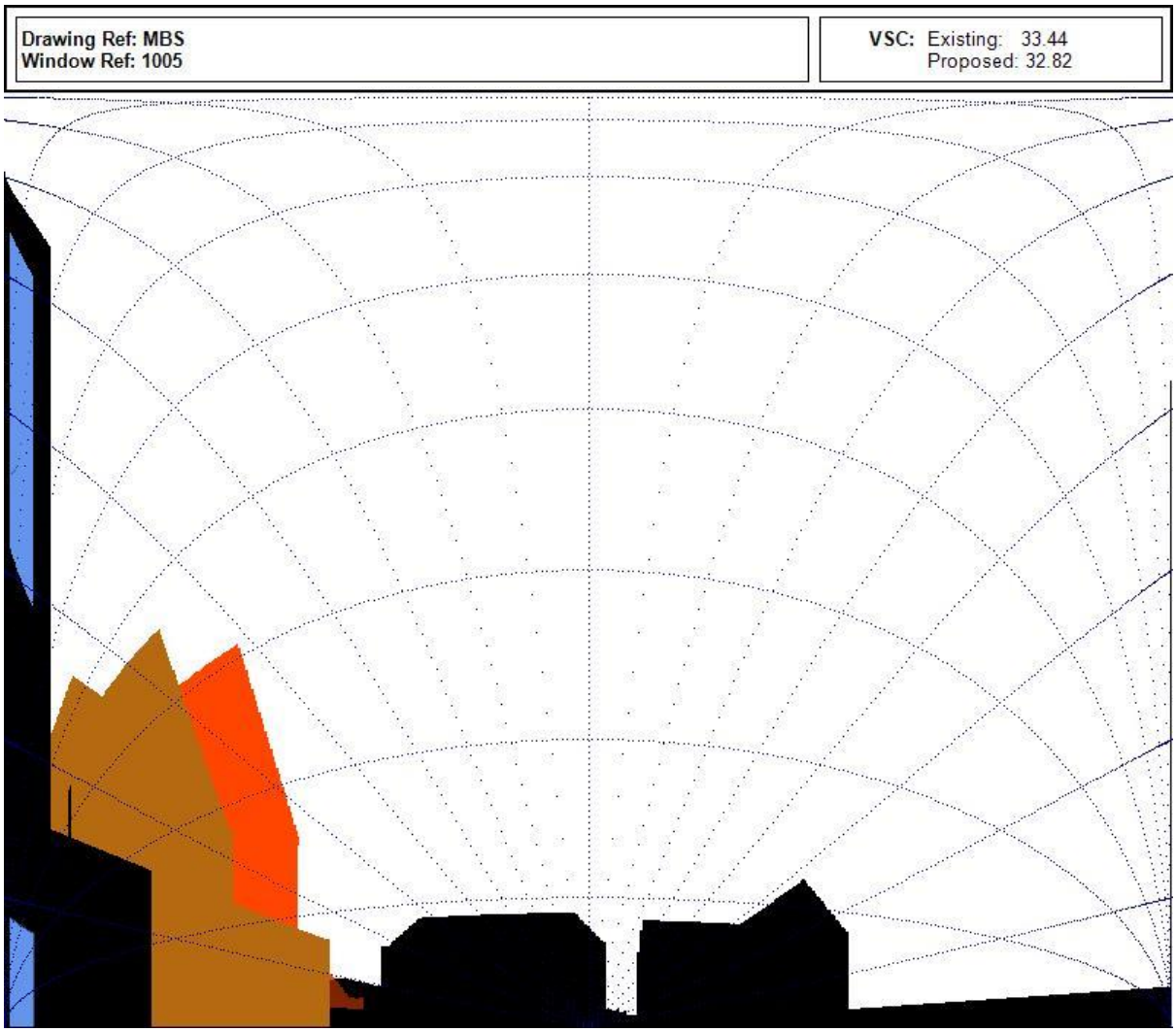
The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

S4 - 75 Compayne Gardens -South Elevation- 1F



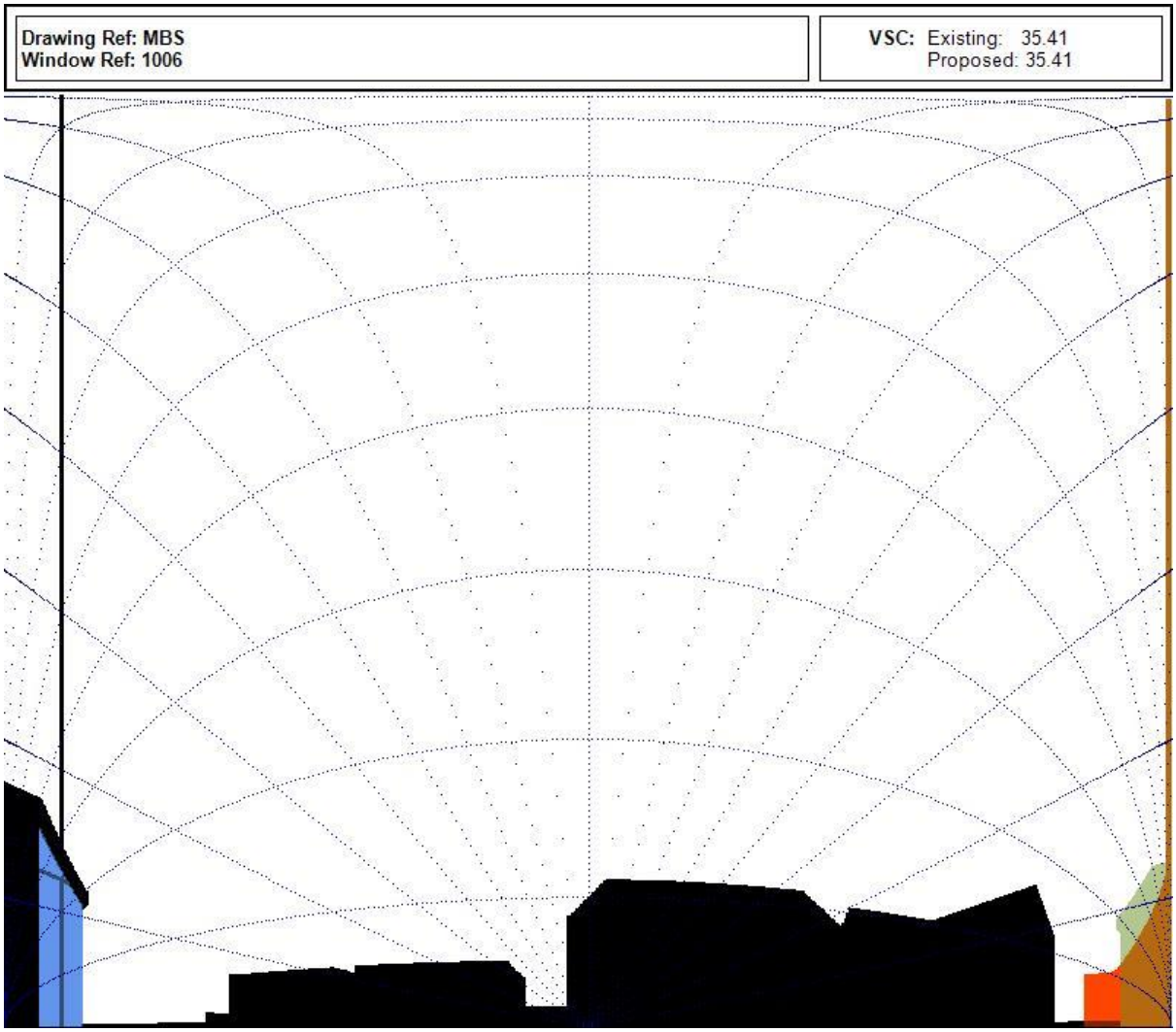
The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

S5 - 75 Compayne Gardens -South Elevation- 1F



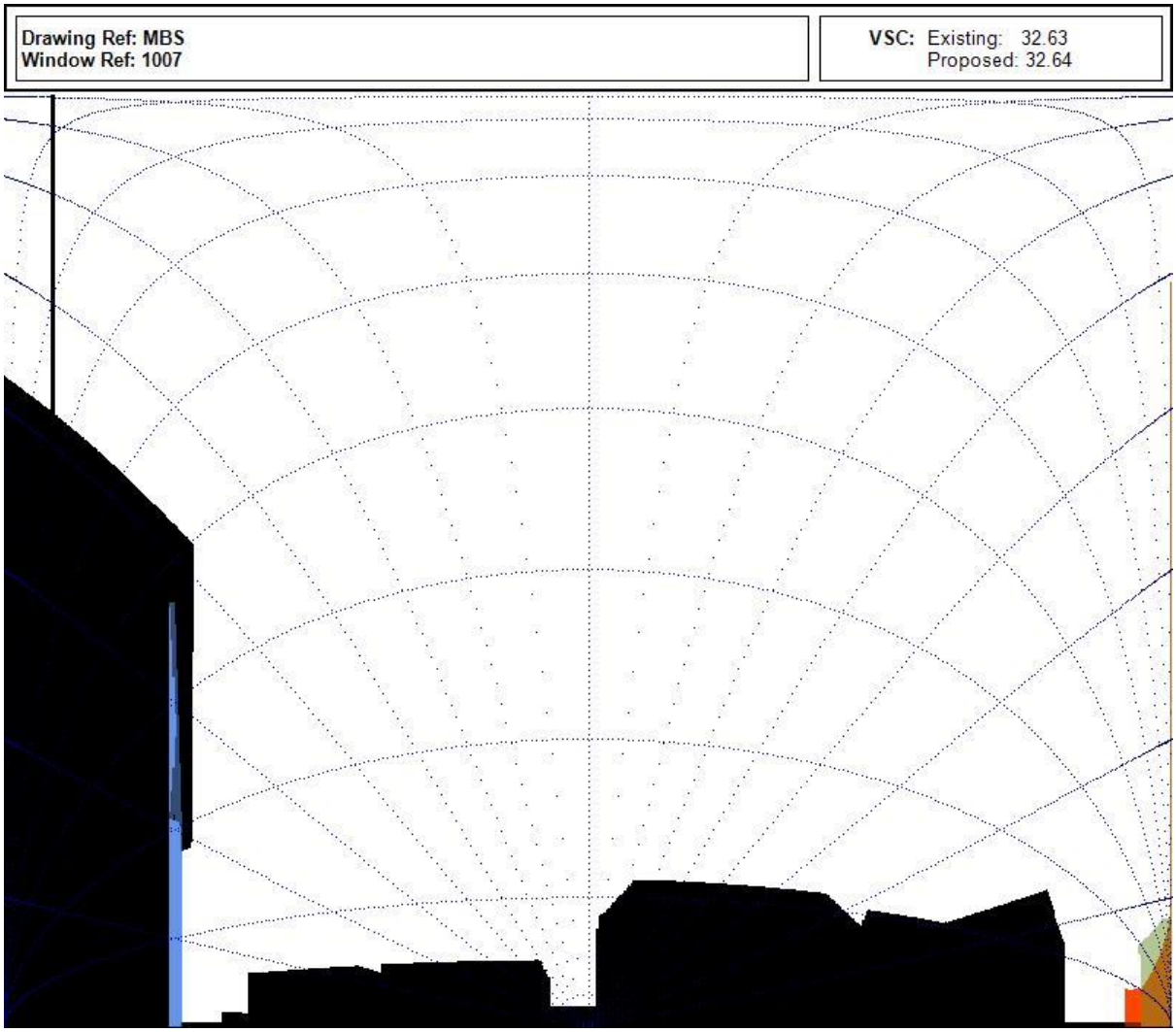
The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

S6 – 11 Highfield Mews -South Elevation- 1F



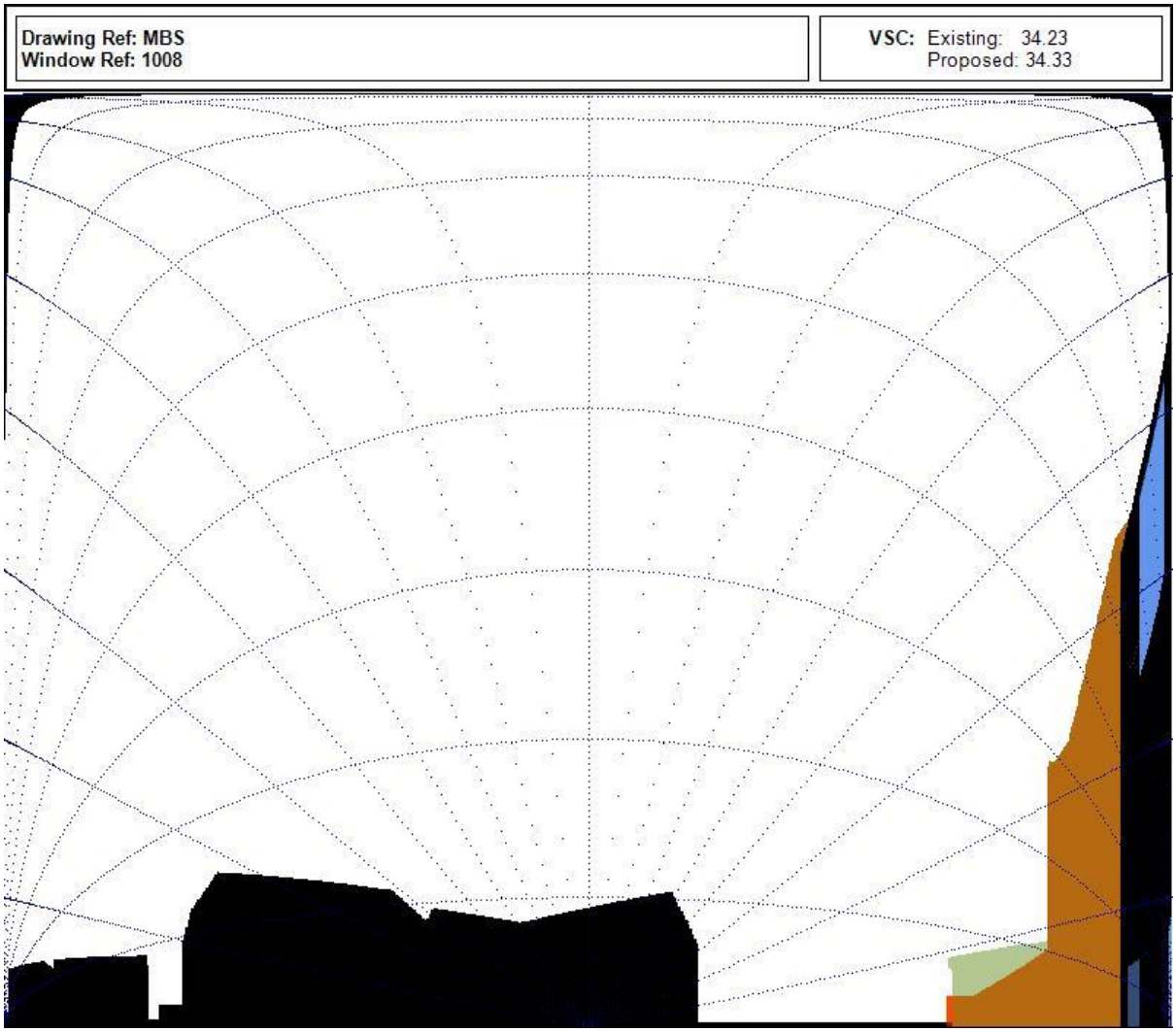
The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

S7 - 11 Highfield Mews -South Elevation- 1F



The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

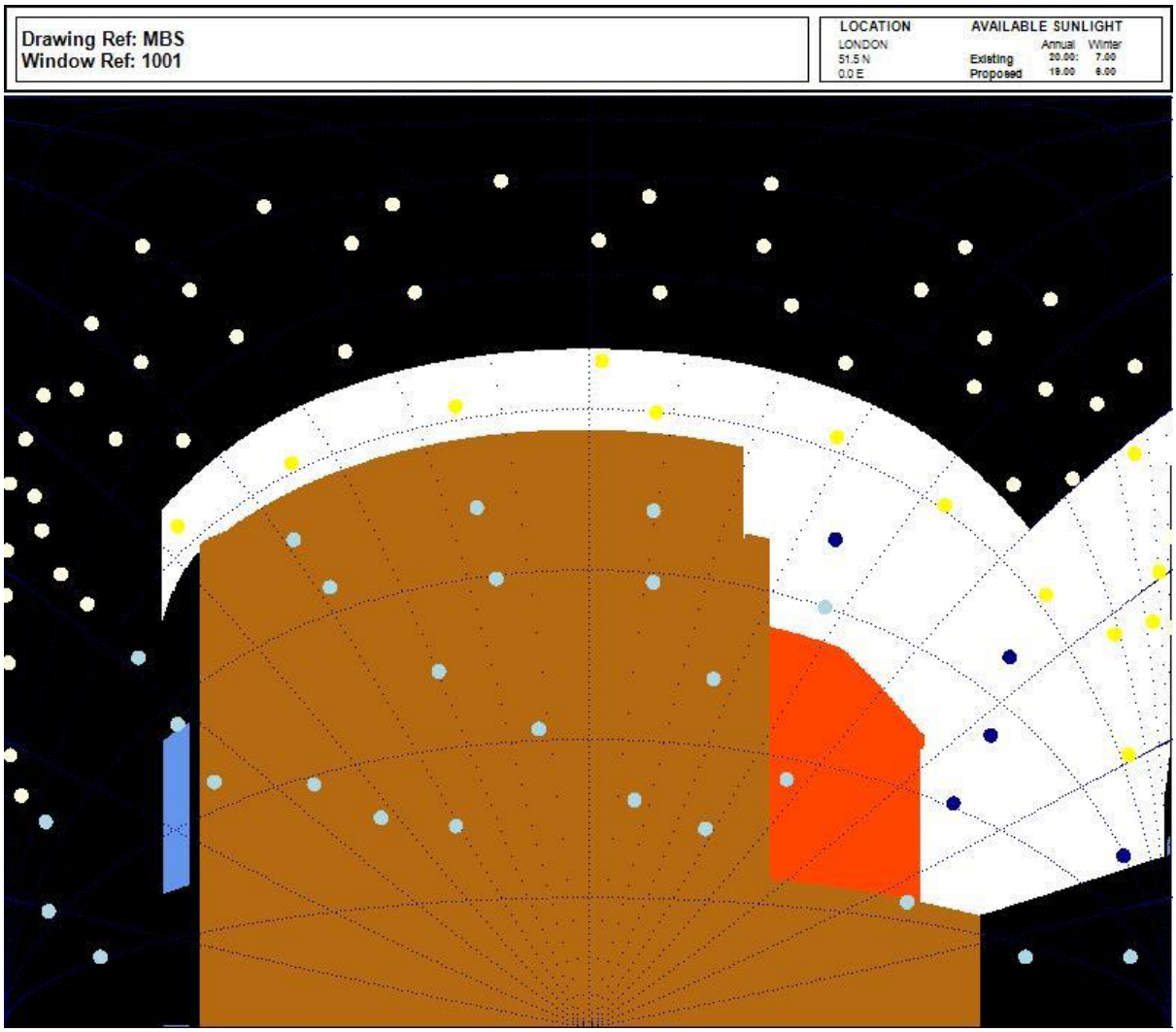
S8 - 11 Highfield Mews -West Elevation- 1F



The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

9.7. Sunlight results

S1 - 1-9 Highfield Mews - South Elevation - 1F

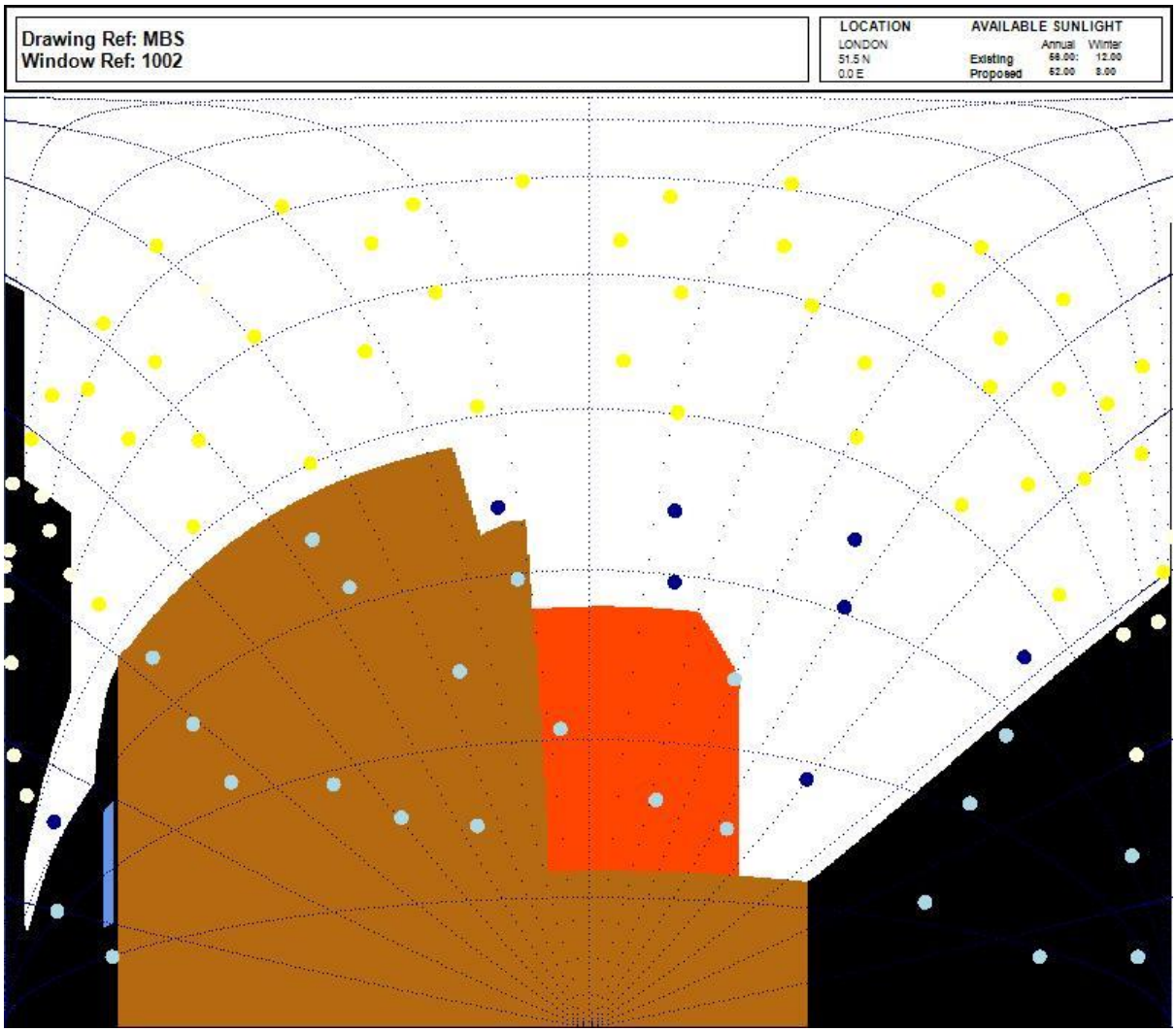


The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).
The blue dot represent the available sunlight during the winter months (Winter).
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

S2 - 1-9 Highfield Mews - South Elevation - 1F

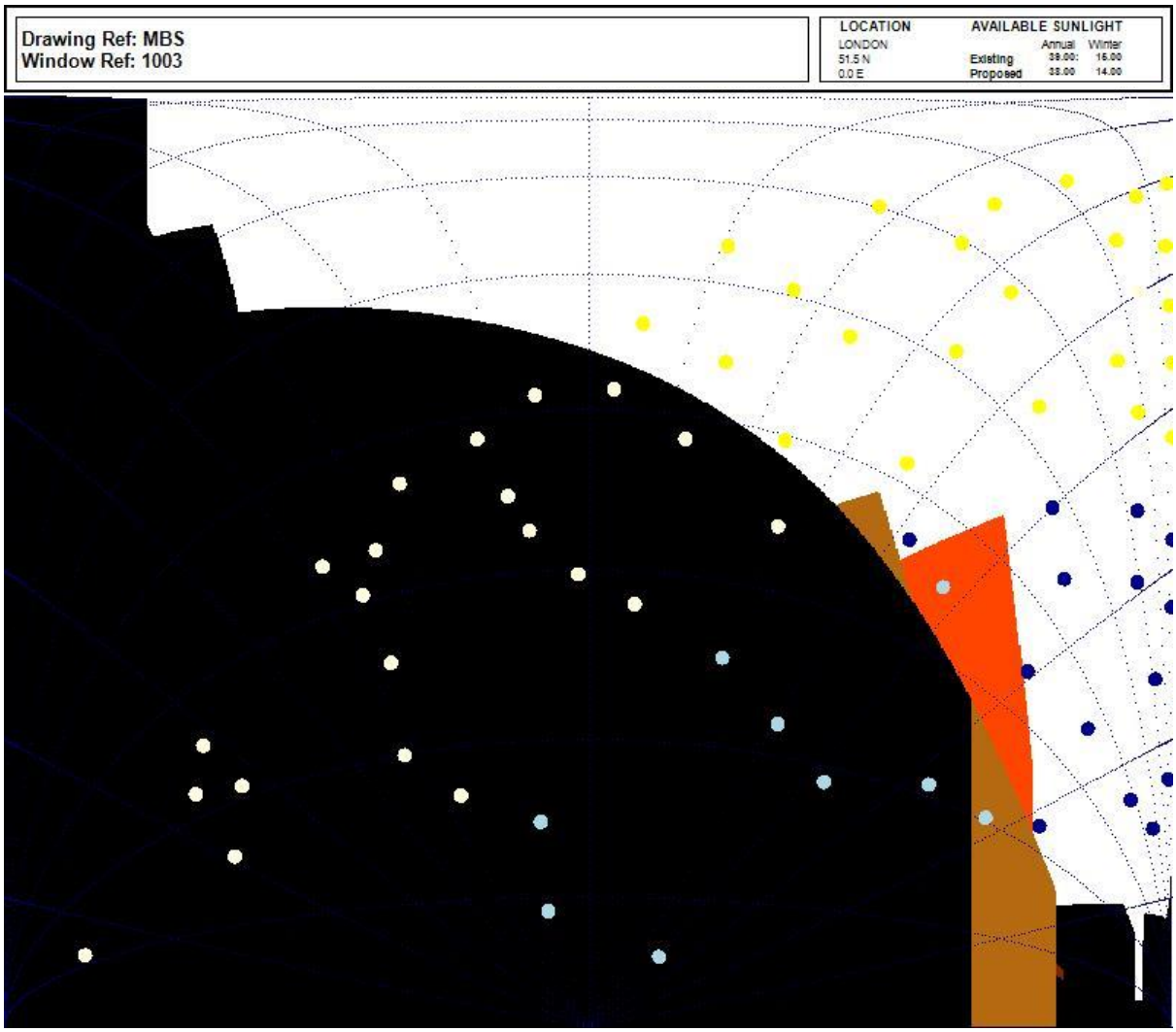


The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).
The blue dot represent the available sunlight during the winter months (Winter).
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

S3 - 75 Compayne Gardens - East Elevation- 1F

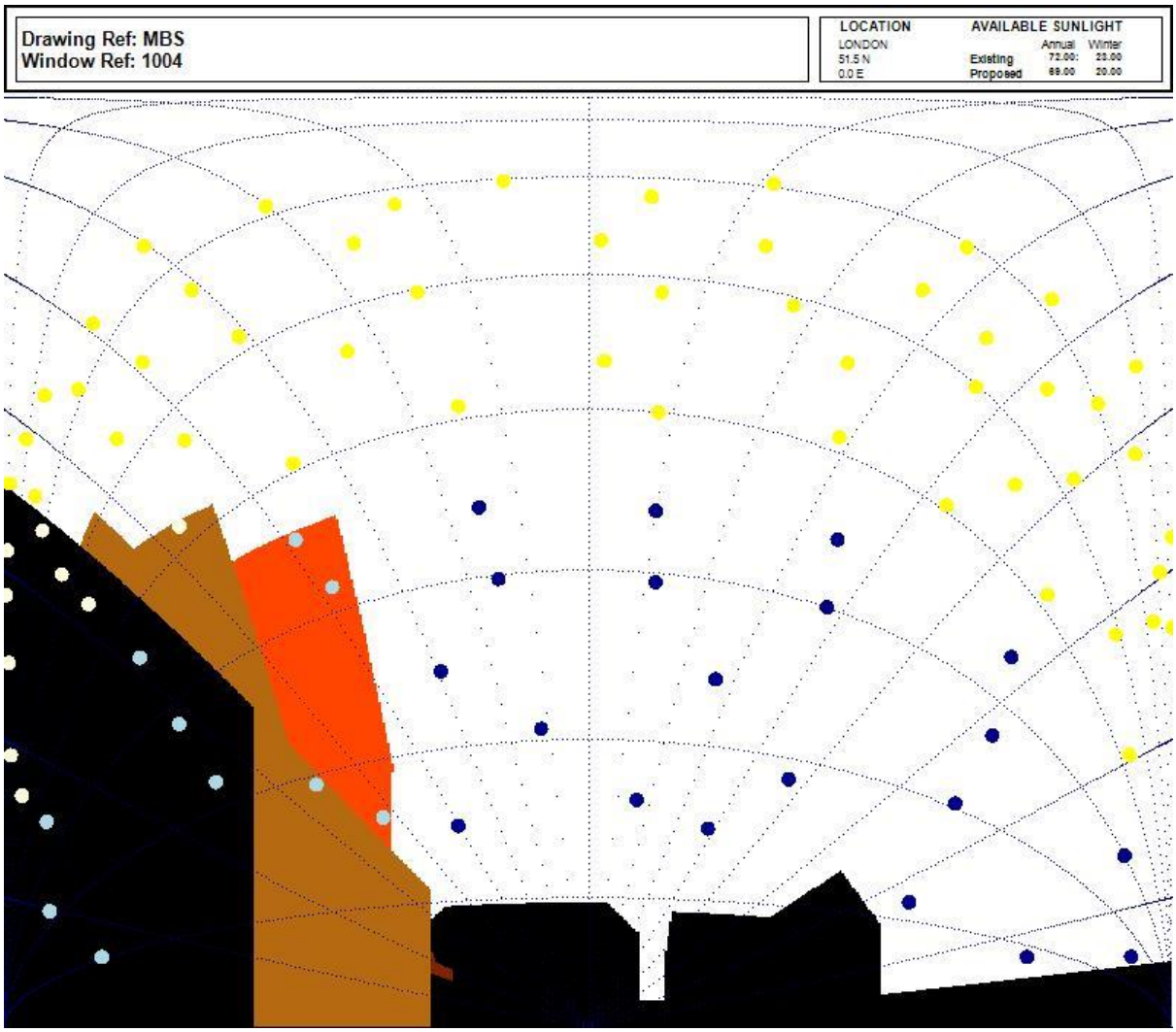


The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).
The blue dot represent the available sunlight during the winter months (Winter).
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

S4 - 75 Compayne Gardens -South Elevation- 1F

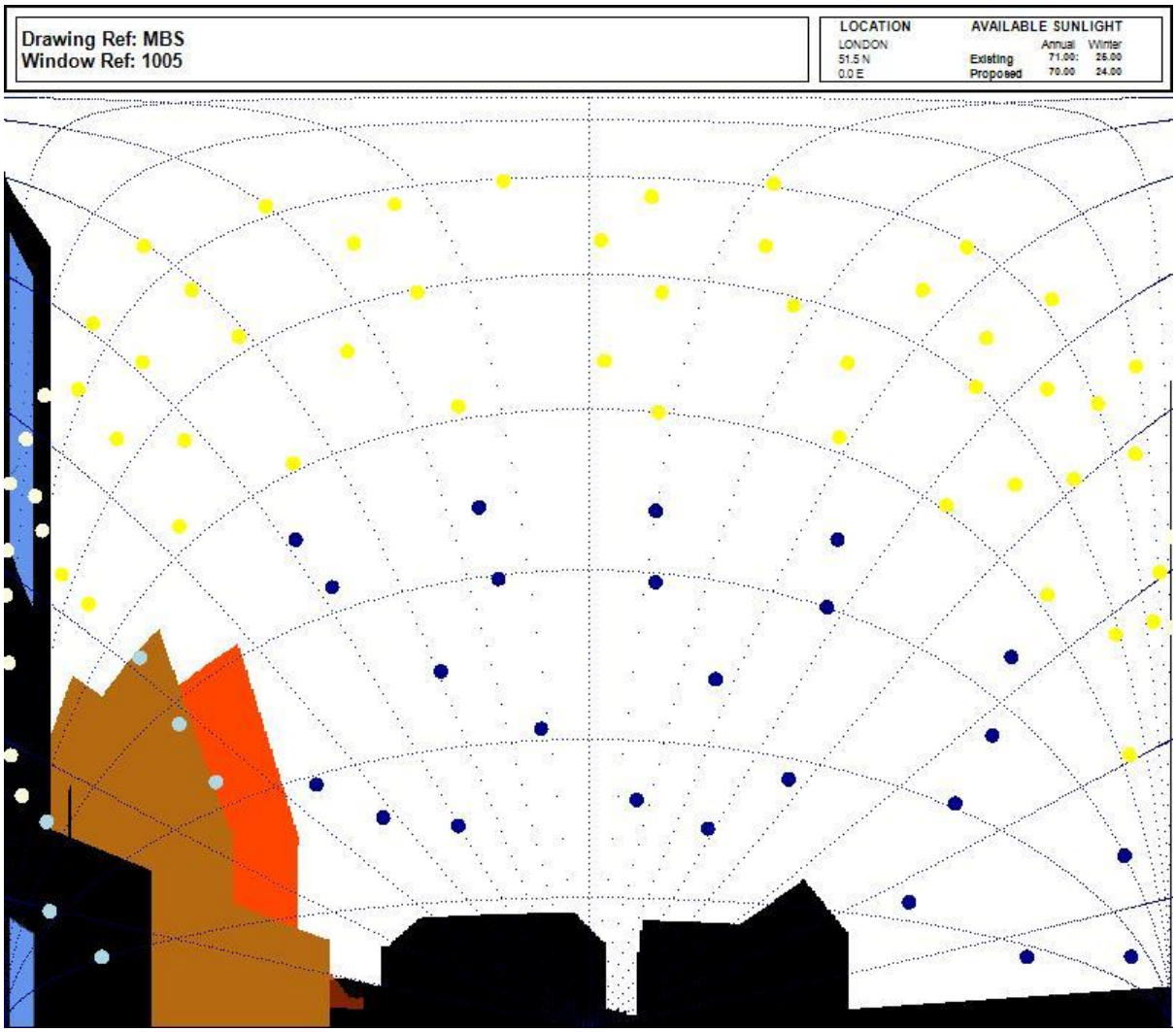


The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).
The blue dot represent the available sunlight during the winter months (Winter).
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

S5 - 75 Compayne Gardens -South Elevation- 1F

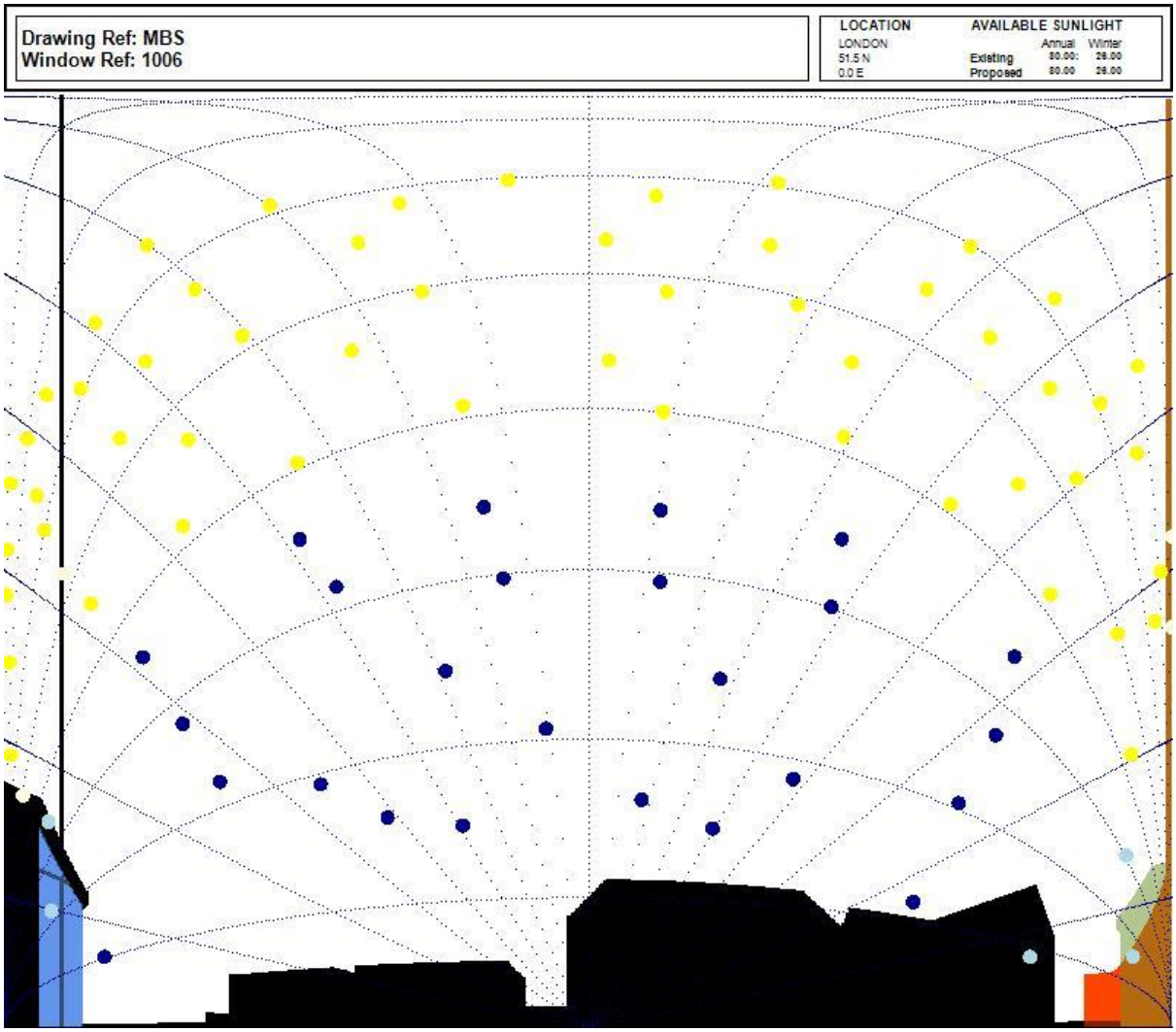


The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).
The blue dot represent the available sunlight during the winter months (Winter).
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

S6 – 11 Highfield Mews -South Elevation- 1F

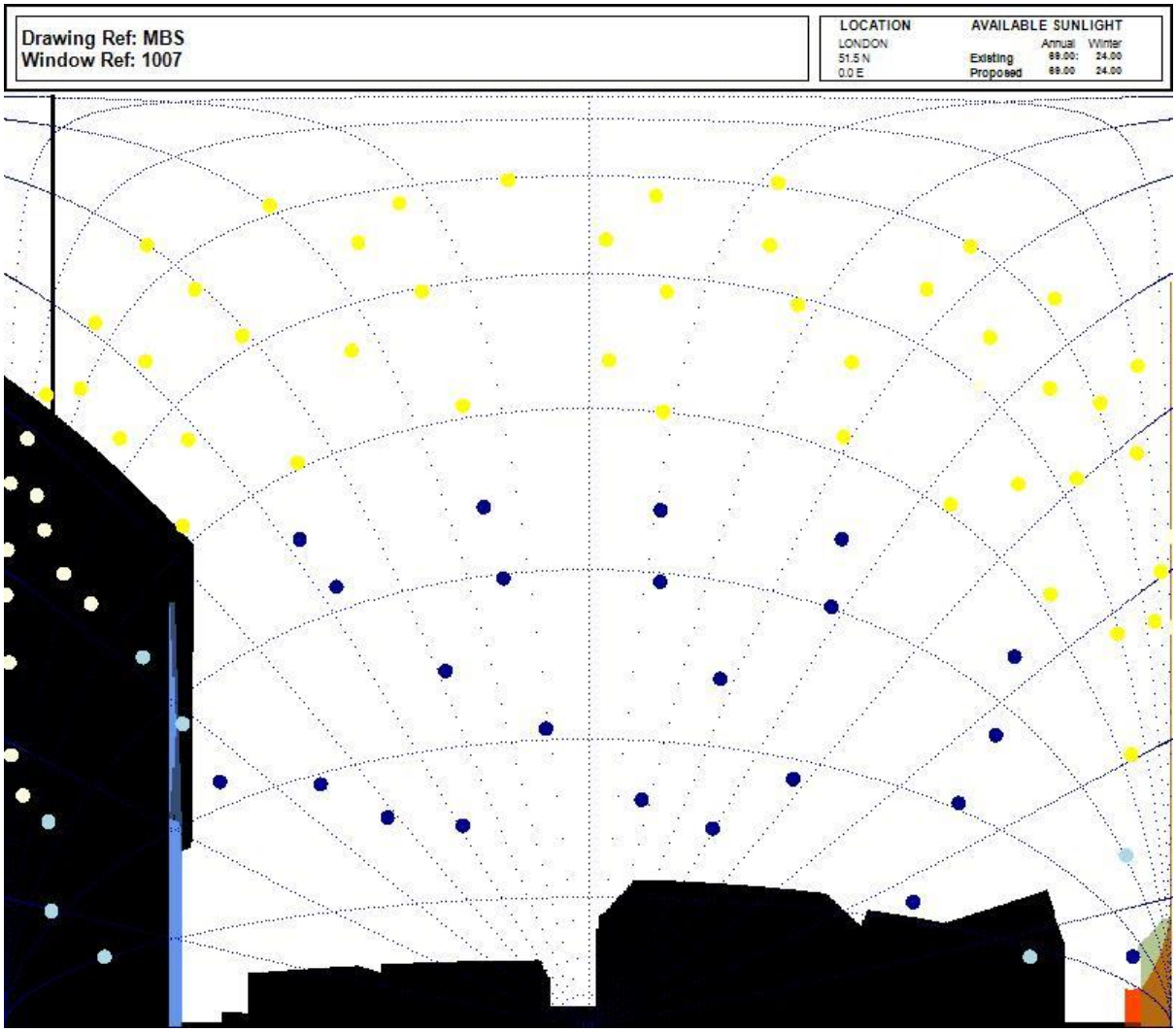


The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).
The blue dot represent the available sunlight during the winter months (Winter).
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

S7 - 11 Highfield Mews -South Elevation- 1F

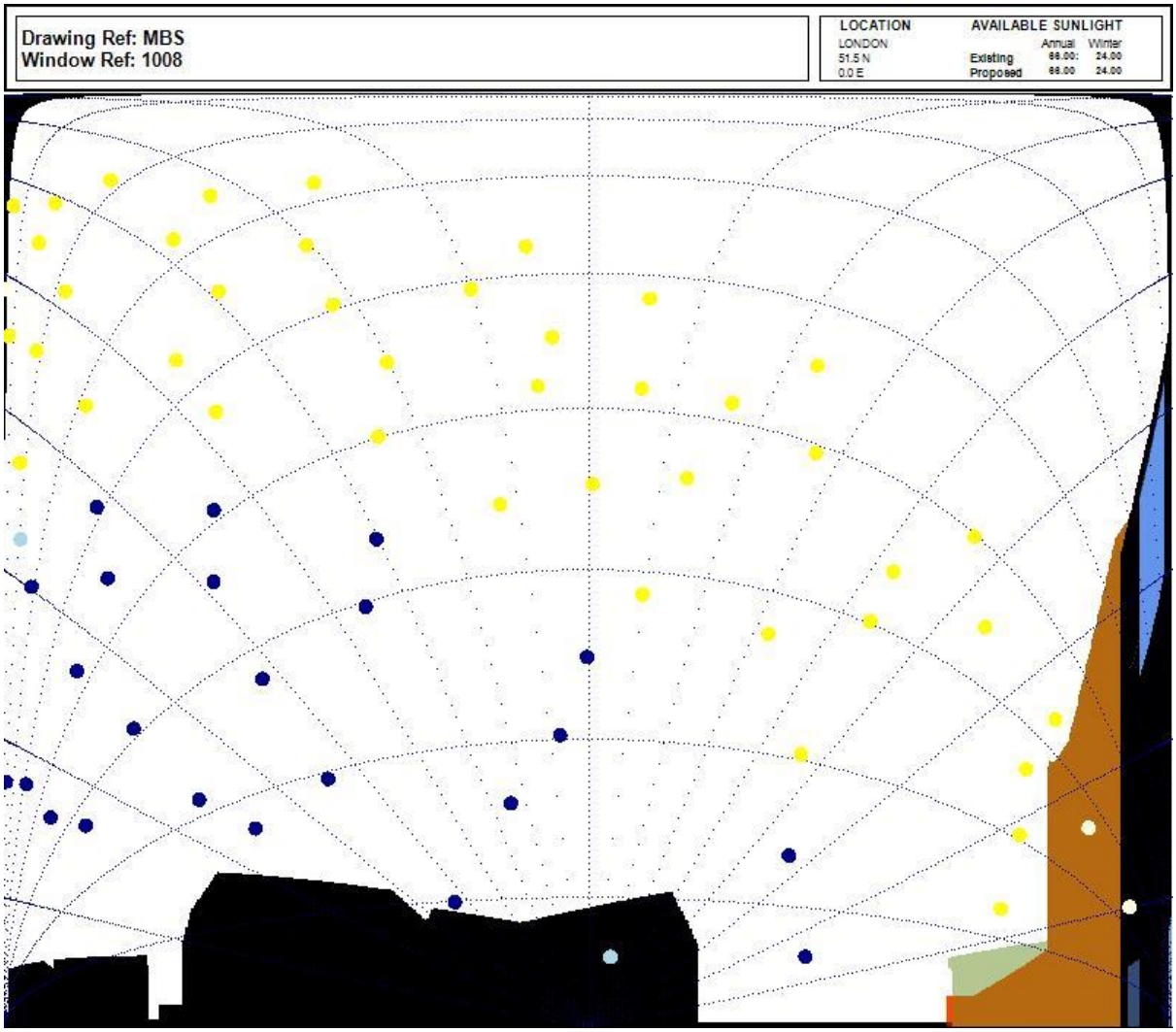


The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).
The blue dot represent the available sunlight during the winter months (Winter).
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

S8 - 11 Highfield Mews -West Elevation- 1F



The green contour represents the existing building.
The orange contour represents the proposed building.
The grey/black contour represents the surrounding buildings.

The yellow dot represents the available sunlight during the summer months (Summer).
The blue dot represent the available sunlight during the winter months (Winter).
The sum of the yellow and blue dots give the available sunlight for the whole year (Annual).

The white dot represents the sunlight blocked by buildings.

9.8. Overshadowing results and pictures (21st March)

<A1 - 1-9 Highfield Mews - Terrace>

The results are expressed as a percentage of area receiving direct sunlight on 21st March.

Existing:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Feb					0.00	0.00	0.00	0.00	9.30	12.90	9.40	0.50	0.00	0.00			
Mar				**0.00**	**13.50**	**3.20**	**0.00**	**0.00**	**27.40**	**35.70**	**33.10**	**18.30**	**0.60**	**0.00**	**0.00**		
Apr		0.00	21.10	70.40	52.90	36.50	27.30	35.10	55.40	56.60	47.30	32.20	11.10	0.00	0.00		
May		0.00	0.00	67.80	64.10	56.70	51.40	60.50	72.70	67.30	56.20	42.90	23.70	3.00	0.00	0.00	
Jun	0.00	0.00	8.30	60.30	68.80	62.30	58.50	65.60	75.30	71.10	60.50	48.10	31.40	6.00	0.00	0.00	0.00
Jul		0.00	0.00	63.10	66.00	58.10	52.00	59.40	71.00	69.20	58.40	45.70	28.00	6.70	0.00	0.00	
Aug			16.30	71.70	54.70	37.70	28.60	34.70	54.50	57.30	48.30	33.60	12.00	0.00	0.00	0.00	
Sep			0.00	2.50	14.10	1.20	0.00	5.80	34.20	35.60	30.30	13.40	0.00	0.00			
Oct				0.00	0.00	0.00	0.00	2.30	12.20	10.00	3.20	0.00	0.00				
Nov					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Dec						0.00	0.00	0.00	0.00	0.00	0.00	0.00					

Proposed:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Feb					0.00	0.00	0.00	0.00	0.00	3.20	3.30	0.50	0.00	0.00			
Mar				**0.00**	**13.50**	**3.20**	**0.00**	**0.00**	**12.80**	**22.60**	**26.60**	**18.20**	**0.60**	**0.00**	**0.00**		
Apr		0.00	21.10	70.40	52.90	36.50	27.30	33.20	48.50	50.90	45.40	32.20	11.10	0.00	0.00		
May		0.00	0.00	67.80	64.10	56.70	51.40	59.20	69.90	65.20	55.50	42.90	23.70	3.00	0.00	0.00	
Jun	0.00	0.00	8.30	60.30	68.80	62.30	58.50	65.10	73.90	70.00	60.30	48.10	31.40	6.00	0.00	0.00	0.00
Jul		0.00	0.00	63.10	66.00	58.10	52.00	58.40	68.40	67.00	57.50	45.70	28.00	6.70	0.00	0.00	
Aug			16.30	71.70	54.70	37.70	28.60	33.20	47.90	51.50	46.20	33.60	12.00	0.00	0.00	0.00	
Sep			0.00	2.50	14.10	1.20	0.00	2.30	19.40	24.40	26.40	13.40	0.00	0.00			
Oct				0.00	0.00	0.00	0.00	0.00	2.30	3.00	1.60	0.00	0.00				
Nov					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Dec						0.00	0.00	0.00	0.00	0.00	0.00	0.00					

Overshadowing assessment % of the amenity area receiving direct sunlight on 21st March		
Existing	Proposed	Ratio
10.98	8.13	0.74

The results are expressed as a percentage of area receiving direct sunlight on 21st June.

Existing:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Feb					0.00	0.00	0.00	0.00	9.30	12.90	9.40	0.50	0.00	0.00			
Mar				0.00	13.50	3.20	0.00	0.00	27.40	35.70	33.10	18.30	0.60	0.00	0.00		
Apr		0.00	21.10	70.40	52.90	36.50	27.30	35.10	55.40	56.60	47.30	32.20	11.10	0.00	0.00		
May		0.00	0.00	67.80	64.10	56.70	51.40	60.50	72.70	67.30	56.20	42.90	23.70	3.00	0.00	0.00	
Jun	**0.00**	**0.00**	**8.30**	**60.30**	**68.80**	**62.30**	**58.50**	**65.60**	**75.30**	**71.10**	**60.50**	**48.10**	**31.40**	**6.00**	**0.00**	**0.00**	**0.00**
Jul		0.00	0.00	63.10	66.00	58.10	52.00	59.40	71.00	69.20	58.40	45.70	28.00	6.70	0.00	0.00	
Aug			16.30	71.70	54.70	37.70	28.60	34.70	54.50	57.30	48.30	33.60	12.00	0.00	0.00	0.00	
Sep			0.00	2.50	14.10	1.20	0.00	5.80	34.20	35.60	30.30	13.40	0.00	0.00			
Oct				0.00	0.00	0.00	0.00	2.30	12.20	10.00	3.20	0.00	0.00				
Nov					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Dec						0.00	0.00	0.00	0.00	0.00	0.00	0.00					

Proposed:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Feb					0.00	0.00	0.00	0.00	0.00	3.20	3.30	0.50	0.00	0.00			
Mar				0.00	13.50	3.20	0.00	0.00	12.80	22.60	26.60	18.20	0.60	0.00	0.00		
Apr		0.00	21.10	70.40	52.90	36.50	27.30	33.20	48.50	50.90	45.40	32.20	11.10	0.00	0.00		
May		0.00	0.00	67.80	64.10	56.70	51.40	59.20	69.90	65.20	55.50	42.90	23.70	3.00	0.00	0.00	
Jun	**0.00**	**0.00**	**8.30**	**60.30**	**68.80**	**62.30**	**58.50**	**65.10**	**73.90**	**70.00**	**60.30**	**48.10**	**31.40**	**6.00**	**0.00**	**0.00**	**0.00**
Jul		0.00	0.00	63.10	66.00	58.10	52.00	58.40	68.40	67.00	57.50	45.70	28.00	6.70	0.00	0.00	
Aug			16.30	71.70	54.70	37.70	28.60	33.20	47.90	51.50	46.20	33.60	12.00	0.00	0.00	0.00	
Sep			0.00	2.50	14.10	1.20	0.00	2.30	19.40	24.40	26.40	13.40	0.00	0.00			
Oct				0.00	0.00	0.00	0.00	0.00	2.30	3.00	1.60	0.00	0.00				
Nov					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Dec						0.00	0.00	0.00	0.00	0.00	0.00	0.00					

Overshadowing assessment % of the amenity area receiving direct sunlight on 21st March		
Existing	Proposed	Ratio
36.25	36.06	0.99

<A2 - 11 Highfield Mews - Garden>

The results are expressed as a percentage of area receiving direct sunlight on 21st March.

Existing:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	3.50	16.20	23.00	19.60	8.40	0.00	0.00				
Feb					0.00	18.10	33.90	43.20	49.50	46.90	38.70	25.90	0.00	0.00			
Mar				**0.00**	**31.20**	**47.10**	**55.70**	**61.80**	**66.80**	**63.50**	**57.20**	**48.90**	**35.10**	**1.40**	**0.00**		
Apr		0.00	0.00	45.50	58.80	65.50	70.20	74.40	78.70	74.40	69.60	64.20	56.60	41.60	0.00		
May		0.00	40.30	63.10	70.20	74.10	77.40	80.80	84.60	80.40	76.50	72.50	67.80	59.50	33.30	0.00	
Jun	0.00	0.50	46.70	65.70	73.50	76.60	79.50	82.60	86.20	82.80	79.20	75.70	71.80	64.90	45.70	1.00	0.00
Jul		0.00	35.70	60.90	69.80	73.80	77.10	80.40	84.20	81.30	77.40	73.50	69.00	62.40	39.90	0.00	
Aug			0.00	44.60	58.50	65.30	70.10	74.30	78.50	74.90	70.10	64.80	57.50	43.60	0.00	0.00	
Sep			0.00	3.60	37.20	50.10	57.80	63.40	67.90	62.20	55.60	46.40	30.00	0.00			
Oct				0.00	4.80	25.60	37.80	45.50	49.00	42.00	31.70	14.90	0.00				
Nov					0.00	0.00	8.10	18.40	22.10	14.40	0.30	0.00					
Dec						0.00	0.00	1.30	6.10	0.00	0.00	0.00					

Proposed:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	3.50	16.20	23.00	19.60	8.40	0.00	0.00				
Feb					0.00	18.10	33.90	43.20	49.50	46.90	38.70	25.90	0.00	0.00			
Mar				**0.00**	**31.20**	**47.10**	**55.70**	**61.80**	**66.80**	**63.50**	**57.20**	**48.90**	**35.10**	**1.40**	**0.00**		
Apr		0.00	0.00	45.50	58.80	65.50	70.20	74.40	78.70	74.40	69.60	64.20	56.60	41.60	0.00		
May		0.00	40.30	63.10	70.20	74.10	77.40	80.80	84.60	80.40	76.50	72.50	67.80	59.50	33.30	0.00	
Jun	0.00	0.50	46.70	65.70	73.50	76.60	79.50	82.60	86.20	82.80	79.20	75.70	71.80	64.90	45.70	1.60	0.00
Jul		0.00	35.70	60.90	69.80	73.80	77.10	80.40	84.20	81.30	77.40	73.50	69.00	62.40	39.90	0.00	
Aug			0.00	44.60	58.50	65.30	70.10	74.30	78.50	74.90	70.10	64.80	57.50	43.60	0.00	0.00	
Sep			0.00	3.60	37.20	50.10	57.80	63.40	67.90	62.20	55.60	46.40	30.00	0.00			
Oct				0.00	4.80	25.60	37.80	45.50	49.00	42.00	31.70	14.90	0.00				
Nov					0.00	0.00	8.10	18.40	22.10	14.40	0.30	0.00					
Dec						0.00	0.00	1.30	6.10	0.00	0.00	0.00					

Overshadowing assessment % of the amenity area receiving direct sunlight on 21st March		
Existing	Proposed	Ratio
39.06	39.06	1.00

<A3 - 6 Cleve Road - Garden>

The results are expressed as a percentage of area receiving direct sunlight on 21st March.

Existing:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	17.70	25.00	13.80	0.00	0.00	0.00	0.00				
Feb					0.00	29.30	43.50	46.00	47.30	41.40	33.00	25.40	0.00	0.00			
Mar				**0.00**	**36.30**	**51.80**	**57.60**	**62.30**	**67.60**	**65.90**	**61.30**	**55.40**	**47.60**	**5.90**	**0.00**		
Apr		0.00	10.10	44.40	58.70	65.50	69.60	74.40	79.50	77.00	73.30	68.90	62.40	48.00	8.50		
May		0.00	40.10	59.10	68.40	72.70	76.10	80.50	85.20	82.40	79.40	76.10	72.00	63.10	36.80	0.00	
Jun	0.00	15.50	44.20	61.70	71.10	74.90	78.00	82.20	86.60	84.50	81.80	78.90	75.50	67.70	48.40	15.30	0.00
Jul		0.00	37.00	56.60	67.80	72.40	75.80	80.00	84.60	83.00	80.10	76.90	73.00	65.80	42.10	4.30	
Aug			6.70	43.80	58.20	65.40	69.50	74.20	79.30	77.30	73.70	69.40	63.20	51.00	13.60	0.00	
Sep			0.00	16.00	40.70	54.30	58.90	64.00	68.70	65.20	60.20	53.90	43.00	0.70			
Oct				0.00	15.40	37.20	43.90	45.50	44.20	35.50	26.40	17.20	0.00				
Nov					0.00	1.40	24.40	20.30	6.80	0.00	0.00	0.00					
Dec						0.00	0.90	14.20	7.60	0.00	0.00	0.00					

Proposed:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	17.70	25.00	13.80	0.00	0.00	0.00	0.00				
Feb					0.00	29.30	43.50	46.00	47.30	41.40	33.00	25.40	0.00	0.00			
Mar				**0.00**	**36.30**	**51.80**	**57.60**	**62.30**	**67.60**	**65.90**	**61.30**	**55.40**	**47.60**	**5.90**	**0.00**		
Apr		0.00	10.10	44.40	58.70	65.50	69.60	74.40	79.50	77.00	73.30	68.90	62.40	48.00	8.50		
May		0.00	40.10	59.10	68.40	72.70	76.10	80.50	85.20	82.40	79.40	76.10	72.00	63.10	36.80	0.00	
Jun	0.00	15.50	44.20	61.70	71.10	74.90	78.00	82.20	86.60	84.50	81.80	78.90	75.50	67.70	48.40	15.30	0.00
Jul		0.00	37.00	56.60	67.80	72.40	75.80	80.00	84.60	83.00	80.10	76.90	73.00	65.80	42.10	4.30	
Aug			6.70	43.80	58.20	65.40	69.50	74.20	79.30	77.30	73.70	69.40	63.20	51.00	13.60	0.00	
Sep			0.00	16.00	40.70	54.30	58.90	64.00	68.70	65.20	60.20	53.90	43.00	0.70			
Oct				0.00	15.40	37.20	43.90	45.50	44.20	35.50	26.40	17.20	0.00				
Nov					0.00	1.40	24.40	20.30	6.80	0.00	0.00	0.00					
Dec						0.00	0.90	14.20	7.60	0.00	0.00	0.00					

Overshadowing assessment % of the amenity area receiving direct sunlight on 21st March		
Existing	Proposed	Ratio
42.64	42.64	1.00

<A4 - 8 Cleve Road - Garden>

The results are expressed as a percentage of area receiving direct sunlight on 21st March.

Existing:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	0.70	0.00	9.80	14.50	0.00	0.00	0.00				
Feb					0.00	23.00	28.40	35.40	47.60	48.50	43.50	12.40	0.00	0.00			
Mar				**0.00**	**41.50**	**51.10**	**58.90**	**63.70**	**73.20**	**68.90**	**65.40**	**56.70**	**11.10**	**9.70**	**0.00**		
Apr		0.00	12.50	50.80	63.00	69.00	73.90	77.80	85.30	79.30	74.80	69.00	50.20	33.20	9.60		
May		0.80	44.10	62.50	70.30	75.00	79.00	83.60	89.40	84.10	79.50	74.40	67.00	50.60	38.60	0.00	
Jun	0.00	16.70	48.20	64.50	72.30	76.70	80.40	84.80	90.40	86.30	81.50	76.80	71.40	58.30	46.70	20.80	0.00
Jul		0.00	40.50	60.40	69.70	74.50	78.60	82.60	88.80	85.30	80.30	75.50	69.70	53.90	41.70	7.20	
Aug			8.90	49.90	62.70	68.70	73.80	77.40	85.00	79.90	75.20	69.60	52.50	33.60	14.20	0.00	
Sep			0.00	20.10	44.30	54.00	60.80	65.20	75.00	68.10	64.60	45.60	12.80	2.00			
Oct				0.00	15.70	23.40	30.10	36.50	51.90	44.50	33.20	0.00	0.00				
Nov					0.00	3.10	0.00	0.00	20.80	6.70	0.00	0.00					
Dec						0.00	0.00	0.00	13.70	5.20	0.00	0.00					

Proposed:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						0.00	0.70	0.00	9.80	14.50	0.00	0.00	0.00				
Feb					0.00	23.00	28.40	35.40	47.60	48.50	43.50	12.40	0.00	0.00			
Mar				**0.00**	**41.50**	**51.10**	**58.90**	**63.70**	**73.20**	**68.90**	**65.40**	**56.70**	**11.10**	**9.70**	**0.00**		
Apr		0.00	12.50	50.80	63.00	69.00	73.90	77.80	85.30	79.30	74.80	69.00	50.20	33.20	9.60		
May		0.80	44.10	62.50	70.30	75.00	79.00	83.60	89.40	84.10	79.50	74.40	67.00	50.60	38.60	0.00	
Jun	0.00	16.70	48.20	64.50	72.30	76.70	80.40	84.80	90.40	86.30	81.50	76.80	71.40	58.30	46.70	20.80	0.00
Jul		0.00	40.50	60.40	69.70	74.50	78.60	82.60	88.80	85.30	80.30	75.50	69.70	53.90	41.70	7.20	
Aug			8.90	49.90	62.70	68.70	73.80	77.40	85.00	79.90	75.20	69.60	52.50	33.60	14.20	0.00	
Sep			0.00	20.10	44.30	54.00	60.80	65.20	75.00	68.10	64.60	45.60	12.80	2.00			
Oct				0.00	15.70	23.40	30.10	36.50	51.90	44.50	33.20	0.00	0.00				
Nov					0.00	3.10	0.00	0.00	20.80	6.70	0.00	0.00					
Dec						0.00	0.00	0.00	13.70	5.20	0.00	0.00					

Overshadowing assessment % of the amenity area receiving direct sunlight on 21st March		
Existing	Proposed	Ratio
41.68	41.68	1.00

<A5 - 75 Compayne Gardens - Garden>

The results are expressed as a percentage of area receiving direct sunlight on 21st March.

Existing:

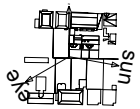
Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						11.00	46.30	63.80	75.10	71.30	44.50	21.90	0.00				
Feb					0.00	39.70	62.20	74.10	83.10	81.10	72.70	57.20	32.40	0.00			
Mar				**0.30**	**32.10**	**57.60**	**73.90**	**82.20**	**89.20**	**86.40**	**80.30**	**72.20**	**58.60**	**24.70**	**0.00**		
Apr		0.00	4.60	33.30	56.60	72.80	81.90	87.90	93.50	89.70	85.10	79.50	71.60	57.50	14.00		
May		0.00	19.90	48.20	68.40	79.20	85.40	90.60	95.40	91.80	87.90	83.60	78.00	69.30	42.10	0.00	
Jun	0.00	0.00	21.60	51.30	70.50	80.40	86.10	91.00	95.60	92.80	89.20	85.30	80.50	72.50	48.70	16.50	0.00
Jul		0.00	16.10	44.10	66.30	78.00	84.70	89.90	94.70	92.40	88.70	84.40	79.20	71.70	47.70	7.00	
Aug			3.20	32.20	55.50	72.20	81.60	87.60	93.20	90.10	85.50	80.10	72.40	59.20	20.20	0.00	
Sep			0.00	11.10	38.70	63.10	76.60	84.20	90.40	85.00	78.60	69.60	53.50	6.10			
Oct				0.00	19.90	51.90	68.40	78.40	84.30	76.80	65.10	47.10	0.00				
Nov					0.00	28.20	54.00	68.20	76.50	66.10	16.90	11.10					
Dec						1.10	35.50	52.00	70.10	62.40	3.10	2.60					

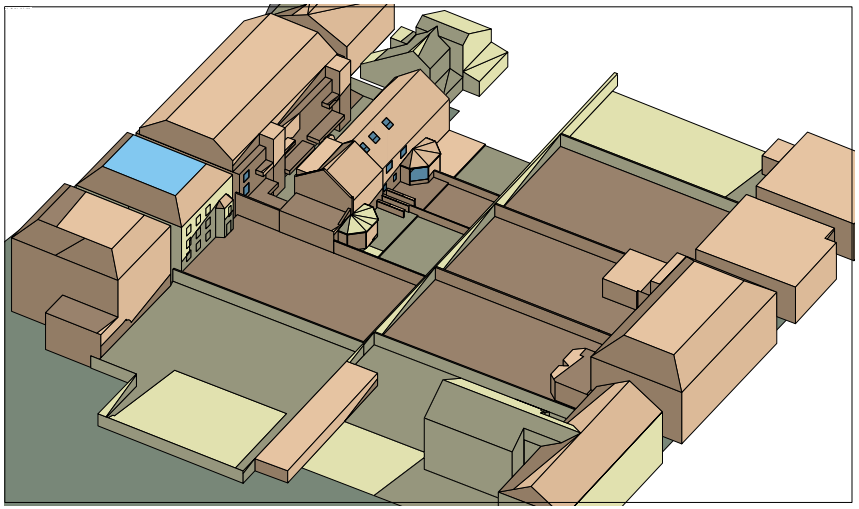
Proposed:

Month	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00
Jan						9.60	45.70	63.70	75.10	71.30	44.50	21.90	0.00				
Feb					0.00	37.10	59.50	73.40	83.10	81.10	72.70	57.20	32.40	0.00			
Mar				**0.30**	**31.30**	**53.30**	**70.00**	**81.00**	**89.20**	**86.40**	**80.30**	**72.20**	**58.60**	**24.70**	**0.00**		
Apr		0.00	5.10	33.20	54.00	69.50	79.40	87.50	93.50	89.70	85.10	79.50	71.60	57.50	14.00		
May		0.00	20.20	47.10	65.60	76.00	83.70	90.40	95.40	91.80	87.90	83.60	78.00	69.30	42.10	0.00	
Jun	0.00	0.00	21.70	49.90	67.60	77.30	84.50	90.80	95.60	92.80	89.20	85.30	80.50	72.50	48.70	16.50	0.00
Jul		0.00	16.30	43.40	63.70	74.80	82.70	89.50	94.70	92.40	88.70	84.40	79.20	71.70	47.70	7.00	
Aug			3.50	32.20	53.10	68.90	79.00	87.10	93.20	90.10	85.50	80.10	72.40	59.20	20.20	0.00	
Sep			0.00	11.30	36.90	58.70	73.40	83.50	90.40	85.00	78.60	69.60	53.50	6.10			
Oct				0.00	19.30	49.20	66.80	78.20	84.30	76.80	65.10	47.10	0.00				
Nov					0.00	27.00	53.70	68.20	76.50	66.10	16.90	11.10					
Dec						1.00	34.90	51.90	70.10	62.40	3.10	2.60					

Overshadowing assessment % of the amenity area receiving direct sunlight on 21st March		
Existing	Proposed	Ratio
54.79	53.94	0.98

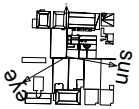
Suncast image:
View time = 21 Mar 07:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 100.38 alt = 7.63
Eye: azi = 240.00 alt = 40.00

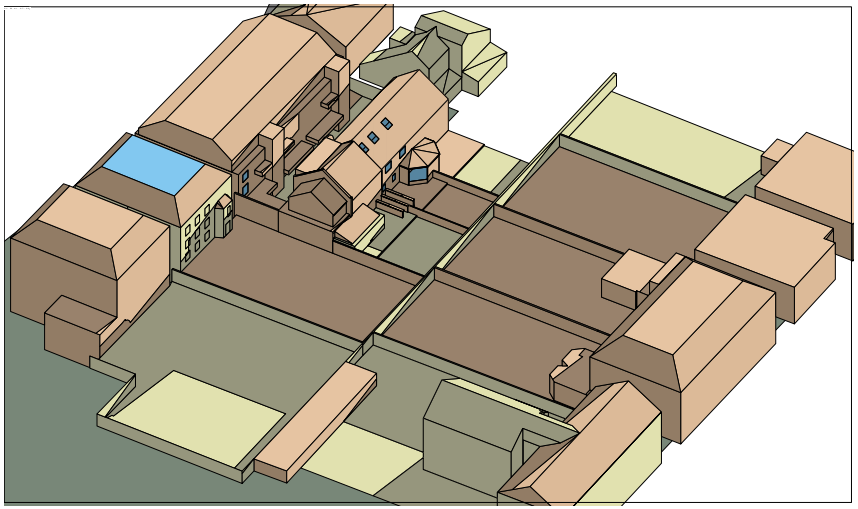




Existing

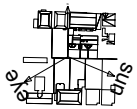
Suncast image:
View time = 21 Mar 07:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 100.38 alt = 7.63
Eye: azi = 240.00 alt = 40.00

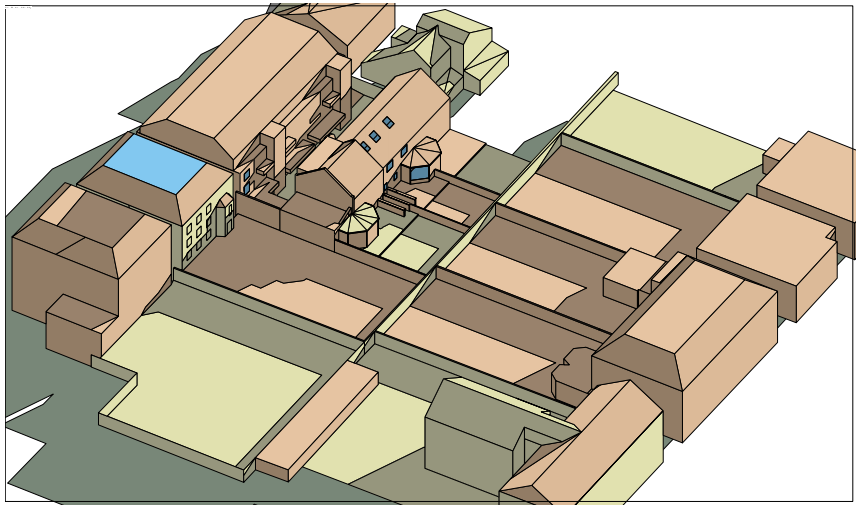




Proposed

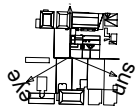
Suncast image:
View time = 21 Mar 08:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 112.72 alt = 16.56
Eye: azi = 240.00 alt = 40.00

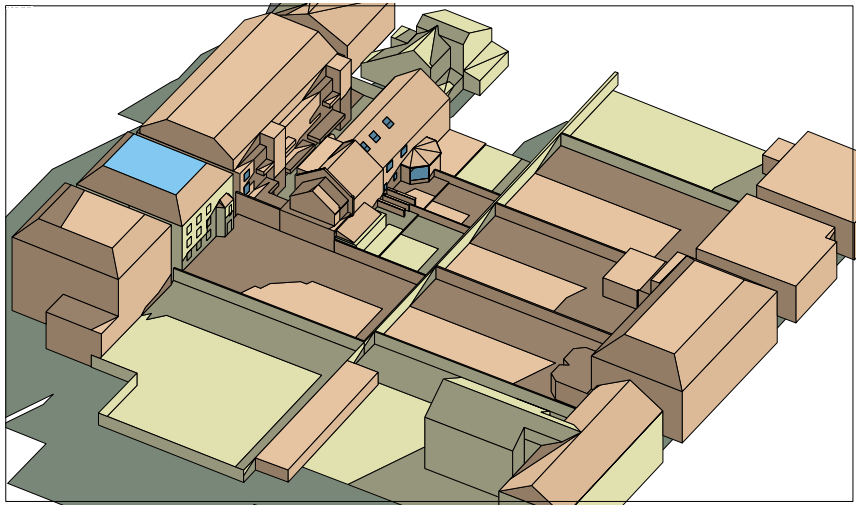




Existing

Suncast image:
View time = 21 Mar 08:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 112.72 alt = 16.56
Eye: azi = 240.00 alt = 40.00





Proposed

Suncast image:
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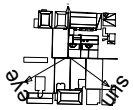
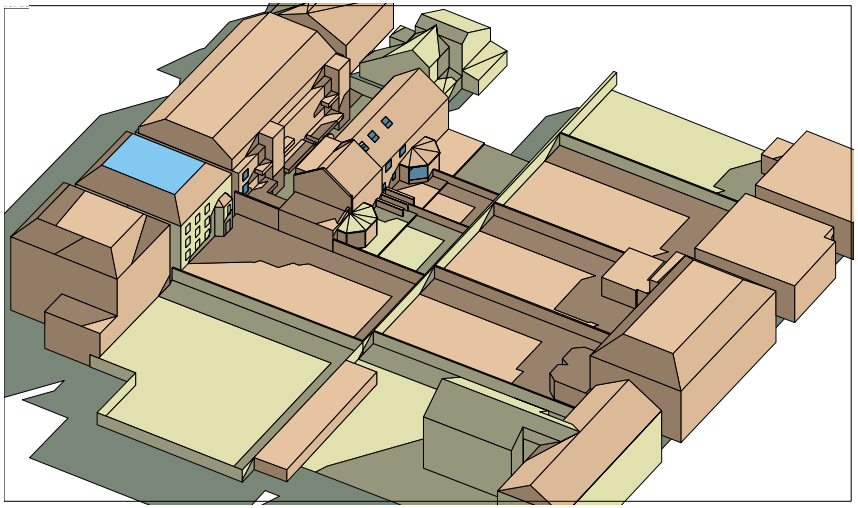
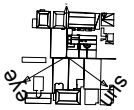
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 126.22 alt = 24.67
Eye: azi = 240.00 alt = 40.00

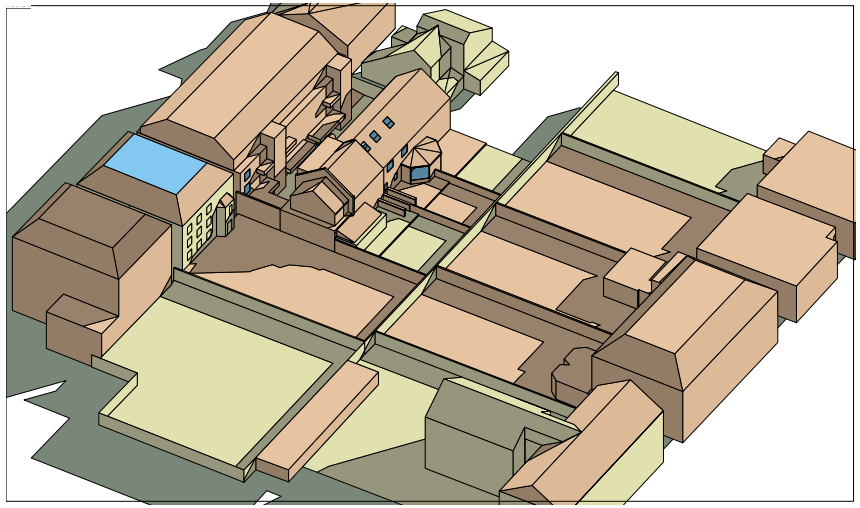




Existing

Suncast image:
View time = 21 Mar 09:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 126.22 alt = 24.67
Eye: azi = 240.00 alt = 40.00





Proposed

Suncast image:
View time = 21 Mar 10:00
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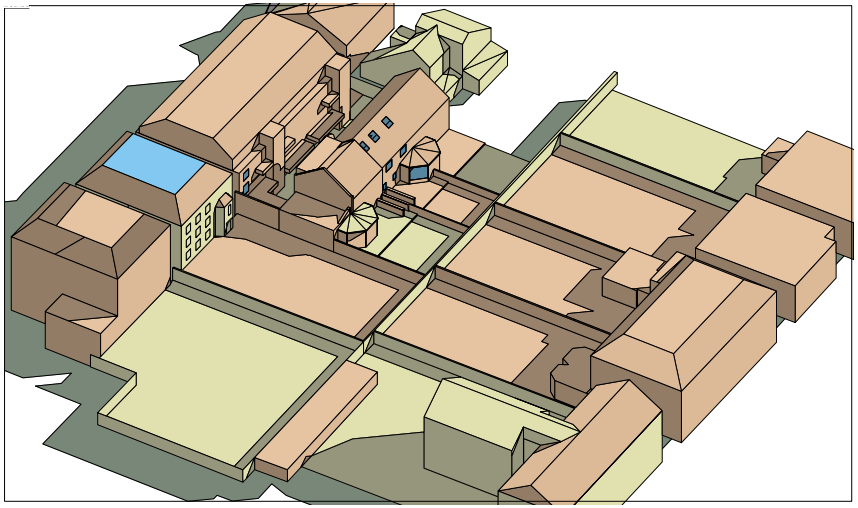
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 141.43 alt = 31.40
Eye: azi = 240.00 alt = 40.00



Existing

Suncast image:
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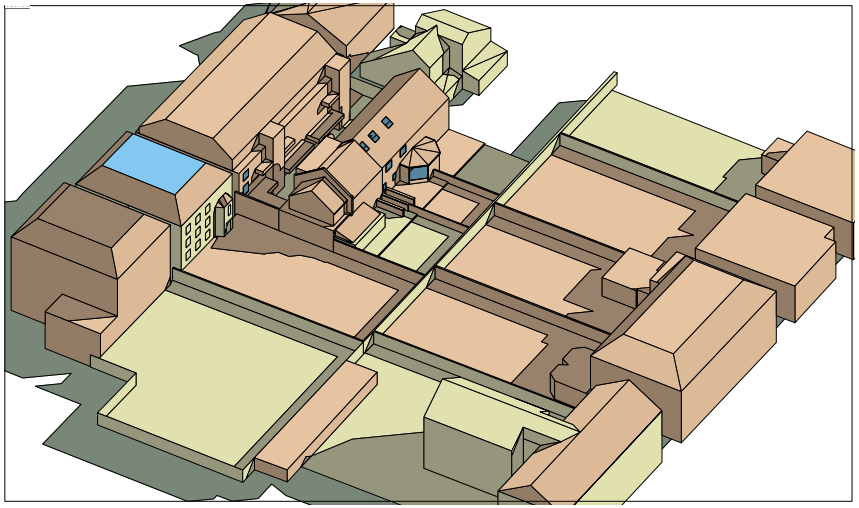
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 141.43 alt = 31.40
Eye: azi = 240.00 alt = 40.00



Proposed

Suncast image:
View time = 21 Mar 11:00
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Longitude diff. = -0.19
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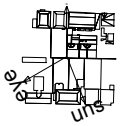
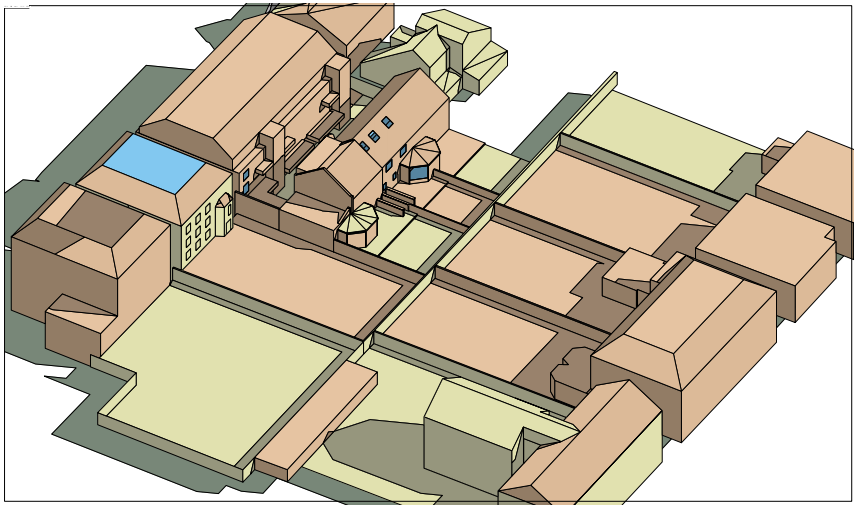
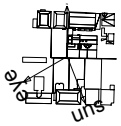
Eye: azi = 240.00 alt = 40.00

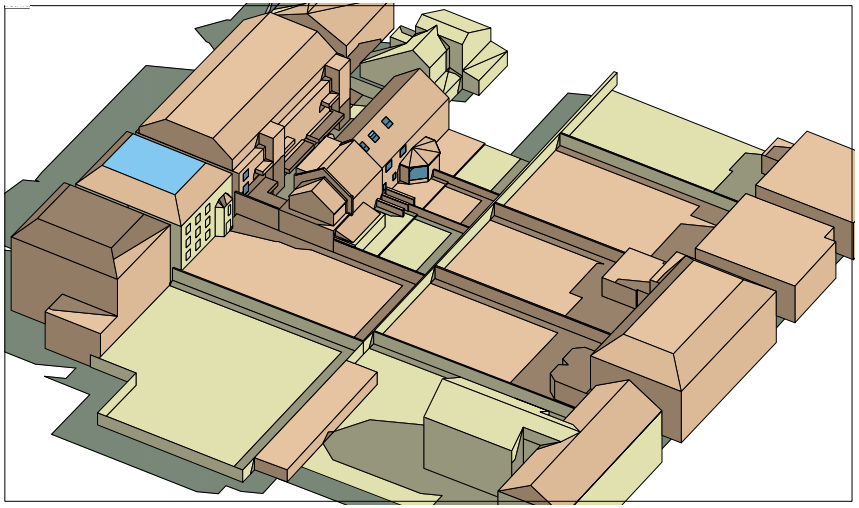




Existing

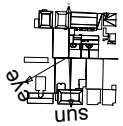
Suncast image:
View time = 21 Mar 11:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 158.61 alt = 36.06
Eye: azi = 240.00 alt = 40.00

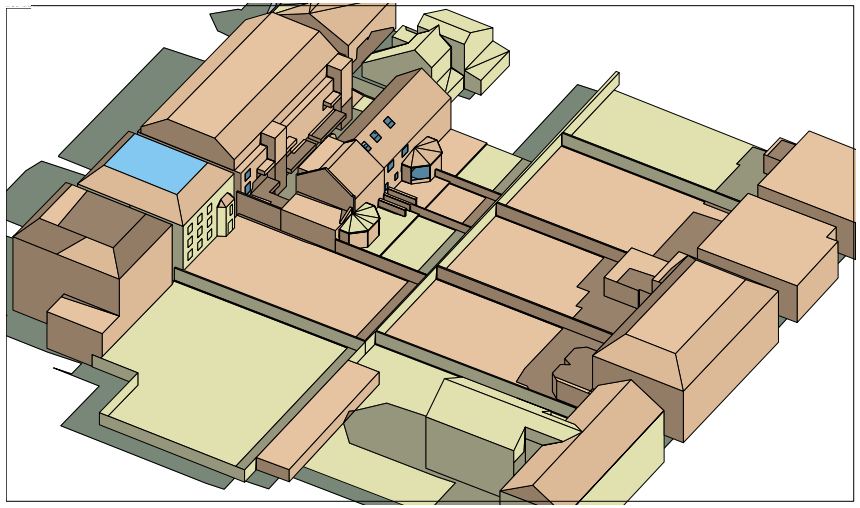




Proposed

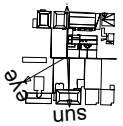
Suncast image:
View time = 21 Mar 12:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 177.27 alt = 38.02
Eye: azi = 240.00 alt = 40.00

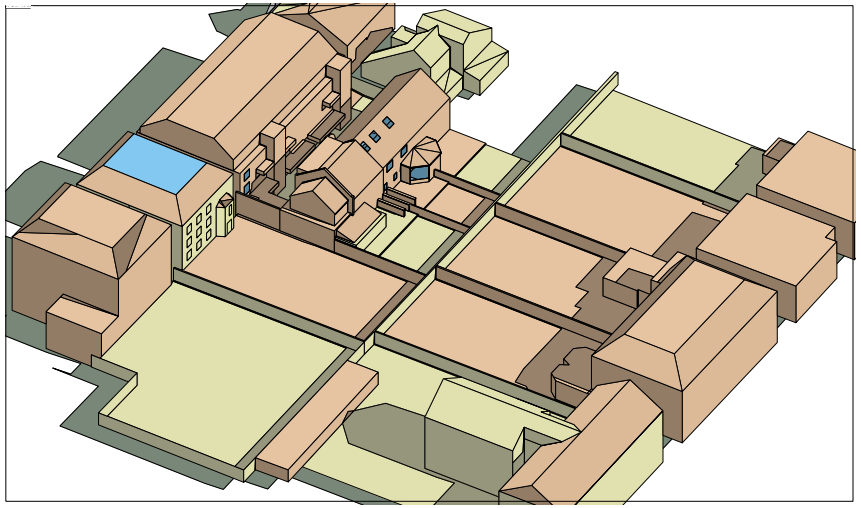




Existing

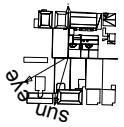
Suncast image:
View time = 21 Mar 12:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 177.27 alt = 38.02
Eye: azi = 240.00 alt = 40.00

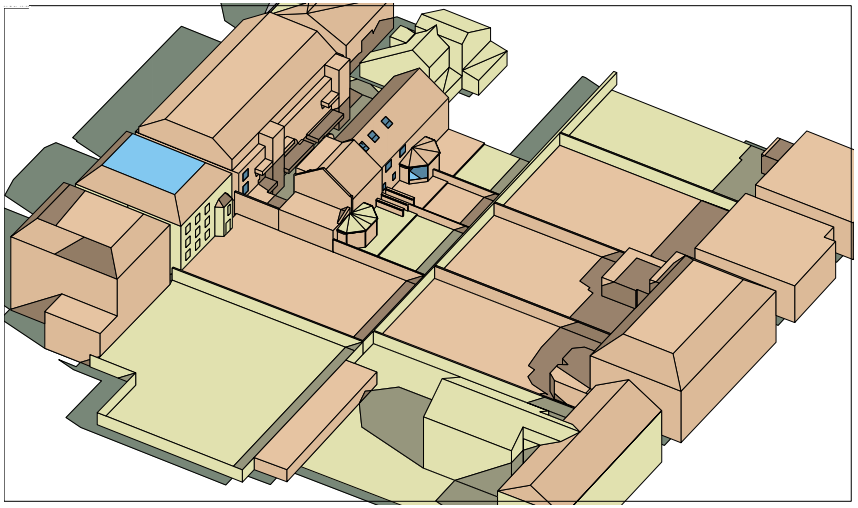




Proposed

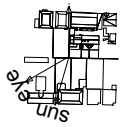
Suncast image:
View time = 21 Mar 13:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 196.15 alt = 36.92
Eye: azi = 240.00 alt = 40.00

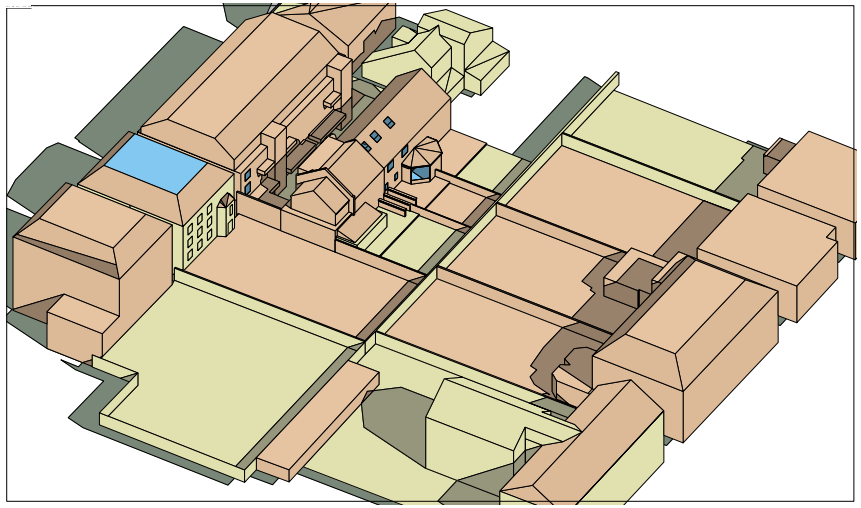




Existing

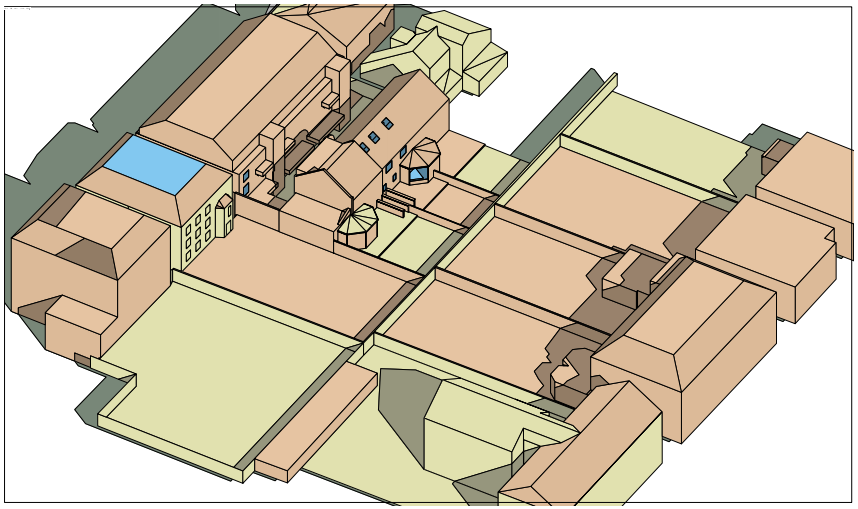
Suncast image:
View time = 21 Mar 13:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 196.15 alt = 36.92
Eye: azi = 240.00 alt = 40.00





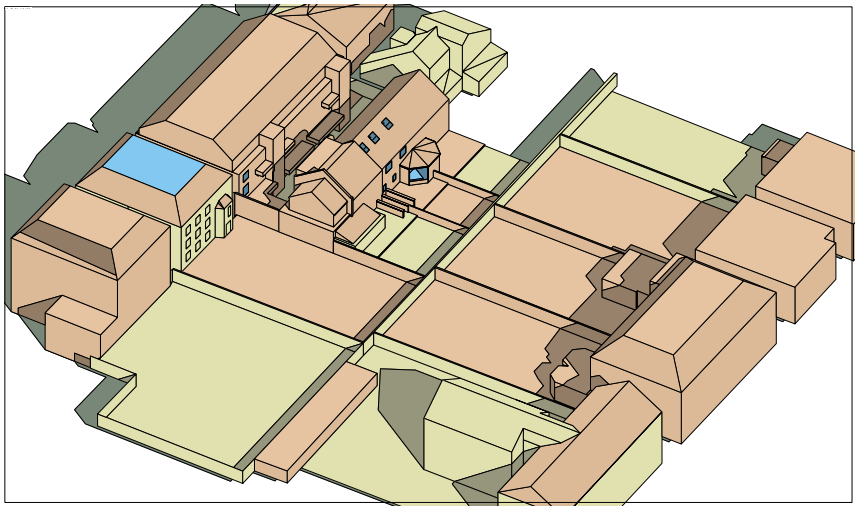
Proposed

Suncast image:
View time = 21 Mar 14:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 213.84 alt = 32.98
Eye: azi = 240.00 alt = 40.00



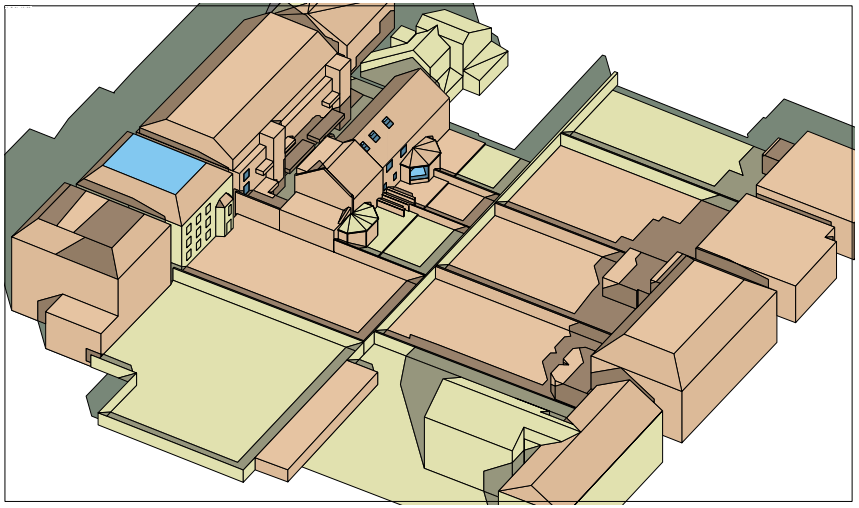
Existing

Suncast image:
View time = 21 Mar 14:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 213.84 alt = 32.98
Eye: azi = 240.00 alt = 40.00



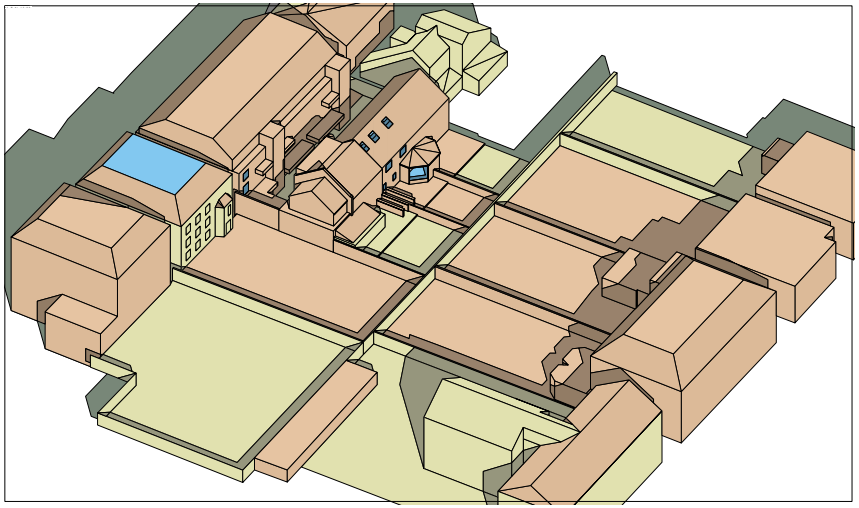
Proposed

Suncast image:
View time = 21 Mar 15:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 229.61 alt = 26.77
Eye: azi = 240.00 alt = 40.00



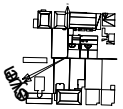
Existing

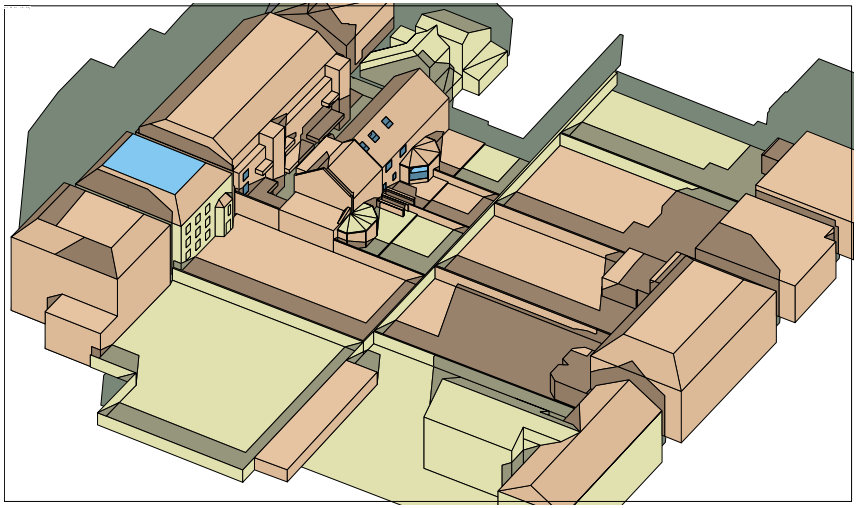
Suncast image:
View time = 21 Mar 15:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 229.61 alt = 26.77
Eye: azi = 240.00 alt = 40.00



Proposed

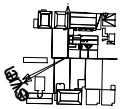
Suncast image:
View time = 21 Mar 16:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 243.55 alt = 18.99
Eye: azi = 240.00 alt = 40.00

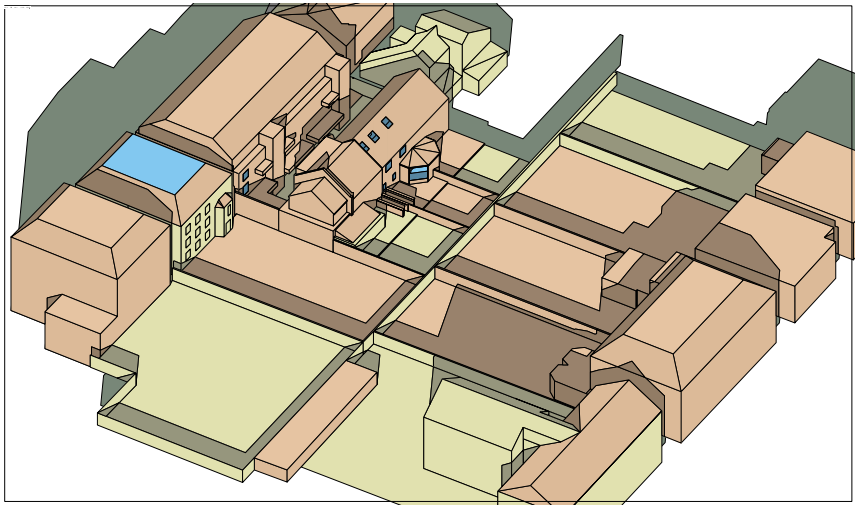




Existing

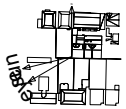
Suncast image:
View time = 21 Mar 16:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 243.55 alt = 18.99
Eye: azi = 240.00 alt = 40.00

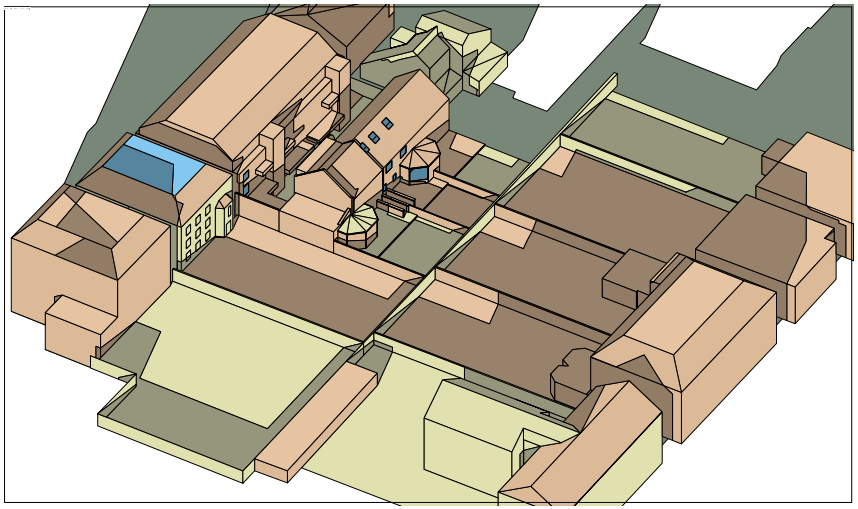




Proposed

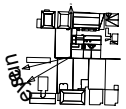
Suncast image:
View time = 21 Mar 17:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 256.16 alt = 10.24
Eye: azi = 240.00 alt = 40.00

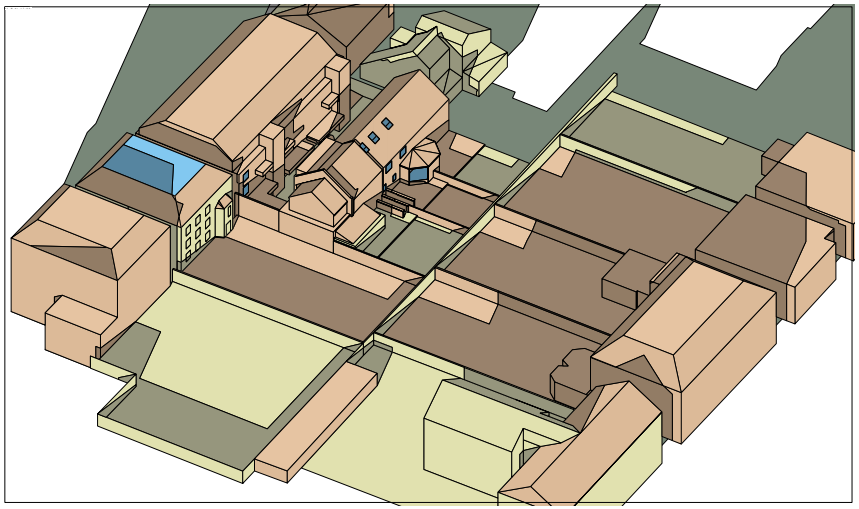




Existing

Suncast image:
View time = 21 Mar 17:00
Site Latitude = 51.54
Longitude diff. = -0.19
Model Bearing = 0.00
Sun: azi = 256.16 alt = 10.24
Eye: azi = 240.00 alt = 40.00





Proposed