79 CAMDEN ROAD
& 86-100 ST PANCRAS WAY

external sunlight & daylight report

November 2013

by GIA

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CLIENT:	Barratt Homes
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DOCUMENT REFERENCES:	6206-rol-bl-13-1028-aah(DaySunReport)) Principles of Daylight & Sunlight) Existing Drawings 6206/05-07 (Rel 03 Rev A)) Proposed Drawings: 6206/26-28 (Rel 15 Rev A) Tabulated Results: VSC, NSL and APSH
AUTHOR FOR AND ON BEHALF OF GIA:	Becky Leaman
AUTHORISATION FOR GIA :	.....

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1.0 INSTRUCTIONS

You have instructed this practice to provide you with a report in respect of Daylight and Sunlight for 79 Camden Road. This report is based on the information received from Sheppard Robson on 16th October 2013.

2.0 INTRODUCTION

DAYLIGHT AND SUNLIGHT

In considering the development potential and the quality of amenity for the surrounding properties once the scheme has been implemented, the analysis is based upon the Building Research Establishment (BRE) guidelines ***'Site Layout Planning for Daylight and Sunlight'*** which provides the criteria and methodology for calculation in connection with daylight and sunlight. This handbook is the primary authority for this matter and therefore it is not only this Practice, but also the Local Authority, who will be considering your application by reference to these guidelines.

The BRE guidelines provide two main methods of calculation for daylight. The first is known as the Vertical Sky Component (VSC) method which considers the potential for daylight by calculating the angle of vertical sky at the centre of each of the windows serving the residential buildings which look towards the site. This is a more simplistic approach and it could be considered as a "rule of thumb" to highlight whether there are any potential concerns to the amenity serving a particular property.

The second method is the No Sky Line or Daylight Distribution method.

This simply assesses the change in position of the No Sky Line between the existing and proposed situations. It does take into account the number and size of windows to a room, but still does not give any qualitative or quantitative assessment of the light in the room, only where sky can or cannot be seen.

The third method of calculation is the Average Daylight Factor (ADF). This is a more detailed and thus more accurate method which considers not only the amount of sky visibility on the vertical face of the window, but also the window size, room size and room use.

Where dimensions of the room to be assessed are available this is the best method of assessment, but even where they are not, it provides a very informative result.

It gives guidance as to the qualitative and quantitative change in daylight and is related to the British Standard BS 8206 Part II.

In relation to sunlight, the criteria given calculates the annual probable sunlight hours (APSH) which considers the amount of sun available in both the summer and winter for each given window which faces within 90° of due south. Summer is considered to be the six months between March 21st and September 21st and winter the remaining months.

3.0 SOURCES OF INFORMATION

GIA

Site Photographs

F!ND MAPS

OS Map

VERTEX

IR08

SHEPPARD ROBSON

IR30 -6206 -16.10.2013

4.0 ASSUMPTIONS

1. We have used site photographs and OS information to estimate as closely as possible the position of buildings and windows within their elevations.

2. We have not sought or obtained access to any of the adjoining properties and therefore have made reasonable assumptions as to the internal layouts of the rooms behind the fenestration. This is normal practice where access to adjoining properties is not available. Unless the building form dictates otherwise, we assume a standard 4.2m deep room (14ft) for residential properties and the 6m (20ft) deep from for commercial properties.

3. Floor levels have been assumed for adjoining properties, as access has not been obtained. This dictates the level of the working plane which is the point at which No Sky Line assessments are carried out.

5.0 THE SITE

The site is situated at 79 Camden Road, London. The existing buildings on and around the site, are more particularly shown upon our drawings 6206/05, 06 &07 contained within Appendix 2 of this report.

6.0 THE PROPOSAL

The proposal assessed in this report is shown on the architects sketch proposal plans listed above and depicted upon GIA drawings 6206/26, 27 & 28 contained in Appendix 2 of this report.

7.0 SURROUNDING PROPERTIES

We have quantitatively assessed the daylight and sunlight impact of the proposed development upon all of those residential properties within the vicinity of the site that have the potential to be materially affected in terms of daylight and sunlight.

Our analysis covers the following residential properties considered to be relevant:

ADDRESS	USE
1-40 ST PANCRAS WAY	RESIDENTIAL
16-30 WILMOT PLACE	RESIDENTIAL
104 ST PANCRAS WAY	RESIDENTIAL
189 ST PANCRAS WAY	RESIDENTIAL
15 WIMOT PLACE	RESIDENTIAL
26-28 ROCHESTER PLACE	RESIDENTIAL
2-12 ROCHESTER MEWS	RESIDENTIAL
81 – 83 CAMDEN ROAD	RESIDENTIAL
1-36 SOANE COURT	RESIDENTIAL
1-24 HOGARTH COURT	RESIDENTIAL

The location of each of these properties is illustrated on drawings contained in Appendix 2 of this report. Detailed results of the daylight and sunlight impact to each of the properties that are contained in the tables in Appendix 3 of this report. The analysis in daylight and sunlight terms has been carried out in accordance with the methodology defined by the BRE Guidelines.

In order to provide a comprehensive assessment of this development proposal, we have commented upon each of the surrounding properties in the paragraphs below. Where a technical assessment was necessary the results generated are considered in this report. We summarise the impact to the properties assessed below:

1-40 ST. PANCRAS WAY (BERNARD SHAW COURT)

Daylight

Of the 120 windows considered relevant for daylight VSC analysis (excluding the stair and landing windows), 55 windows achieve the BRE recommended VSC levels. There are impacts to the VSC levels of the remaining 65 windows beyond that recommended by the BRE.

Of these 65 windows, the majority of windows (72%) retain good levels of light between 20-27% VSC.

Furthermore, of the 65 windows, 26 windows experience a loss just over the recommended BRE guidelines between 20% - 25%. In addition, a further 32 windows have impacts that range from 25% - 30%. Whilst it is recognised that these windows have impacts that exceed the BRE guideline 20% maximum loss, these impacts are considered minor. A further 7 windows have impacts between 30%- 33% and whilst these impacts are more significant given the dense urban location of the site, these losses are not considered unusual.

Further to this, the BRE Guidelines are not intended to be mandatory but are requested to be interpreted flexibly to make them appropriate to individual locations.

In respect of NSL, of the 115 relevant rooms 70 rooms meet the BRE guidelines. There are impacts beyond the recommended BRE guidelines to 45 rooms. However, 30 rooms will continue to enjoy a view of the sky to over 50% of their room area. . The remaining 15 rooms will see a further reduction. 13 of these rooms will continue to enjoy between 40%-50% of their room area and two rooms (R15/100 & R16/100) will have a room area of 38%. Whilst the proposed development will have impacts beyond the BRE Guidelines the majority of rooms will continue to enjoy a good percentage of visible sky and therefore in our opinion considered acceptable for an urban location such as this.

Further to this, the impact of the several large trees directly in front of this building have not been analysed as part of our assessment. It is likely that these trees have an impact to the existing situation by obstructing the amount of light reaching these windows.

Sunlight

In respect of sunlight, all of the 5 relevant rooms assessed for sunlight achieve the BRE recommended APSH level and are therefore acceptable in respect of the BRE guidelines.

16-30 WILMOT PLACE

Daylight and Sunlight

The results show that this property achieves 100% compliance in respect of daylight VSC, and NSL levels and sunlight APSH levels following the completion of the proposed development.

Therefore, the impact to this property is compliant with the BRE guidelines.

104 ST. PANCRAS WAY

Daylight and Sunlight

The results show that this property achieves 100% compliance in respect of daylight VSC, and NSL levels and sunlight APSH levels following the completion of the proposed development.

Therefore, the impact to this property is compliant with the BRE guidelines.

189 ST. PANCRAS WAY

Daylight and Sunlight

The results show that this property achieves 100% compliance in respect of daylight VSC, and NSL levels and sunlight APSH levels following the completion of the proposed development.

Therefore, the impact to this property is compliant with the BRE guidelines.

15 WILMOT PLACE

Daylight and Sunlight

This property achieves the BRE recommended daylight and sunlight levels following the completion of the proposed development.

As such, there is no impact to this property beyond that recommended by the BRE.

26-28 ROCHESTER PLACE

Daylight

This property is mixed use with commercial uses on the ground and 1st floor and residential uses on the 2nd and 3rd floors.

In respect of daylight analysis, only the residential accommodation is considered relevant within the BRE guidelines. As such, the top 2 floors only are considered in this analysis.

Of the 28 windows assessed for VSC daylight levels, 16 windows achieve the BRE recommended VSC level.

Of the 12 windows that do not achieve the BRE recommended VSC level, 8 of these windows are in rooms which are served by multiple windows, of which a number of the alternative windows achieve the recommended VSC level. Furthermore, these rooms (R1/602, R4/602, R4/603) all achieve the BRE recommended NSL level. Therefore, the impact to these 8 windows is considered acceptable.

In respect of the remaining 4 windows, 1 of these windows (W8/603) are to rooms that achieve the BRE recommended NSL level whilst the 3 remaining windows (W6/602, W7/602 & W8/602) experience between 23.9-34.0% loss in NSL.

It is recognised that impacts occur to the VSC levels of the relevant windows within this property. However, given the fact that these windows are mainly to rooms which have multiple sources of light, NSL is a more suitable analysis method.

Therefore, in our opinion the proposed development will not have an unacceptable impact on the daylight levels of this property.

Sunlight

In respect of sunlight analysis, of the 8 rooms assessed, 7 rooms achieve the BRE recommended sunlight level. There is an impact to one room (R3/602) however this room will retain Annual APSH in excess of the BRE guidelines (35 APSH). Therefore, whilst there is an impact to this room, the retained sunlight levels are good.

2-12 ROCHESTER MEWS

Daylight

Of the 19 windows assessed within this property, 16 windows achieve the BRE recommended VSC levels.

From our analysis, it is understood that these 3 windows which fail BRE guidelines (W2/700, W3/700, W4/700) are either to doorways or bathrooms and as such are not required to be analysis.

Furthermore, the NSL analysis shows that these 3 rooms achieve the BRE recommended NSL level. As such, the impact to the daylight levels of this property is considered to be acceptable.

Sunlight

In terms of sunlight, of the 10 rooms assessed, 7 rooms achieve the BRE recommended levels. Of the three rooms which experience impact beyond the recommended levels (R7/700, R8/700 & R5/701) all these rooms retain significantly more annual APSH than the BRE recommends between 39-45 APSH.

As such, whilst there is an impact to this property, the impact is small and so considered to be acceptable.

81 – 83 CAMDEN ROAD

Daylight

This property is in compliance in respect of the BRE daylight guidelines and is therefore considered to be acceptable.

Sunlight

In respect of sunlight, this property does not have windows which face within 90 degrees of due south. As such, it has not been considered for sunlight analysis.

1-36 SOANE COURT

Daylight

One of the windows facing towards the development site has been analysis in this building. The results show that there are no impacts to the daylight levels of this property beyond that recommended by the BRE. As such, this property is in compliance with the BRE guidelines in terms of daylight.

Sunlight

In respect of sunlight levels, this property does not have any relevant windows which face within 90 degrees due south of the proposed development. As such, no sunlight analysis has been undertaken.

1-24 HOGARTH COURT

Daylight

Of the 24 windows assessed within this property for daylight levels, 19 of these windows achieve the recommended VSC level. There are impacts to the VSC levels of the remaining 5 windows.

These windows (W3/1000, W3/1001, W3/1002, W3/1003, W3/1004) are located beneath a significant balcony overhang. As such, the existing daylight level to these windows is low (less than 12.46%). As a result of this, whilst the actual impact to the VSC level of these windows is very low (maximum of 3.26% loss), the impact appears disproportionally worse in percentage terms.

As a result of the actual low VSC losses and the fact that the rooms in which these windows are located achieve the recommended NSL levels, the impacts are considered acceptable.

Sunlight

In respect of sunlight, of the 12 rooms considered relevant for sunlight analysis meet the BRE guidelines and therefore considered acceptable.

8.0 CONCLUSIONS

In accordance with our instructions, GIA have prepared an analysis of the daylight and sunlight implications of the proposed scheme prepared by Sheppard Robson issued to GIA on 16th October 2013.

In accordance with the BRE methodology set out in their handbook: Site Layout Planning for Daylight and Sunlight (2011) we have considered all of those properties within the immediate vicinity of the site which are residential in nature.

There are some minor impacts to surrounding properties including 26 – 28 Rochester Place and 1-24 Hogarth Court. There are some further impacts to 1-40 St Pancras Way however 72% of windows retain good levels of light above 20% VSC. There are more significant impacts to 7 windows where the loss is over 30% however given the dense urban location such as this these losses are not considered unusual. Further to this, these windows will experience a loss of daylight in the existing situation due to the tree foliage.

Furthermore, all the rooms tested retain good annual levels of sunlight including all the rooms assessed within 1-40 St Pancras Way.

It should be noted that the BRE Guidelines were written with a suburban context in mind and should be interpreted flexibly. The BRE Guidelines does state "… In a historic city centre, or in an area with modern high right buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings." This scheme proposal does match the height of the adjoining existing buildings.

The BRE Guidelines also states "Note that numerical values given here are purely advisory. Different criteria may be used based on the requirements for daylighting 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."

Therefore, the proposal is justifiable in terms of daylight and sunlight.

Appendix 1

Principles of Daylight & Sunlight

PRINCIPLES OF DAYLIGHT AND SUNLIGHT

BACKGROUND

The quality of amenity for buildings and open spaces is increasingly becoming the subject of concern and attention for many interested parties.

Historically the Department of Environment provided guidance of these issues and, in this country, this role has now been taken on by the Building Research Establishment (BRE), the British Standards Institution (BSI) and the Chartered Institute of Building Services Engineers (CIBSE). Fortunately they have collaborated in many areas to provide as much unified advice as possible in these areas.

Further emphasis has been placed on these issues through the European Directive that require Environmental Impact Assessments (EIA's) for large projects. Parts of these assessments include the consideration of the micro-climate around and within a proposal. The EIA requires a developer to advise upon, amongst other matters, the quality of and impact to daylight, sunlight, overshadowing, solar glare and light pollution.

It is also clear, particularly through either adopted or emerging Unitary Development Plans (UDP's), that local Authorities take this matter far more seriously than they previously did. There are many instances of planning applications being refused due to impact on daylight and sunlight to neighbouring properties and proportionately more of these refusals are appealed by applicants.

Where developers are seeking to maximise their development value, it is often in the area of daylight and sunlight issues that they may seek to 'push the boundaries'. Local Authorities vary in their attitude of how flexible they can be with worsening the impact on the amenity enjoyed by neighbouring owners. In city centres, where there is high density, it can be the subject of hot debate as to whether further loss of amenity is material or not. There are many factors that need to be taken into account and therefore each case has to be considered on its own merits. Clearly, though, there are governing principles which direct and inform on the approach that is taken.

These principles are effectively embodied within the UDP's and the guidance they expressly rely upon. For example, in central London, practically all of the Local Authorities expressly state they will not permit or encourage developments which create a material impact to neighbouring buildings or amenity areas. Often the basis on what is constituted as 'material' will be derived specifically from the BRE Guidelines. The guidelines were produced in 1991, as a direct commission from the Department of the Environment, and entitled 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice'. In October 2011, the BRE Guidelines were updated and the revised edition states the 2011 BRE "… supersedes the 1991 edition which is now withdrawn".

These guidelines are normally recognised as being the main source for which amenity issues can be considered. The document is used by the majority of local Authorities (adopted within the policy) and consequently they are referred to extensively by designers, consultants and planners. Whilst they are expressly not mandatory and state that they should not be used as an instrument of planning policy, they are heavily relied upon as they advise on the approach, methodology evaluation of impact in daylight and sunlight matters – a key consideration through the planning policy.

THE BRE GUIDELINES

The BRE give criteria and methods for calculating daylight, and sunlight as well as overshadowing and through each approach define what they consider as a material impact. As these different methods of calculation vary in their depth of analysis, it is often arguable as to whether the BRE definition of 'material' is applicable in all locations and furthermore if it holds under the different methods of calculation.

As the majority of the controversial daylight and sunlight issues occur within city centres these explanatory notes focus on the relevant criteria and parts of the Handbook which are applicable in such locations.

In the Introduction of 'Site Layout Planning for Daylight and Sunlight (2011)', Section 1.6 (page 1), states that:-

> *"The guide is intended for building designers and their clients, consultants and planning officials. 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 (see Section 5). In special circumstances the developer or Planning Authority may wish to use different target values. For example, in an historic city centre a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".*

Again, the third paragraph of Chapter 2.2 (page 7) of the document states:-

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

The reason for including these statements in the Report is to appreciate that when quoting the criteria suggested by the BRE, they should not necessarily be considered as appropriate. However, rather than suggest alternative values, consultants in this field often remind local Authorities that this approach is supportable and thus flexibility applied.

MEASUREMENT AND CRITERIA FOR DAYLIGHT & SUNLIGHT

The BRE handbook provides two main methods of measurement for calculating daylight which we use for the assessment in our Reports. In addition, in conjunction with the BSI and CIBSE it provides a further method in Appendix C of the Handbook. In relation to sunlight only one method is offered for calculating sunlight availability for buildings. There is an overshadowing test offered in connection with open spaces.

DAYLIGHT

In the first instance, if a proposed development falls beneath a 25° angle taken from a point two metres above ground level, then the BRE say that no further analysis is required as there will be adequate skylight (i.e. sky visibility) availability.

The two methods for calculating daylight to existing surrounding residential properties are as follows:

- Vertical Sky Component (VSC) and
- No Sky Contours (NSC)

The main method for calculating daylight to proposed residential properties is:

- Average Daylight Factor (ADF)

Each is briefly described below.

(a) Vertical Sky Component

Methodology

This is defined in the Handbook as:-

> *"Ratio of that part of illuminance, at a point on a given vertical plane that is received directly from a CIE standard overcast sky, to illuminate on a horizontal plane due to an unobstructed hemisphere of this sky."*

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

The ratio referred to in the above definition is the percentage of the total unobstructed view that is available, once obstructions, in the form of buildings (trees are excluded) are placed in front of the point of view. The view is always taken from the centre of the outward face of a window.

This statement means, in practice that if one had a totally unobstructed view of the sky, looking in a single direction, then just under 40% of the complete hemisphere would be visible.

The measurement of this vertical sky component is undertaken using two indicators, namely a skylight indicator and a transparent direction finder. Alternatively a further method of measuring the vertical sky component, which is easier to understand both in concept and analysis, is often more precise and can deal with more complex instructions, is that of the Waldram diagram.

The point of reference is the same as for the skylight indicator. Effectively a snap shot is taken from that point of the sky in front of the window, together with all the relevant obstructions to it, i.e. the buildings.

An unobstructed sky from that point of reference would give a vertical sky component of 39.6%, corresponding to 50% of the hemisphere, and therefore the purpose of the diagram is to discover how much sky remains once obstructions exist in front of that point.

The diagram comes on an A4 sheet (landscape) and this sheet represents the unobstructed sky, which in one direction equates to a vertical sky component of 39.6%. The obstructions in front of a point of reference are then plotted onto the diagram and the resultant area remaining is proportional to the vertical sky component from that point.

Criteria

The BRE Handbook provides criteria for:

(a) New Development
(b) Existing Buildings

A summary of the criteria for each of these elements is given and these are repeated below:-

New Development

Summary

In general, a building will retain the potential for good interior diffuse daylighting provided that on all its main faces:-

(a) no obstruction, measured in a vertical section perpendicular to the main face, from a point 2m above ground level, subtends an angle of more than 25 degrees to the horizontal;

(b) If (a) is not satisfied, then all points on the main face on a line 2m above ground level are within 4m (measured sideways) of a point which has a vertical sky component of 27% or more.

Existing Buildings

Summary

If any part of a new building or extension measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle of more than 25 degree to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:

(a) the vertical sky component measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value;

or

(b) the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value.

The VSC calculation has, like the other two methods, both advantages and disadvantages. In fact they are tied together. It is a quick simple test which looks to give an early indication of the potential for light. However, it does not, in any fashion, indicate the quality of actual light within a space. It does not take into account the window size, the room size or room use. It helps by indicating that if there is an appreciable amount of sky visible from a given point there will be a reasonable potential for daylighting.

(b) No Sky Contours

This is the part (b) of the alternative method of analysis which is given under the Vertical Sky Component heading in this Appendix. It is similar to the VSC approach in that a reduction of 0.8 times in the area of sky visibility at the working plane may be deemed to adversely affect daylight. It is however, very dependent upon knowing the actual room layouts or having a reasonable understanding of the likely layouts. The contours are also known as daylight distribution contours. They assist in helping to understand the way the daylight is distributed within a room and the comparisons of existing and limitations of proposed circumstances within neighbouring properties. Like the VSC method, it relates to the amount of visible sky but does not consider the room use in its criteria, it is simply a test to assess the change in position of the No Sky Line, between the existing and proposed situation. It does take into account the number and size of windows to a room, but does not give any quantative or qualitative assessment of the light in the rooms, only where sky can or cannot be seen.

(c) Average Daylight Factor

This is defined in Appendix H of the BRE Document as:

"*Ratio of total daylight flux incident on the working plane, expressed as a percentage of the outdoor illuminance on a horizontal plane due to an unobstructed CIE Standard Overcast Sky.*"

This factor considers interior daylighting to a room and therefore is a more accurate indication of available light in a given room, if details of the room size and use are available.

Criteria

The British Standard, BS8206 Part II gives the following recommendations for the average daylight factor (ADF) in dwellings.

The BRE Handbook provides the formula for calculating the average daylight factor. If the necessary information can be obtained to use the formula then this criteria would be more useful.

Room	**Percentage**
Kitchen	2%
Living Rooms	1.5%
Bedrooms	1%

It is sometimes questioned whether the use of the ADF is valid when assessing the impact on neighbouring buildings. Firstly, it is often the case that room layouts and uses may not have been established with certainty. Additionally this method is not cited in the main body of text in the BRE Guidelines but only in Appendix C of that document. It is however, the principal method used by both the British Standard and CIBSE in their detailed daylight publications with which the BRE guide recommends that it should be read.

The counter-argument to this view is that whilst room uses and layouts may be not definitely established, reasonable assumptions can easily be made to give sufficient understanding of the likely quality of light. Building types and layouts for certain buildings, particularly residential, are often similar. In these circumstances reasonable conclusions can be drawn as to whether a particular room will have sufficient light against the British Standards. In addition, the final result is less sensitive to changes in the room layout than the No Sky Contour method as it is an average and this element represents only one of the input factors. It is in cases where rooms sizes have been assumed a more reliable indicator than the No Sky Line method.

Clearly if a room which is being designed for a new development is deemed to have sufficient light against the British Standards, then it should equally follow for a room assessed in a neighbouring existing building.

The average daylight factor considers the light within the room behind the fenestration which serves it. The latter is therefore likely to be more accurate because it takes into account the following:-

a) All the windows serving the room in question.

b) The room use.

c) The size and layout of the room.

d) The finishes of the room surfaces.

SUMMARY

The VSC (which forms part of the ADF formula) is helpful as an initial first guide, especially where access to the rooms in question is not available. Where the room layouts and uses are established or can be reasonably estimated we consider it appropriate to analyse the average daylight factor as well as the vertical sky component.

SUNLIGHT

(a) Annual Probable Sunlight Hours (APSH) method

Sunlight is measured in the Handbook in a similar manner to the first method given for measuring the VSC. A separate indicator is used which contains 100 spots, each representing 1% of annual probable sunlight hours.

The BRE calculated that where no obstructions exist, the total annual probable sunlight hours would amount to 1486. Therefore, each dot on the indicator equates to 14.86 hours of the total annual probable sunlight. Again, to use this indicator the obstructions need to be scaled down and overlaid onto the sunlight indicator.

Those spots which remain uncovered by the scaled obstructions are counted and this gives the percentage of total annual probable sunlight hours for that particular reference point. Again, like the VSC, the reference point is taken to be the centre of the window.

Criteria

Again, the BRE Handbook gives criteria for:

(a) New Development

(b) Existing Buildings

A summary is given in the Handbook on page 16 and this is as follows:-

New Development

Summary

'In general, a dwelling or non-domestic building which has a particular requirement for sunlight, will appear reasonably sunlit provided';-

(a) at least one main window wall faces within 90 degrees of due south; and

(b) the centre of at least one window to a main living room can receive 25% of annual probable sunlight hours, including at least 5% of annual probable sunlight hours in the winter months between 21 September and 21 March.

Existing Buildings

Summary (page 17)

> *'If a living room of an existing dwelling has a main window facing within 90° of due south, and any part of a new development subtends an angle of more than 25° to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely affected. This will be the case if a point at the centre of the window;*
>
> - *receives less than 25% of annual probable sunlight hours , or less than 5% of annual probable sunlight hours between 21 September and 21 March;*
> - *receives less than 0.8 times its former sunlight hours during either period; and*
> - *has a reduction in sunlight received over the whole year greater than 4% annual probable sunlight hours.*

It will be noted that the BRE clearly separates summer from winter and indicates that a 20% reduction for either may be material. The Handbook also states that- *"To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings and conservatories, should be checked if they have a window facing within 90º of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun... A point at the centre of each window on the outside face of the window wall may be taken".*

(b) Area of Permanent Shadow- Sun Hours on Ground

The 2011 BRE Handbook, 'Site Layout Planning for Daylight and Sunlight' (Second edition) also provides criteria for open spaces where sunlight will be required, including; gardens, parks, children's playgrounds, public squares etc.

The BRE Guidance acknowledges that sunlight in the space between buildings has an important effect on the overall appearance and ambience of a development. The worst situation is to have significant areas on which the sun only shines for a limited part of the year.

In summary the BRE document states the following:-

"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 21 March. If, as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive some two hours of sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".

In relation to general overshadowing we often provide, where appropriate, an hourly record for existing and proposed situations, the effect of overshadowing on December 21st, March 21st and June 21st.

For open spaces the sun hours on ground criteria is naturally adopted but this offers limited understanding of how a space will feel or appear generally.

CITY CENTRES

The introduction of the BRE document gives the example of *'historic city centres'* being a case where there is the need for flexibility and altering the target values for criteria when appropriate, to reflect other site and layout constraints.

To explain why it is appropriate to alter these values, one needs to go further into the BRE Handbook to examine how the criteria for the vertical sky component criteria was determined and the reason therefore for varying the criteria in City Centres.

Appendix F of the document is dedicated to the use of alternative values and, it also demonstrates the manner in which the criteria for skylight was determined for the Summary given above, i.e. the need for 27% vertical sky component for adequate daylighting.

This figure of 27% was achieved in the following manner:

A theoretical road was created with two storey terraced houses upon either side, approximately twelve metres apart. The houses have windows at ground and first floor level, and a pitched roof with a central ridge.

Thereafter, a reference point was taken at the centre of a ground floor window of one of the properties and a line was drawn from this point to the central ridge of the property on the other side of the road. The angle of this line equated to 25 degrees (the 25 degrees referred to in the summaries given with reference to the criteria for skylight).

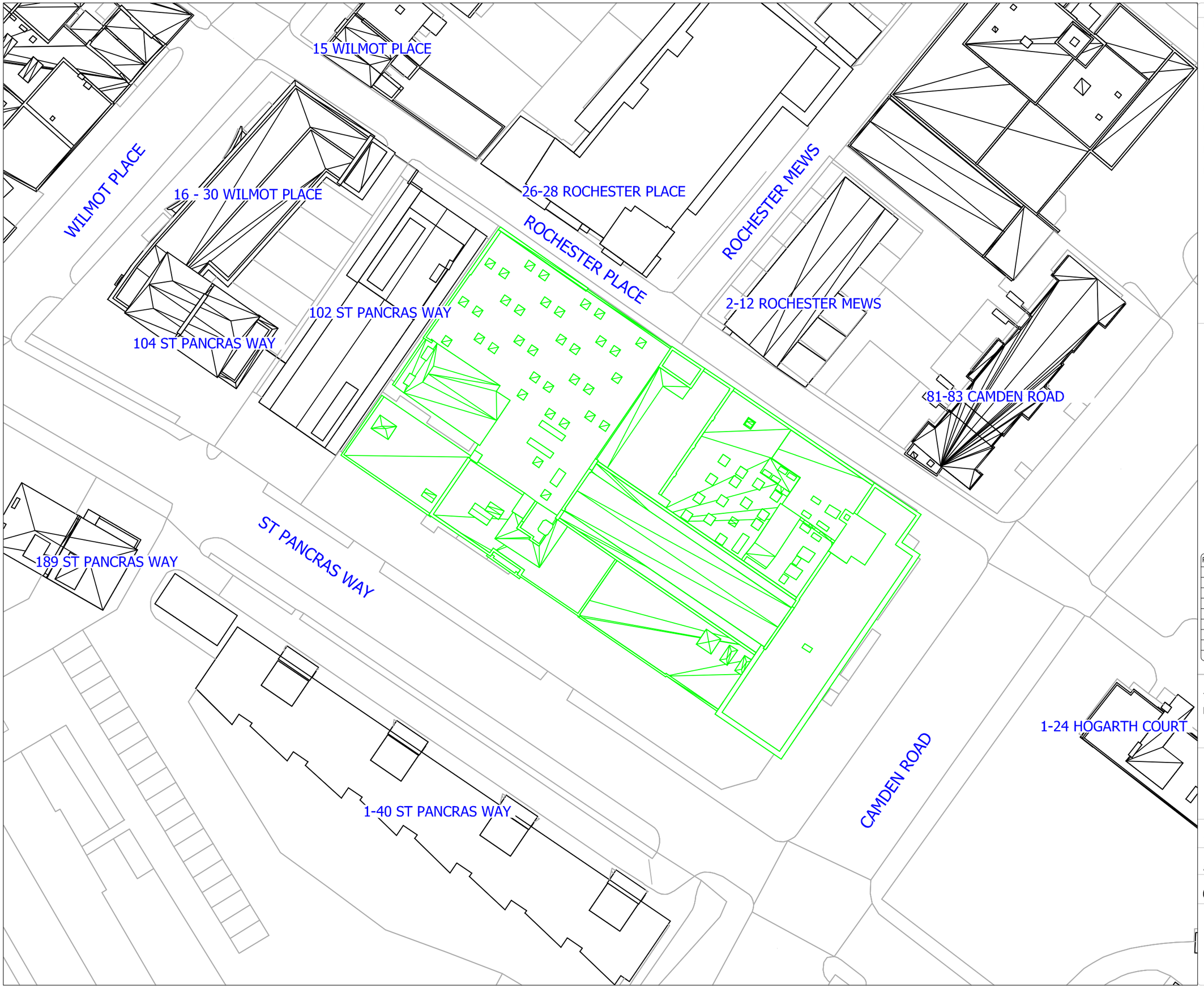
This 25 degrees line obstructs 13% of the totally unobstructed sky available, leaving a resultant figure of 27% which is deemed to give adequate daylighting. This figure of 27% is the recommended criteria referred to earlier in this report. It will be readily appreciated that in a City Centre, this kind of urban form is unlikely and is impractical. It would therefore be inappropriate to consider values for two storey terraced housing in a City Centre.

It is therefore sometimes necessary to apply different target criteria or at least acknowledge that the recommendations in the BRE cannot be achieved.

In addition, it is often the case that residential buildings within city centres are served by balconies. Balconies restrict lighting levels even more and thus if they were to be rigidly taken into account, a neighbouring proposal would be artificially and inappropriately constrained. This view is supported by the BRE and is equally another reason for flexible and sensible interpretation of the guidelines.

Appendix 2

Existing & Proposed Drawings



Sources of Information

IR01-28.09.11

IR02-03.10.11

IR03 - 280812 FORMATION ARCHITECTS

IR04 - 14.01.2012

IR06-FIND MAPS

IR07-FORMATION ARCHITECTS-15012013

IR08 - VERTEX

IR046206 (Topo Survey from Barratts 14.12.12)

Notes

N.B. DO NOT SCALE OFF THIS DRAWING

EXISTING SITE SHOWN IN BLUE

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Indicative Only

ALL HEIGHTS GIVEN IN mm AOD

Rev	Date	Description	Initials
A		Initial Issue	

Project

79 CAMDEN ROAD
LONDON

Title

PLAN VIEW
EXISTING SITE

Scale: 1:500 @ A3

Date: 28.01.13

Drawn: AMM

Checked:

Drawing No.: 6206-05

Rel No.: 03

Revision: A

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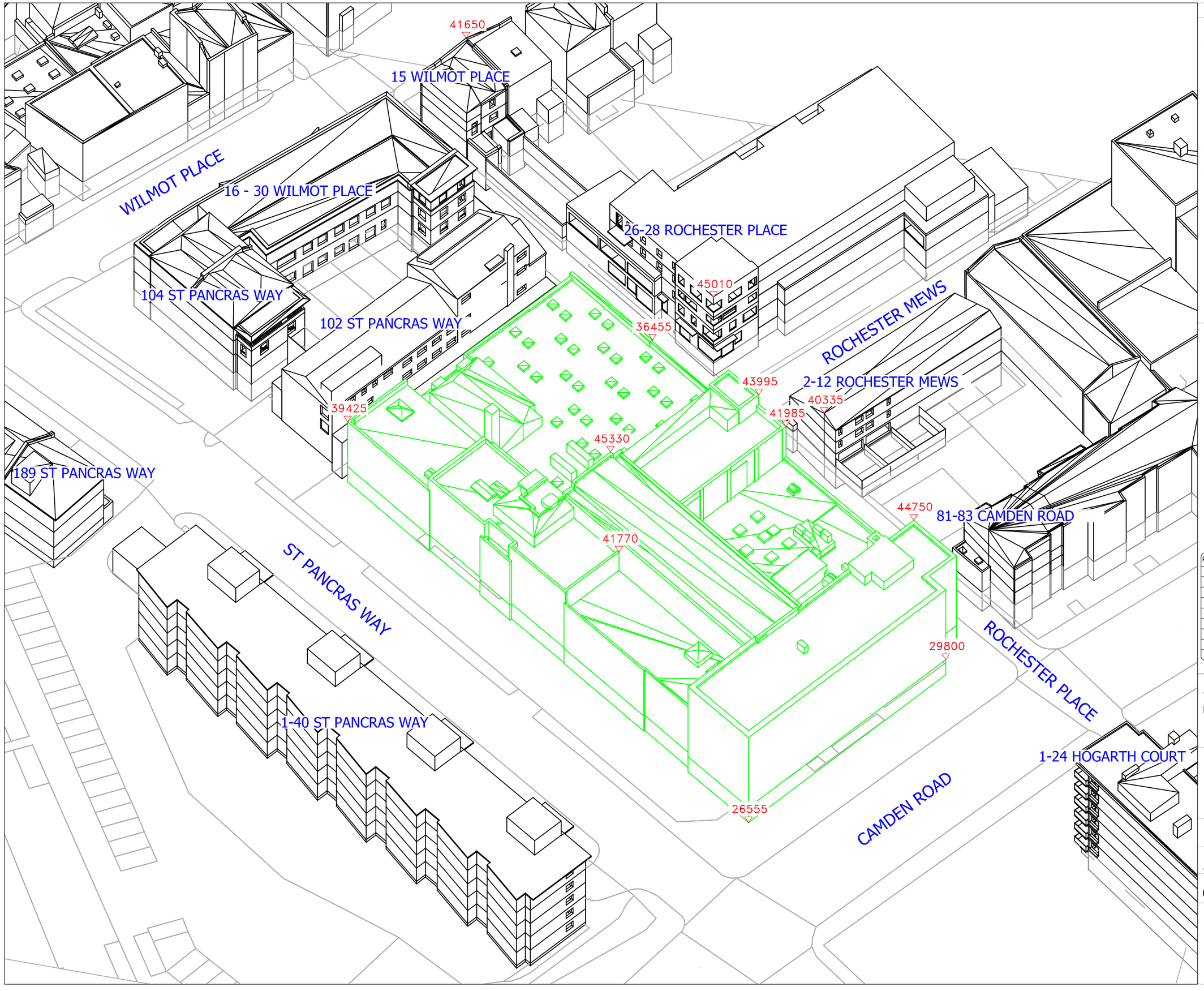

Sources of Information

IR01-28.09.11

IR02-03.10.11

IR03 - 280812 FORMATION ARCHITECTS

IR04 - 14.01.2012

IR06-FIND MAPS

IR07-FORMATION ARCHITECTS-15012013

IR08 - VERTEX

IR046206 (Topo Survey from Barratts 14.12.12)

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Rev	Date	Description	Initials
A		Initial Issue	

Project

79 CAMDEN ROAD
LONDON

Title

3D VIEW
EXISTING SITE

Scale	Date
NTS	28.01.13
Drawn	Checked
AMM	

Drawing No.	Rel No.	Revision
6206-06	03	A

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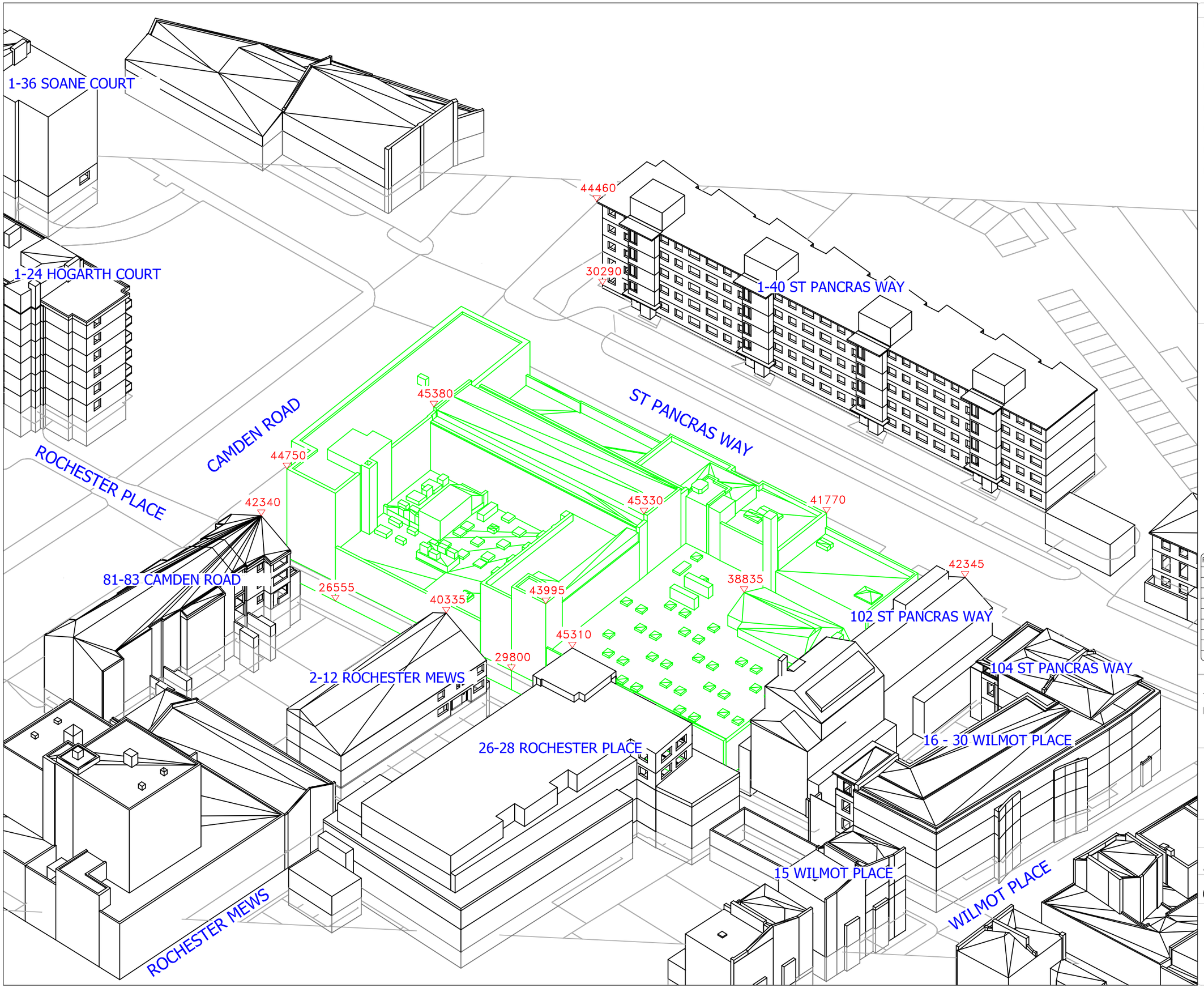

Sources of Information

IR01-28.09.11

IR02-03.10.11

IR03 - 280812 FORMATION ARCHITECTS

IR04 - 14.01.2012

IR06-FIND MAPS

IR07-FORMATION ARCHITECTS-15012013

IR08 - VERTEX

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Notes

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EXISTING SITE SHOWN IN BLUE

ALL HEIGHTS GIVEN IN mm AOD

Rev	Date	Description	Initials
A		Initial Issue	

Project

79 CAMDEN ROAD
LONDON

Title

3D VIEW 2
EXISTING SITE

Scale: NTS

Date: 28.01.13

Drawn: AMM

Checked:

Drawing No.: 6206-07

Rel No.: 03

Revision: A

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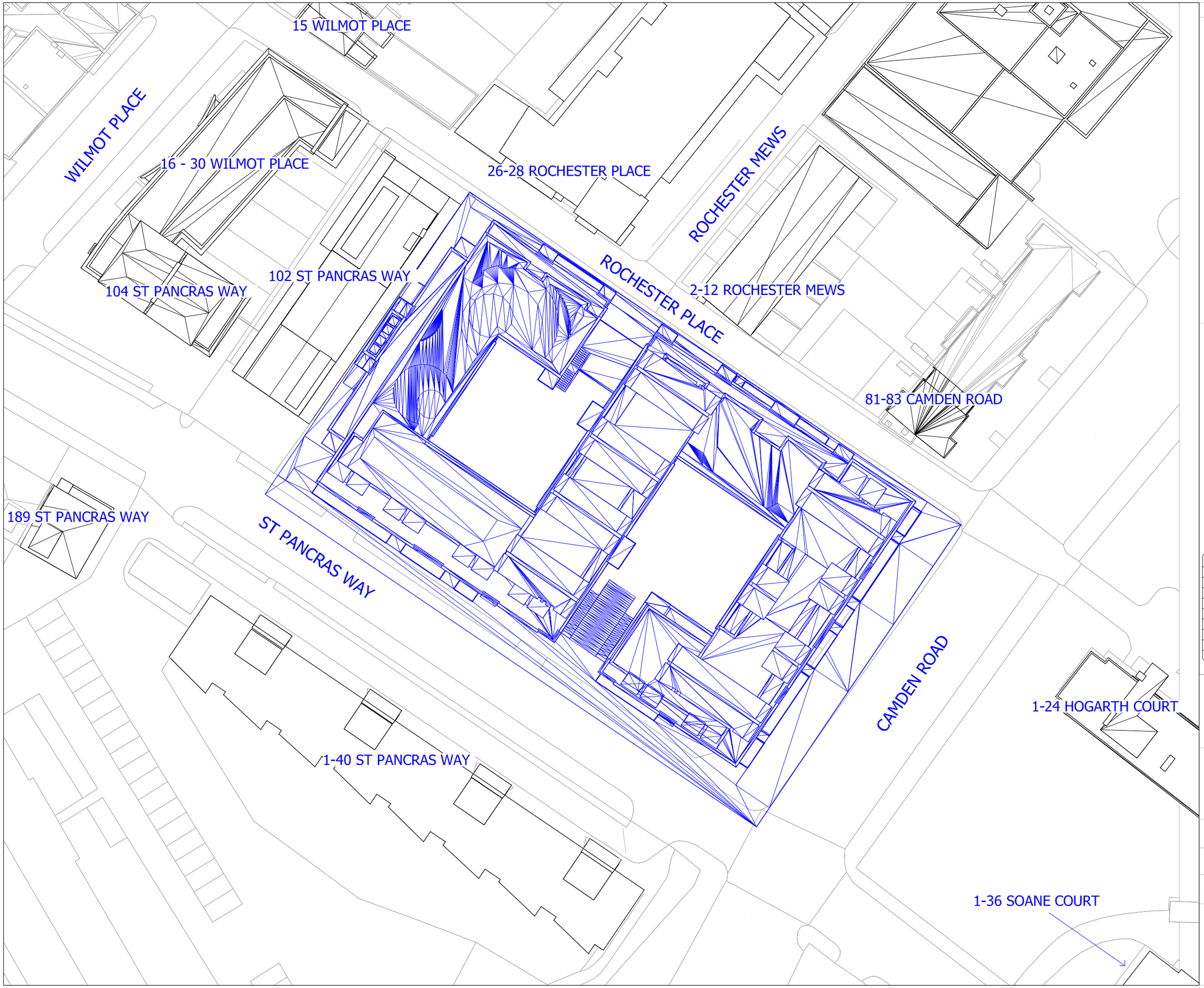

Sources of Information

IR01-28.09.11

IR02-03.10.11

IR03 - 280812 FORMATION ARCHITECTS

IR04 - 14.01.2012

IR06-FIND MAPS

IR07-FORMATION ARCHITECTS-15012013

IR08 - VERTEX

IR046206 (Topo Survey from Barratts 14.12.12)

IR30-SHEPPARD ROBSON 161013
131015 - Camden Road.skp

GIA INTERNAL SURVEY 102 ST PANCRAS WAY

Notes

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PROPOSED SCHEME SHOWN IN BLUE

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Rev	Date	Description	Initials
A		Initial Issue	

Project

79 CAMDEN ROAD
LONDON

Title

PLAN VIEW
PROPOSED SCHEME 131015
(RECEIVED 161013)

Scale	Date
1:500 @ A3	17.10.13
Drawn	Checked
JH	

Drawing No.	Rel No.	Revision
6206-26	15	A

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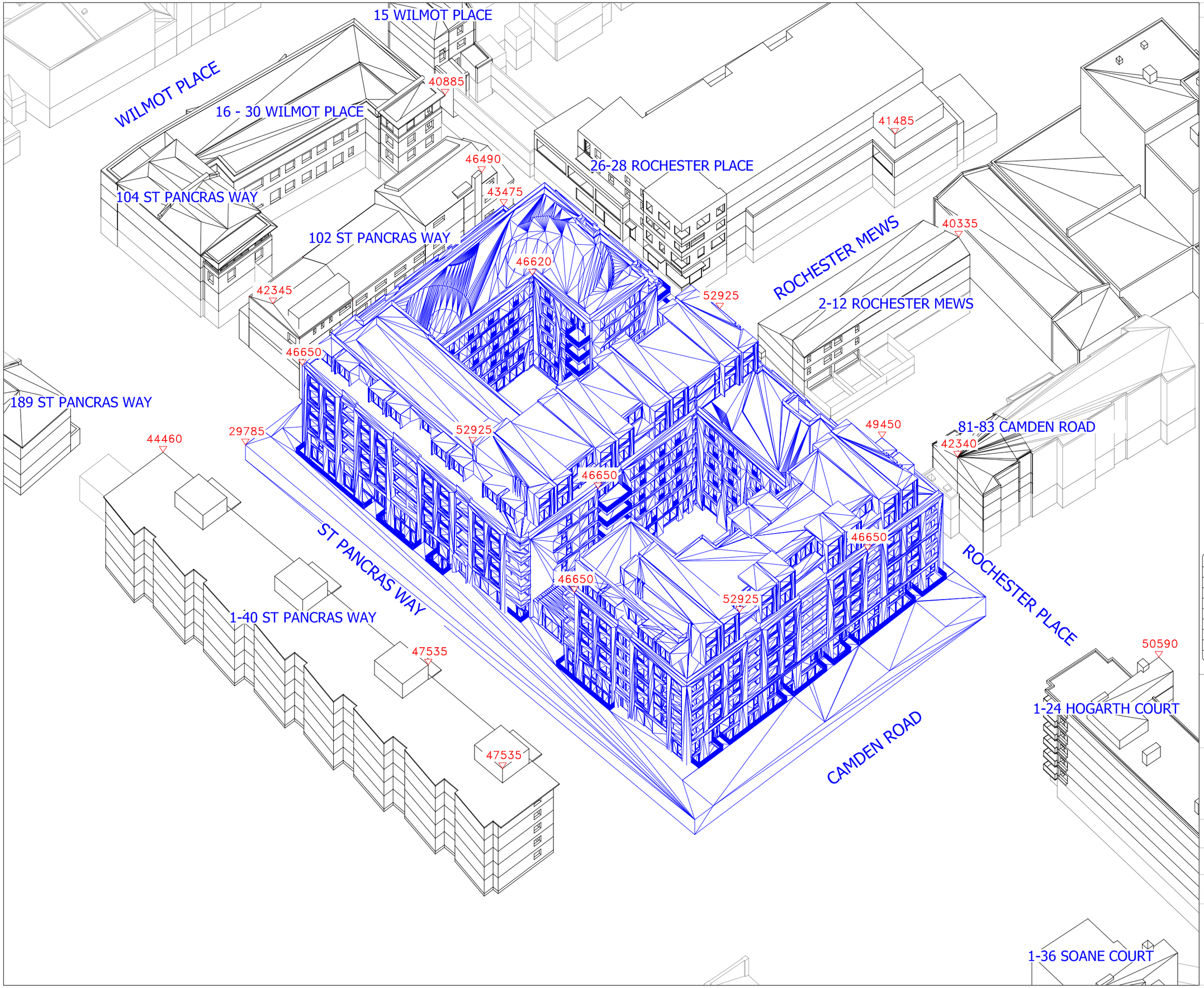

Sources of Information

IR01-28.09.11

IR02-03.10.11

IR03 - 280812 FORMATION ARCHITECTS

IR04 - 14.01.2012

IR06-FIND MAPS

IR07-FORMATION ARCHITECTS-15012013

IR08 - VERTEX

IR046206 (Topo Survey from Barratts 14.12.12)

IR30-SHEPPARD ROBSON 161013
131015 - Camden Road.skp

GIA INTERNAL SURVEY 102 ST PANCRAS WAY

Notes

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ALL HEIGHTS GIVEN IN mm AOD

Rev	Date	Description	Initials
A		Initial Issue	

Project

79 CAMDEN ROAD
LONDON

Title

3D VIEW
PROPOSED SCHEME 131015
(RECEIVED 161013)

Scale	Date
NTS	17.10.13
Drawn	Checked
JH	

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6206-27	15	A

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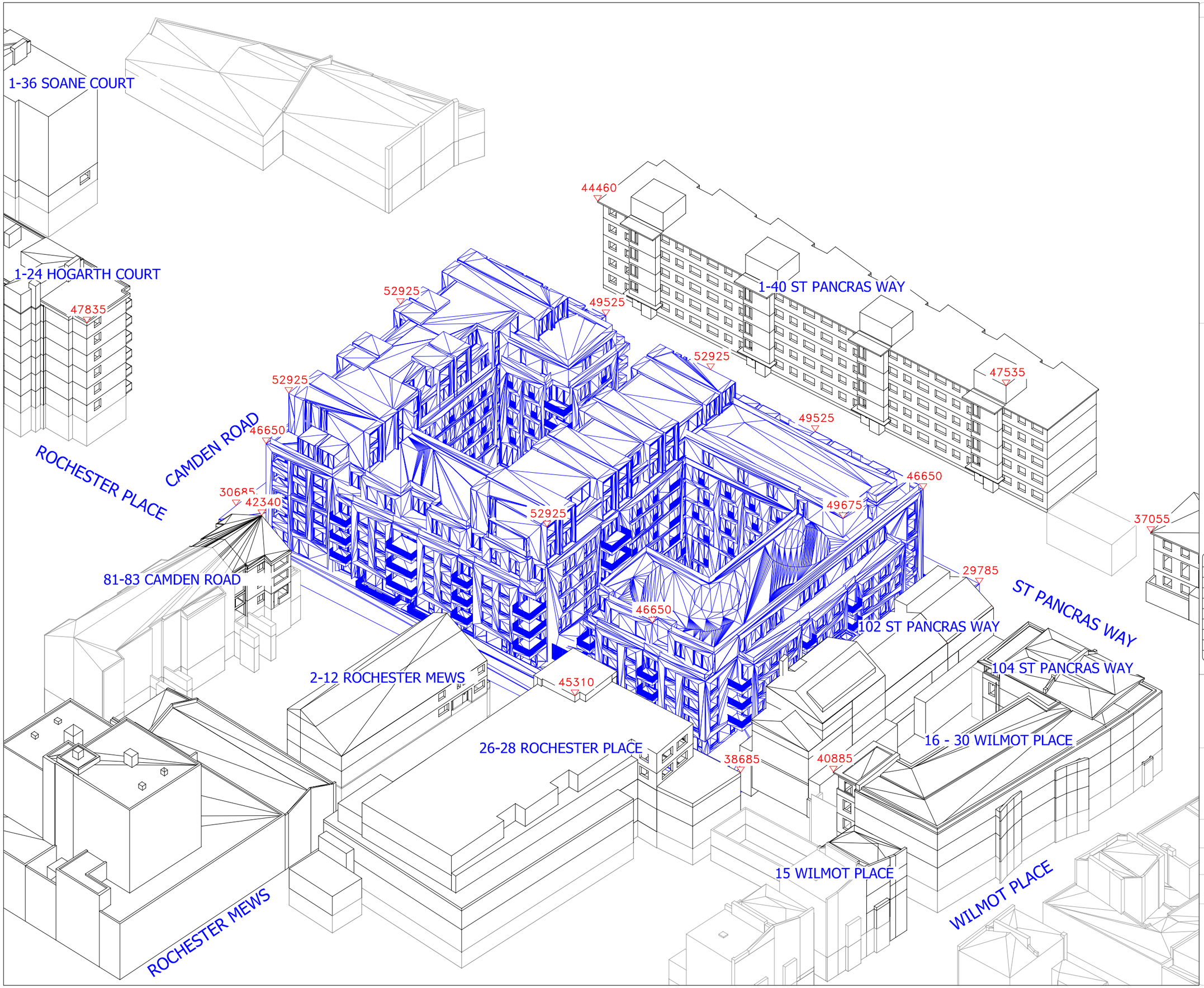

Sources of Information

IR01-28.09.11

IR02-03.10.11

IR03 - 280812 FORMATION ARCHITECTS

IR04 - 14.01.2012

IR06-FIND MAPS

IR07-FORMATION ARCHITECTS-15012013

IR08 - VERTEX

IR046206 (Topo Survey from Barratts 14.12.12)

IR30-SHEPPARD ROBSON 161013
131015 - Camden Road.skp

GIA INTERNAL SURVEY 102 ST PANCRAS WAY

Notes

N.B. DO NOT SCALE OFF THIS DRAWING

ALL HEIGHTS GIVEN IN mm AOD

Rev	Date	Description	Initials
A		Initial Issue	

Project

79 CAMDEN ROAD
LONDON

Title

3D VIEW
PROPOSED SCHEME 131015

Scale	Date
NTS	17.10.13
Drawn	Checked
JH	

Drawing No.	Rel No.	Revision
6206-28	15	A

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APPENDIX 3

DAYLIGHT & SUNLIGHT TABULATED RESULTS

Vertical Sky Component (VSC)

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
1-40 ST PANCRAS WAY						
R1/100	W1/100		36.66	36.64	0.02	0.05
R1/100	W2/100		31.62	25.60	6.02	19.04
R2/100	W3/100		24.11	19.89	4.22	17.50
R3/100	W4/100		22.99	15.47	7.52	32.71
R4/100	W5/100		30.04	21.66	8.38	27.90
R5/100	W6/100		30.41	22.02	8.39	27.59
R6/100	W7/100		30.39	21.96	8.43	27.74
R7/100	W9/100		23.21	17.50	5.71	24.60
R8/100	W8/100		29.93	21.65	8.28	27.66
R9/100	W10/100		23.25	17.10	6.15	26.45
R10/100	W11/100		29.84	21.55	8.29	27.78
R11/100	W12/100		30.43	21.80	8.63	28.36
R12/100	W13/100		30.49	21.54	8.95	29.35
R13/100	W14/100		30.05	20.84	9.21	30.65
R14/100	W15/100		23.21	16.01	7.20	31.02
R15/100	W16/100		23.35	16.38	6.97	29.85
R16/100	W17/100		30.14	21.02	9.12	30.26

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R17/100	W18/100		30.81	21.88	8.93	28.98
R18/100	W19/100		30.92	22.27	8.65	27.98
R19/100	W20/100		30.55	22.27	8.28	27.10
R20/100	W21/100		23.55	16.05	7.50	31.85
R21/100	W22/100		23.94	20.06	3.88	16.21
R22/100	W23/100		30.84	24.95	5.89	19.10
R23/100	W24/100		31.58	26.37	5.21	16.50
R1/101	W1/101		37.63	37.61	0.02	0.05
R1/101	W2/101		33.15	27.28	5.87	17.71
R2/101	W3/101		26.94	21.53	5.41	20.08
R3/101	W4/101		26.28	18.42	7.86	29.91
R4/101	W5/101		31.94	23.80	8.14	25.49
R5/101	W6/101		32.38	24.19	8.19	25.29
R6/101	W7/101		32.40	24.15	8.25	25.46
R7/101	W9/101		26.35	19.43	6.92	26.26
R8/101	W8/101		31.91	23.80	8.11	25.42
R9/101	W10/101		26.10	19.07	7.03	26.93

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R10/101	W11/101		31.99	23.85	8.14	25.45
R11/101	W12/101		32.59	24.12	8.47	25.99
R12/101	W13/101		32.66	23.88	8.78	26.88
R13/101	W14/101		32.22	23.21	9.01	27.96
R14/101	W15/101		26.60	18.22	8.38	31.50
R15/101	W16/101		26.54	18.57	7.97	30.03
R16/101	W17/101		32.42	23.49	8.93	27.54
R17/101	W18/101		33.11	24.35	8.76	26.46
R18/101	W19/101		33.23	24.75	8.48	25.52
R19/101	W20/101		32.86	24.74	8.12	24.71
R20/101	W21/101		27.21	19.49	7.72	28.37
R21/101	W22/101		27.22	22.23	4.99	18.33
R22/101	W23/101		33.22	27.38	5.84	17.58
R23/101	W24/101		33.98	28.83	5.15	15.16
R1/102	W1/102		38.32	38.31	0.01	0.03
R1/102	W2/102		34.57	29.00	5.57	16.11
R2/102	W3/102		28.17	23.04	5.13	18.21
R3/102	W4/102		27.80	20.40	7.40	26.62

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R4/102	W5/102		33.65	25.98	7.67	22.79
R5/102	W6/102		34.24	26.51	7.73	22.58
R6/102	W7/102		34.28	26.49	7.79	22.72
R7/102	W9/102		27.89	21.29	6.60	23.66
R8/102	W8/102		33.70	26.03	7.67	22.76
R9/102	W10/102		27.70	21.02	6.68	24.12
R10/102	W11/102		33.82	26.15	7.67	22.68
R11/102	W12/102		34.54	26.57	7.97	23.07
R12/102	W13/102		34.61	26.37	8.24	23.81
R13/102	W14/102		34.07	25.63	8.44	24.77
R14/102	W15/102		28.21	20.36	7.85	27.83
R15/102	W16/102		28.16	20.72	7.44	26.42
R16/102	W17/102		34.31	26.00	8.31	24.22
R17/102	W18/102		35.12	26.96	8.16	23.23
R18/102	W19/102		35.24	27.36	7.88	22.36
R19/102	W20/102		34.74	27.22	7.52	21.65
R20/102	W21/102		28.84	21.70	7.14	24.76

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R21/102	W22/102		28.83	24.22	4.61	15.99
R22/102	W23/102		35.09	29.74	5.35	15.25
R23/102	W24/102		35.99	31.26	4.73	13.14
R1/103	W1/103		38.30	38.29	0.01	0.03
R1/103	W2/103		35.64	30.52	5.12	14.37
R2/103	W3/103		28.62	23.93	4.69	16.39
R3/103	W4/103		28.54	21.80	6.74	23.62
R4/103	W5/103		34.92	27.98	6.94	19.87
R5/103	W6/103		35.83	28.82	7.01	19.56
R6/103	W7/103		35.88	28.79	7.09	19.76
R7/103	W9/103		28.61	22.55	6.06	21.18
R8/103	W8/103		35.04	28.05	6.99	19.95
R9/103	W10/103		28.45	22.34	6.11	21.48
R10/103	W11/103		35.14	28.21	6.93	19.72
R11/103	W12/103		36.14	28.95	7.19	19.89
R12/103	W13/103		36.23	28.80	7.43	20.51
R13/103	W14/103		35.43	27.84	7.59	21.42

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R14/103	W15/103		28.95	21.86	7.09	24.49
R15/103	W16/103		28.88	22.25	6.63	22.96
R16/103	W17/103		35.62	28.24	7.38	20.72
R17/103	W18/103		36.68	29.47	7.21	19.66
R18/103	W19/103		36.76	29.85	6.91	18.80
R19/103	W20/103		35.94	29.40	6.54	18.20
R20/103	W21/103		29.38	23.20	6.18	21.03
R21/103	W22/103		29.32	25.43	3.89	13.27
R22/103	W23/103		36.17	31.65	4.52	12.50
R23/103	W24/103		37.35	33.36	3.99	10.68
R1/104	W1/104		32.89	32.88	0.01	0.03
R1/104	W2/104		31.82	27.35	4.47	14.05
R2/104	W3/104		22.48	18.39	4.09	18.19
R3/104	W4/104		22.63	16.84	5.79	25.59
R4/104	W5/104		31.42	25.47	5.95	18.94
R5/104	W6/104		32.10	26.08	6.02	18.75
R6/104	W7/104		32.13	26.05	6.08	18.92
R7/104	W9/104		22.61	17.34	5.27	23.31

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R8/104	W8/104		31.56	25.55	6.01	19.04
R9/104	W10/104		22.45	17.21	5.24	23.34
R10/104	W11/104		31.60	25.74	5.86	18.54
R11/104	W12/104		32.29	26.24	6.05	18.74
R12/104	W13/104		32.33	26.14	6.19	19.15
R13/104	W14/104		31.76	25.49	6.27	19.74
R14/104	W15/104		22.74	16.90	5.84	25.68
R15/104	W16/104		22.64	17.28	5.36	23.67
R16/104	W17/104		31.81	25.90	5.91	18.58
R17/104	W18/104		32.53	26.80	5.73	17.61
R18/104	W19/104		32.55	27.11	5.44	16.71
R19/104	W20/104		31.96	26.85	5.11	15.99
R20/104	W21/104		22.91	18.12	4.79	20.91
R21/104	W22/104		22.70	19.80	2.90	12.78
R22/104	W23/104		32.01	28.60	3.41	10.65
R23/104	W24/104		32.81	29.82	2.99	9.11
R1/110	W1/110	ENTRANCE	12.60	5.28	7.32	58.10

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R1/110	W2/110	ENTRANCE	14.89	9.25	5.64	37.88
R2/110	W3/110	ENTRANCE	11.65	3.60	8.05	69.10
R2/110	W4/110	ENTRANCE	14.07	7.84	6.23	44.28
R3/110	W5/110	ENTRANCE	11.80	2.25	9.55	80.93
R3/110	W6/110	ENTRANCE	13.98	6.08	7.90	56.51
R4/110	W7/110	ENTRANCE	12.30	4.71	7.59	61.71
R4/110	W8/110	ENTRANCE	14.57	7.11	7.46	51.20
R1/111	W1/111	LANDING?	32.46	24.85	7.61	23.44
R2/111	W2/111	LANDING?	31.84	23.46	8.38	26.32
R3/111	W3/111	LANDING?	32.21	22.47	9.74	30.24
R4/111	W4/111	LANDING?	32.85	24.89	7.96	24.23
R1/112	W1/112	LANDING?	34.04	26.72	7.32	21.50
R2/112	W2/112	LANDING?	33.68	25.59	8.09	24.02
R3/112	W3/112	LANDING?	34.13	24.83	9.30	27.25
R4/112	W4/112	LANDING?	34.91	27.24	7.67	21.97
R1/113	W1/113	LANDING?	35.28	28.48	6.80	19.27
R2/113	W2/113	LANDING?	35.14	27.62	7.52	21.40
R3/113	W3/113	LANDING?	35.61	27.11	8.50	23.87
R4/113	W4/113	LANDING?	36.27	29.44	6.83	18.83

Vertical Sky Component						
Room	**Window**	**Room Use**	**Existing**	**Proposed**	**Loss**	**%**
R1/114	**W1/114**	LANDING?	29.16	23.32	5.84	20.03
R2/114	**W2/114**	LANDING?	29.16	22.71	6.45	22.12
R3/114	**W3/114**	LANDING?	29.38	22.42	6.96	23.69
R4/114	**W4/114**	LANDING?	29.55	24.36	5.19	17.56
16 - 30 WILMOT PLACE						
R1/300	**W1/300**		2.74	2.74	0.00	0.00
R2/300	**W2/300**		16.45	16.39	0.06	0.36
R3/300	**W3/300**		18.65	18.63	0.02	0.11
R4/300	**W4/300**		19.78	19.75	0.03	0.15
R5/300	**W5/300**		19.60	19.58	0.02	0.10
R6/300	**W6/300**		18.16	18.13	0.03	0.17
R7/300	**W7/300**		16.14	16.12	0.02	0.12
R8/300	**W8/300**		14.18	14.17	0.01	0.07
R1/301	**W1/301**		4.39	4.22	0.17	3.87
R2/301	**W2/301**		24.21	23.37	0.84	3.47
R3/301	**W3/301**		26.95	26.20	0.75	2.78
R4/301	**W4/301**		27.34	26.67	0.67	2.45

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R5/301	W5/301		27.06	26.48	0.58	2.14
R6/301	W6/301		26.10	25.63	0.47	1.80
R7/301	W7/301		23.94	23.58	0.36	1.50
R8/301	W8/301		19.82	19.54	0.28	1.41
R1/320	W1/320		19.88	19.87	0.01	0.05
R1/320	W2/320		14.19	14.19	0.00	0.00
R2/320	W3/320		16.43	16.25	0.18	1.10
R2/320	W4/320		27.57	27.57	0.00	0.00
R1/321	W1/321		25.96	25.93	0.03	0.12
R1/321	W2/321		20.65	20.65	0.00	0.00
R2/321	W3/321		24.79	24.67	0.12	0.48
R2/321	W4/321		32.16	32.16	0.00	0.00
R1/322	W1/322		31.98	31.86	0.12	0.38
R1/322	W2/322		26.42	26.39	0.03	0.11
R2/322	W3/322		28.78	28.56	0.22	0.76
R2/322	W4/322		35.03	35.03	0.00	0.00
104 ST PANCRAS WAY						
R1/311	W1/311	BLOCKED_WINI	35.93	35.64	0.29	0.81
R1/311	W2/311	BLOCKED_WINI	25.55	25.51	0.04	0.16
R2/311	W3/311	BLOCKED_WINI	23.36	23.32	0.04	0.17
R2/311	W4/311	BLOCKED_WINI	27.96	27.96	0.00	0.00

Vertical Sky Component						
Room	**Window**	**Room Use**	**Existing**	**Proposed**	**Loss**	**%**
R1/312	**W1/312**		28.35	28.15	0.20	0.71
R1/312	**W2/312**		30.00	29.75	0.25	0.83
R1/312	**W3/312**		25.67	23.22	2.45	9.54
R1/312	**W4/312**		24.78	22.85	1.93	7.79
R1/312	**W5/312**		24.31	22.53	1.78	7.32
R1/312	**W6/312**		24.01	22.23	1.78	7.41
R2/312	**W7/312**		23.62	21.85	1.77	7.49
R2/312	**W8/312**		23.60	21.85	1.75	7.42
R2/312	**W9/312**		27.49	27.28	0.21	0.76
R2/312	**W10/312**		27.64	27.41	0.23	0.83
189 ST PANCRAS WAY						
R1/400	**W1/400**		32.81	31.20	1.61	4.91
R2/400	**W2/400**		32.70	31.35	1.35	4.13
R3/400	**W3/400**	ENTRANCE	33.17	32.05	1.12	3.38
R1/401	**W1/401**		33.54	31.99	1.55	4.62
R2/401	**W2/401**		33.41	32.11	1.30	3.89
R3/401	**W3/401**		33.35	32.25	1.10	3.30
R1/499	**W1/499**	BASEMENT	29.78	28.19	1.59	5.34
R2/499	**W2/499**	BASEMENT	27.83	26.47	1.36	4.89
R3/499	**W3/499**	ENTRANCE	17.82	15.64	2.18	12.23
15 WILMOT PLACE						

Vertical Sky Component						
Room	**Window**	**Room Use**	**Existing**	**Proposed**	**Loss**	**%**
R1/500	**W1/500**	ENTRANCE	10.45	10.24	0.21	2.01
R1/501	**W1/501**		30.95	29.95	1.00	3.23
R1/502	**W1/502**		34.58	33.57	1.01	2.92
R1/511	**W1/511**	STAIRS	28.92	28.04	0.88	3.04
R1/512	**W1/512**	STAIRS	30.69	29.81	0.88	2.87
26-28 ROCHESTER PLACE						
R1/600	**W1/600**		20.48	14.99	5.49	26.81
R1/600	**W2/600**		21.17	13.21	7.96	37.60
R1/600	**W3/600**		20.33	10.94	9.39	46.19
R2/600	**W4/600**		13.64	3.93	9.71	71.19
R3/600	**W5/600**		17.48	4.99	12.49	71.45
R4/600	**W6/600**		20.84	8.48	12.36	59.31
R4/600	**W7/600**		20.85	18.15	2.70	12.95
R4/600	**W8/600**		21.97	19.58	2.39	10.88
R4/600	**W9/600**		25.75	23.53	2.22	8.62
R1/601	**W1/601**		26.79	21.09	5.70	21.28
R2/601	**W2/601**		29.64	20.27	9.37	31.61
R2/601	**W3/601**		31.32	16.20	15.12	48.28
R3/601	**W4/601**		27.48	11.94	15.54	56.55
R4/601	**W5/601**		32.41	13.94	18.47	56.99

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R4/601	W6/601		32.17	13.55	18.62	57.88
R4/601	W7/601		31.52	13.41	18.11	57.46
R4/601	W8/601		30.92	26.99	3.93	12.71
R4/601	W9/601		31.76	28.19	3.57	11.24
R4/601	W10/601		32.50	29.28	3.22	9.91
R5/601	W11/601		23.72	21.33	2.39	10.08
R1/602	W1/602		27.23	27.23	0.00	0.00
R1/602	W2/602		38.15	38.15	0.00	0.00
R1/602	W3/602		37.74	37.74	0.00	0.00
R1/602	W4/602		14.62	9.74	4.88	33.38
R1/602	W5/602		14.90	7.70	7.20	48.32
R2/602	W6/602		34.78	24.58	10.20	29.33
R2/602	W7/602		35.33	22.74	12.59	35.64
R3/602	W8/602		31.43	18.61	12.82	40.79
R4/602	W9/602		35.75	19.60	16.15	45.17
R4/602	W10/602		35.68	19.22	16.46	46.13
R4/602	W11/602		35.25	18.82	16.43	46.61
R4/602	W12/602		35.15	30.37	4.78	13.60
R4/602	W13/602		35.58	31.32	4.26	11.97
R4/602	W14/602		36.21	32.70	3.51	9.69
R1/603	W1/603		33.58	33.58	0.00	0.00
R1/603	W2/603		39.35	39.35	0.00	0.00
R1/603	W3/603		39.19	39.19	0.00	0.00
R1/603	W4/603		37.31	32.62	4.69	12.57
R1/603	W5/603		37.79	32.51	5.28	13.97
R2/603	W6/603		37.88	30.94	6.94	18.32
R2/603	W7/603		37.73	28.95	8.78	23.27

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R3/603	W8/603		33.61	24.83	8.78	26.12
R4/603	W9/603		38.23	26.87	11.36	29.71
R4/603	W10/603		38.25	26.26	11.99	31.35
R4/603	W11/603		38.19	25.83	12.36	32.36
R4/603	W12/603		38.08	32.99	5.09	13.37
R4/603	W13/603		38.21	34.05	4.16	10.89
R4/603	W14/603		38.28	34.82	3.46	9.04
2-12 ROCHESTER MEWS						
R1/700	W1/700		20.69	18.64	2.05	9.91
R2/700	W2/700	ENTRANCE	11.34	8.86	2.48	21.87
R3/700	W3/700	WC	1.28	0.21	1.07	83.59
R4/700	W4/700	WC	1.41	0.33	1.08	76.60
R6/700	W6/700		21.87	19.12	2.75	12.57
R7/700	W7/700		28.23	23.53	4.70	16.65
R8/700	W8/700		28.76	25.47	3.29	11.44
R1/701	W1/701		24.73	22.81	1.92	7.76
R2/701	W2/701		25.04	22.63	2.41	9.62
R3/701	W3/701		25.21	22.58	2.63	10.43
R4/701	W4/701		25.92	22.88	3.04	11.73

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R5/701	W5/701		31.36	25.74	5.62	17.92
R6/701	W6/701		31.68	27.52	4.16	13.13
R7/701	W7/701		31.78	28.10	3.68	11.58
R8/701	W8/701		32.20	29.26	2.94	9.13
R5/702	W1/702		33.95	28.47	5.48	16.14
R6/702	W2/702		34.21	30.17	4.04	11.81
R7/702	W3/702		34.33	30.79	3.54	10.31
R8/702	W4/702		34.70	31.90	2.80	8.07
81-83 CAMDEN ROAD						
R1/800	W1/800		22.97	22.89	0.08	0.35
R2/800	W2/800		5.20	4.76	0.44	8.46
R1/801	W1/801		25.09	25.00	0.09	0.36
R2/801	W2/801		6.20	5.65	0.55	8.87
R1/802	W1/802		26.86	26.75	0.11	0.41
R2/802	W2/802		7.56	6.90	0.66	8.73
R1/810	W1/810	ENTRANCE	5.70	5.68	0.02	0.35
R1/811	W1/811	LANDING	31.42	29.24	2.18	6.94

Vertical Sky Component						
Room	**Window**	**Room Use**	**Existing**	**Proposed**	**Loss**	**%**
R1/812	**W1/812**	LANDING	34.17	32.07	2.10	6.15
1-36 SOANE COURT						
R1/1100	**W1/1100**		33.48	32.05	1.43	4.27
1-24 HOGARTH COURT						
R1/1000	**W1/1000**		32.02	28.92	3.10	9.68
R2/1000	**W2/1000**		13.58	12.46	1.12	8.25
R3/1000	**W3/1000**		7.79	4.81	2.98	38.25
R3/1000	**W4/1000**		34.86	33.90	0.96	2.75
R1/1001	**W1/1001**		33.92	30.74	3.18	9.38
R2/1001	**W2/1001**		14.47	13.37	1.10	7.60
R3/1001	**W3/1001**		9.05	5.79	3.26	36.02
R3/1001	**W4/1001**		36.04	35.08	0.96	2.66
R1/1002	**W1/1002**		35.74	32.56	3.18	8.90
R2/1002	**W2/1002**		15.11	14.04	1.07	7.08
R3/1002	**W3/1002**		10.27	7.02	3.25	31.65
R3/1002	**W4/1002**		36.95	36.01	0.94	2.54
R1/1003	**W1/1003**		37.39	34.34	3.05	8.16
R2/1003	**W2/1003**		15.60	14.58	1.02	6.54
R3/1003	**W3/1003**		11.42	8.28	3.14	27.50

Vertical Sky Component						
Room	Window	Room Use	Existing	Proposed	Loss	%
R3/1003	W4/1003		37.68	36.78	0.90	2.39
R1/1004	W1/1004		38.61	35.79	2.82	7.30
R2/1004	W2/1004		16.03	15.11	0.92	5.74
R3/1004	W3/1004		12.46	9.54	2.92	23.43
R3/1004	W4/1004		38.26	37.44	0.82	2.14
R1/1005	W1/1005		35.86	33.73	2.13	5.94
R2/1005	W2/1005		17.61	16.93	0.68	3.86
R3/1005	W3/1005		13.72	11.38	2.34	17.06
R3/1005	W4/1005		36.11	35.50	0.61	1.69

Daylight Distribution (No SkyLine)

79 CAMDEN ROAD
LONDON
PROPOSED SCHEME 131015 IR30
DAYLIGHT DISTRIBUTION ANALYSIS

Room / Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
1-40 ST PANCRAS WAY						
R1/100		117.7	116.8	114.8	2.0	1.7
R2/100		103.7	96.6	58.4	38.2	39.5
R3/100		94.8	88.7	46.5	42.2	47.6
R4/100		102.4	94.4	48.0	46.4	49.2
R5/100		129.8	122.4	81.8	40.6	33.2
R6/100		129.8	122.6	99.4	23.2	18.9
R7/100		97.2	90.7	90.0	0.7	0.8
R8/100		104.8	98.8	83.8	15.0	15.2
R9/100		94.8	88.8	89.0	-0.1	-0.1
R10/100		102.4	96.2	82.1	14.1	14.7
R11/100		129.8	121.9	101.8	20.1	16.5
R12/100		129.8	121.2	90.9	30.3	25.0
R13/100		105.6	97.5	54.2	43.3	44.4
R14/100		97.2	88.1	40.6	47.5	53.9
R15/100		94.8	85.4	35.7	49.7	58.2
R16/100		102.4	93.8	39.4	54.4	58.0
R17/100		129.8	123.0	55.7	67.2	54.6
R18/100		129.8	124.6	59.9	64.7	51.9
R19/100		104.8	100.8	45.4	55.4	55.0
R20/100		97.2	94.8	43.8	51.0	53.8
R21/100		96.0	93.8	63.1	30.7	32.7
R22/100		103.4	102.1	80.8	21.4	21.0
R23/100		128.3	127.0	115.0	11.9	9.4
R1/101		117.7	117.1	115.0	2.1	1.8
R2/101		103.7	99.3	62.9	36.3	36.6
R3/101		94.8	90.9	44.7	46.2	50.8
R4/101		102.4	99.9	55.8	44.1	44.1
R5/101		129.8	128.4	89.6	38.9	30.3
R6/101		129.8	128.4	106.9	21.6	16.8
R7/101		97.2	94.9	92.6	2.2	2.3
R8/101		104.8	103.5	85.9	17.6	17.0
R9/101		94.8	93.0	91.1	1.9	2.0
R10/101		102.4	100.9	85.1	15.9	15.8
R11/101		129.8	128.4	104.8	23.7	18.5
R12/101		129.8	128.4	94.7	33.8	26.3

79 CAMDEN ROAD
LONDON
PROPOSED SCHEME 131015 IR30
DAYLIGHT DISTRIBUTION ANALYSIS

Room / Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
R13/101		105.6	104.3	59.2	45.1	43.2
R14/101		97.2	94.9	46.0	48.9	51.5
R15/101		94.8	93.0	42.5	50.5	54.3
R16/101		102.4	100.9	47.0	54.0	53.5
R17/101		129.8	128.4	63.5	64.9	50.5
R18/101		129.8	128.4	66.6	61.8	48.1
R19/101		104.8	103.5	51.3	52.2	50.4
R20/101		97.2	94.9	48.9	46.0	48.5
R21/101		96.0	93.8	68.6	25.2	26.9
R22/101		103.4	102.1	87.1	15.1	14.8
R23/101		128.3	127.0	119.8	7.2	5.7
R1/102		117.7	117.1	115.1	2.0	1.7
R2/102		103.7	100.7	69.6	31.0	30.8
R3/102		94.8	93.0	53.7	39.3	42.3
R4/102		102.4	100.9	62.3	38.6	38.3
R5/102		129.8	128.4	103.5	24.9	19.4
R6/102		129.8	128.4	110.0	18.4	14.3
R7/102		97.2	94.9	94.3	0.6	0.6
R8/102		104.8	103.5	89.6	13.9	13.4
R9/102		94.8	93.0	92.2	0.7	0.8
R10/102		102.4	100.9	89.1	11.8	11.7
R11/102		129.8	128.4	110.6	17.8	13.9
R12/102		129.8	128.4	102.5	26.0	20.2
R13/102		105.6	104.3	68.9	35.4	33.9
R14/102		97.2	94.9	57.7	37.1	39.1
R15/102		94.8	93.0	55.8	37.2	40.0
R16/102		102.4	100.9	61.2	39.8	39.4
R17/102		129.8	128.4	79.2	49.2	38.3
R18/102		129.8	128.4	81.2	47.2	36.8
R19/102		104.8	103.5	64.0	39.5	38.2
R20/102		97.2	94.9	59.3	35.6	37.5
R21/102		96.0	93.8	74.5	19.3	20.6
R22/102		103.4	102.1	91.1	11.1	10.9
R23/102		128.3	127.0	123.0	3.9	3.1
R1/103		117.7	117.1	115.5	1.6	1.4
R2/103		103.7	100.7	79.9	20.8	20.7
R3/103		94.8	93.0	64.6	28.4	30.5

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LONDON
PROPOSED SCHEME 131015 IR30
DAYLIGHT DISTRIBUTION ANALYSIS

Room / Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
R4/103		102.4	100.9	75.1	25.8	25.6
R5/103		129.8	128.4	112.4	16.1	12.5
R6/103		129.8	128.4	117.0	11.4	8.9
R7/103		97.2	94.9	94.9	0.0	0.0
R8/103		104.8	103.3	96.0	7.3	7.1
R9/103		94.8	93.0	92.4	0.6	0.6
R10/103		102.4	100.9	94.0	7.0	6.9
R11/103		129.8	128.4	120.1	8.4	6.5
R12/103		129.8	128.4	116.4	12.1	9.4
R13/103		105.6	104.1	85.2	18.8	18.1
R14/103		97.2	94.9	76.2	18.7	19.7
R15/103		94.8	93.0	75.1	17.9	19.2
R16/103		102.4	100.9	81.7	19.2	19.0
R17/103		129.8	128.4	104.1	24.3	18.9
R18/103		129.8	128.4	104.7	23.8	18.5
R19/103		104.8	103.3	83.7	19.5	18.9
R20/103		97.2	94.9	77.7	17.2	18.1
R21/103		96.0	93.8	84.9	8.8	9.4
R22/103		103.4	101.9	97.3	4.6	4.5
R23/103		128.3	127.0	126.0	1.0	0.8
R1/104		117.7	117.1	115.8	1.3	1.1
R2/104		103.7	99.4	89.4	10.0	10.1
R3/104		94.8	91.7	83.2	8.5	9.3
R4/104		102.4	99.7	93.9	5.8	5.8
R5/104		129.8	126.3	123.7	2.7	2.1
R6/104		129.8	126.3	126.2	0.2	0.2
R7/104		97.2	93.6	93.6	0.0	0.0
R8/104		104.8	102.0	102.0	0.0	0.0
R9/104		94.8	91.7	91.7	0.0	0.0
R10/104		102.4	99.7	95.7	4.0	4.0
R11/104		129.8	126.3	126.3	0.0	0.0
R12/104		129.8	126.3	126.3	0.0	0.0
R13/104		105.6	102.8	98.4	4.4	4.3
R14/104		97.2	93.6	91.2	2.3	2.5
R15/104		94.8	91.7	91.7	0.0	0.0
R16/104		102.4	99.7	99.7	0.0	0.0
R17/104		129.8	126.3	126.3	0.0	0.0

Room / Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
R18/104		129.8	126.3	126.3	0.0	0.0
R19/104		104.8	102.0	102.0	0.0	0.0
R20/104		97.2	93.6	93.6	0.0	0.0
R21/104		96.0	92.5	92.5	0.0	0.0
R22/104		103.4	100.6	100.6	0.0	0.0
R23/104		128.3	126.0	126.0	0.0	0.0
R1/110	ENTRANCE	47.1	42.2	18.3	23.9	56.6
R2/110	ENTRANCE	47.1	42.2	32.5	9.7	23.0
R3/110	ENTRANCE	47.1	42.2	13.5	28.8	68.2
R4/110	ENTRANCE	47.1	42.2	30.3	11.9	28.2
R1/111	LANDING?	24.6	24.5	24.5	0.0	0.0
R2/111	LANDING?	24.6	24.5	24.5	0.0	0.0
R3/111	LANDING?	24.6	24.5	24.5	0.0	0.0
R4/111	LANDING?	24.6	24.5	24.5	0.0	0.0
R1/112	LANDING?	24.6	24.5	24.5	0.0	0.0
R2/112	LANDING?	24.6	24.5	24.5	0.0	0.0
R3/112	LANDING?	24.6	24.5	24.5	0.0	0.0
R4/112	LANDING?	24.6	24.5	24.5	0.0	0.0
R1/113	LANDING?	24.6	24.5	24.5	0.0	0.0
R2/113	LANDING?	24.6	24.5	24.5	0.0	0.0
R3/113	LANDING?	24.6	24.5	24.5	0.0	0.0
R4/113	LANDING?	24.6	24.5	24.5	0.0	0.0
R1/114	LANDING?	24.6	24.5	24.5	0.0	0.0
R2/114	LANDING?	24.6	24.5	24.5	0.0	0.0
R3/114	LANDING?	24.6	24.5	24.5	0.0	0.0
R4/114	LANDING?	24.6	24.5	24.5	0.0	0.0
16 - 30 WILMOT PLACE						
R1/300		52.8	24.0	24.0	0.0	0.0
R2/300		228.3	143.0	139.8	3.2	2.2
R3/300		111.8	70.3	69.8	0.5	0.7
R4/300		112.5	70.2	69.0	1.2	1.7
R5/300		112.5	65.5	65.0	0.6	0.9
R6/300		112.5	64.7	64.4	0.3	0.5
R7/300		112.5	60.6	60.2	0.4	0.7
R8/300		112.5	48.4	48.4	0.0	0.0

Room / Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
R1/301		52.8	28.1	28.1	0.0	0.0
R2/301		228.3	225.4	225.4	0.0	0.0
R3/301		111.8	110.6	110.6	0.0	0.0
R4/301		112.5	111.3	111.3	0.0	0.0
R5/301		112.5	110.8	110.8	0.0	0.0
R6/301		112.5	106.7	106.7	0.0	0.0
R7/301		112.5	99.2	99.2	0.0	0.0
R8/301		112.5	93.6	93.6	0.0	0.0
R1/320		114.8	112.0	112.0	0.0	0.0
R2/320		114.8	109.8	109.8	0.0	0.0
R1/321		114.8	112.3	112.3	0.0	0.0
R2/321		114.8	110.1	110.1	0.0	0.0
R1/322		114.8	112.6	112.6	0.0	0.0
R2/322		114.8	111.9	111.9	0.0	0.0
104 ST PANCRAS WAY						
R1/311	BLOCKED_WINDOW	122.1	121.6	121.6	0.0	0.0
R2/311	BLOCKED_WINDOW	121.2	120.8	120.8	0.0	0.0
R1/312		157.5	155.0	155.0	0.0	0.0
R2/312		85.8	84.6	84.6	0.0	0.0
189 ST PANCRAS WAY						
R1/400		147.2	144.8	144.8	0.0	0.0
R2/400		147.2	144.8	144.8	0.0	0.0
R3/400	ENTRANCE	61.2	58.2	58.2	0.0	0.0
R1/401		147.2	144.2	144.2	0.0	0.0
R2/401		125.3	123.1	123.1	0.0	0.0
R3/401		125.3	123.1	123.1	0.0	0.0
R1/499	BASEMENT	147.2	132.9	132.9	0.0	0.0
R2/499	BASEMENT	147.2	132.9	132.9	0.0	0.0
R3/499	ENTRANCE	26.2	19.8	19.8	0.0	0.0

79 CAMDEN ROAD
LONDON
PROPOSED SCHEME 131015 IR30
DAYLIGHT DISTRIBUTION ANALYSIS

Room / Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
15 WILMOT PLACE						
R1/500	ENTRANCE	39.0	38.7	38.7	0.0	0.0
R1/501		178.3	173.4	173.4	0.0	0.0
R1/502		178.3	168.8	168.8	0.0	0.0
R1/511	STAIRS	47.6	46.2	46.2	0.0	0.0
R1/512	STAIRS	47.6	2.2	1.7	0.5	22.7
26-28 ROCHESTER PLACE						
R1/600		601.8	517.0	537.0	-20.0	-3.9
R2/600		89.2	86.0	29.5	56.5	65.7
R3/600		274.1	232.4	44.2	188.2	81.0
R4/600		280.1	272.0	253.7	18.3	6.7
R1/601		369.8	369.8	358.6	11.3	3.1
R2/601		601.8	601.5	601.5	0.0	0.0
R3/601		79.7	76.0	27.4	48.5	63.8
R4/601		618.3	618.2	617.8	0.5	0.1
R5/601		247.8	247.7	247.7	0.0	0.0
R1/602		370.2	368.7	368.7	0.0	0.0
R2/602		428.8	420.2	319.7	100.5	23.9
R3/602		79.7	75.4	49.8	25.6	34.0
R4/602		618.3	618.3	616.6	1.7	0.3
R1/603		370.2	370.1	370.1	0.0	0.0
R2/603		428.8	420.3	374.5	45.7	10.9
R3/603		79.7	75.7	75.7	0.0	0.0
R4/603		573.5	573.2	573.0	0.2	0.0
2-12 ROCHESTER MEWS						
R1/700		107.4	45.3	45.3	0.0	0.0
R2/700	ENTRANCE	32.6	14.8	14.7	0.1	0.7
R3/700	WC	16.1	0.0	0.0	0.0	#DIV/0!
R4/700	WC	16.1	0.4	0.4	0.0	0.0
R6/700		106.6	82.6	82.6	0.0	0.0

79 CAMDEN ROAD
LONDON
PROPOSED SCHEME 131015 IR30
DAYLIGHT DISTRIBUTION ANALYSIS

Room / Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
R7/700		205.6	205.5	205.5	0.0	0.0
R8/700		205.6	205.5	205.5	0.0	0.0
R1/701		117.7	57.7	57.7	0.0	0.0
R2/701		60.1	37.9	37.9	0.0	0.0
R3/701		59.3	36.5	36.5	0.0	0.0
R4/701		115.8	93.6	94.7	-1.1	-1.2
R5/701		85.6	75.5	61.7	13.8	18.3
R6/701		115.4	113.2	113.2	0.0	0.0
R7/701		115.4	113.2	110.3	2.9	2.6
R8/701		87.3	83.3	83.3	0.0	0.0
R5/702		85.6	81.7	70.2	11.5	14.1
R6/702		115.4	113.2	113.2	0.0	0.0
R7/702		115.4	113.2	113.1	0.1	0.1
R8/702		87.3	83.3	83.3	0.0	0.0
81-83 CAMDEN ROAD						
R1/800		133.9	114.5	111.0	3.5	3.1
R2/800		151.8	151.4	151.1	0.3	0.2
R1/801		133.9	114.5	112.1	2.4	2.1
R2/801		151.8	151.4	151.1	0.3	0.2
R1/802		133.9	118.6	117.9	0.7	0.6
R2/802		151.8	151.4	151.1	0.3	0.2
R1/810	ENTRANCE	49.2	49.0	49.0	0.0	0.0
R1/811	LANDING	40.4	40.4	40.4	0.0	0.0
R1/812	LANDING	40.4	40.4	40.4	0.0	0.0
1-36 SOANE COURT						
R1/1100		202.1	197.9	197.9	0.0	0.0
1-24 HOGARTH COURT						
R1/1000		132.9	127.5	102.0	25.4	19.9

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LONDON
PROPOSED SCHEME 131015 IR30
DAYLIGHT DISTRIBUTION ANALYSIS

Room / Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
R2/1000		108.3	104.6	104.6	0.0	0.0
R3/1000		88.0	87.9	86.8	1.2	1.4
R1/1001		132.9	129.9	111.5	18.3	14.1
R2/1001		108.3	104.6	104.6	0.0	0.0
R3/1001		88.0	88.0	86.8	1.3	1.5
R1/1002		132.9	129.9	121.3	8.6	6.6
R2/1002		108.3	104.6	104.6	0.0	0.0
R3/1002		88.0	88.0	87.3	0.8	0.9
R1/1003		132.9	129.9	129.9	0.0	0.0
R2/1003		108.3	104.6	104.6	0.0	0.0
R3/1003		88.0	88.0	88.0	0.0	0.0
R1/1004		132.9	129.9	129.9	0.0	0.0
R2/1004		108.3	104.6	104.6	0.0	0.0
R3/1004		88.0	88.0	88.0	0.0	0.0
R1/1005		132.9	129.9	129.9	0.0	0.0
R2/1005		108.3	104.1	104.1	0.0	0.0
R3/1005		88.0	88.0	88.0	0.0	0.0

Annual Probable Sunlight Hours (APSH)

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
1-40 ST PANCRAS WAY														
R1/100	**W1/100**		22	66	22	66	0.0	0.0	22	66	22	66	0.0	0.0
R1/101	**W1/101**		23	67	23	67	0.0	0.0	23	67	23	67	0.0	0.0
R1/102	**W1/102**		23	67	23	67	0.0	0.0	23	67	23	67	0.0	0.0
R1/103	**W1/103**		23	66	23	66	0.0	0.0	23	66	23	66	0.0	0.0
R1/104	**W1/104**		21	55	21	55	0.0	0.0	21	55	21	55	0.0	0.0
16 - 30 WILMOT PLACE														
R1/300	**W1/300**		0	4	0	4	-	0.0	0	4	0	4	-	0.0
R2/300	**W2/300**		1	21	1	21	0.0	0.0	1	21	1	21	0.0	0.0
R3/300	**W3/300**		3	29	3	29	0.0	0.0	3	29	3	29	0.0	0.0
R4/300	**W4/300**		6	35	6	35	0.0	0.0	6	35	6	35	0.0	0.0
R5/300	**W5/300**		7	37	7	37	0.0	0.0	7	37	7	37	0.0	0.0
R6/300	**W6/300**		9	36	9	36	0.0	0.0	9	36	9	36	0.0	0.0
R7/300	**W7/300**		10	38	10	38	0.0	0.0	10	38	10	38	0.0	0.0
R8/300	**W8/300**		10	36	10	36	0.0	0.0	10	36	10	36	0.0	0.0

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
R1/301	W1/301		0	6	0	6	-	0.0	0	6	0	6	-	0.0
R2/301	W2/301		6	43	3	40	50.0	7.0	6	43	3	40	50.0	7.0
R3/301	W3/301		13	51	11	49	15.4	3.9	13	51	11	49	15.4	3.9
R4/301	W4/301		15	54	14	53	6.7	1.9	15	54	14	53	6.7	1.9
R5/301	W5/301		16	55	15	54	6.3	1.8	16	55	15	54	6.3	1.8
R6/301	W6/301		16	54	14	52	12.5	3.7	16	54	14	52	12.5	3.7
R7/301	W7/301		15	50	14	49	6.7	2.0	15	50	14	49	6.7	2.0
R8/301	W8/301		14	45	14	45	0.0	0.0	14	45	14	45	0.0	0.0
R1/320	W1/320		8	36	8	36	0.0	0.0						
R1/320	W2/320		6	24	6	24	0.0	0.0	8	39	8	39	0.0	0.0
R2/320	W3/320		6	33	6	33	0.0	0.0	6	33	6	33	0.0	0.0
R1/321	W1/321		14	49	14	49	0.0	0.0						
R1/321	W2/321		7	40	7	40	0.0	0.0	14	62	14	62	0.0	0.0
R2/321	W3/321		9	50	9	50	0.0	0.0	9	50	9	50	0.0	0.0
R1/322	W1/322		19	62	19	62	0.0	0.0						
R1/322	W2/322		12	51	12	51	0.0	0.0	19	86	19	86	0.0	0.0

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
R2/322	**W3/322**		13	53	13	53	0.0	0.0	13	53	13	53	0.0	0.0
104 ST PANCRAS WAY														
R1/311	**W1/311**	BLOCKED_WIND	25	73	23	71	8.0	2.7						
R1/311	**W2/311**	BLOCKED_WIND	17	52	17	52	0.0	0.0	26	84	24	82	7.7	2.4
R2/311	**W3/311**	BLOCKED_WIND	14	48	14	48	0.0	0.0	14	48	14	48	0.0	0.0
R1/312	**W1/312**		25	52	25	52	0.0	0.0						
R1/312	**W2/312**		27	60	27	60	0.0	0.0						
R1/312	**W3/312**		19	50	16	46	15.8	8.0						
R1/312	**W4/312**		18	49	15	45	16.7	8.2						
R1/312	**W5/312**		18	49	15	45	16.7	8.2						
R1/312	**W6/312**		18	49	16	46	11.1	6.1	27	89	27	88	0.0	1.1
R2/312	**W7/312**		18	49	15	45	16.7	8.2						
R2/312	**W8/312**		18	48	15	44	16.7	8.3	18	49	15	45	16.7	8.2
189 ST PANCRAS WAY														
R3/499	**W3/499**	ENTRANCE	2	20	2	16	0.0	20.0	2	20	2	16	0.0	20.0
15 WILMOT PLACE														
R1/500	**W1/500**	ENTRANCE	2	16	2	16	0.0	0.0	2	16	2	16	0.0	0.0
R1/501	**W1/501**		14	60	13	59	7.1	1.7	14	60	13	59	7.1	1.7

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
R1/502	**W1/502**		20	66	20	66	0.0	0.0	20	66	20	66	0.0	0.0
R1/511	**W1/511**	STAIRS	7	53	6	52	14.3	1.9	7	53	6	52	14.3	1.9
R1/512	**W1/512**	STAIRS	11	57	11	57	0.0	0.0	11	57	11	57	0.0	0.0
26-28 ROCHESTER PLACE														
R1/600	**W1/600**		9	44	4	33	55.6	25.0						
R1/600	**W2/600**		10	46	4	31	60.0	32.6						
R1/600	**W3/600**		8	46	3	25	62.5	45.7	10	49	6	40	40.0	18.4
R2/600	**W4/600**		8	36	0	11	100.0	69.4	8	36	0	11	100.0	69.4
R3/600	**W5/600**		7	37	1	7	85.7	81.1	7	37	1	7	85.7	81.1
R4/600	**W6/600**		6	45	1	16	83.3	64.4						
R4/600	**W7/600**		7	49	1	32	85.7	34.7						
R4/600	**W8/600**		9	41	2	34	77.8	17.1						
R4/600	**W9/600**		9	44	3	37	66.7	15.9	12	69	3	40	75.0	42.0
R1/601	**W1/601**		21	64	9	52	57.1	18.8	21	64	9	52	57.1	18.8
R2/601	**W2/601**		24	69	8	51	66.7	26.1						
R2/601	**W3/601**		24	68	4	38	83.3	44.1	25	71	8	52	68.0	26.8
R3/601	**W4/601**		16	48	0	20	100.0	58.3	16	48	0	20	100.0	58.3

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
R4/601	W5/601		22	69	2	32	90.9	53.6						
R4/601	W6/601		22	69	2	31	90.9	55.1						
R4/601	W7/601		17	65	2	29	88.2	55.4						
R4/601	W8/601		14	59	3	45	78.6	23.7						
R4/601	W9/601		16	61	5	48	68.8	21.3						
R4/601	W10/601		18	63	8	53	55.6	15.9	26	93	8	62	69.2	33.3
R5/601	W11/601		23	55	19	51	17.4	7.3	23	55	19	51	17.4	7.3
R1/602	W4/602		11	23	4	16	63.6	30.4						
R1/602	W5/602		21	36	9	24	57.1	33.3	21	44	10	33	52.4	25.0
R2/602	W6/602		24	70	9	54	62.5	22.9						
R2/602	W7/602		24	67	6	47	75.0	29.9	25	74	10	58	60.0	21.6
R3/602	W8/602		18	54	3	35	83.3	35.2	18	54	3	35	83.3	35.2
R4/602	W9/602		26	75	5	46	80.8	38.7						
R4/602	W10/602		26	75	6	47	76.9	37.3						
R4/602	W11/602		25	74	5	44	80.0	40.5						
R4/602	W12/602		22	67	9	54	59.1	19.4						
R4/602	W13/602		22	67	12	57	45.5	14.9						
R4/602	W14/602		24	69	15	60	37.5	13.0	30	98	16	77	46.7	21.4
R1/603	W4/603		25	75	18	68	28.0	9.3						
R1/603	W5/603		26	76	21	71	19.2	6.6	26	76	21	71	19.2	6.6
R2/603	W6/603		26	76	18	68	30.8	10.5						
R2/603	W7/603		24	73	14	63	41.7	13.7	26	76	18	68	30.8	10.5

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
R3/603	W8/603		20	57	9	46	55.0	19.3	20	57	9	46	55.0	19.3
R4/603	W9/603		27	77	12	61	55.6	20.8						
R4/603	W10/603		27	77	13	62	51.9	19.5						
R4/603	W11/603		27	77	12	60	55.6	22.1						
R4/603	W12/603		24	69	15	60	37.5	13.0						
R4/603	W13/603		24	69	15	60	37.5	13.0						
R4/603	W14/603		24	69	18	63	25.0	8.7	30	99	20	88	33.3	11.1
2-12 ROCHESTER MEWS														
R7/700	W7/700		12	55	2	39	83.3	29.1	12	55	2	39	83.3	29.1
R8/700	W8/700		13	56	4	45	69.2	19.6	13	56	4	45	69.2	19.6
R5/701	W5/701		16	62	4	44	75.0	29.0	16	62	4	44	75.0	29.0
R6/701	W6/701		17	63	5	48	70.6	23.8	17	63	5	48	70.6	23.8
R7/701	W7/701		17	63	7	53	58.8	15.9	17	63	7	53	58.8	15.9
R8/701	W8/701		19	65	9	55	52.6	15.4	19	65	9	55	52.6	15.4
R5/702	W1/702		21	67	7	50	66.7	25.4	21	67	7	50	66.7	25.4
R6/702	W2/702		20	66	10	55	50.0	16.7	20	66	10	55	50.0	16.7
R7/702	W3/702		20	66	11	57	45.0	13.6	20	66	11	57	45.0	13.6

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
R8/702	W4/702		20	66	13	59	35.0	10.6	20	66	13	59	35.0	10.6
1-24 HOGARTH COURT														
R2/1000	W2/1000		13	19	13	17	0.0	10.5	13	19	13	17	0.0	10.5
R3/1000	W4/1000		23	68	23	66	0.0	2.9	23	68	23	66	0.0	2.9
R2/1001	W2/1001		13	20	13	17	0.0	15.0	13	20	13	17	0.0	15.0
R3/1001	W4/1001		23	70	23	66	0.0	5.7	23	70	23	66	0.0	5.7
R2/1002	W2/1002		13	21	13	17	0.0	19.0	13	21	13	17	0.0	19.0
R3/1002	W4/1002		26	74	26	70	0.0	5.4	26	74	26	70	0.0	5.4
R2/1003	W2/1003		14	24	14	20	0.0	16.7	14	24	14	20	0.0	16.7
R3/1003	W4/1003		27	75	27	71	0.0	5.3	27	75	27	71	0.0	5.3
R2/1004	W2/1004		14	24	14	22	0.0	8.3	14	24	14	22	0.0	8.3
R3/1004	W4/1004		27	74	27	72	0.0	2.7	27	74	27	72	0.0	2.7
R2/1005	W2/1005		13	26	13	25	0.0	3.8	13	26	13	25	0.0	3.8
R3/1005	W4/1005		26	67	26	66	0.0	1.5	26	67	26	66	0.0	1.5

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