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48-56 Bayham Place

Daylight, Sunlight and Overshadowing Report

Overshadowing

• Daylight & Sunlight • Light Pollution •

Solar Glare • Daylight Design

Director:	Justin Bolton
Client:	Summer Butterfly Ltd
Date:	May 2017
Project:	P469

Contents

Appendices

1 Executive Summary

1.1 This report has considered the potential Daylight and Sunlight effects to the surrounding residential properties as a result of the implementation of proposed Ambigram Architects scheme for 48-56 Bayham Place, London, NW1.

1.2 The scheme includes the Erection of a single storey extension at 3rd floor level plus double roof extension to provide 9 self-contained units, rear extension at second floor level and associated works.

1.3 A number of detailed assessments have been undertaken on the surrounding buildings that have habitable rooms/windows overlooking the site. This has been undertaken in accordance with the BRE report entitled 'Site layout planning for daylight and sunlight: A guide to good practice', more commonly known as 'The BRE guidelines'.

1.4 The daylight results show full BRE compliance with all of the surrounding residential properties meeting the BRE guidelines recommended criteria.

1.5 The sunlight assessment indicates that only 3 rooms (within the surrounding building) will experience a change beyond the BRE. However, 2 of these are understood to be bedrooms which do not have an expectation for direct point source lighting. The remaining 1 room receives sunlight alterations during the winter months when the sun is low in the sky and further obstructed by local buildings.

2 Introduction

2.1 Point 2 Surveyors Ltd has been appointed by Summer Butterfly Ltd to undertake a daylight and sunlight study with regard to the proposed redevelopment of the 48-56 Bayham Place, London, NW1 site.

2.2 The proposed development is for an extension of a single story at 3rd floor level plus double roof extension to provide 9 self-contained units, rear extension at second floor level and associated works. The extents of the current building (drawings P469/35-37) and proposed extension (drawings P469/38-40) can be seen in Appendix 1.

2.3 In August 2015 prior approval (planning ref: 2015/4598/P) was granted by LB Camden for the change of use of the building from office (Class B1a) to residential (Class C3). In October 2016 planning permission (ref. 2016/4116/P) was granted by LB Camden for the erection of a part single, part double roof extension to the building to provide four self-contained units (Class C3), two rear extensions at first and second floor level and associated external alterations. Since the approval of the planning application in October 2016 the applicant has constructed the rear extensions at first and second floor level to allow the occupation of these floors. This application seeks an additional floor at third floor level and to replicate a similar two storey roof extension as approved under planning permission ref. 2016/4116/P. The scheme also includes a rear extension at second floor level.

2.4 This report will assess the potential daylight and sunlight effects as a result of the proposal on the surrounding residential properties. The room dimensions and classifications for 3-7 Bayham Place have been determined by reference to the Planning Permission ref 2016/6394/P

2.5 The calculations in this report have been based on the submitted plans, elevations, sections and models by Ambigram Architects along with land survey information of the surrounding elevations. Access into 5 Bayham Street has been secured in order to confirm the internal subdivision and uses of the rooms which have windows facing towards the development site. For those surrounding properties that access has not been obtained, we have used site photographs and information from the local authorities planning records to assume the internal layouts and room uses.

3 Methodology

3.1 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 to 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 building where the occupants have a reasonable expectation of daylight; this would normally include schools, hospitals, hotels and hostels, small workshops and some offices."*

3.2 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 artificial electric lighting rather than natural light.

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

Daylighting

3.4 It is common to consider the local authorities planning policy in order to establish the basis for which consideration in relation to light should be approached. The following can be used as a quick test to assess the likely effect on existing surrounding properties:

a) Project a 25 degree line from the centre of the lowest window on the existing building;

b) If the whole of your new development is lower than this line then it is unlikely to have a substantial effect on the daylight enjoyed by occupants in the existing building.

3.5 The above test is also known as the 25° angle test but has not been used for this assessment as it does not reflect the differing heights and layouts of the buildings in the local area.

3.6 More detailed tests can be undertaken to fully assess the loss of daylight in existing buildings, in particular the use of the Vertical Sky Component (VSC) method of assessment.

> *The Vertical Sky Component is expressed as a ratio of the maximum value of daylight achievable for a completely unobstructed vertical wall. The maximum value is almost 40%. This is because daylight hitting a window can only come from one direction immediately halving the available light. The value is limited further by the angle of the sun. This is why if the VSC is greater than 27% enough sunlight [SIC] should be reaching the existing window. Any reduction below this level should be kept to minimum.*
>
> *Windows to some existing rooms may already fail to achieve this target under existing conditions. In these circumstances it is possible to accept a reduction to the existing level of daylight to no less than 80% of its former value.*

3.7 In summary to the above, a room is considered to continue to receive good levels of daylight if the window can receive a VSC of at least 27%. If the window receives a VSC below 27% in the existing scenario a reduction of less than 0.8 times its former value (20%), as a result of the proposed development, is considered acceptable.

3.8 In conjunction with the VSC tests, the BRE guidelines and British Standard 8206-Part2:2008 suggest that the distribution of daylight is assessed using the No Sky Line (NSL) test. This test separates those areas of the working plane that can receive direct skylight and those that cannot.

3.9 The BRE guidelines suggest that the daylight distribution test is undertaken to existing surrounding properties when the internal arrangements are known. To assess the impact of any reduction the BRE guidelines suggest:

"If, following construction of a new development, the no sky line moves so that the area of the existing room, which does receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit."

Sunlighting

3.10 The amount of direct sunlight a window can enjoy is dependent on its orientation and the extent of any external obstructions. For example, a window that faces directly north, no matter what external obstructions are present, will not be able to receive good levels of sunlight throughout the year. However, a window that faces directly south with no obstructions will enjoy very high levels of sunlight throughout the year. As the potential to receive sunlight is dependent on a window's orientation, the BRE guidelines state:

"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 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun."

3.11 To consider any sunlight effect to the surrounding properties the BRE guidelines suggest calculating the Annual Probable Sunlight Hours (APSH) at the centre of each window on the outside face of the window wall. The BRE guidelines suggest that:

"If this window point can receive more than one quarter of APSH (see section 3.1), including at least 5% of APSH in the winter months between 21st September and 21st March, then the room should still receive enough sunlight."

3.12 If the above criteria is not met, the BRE guidelines suggest calculating the APSH at the window in the existing situation, i.e. before redevelopment. If the reduction of APSH between the existing and proposed situations is less than 0.8 times its former value for either the total APSH or in the winter months; and greater than 4% for the total APSH, then the occupants of the adjoining building are likely to notice the reduction in sunlight.

3.13 In assessing the daylight and sunlight to the neighbouring buildings as well as assessing the quality of light within the proposed habitable rooms that make up the residential units, the true existing baseline condition has been observed. This includes all neighbouring buildings and obstructions within the vicinity that could be affected by the scheme proposal and or affect the potential for light entering into the proposed residential rooms within the scheme.

3.14 Trees and any other foliage have not been considered as part of the assessments as their size, shape, and density are impossible to predict. The BRE do recognise that certain tree types can be obstructive in allowing light penetration and further provide a transparency (% radiation passing) to apply within the calculation of daylight.

3.15 The application of the tree transparency formula has not been applied in reviewing the daylight impacts to the neighbouring buildings as a result of the proposed 48-56 Bayham Place site proposal. It is, however, acknowledged that the majority of the foliage can be described as shrubbery rather than mature trees. There are a couple of larger trees that are deciduous and will therefore lose their leaves during the winter months.

3.16 The obstruction produced by trees will in any event be blocking a certain view of the skydome and thus the actual impact produced by testing the changes in light (or view of the skydome) by the scheme can be slightly misleading given that in some instances no view of the existing and proposal will be prevalent and thus no recording of any alteration observed. The results are therefore a clear indication as to what would be available in the event that no trees were present and therefore what the worst case impacts would be by the implementation of the proposal.

Sun on Ground

3.17 The methodology for the assessment of sun hours on ground for external and internal areas is set out in the 2011 BRE Guidance and is summarised below. The 2011 BRE Guidelines acknowledges that:

> *"Good Site layout planning for daylight and sunlight should not limit itself to providing good natural light inside buildings. Sunlight in the space between buildings has an important effect on the overall appearance and ambience of a Development."*

3.18 The method for assessing sun hours on ground is the sun-on-ground indicator. The sun hours on ground assessment applies both to new gardens and amenity areas, and to existing ones, which are affected by new Developments.

3.19 The 2011 BRE Guidelines suggests that the Spring Equinox (21st March) is a good date for assessment as the sun is at its midpoint in the sky. Using specialist software, the path of the sun is tracked which maps obstructions and compares them to the known sun paths to determine where the sun would reach the ground and where it would not.

3.20 The BRE suggests that for a garden or amenity area to appear adequately sunlit throughout the year, no more than half (50%) of the area should be prevented by buildings from receiving two hours of sunlight on the 21st March. The 2011 BRE Guidelines then go on to suggest that if, as a result of new Development, an existing garden or amenity area (external receptor) does not meet the Guidance, or the area which can receive some sun on the 21st March is less than 0.8 times its former value then the loss of sunlight is likely to be noticeable. The results of each assessment are analysed against these criteria.

Internal Daylight

3.21 The BRE recognise the importance for receiving adequate daylight within the proposed residential accommodation. The use of the Average Daylight Factor (ADF) is used to determine the average illuminance on the working plane in a room, divided by the illuminance on an unobstructed surface outdoors. This analysis is undertaken in accordance with BS 8206 Part 2:2008.

3.22 The BRE suggests minimum ADF standards for room use for which the following is recommended:

- Kitchens 2.0%
- Living rooms 1.5%
- Bedrooms 1.0%

4 Surrounding Properties

4.1 Following a site visit and a number of Valuation Agency searches, the following surrounding properties are those that are within close proximity of the site, and are understood to be residential or include a residential component:

- 7b Bayham Place
- 7a Bayham Place
- 7 Bayham Place
- 3 Bayham Place
- 5 Bayham Place
- 65 Bayham Place
- 6 Bayham Place
- 4 Bayham Place

4.2 A site plan illustrating the position of the site (red) and the above surrounding properties is shown (in blue) on Plate 01 below.

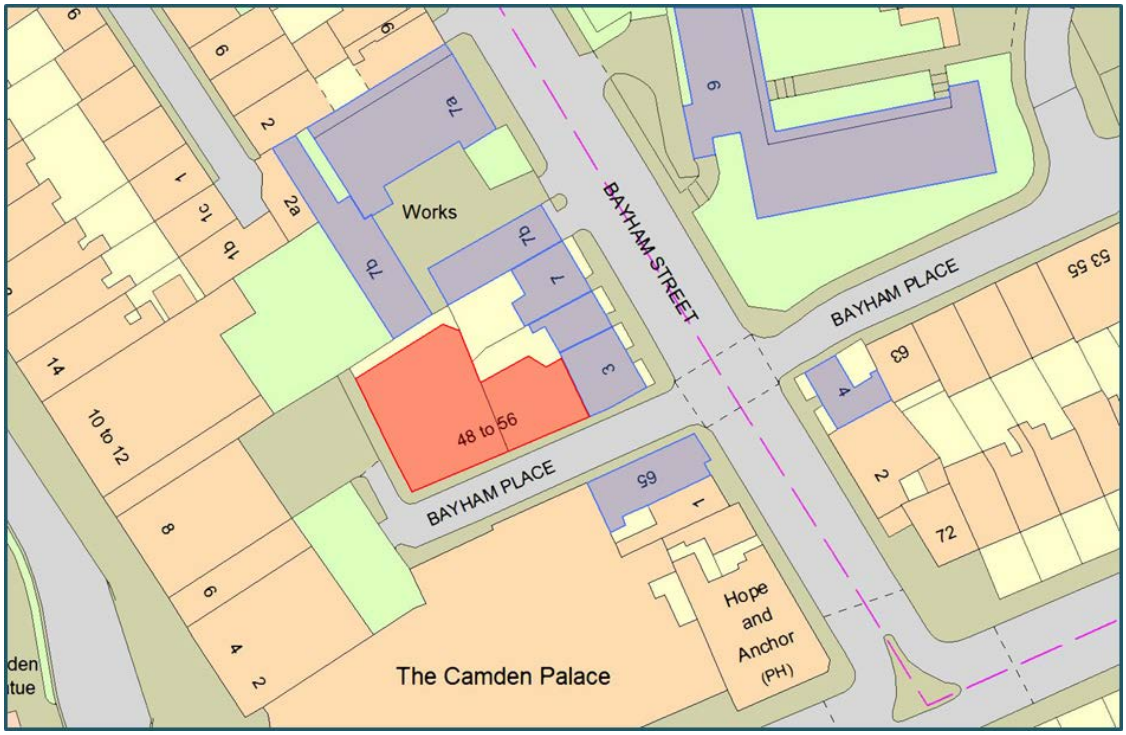


PLATE 01 – PLAN SHOWING DEVELOPMENT SITE (RED) AND ASSESSED SURROUNDING BUILDINGS (BLUE).

4.3 The remaining surrounding properties are either too far away to be affected by the implementation of the proposed development or understood to be of commercial use and not considered to have an expectation for daylight or sunlight. Detailed daylight and sunlight assessments have not therefore been undertaken to these properties.

5 Assessment Results for Daylight to Neighbouring Buildings

5.1 Following the identification of those properties that are considered to have a reasonable expectation of daylight and sunlight, VSC, NSL, and where appropriate, APSH tests have been undertaken.

Daylight

5.2 The tabular results of the assessments are given at Appendix 2 and 3.

5.3 A summary of VSC impacts has been provided below:

TABLE 01 – SUMMARY OF VSC RESULTS (EXISTING VS PROPOSED)

Address	Total that Meet BRE Guidelines	Below BRE Guidelines				Total No. of Windows
		20-29% Loss	30-39.9% Loss	>=40% Loss	Total	
7b BAYHAM STREET	10	0	0	0	0	10
7a BAYHAM STREET	17	0	0	0	0	17
6 BAYHAM STREET	9	0	0	0	0	9
4 BAYHAM STREET	7	0	0	0	0	7
2-4 KINGS TERRACE	5	0	0	0	0	5
Total	**48**	**0**	**0**	**0**	**0**	**48**

5.4 The VSC method of assessment indicates that 100% of windows tested achieve BRE compliance. That is to say, 48 out of the 48 windows tested will not experience a change in light exceeding permissible levels set out by the BRE.

5.5 The NSL method of assessment indicates that 100% of rooms tested achieve BRE compliance, with all rooms meeting the BRE guidelines.

5.6 **3,5,7 Bayham Place –** These properties form part of another planning application (ref: 2016/6394/P) that obtained planning permission in which the internal use and dimensions have been recognised. Now that specific room uses and dimensions are known, an ADF assessment has been undertaken. The table below (Table 02) highlights that every room with 3-7 Bayham Place that faces the proposed development will be fully BRE compliant.

TABLE 02 – SUMMARY OF ADF – RETAINED VALUES

Address	>2%	1.5-1.99%	1.0-1.49%	0.5-0.99%	<0.49%	Total No. Rooms	Total Below 1.5%	Total Above 1.5%
7 BAYHAM STREET	2	1	0	0	0	3	0	3
3 BAYHAM STREET	1	0	0	0	0	1	0	1
5 BAYHAM STREET	2	0	1	0	0	3	1	2
Total	**5**	**1**	**1**	**0**	**0**	**7**	**1**	**6**

Sunlight

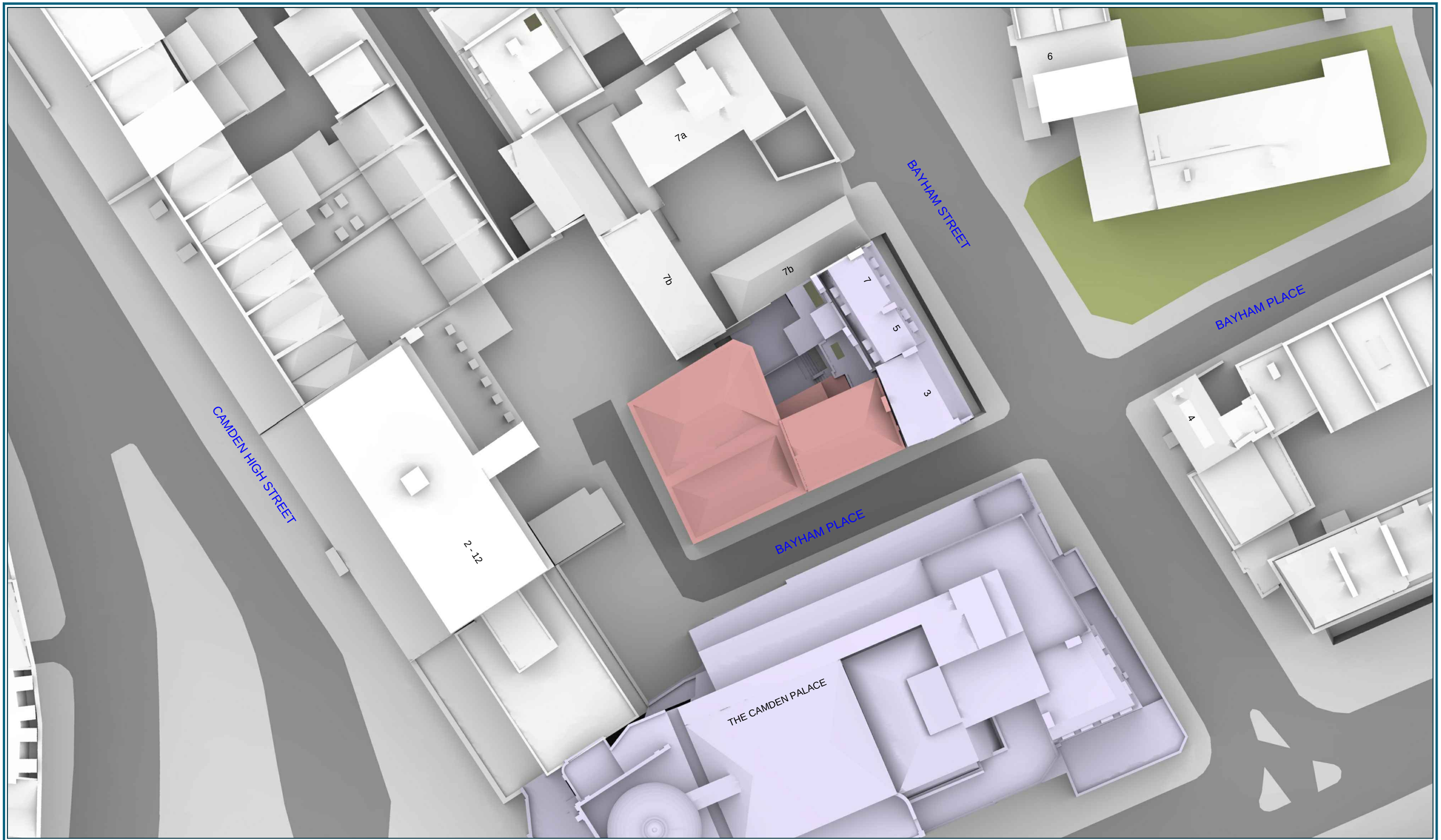
5.7 The tabular results of the assessments are given at Appendix 4.

5.8 Eight of the surrounding buildings have windows facing the site and are within 90 degrees of due south. The APSH sunlight results show that 29 of 32 rooms (90%) meet BRE compliance. One room which breaches the BRE guidelines only does so in the winter condition, where sun availability is already low in the existing condition. Achieving BRE non-compliance for Winter Sunlight is quite typical for an urban setting where the low angle of the sun is further blocked by other local obstructions. Importantly, two out of the three rooms that experience sunlight transgressions are bedrooms. The BRE recognise that Livingroom's have an expectation for direct sunlight beyond any other habitable use. All rooms will retain good levels of sunlight annually, and is commensurate with other neighbouring buildings.

6 Conclusions

6.1 The results of the detailed technical assessments highlight full BRE compliance in daylight and sunlight terms to the neighbouring residential buildings. The sunlight assessment highlights near full compliance although the retained levels are well within the intension and application of the BRE guidelines.

Appendix A – Existing and Proposed Plan & 3D Views



Sources: 3 SIXTY MEASUREMENT
Existing Building Survey 2D Survey

MIDLAND SURVEY LTD
Surrounding Buildings 2D Survey

AMBIGRAM ARCHITECTS
3D Model of the Proposed Scheme
Received 24/04/17
"20170424_BPL_Massing for light assessment.3ds"

Key:
Existing Building
Consented Schemes Around the Site

N

Project: 48-56 Bayham Place
London

Title: Site Plan
Existing Building

Point 2 Surveyors Ltd,
3rd Floor,
17 Slingsby Place,
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Drawn By: FS

Scale: 1:350

Date: APR 17

Dwg No: **P469/35**

Sources: 3 SIXTY MEASUREMENT
Existing Building Survey 2D Survey

MIDLAND SURVEY LTD
Surrounding Buildings 2D Survey

AMBIGRAM ARCHITECTS
3D Model of the Proposed Scheme
Received 24/04/17
"20170424_BPL_Massing for light assessment.3ds"

Key: All Heights in MM AOD
Existing Building
Consented Schemes Around the Site

Project: 48-56 Bayham Place
London

Title: 3D View
Existing Building

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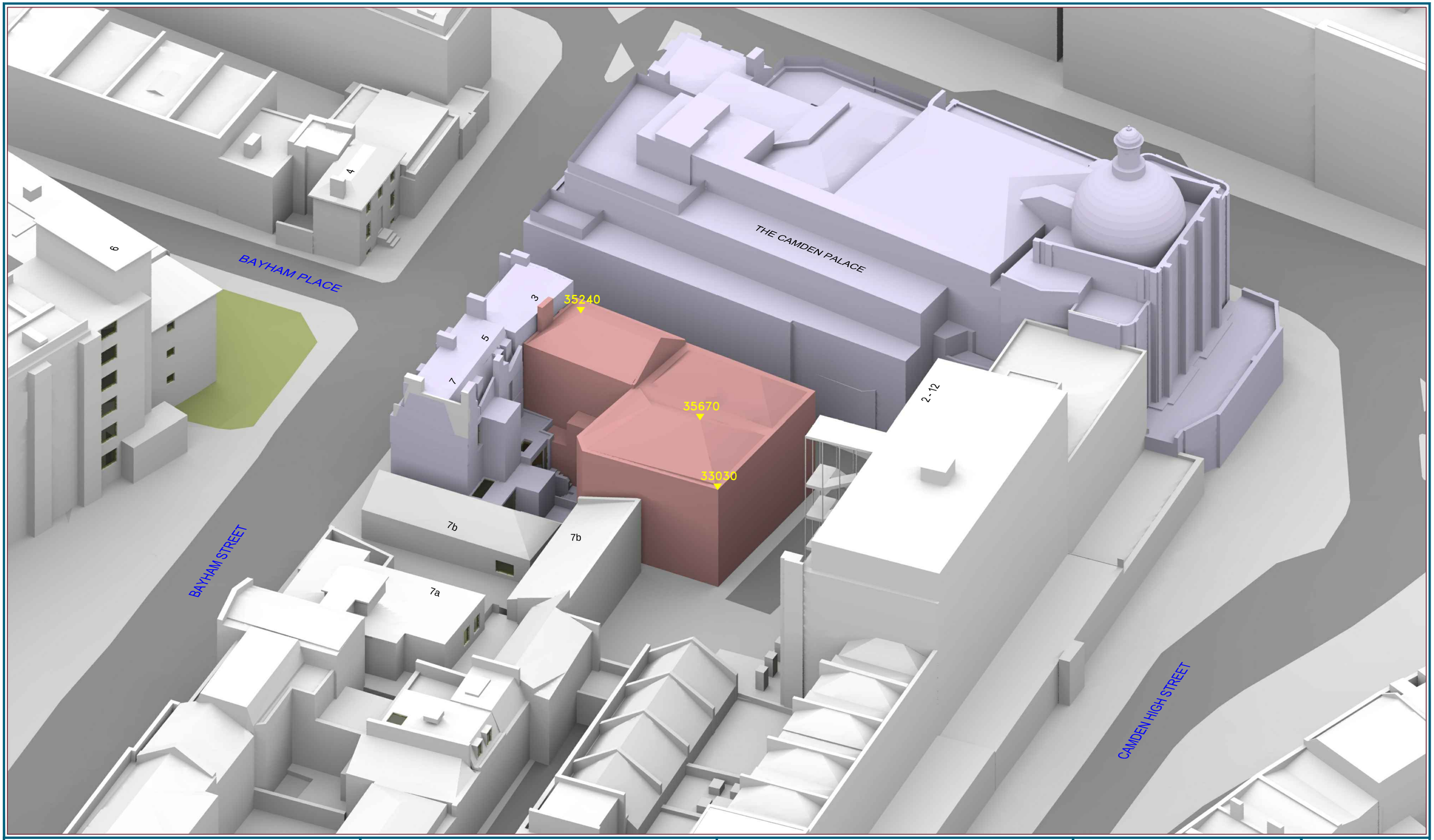
Drawn By: FS | Scale: NTS | Date: APR 17 | Dwg No: **P469/36**



Sources: 3 SIXTY MEASUREMENT
Existing Building Survey 2D Survey

MIDLAND SURVEY LTD
Surrounding Buildings 2D Survey

AMBIGRAM ARCHITECTS
3D Model of the Proposed Scheme
Received 24/04/17
"20170424_BPL_Massing for light assessment.3ds"

Key: All Heights in MM AOD
Existing Building
Consented Schemes Around the Site

Project: 48-56 Bayham Place
London

Title: 3D View
Existing Building

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Drawn By: FS | Scale: NTS | Date: APR 17 | Dwg No: **P469/37**

Sources: 3 SIXTY MEASUREMENT
Existing Building Survey 2D Survey

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Surrounding Buildings 2D Survey

AMBIGRAM ARCHITECTS
3D Model of the Proposed Scheme
Received 24/04/17
"20170424_BPL_Massing for light assessment.3ds"

Key:
Proposed Scheme
Consented Schemes Around the Site

N

Project: 48-56 Bayham Place
London

Title: Site Plan
Proposed Scheme Dated 24/04/17

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Drawn By: FS

Scale: 1:350

Date: APR 17

Dwg No: **P469/38**

Sources: 3 SIXTY MEASUREMENT
Existing Building Survey 2D Survey

MIDLAND SURVEY LTD
Surrounding Buildings 2D Survey

AMBIGRAM ARCHITECTS
3D Model of the Proposed Scheme
Received 24/04/17
"20170424_BPL_Massing for light assessment.3ds"

Key:
All Heights in MM AOD
Proposed Scheme
Consented Schemes Around the Site

Project: 48-56 Bayham Place
London

Title: 3D View
Proposed Scheme Dated 24/04/17

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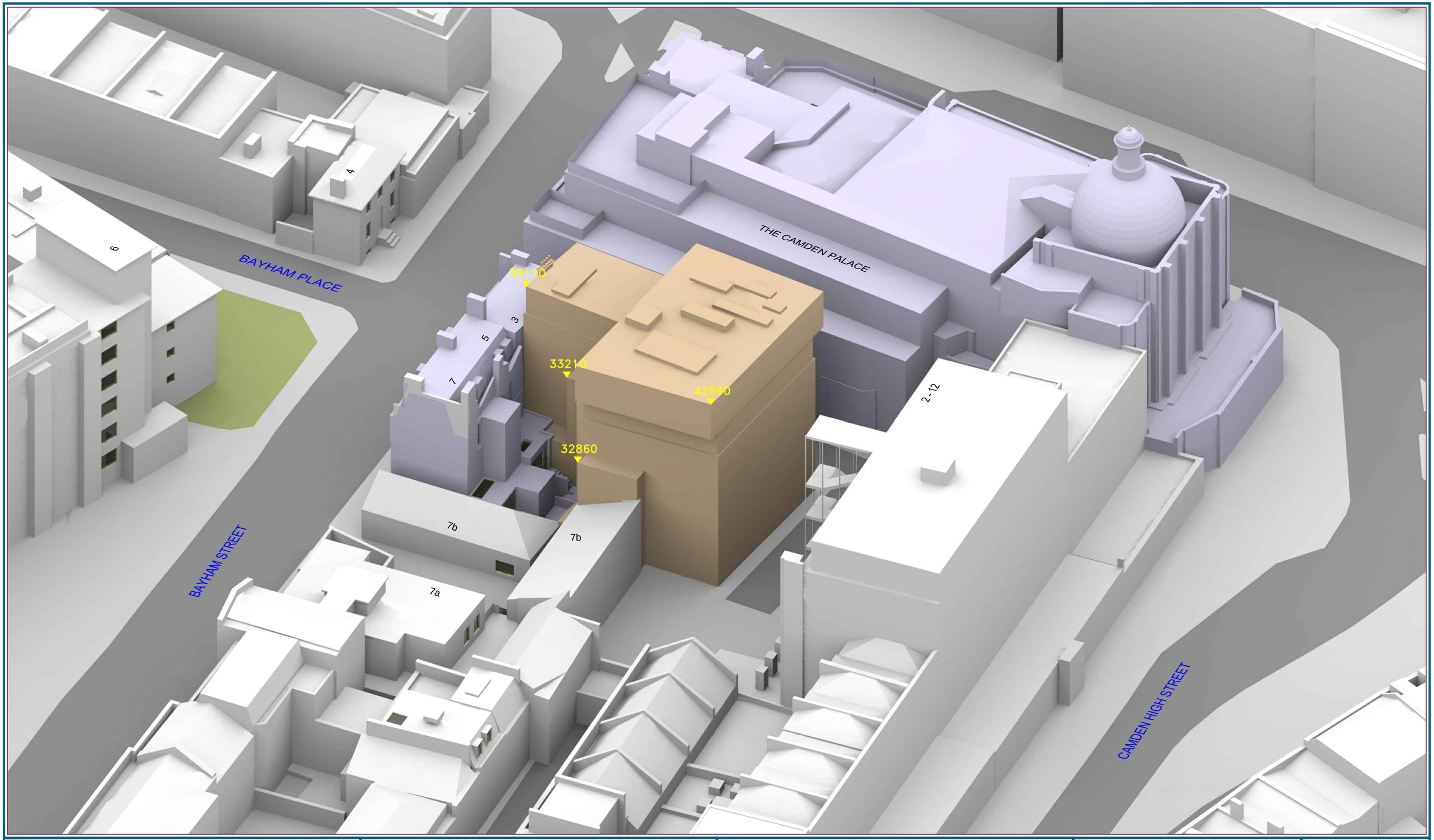
Drawn By: FS

Scale: NTS

Date: APR 17

Dwg No: **P469/39**



Sources: 3 SIXTY MEASUREMENT
Existing Building Survey 2D Survey

MIDLAND SURVEY LTD
Surrounding Buildings 2D Survey

AMBIGRAM ARCHITECTS
3D Model of the Proposed Scheme
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Key: All Heights in MM AOD
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Consented Schemes Around the Site

Project: 48-56 Bayham Place
London

Title: 3D View
Proposed Scheme Dated 24/04/17

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Drawn By: FS

Scale: NTS

Date: APR 17

Dwg No: **P469/40**

Appendix B – VSC Results (Existing vs Proposed)

Room	Room Use	Window	EXISTING VSC	PROPOSED VSC	LOSS VSC	%LOSS VSC
7b BAYHAM STREET						
R1/50		W1/50	15.25	14.50	0.75	4.92
R1/50		W2/50	16.56	15.95	0.61	3.68
R1/50		W3/50	21.38	20.86	0.52	2.43
R2/50		W4/50	23.07	22.75	0.32	1.39
R1/51		W1/51	26.13	25.31	0.82	3.14
R1/51		W2/51	28.71	28.21	0.50	1.74
R1/51		W3/51	29.10	28.80	0.30	1.03
R1/60		W1/60	22.14	22.14	0.00	0.00
R1/60		W2/60	2.77	2.31	0.46	16.61
R1/60		W3/60	3.37	2.72	0.65	19.29
7a BAYHAM STREET						
R1/40		W1/40	18.83	15.96	2.87	15.24
R1/40		W2/40	24.23	19.71	4.52	18.65
R2/40		W3/40	25.70	21.19	4.51	17.55
R2/40		W4/40	25.59	21.29	4.30	16.80
R3/40		W5/40	24.38	20.40	3.98	16.32
R3/40		W6/40	17.74	14.22	3.52	19.84
R1/41		W1/41	24.00	22.76	1.24	5.17
R1/41		W2/41	23.92	22.91	1.01	4.22
R1/41		W3/41	29.38	23.76	5.62	19.13
R1/41		W4/41	29.65	24.39	5.26	17.74
R2/41		W5/41	29.86	24.97	4.89	16.38
R2/41		W6/41	29.96	25.40	4.56	15.22
R3/41		W7/41	29.61	25.49	4.12	13.91
R3/41		W8/41	21.81	18.17	3.64	16.69
R4/41		W9/41	30.04	26.72	3.32	11.05
R4/41		W10/41	27.82	27.82	0.00	0.00
R4/41		W11/41	27.59	27.59	0.00	0.00
6 BAYHAM STREET						

Room	Room Use	Window	EXISTING VSC	PROPOSED VSC	LOSS VSC	%LOSS VSC
R1/20		W1/20	27.85	27.62	0.23	0.83
R2/20		W2/20	28.23	27.96	0.27	0.96
R1/21		W1/21	31.94	31.51	0.43	1.35
R2/21		W2/21	30.78	30.21	0.57	1.85
R1/22		W1/22	33.59	33.03	0.56	1.67
R2/22		W2/22	29.84	29.04	0.80	2.68
R1/23		W1/23	34.76	34.19	0.57	1.64
R1/24		W1/24	35.42	35.08	0.34	0.96
R1/25		W1/25	32.92	32.79	0.13	0.39
4 BAYHAM STREET						
R1/29		W1/29	20.57	19.91	0.66	3.21
R2/29		W2/29	15.67	15.21	0.46	2.94
R1/30		W1/30	24.65	23.95	0.70	2.84
R2/30		W2/30	20.58	20.09	0.49	2.38
R1/31		W1/31	25.29	24.54	0.75	2.97
R2/31		W2/31	24.79	24.07	0.72	2.90
R3/31		W3/31	24.50	23.94	0.56	2.29
2-4 KINGS TERRACE						
R1/200	LKD	W1/200	28.53	26.91	1.62	5.68
R1/200	LKD	W2/200	30.99	30.95	0.04	0.13
R1/200	LKD	W3/200	30.86	30.81	0.05	0.16
R1/200	LKD	W4/200	49.82	49.79	0.03	0.06
R1/200	LKD	W5/200	96.74	96.48	0.26	0.27

Appendix C – NSL Results (Existing vs Proposed)

Room/ Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
7b BAYHAM STREET						
R1/50		374.7	262.2	255.1	7.1	2.7
R2/50		274.3	192.2	186.6	5.6	2.9
R1/51		777.2	770.2	758.4	11.7	1.5
R1/60		167.4	96.1	96.1	0.0	0.0
7a BAYHAM STREET						
R1/40		151.1	149.8	149.8	0.0	0.0
R2/40		153.8	152.4	152.4	0.0	0.0
R3/40		160.2	158.8	158.8	0.0	0.0
R1/41		151.1	150.9	148.0	2.9	1.9
R2/41		153.8	152.9	146.1	6.8	4.4
R3/41		160.2	159.2	148.3	10.9	6.8
R4/41		155.8	154.8	153.8	1.0	0.6
6 BAYHAM STREET						
R1/20		223.5	202.0	202.0	0.0	0.0
R2/20		149.5	116.7	113.7	3.0	2.6
R1/21		223.5	213.6	213.6	0.0	0.0
R2/21		149.5	132.8	125.8	7.0	5.3
R1/22		223.5	213.6	213.6	0.0	0.0
R2/22		149.5	141.4	134.9	6.5	4.6
R1/23		223.5	213.6	213.6	0.0	0.0
R1/24		223.5	213.6	213.6	0.0	0.0
R1/25		223.5	216.4	216.4	0.0	0.0
4 BAYHAM STREET						
R1/29		96.0	66.7	66.7	0.0	0.0
R2/29		85.1	44.1	42.9	1.2	2.7
R1/30		96.0	74.4	74.4	0.0	0.0
R2/30		85.1	56.3	56.0	0.3	0.5
R1/31		96.0	81.5	81.5	0.0	0.0
R2/31		85.0	72.0	72.0	0.0	0.0
R3/31		85.1	66.1	66.1	0.0	0.0
2-4 KINGS TERRACE						
R1/200	LKD	429.4	429.0	429.0	0.0	0.0

Appendix D – APSH Results (Existing vs Proposed)

46-58 Bayham Place
LONDON

SUNLIGHT ANALYSIS
EXISTING VS PROPOSED DATE 24/04/17

APR 2017

			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
7b BAYHAM STREET														
R1/60	**W1/60**		0	0	0	0	-	-						
R1/60	**W2/60**		0	0	0	0	-	-						
R1/60	**W3/60**		0	1	0	0	-	100.0	0	1	0	0	-	100.0
7a BAYHAM STREET														
R1/40	**W1/40**		4	34	2	31	50.0	8.8						
R1/40	**W2/40**		8	52	3	45	62.5	13.5	8	54	3	47	62.5	13.0
R2/40	**W3/40**		10	56	5	49	50.0	12.5						
R2/40	**W4/40**		11	58	5	51	54.5	12.1	11	58	5	51	54.5	12.1
R3/40	**W5/40**		11	59	5	52	54.5	11.9						
R3/40	**W6/40**		10	45	5	40	50.0	11.1	12	60	7	55	41.7	8.3
R1/41	**W1/41**		11	45	5	39	54.5	13.3						
R1/41	**W2/41**		11	44	5	38	54.5	13.6						
R1/41	**W3/41**		16	66	5	54	68.8	18.2						
R1/41	**W4/41**		16	66	6	55	62.5	16.7	17	77	10	70	41.2	9.1
R2/41	**W5/41**		19	68	8	56	57.9	17.6						
R2/41	**W6/41**		19	68	8	57	57.9	16.2	21	70	10	59	52.4	15.7
R3/41	**W7/41**		19	68	9	58	52.6	14.7						

46-58 Bayham Place
LONDON

SUNLIGHT ANALYSIS
EXISTING VS PROPOSED DATE 24/04/17

APR 2017

			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
R3/41	**W8/41**		17	53	10	46	41.2	13.2	21	70	12	61	42.9	12.9
R4/41	**W9/41**		19	68	11	60	42.1	11.8						
R4/41	**W10/41**		5	26	5	26	0.0	0.0						
R4/41	**W11/41**		6	26	6	26	0.0	0.0	21	70	13	62	38.1	11.4
7 BAYHAM STREET														
R1/71	**W1/71**	LKD	0	20	0	10	-	50.0						
R1/71	**W3/71**	LKD	4	30	4	30	0.0	0.0						
R1/71	**W4/71**	LKD	4	31	4	31	0.0	0.0						
R1/71	**W6/71**	LKD	0	18	0	8	-	55.6	4	61	4	45	0.0	26.2
R1/73	**W1/73**	BEDROOM	1	24	0	14	100.0	41.7	1	24	0	14	100.0	41.7
R1/74	**W1/74**	BEDROOM	19	52	4	32	78.9	38.5						
R1/74	**W2/74**	BEDROOM	6	34	6	34	0.0	0.0	25	86	10	66	60.0	23.3
3 BAYHAM STREET														
R1/82	**W1/82**	BEDROOM	0	10	0	0	-	100.0						
R1/82	**W2/82**	BEDROOM	7	36	7	36	0.0	0.0	7	46	7	36	0.0	21.7
5 BAYHAM STREET														
R2/71	**W2/71**	LKD	0	14	0	2	-	85.7						

46-58 Bayham Place
LONDON

SUNLIGHT ANALYSIS
EXISTING VS PROPOSED DATE 24/04/17

APR 2017

			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
R2/71	**W5/71**	LKD	4	31	4	31	0.0	0.0						
R2/71	**W7/71**	LKD	0	3	0	0	-	100.0						
R2/71	**W8/71**	LKD	0	0	0	0	-	-	4	45	4	33	0.0	26.7
R2/73	**W2/73**	BEDROOM	3	35	0	5	100.0	85.7	3	35	0	5	100.0	85.7
R2/74	**W3/74**	BEDROOM	19	53	2	18	89.5	66.0						
R2/74	**W4/74**	BEDROOM	3	24	3	24	0.0	0.0	22	77	5	42	77.3	45.5
6 BAYHAM STREET														
R1/20	**W1/20**		3	36	2	35	33.3	2.8	3	36	2	35	33.3	2.8
R2/20	**W2/20**		10	44	10	44	0.0	0.0	10	44	10	44	0.0	0.0
R1/21	**W1/21**		14	50	13	49	7.1	2.0	14	50	13	49	7.1	2.0
R2/21	**W2/21**		12	47	11	46	8.3	2.1	12	47	11	46	8.3	2.1
R1/22	**W1/22**		16	52	15	51	6.3	1.9	16	52	15	51	6.3	1.9
R2/22	**W2/22**		11	40	10	39	9.1	2.5	11	40	10	39	9.1	2.5
R1/23	**W1/23**		17	52	16	51	5.9	1.9	17	52	16	51	5.9	1.9
R1/24	**W1/24**		17	52	17	52	0.0	0.0	17	52	17	52	0.0	0.0

46-58 Bayham Place
LONDON

SUNLIGHT ANALYSIS
EXISTING VS PROPOSED DATE 24/04/17

APR 2017

			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
R1/25	**W1/25**		15	43	15	43	0.0	0.0	15	43	15	43	0.0	0.0
4 BAYHAM STREET														
R1/29	**W1/29**		3	31	3	30	0.0	3.2	3	31	3	30	0.0	3.2
R2/29	**W2/29**		0	15	0	14	-	6.7	0	15	0	14	-	6.7
R1/30	**W1/30**		12	45	12	44	0.0	2.2	12	45	12	44	0.0	2.2
R2/30	**W2/30**		3	28	3	28	0.0	0.0	3	28	3	28	0.0	0.0
R1/31	**W1/31**		13	44	13	43	0.0	2.3	13	44	13	43	0.0	2.3
R2/31	**W2/31**		12	42	12	41	0.0	2.4	12	42	12	41	0.0	2.4
R3/31	**W3/31**		13	41	13	41	0.0	0.0	13	41	13	41	0.0	0.0
2-4 KINGS TERRACE														
R1/200	**W1/200**	LKD	12	55	10	53	16.7	3.6						
R1/200	**W2/200**	LKD	17	58	16	57	5.9	1.7						
R1/200	**W3/200**	LKD	15	56	14	55	6.7	1.8						
R1/200	**W4/200**	LKD	9	40	8	39	11.1	2.5						
R1/200	**W5/200**	LKD	22	88	21	87	4.5	1.1	24	91	24	91	0.0	0.0

SUNLIGHT ANALYSIS
EXISTING VS PROPOSED DATE 24/04/17

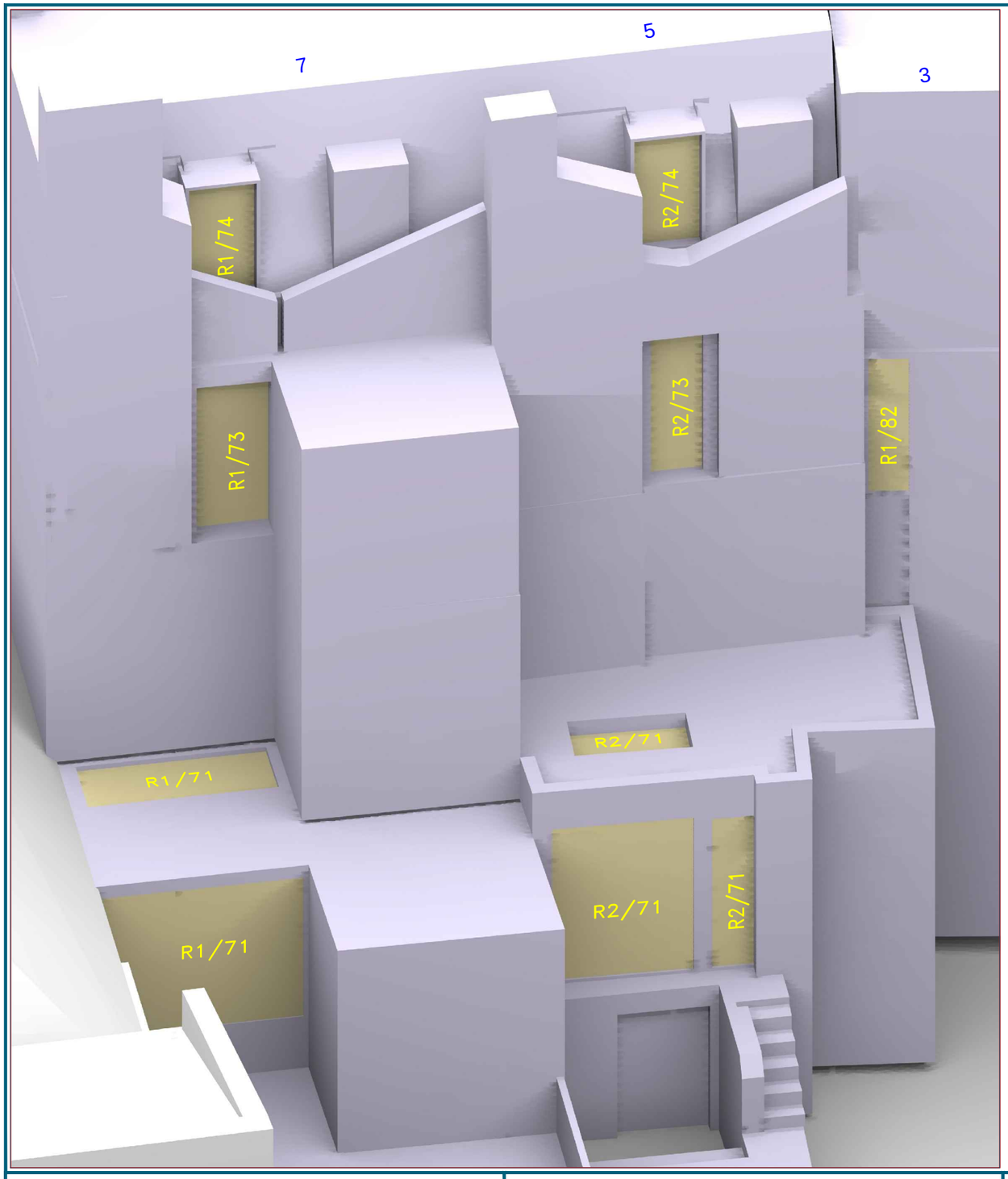
			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss

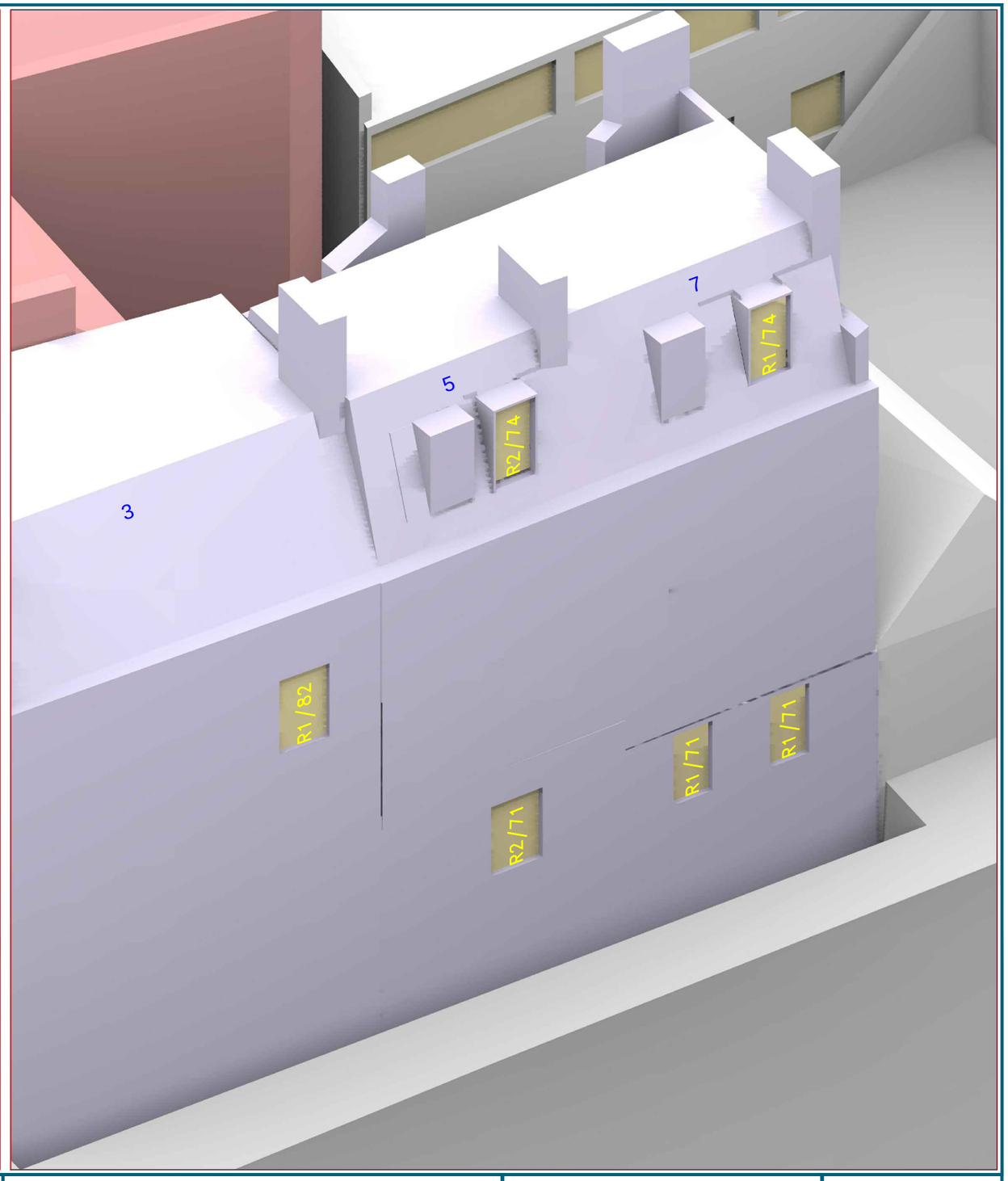
Appendix E – ADF Results (Existing vs Proposed)

DAYLIGHT ANALYSIS
EXISTING VS PROPOSED DATE 24/04/17

Room	Room Use	Window	EXISTING ADF	EXISTING TOTAL	PROPOSED ADF	PROPOSED TOTAL	TOTAL LOSS	%LOSS ADF
7 BAYHAM STREET								
R1/71	LKD	W1/71	1.41		1.30			
R1/71	LKD	W3/71	0.55		0.55			
R1/71	LKD	W4/71	0.55		0.55			
R1/71	LKD	W6/71	1.50	4.01	1.21	3.61	0.40	10.02
R1/73	BEDROOM	W1/73	2.27	2.27	1.84	1.84	0.43	19.01
R1/74	BEDROOM	W1/74	1.44		1.05			
R1/74	BEDROOM	W2/74	1.77	3.20	1.77	2.82	0.39	12.05
3 BAYHAM STREET								
R1/82	BEDROOM	W1/82	0.45		0.26			
R1/82	BEDROOM	W2/82	1.83	2.28	1.83	2.08	0.19	8.48
5 BAYHAM STREET								
R2/71	LKD	W2/71	0.94		0.77			
R2/71	LKD	W5/71	1.08		1.08			
R2/71	LKD	W7/71	1.25		0.87			
R2/71	LKD	W8/71	0.34	3.62	0.25	2.97	0.65	17.93
R2/73	BEDROOM	W2/73	2.14	2.14	1.05	1.05	1.09	50.77
R2/74	BEDROOM	W3/74	1.76		1.08			
R2/74	BEDROOM	W4/74	2.03	3.79	2.03	3.12	0.68	17.83

Appendix F – Window Map





Sources: 3 SIXTY MEASUREMENT
Existing Building Survey 2D Survey

MIDLAND SURVEY LTD
Surrounding Buildings 2D Survey

AMBIGRAM ARCHITECTS
3D Model of the Proposed Scheme
Received 24/04/17
"20170424_BPL_Massing for light assessment.3ds"

Key:

Project: 48-56 Bayham Place
London

Title: 3D View
Window/Room Maps

Point 2 Surveyors Ltd,
3rd Floor,
17 Slingsby Place,
London WC2E 9AB,
0207 836 5828
www.point2surveyors.com

Drawn By: FS

Scale: NTS

Date: APR 17

Dwg No: **P469/W/05**