48 CHURCHWAY

LONDON, NW1 1LJ

DAYLIGHT & SUNLIGHT STUDY

JULY 2018

CONTENTS

APPENDICES

1.0 INTRODUCTION

Delva Patman Redler LLP have been instructed by Moorgarth Living to assess the potential effects of the proposed development at 48 Churchway on daylight and sunlight to any neighbouring residential properties.

It is noted that there is currently a planning application for an alternative scheme proposal by TTG Architects registered on the London Borough of Camden planning portal under 2016/6599/P.

This study has been carried out in accordance with the recommendations of the Building Research Establishment (BRE) Report 209, *Site Layout Planning for Daylight and Sunlight: A guide to good practice (second edition, 2011)* ("the BRE guide"). The planning consented scheme filed under 2016/6599/P by TTG Architects has been utilised as the baseline to quantify what additional resultant impacts occur as a result of the implementation of the new scheme proposals by Gibson Thornley Architects may have.

A location drawing of the site and surrounding properties that have been assessed is attached at Appendix A. Our analysis results are attached in the remaining appendices.

2.0 PROPOSED DEVELOPMENT

The proposed development comprises the partial demolition of existing single storey building followed by the erection of a new ground plus three storey building facing Churchway to provide 457sq.m (GIA) of office floorspace (Use Class B1(a)) plus refurbishment throughout of the retained building including replacement of the existing roof structure, and all associated works.

3.0 PLANNING POLICY & GUIDELINES

This study has been carried out in accordance with the recommendations of the abovementioned BRE guide. This is the recognised guidance against which daylight and sunlight effects should be assessed.

The BRE guide states:

> *"The guide is intended for building designers and their clients, consultants and planning officials. The advice given is not mandatory and the report should not be seen as a part 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 the many factors in site layout design."*
>
> *"In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings… The calculation methods … are entirely flexible in this respect."*

Whilst technical analysis can be carried out in accordance with numerical guidelines and reported factually by comparison with those guidelines, the final assessment as to whether affected dwellings are left with acceptable amounts of daylight and sunlight in an urban context, where the findings are to be interpreted in a flexible manner, is a matter of subjective opinion.

4.0 ASSESSMENT METHODOLOGY

The daylight and sunlight assessments have been undertaken in accordance with the assessment methodology recommended in the BRE guide. This measures the available daylight and sunlight in the existing and proposed conditions and presents the numerical results both on an absolute scale and a comparative scale, measuring the factor of former value, to quantify the magnitude of impact.

For neighbouring residential properties, the BRE guide advises that rooms/windows should be assessed where daylight and sunlight is required. It regards bedrooms as less important for daylight and both

kitchens and bedrooms as less important for sunlight. Bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.

The guidelines may also be applied to non-domestic buildings where occupants have a reasonable expectation of daylight, including schools, hospitals, hotels and hostels, small workshops and some offices, and any with a specific requirement for sunlight. However, it is common practice for studies for planning applications to assess residential properties only, unless the neighbouring buildings are sensitive receptors such as residential care homes, schools or hospitals.

4.1 Daylight to buildings

The BRE guide states that:

> *"If, for any part of the new development, the angle from the centre of the lowest affected window to the head of the new development is more than 25°, then a more detailed check is needed to find the loss of skylight to the existing buildings."*

The BRE guidelines propose several methods for assessing the effect on daylight. The two main methods predominantly used are:

- vertical sky component (VSC), which measures the total amount of skylight available on the outside plane of the window wall at the centre of each window; and
- no-sky line (NSL), which measures the area of the working plane in a room which can receive direct skylight.

The VSC measures the potential for daylight reaching a room, as it does not take account of the size or number of windows serving it. If a room has two or more windows of equal size, the mean of their VSCs may be taken.

The NSL is the line on the working plane that divides areas that receive direct skylight from those that do not. It therefore measures the distribution of daylight around the room and can be displayed graphically on floor plans.

A third daylight metric is the average daylight factor (ADF), which assesses the average level of daylight inside a room. It is a detailed calculation that takes account of the amount of sky visible at each of the windows serving the room, the glazed area of each window, the diffuse light transmittance of the glazing, the total surface area of the room and the reflectance of those surfaces. British Standard *BS8206-2:2008, Lighting for Buildings – Part 2: Code of Practice for Daylighting* recommends minimum ADF values for dwellings of 1% in bedrooms, 1.5% in living rooms and 2% in kitchens. For other uses, where it is expected that supplementary electric lighting will be used throughout the daytime, such as in offices, it recommends an ADF value of 2%.

The ADF test is primarily intended for assessing light within new development, including neighbouring consented buildings that are not yet built. However, when considering the acceptability of VSC and NSL effects it can be helpful to understand whether the retained ADF values with the proposed development in place will satisfy the ADF guidelines for new dwellings.

For the purposes of this report all three methods of assessment have been considered.

4.2 Sunlight to buildings

Sunlight to buildings is assessed by calculating the percentage of annual probable sunlight hours (APSH) for the main windows of the relevant rooms which face within 90° of due south. Probable sunlight hours is the long-term average of the total number of hours during a year in which direct sunlight reaches the unobstructed ground when clouds are taken into account.

The BRE publishes APSH indicators for three latitudes in the UK: London (51.5°N, 1486 unobstructed hours), Manchester (53.5°N, 1392 unobstructed hours) and Edinburgh (56°N, 1267 unobstructed hours). The assessment uses whichever indicator is nearest to the latitude of the proposed development.

The assessment calculates the percentage of APSH over the whole year (annual sunlight) and between 21 September and 21 March (winter sunlight).

4.3 Scope of assessment

We have used 3D computer modelling and specialist software to run the assessments recommended in the BRE guide.

We have assessed the neighbouring residential properties that may potentially be adversely affected by the proposed development, having regard to the BRE preliminary 25° angle test and using professional judgement.

We have included the following drawings at Appendix A to show the 3D computer model used in our assessment and the neighbouring properties that have been assessed:

- Site location plan showing the neighbouring properties assessed
- Key building heights drawing showing a 3D view in the existing and proposed conditions
- Window location drawings show the neighbouring windows that have been assessed

5.0 ASSUMPTIONS MADE

Access has not been sought into any of the neighbouring properties; however, we have carried out research to try to obtain floor plans wherever reasonably possible. Properties where we were able to find floor plans showing the internal layouts are listed in Table 1. The property reference numbers cross-refer to the location drawing at Appendix A.

Table 1 - Information sources for neighbouring buildings

Ref	Address	Information obtained
1	Winsham House	Typical Estate Agents Particular
2	Seymour House	Typical Estate Agents Particular
3	1-31 Churchway	Typical Estate Agents Particular
4	1-79 Doric Way	Typical Estate Agents Particular

Where we have found drawings, we have based the room layouts and, where possible, the floor levels in our assessment model on the drawings. Where we were been unable to obtain drawings we have made reasonable assumptions as room layouts and uses and floor levels within the neighbouring properties. Typically, we have then adopted a generic 4m-deep room for residential premises. In the absence of suitable plans, estimation is a conventional approach.

6.0 SIGNIFICANCE CRITERIA

The BRE guide sets out numerical guidelines against which the potential effects of proposed development on daylight and sunlight may be assessed. The numerical guidelines are summarised in Table 2 below.

Table 2 - BRE assessment criteria for neighbouring properties

Issue	Criteria
Daylight to buildings	Daylight may be adversely affected if either: • the vertical sky component (VSC) measured at the centre of the window is reduced to less than 27% and less than 0.8 times its former value, or • the area of the working plane in a room which can receive direct skylight, i.e. is within no-sky line (NSL), is reduced to less than 0.8 times its former value.

	In neighbouring dwellings, the minimum recommended average daylight factor (ADF) is 1% for bedrooms, 1.5% for living rooms and 2% for kitchens and in offices 2% is recommended.
Sunlight to buildings	Sunlight may be adversely affected if the centre of the window will: • receive less than 25% of annual probable sunlight hours (APSH) or less than 5% APSH during the winter months (21 September to 21 March) and • less than 0.8 times its former sunlight hours during either period and • the reduction in sunlight over the whole year will be greater than 4% APSH.

In short, the BRE guidelines work on the general principle that, except where certain minimum values are retained (i.e. 27% VSC, 25% APSH annually, 5% APSH in winter and 50% of a garden/amenity space receiving at least two hours of sunlight), a reduction in light to less than 0.8 times its former value (i.e. more than 20% reduction) will be noticeable to the occupiers.

As noted in section 1 of this report, the BRE guide states that these numerical guidelines are not mandatory and must be interpreted flexibly because natural lighting is only one of many factors in site layout design. In certain circumstance, such as city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings.

Therefore, the assessment results must interpreted carefully, with due consideration given to the site context and whether acceptable amounts of daylight and sunlight will be retained for an urban context.

7.0 BASELINE CONDITION

An analysis has been undertaken of the daylight and sunlight levels in the neighbouring buildings and amenity spaces in the baseline condition with the existing site massing in place. The existing site massing is shown coloured red on the key building heights drawing 18228/SPT/801 at Appendix A.

As noted in section 1 of this report, the planning consented scheme filed under 2016/6599/P by TTG Architects has been utilised as the baseline to determine what additional resultant impacts may occur as a result of the implementation of the new scheme proposals by Gibson Thornley Architects.

The site is bounded to the north and south by both Winsham and Seymour House with the main building elevation fronting Churchway.

The findings from the technical assessments can be seen from the results, both in graphical and tabular form, in the Technical Appendices.

An analysis of the existing daylight and sunlight levels enjoyed by the neighbouring residential amenity has been undertaken to provide a baseline against which the impacts arising from the proposed development can be assessed.

8.0 EFFECTS OF PROPOSED DEVELOPMENT ON NEIGHBOURING PROPERTIES

8.1 Daylight – VSC and NSL

The results of the VSC and NSL analysis are tabulated in Appendix B and summarised in Table 3 and Table 4 below.

Table 3 - Number of rooms experiencing VSC effects as a result of the proposed development

Address	Total Number of Rooms Tested	Rooms Meeting BRE Guidelines For VSC	Number of Rooms Experiencing Adverse Impacts		
			20-29.9% reduction (minor adverse impact)	30-39.9% reduction (moderate adverse impact	>40% reduction (substantial adverse impact)
Winsham House	25	25	0	0	0
Seymour House	39	39	0	0	0
1-31 Churchway	48	48	0	0	0
1-79 Doric Way	35	35	0	0	0
Total	147	147	0	0	0

Table 3 shows that all 147 rooms (100%) rooms assessed will fully comply with the BRE Guidelines in Vertical Sky Component terms.

Table 4 - Number of rooms experiencing NSL effects as a result of the proposed development

Address	Total Number of Rooms Tested	Rooms Meeting BRE Guidelines For NSL	Number of Rooms Experiencing Adverse Impacts		
			20-29.9% reduction (minor adverse impact)	30-39.9% reduction (moderate adverse impact	>40% reduction (substantial adverse impact)
Winsham House	25	25	0	0	0
Seymour House	39	39	0	0	0
1-31 Churchway	48	48	0	0	0
1-79 Doric Way	35	35	0	0	0
Total	147	147	0	0	0

Table 4 shows that all 147 rooms (100%) rooms assessed will fully comply with the BRE Guidelines in Daylight Distribution terms.

8.2 Daylight – ADF

The results of the ADF analysis are tabulated in Appendix B and summarised in Table 5 below.

Table 5 - Number of rooms experiencing ADF effects as a result of the proposed development

Address	Total Number of Rooms Tested	Rooms Meeting BRE Guidelines For ADF	Number of Rooms Experiencing Adverse Impacts		
			20-29.9% reduction (minor adverse impact)	30-39.9% reduction (moderate adverse impact	>40% reduction (substantial adverse impact)
Winsham House	25	25	0	0	0
Seymour House	39	39	0	0	0
1-31 Churchway	48	48	0	0	0
1-79 Doric Way	35	35	0	0	0
Total	147	147	0	0	0

Table 5 shows that all 147 rooms (100%) rooms assessed will fully comply with the BRE Guidelines in ADF terms.

8.3 Sunlight – APSH

The results of the annual and winter sunlight analyses are tabulated in Appendix C and summarised Table below.

Table 6 - Number of rooms experiencing APSH effects as a result of the proposed development

Address	Total number of rooms tested	Number of windows meeting APSH guidelines	Number of windows with impacts beyond APSH guidelines
Winsham House	10	10	0
1-79 Doric Way	35	35	0
Total	**45**	**45**	**0**

Table shows that all rooms will satisfy the BRE guidelines for APSH with only one minor transgression in winter sun which is considered to be negligible.

9.0 CONCLUSION

The site is bounded to the north and south by both Winsham and Seymour House with the main building elevation fronting Churchway.

The proposed development comprises the partial demolition of existing single storey building followed by the erection of a new ground plus three storey building facing Churchway to provide 457sq.m (GIA) of office floorspace (Use Class B1(a)) plus refurbishment throughout of the retained building including replacement of the existing roof structure, and all associated works.

We have assessed the potential effects of the proposed development on daylight and sunlight to surrounding residential properties using the methodology recommended in the BRE guidelines, *Site Layout Planning for Daylight and Sunlight: A guide to good practice (second edition, 2011)*. The assessment has been run using the planning consented scheme which has been filed under application number 2016/6599/P by TTG Architects in the existing baseline to quantify what additional resultant impacts may occur as a result of the implementation of the new scheme proposals by Gibson Thornley Architects.

Overall the neighbouring daylight analysis illustrates that the quality, quantity and distribution of light within the majority of neighbouring rooms will remain comfortably BRE compliant.

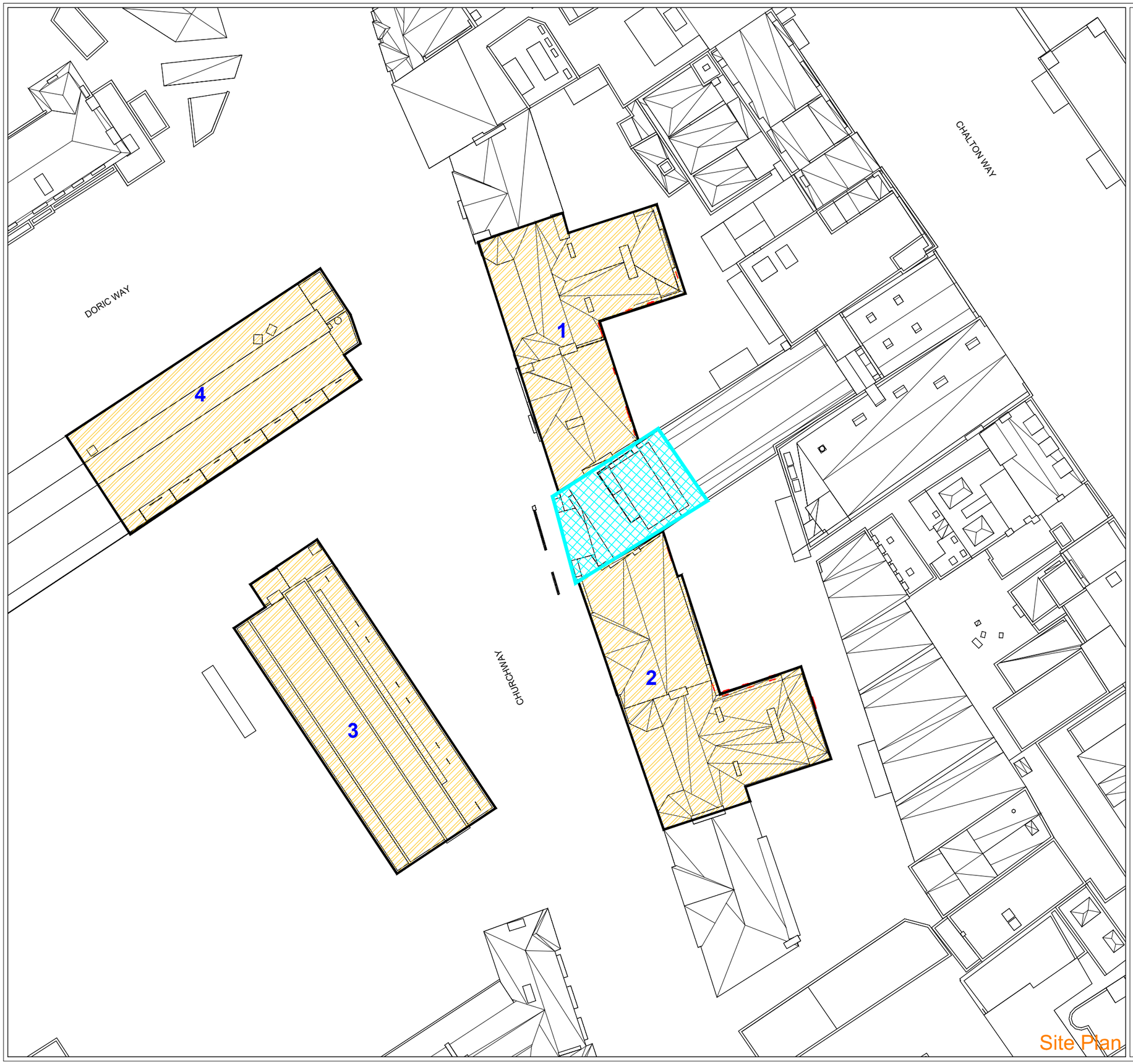
Overall the neighbouring sunlight analysis illustrates that all rooms assessed comfortably comply with the APSH guidelines as outlined in the BRE Guide. There is one minor transgression of winter sun however this is considered to be negligible in nature.

In conclusion, it is submitted that the layout of the proposed development recognises and observes the intentions of the London Borough of Camden local planning policy and the BRE guidelines in daylight and sunlight terms.

Delva Patman Redler LLP

APPENDIX A

LOCATION DRAWINGS



Site Plan

1: Winsham House, Churchway
Dwg No: 18228/LOC/800

2: Seymour House, Churchway
Dwg No: 18228/LOC/801

3: 1-31 Churchway
Dwg No: 18228/LOC/802

4: 1-79 Doric Way
Dwg No: 18228/LOC/803

N
Indicative

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Site Boundary
Residential Buildings

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Delva Patman Redler LLP:
Measured Survey, 3D Point Cloud:
Dwg No's:
18232 - 2018-05-25 - Master Model.dwg

NOTES

All neighbouring properties considered for analysis.

REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER
Chartered Surveyors

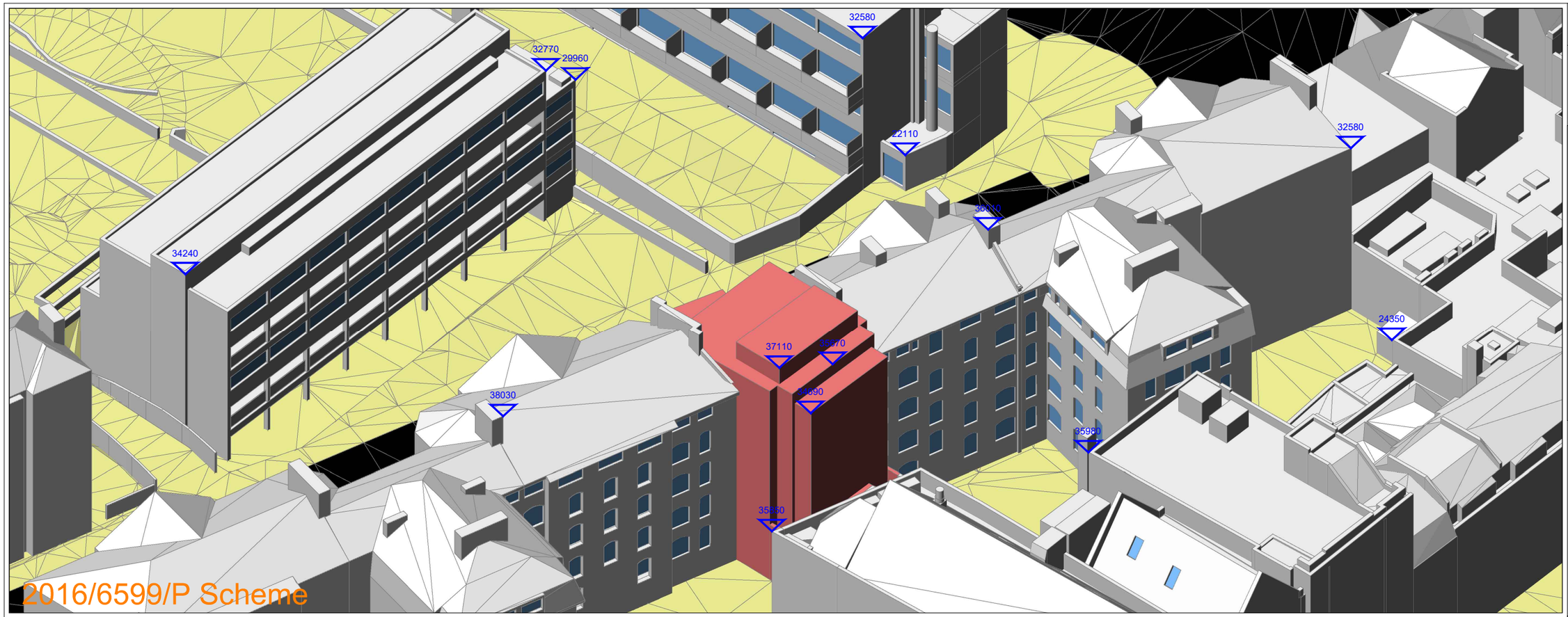
Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7936 3668
www.delvapatmanredler.co.uk

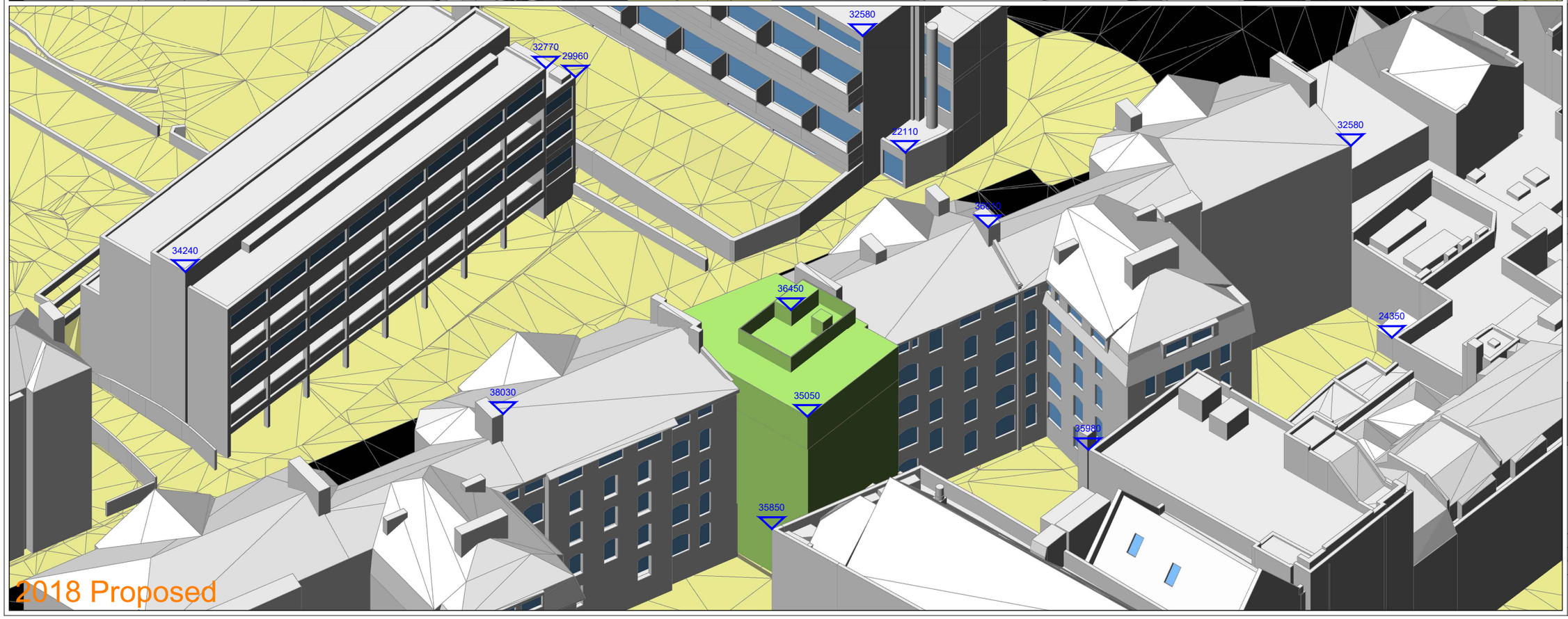
The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:
41-43 CHALTON STREET
LONDON NW1 1LJ
-
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:
41-43 Chalton Street - Property Location
Daylight / Sunlight Analysis
2016/6599/P Scheme & Proposed Scheme
-
-
-

DRAWN: EJ	JOB NO: 18228
SCALE: 1:400@A3	
DATE: 27/07/2018	
DWG NO: LOC/DS/800	REV: -





NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

2016/6599/P Scheme

Proposed

Surrounding

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Delva Patman Redler LLP:
Measured Survey, 3D Point Cloud:
Dwg No's:
18232 - 2018-05-25 - Master Model.dwg

Proposed Scheme:
Gibson Thornley Architects:
Dwg No's:
3D model received 31/05/2018:
17009_Churchway_Proposed_180529.dwg

2016/6599/P Scheme:
TTG Architects:
Dwg No's:
3913/111/06, 3913/112/06, 3913/113/05, 3913/114/05, 3913/115/05, 3913/116/05, 3913/117/05, 3913/131/02, 3913/132/01 3913/133/01, 3913/134/01, 3913/sk102/00, 3913/sk103/00, 3913/sk104/01

NOTES

All heights are measured in mm AOD.

REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER
Chartered Surveyors

Thavies Inn House
3-4 Holborn Circus
London EC1N 2HA
020 7936 3668
www.delvapatmanredler.co.uk

The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:
41-43 CHURCHWAY
LONDON
NW1 1LJ
-
-

DRAWING:
41-43 Churchway
2016/6599/P Scheme & Proposed
Scheme Key Building Heights
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-
-
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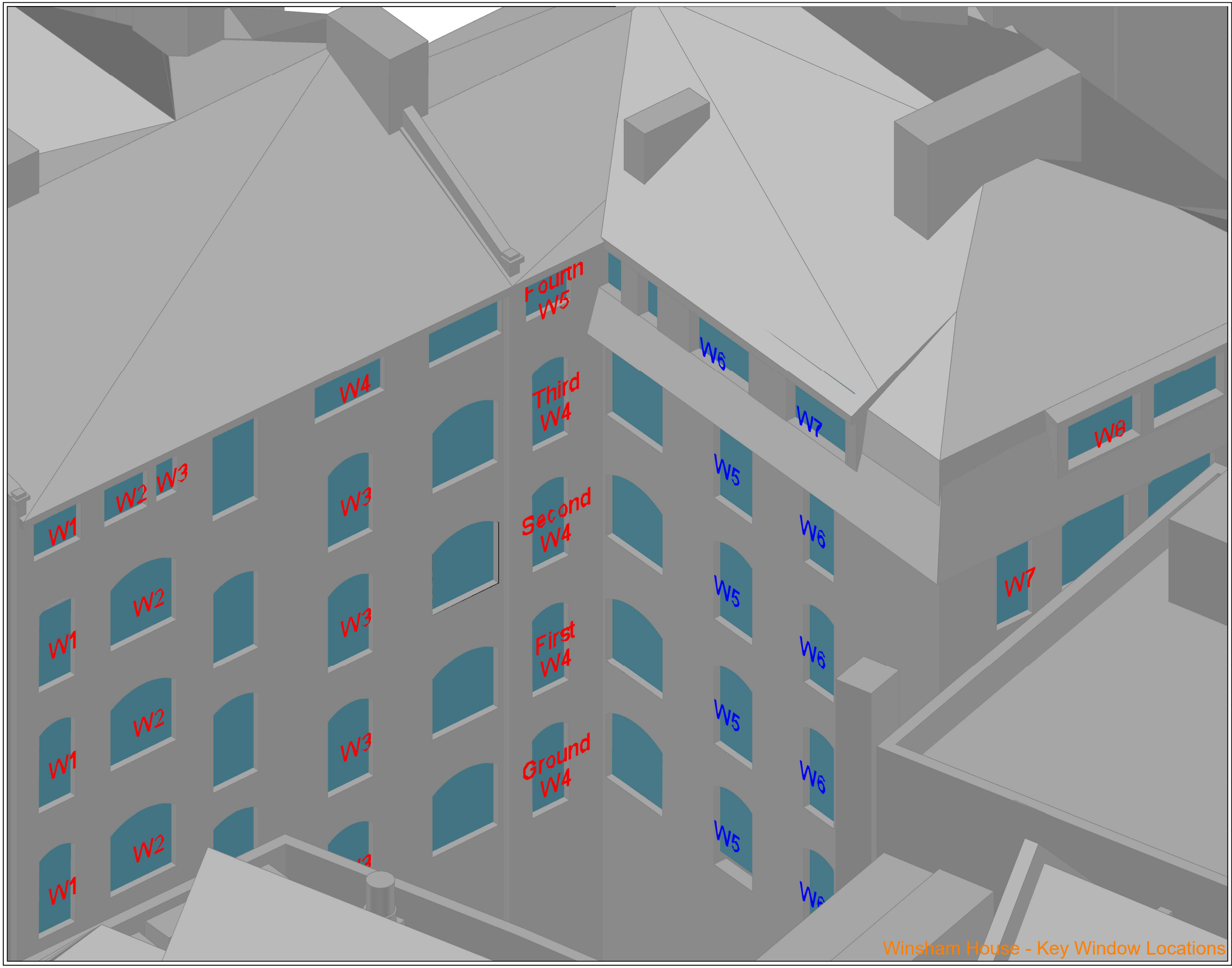
SCALE: NTS	
DATE: 18/06/2018	
DWG NO: SPT/801	REV: -



Winsham House - Key Window Locations

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

2016/6599/P Scheme

Proposed

Surrounding

W1/08 Window Tested Daylight only

W1/08 Window Tested Daylight & Sunlight

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Delva Patman Redler LLP:
Measured Survey, 3D Point Cloud:
Dwg No's:
18232 - 2018-05-25 - Master Model.dwg

NOTES

Site Plan

REV	Description	Drawn	Ch'kd	Date

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The Plaza
100 Old Hall Street
Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:
41-43 CHURCHWAY
LONDON NW1 1LJ
-
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:
Winsham House
Daylight / Sunlight Analysis
Key Window Locations
-
-
-
-

DRAWN: EJ	JOB NO: 18228
SCALE: NTS	
DATE: 27/07/2018	

DWG NO: LOC/800

REV: -

Seymour House - Key Window Locations

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

N
Indicative

- 🟥 2016/6599/P Scheme
- 🟩 Proposed
- ⬜ Surrounding
- W1/08 Window Tested Daylight only
- W1/08 Window Tested Daylight & Sunlight

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Delva Patman Redler LLP:
Measured Survey, 3D Point Cloud:
Dwg No's:
18232 - 2018-05-25 - Master Model.dwg

NOTES

Building not accessed to assess internal configuration - room uses information downloaded from Estate Agency website.

Site Plan

REV	Description	Drawn	Ch'kd	Date

DELVA PATMAN REDLER
Chartered Surveyors

Thavies Inn House
3-4 Holborn Circus
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Liverpool L3 9QJ
0151 242 0980
info@delvapatmanredler.co.uk

TITLE:
41-43 CHURCHWAY
LONDON NW1 1LJ
-
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:
Seymour House
Daylight / Sunlight Analysis
Key Window Locations
-
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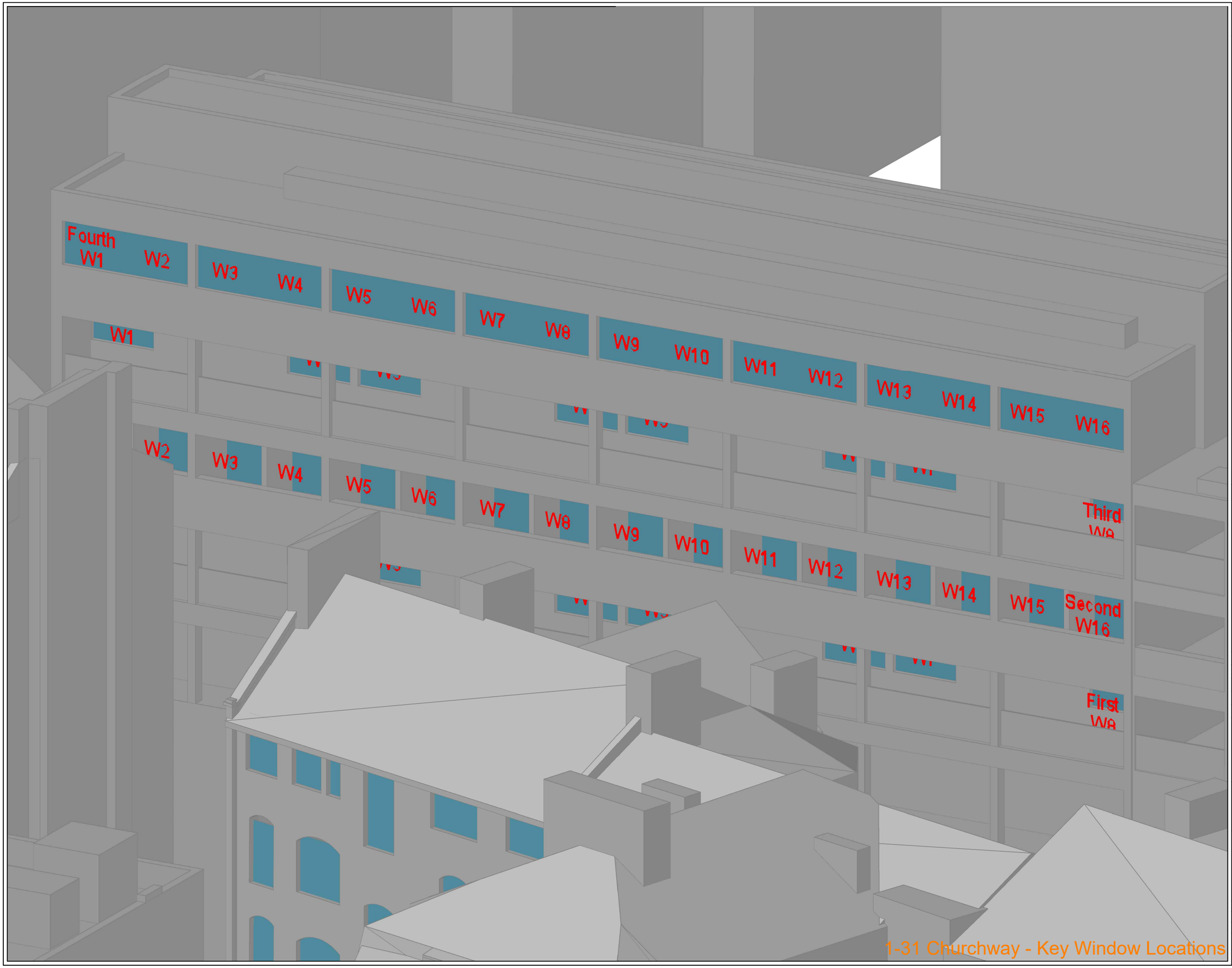
DRAWN: EJ
SCALE: NTS
DATE: 27/07/2018
JOB NO: 18228
DWG NO: LOC/801
REV: -



1-31 Churchway - Key Window Locations

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

2016/6599/P Scheme
Proposed
Surrounding

W1/08 Window Tested Daylight only

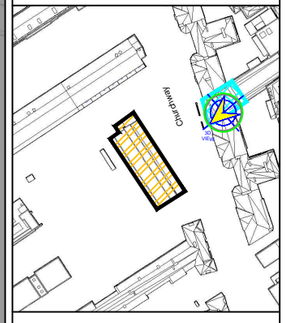
W1/08 Window Tested Daylight & Sunlight

SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Delva Patman Redler LLP:
Measured Survey, 3D Point Cloud:
Dwg No's:
18232 - 2018-05-25 - Master Model.dwg

NOTES

Site Plan



REV	Description	Drawn	Ch'kd	Date

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TITLE:
41-43 CHURCHWAY
LONDON NW1 1LJ
-
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:
1-31 Churchway
Daylight / Sunlight Analysis
Key Window Locations
-
-
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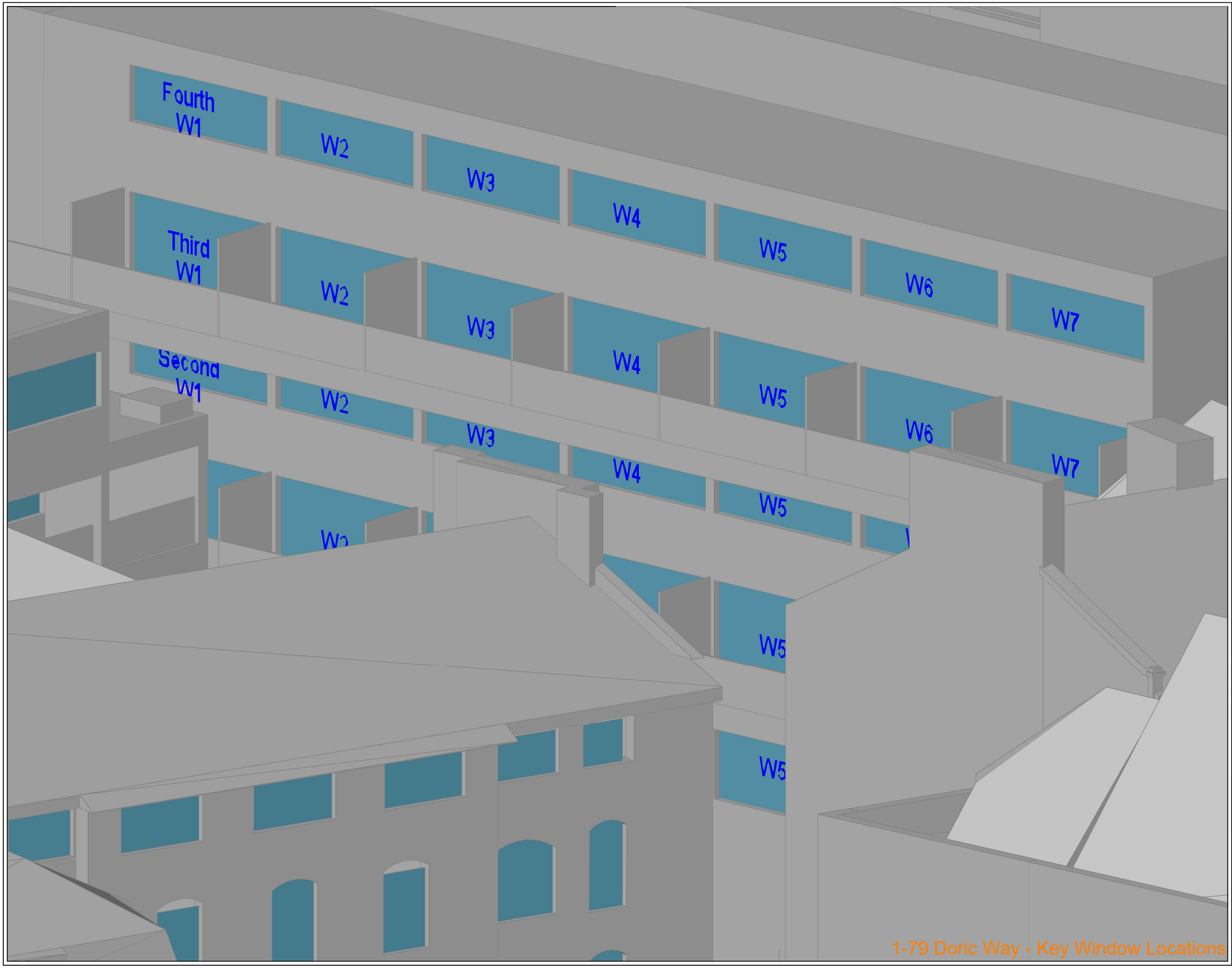
SCALE: NTS	
DATE: 27/07/2018	
DWG NO: LOC/802	REV: -



1-79 Doric Way - Key Window Locations

NO DIMENSIONS TO BE SCALED FROM THIS DRAWING:

Indicative

2016/6599/P Scheme	W1/08 Window Tested Daylight only
Proposed	W1/08 Window Tested Daylight & Sunlight
Surrounding	

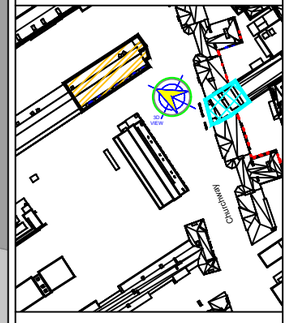
SOURCE DATA

Drawings Used:
Existing and surrounding buildings:
Delva Patman Redler LLP:
Measured Survey, 3D Point Cloud:
Dwg No's:
18232 - 2018-05-25 - Master Model.dwg

NOTES

Building not accessed to assess internal configuration - room uses information downloaded from Estate Agency website.

Site Plan



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TITLE:
41-43 CHURCHWAY
LONDON NW1 1LJ
-
-
DAYLIGHT / SUNLIGHT ANALYSIS

DRAWING:
1-79 Doric Way
Daylight / Sunlight Analysis
Key Window Locations
-
-
-
-

DRAWN: EJ	JOB NO: 18228
SCALE: NTS	
DATE: 27/07/2018	
DWG NO: LOC/803	REV: -

APPENDIX B

DAYLIGHT & SUNLIGHT ANALYSIS RESULTS – NEIGHBOURING PROPERTIES

				VSC				Daylight Distribution			ADF			APSH					
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Room %age Diff	Existing	Proposed	%age Diff	Existing	Proposed	%age Diff	APSH Existing	APSH Proposed	%age Diff	Winter Existing	Winter Proposed	&age Diff
Winsham House	Ground	Unknown-Resi/R1	W1	10.47	9.85	-5.90%	-5.90%	53.34%	52.49%	-1.59%	0.82%	0.79%	-3.66%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W3	13.97	13.81	-1.17%	-1.17%	59.37%	59.14%	-0.39%	1.02%	1.02%	-0.72%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W4	9.60	9.54	-0.64%	-0.64%	46.22%	46.22%	0.00%	0.66%	0.66%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W5	12.70	12.42	-2.23%	-2.23%	49.84%	47.44%	-4.81%	1.07%	1.06%	-1.32%	25	25	0.00%	3	3	0.00%
		Unknown-Resi/R6	W6	14.25	13.94	-2.18%	-1.09%	86.99%	86.31%	-0.78%	1.96%	1.95%	-0.66%	25	26	4.00%	3	3	0.00%
			W7	13.18	13.18	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
	First	Unknown-Resi/R1	W1	14.75	12.52	-15.11%	-15.11%	47.56%	46.42%	-2.39%	0.76%	0.69%	-9.52%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W3	17.48	17.31	-0.98%	-0.98%	54.87%	54.64%	-0.41%	0.92%	0.91%	-0.58%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W4	11.56	11.51	-0.44%	-0.44%	38.31%	38.31%	0.00%	0.56%	0.56%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W5	15.28	15.04	-1.51%	-1.51%	46.54%	45.10%	-3.08%	0.93%	0.92%	-0.86%	28	28	0.00%	3	3	0.00%
		Unknown-Resi/R6	W6	17.28	17.03	-1.44%	-0.72%	85.37%	84.79%	-0.68%	1.73%	1.72%	-0.42%	32	31	-3.13%	4	3	-25.00%
			W7	16.35	16.35	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
	Second	Unknown-Resi/R1	W1	17.94	15.07	-15.96%	-15.96%	73.12%	72.04%	-1.48%	0.92%	0.83%	-10.16%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W3	21.75	21.59	-0.75%	-0.75%	71.35%	71.12%	-0.33%	1.14%	1.13%	-0.48%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W4	14.18	14.14	-0.25%	-0.25%	60.92%	60.92%	0.00%	0.68%	0.68%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W5	18.90	18.77	-0.66%	-0.66%	57.64%	55.87%	-3.07%	1.12%	1.11%	-0.39%	36	36	0.00%	6	6	0.00%
		Unknown-Resi/R6	W6	21.27	21.13	-0.65%	-0.33%	92.70%	93.27%	0.61%	2.03%	2.03%	-0.18%	40	40	0.00%	7	7	0.00%
			W7	20.04	20.04	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
	Third	Unknown-Resi/R1	W1	21.25	17.72	-16.59%	-16.59%	95.06%	93.83%	-1.29%	0.95%	0.85%	-10.90%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W3	26.82	26.69	-0.50%	-0.50%	89.40%	89.32%	-0.09%	1.22%	1.22%	-0.34%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W4	17.81	17.79	-0.10%	-0.10%	81.59%	81.59%	0.00%	0.74%	0.74%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W5	22.04	22.06	0.08%	0.08%	77.53%	76.71%	-1.06%	1.04%	1.04%	0.02%	41	41	0.00%	11	11	0.00%
		Unknown-Resi/R6	W6	23.64	23.67	0.13%	0.06%	97.58%	97.58%	0.00%	1.79%	1.79%	0.04%	45	45	0.00%	15	15	0.00%
			W7	21.49	21.49	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
	Fourth	Unknown-Resi/R1	W1	21.63	17.72	-18.09%	-18.09%	69.67%	69.26%	-0.59%	0.54%	0.48%	-10.74%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W4	26.03	25.96	-0.28%	-0.28%	74.00%	73.90%	-0.13%	0.78%	0.78%	-0.12%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W5	21.68	21.68	0.00%	0.00%	60.31%	60.31%	0.00%	0.43%	0.43%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W6	28.67	28.73	0.21%	0.21%	74.80%	75.63%	1.12%	0.92%	0.92%	0.22%	47	48	2.13%	15	16	6.67%
		Unknown-Resi/R6	W7	29.16	29.21	0.16%	0.08%	91.29%	91.29%	0.00%	1.41%	1.41%	0.06%	52	52	0.00%	20	20	0.00%
			W8	30.49	30.49	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
Seymour House	Ground	Unknown-Resi/R1	W1	22.53	22.53	0.00%	-0.13%	98.96%	98.96%	0.00%	2.76%	2.76%	-0.05%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	21.53	21.53	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	17.75	17.68	-0.38%								N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R2	W4	15.71	15.60	-0.69%	-0.69%	78.82%	78.51%	-0.40%	1.16%	1.15%	-0.39%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W5	12.63	12.45	-1.43%	-1.43%	64.04%	62.56%	-2.31%	1.23%	1.22%	-0.83%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W6	15.01	14.91	-0.64%	-0.64%	97.80%	97.80%	0.00%	1.10%	1.10%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W7	20.83	20.63	-0.96%	-0.96%	91.16%	90.91%	-0.28%	1.19%	1.18%	-0.66%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W8	20.99	20.52	-2.26%	-2.26%	88.93%	88.82%	-0.13%	1.18%	1.17%	-1.50%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W9	17.39	16.22	-6.70%	-6.70%	66.96%	66.86%	-0.16%	1.03%	0.99%	-4.28%	N/A	N/A	N/A	N/A	N/A	N/A
	First	Unknown-Resi/R1	W1	29.13	29.13	0.00%	0.04%	98.95%	98.95%	0.00%	2.83%	2.83%	0.02%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	28.97	28.97	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	21.22	21.24	0.11%								N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R2	W4	18.63	18.62	-0.07%	-0.07%	82.07%	83.34%	1.54%	1.16%	1.16%	-0.04%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W5	14.41	14.31	-0.67%	-0.67%	64.91%	64.22%	-1.06%	1.17%	1.17%	-0.41%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W6	16.81	16.73	-0.46%	-0.46%	97.87%	97.87%	0.00%	1.06%	1.06%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W7	23.69	23.52	-0.69%	-0.69%	92.69%	92.50%	-0.21%	1.15%	1.15%	-0.53%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W8	24.55	24.26	-1.18%	-1.18%	93.85%	93.69%	-0.17%	1.20%	1.19%	-0.90%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W9	24.12	23.66	-1.87%	-1.87%	90.33%	90.28%	-0.06%	1.16%	1.14%	-1.33%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R8	W10	19.95	18.68	-6.36%	-6.36%	66.01%	65.93%	-0.12%	0.93%	0.90%	-4.16%	N/A	N/A	N/A	N/A	N/A	N/A
	Second	Unknown-Resi/R1	W1	31.39	31.39	0.00%	0.11%	98.95%	98.95%	0.00%	2.71%	2.71%	0.06%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	31.30	31.30	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	25.37	25.45	0.34%								N/A	N/A	N/A	N/A	N/A	N/A

Red Text Cells do not meet the BRE recommendations
Positive %age figures indicate an improvement
in the natural lighting conditions

See Dwg No: 18228/LOC/800-803

				VSC				Daylight Distribution			ADF			APSH					
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Room %age Diff	Existing	Proposed	%age Diff	Existing	Proposed	%age Diff	APSH Existing	APSH Proposed	%age Diff	Winter Existing	Winter Proposed	&age Diff
Seymour House	Second	Unknown-Resi/R2	W4	22.36	22.42	0.28%	0.28%	91.04%	94.40%	3.68%	1.18%	1.19%	0.21%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W5	16.45	16.42	-0.15%	-0.15%	66.66%	66.91%	0.37%	1.12%	1.12%	-0.05%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W6	18.74	18.69	-0.30%	-0.30%	98.05%	98.05%	0.00%	1.01%	1.01%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W7	27.13	27.02	-0.41%	-0.41%	95.26%	95.20%	-0.07%	1.13%	1.13%	-0.32%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W8	27.94	27.73	-0.74%	-0.74%	95.63%	95.59%	-0.04%	1.17%	1.16%	-0.65%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W9	27.47	27.11	-1.32%	-1.32%	92.01%	92.01%	0.00%	1.13%	1.12%	-1.02%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R8	W10	23.07	21.80	-5.50%	-5.50%	70.93%	70.94%	0.01%	0.96%	0.92%	-3.77%	N/A	N/A	N/A	N/A	N/A	N/A
	Third	Unknown-Resi/R1	W1	32.40	32.40	0.00%	0.16%	99.06%	99.06%	0.00%	3.10%	3.10%	0.09%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	32.34	32.34	0.00%								N/A	N/A	N/A	N/A	N/A	N/A
			W3	24.85	24.97	0.48%								N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R2	W4	22.79	22.92	0.56%	0.56%	97.83%	97.83%	0.00%	1.24%	1.24%	0.44%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W5	16.70	16.75	0.29%	0.29%	86.76%	87.88%	1.29%	1.26%	1.26%	0.21%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W6	21.54	21.51	-0.15%	-0.15%	98.13%	98.13%	0.00%	1.25%	1.25%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W7	31.24	31.19	-0.18%	-0.18%	97.73%	97.72%	0.00%	1.46%	1.46%	-0.19%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W8	31.43	31.34	-0.31%	-0.31%	98.15%	98.15%	0.00%	1.49%	1.49%	-0.37%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W9	30.95	30.76	-0.59%	-0.59%	97.65%	97.65%	0.00%	1.44%	1.43%	-0.62%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R8	W10	26.61	25.70	-3.43%	-3.43%	92.53%	92.55%	0.02%	1.18%	1.15%	-2.37%	N/A	N/A	N/A	N/A	N/A	N/A
	Fourth	Unknown-Resi/R1	W1	34.85	34.85	0.00%	0.18%	87.43%	87.43%	0.00%	1.25%	1.25%	0.14%	N/A	N/A	N/A	N/A	N/A	N/A
			W2	38.86	38.99	0.35%								N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R2	W3	37.85	37.99	0.39%	0.39%	99.80%	99.80%	0.00%	1.92%	1.93%	0.36%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W4	35.01	35.21	0.56%	0.56%	95.48%	98.46%	3.12%	1.13%	1.14%	0.48%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W5	28.85	28.84	-0.04%	-0.04%	98.93%	98.92%	0.00%	0.71%	0.71%	-0.02%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W6	31.31	31.31	-0.01%	-0.01%	99.34%	99.34%	0.00%	0.95%	0.95%	-0.06%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W7	31.07	31.06	-0.03%	-0.03%	99.52%	99.55%	0.03%	0.95%	0.95%	-0.10%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W8	30.12	30.11	-0.04%	-0.04%	98.15%	98.24%	0.09%	0.88%	0.88%	-0.11%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R8	W9	26.44	26.56	0.45%	0.45%	85.78%	85.78%	0.00%	0.56%	0.56%	-0.58%	N/A	N/A	N/A	N/A	N/A	N/A
1-31 Churchway Street	First	Unknown-Resi/R1	W1	0.08	0.08	0.00%	0.00%	17.82%	18.50%	3.79%	0.01%	0.01%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R2	W2	0.19	0.19	0.00%	0.00%	21.75%	22.31%	2.54%	0.03%	0.03%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W3	0.17	0.17	0.00%	0.00%	23.74%	24.24%	2.10%	0.02%	0.02%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W4	0.24	0.24	0.00%	0.00%	28.74%	28.78%	0.17%	0.05%	0.05%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W5	0.33	0.33	0.00%	0.00%	31.87%	32.12%	0.78%	0.05%	0.05%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W6	0.34	0.34	0.00%	0.00%	36.87%	37.38%	1.39%	0.06%	0.06%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W7	0.52	0.52	0.00%	0.00%	41.22%	41.23%	0.01%	0.09%	0.09%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R8	W8	0.31	0.31	0.00%	0.00%	40.60%	40.60%	0.00%	0.04%	0.04%	0.00%	N/A	N/A	N/A	N/A	N/A	N/A
	Second	Unknown-Resi/R1	W1	26.65	26.69	0.12%	0.12%	65.68%	65.69%	0.03%	2.15%	2.15%	0.08%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R2	W2	26.92	26.97	0.15%	0.15%	65.64%	65.64%	0.01%	2.19%	2.19%	0.11%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W3	27.21	27.26	0.17%	0.17%	68.07%	68.32%	0.37%	2.20%	2.20%	0.11%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W4	27.48	27.54	0.19%	0.19%	68.86%	69.31%	0.65%	2.22%	2.22%	0.14%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W5	27.77	27.83	0.21%	0.21%	71.75%	72.75%	1.40%	2.24%	2.24%	0.16%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W6	28.05	28.12	0.23%	0.23%	73.52%	74.61%	1.48%	2.25%	2.26%	0.19%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W7	28.35	28.42	0.24%	0.24%	76.96%	78.45%	1.94%	2.27%	2.27%	0.19%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R8	W8	28.65	28.72	0.24%	0.24%	78.99%	80.69%	2.16%	2.29%	2.29%	0.19%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R9	W9	28.96	29.03	0.25%	0.25%	83.46%	85.05%	1.90%	2.30%	2.31%	0.19%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R10	W10	29.24	29.32	0.26%	0.26%	85.69%	87.49%	2.10%	2.32%	2.33%	0.22%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R11	W11	29.51	29.59	0.28%	0.28%	89.82%	90.74%	1.03%	2.34%	2.34%	0.21%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R12	W12	29.75	29.84	0.29%	0.29%	92.34%	92.87%	0.57%	2.35%	2.36%	0.23%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R13	W13	29.97	30.06	0.29%	0.29%	95.98%	96.44%	0.48%	2.37%	2.37%	0.23%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R14	W14	30.14	30.22	0.29%	0.29%	97.55%	97.59%	0.04%	2.38%	2.38%	0.21%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R15	W15	30.27	30.35	0.26%	0.26%	98.55%	98.55%	0.00%	2.39%	2.39%	0.18%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R16	W16	30.33	30.40	0.24%	0.24%	99.13%	99.13%	0.00%	2.39%	2.39%	0.19%	N/A	N/A	N/A	N/A	N/A	N/A
	Third	Unknown-Resi/R1	W1	1.27	1.30	2.27%	2.27%	53.13%	53.60%	0.90%	0.18%	0.18%	4.11%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R2	W2	1.32	1.36	2.37%	2.37%	56.64%	57.99%	2.39%	0.21%	0.22%	3.30%	N/A	N/A	N/A	N/A	N/A	N/A

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See Dwg No: 18228/LOC/800-803

				VSC				Daylight Distribution			ADF			APSH					
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Room %age Diff	Existing	Proposed	%age Diff	Existing	Proposed	%age Diff	APSH Existing	APSH Proposed	%age Diff	Winter Existing	Winter Proposed	&age Diff
1-31 Churchway Street	Third	Unknown-Resi/R3	W3	1.64	1.69	3.05%	3.05%	59.70%	62.60%	4.86%	0.26%	0.28%	5.03%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W4	1.94	2.00	3.28%	3.28%	67.38%	70.94%	5.28%	0.33%	0.35%	4.33%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W5	2.48	2.54	2.57%	2.57%	76.06%	78.89%	3.73%	0.42%	0.43%	2.58%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W6	2.46	2.53	2.81%	2.81%	85.48%	87.13%	1.93%	0.42%	0.43%	2.55%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W7	3.05	3.12	2.28%	2.28%	92.67%	93.16%	0.53%	0.50%	0.51%	2.18%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R8	W8	2.68	2.74	2.11%	2.11%	96.95%	96.95%	0.00%	0.44%	0.45%	1.95%	N/A	N/A	N/A	N/A	N/A	N/A
	Fourth	Unknown-Resi/R1	W1	33.10	33.13	0.07%	0.07%	100.00%	100.00%	0.00%	2.55%	2.55%	0.07%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R2	W2	33.25	33.28	0.09%	0.09%	100.00%	100.00%	0.00%	2.58%	2.58%	0.08%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R3	W3	33.37	33.41	0.11%	0.11%	100.00%	100.00%	0.00%	2.59%	2.59%	0.08%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R4	W4	33.48	33.52	0.13%	0.13%	100.00%	100.00%	0.00%	2.59%	2.59%	0.14%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R5	W5	33.59	33.64	0.16%	0.16%	100.00%	100.00%	0.00%	2.60%	2.61%	0.12%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R6	W6	33.72	33.78	0.20%	0.20%	100.00%	100.00%	0.00%	2.61%	2.61%	0.19%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R7	W7	33.87	33.95	0.23%	0.23%	100.00%	100.00%	0.00%	2.62%	2.63%	0.19%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R8	W8	34.05	34.14	0.26%	0.26%	100.00%	100.00%	0.00%	2.63%	2.64%	0.24%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R9	W9	34.25	34.34	0.27%	0.27%	100.00%	100.00%	0.00%	2.65%	2.65%	0.24%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R10	W10	34.44	34.54	0.27%	0.27%	100.00%	100.00%	0.00%	2.66%	2.67%	0.27%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R11	W11	34.65	34.74	0.28%	0.28%	100.00%	100.00%	0.00%	2.67%	2.68%	0.27%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R12	W12	34.82	34.91	0.27%	0.27%	100.00%	100.00%	0.00%	2.69%	2.69%	0.25%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R13	W13	35.00	35.08	0.25%	0.25%	100.00%	100.00%	0.00%	2.70%	2.71%	0.24%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R14	W14	35.14	35.22	0.23%	0.23%	100.00%	100.00%	0.00%	2.71%	2.72%	0.18%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R15	W15	35.25	35.33	0.23%	0.23%	100.00%	100.00%	0.00%	2.72%	2.72%	0.22%	N/A	N/A	N/A	N/A	N/A	N/A
		Unknown-Resi/R16	W16	35.36	35.44	0.22%	0.22%	100.00%	100.00%	0.00%	2.73%	2.73%	0.18%	N/A	N/A	N/A	N/A	N/A	N/A
1-79 Doric Way	Ground	Unknown-Resi/R1	W1	3.64	3.65	0.43%	0.43%	85.07%	85.07%	0.00%	0.41%	0.41%	0.03%	6	6	0.00%	5	5	0.00%
		Unknown-Resi/R2	W2	3.49	3.51	0.57%	0.57%	74.34%	74.34%	0.00%	0.39%	0.39%	0.07%	5	5	0.00%	5	5	0.00%
		Unknown-Resi/R3	W3	0.40	0.40	0.00%	0.00%	43.22%	43.22%	0.00%	0.06%	0.06%	0.00%	0	0	0.00%	0	0	0.00%
		Unknown-Resi/R4	W4	0.39	0.39	0.00%	0.00%	67.52%	67.52%	0.00%	0.05%	0.05%	0.00%	0	0	0.00%	0	0	0.00%
		Unknown-Resi/R5	W5	4.92	4.95	0.76%	0.76%	100.00%	100.00%	0.00%	0.54%	0.54%	0.07%	4	4	0.00%	4	4	0.00%
		Unknown-Resi/R6	W6	5.12	5.16	0.88%	0.88%	99.78%	99.78%	0.00%	0.62%	0.63%	0.09%	4	4	0.00%	4	4	0.00%
		Unknown-Resi/R7	W7	1.13	1.13	0.00%	0.00%	94.76%	94.76%	0.00%	0.23%	0.23%	0.00%	0	0	0.00%	0	0	0.00%
	First	Unknown-Resi/R1	W1	20.49	20.49	0.00%	0.00%	100.00%	100.00%	0.00%	2.45%	2.45%	0.00%	44	44	0.00%	11	11	0.00%
		Unknown-Resi/R2	W2	20.23	20.23	0.03%	0.03%	91.07%	91.07%	0.00%	2.44%	2.44%	0.07%	45	45	0.00%	11	11	0.00%
		Unknown-Resi/R3	W3	20.87	20.89	0.09%	0.09%	99.19%	99.19%	0.00%	2.50%	2.50%	0.09%	44	44	0.00%	9	9	0.00%
		Unknown-Resi/R4	W4	21.35	21.38	0.14%	0.14%	99.15%	99.15%	0.00%	2.53%	2.53%	0.08%	46	47	2.17%	11	11	0.00%
		Unknown-Resi/R5	W5	22.02	22.05	0.17%	0.17%	100.00%	100.00%	0.00%	2.57%	2.57%	0.10%	46	46	0.00%	11	11	0.00%
		Unknown-Resi/R6	W6	22.12	22.16	0.20%	0.20%	99.77%	99.77%	0.00%	2.57%	2.57%	0.13%	47	47	0.00%	12	12	0.00%
		Unknown-Resi/R7	W7	22.45	22.50	0.24%	0.24%	99.36%	99.36%	0.00%	2.59%	2.60%	0.15%	45	45	0.00%	12	12	0.00%
	Second	Unknown-Resi/R1	W1	3.02	3.03	0.44%	0.44%	100.00%	100.00%	0.00%	0.60%	0.61%	0.35%	3	3	0.00%	3	3	0.00%
		Unknown-Resi/R2	W2	2.74	2.76	0.53%	0.53%	90.12%	90.19%	0.08%	0.55%	0.56%	0.46%	4	4	0.00%	4	4	0.00%
		Unknown-Resi/R3	W3	3.38	3.39	0.53%	0.53%	100.00%	100.00%	0.00%	0.66%	0.67%	0.32%	3	3	0.00%	3	3	0.00%
		Unknown-Resi/R4	W4	3.61	3.63	0.55%	0.55%	100.00%	100.00%	0.00%	0.68%	0.68%	0.56%	5	5	0.00%	4	4	0.00%
		Unknown-Resi/R5	W5	3.92	3.95	0.66%	0.66%	100.00%	100.00%	0.00%	0.76%	0.76%	0.45%	5	5	0.00%	4	4	0.00%
		Unknown-Resi/R6	W6	3.86	3.89	0.93%	0.93%	99.76%	99.76%	0.00%	0.74%	0.75%	0.69%	3	3	0.00%	3	3	0.00%
		Unknown-Resi/R7	W7	3.83	3.88	1.29%	1.29%	99.07%	99.07%	0.00%	0.73%	0.74%	1.22%	3	3	0.00%	3	3	0.00%
	Third	Unknown-Resi/R1	W1	29.15	29.15	0.00%	0.00%	100.00%	100.00%	0.00%	3.13%	3.13%	0.00%	56	56	0.00%	16	16	0.00%
		Unknown-Resi/R2	W2	29.02	29.02	0.02%	0.02%	100.00%	100.00%	0.00%	3.12%	3.12%	0.00%	56	56	0.00%	16	16	0.00%
		Unknown-Resi/R3	W3	29.54	29.56	0.05%	0.05%	100.00%	100.00%	0.00%	3.17%	3.17%	0.01%	56	56	0.00%	15	15	0.00%
		Unknown-Resi/R4	W4	29.55	29.57	0.05%	0.05%	100.00%	100.00%	0.00%	3.17%	3.17%	0.03%	57	57	0.00%	16	16	0.00%
		Unknown-Resi/R5	W5	29.59	29.60	0.04%	0.04%	100.00%	100.00%	0.00%	3.17%	3.18%	0.01%	57	57	0.00%	16	16	0.00%
		Unknown-Resi/R6	W6	29.51	29.51	0.02%	0.02%	100.00%	100.00%	0.00%	3.17%	3.17%	0.01%	57	57	0.00%	16	16	0.00%
		Unknown-Resi/R7	W7	29.51	29.53	0.04%	0.04%	100.00%	100.00%	0.00%	3.18%	3.19%	0.05%	57	57	0.00%	16	16	0.00%
	Fourth	Unknown-Resi/R1	W1	32.90	32.91	0.05%	0.05%	100.00%	100.00%	0.00%	3.59%	3.59%	0.04%	59	59	0.00%	18	18	0.00%
		Unknown-Resi/R2	W2	32.93	32.95	0.06%	0.06%	100.00%	100.00%	0.00%	3.59%	3.59%	0.06%	62	62	0.00%	21	21	0.00%

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				VSC				Daylight Distribution			ADF			APSH					
Address	Floor Level	Room Name	Window ID	Existing	Proposed	Window %age Diff	Room %age Diff	Existing	Proposed	%age Diff	Existing	Proposed	%age Diff	APSH Existing	APSH Proposed	%age Diff	Winter Existing	Winter Proposed	&age Diff
1-79 Doric Way	Fourth	Unknown-Resi/R3	W3	33.17	33.19	0.07%	0.07%	100.00%	100.00%	0.00%	3.61%	3.61%	0.06%	61	61	0.00%	20	20	0.00%
		Unknown-Resi/R4	W4	33.37	33.40	0.07%	0.07%	100.00%	100.00%	0.00%	3.63%	3.64%	0.08%	61	61	0.00%	20	20	0.00%
		Unknown-Resi/R5	W5	33.33	33.34	0.05%	0.05%	100.00%	100.00%	0.00%	3.63%	3.64%	0.03%	61	61	0.00%	20	20	0.00%
		Unknown-Resi/R6	W6	33.35	33.37	0.03%	0.03%	100.00%	100.00%	0.00%	3.63%	3.63%	0.03%	61	61	0.00%	20	20	0.00%
		Unknown-Resi/R7	W7	33.42	33.43	0.03%	0.03%	100.00%	100.00%	0.00%	3.64%	3.64%	0.03%	61	61	0.00%	20	20	0.00%

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