26-28 PRIESTS BRIDGE

Daylight and Sunlight Report





Daylight and Sunlight Report

Project:	26-28 Priests Bridge, Barnes
Client:	Wimshurst Pelleriti
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Executive Summary

- This is a report into the impact of the proposed development at 26-28 Priests Bridge, Barnes
 on the daylight and sunlight to surrounding residential properties and amenity spaces. This
 analysis has been based upon scheme drawings provided by Wimshurst Pelleriti, a partial
 measured survey, and site photography.
- All surrounding properties are compliant with the BRE Guidelines for VSC and annual & winter
 APSH and, where layouts are known, are also compliant with the BRE Guidelines for daylight
 distribution. Where layouts are not known, all rooms experience less than 20% reductions in
 daylight distribution based on reasonably assumed layouts.
- In sunlight amenity terms, all of the surrounding amenity areas meet the BRE Guidelines for sunlight amenity.

1. Introduction

Waldrams Ltd has been instructed to provide daylight and sunlight analysis for the proposed

development of the site at 26-28 Priests Bridge, Barnes, and the associated land to the rear. This

analysis is based upon scheme drawings by Wimshurst Pelleriti, a partial measured survey of the

site and surrounding context and site photography.

The analysis has been carried out in accordance with the methodologies contained in the BRE

Guidelines (Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice by P. Littlefair

(2011)), which is used by the local authority to determine the acceptability of a proposal in terms

of its effect on neighbouring daylight and sunlight amenity.

The existing site can be seen on drawings 2139-01-01 to -01-03 with the proposal on drawings

2139-01-04 to -01-06, all in Appendix 1. The numerical results of the quantitative daylight and

sunlight analysis can be found in Appendix 2. Window maps showing the locations of the windows

analysed in the neighbouring property can be found on drawings 2139-01-08 to -01-09 in Appendix

1. The sunlight amenity results can be found on drawing 2139-01-07 in Appendix 3.

2. Summary of how daylight and sunlight are considered for planning

2.1 Introduction to the BRE Guidelines

Daylight and sunlight are planning considerations. The main reference used by local planning

authorities to determine the acceptability of proposals in terms of their internal daylight and

sunlight and the impact on daylight and sunlight to the surrounding properties is the Building

Research Establishment (BRE) Guidelines, used in conjunction with British Standard BS8206 Part 2.

The BRE Guidelines provide scientific, objective methods for establishing the acceptability of

daylight and sunlight internal to the scheme and the surrounding properties. In practice it is

principally the main habitable rooms internal to the scheme and within the surrounding residential

properties which are sensitive in terms of daylight and sunlight. This report therefore focuses on

the internal daylight and sunlight and the change in daylight and sunlight to habitable rooms in the

surrounding residential property.

The BRE Guidelines specify that the daylight and sunlight results be considered flexibly and in the

context of the site. Clearly there would be a higher expectation for daylight and sunlight in a rural

or suburban environment than in a dense city centre location. The important factor in all cases is

that the levels of daylight and sunlight are appropriate, taking into account all the planning policy

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requirements of the site. The BRE Guidelines acknowledge this in the introduction where the BRE

Guidelines state:

"The guide is intended for building designers and their clients, consultants and planning

officials. The advice given here is not mandatory and thus 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 the many factors in site layout design. In special circumstances the

developer or planning authority may wish to use different target values."

(Page 1, BRE Guidelines)

Thus, the numerical figures should not be rigidly applied, but instead used as part of the overall

evaluation of the daylight and sunlight to the surroundings in context of the site, its existing

massing, and the need for regeneration and local planning policy guidance for the site. In particular

existing local precedents or recent planning consents may provide a good indication as to

appropriate levels in the vicinity.

The BRE Guidelines specifies in Paragraph H1.2:

"Where the effect of a new building on existing buildings nearby is being analysed, it is usual

to ignore the effect of trees. This is because daylight is at its scarcest and most valuable in

winter months when most trees will not be in leaf."

This summary in section 2 of this report is provided to briefly introduce some of the main methods

of the BRE Guidelines, however, the BRE Guidelines should be used as the basis for assessing the

daylight and sunlight results included within this report. This section is not intended to override

the wording of the BRE Guidelines for Daylight and Sunlight.

2.2 Daylight and sunlight criteria to surrounding residential property

According to the BRE Guidelines a surrounding existing building to a proposed scheme will retain

the potential for good interior daylighting, provided that the scheme subtends less than 25 degrees

from the horizontal as measured from the lowest habitable windows in the neighbouring windows.

If this is not achieved then good daylighting to the neighbouring properties is still achieved if the

Vertical Sky Component (VSC) is in excess of 27% or is reduced by less than 20% from its existing

level and if the area of the room that can see the sky at desk height (known as the daylight

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distribution or no sky contour) is reduced by less than 20% of its existing area. The BRE Guidelines

state this in paragraph 2.2.21 as:

"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° to the horizontal, then the diffuse daylighting of the

existing building may be adversely affected. This will be the case if either:

• The VSC measured at the centre of an existing main window is less than 27%,

and less than 0.8 times its former value

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 BRE Guidelines recommend that in urban development locations, alternative baselines or

lower target values may be used (cf Appendix F of the BRE Guidelines for Daylight & Sunlight).

Paragraph F1 states:

"...such alternative targets may be generated from the layout dimensions of existing

development, or they may be derived from considering the internal layout and daylight

needs of the proposed development itself."

Indeed, in paragraph 2.2.3 of the BRE Guidelines it 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 it itself a good

neighbour, standing a reasonable distance from the boundary and taking more than its

fair share of light. Appendix F gives further guidance.

In Paragraph F4, the BRE Guidelines state:

"For example, in a mews in a historic city centre, a typical obstruction angle from ground

floor window level might be close to 40°. This would correspond to a VSC of 18%, which

could be used as a target value for development in that street if new development is to

match the existing layout."

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In Paragraph F5, the BRE Guidelines state:

"A similar approach may be adopted in cases where an existing building has windows that

are unusually close to the site boundary and taking more than their fair share of light... To

ensure that new development matches the height and proportions of existing buildings,

the VSC and APSH targets for those windows could be set to those for a 'mirror-image'

building of the same height and size, an equal distance away from the other side of the

boundary."

In considering planning policy, it is important to establish whether the impact of a proposed

development on the daylighting and sunlight conditions of surrounding property to

development:

i) would or would not result in a "material deterioration" of those conditions; and

ii) whether such deterioration would be "unacceptable"

The BRE Guidelines are those that assess the impact of a proposed development and whether

or not there is likely to be a "material deterioration".

The test for sunlight to the neighbouring properties is calculated for each main south facing

window to habitable rooms and in particular living rooms. Bedrooms and kitchens are considered

by the BRE Guidelines as less important for sunlight. The BRE Guidelines state that any south facing

window may potentially receive up to 1486 hours of sunlight per year on average, representing

100% of the annual probable sunlight hours (APSH). Of this, each main window to a main habitable

room may be adversely affected if it has less than 25% of the total APSH across the whole year or

less than 5% APSH during the winter months (defined as the 6 months from September 21st

through to March 21st). If the retained total APSH is reduced by less than 4% or the change from

the existing is less than 20% for total and winter levels of APSH then this too would meet the BRE

Guideline levels.

Following the BRE Guidelines recommendations, VSC and APSH are measured from a point on the

outer window wall whilst ADF is measured from the point halfway between the inner and outer

window wall.

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2.3 Method used for calculating the daylight and sunlight results

The analysis provided in this report utilizes state-of-the-art software to calculate in three

dimensions the daylight and sunlight following the methods specified in the BRE Guidelines. A

three dimensional accurate computer model has been created for the existing site in context of

the immediate surrounding properties, based upon a partial measured survey of the site and

surrounding properties, site photographs and Ordnance Survey information.

Drawings of the existing and proposed building in context of the surrounding properties are shown

in Appendix 1.

2.3.1 Surrounding properties

Daylight and sunlight levels comparing the existing and proposed daylight (VSC and daylight

distribution) and sunlight (APSH) situation are then calculated for the surrounding properties.

These results are provided in Appendix 2.

2.4 Method for analysing acceptable sunlight amenity to the open amenity spaces within

and surrounding the proposed scheme

The BRE Guidelines state that for an amenity space to appear adequately sunlit throughout the

year, at least half of the amenity area should receive at least two hours of sunlight on 21st March.

If as a result of new development an existing amenity area does not meet the above, it should

retain at least 80% of its former value with the proposal in place. If a detailed calculation cannot

be carried out and the area is a simple shape, the BRE Guidelines suggest that the centre area of

each amenity space should receive at least 2 hours of sunlight on March 21st.

References:

BRE Guidelines (BR 209):- Site layout planning for daylight and sunlight: a guide to good practice,

by PJ Littlefair (2011).

These Guidelines provide the basis of the analysis described in this report. Please refer to this

document for a detailed description as to the approach, methodology and implementation of the

numerical analysis used in this report. A summary of the approach and methods recommended by

the BRE Guidelines is included in Section 2 above of this report.

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3. Assumptions used in the analysis

Uses of the surrounding properties have been based on external appearance to determine

whether they are residential or commercial use. Where this is ambiguous we have researched the

Council Tax records for the property, which if listed would indicate residential use.

It is important to note that the precise position of the surrounding property elevations has been

estimated, based on brick counts from site photographs. The floor levels for the surrounding

buildings are assumed unless otherwise indicated, which may affect the daylight distribution and

ADF calculations. Furthermore, as a result of the constraints posed by the current arrangement of

buildings on the site, it was not possible to view all the windows facing the site in the surrounding

properties, particularly for the Treen Avenue building. Test windows have therefore been inserted

in locations where windows would normally be expected, based on our experience on similar sites.

Two windows have been located on each floor of the Treen Avenue properties; it is likely that the

VSC levels measured for these test windows will be similar to those recorded for actual windows

in these locations as the sky view (the primary variable in a VSC calculation) will be similar in both

measurements.

We have obtained layouts for the following properties from the local planning website and local

estate agency websites:

• 2 Treen Avenue

• 10 Treen Avenue

• 14 Treen Avenue

• 7 Westwood Gardens

8 Westwood Gardens

30 Priest's Bridge

Flats 20 & 21, The Willoughbys

We have obtained layouts or gained access internally to any of the remaining surrounding

properties and so details of the internal layouts and floor level heights have been assumed from

the external appearance of the building, and the locations of windows. Unless known or otherwise,

appropriate the depths of rooms have been assumed at 4.27m for residential properties and 6m

for commercial properties, or half the building depth if this is less than these dimensions. All

property addresses are taken from the Land Registry MapSearch website and we advise that these

are checked by your solicitor prior to any action being taken on the basis of this report.

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4. Sources of Information Used in the Report

Wimshurst Pelleriti

0663 - Priests Bridge - Model -

20190116.dwg

2350 – 26 Priests Bridge, SW14 8TA (Issue

Drawing 2018.09.24).dwg

0663-ARR-E.dwg

0663-ARR-E-X.dwg

0663-ARR-P-L1.dwg

0663-ARR-P-L3.dwg

0663-ARR-P-RF.dwg

0663-ARR-S-AA.dwg

0663-ARR-S-BB.dwg

0663-ARR-S-CC.dwg

0663-ARR-S-DD.dwg

Site photography

Received 18.1.19

Waldrams Chartered Surveyors

Site Photographs

Ordnance Survey

5. Daylight & Sunlight Analysis

The existing site is shown on drawings 2139-01-01 to -01-03 in Appendix 1 whilst the proposed scheme is shown on drawings 2139-01-04 to -01-06. The existing property in its condition at the time of writing is shown on *fig.* 1 below.



Fig. 1: Existing site

24 Priests Bridge is currently used as a public house (the Stag's Head). According to research via the Valuations Office Agency (VOA) website there is a residential element within this building, likely a manager's flat or similar, which on the basis of external inspection seems likely to be across

the first and second floors. We have therefore assumed the first and second floors to be entirely of residential use and have reported on these spaces accordingly below.

In terms of daylight and sunlight, the following properties in the table below were analysed due to their proximity to the development site given the height and massing of the proposal:

		Vertic	al Sky Comp	onent				No Sky Line				Probable at Hours
Property	Total no. of windows tested	Total no. of windows satisfying BRE criteria	Total no. o	f windows no BRE criteria	ot satisfying	Total no. of rooms tested	Total no. of rooms experiencing <20% NSL loss		of rooms exp >20% NSL los		Total no. of south facing windows tested	Total no. of windows satisfying BRE criteria
			20-29.9% reduction	30-39.9% reduction	>40% reduction			20-29.9% reduction	30-39.9% reduction	>40% reduction		
2 Treen												
Avenue	3	3	0	0	0	3	3	0	0	0	3	3
4 Treen												
Avenue*	5	5	0	0	0	5	5	0	0	0	5	5
6 Treen												
Avenue*	6	6	0	0	0	5	5	0	0	0	6	6
8 Treen												
Avenue*	4	4	0	0	0	4	4	0	0	0	4	4
10 Treen												
Avenue	5	5	0	0	0	4	4	0	0	0	5	5
12 Treen												
Avenue*	4	4	0	0	0	4	4	0	0	0	4	4
14 Treen												
Avenue	6	6	0	0	0	4	4	0	0	0	6	6
16 Treen												
Avenue*	4	4	0	0	0	4	4	0	0	0	4	4
18 Treen												
Avenue*	4	4	0	0	0	4	4	0	0	0	4	4
7 Westwood												
Gardens	12	12	0	0	0	8	8	0	0	0	2	2
8 Westwood												
Gardens	13	13	0	0	0	5	5	0	0	0	10	10

9 Westwood												
Gardens*	6	6	0	0	0	3	3	0	0	0	3	3
18 Priests												
Bridge*	4	4	0	0	0	4	4	0	0	0	0	0
20 Priests												
Bridge*	5	5	0	0	0	5	5	0	0	0	0	0
24 Priests												
Bridge*	3	3	0	0	0	3	3	0	0	0	1	1
30 Priests												
Bridge	3	3	0	0	0	3	3	0	0	0	0	0
32 Priests												
Bridge*	3	3	0	0	0	3	3	0	0	0	0	0
32a Priests												
Bridge*	8	8	0	0	0	7	7	0	0	0	0	0
17-56 The												
Willoughbys,												
Priests												
Bridge	43	43	0	0	0	39	39	0	0	0	4	4
Total	168	168	0	0	0	117	117	0	0	0	61	61

NB only habitable rooms are referred to in the table above.

^{*} Reasonable assumed layouts of 4.27m depth have been used in these properties in the absence of known layouts. The daylight distribution (NSL) results cannot therefore be relied upon

All surrounding properties are therefore compliant with the BRE Guidelines for VSC and annual &

winter APSH and, where layouts are known, are also compliant with the BRE Guidelines for daylight

distribution. Where layouts are not known, all reasonably assumed rooms experience less than

20% reductions in daylight distribution.

6. Sunlight amenity

We have assessed the level of sunlight to the outdoor amenity spaces (i.e. gardens) within the

surrounding properties which could potentially be impacted by the proposal as they are located

to the north of the site, namely the gardens at 2 to 18 Treen Avenue and 30 & 32 Priests Bridge.

The results of the analysis to surrounding amenity spaces can be found on drawing 2139-01-07.

The BRE Guidelines recommend that an outdoor amenity space receives at least 2 hours of sunlight

on March 21st to at least 50% of its area in the proposed situation or retains at least 80% of its

former value with the proposal in place.

The analysis demonstrates that all of the surrounding rear garden spaces meet the BRE Guidelines

for sunlight amenity in the proposed situation.

7. Conclusions

This is a report into the impact of the proposed development at 26-28 Priests Bridge, Barnes on

the daylight and sunlight to surrounding residential properties and amenity spaces. This analysis

has been based upon scheme drawings provided by Wimshurst Pelleriti, a partial measured survey,

and site photography.

The analysis has been carried out in accordance with the methodologies contained in the BRE

Guidelines (Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice by P. Littlefair

(2011)), which is used by the local authority to determine the acceptability of a proposal in terms

of its effect on neighbouring daylight and sunlight amenity.

All surrounding properties are compliant with the BRE Guidelines for VSC and annual & winter

APSH and, where layouts are known, are also compliant with the BRE Guidelines for daylight

distribution. Where layouts are not known, all rooms experience less than 20% reductions in

daylight distribution based on reasonably assumed layouts.

In sunlight amenity terms, all of the surrounding amenity areas meet the BRE Guidelines for

sunlight amenity.

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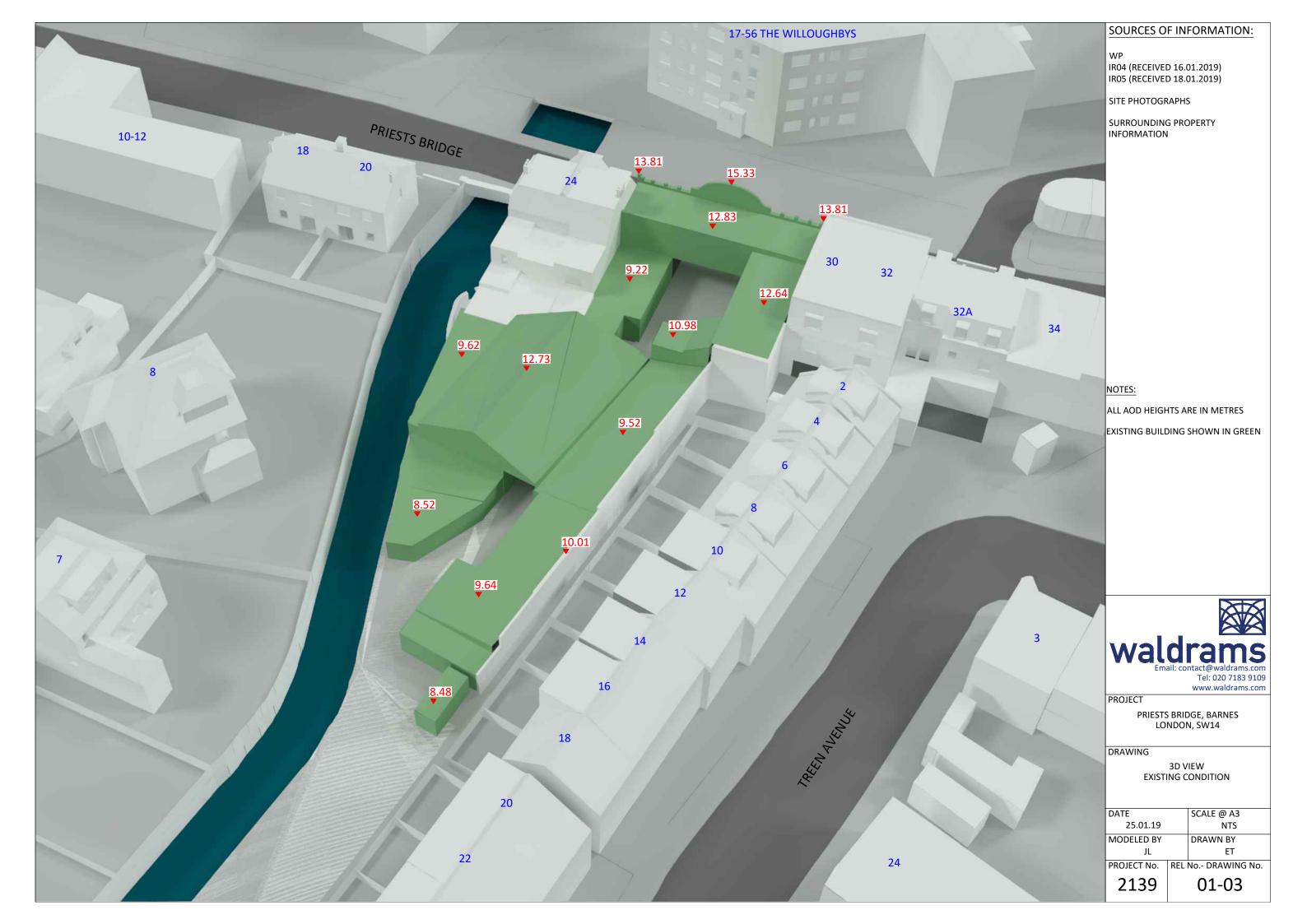
APPENDIX 1

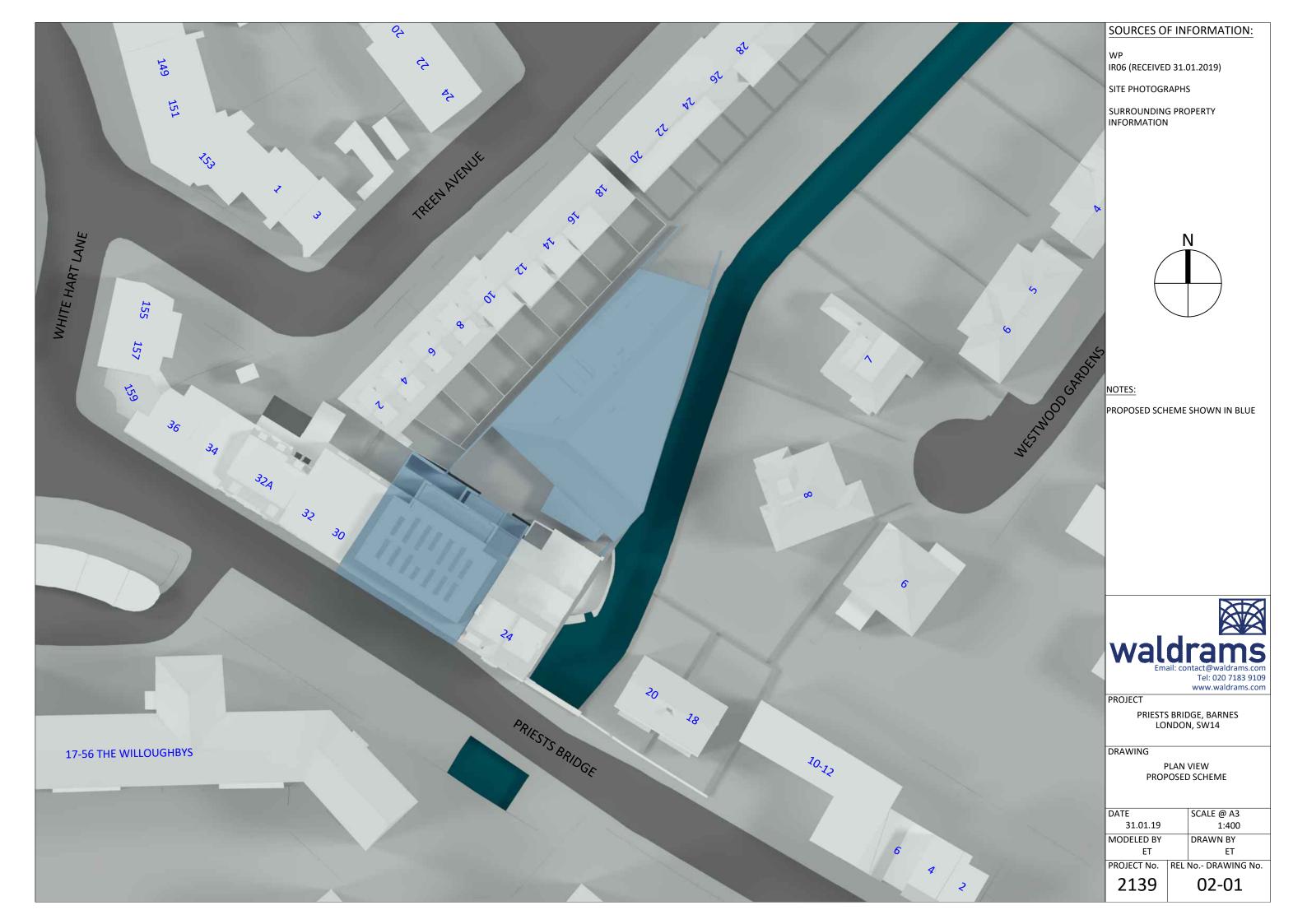
Drawings

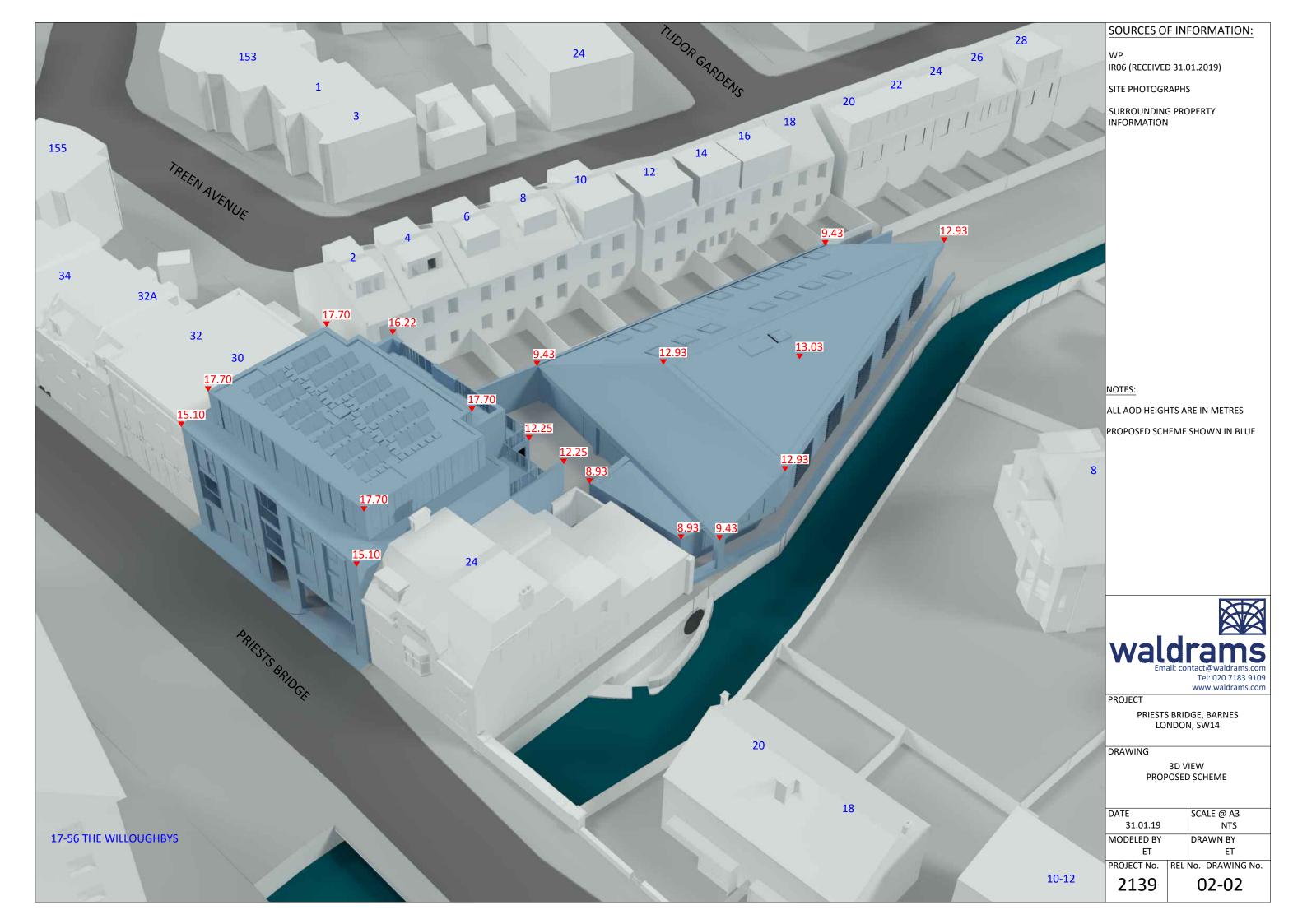


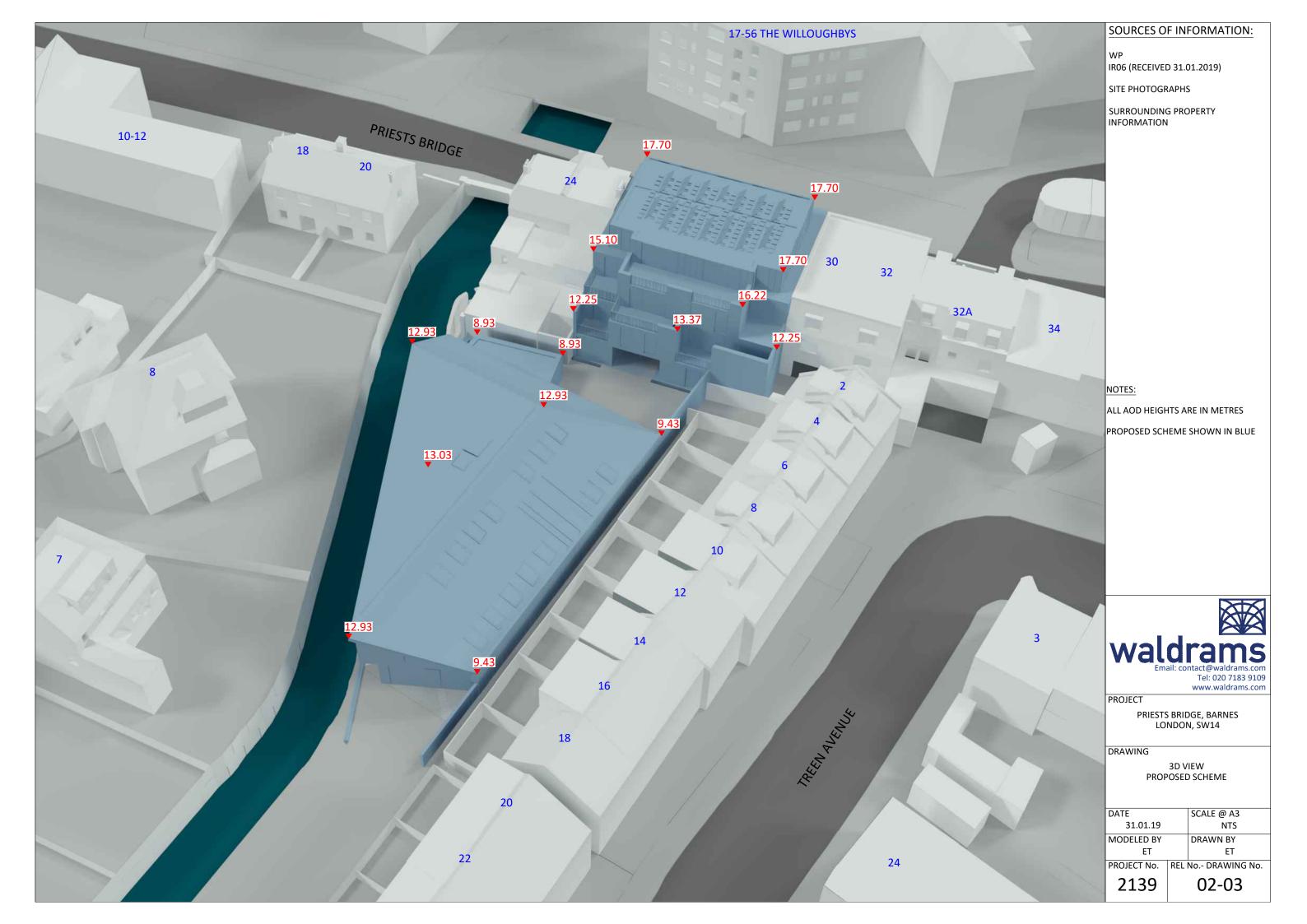


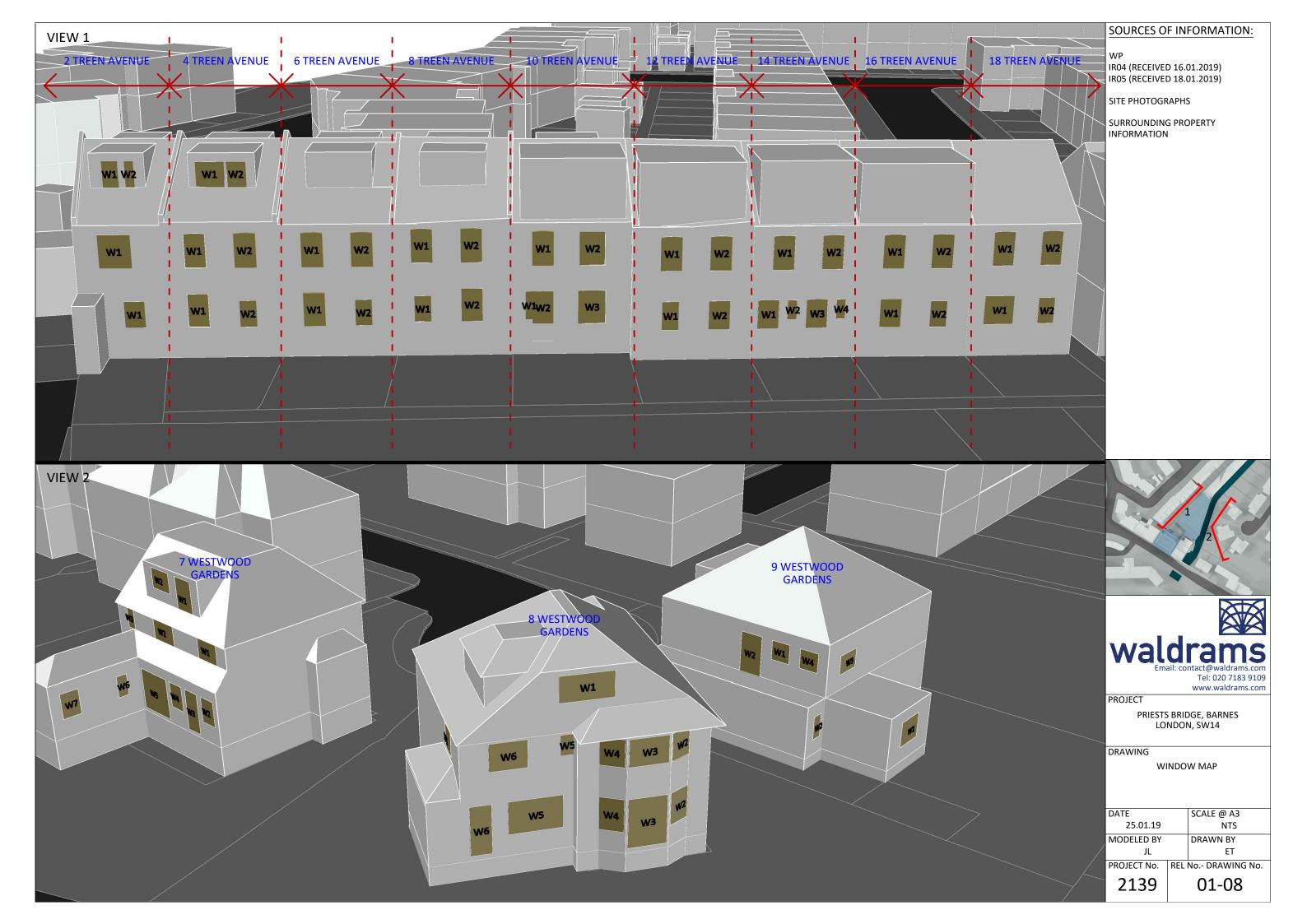


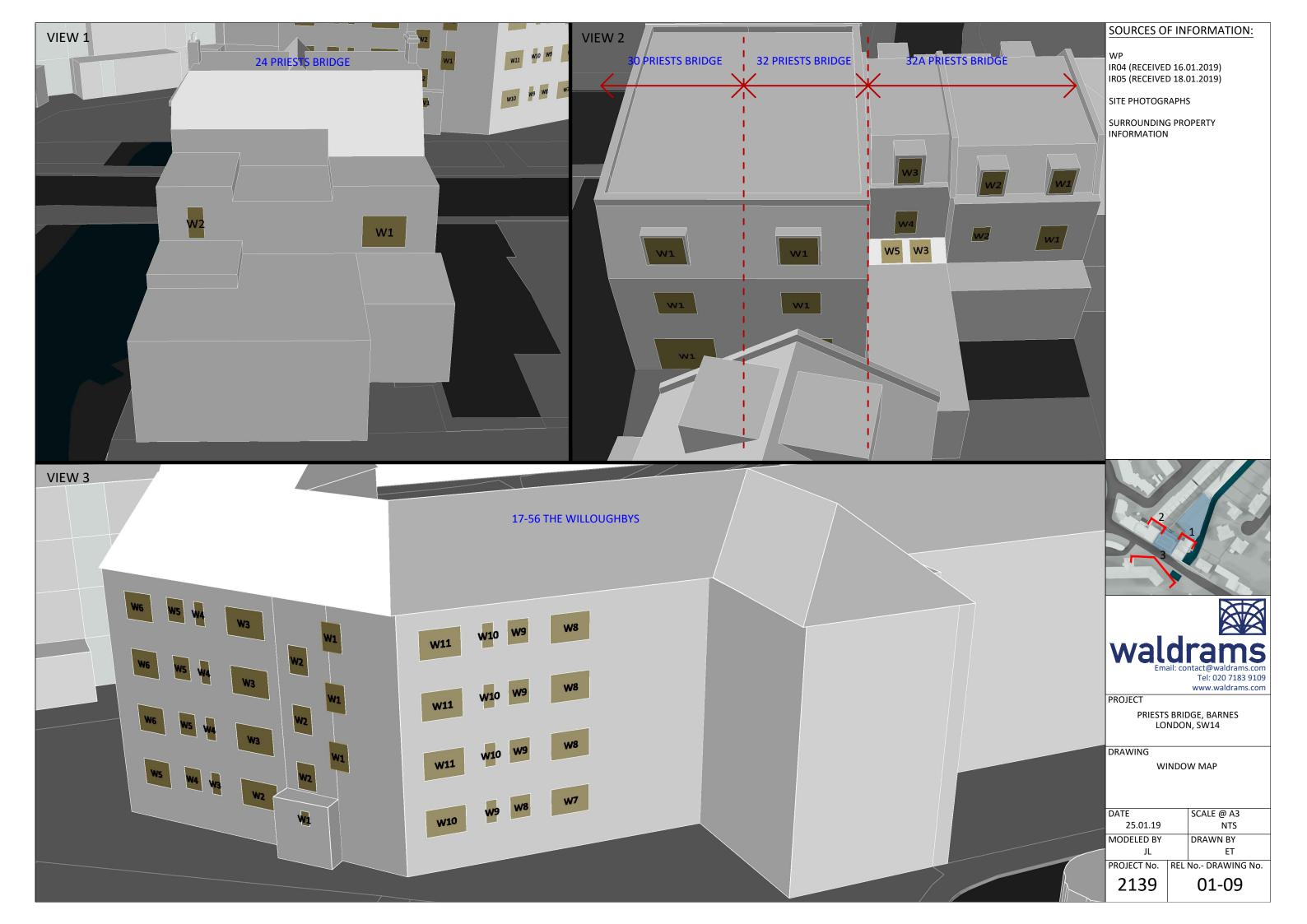








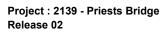




APPENDIX 2

Daylight & Sunlight Results

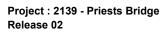




Date: 01.02.2019



					Vertic	al Sky Comp	onent		No S	kyline		Annual Probable Sunlight Hours							
Address/Floor	Room Ref	Property Type	Room Usage	Window Ref	Existing VSC %	Proposed VSC %	Ratio Proposed /Existing VSC	Room Area m²	Existing NSC %	Proposed NSC %	Ratio Proposed /Existing NSC	Existing Sunlight Annual%	Proposed Sunlight Annual%	Ratio Proposed /Existing Annual	Existing Sunlight Winter%	Proposed Sunlight Winter%	Ratio Proposed /Existing Winter		
		.,,,,,			100 /0	700 //						7 70	74111000170	7		75			
	7 Westv	vood Garden	S																
Ground	R1	Residential	Kitchen-Resi	W1	34.32	34.32	1.00	16.01	99.41	99.41	1.00	North	North	North	North	North	North		
Ground	R1	Residential	Kitchen-Resi	W5	27.52	26.78	0.97	16.01	99.41	99.41	1.00	North	North	North	North	North	North		
Ground	R2	Residential	Living Room	W2	34.72	33.75	0.97	17.01	99.97	99.97	0.99	North	North	North	North	North	North		
Ground	R2	Residential	Living Room	W3	33.57	32.55	0.96	17.01	99.97	99.97	0.99	North	North	North	North	North	North		
Ground	R2	Residential	Living Room	W4	33.37	32.62	0.97	17.01	99.97	99.97	0.99	North	North	North	North	North	North		
Ground	R3	Residential	Unknown-Res	W6	24.96	24.36	0.97	3.9	75.03	75.03	0.99	40	38	0.95	8	7	0.87		
Ground	R4	Residential	Home Office	W7	30.59	29.78	0.97	3.18	99.06	99.06	0.99	56	54	0.96	14	13	0.92		
First	R1	Residential	Bedroom	W1	35.59	35.53	0.99	10.15	98.18	98.18	1.00	North	North	North	North	North	North		
First	R2	Residential	Bedroom	W2	35.55	35.51	0.99	7.5	97.42	97.42	1.00	North	North	North	North	North	North		
First	R3	Residential	Bathroom	W3	35.59	35.56	0.99	3.7	96.72	96.72	1.00	North	North	North	North	North	North		
Second	R1	Residential	Bedroom	W1	38.66	38.63	0.99	13.97	98.45	98.45	1.00	North	North	North	North	North	North		
Second	R1	Residential	Bedroom	W2	38.96	38.94	0.99	13.97	98.45	98.45	1.00	North	North	North	North	North	North		
	8 Westv	vood Garden	S																
Ground	R1	Residential	LKD	W1	32.25	32.25	1.00	31.47	99.85	99.85	0.99	74	74	1.00	24	24	1.00		
Ground	R1	Residential	LKD	W2	32.64	31.99	0.98	31.47	99.85	99.85	0.99	63	61	0.96	21	21	1.00		
Ground	R1	Residential	LKD	W3	33.99	32.36	0.95	31.47	99.85	99.85	0.99	55	52	0.94	18	18	1.00		
Ground	R1	Residential	LKD	W4	32.94	30.77	0.93	31.47	99.85	99.85	0.99	North	North	North	North	North	North		
Ground	R1	Residential	LKD	W5	33.17	31.19	0.94	31.47	99.85	99.85	0.99	45	41	0.91	12	12	1.00		
Ground	R1	Residential	LKD	W6	33.74	31.06	0.92	31.47	99.85	99.85	0.99	51	46	0.90	15	14	0.93		
First	R1	Residential	Bedroom	W1	36.37	36.27	0.99	8.23	99.53	99.53	1.00	North	North	North	North	North	North		
First	R1	Residential	Bedroom	W6	35.81	35.24	0.98	8.23	99.53	99.53	1.00	53	53	1.00	16	16	1.00		
First	R2	Residential	Bedroom	W2	25.68	25.3	0.98	16.21	99.92	99.92	1.00	45	45	1.00	18	18	1.00		
First	R2	Residential	Bedroom	W3	34.57	34	0.98	16.21	99.92	99.92	1.00	53	53	1.00	18	18	1.00		
First	R2	Residential	Bedroom	W4	26.19	25.6	0.97	16.21	99.92	99.92	1.00	North	North	North	North	North	North		
First	R3	Residential	Bathroom	W5	23.95	23.45	0.97	2.8	78.05	78.05	1.00	17	17	1.00	2	2	1.00		
Second	R1	Residential	Bedroom	W1	34.56	34.26	0.99	20.09	93.08	93.08	0.99	50	50	1.00	17	17	1.00		
	9 Westv	vood Garden	S																
Ground	R1	Residential	Unknown-Res	W1	31.16	31	0.99	13.97	93.52	93.52	1.00	68	67	0.98	18	18	1.00		
Ground	R2	Residential	Unknown-Res	W2	23.33	23.09	0.98	5.12	97.83	97.83	0.99	40	38	0.95	6	6	1.00		
First	R1	Residential	Unknown-Res	W1	31.44	31.16	0.99	21.23	98.85	98.85	0.99	North	North	North	North	North	North		
First	R1	Residential	Unknown-Res	W2	29.44	29.18	0.99	21.23	98.85	98.85	0.99	North	North	North	North	North	North		
First	R1	Residential	Unknown-Res	W3	35.57	35.41	0.99	21.23	98.85	98.85	0.99	75	75	1.00	25	25	1.00		
First	R1	Residential	Unknown-Res	W4	32.2	31.93	0.99	21.23	98.85	98.85	0.99	North	North	North	North	North	North		
	18 Pri	ests Bridge																	
Ground	R1	Residential	Unknown-Res	W1	32.93	32.75	0.99	10.6	98.64	98.64	0.99	North	North	North	North	North	North		
Ground	R2	Residential	Unknown-Res	W2	32.34	32.14	0.99	8.56	97.27	97.27	1.00	North	North	North	North	North	North		
First	R1	Residential	Unknown-Res	W1	36.21	36.14	0.99	10.6	98.91	98.91	1.00	North	North	North	North	North	North		
First	R2	Residential	Unknown-Res	W2	35.37	35.33	0.99	8.56	97.44	97.44	1.00	North	North	North	North	North	North		
		iests Bridge																	
Ground	R1	Residential	Unknown-Res	W1	34.39	33.99	0.98	8.56	97.74	97.74	1.00	North	North	North	North	North	North		
Ground	R2	Residential	Unknown-Res	W2	33.38	33.01	0.98	10.6	99.06	99.05	0.99	North	North	North	North	North	North		
First	R1	Residential	Unknown-Res	W1	36.7	36.52	0.99	6.72	97.28	97.28	1.00	North	North	North	North	North	North		
First	R2	Residential	Unknown-Res	W2	36.56	36.44	0.99	10.6	98.69	98.69	0.99	North	North	North	North	North	North		



Date: 01.02.2019



					Verti	cal Sky Comp	onent		No S	kyline		Annual Probable Sunlight Hours						
							Ratio				Ratio			Ratio			Ratio	
Address/Floor	Room Ref	Property Type	Room Usage	Window Ref	Existing VSC %	Proposed VSC %	Proposed /Existing VSC	Room Area m²	Existing NSC %	Proposed NSC %	Proposed /Existing NSC	Existing Sunlight Annual%	Proposed Sunlight Annual%	Proposed /Existing Annual	Existing Sunlight Winter%	Proposed Sunlight Winter%	Proposed /Existing Winter	
First	R3	Residential	Unknown-Res	W3	32.92	32.27	0.98	4.28	97.4	97.4	1.00	North	North	North	North	North	North	
	24 Pri	ests Bridge																
First	R1	Residential	Unknown-Res	W1	34.16	29.63	0.86	12.31	99.23	98.41	0.99	North	North	North	North	North	North	
First	R2	Residential	Unknown-Res	W2	36.91	36.05	0.97	7.04	98.53	98.53	1.00	North	North	North	North	North	North	
First	R2	Residential	Unknown-Res	W3	35.78	35.77	0.99	7.04	98.53	98.53	1.00	66	66	1.00	22	22	1.00	
	30 Pri	ests Bridge																
Ground	R1	Residential	Kitchen-Resi	W1	17.59	13.99	0.80	18.23	87.13	84.85	0.97	North	North	North	North	North	North	
First	R1	Residential	Bedroom	W1	27.21	24.65	0.90	14.84	87.65	86.68	0.98	North	North	North	North	North	North	
Second	R1	Residential	Bedroom	W1	36.31	35.35	0.97	12.83	93.93	91.78	0.97	North	North	North	North	North	North	
	32 Pri	ests Bridge																
Ground	R1	=	Kitchen-Resi	W1	12.44	11.61	0.93	18.23	58.11	58.06	0.99	North	North	North	North	North	North	
First	R1	Residential	Bedroom	W1	24.39	23.92	0.98	14.84	77.9	77.59	0.99	North	North	North	North	North	North	
Second	R1	Residential	Bedroom	W1	35.01	34.8	0.99	12.93	94.07	93.95	0.99	North	North	North	North	North	North	
0000110		iests Bridge	200.00		00.01	55	0.00	.2.00		00.00	0.00						. 10.0.	
Ground	R1		Unknown-Res	W3	43.24	43.24	1.00	11.82	68.87	68.87	1.00	North	North	North	North	North	North	
Ground	R1		Unknown-Res	W5	40.44	40.44	0.99	11.82	68.87	68.87	1.00	North	North	North	North	North	North	
First	R1		Unknown-Res	W1	36.1	36.1	0.99	10.98	98.8	98.8	0.99	North	North	North	North	North	North	
First	R2		Unknown-Res	W2	34.9	34.9	0.99	10.33	94.84	94.84	1.00	North	North	North	North	North	North	
First	R3		Unknown-Res	W4	24.65	24.65	1.00	11.75	90.32	90.32	1.00	North	North	North	North	North	North	
	R1		Unknown-Res	W1	38.76	38.76	0.99	9.76	95.64	90.32 95.64	1.00		North					
Second												North		North	North	North	North	
Second	R2		Unknown-Res	W2	38.22	38.22	1.00	9.19	96.05	96.05	1.00	North	North	North	North	North	North	
Second	R3		Unknown-Res	W3	33.26	33.26	1.00	10.27	88.68	88.68	1.00	North	North	North	North	North	North	
0 1		en Avenue	100 L D 1	14/4	04.40	00.00	0.05	0.07	00.70	77.00	0.00	40	40	0.04	•	•	4.00	
Ground	R1		Kitchen-Resi	W1	24.13	23.03	0.95	8.67	82.79	77.29	0.93	46	42	0.91	2	2	1.00	
First	R1	Residential	Bedroom	W1	32.49	28.66	0.88	9.33	96.59	96.59	0.99	67	56	0.83	18	7	0.38	
Second	R1	Residential		W1	37.9	35.09	0.92	3.68	88.74	88.74	0.99	73	69	0.94	24	20	0.83	
Second	R2		irculation Spa	W2	37.95	35.46	0.93	1.73	99.02	99.02	0.99	73	70	0.95	24	21	0.87	
		en Avenue														_		
Ground	R1		Unknown-Res	W1	29.15	27.15	0.93	9.92	98.57	98.57	0.99	54	53	0.98	7	6	0.85	
Ground	R2		Unknown-Res	W2	30.6	28.47	0.93	9.83	97.54	96.61	0.99	62	56	0.90	14	8	0.57	
First	R1		Unknown-Res	W1	35.58	32.14	0.90	9.92	98.58	98.57	0.99	69	61	0.88	22	14	0.63	
First	R2		Unknown-Res	W2	36.27	33.63	0.92	9.83	98.53	98.52	0.99	71	64	0.90	23	16	0.69	
Second	R1		Unknown-Res	W1	38.13	36.7	0.96	5.58	93.18	93.18	1.00	74	73	0.98	25	24	0.96	
Second	R2		Unknown-Res	W2	38.18	37	0.96	2.6	99.88	99.88	0.99	74	73	0.98	25	24	0.96	
	6 Tre	en Avenue																
Ground	R1		Unknown-Res	W1	32.43	30.31	0.93	9.88	98.71	98.71	0.99	67	61	0.91	18	12	0.66	
Ground	R2	Residential	Unknown-Res	W2	32.38	30.35	0.93	10	97.73	97.16	0.99	64	60	0.93	18	14	0.77	
First	R1	Residential	Unknown-Res	W1	36.56	34.81	0.95	9.88	98.71	98.71	0.99	73	69	0.94	24	20	0.83	
First	R2	Residential	Unknown-Res	W2	36.65	35.31	0.96	10	98.54	98.54	0.99	73	70	0.95	24	21	0.87	
	8 Tre	en Avenue																
Ground	R1	Residential	Unknown-Res	W1	33.31	31.15	0.93	8.74	98.06	97.17	0.99	69	64	0.92	20	15	0.75	
Ground	R2	Residential	Unknown-Res	W2	33.81	31.62	0.93	11.6	97.94	97.93	0.99	70	67	0.95	21	18	0.85	
First	R1	Residential	Unknown-Res	W1	36.84	35.83	0.97	8.74	98.87	98.87	0.99	72	68	0.94	24	20	0.83	
First	R2	Residential	Unknown-Res	W2	36.92	36.07	0.97	11.6	97.87	97.86	0.99	73	71	0.97	24	22	0.91	
	10 Tro	een Avenue																
Ground	R1	Residential	Unknown-Res	W1	33.52	31.38	0.93	9.32	99.06	99.06	0.99	68	65	0.95	21	18	0.85	

Date: 01.02.2019



					Vertic	cal Sky Comp	onent		No S	kyline			An	nual Probable	Sunlight Ho	urs	
Address/Floor	Room Ref	Property Type	Room Usage	Window Ref	Existing VSC %	Proposed VSC %	Ratio Proposed /Existing VSC	Room Area m²	Existing NSC %	Proposed NSC %	Ratio Proposed /Existing NSC	Existing Sunlight Annual%	Proposed Sunlight Annual%	Ratio Proposed /Existing Annual	Existing Sunlight Winter%	Proposed Sunlight Winter%	Ratio Proposed /Existing Winter
Ground	R1	Residential	Unknown-Res	W2	33.16	31.1	0.93	9.32	99.06	99.06	0.99	68	64	0.94	21	17	0.80
Ground	R2	Residential	Unknown-Res	W3	31.39	29.38	0.93	11.08	98.64	98.64	0.99	69	65	0.94	21	17	0.80
First	R1	Residential	Unknown-Res	W1	36.7	35.72	0.97	9.32	98.58	98.58	0.99	72	72	1.00	23	23	1.00
First	R2	Residential	Unknown-Res	W2	35.25	34.2	0.97	11.08	98.59	98.59	0.99	72	72	1.00	24	24	1.00
		een Avenue															
Ground	R1	Residential	Unknown-Res	W1	32.6	31.22	0.95	10.24	98.27	96.26	0.97	71	68	0.95	22	19	0.86
Ground	R2	Residential	Unknown-Res	W2	32.65	31.3	0.95	9.72	98.6	98.57	0.99	71	68	0.95	22	19	0.86
First	R1	Residential	Unknown-Res	W1	37.11	36.01	0.97	10.24	98.43	98.42	0.99	73	72	0.98	24	23	0.95
First	R2		Unknown-Res	W2	37.16	36.1	0.97	9.72	98.6	98.6	0.99	74	72	0.97	25	23	0.92
		een Avenue			0.1.1			5 =					· -				
Ground	R1		Unknown-Res	W1	32.98	31.59	0.95	8.53	98.84	98.84	0.99	70	68	0.97	22	20	0.90
Ground	R1		Unknown-Res	W2	33.76	32.06	0.94	8.53	98.84	98.84	0.99	70	69	0.98	22	21	0.95
Ground	R2		Unknown-Res	W3	33.21	31.8	0.94	9.2	99.18	99.18	0.99	70 70	68	0.98	22	20	0.90
Ground	R2		Unknown-Res	W4	34.04	32.35	0.95	9.2	99.18	99.18	0.99	71	69	0.97	23	21	0.91
First	R1		Unknown-Res	W1	37.22	36.2	0.93	9.59	98.66	98.66	0.99	73	71	0.97	25	23	0.92
				W2	37.22	36.28	0.97		99.17	99.17	0.99			0.97		23	0.92
First	R2		Unknown-Res	VVZ	37.23	30.28	0.97	8.14	99.17	99.17	0.99	73	71	0.97	25	23	0.92
Onested		een Avenue	Halman Daa	10/4	04.00	00.40	0.04	40.00	00.47	07.70	0.00	70	00	0.04	00	40	0.00
Ground	R1		Unknown-Res	W1	34.08	32.16	0.94	10.88	98.17	97.73	0.99	70	66	0.94	23	19	0.82
Ground	R2		Unknown-Res	W2	34.32	32.2	0.93	9.42	98.54	87.43	0.88	70	66	0.94	23	19	0.82
First	R1		Unknown-Res	W1	37.19	36.28	0.97	10.88	98.17	98.17	0.99	73	71	0.97	24	22	0.91
First	R2		Unknown-Res	W2	37.24	36.36	0.97	9.42	98.7	98.7	0.99	73	72	0.98	24	23	0.95
	18 Tr	een Avenue															
Ground	R1	Residential	Unknown-Res	W1	35.29	33.24	0.94	9.6	99.57	99.57	0.99	71	69	0.97	23	21	0.91
Ground	R2		Unknown-Res	W2	35.14	33.38	0.94	8.38	99.02	97.98	0.98	71	69	0.97	24	22	0.91
First	R1	Residential	Unknown-Res	W1	37.34	36.66	0.98	9.6	98.67	98.67	0.99	73	73	1.00	25	25	1.00
First	R2		Unknown-Res	W2	37.26	36.78	0.98	8.38	99.05	99.05	0.99	72	72	1.00	24	24	1.00
	17 to 56 T	he Willoughb	oys														
Ground	R1	Residential	Unknown-Res	W1	31.52	29.62	0.93	1.4	57.81	57.8	0.99	North	North	North	North	North	North
Ground	R2	Residential	Kitchen-Resi	W2	31.84	30.34	0.95	8.26	98.4	98.38	0.99	North	North	North	North	North	North
Ground	R3	Residential	Bathroom	W3	32.91	31.63	0.96	1.35	98.65	98.65	1.00	North	North	North	North	North	North
Ground	R4	Residential	Bathroom	W4	33.08	31.92	0.96	2.5	98.33	98.33	1.00	North	North	North	North	North	North
Ground	R5	Residential	Bedroom	W5	33.24	32.24	0.97	10.56	98.69	98.69	0.99	North	North	North	North	North	North
Ground	R5	Residential	Bedroom	W6	25.11	25.11	1.00	10.56	98.69	98.69	0.99	51	51	1.00	3	3	1.00
Ground	R6	Residential	Bedroom	W7	28.19	27.08	0.96	12.87	97.64	97.64	0.99	North	North	North	North	North	North
Ground	R7	Residential	Bathroom	W8	29.91	28.57	0.95	2.49	96.48	96.48	1.00	North	North	North	North	North	North
Ground	R8	Residential	Bathroom	W9	30.39	28.92	0.95	1.12	96.25	96.25	1.00	North	North	North	North	North	North
Ground	R9	Residential	Kitchen-Resi	W10	30.6	28.91	0.94	8.98	96.69	96.55	0.99	North	North	North	North	North	North
First	R1		irculation Spa	W1	35.12	33.18	0.94	5.97	99.21	99.21	0.99	North	North	North	North	North	North
First	R2		Kitchen-Resi	W3	35.61	34.07	0.95	8.26	98.43	98.43	0.99	North	North	North	North	North	North
First	R3	Residential	Bathroom	W4	35.91	34.6	0.96	1.35	98.65	98.65	1.00	North	North	North	North	North	North
First	R4	Residential	Bathroom	W5	35.98	34.78	0.96	2.5	98.33	98.33	1.00	North	North	North	North	North	North
First	R5	Residential	Bedroom	W6	36.01	34.98	0.90	10.56	98.7	98.7	0.99	North	North	North	North	North	North
First	R5	Residential	Bedroom	W7	28.1	28.1	1.00	10.56	98.7	98.7	0.99	58	58	1.00	9	9	1.00
First		Residential		W8	31.68	30.56	0.96	11.6	98.49	98.49	0.99	North	North			North	
	R6		Bedroom											North	North		North
First	R7	Residential	Bathroom	W9	33.51	32.16	0.95	2.49	96.74	96.74	1.00	North	North	North	North	North	North
First	R8	Residential	Bathroom	W10	34	32.5	0.95	1.12	96.25	96.25	1.00	North	North	North	North	North	No

Daylight_Sunlight Analysis Table Surroundings

Project : 2139 - Priests Bridge Release 02

Release 02 Date : 01.02.2019



					Verti	cal Sky Comp	onent		No S	kyline							
Address/Floor	Room Ref	Property Type	Room Usage	Window Ref	Existing VSC %	Proposed VSC %	Ratio Proposed /Existing VSC	Room Area m²	Existing NSC %	Proposed NSC %	Ratio Proposed /Existing NSC	Existing Sunlight Annual%	Proposed Sunlight Annual%	Ratio Proposed /Existing Annual	Existing Sunlight Winter%	Proposed Sunlight Winter%	Ratio Proposed /Existing Winter
First	R9	Residential	Kitchen-Resi	W11	34.29	32.55	0.94	8.79	97.82	97.82	0.99	North	North	North	North	North	North
First	R10	Residential	rculation Spa	W2	33.7	31.94	0.94	5.47	99.58	99.58	0.99	North	North	North	North	North	North
Second	R1	Residential	rculation Spa	W1	37.88	36.23	0.95	5.97	99.21	99.21	0.99	North	North	North	North	North	North
Second	R2	Residential	Kitchen-Resi	W3	37.92	36.67	0.96	8.26	98.44	98.44	0.99	North	North	North	North	North	North
Second	R3	Residential	Bathroom	W4	38.02	36.97	0.97	1.35	98.65	98.65	1.00	North	North	North	North	North	North
Second	R4	Residential	Bathroom	W5	38.05	37.09	0.97	2.49	98.09	98.09	1.00	North	North	North	North	North	North
Second	R5	Residential	Bedroom	W6	38.08	37.24	0.97	10.56	99.44	99.44	1.00	North	North	North	North	North	North
Second	R5	Residential	Bedroom	W7	31.09	31.09	1.00	10.56	99.44	99.44	1.00	61	61	1.00	14	14	1.00
Second	R6	Residential	Bedroom	W8	34.91	34	0.97	11.6	98.95	98.95	0.99	North	North	North	North	North	North
Second	R7	Residential	Bathroom	W9	36.24	35.16	0.97	2.49	96.75	96.75	1.00	North	North	North	North	North	North
Second	R8	Residential	Bathroom	W10	36.67	35.46	0.96	1.12	96.25	96.25	1.00	North	North	North	North	North	North
Second	R9	Residential	Kitchen-Resi	W11	37.09	35.64	0.96	8.79	98.64	98.64	0.99	North	North	North	North	North	North
Second	R10	Residential	rculation Spa	W2	36.84	35.13	0.95	5.46	99.6	99.6	0.99	North	North	North	North	North	North
Third	R1	Residential	rculation Spa	W1	36.22	35.66	0.98	5.97	99.21	99.21	0.99	North	North	North	North	North	North
Third	R2	Residential	Kitchen-Resi	W3	35.79	35.35	0.98	8.26	98.43	98.43	0.99	North	North	North	North	North	North
Third	R3	Residential	Bathroom	W4	35.62	35.25	0.98	1.35	95.94	95.94	1.00	North	North	North	North	North	North
Third	R4	Residential	Bathroom	W5	35.76	35.41	0.99	2.5	95.49	95.49	1.00	North	North	North	North	North	North
Third	R5	Residential	Bedroom	W6	36.42	36.09	0.99	10.56	99.53	99.53	1.00	North	North	North	North	North	North
Third	R5	Residential	Bedroom	W7	31.78	31.78	1.00	10.56	99.53	99.53	1.00	65	65	1.00	21	21	1.00
Third	R6	Residential	Bedroom	W8	33.94	33.61	0.99	11.6	99.1	99.1	0.99	North	North	North	North	North	North
Third	R7	Residential	Bathroom	W9	33.86	33.51	0.98	2.49	96.71	96.71	1.00	North	North	North	North	North	North
Third	R8	Residential	Bathroom	W10	33.88	33.48	0.98	1.12	94.71	94.71	1.00	North	North	North	North	North	North
Third	R9	Residential	Kitchen-Resi	W11	34.49	33.98	0.98	8.79	98.72	98.72	0.99	North	North	North	North	North	North
Third	R10	Residential	irculation Spa	W2	38.11	37.03	0.97	5.46	99.54	99.54	0.99	North	North	North	North	North	North

APPENDIX 3

Sunlight Amenity Analysis



