



4th Floor Holborn Tower
137-144 High Holborn
London WC1V 6PL
+44 (0)20 7148 6290
info@eb7.co.uk
www.eb7.co.uk

Emily Harrison
McLeod + Aitken
Unit 9. Wheatley Business Centre
Old London Road
Wheatley
OX33 1XW

By email: [REDACTED]

01 March 2023

Dear Emily,

Re: Challoner House – Proposed Development Daylight and Sunlight

Introduction

eb7 have been instructed to assess the effect of the proposed development at Challoner House, 175 Winchester Road, on daylight and sunlight to the existing surrounding properties and neighbouring amenity spaces. The proposal involves the two-storey extension of the existing care home at Challoner House, following the demolition of the existing conservatory. These assessments consider the latest Harris Irwin Architects scheme proposals dated February 2023.

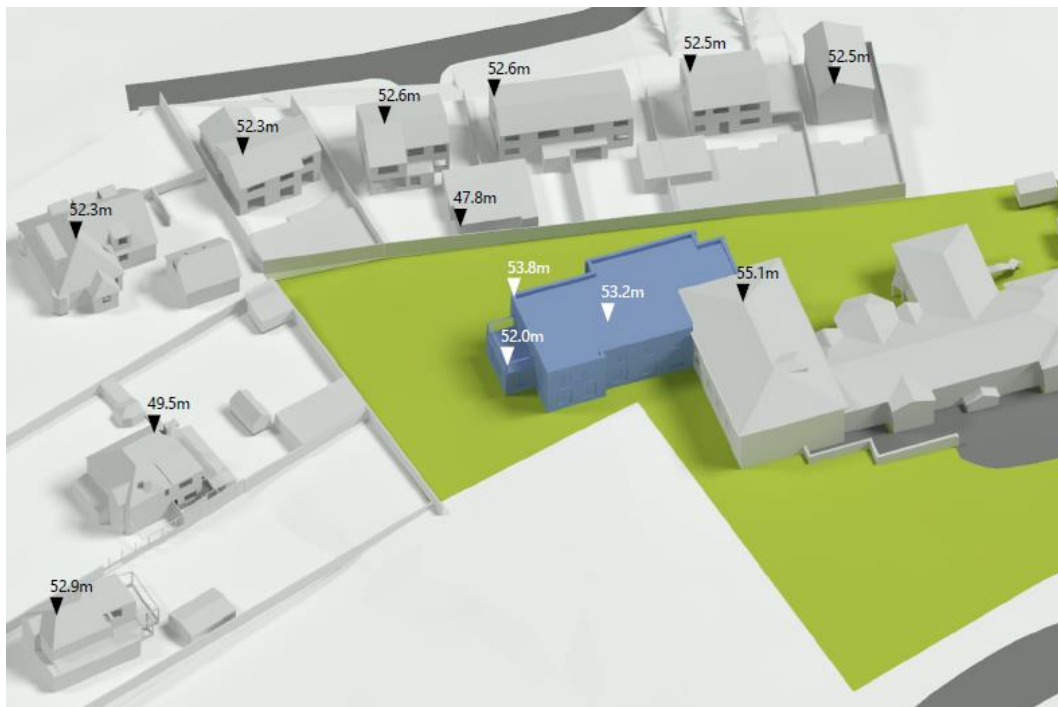


Image 1 – Isometric view of the proposed development and context

Summary of BRE Assessment Methods

The methodology and criteria used for the assessment of potential amenity effects to neighbouring properties is provided by the Building Research Establishment's (BRE) guidance 'Site layout planning for daylight and sunlight: A guide to good practice' (BRE 209 3rd edition, 2022). This is the reference document used by most local authorities for assessing daylight and sunlight in relation to new developments.

The guidance outlines detailed methods for calculating daylight to neighbours – the Vertical Sky Component (VSC) and the No-Sky Line (NSL). The VSC test measures the amount of sky that is visible to a specific point on the outside of a property, which is directly related to the amount of daylight that can be received. It is measured on the outside face of the external walls, usually at the centre point of a window.

The NSL test calculates the distribution of daylight within rooms by determining the area of the room at desk/work surface height (the 'working plane') which can and cannot receive a direct view of the sky and hence 'sky light'. The working plane height is set at 850mm above floor level within residential property.

For the above methods, the guidance suggests that existing daylight may be noticeably affected by new development if: -

- Windows achieve a VSC below 27% and are reduced to less than 0.80 times their former value; and
- Levels of NSL within rooms are reduced to less than 0.80 times their former values.

For sunlight, the APSH test calculates the percentage of statistically probable hours of sunlight received by each window in both the summer and winter months. March 21st through to September 21st is considered to be the summer period while September 21st to March 21st is considered the winter period. For properties surrounding a new development, only those windows oriented within 90° of due south and which overlook the site of the proposal are relevant for the assessment.

The overshadowing effects and provision of sunlight to neighbouring gardens and open spaces is assessed using the Sunlight Amenity test. This looks at the proportion of a relevant amenity space that receives at least 2 hours of sun on the 21st March in the present condition and compares this with the proportion of the area that receives at least 2 hours of sun on the 21st March with the proposal in place.

When considering the overshadowing impacts to neighbouring amenity spaces, for the area to be considered well sunlit it is similarly recommended that at least half of the area should receive at least 2hrs of sunlight on the 21st March or that reductions are limited to 0.8 times their existing value.

Planning Policy

Winchester Country Council

High-Quality Places: Supplementary Planning Document (2015):

Part 4 – Layout: arrangement of buildings and creation of spaces:

"4.48 Overshadowing/loss of light: significantly reducing the light reaching an important area which contributes to the amenity of a neighbouring property (such as gardens, a lounge or bedroom) is also potentially unacceptable. For example, where a two-storey structure is placed immediately to the south of a neighbouring patio area"

The National Planning Policy Framework - Department for Housing, Communities and Local Government (July 2021)

The latest version of the National Planning Policy Framework was issued in July 2021. The document sets out planning policies for England and how these are expected to be applied. In respect of daylight and sunlight it stresses the need to make optimal use of sites and to take a flexible approach to daylight and sunlight guidance. Para 125 States: -

11. Making effective use of land

Achieving appropriate densities

"125. Area-based character assessments, design guides and codes and masterplans can be used to help ensure that land is used efficiently while also creating beautiful and sustainable places. Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities and ensure that developments make optimal use of the potential of each site. In these circumstances:

c) local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)."

External Daylight & Sunlight Effects

Challoner House is a care home in the village of Chandlers Ford. There are residential neighbours to the north of the site, along Westwood Gardens and to the west of the site along Merdon Avenue. We have considered the following neighbouring residential properties in our assessment. The relationship with these neighbours is shown in the image below and drawings attached at Appendix 1.

- 1) 5 Merdon Avenue, SO53 1EH
- 2) 7 Merdon Avenue, SO53 1EH
- 3) 23A Westwood Gardens, SO53 1FN
- 4) 23 Westwood Gardens, SO53 1FN
- 5) 24 Westwood Gardens, SO53 1FN
- 6) 25 Westwood Gardens, SO53 1FN
- 7) 26 Westwood Gardens, SO53 1FN



Image 2 – Aerial view of the proposed development and context

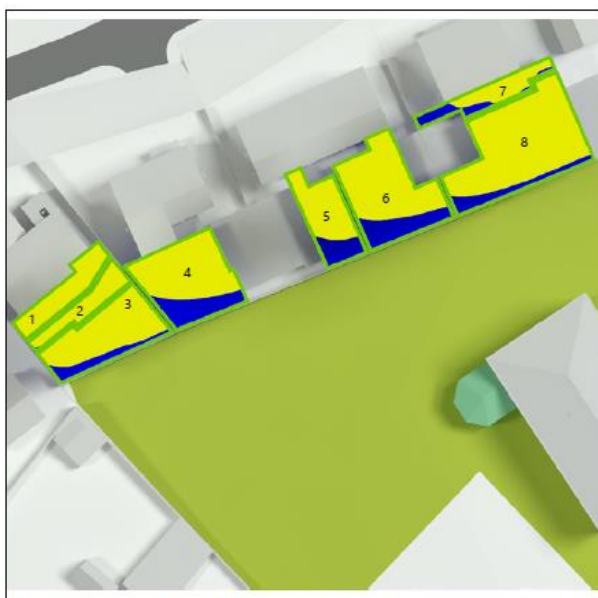
The results of our VSC and NSL assessments are attached at Appendix 2. Our assessment confirms that all of the neighbouring properties will maintain full compliance with the BRE guidelines with the proposal in place. The retained VSC levels to the windows serving habitable spaces remain at or within 0.80 times their former value with many being well in excess of the suggested targets. The limited effects of the proposal are confirmed by the NSL assessment with minimal shifts in daylight penetration to the spaces and all levels being well-within 0.8 times their former value.

The results of our APSH assessments show that all relevant rooms with windows within 90 degrees of due south retain good APSH levels remaining well in excess of the 25% BRE target for total annual probable sunlight hours and 5% winter probable sunlight hours.

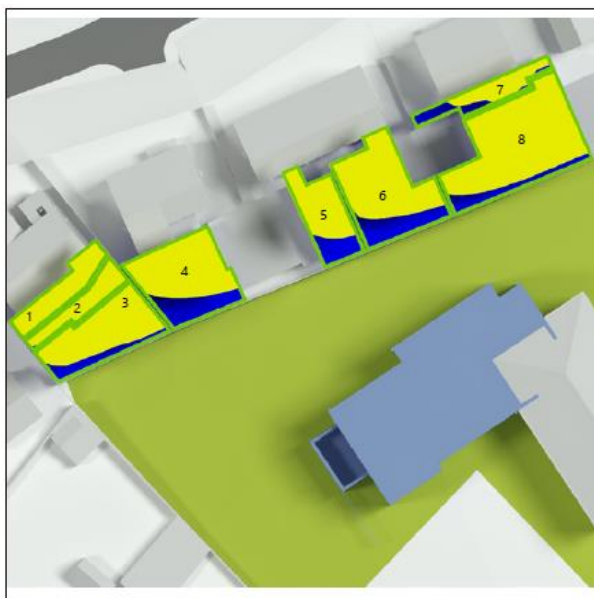
Sunlight Amenity Assessment (2-hour sun on ground)

We have assessed any potential shading effect of the proposal on neighbouring gardens and amenity areas using the two-hour sun on ground/sunlight amenity assessment. This has considered the gardens of the following properties. The results of this study are attached at Appendix 3 and extracted below.

- | | |
|------------------------|-------------------------|
| 1) 23 Westwood Gardens | 2) 23A Westwood Gardens |
| 3) 24 Westwood Gardens | 4) 25 Westwood Gardens |
| 5) 26 Westwood Gardens | |



Existing Scenario - March 21st



Proposed Scenario - March 21st

Image 3 - Extract of sunlight amenity study

The results of our assessment show that all the gardens analysed will experience no material reduction in sunlight availability as a result of the proposed development. All of the gardens will continue to receive 2 hours of direct sunlight to over 50% of the space as illustrated by the 'yellow' areas above. Additionally, none of the gardens experience a material change from the pre-existing position and therefore are fully in accordance with the BRE targets.

Conclusion

This practice has undertaken a detailed assessment of the potential daylight and sunlight effects of the proposed development at Challoner House on the key neighbouring properties. Our assessments have been undertaken using the VSC, NSL (daylight) and APSH (sunlight) tests set out within the BRE guidance. The result of our studies confirm excellent levels of retained amenity with the effects to all neighbouring properties fully meeting BRE targets in respect of both daylight and sunlight levels.

In addition to the effects on rooms and windows, our sunlight amenity/overshadowing assessments also confirm that the neighbouring gardens will not be adversely affected by the proposed development. All of the garden spaces will fully satisfy the BRE guidance in terms of overshadowing and experience no material change when compared to the pre-existing position.

I trust the above is useful in demonstrating the acceptability of the submission scheme in terms of potential daylight, sunlight, and shading effects. Please do not hesitate to contact us should you have any queries or require anything further in this regard.

Yours sincerely,

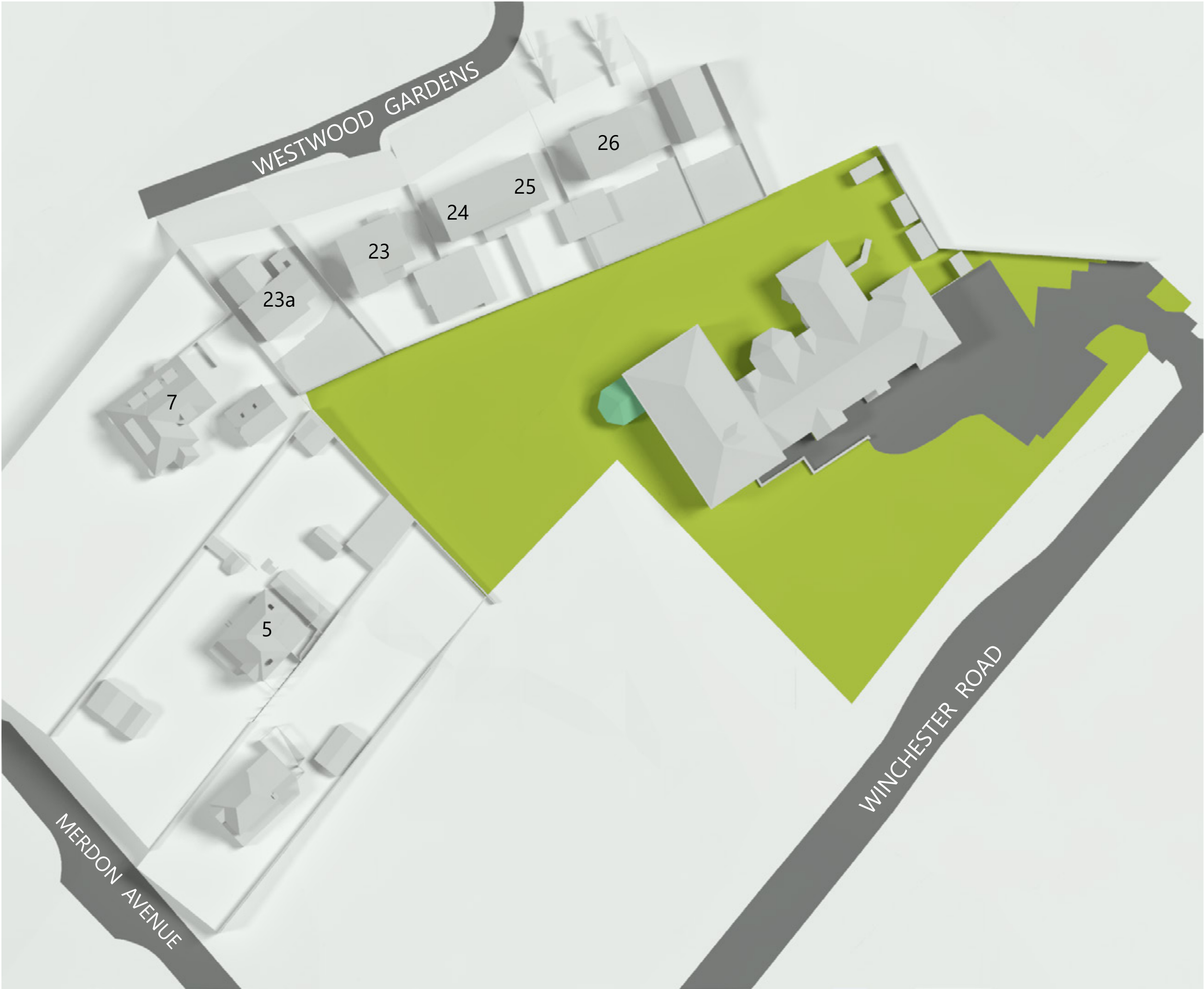
Jamie Parkes
Assistant Surveyor

For and on behalf of eb7 Ltd



Appendix 1

Drawings of the existing, proposed and surrounding buildings



Sources of information

SURVEY SOLUTIONS

42687YOLS-01.dwg
Received 20/06/2022
42687YOLS-02.dwg
42687YOLS-03.dwg
Received 29/06/2022

HARRIS IRWIN Architects

3307-HIA-01-ZZ-M3-A-0001-Challoner
House Extension-P2C.rvt
Received 23/02/2023

EB7 Ltd

Site Photographs
Ordnance Survey

Key:



Existing

NORTH



Project Challoner House
Eastleigh
SO53 2DU

Title Existing Condition
Plan View

Drawn JG Checked --

Date 01/03/2023 Project 5594

Rel no. 02 Prefix DS01 Page no. 01



Sources of information

SURVEY SOLUTIONS

42687YOLS-01.dwg
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House Extension-P2C.rvt
Received 23/02/2023

EB7 Ltd

Site Photographs
Ordnance Survey



Key:

Existing

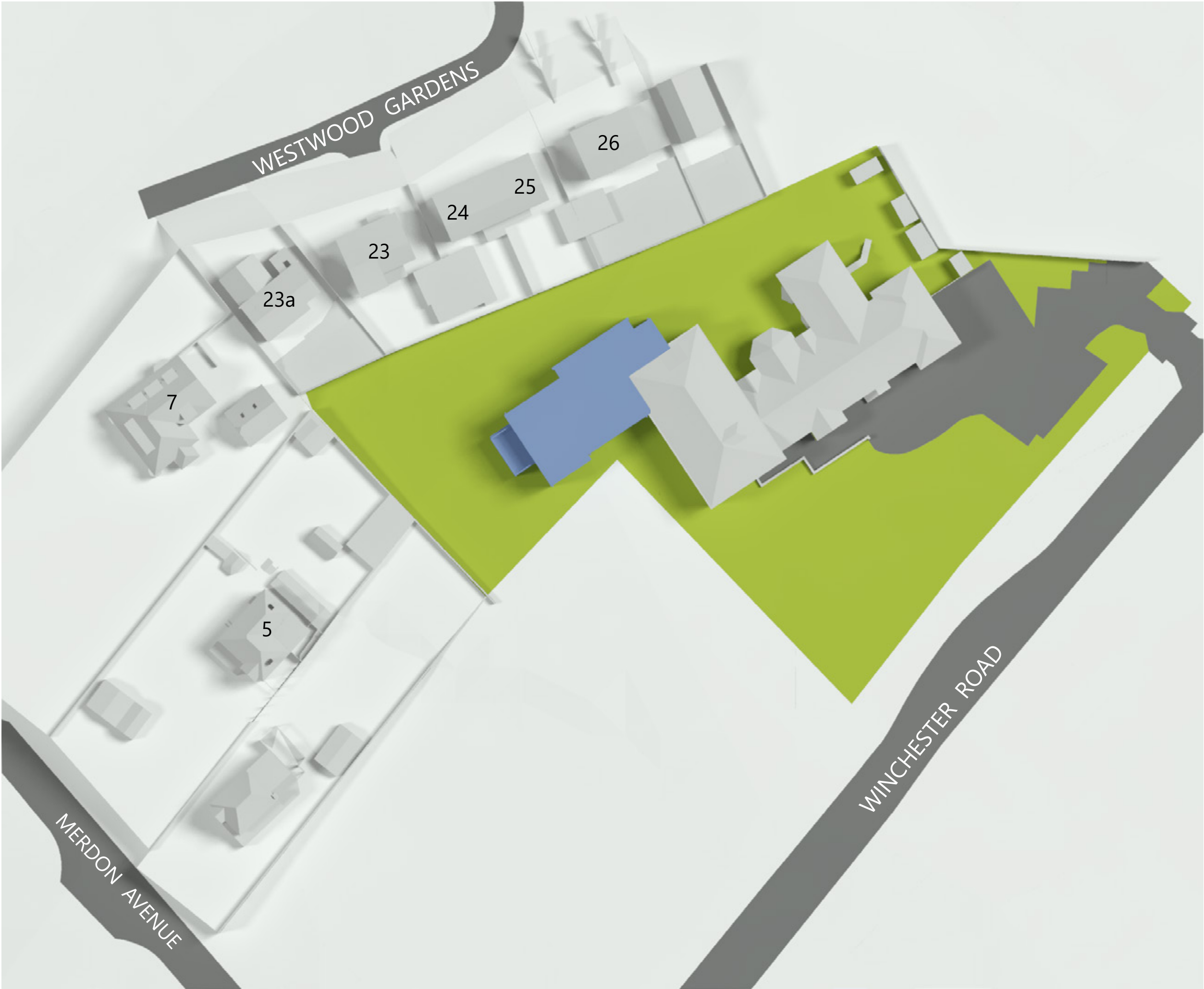
Project Challoner House
Eastleigh
SO53 2DU

Title Existing Condition
3D View

Drawn JG Checked --

Date 01/03/2023 Project 5594

Rel no. 02 Prefix DS01 Page no. 02



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HARRIS IRWIN Architects

3307-HIA-01-ZZ-M3-A-0001-Challoner
House Extension-P2C.rvt
Received 23/02/2023

EB7 Ltd

Site Photographs
Ordnance Survey

Key:



Proposed

NORTH



Project Challoner House
Eastleigh
SO53 2DU

Title Proposed Development
Plan View

Drawn JG Checked --

Date 01/03/2023 Project 5594

Rel no. 02 Prefix DS01 Page no. 03



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House Extension-P2C.rvt
Received 23/02/2023

EB7 Ltd

Site Photographs
Ordnance Survey

Key:

Proposed

Project Challoner House
Eastleigh
SO53 2DU

Title Proposed Development
3D View

Drawn JG Checked --

Date 01/03/2023 Project 5594

Rel no. 02 Prefix DS01 Page no. 04



Appendix 2

Results of the daylight and sunlight assessments
within neighbouring properties

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room						
				Existing	Proposed	Proportion	Room Area	Existing NSL		Proposed NSL		Proportion Retained	Existing APSH		Proposed APSH		Retained	
				VSC	VSC	Retained		m²	%	m²	%		Total	Winter	Total	Winter	Total	Winter
Ground	R7	W14-U	Residential															
		W15-L		19.7	19.7	1.00												
		W15-U					19.6	19.6	100%	19.6	100%	1.00	50	5	50	5	1.00	1.00
		W16		29.7	29.7	1.00												
		W17		28.4	28.4	1.00	32.3	28.4	88%	28.4	88%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R1	W1	Storage	38.7	38.7	1.00	5.3	5.1	98%	5.1	98%	1.00	78	27	78	27	1.00	1.00
First	R2	W2	Bedroom	38.3	38.3	1.00												
		W3		39.6	39.6	1.00	19.2	18.4	96%	18.4	96%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
First	R3	W4	Residential	36.7	36.7	1.00												
		W5		0.0	0.0	1.00												
		W6		0.0	0.0	0.00	23.0	22.7	99%	22.7	99%	1.00	65	24	65	24	1.00	1.00
23 Westwood Gardens																		
Ground	R1	W1	Residential	28.5	28.5	1.00												
		W2-L		27.2	27.2	1.00												
		W2-U																
		W3-L		35.0	33.8	0.97												
		W3-U																
		W4-L		34.6	33.4	0.96												
		W4-U																
		W5-L		36.0	34.6	0.96												
		W5-U					17.3	17.3	100%	17.3	100%	1.00	87	27	85	25	0.98	0.93
Ground	R2	W6-L	Residential	35.0	33.9	0.97												
		W6-U					12.0	11.7	98%	11.7	98%	1.00	76	25	76	25	1.00	1.00
Ground	R3	W7-L	Residential	23.9	23.9	1.00												
		W7-U																
		W8-L		23.5	23.5	1.00												
		W8-U					5.2	5.2	100%	5.2	100%	1.00	57	10	57	10	1.00	1.00
Ground	R4	W9	Residential	26.4	26.0	0.98	3.5	3.1	89%	3.1	89%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R5	W10-L	Residential	30.0	30.0	1.00												
		W10-U					10.4	10.1	97%	10.1	97%	1.00	55	20	55	20	1.00	1.00
Ground	R6	W11-L	Residential	29.0	29.0	1.00												
		W11-U																
		W12-L		30.3	30.3	1.00												
		W12-U					10.1	10.1	100%	10.1	100%	1.00	53	16	53	16	1.00	1.00

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room					
				Existing VSC	Proposed VSC	Proportion Retained	Room Area	Existing NSL		Proposed NSL		Proportion Retained	Existing APSH		Proposed APSH		Retained	
								m²	%	m²	%		Total	Winter	Total	Winter	Total	Winter
First	R1	W1	Residential	35.8	35.8	1.00	16.1	16.0	100%	16.0	100%	1.00	95	28	94	27	0.99	0.96
		W2-L		36.8	35.8	0.97												
		W2-U																
First	R2	W3-L	Residential	31.5	30.4	0.97	10.0	10.0	99%	10.0	99%	1.00	63	18	62	17	0.98	0.94
W3-U																		
First	R3	W4-L	Residential	36.3	35.0	0.97	5.2	5.2	100%	5.2	100%	1.00	78	27	77	26	0.99	0.96
W4-U																		
First	R4	W5-L	Residential	33.2	32.9	0.99	3.5	3.5	100%	3.5	100%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
W5-U																		
23A Westwood Gardens																		
Ground	R1	W1-L	LD	33.4	32.9	0.98	39.0	39.0	100%	39.0	100%	1.00	96	26	94	24	0.98	0.92
		W1-U																
		W2-L		34.8	34.2	0.98												
		W2-U																
		W3-L		28.9	28.5	0.99												
		W3-U																
		W4		22.7	22.6	1.00												
		W5		28.7	28.7	1.00												
		W6		74.0	74.0	1.00												
		W7		13.3	13.3	1.00												
		W8		11.5	11.5	1.00												
		W9		10.4	10.4	1.00												
		W10-L		9.6	9.6	1.00												
		W10-U																
W11-L	11.3	11.3	1.00															
W11-U																		
W12	0.0	0.0	0.00															
Ground	R2	W1-L	Kitchen	33.4	32.9	0.98												
		W1-U																
		W2-L		34.8	34.2	0.98												
		W2-U																
		W3-L		28.9	28.5	0.99												
		W3-U																
		W4		22.7	22.6	1.00												
		W5		28.7	28.7	1.00												
		W6		74.0	74.0	1.00												
W7	13.3	13.3	1.00															
W8	11.5	11.5	1.00															

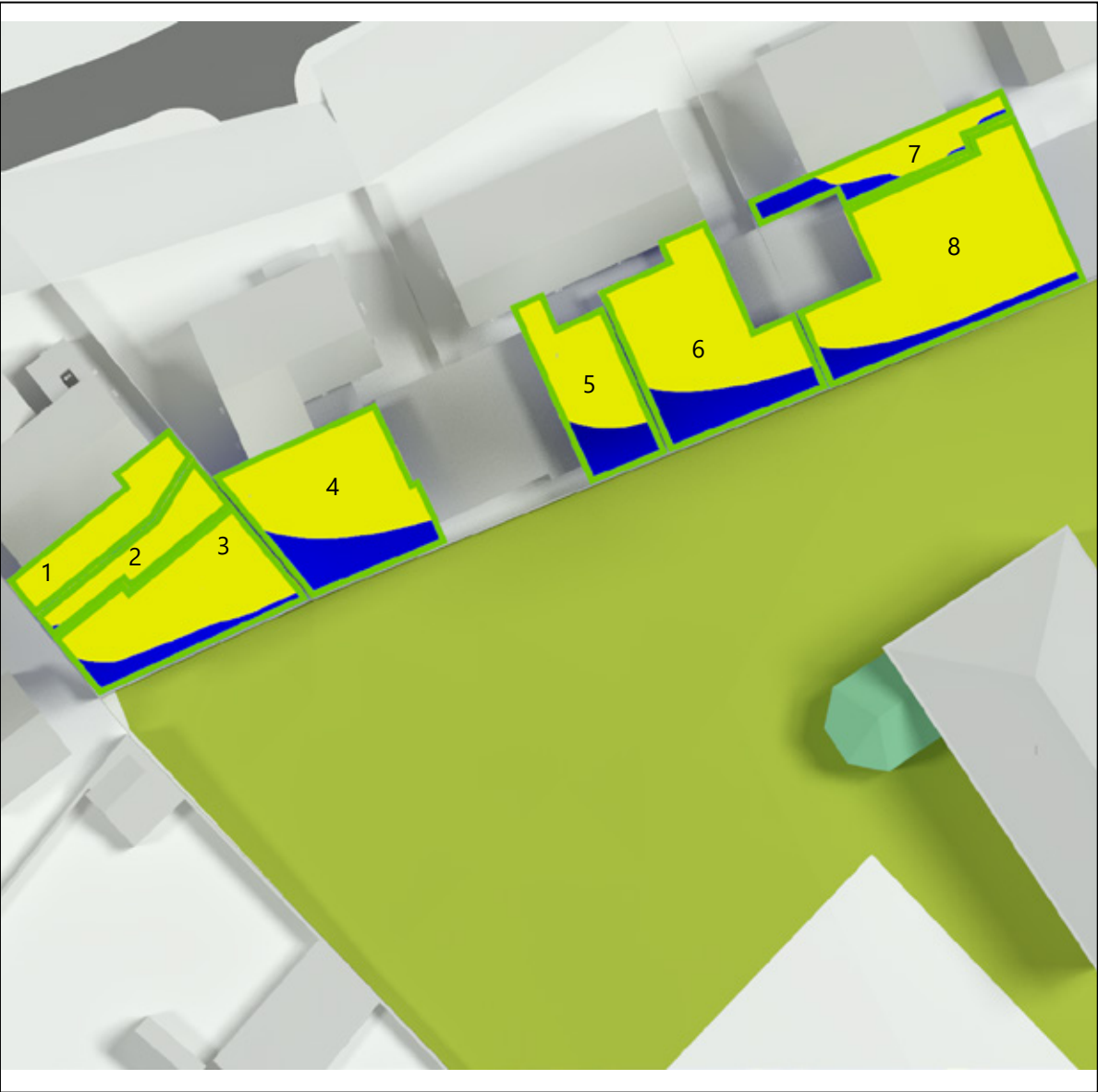
				Vertical Sky Component (VSC)			No-Sky Line (NSL)					Annual Probable Sunlight Hours (APSH) by Room						
Address	Room	Window	Room use	Existing	Proposed	Proportion	Room Area	Existing NSL		Proposed NSL		Proportion Retained	Existing APSH		Proposed APSH		Retained	
				VSC	VSC	Retained		m²	%	m²	%		Total	Winter	Total	Winter	Total	Winter
		W9	Bedroom	10.4	10.4	1.00												
		W10-L		9.6	9.6	1.00												
		W10-U																
		W11-L		11.3	11.3	1.00												
		W11-U																
		W12		0.0	0.0	0.00	19.3	19.3	100%	19.3	100%	1.00	96	26	94	24	0.98	0.92
First	R1	W1	Bedroom	34.0	33.6	0.99	11.6	11.4	98%	11.4	98%	1.00	67	25	67	25	1.00	1.00
First	R2	W2-L	Bedroom	34.4	33.9	0.99	10.1	10.0	99%	10.0	99%	1.00	68	25	68	25	1.00	1.00
		W2-U																
First	R3	W3-L	Bedroom	32.5	31.9	0.98	8.8	8.8	99%	8.8	99%	1.00	55	16	54	15	0.98	0.94
		W3-U																
24 Westwood Gardens																		
Ground	R1	W1	Residential	26.6	26.6	1.00	6.3	4.3	68%	4.3	68%	1.00	43	15	43	15	1.00	1.00
Ground	R2	W2-L	Residential	22.8	22.8	1.00	7.8	7.6	97%	7.6	97%	1.00	74	19	74	19	1.00	1.00
		W2-U																
		W3		30.7	30.6	1.00												
First	R1	W1-L	Residential	33.5	33.5	1.00	6.3	6.2	99%	6.2	99%	1.00	56	17	56	17	1.00	1.00
		W1-U																
First	R2	W2	Residential	35.2	33.5	0.95	7.8	7.7	99%	7.7	99%	1.00	76	27	76	27	1.00	1.00
First	R3	W3-L	Residential	36.0	34.1	0.95	13.4	13.3	99%	13.3	99%	1.00	78	27	78	27	1.00	1.00
		W3-U																
25 Westwood Gardens																		
Ground	R1	W1	Residential	28.8	28.8	1.00	6.3	5.0	80%	5.0	80%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
Ground	R2	W2-L	Residential	25.1	25.1	1.00	7.8	7.7	98%	7.7	98%	1.00	77	23	74	20	0.96	0.87
		W2-U																
		W3		34.5	31.9	0.92												
Ground	R3	W4-L	Residential	31.7	29.1	0.92	17.3	17.2	99%	17.1	99%	1.00	73	20	69	16	0.95	0.80
		W4-U																
First	R1	W1-L	Residential	34.7	34.7	1.00	6.3	6.2	99%	6.2	99%	1.00	N/F	N/F	N/F	N/F	N/F	N/F
		W1-U																

Address	Room	Window	Room use	Vertical Sky Component (VSC)			No-Sky Line (NSL)						Annual Probable Sunlight Hours (APSH) by Room					
				Existing	Proposed	Proportion	Room Area	Existing NSL		Proposed NSL		Proportion Retained	Existing APSH		Proposed APSH		Retained	
				VSC	VSC	Retained		m²	%	m²	%		Total	Winter	Total	Winter	Total	Winter
First	R2	W2	Residential	34.7	32.9	0.95	7.8	7.7	99%	7.7	99%	1.00	77	28	77	28	1.00	1.00
First	R3	W3-L W3-U	Residential	35.9	33.9	0.95	13.4	13.3	99%	13.3	99%	1.00	78	27	78	27	1.00	1.00
26 Westwood Gardens																		
Ground	R1	W1	Bathroom	28.8	28.4	0.99	1.4	1.3	93%	1.3	93%	1.00	49	15	48	14	0.98	0.93
Ground	R2	W2 W3 W4-L W4-U	Kitchen	27.3 29.8 32.2	27.3 29.8 31.6	1.00 1.00 0.98	21.3	21.0	99%	21.0	99%	1.00	82	25	80	23	0.98	0.92
Ground	R3	W5	Dining Room	35.1	34.0	0.97	11.0	10.8	98%	10.8	98%	1.00	80	26	80	26	1.00	1.00
Ground	R4	W6-L W6-U W7-L W7-U W8-L W8-U W9-L W9-U W10-L W10-U W11-L W11-U	Living Room	34.2 31.8 27.7 0.0 0.1 0.0	33.2 30.8 26.8 0.0 0.1 0.0	0.97 0.97 0.97 0.00 1.00 0.00	24.2	24.2	100%	24.2	100%	1.00	78	25	77	24	0.99	0.96
First	R1	W1-L W1-U	Circulation	35.0	34.6	0.99	12.9	10.2	79%	10.2	79%	1.00	57	16	57	16	1.00	1.00
First	R2	W2-L W2-U	Bathroom	35.1	33.8	0.96	3.5	3.5	100%	3.5	100%	1.00	79	28	79	28	1.00	1.00
First	R3	W3-L W3-U	Bedroom	34.7	33.6	0.97	6.3	6.2	99%	6.2	99%	1.00	78	28	78	28	1.00	1.00
First	R4	W4-L W4-U	Bedroom	35.2	34.3	0.97	9.5	9.4	99%	9.4	99%	1.00	79	28	79	28	1.00	1.00

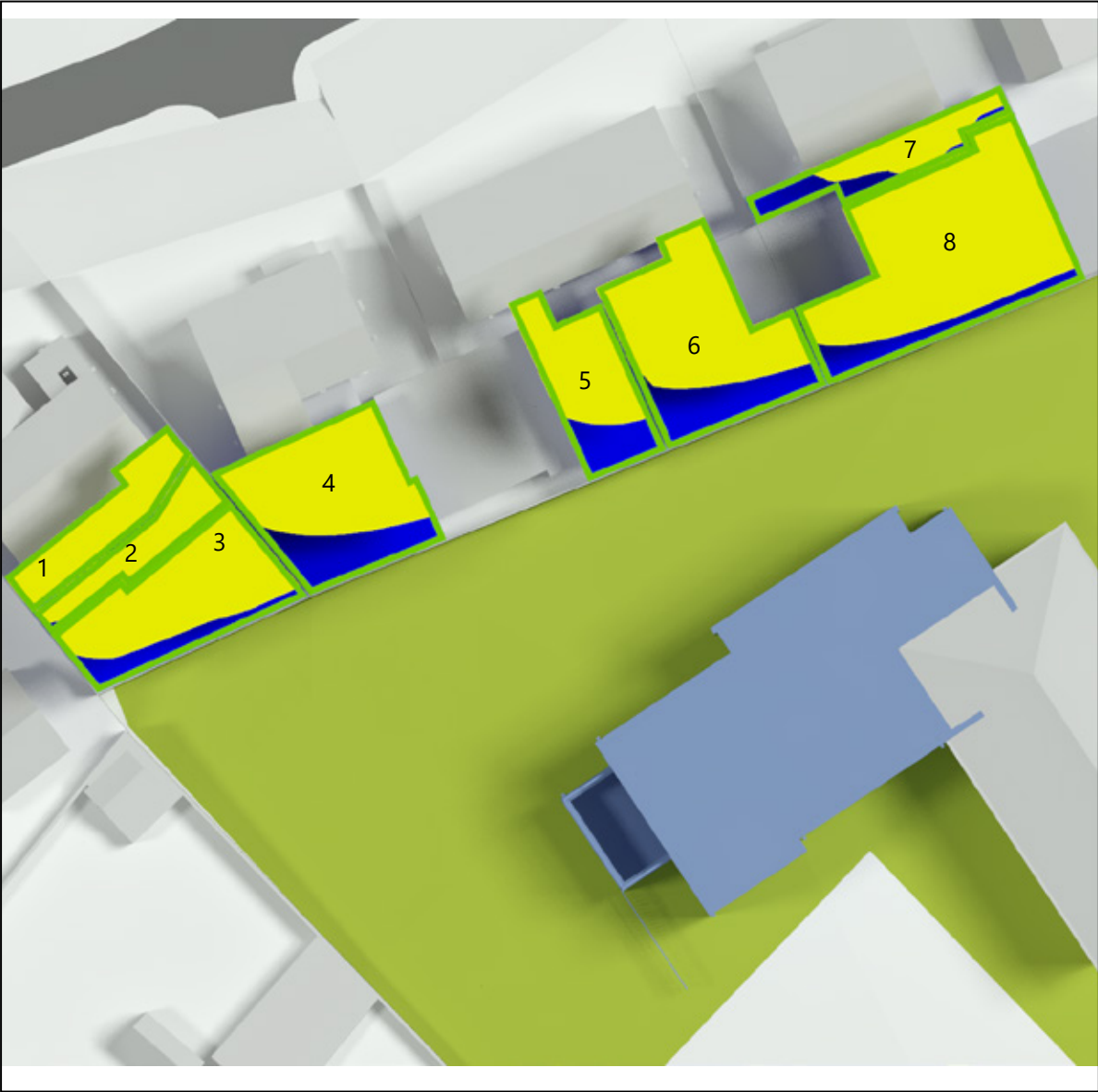


Appendix 3

Results of the sunlight amenity assessment



Existing Scenario - March 21st



Proposed Scenario - March 21st

Area	Total Area (sq.m)	Existing Scenario Area recieving more than two hours of sun		Proposed Scenario Area recieving more than two hours of sun		Proportion Retained
		(m²)	%	(m²)	%	
1 - 23A Westwood Gardens	38.67	37.14	96.0	37.14	96.0	1.0
2 - 23A Westwood Gardens	31.47	28.90	92.0	28.90	92.0	1.0
3 - 23A Westwood Gardens	79.25	62.38	79.0	62.38	72.0	1.0
4 - 23 Westwood Gardens	93.06	67.37	72.0	67.33	72.0	1.0
5 - 24 Westwood Gardens	54.60	39.60	73.0	38.99	71.0	0.98
6 - 25 Westwood Gardens	101.42	75.74	75.0	74.75	74.0	0.99
7 - 26 Westwood Gardens	39.50	22.42	57.0	22.42	57.0	1.0
8 - 26 Westwood Gardens	145.86	123.39	85.0	123.39	85.0	1.0

Sources of information

SURVEY SOLUTIONS

42687YOLS-01.dwg
Received 20/06/2022
42687YOLS-02.dwg
42687YOLS-03.dwg
Received 29/06/2022

HARRIS IRWIN Architects

3307-HIA-01-ZZ-M3-A-0001-Challoner
House Extension-P2C.rvt
Received 23/02/2023

EB7 Ltd

Site Photographs
Ordnance Survey

NORTH



Key:

- Existing building
- Proposed development
- Area of assessment
- Area receiving more than two hours of sun on March 21st
- Area receiving less than two hours of sun on March 21st

Project Challoner House
Eastleigh
SO53 2DU

Title Sunlight Amenity Study
Existing vs Proposed
21st March

Drawn JG Checked --

Date 01/03/2023 Project 5171

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