

Impact Assessment: Daylight and Sunlight Report

115A Connaught Avenue, Shoreham-By-Sea, BN43 5WP





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1 Introduction

1.1 Scope

SB Architectural Design has been commissioned by the applicants to determine the impact on daylight and sunlight amenity to the existing surrounding buildings that may arise from the proposed development at 115A Connaught Avenue, Shoreham-By-Sea, BN43 5WP.

1.2 Assessment Criteria

To ensure that this assessment can be evaluated against Adur and Worthing Council's planning policy, daylight and sunlight calculations have been undertaken in accordance with and informed by the building research establishment's (BRE) guidance entitled 'Site layout planning for daylight and sunlight: a guide to good practise', and the various tests laid down within and is considered principle guidance in this area, setting out methodology for measuring suitable light levels.

While BRE guidelines are advisory and not legal obligation, local planning authorities and inspectors will assess the appropriateness of a proposed development against them, taking into account the urban setting and factors such as daylight and sunlight as part of the planning process.

1.3 Sources

- Ordnance Survey Data
 - Site Inspection (*to record location of windows*)
 - Planning Drawings
-

1.4 Surrounding Buildings

The properties (see Appendix A) that form the focus of this report include:

Building Name/Address	Assumed Use	Relative Position to Site
98 Connaught Avenue	Residential	North
100 Connaught Avenue	Residential	North
115 Connaught Avenue	Residential	East
117 Connaught Avenue	Residential	West

1.5 Site & Context

The site is situated at #115A Connaught Avenue, Shoreham-By-Sea. The street consists of two-storey houses and chalet bungalows, with gardens and garages located to the south serving properties on Old Shoreham Road.



Figure 01. The site and its boundary (white)



2 Methodology

2.1 Limitations

Whilst as thorough as possible inspection has been carried out, some assumptions and constraints also apply.

- Reasonable estimates were made to determine the building type (residential or commercial) and room functions, based on external observations and available planning records.
- In cases where floor plans of neighboring properties were unavailable, room depths were approximated using external observations. If no clear indicators of room depth are present, standard depths (4m, 6m, 8m) have/will be applied.

2.2 Identifying Potential Impact

This report evaluates the potential impact of the development on various areas of concern due to proximity to the site. These include:

- **#115 Connaught Avenue:** Side windows (32 & 33) and garden amenity
- **#117 Connaught Avenue:** Front, rear, side windows (34-40); garden amenity
- **#100 Connaught Avenue:** Front, side windows (41-55)
- **#98 Connaught Avenue:** Front windows (56-61)

2.3 Constraints

Access to or contact with the owners/occupants to the property at #115 has not been possible. Consequently, a full understanding of the conditions within or surrounding the property could not be achieved. Additionally, the presence of dense vegetation on the site has further obscured visibility and limited the ability of a comprehensive analysis.

As such, best assumptions have been made based on a visible site inspection, during which two side windows were identified. It is presumed (best guess) that the rooms in which these windows serve are not habitable rooms, given the size and position of these windows and locations of visible services (vents, soil pipes) in vicinity.



2.4 BRE Tests Conducted

In accordance with BRE document "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice" the following tests are applicable and have been conducted:

1. Vertical Sky Component (VSC)

The Vertical Sky Component (VSC) is a measure of the amount of daylight received at the center of a window. It is expressed as a percentage, representing the proportion of the sky visible from that point. This test is used to assess the impact of the proposed development on the daylight received by windows of surrounding properties. According to BRE guidance, a VSC of 27% or more is considered adequate for good daylighting conditions. If the VSC falls below this threshold and is reduced by more than 20% of its original value, the change is considered significant.

2. Annual Probable Sunlight Hours (APSH)

The Annual Probable Sunlight Hours (APSH) test evaluates the availability of sunlight at specific windows of surrounding properties. This test is applied to windows that face within 90 degrees of due south, as these are most likely to be affected by overshadowing. APSH is expressed as a percentage of the total possible sunlight hours over the year. The BRE recommends that windows should receive at least 25% of annual probable sunlight hours, including at least 5% during the winter months, to ensure adequate sunlight levels.

3. Overshadowing to Garden Amenity Spaces

This test assesses the impact of the proposed development on the sunlight received by surrounding gardens and open amenity spaces. The BRE guidance suggests that at least 50% of a garden or amenity area should receive at least two hours of direct sunlight on the equinox (21st March). If the amount of sunlight falls below this threshold and is reduced by more than 20% of its original value, the overshadowing is considered significant.

The results of these assessments are detailed in the following sections of this report.



3 Assessment Results

3.1 Vertical Sky Component (VSC)

The Vertical Sky Component (VSC) test has been carried out on a total of 28 windows. All windows tested meet or surpass the standard BRE VSC targets, with the exception of only 2 windows, those of #32 and #33 (115 Connaught Avenue), of which are presumed non-habitable rooms (window results shown in Appendix C).

Where windows do not meet the standard BRE targets, it does not automatically follow that daylight will be adversely affected. When interpreting the numerical data, it is necessary to have regard to factors such as the use of the rooms, whether or not windows are sited close to the boundary and the existing site conditions. As such, mitigating factors may apply..

3.2 Annual Probable Sunlight Hours (APSH)

The results show that all windows and associated rooms will not experience a noticeable reduction in sunlight as defined in the BRE guidance.

3.3 Overshadowing to Garden Amenity Spaces

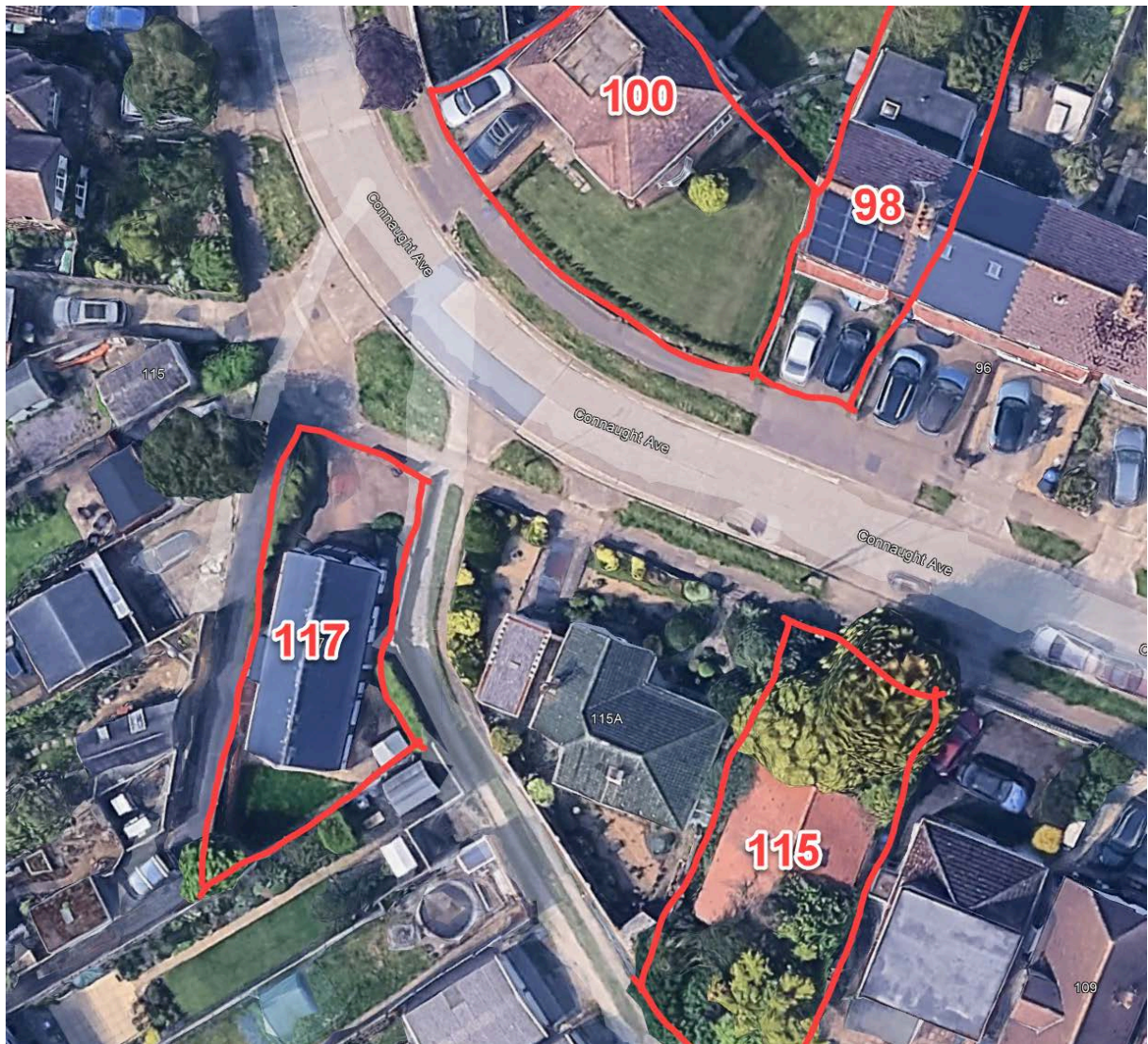
The results show that garden amenity spaces will not experience a noticeable reduction in sunlight as defined in the BRE guidance.

4 Conclusion

The properties of #98, 100, and 117 Connaught Avenue will not experience noticeable reduction of daylight and sunlight as set out in the BRE guidelines.

Although the north-facing windows at property #115 fall short of the BRE recommendations for VSC, the inability to access the property or communicate with its occupants make it difficult to fully assess impact. With the assumption that these windows likely serve non-habitable rooms based on their size, position, and visible services in vicinity, suggests that it may be reasonable to overlook this shortfall in the context of the daylight impact assessment. As such, we conclude minimal grounds for a rejection to the planning application on this basis.

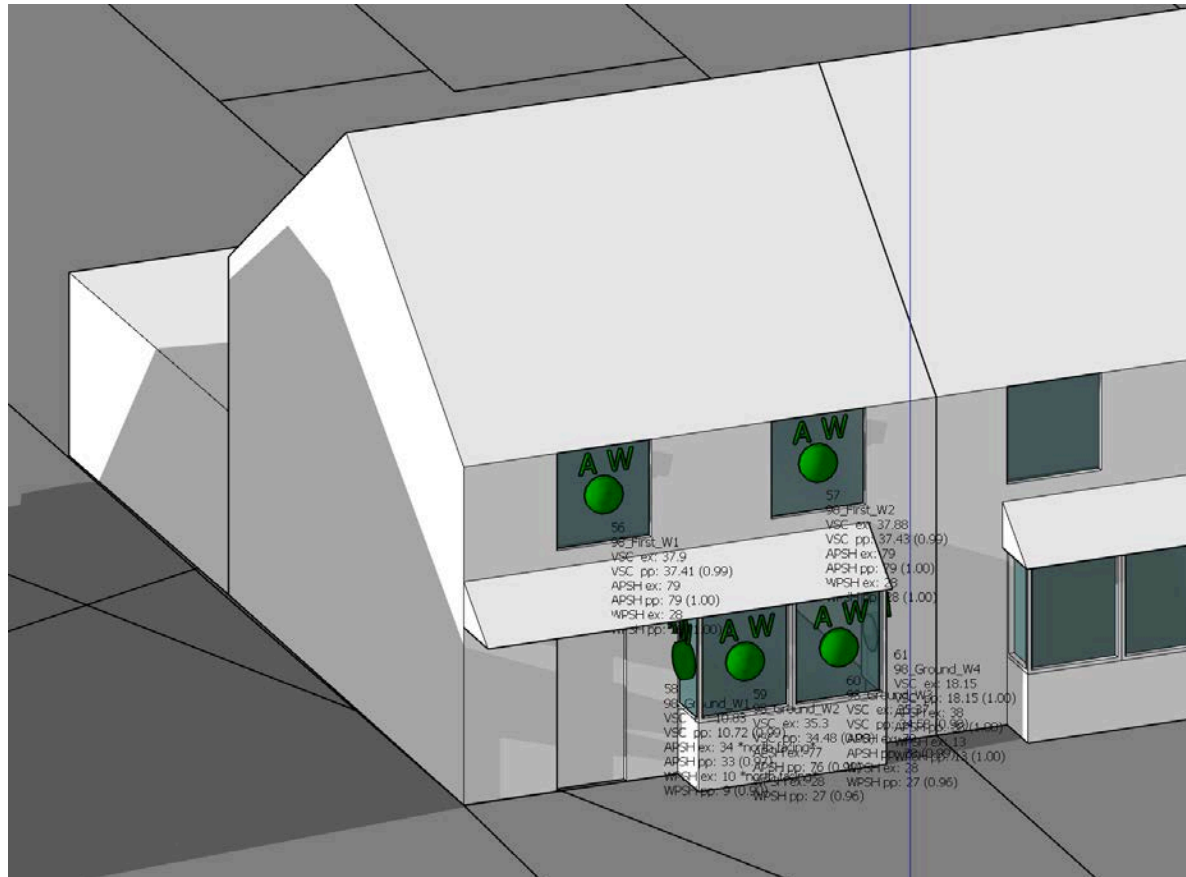
Appendix A - Site Context





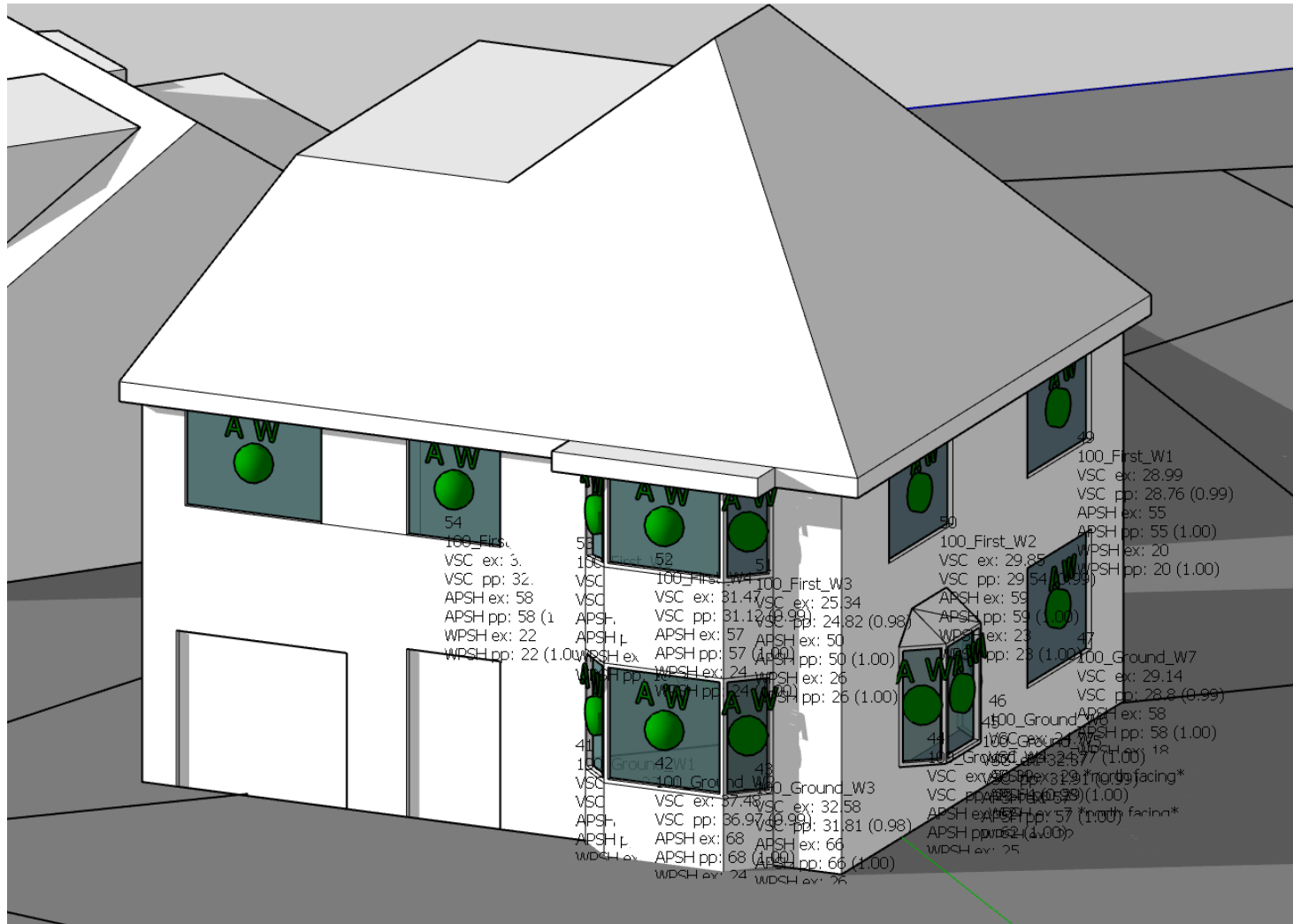
Appendix B - Window & Garden Key

#98 Connaught Avenue: Front windows (56-61)



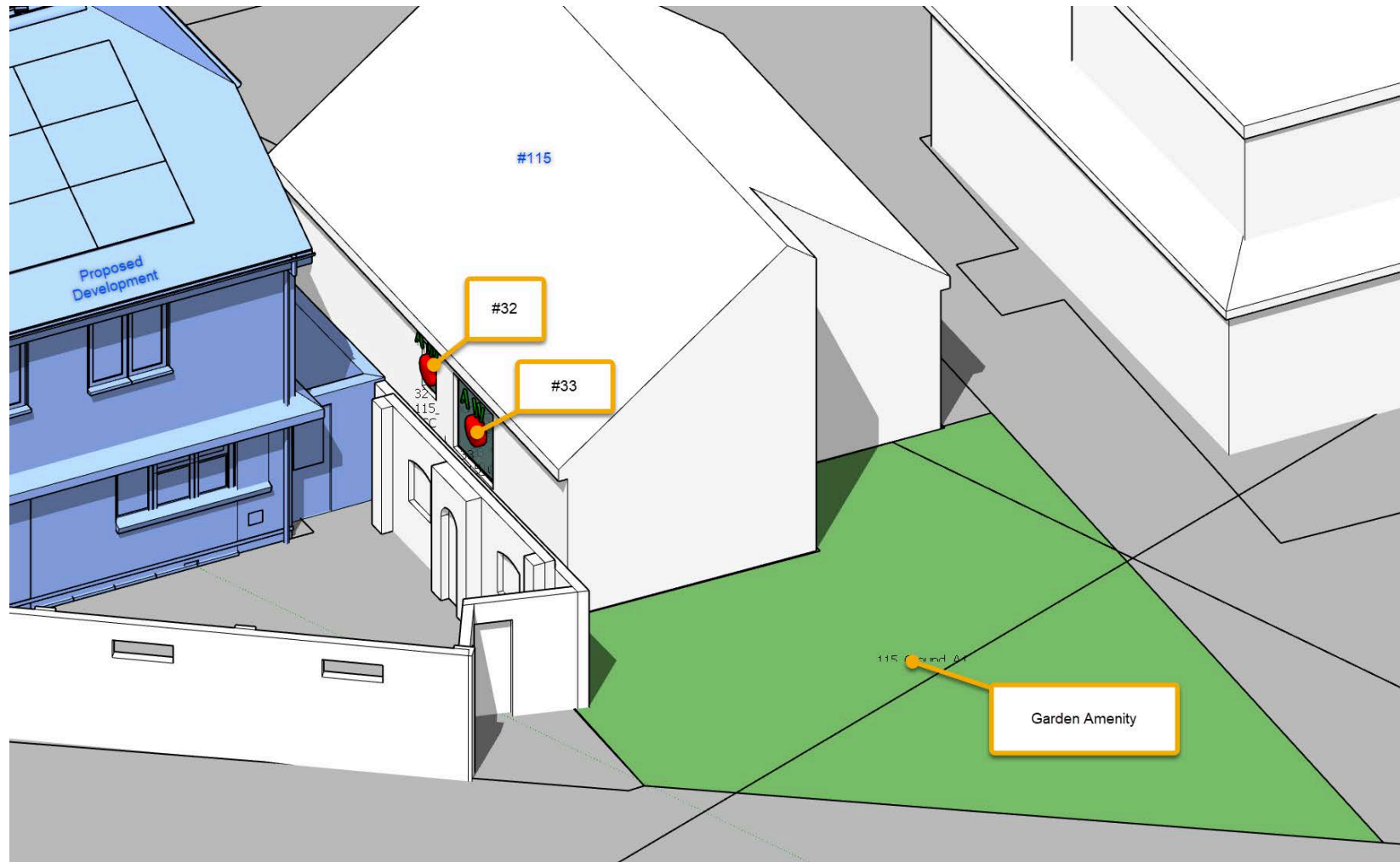


#100 Connaught Avenue: Front, side windows (41-55)



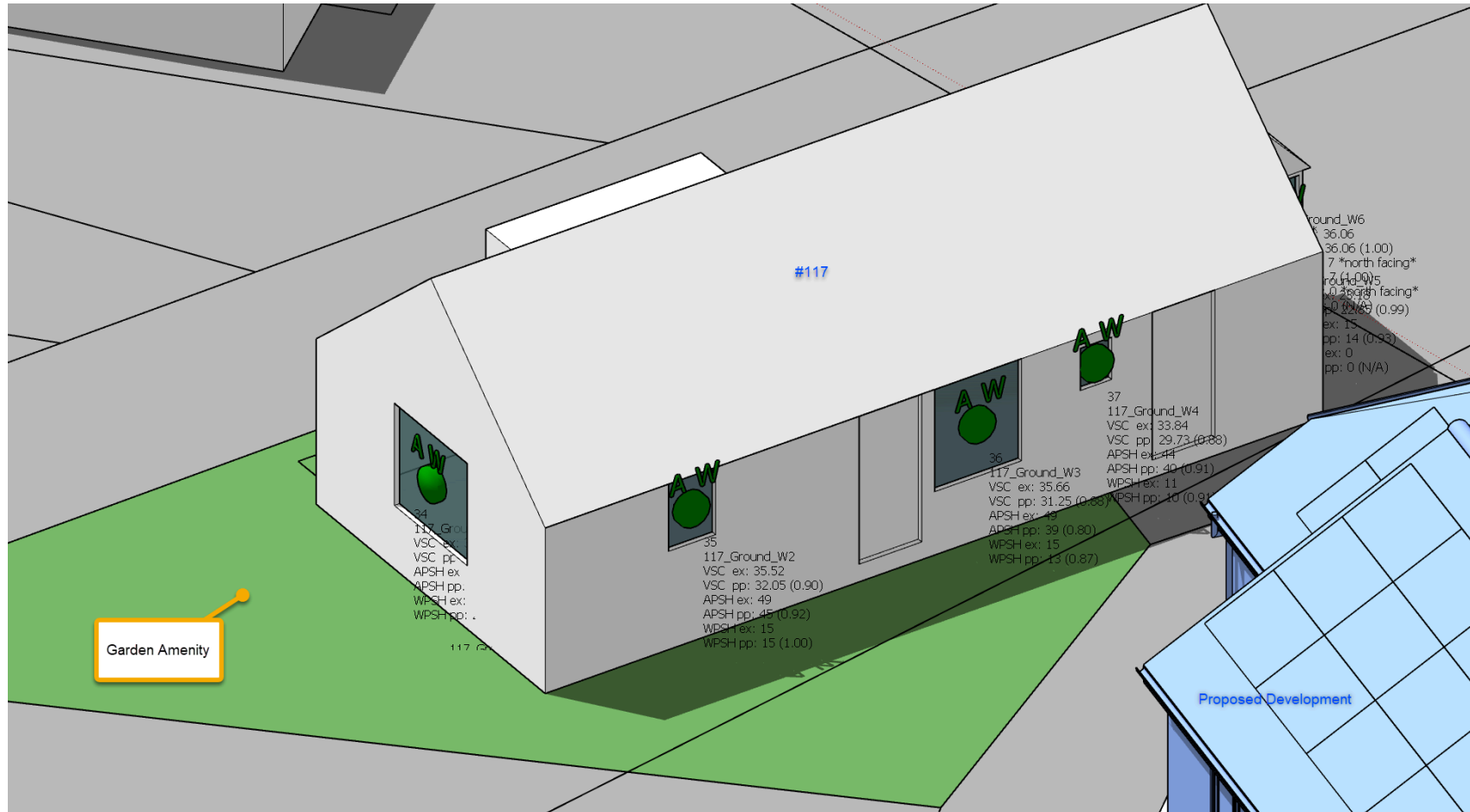


#115 Connaught Avenue: Side windows (32 & 33) and garden amenity





#117 Connaught Avenue: Front, rear, side windows (34-40); garden amenity





Appendix C - Result Data

Vertical Sky Component (VSC)

Building	Floor Level	Window ID	Window Orientation	VSC Existing	VSC Proposed	Pr/Ex	Meets BRE Criteria
98	Ground	58	291°N	10.83	10.72	0.99	YES
98	Ground	59	201°	35.3	34.48	0.98	YES
98	Ground	60	201°	35.37	34.58	0.98	YES
98	Ground	61	111°	18.15	18.15	1	YES
98	First	56	201°	37.9	37.41	0.99	YES
98	First	57	201°	37.88	37.43	0.99	YES
100	Ground	41	269°	32.31	32.31	1	YES
100	Ground	42	225°	37.48	36.97	0.99	YES
100	Ground	43	180°	32.58	31.81	0.98	YES
100	Ground	44	186°	30.39	29.64	0.98	YES
100	Ground	45	135°	32.37	31.91	0.99	YES
100	Ground	46	87°N	24.77	24.77	1	YES
100	Ground	47	135°	29.14	28.8	0.99	YES
100	First	49	135°	28.99	28.76	0.99	YES
100	First	50	135°	29.85	29.54	0.99	YES
100	First	51	180°	25.34	24.82	0.98	YES
100	First	52	225°	31.47	31.12	0.99	YES
100	First	53	269°	25.79	25.79	1	YES
100	First	54	225°	32.84	32.55	0.99	YES
100	First	55	225°	33.04	32.79	0.99	YES
115	Ground	32	291°N	25.04	11.69	0.47	NO
115	Ground	33	291°N	21.93	14.33	0.65	NO
117	Ground	34	190°	35.11	35.11	1	YES
117	Ground	35	100°	35.52	32.05	0.9	YES
117	Ground	36	100°	35.66	31.25	0.88	YES
117	Ground	37	100°	33.84	29.73	0.88	YES
117	Ground	38	100°	23.18	22.85	0.99	YES
117	Ground	39	10°N	36.06	36.06	1	YES
117	Ground	40	280°N	24.87	24.87	1	YES



Annual probable sunlight hours (APSH)

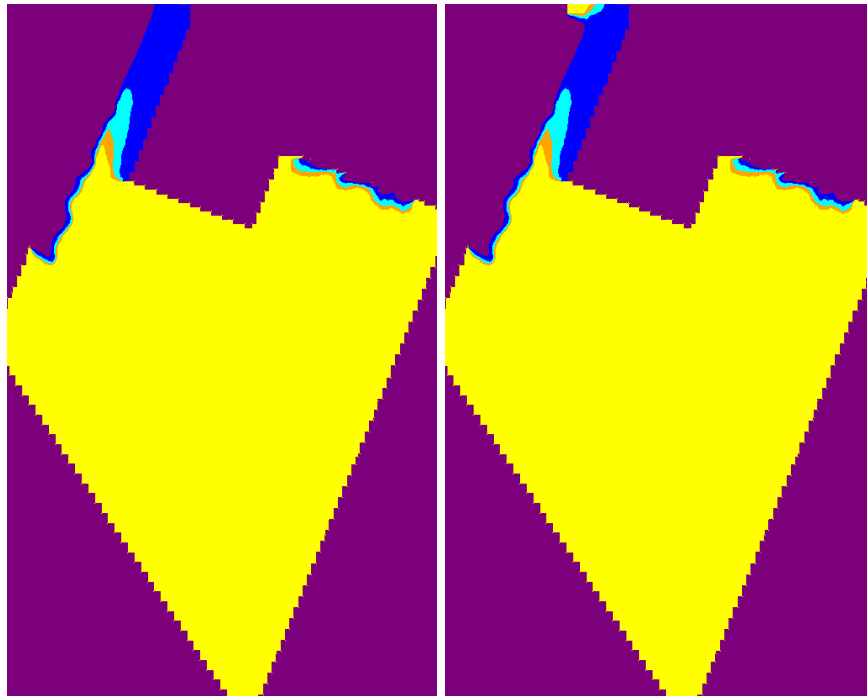
* Windows facing within 90 degrees of due north are not required to be analysed for the APSH test, as they are not expected to receive significant sunlight.

Building	Floor Level	Window ID	Window Orientation	Annual Ex	Annual Pr	Pr/Ex	Meets BRE Criteria
98	Ground	58	291°N	34	33	North	North
98	Ground	59	201°	77	76	0.99	YES
98	Ground	60	201°	79	78	0.99	YES
98	Ground	61	111°	38	38	1	YES
98	First	56	201°	79	79	1	YES
98	First	57	201°	79	79	1	YES
100	Ground	41	269°	39	39	1	YES
100	Ground	42	225°	68	68	1	YES
100	Ground	43	180°	66	66	1	YES
100	Ground	44	186°	62	62	1	YES
100	Ground	45	135°	57	57	1	YES
100	Ground	46	87°N	29	29	North	North
100	Ground	47	135°	58	58	1	YES
100	First	49	135°	55	55	1	YES
100	First	50	135°	59	59	1	YES
100	First	51	180°	50	50	1	YES
100	First	52	225°	57	57	1	YES
100	First	53	269°	35	35	1	YES
100	First	54	225°	58	58	1	YES
100	First	55	225°	59	59	1	YES
115	Ground	32	291°N	20	20	North	North
115	Ground	33	291°N	20	20	North	North
117	Ground	34	190°	80	80	1	YES
117	Ground	35	100°	49	45	0.92	YES
117	Ground	36	100°	49	39	0.8	YES
117	Ground	37	100°	44	40	0.91	YES
117	Ground	38	100°	15	14	0.93	YES
117	Ground	39	10°N	7	7	North	North
117	Ground	40	280°N	8	8	North	North

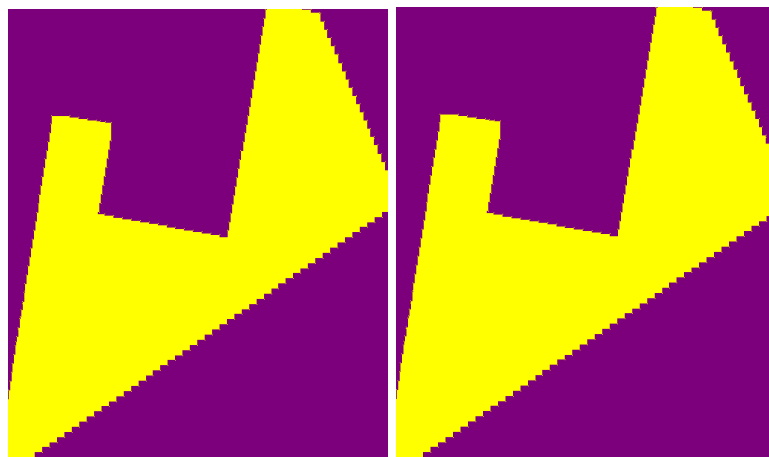


Overshadowing to Garden Amenity

#115 Existing(left) and Proposed (right) - No impact

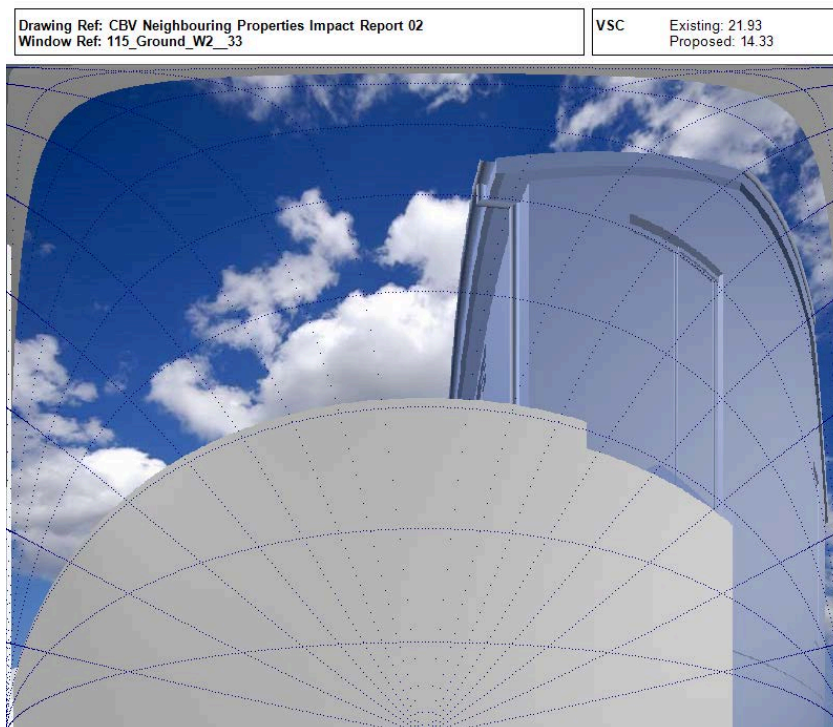
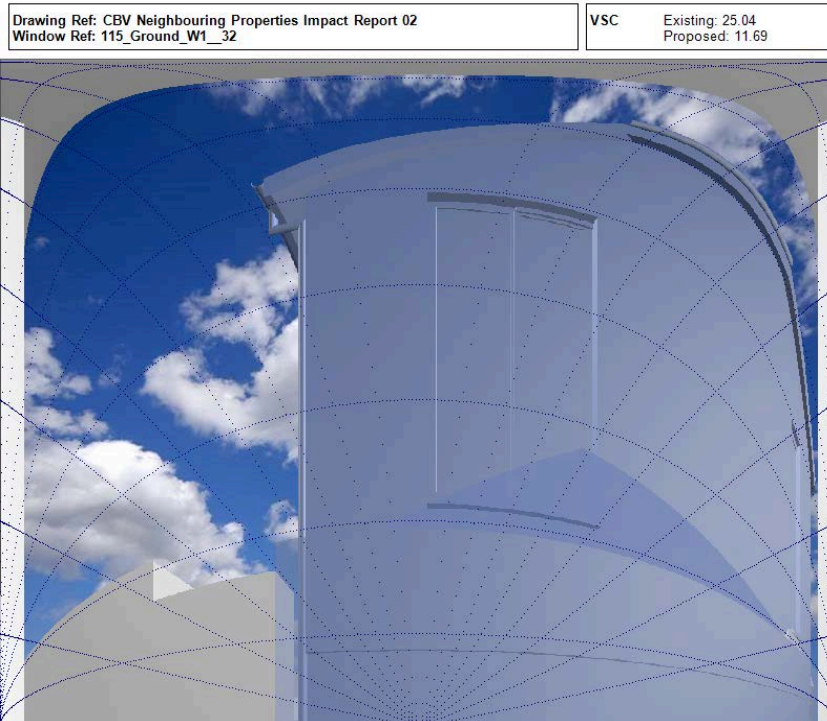


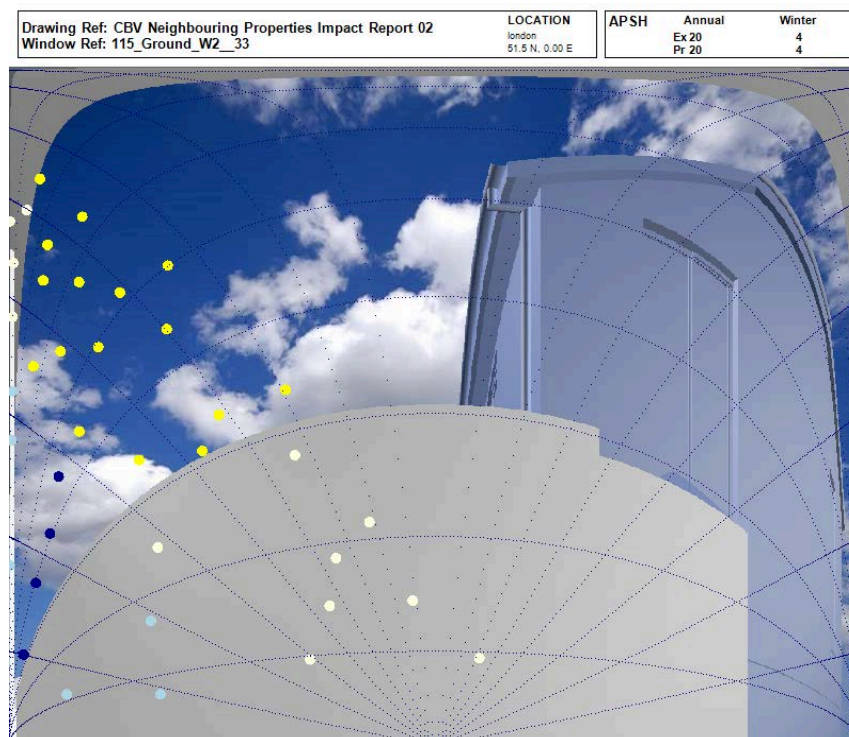
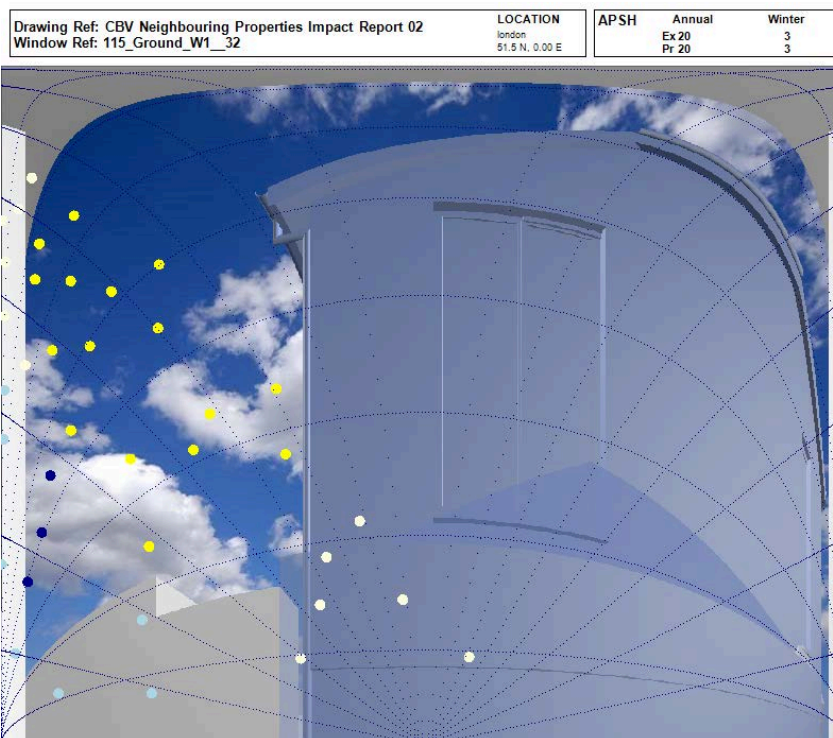
#117 Existing(left) and Proposed (right) - No impact





Appendix D - Waldram Diagrams







Appendix E - Windows 32 & 33

Photos below show windows 32 (left) and 33 (right) at 115 Connaught Avenue. Service pipework can be seen (top), likely indicating a bathroom and/or kitchen on this side of the property.

