

DAYLIGHT & SUNLIGHT REPORT

relating to the

PROPOSED ROOF EXTENSION

at

38a ST. PAUL'S CRESCENT LONDON NW1 9TN

MARCH 2023 Ref: 2042/B rev-



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1.0 EXECUTIVE SUMMARY

- 1.1 This Daylight and Sunlight Report considers the impact of the proposal upon daylight and sunlight to the nearest applicable neighbouring residential properties, at Nos. 100 & 102 Agar Crescent (No. 38 St Paul's Crescent not being applicable for analysis review as windows in the north facing side flank elevation are serving non-habitable rooms or potentially at lower ground floor level, being secondary windows with the main front elevation window serving the room being unaffected by the proposals).
- 1.2 The results of our examination are based upon the standard assessment procedure of the BRE Guide 'Site Layout Planning for Daylight and Sunlight - A Guide to Good Practice' 3rd Edition 2022 (The BRE Guide).
- 1.3 For daylight analysis to neighbouring residential properties, this has been considered, both in terms of the Vertical Sky Component (VSC) and Daylight Distribution.
- 1.4 The analysis for daylight VSC confirms that for all main windows appropriate for review (or rooms where a weighted approach is appropriate to consider the loss of VSC to the room as a whole), these readily meet BRE Guide default target criteria with very limited reductions applicable.
- 1.5 In terms of daylight distribution, where there are reductions to habitable rooms appropriate for review, these also readily meet BRE Guide default target criteria with again, very limited reductions applicable.
- 1.6 For sunlight, analysis to main applicable neighbouring windows / rooms confirms that where reductions are applicable, these readily meet BRE Guide default target criteria (target relating to living rooms). Equally, in terms of the effect upon neighbouring amenity, any reductions applicable meet BRE Guide default target criteria.
- 1.7 Therefore, we conclude that the impact of the proposal upon daylight and sunlight to neighbouring residential properties meets BRE Guide default target criteria and on that basis considered acceptable in reference to such review.



2.0 OVERVIEW

- 2.1 The proposal comprises a roof extension to the existing detached property at 38a St Paul's Crescent, London NW1 as per the scheme design prepared by Liddicoat Goldhill LLP.
- 2.2 In terms of neighbouring properties for detailed review, this relates to the nearest neighbouring residential properties at Nos.100 and 102 Agar Grove (with neighbouring No. 38 St Paul's Crescent not being considered applicable for review in reference to the BRE Guide).
- 2.3 3D perspective views (existing and proposed) with neighbouring context (along with associated window references relating to the analysis tables) are provided within Appendix A, to enable the analysis tables and other descriptions within this report to be interpreted.



3.0 NEIGHBOURING REVIEW - DAYLIGHT & SUNLIGHT

3.1 BACKGROUND

- 3.1.1 Daylight and sunlight amenity are considerations that the local planning authority will ordinarily take into account when determining planning applications. There is no national planning policy relating to daylight and sunlight and overshadowing impacts although general guidance is, however, given on the need to protect existing amenity as set out in the National Planning Policy Framework. The National Planning Practice Guidance (NPPG) requires consideration on whether the impact to neighbouring daylight and sunlight would be 'unreasonable'.
- 3.1.2 Locally, consideration has been made to daylight and sunlight review in reference to applicable policies within the London Borough of Camden.
- 3.1.3 Accordingly, this review has been undertaken in reference to the Building Research Establishment's (BRE) 'Site Layout Planning for Daylight and Sunlight A Guide to Good Practice' (3rd Ed / 2022) (The BRE Guide) which enables an objective assessment to be made as to whether the proposals will adversely affect the daylight and sunlight reaching neighbouring habitable rooms. The BRE Guide is the industry source reference for daylight and sunlight review although it is important to highlight that the Guide is not a set of planning rules, which are either passed or failed; the numerical values are given and used, not as proscriptive or prescriptive values but as a way of comparing situations and coming to a judgement.



3.2 METHODOLOGY

- 3.2.1 We have undertaken analysis of the existing and proposed situations following the methodology set out in the BRE Guide on Site Layout Planning for Daylight and Sunlight (3rd Ed / 2022). We have considered daylight, both in terms of Vertical Sky Component (VSC) and daylight distribution analysis and have also considered sunlight (again, by the method set out in the Guide for the proportion of the annual probable sunlight hours / APSHs and winter hours), that the surrounding windows / rooms will benefit from in the existing and proposed scenario (and consideration of the shift change as applicable). Similarly, existing and proposed sunlight availability has been reviewed to applicable neighbouring amenity areas as per the BRE Guide.
- 3.2.2 We have utilised the architect's design drawings and 3D model of the existing and proposed arrangement, complete with neighbouring context, ready for analysis review of daylight and sunlight, utilising industry recognised specialist software. As the scheme drawings form part of the formal submission, these are not reproduced here.
- 3.2.3 In terms of neighbouring properties applicable for detailed daylight and sunlight review, we have assessed the effects of the proposals on applicable windows and rooms within:
 - 100 Agar Grove located north of site (comprising 3 No. flats; including a lower ground & raised ground floor maisonette).
 - 102 Agar Grove located north of site (comprising 4 No. flats; lower ground floor flat referenced as No. 102A Agar Grove).
- 3.2.4 Whilst we have not accessed neighbouring properties and accordingly, we have made reasonable assumptions / interpreted where necessary, anticipated room arrangements / uses to these properties has been based on consideration of the exterior and utilising in part, information available on the plan layouts from within the public realm. In particular, planning reference 2017/1975/P for 102A Agar Grove and 2003/0947/P for 102 Agar Grove general layout has been considered and also planning reference PEX0100473 for general layout of 100 Agar Grove).
- 3.2.5 In respect of Nos. 100 and 102 Agar Grove, it has not been necessary to consider windows / rooms at 2nd floor given these are above the proposal in height / no loss to daylight or sunlight could be applicable.
- 3.2.6 In reference to the BRE Guide, No. 38 St. Paul's Crescent has not been analysed given that the limited windows within the side flank elevation are serving staircase / circulation areas and also a bathroom at 1st floor, thus non-habitable. (As background, even if the



2 No. lower ground floor flank windows were also serving an open/plan habitable room / combined with circulation area, the main window in such an arrangement is set within the front elevation which would be unaffected by the proposals thus, such side windows in this instance, considered secondary).

3.3 DAYLIGHT VSC

- 3.3.1 The BRE Guide considers that in terms of Vertical Sky Component (VSC), as a target value, if the VSC with the new development in place is both, less than 27% and less than 0.8 times its former value (i.e. the latter, if exceeding a 20% reduction), occupants of the existing building will notice the reduction in the amount of skylight. The maximum value obtainable at a flat window in a vertical wall is effectively 40%.
- 3.3.2 VSC represents a ratio of the part of illuminance at a point on a given vertical plane (usually the centre point of window on the window wall face), that would be received directly from an overcast sky (CIE standard overcast sky) to illuminance on a horizontal plane due to an unobstructed hemisphere of this sky. The VSC does not include reflected light, either from the ground or from other buildings.
- 3.3.3 Applicable windows within neighbouring Nos. 100 and 102 Agar Grove have been analysed.
- 3.3.4 Table 1 VSC and Sunlight for surrounding buildings within Appendix B sets-out the results of our analysis review with the existing and proposed VSC values presented along with the proportion of the former value stated from which we summarise the results as follows;
 - <u>100 Agar Grove</u>: VSC reductions meet BRE Guide default target criteria for all main windows (or if not the case, that rooms meet BRE Guide target where a weighted approach is appropriate to consider the loss of VSC to the room as a whole).
 - 102 Agar Grove (including 102A Agar Grove at lower ground): VSC reductions meet BRE Guide default target criteria for all main windows (or rooms where a weighted approach is appropriate to consider the loss of VSC to the room as a whole).
- 3.3.5 **Summary:** Daylight VSC analysis for applicable neighbouring windows that serve habitable rooms, confirms that for all appropriate main windows for review (or rooms where a weighted approach is appropriate to consider the loss of VSC to the room as



a whole), these meet BRE Guide default target criteria and on that basis considered acceptable in reference to such review.

3.4 DAYLIGHT DISTRIBUTION

- 3.4.1 The Guide considers that in terms of daylight distribution, as a target value, if the daylight distribution with the new development in place is less than 0.8 times its former value (i.e. if exceeding a 20% reduction), occupants of the existing building will notice the reduction in the amount of daylight distribution within the room.
- 3.4.2 Daylight distribution relates to the area of the room (expressed as a percentage of the whole room area) that can see direct sky, at the working plane (working plane for residential is taken at 85 cm above floor level).
- 3.4.3 Applicable rooms within neighbouring Nos. 100 and 102 Agar Grove have been analysed.
- 3.4.4 Table 2 Daylight Distribution for surrounding buildings within Appendix B sets out the results of our analysis review with the existing and proposed daylight distribution values presented along with the proportion of the former value stated, from which we summarise the results as follows;
 - <u>100 Agar Grove</u>: For any applicable reductions in daylight distribution, these meet BRE Guide default target criteria.
 - <u>102 Agar Grove (including 102A Agar Grove at lower ground)</u>: For any applicable reductions in daylight distribution, these meet BRE Guide default target criteria.
- 3.4.5 **Summary**: Daylight distribution analysis confirms that for applicable neighbouring habitable rooms, where reductions are applicable, these meet BRE Guide default target criteria and on that basis considered acceptable in reference to such review.



3.5 SUNLIGHT

- 3.5.1 For sunlight, only windows that face within 90° of South, that is to say, facing from 90° to 270°, are ordinarily considered in reference to sunlight BRE Guide review.
- 3.5.2 The BRE Guide recommendation is that windows facing within 90° of South, should have 25% of Annual Probable Sunlight Hours (APSHs) with 5% in the winter months (from the autumn equinox to the spring equinox). Where reductions below the recommended levels are contemplated, these should be targeted so that the proposed value is 0.8 times former value or above (unless a reduction of sunlight received over the whole year is not greater than 4% of annual probable sunlight hours).
- 3.5.3 To highlight, focus of analysis review of windows primarily relates to main living rooms and conservatories i.e. sun important rooms as per the BRE Guide (in reference to the BRE Guide, kitchens and bedrooms are less important, although care should be taken not to block too much sun). Our analysis review has considered all habitable rooms for sunlight review as considered previously for daylight.
- 3.5.4 **Table 1 VSC and Sunlight for surrounding buildings** within **Appendix B** sets out the results of our analysis review with the existing and proposed APSHs values (plus winter hours) presented along with the proportion of the former value stated. The analysis results for all neighbouring anticipated living rooms (sun important rooms where main windows face within 90° of South), where reductions are applicable, these adhere to the BRE Guide default target criteria in reference to both APSH and winter ('Total suns per room' existing and proposed).
- 3.5.5 Summary: Sunlight analysis to applicable neighbouring anticipated living room window / rooms, confirms that for where reductions are applicable, these all meet BRE Guide default target criteria thus such reductions should be considered acceptable.



3.6 SUN ON THE GROUND

- 3.6.1 The BRE Guide states that for the garden (amenity space) of an existing property, it is recommended that for it to appear adequately sunlit throughout the year;
 - 1) at least half of a garden or amenity area should receive at least two hours of sunlight on 21st March.
 - 2) If as a result of a new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sun on 21st March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable. If a detailed calculation cannot be carried out, it is recommended that the centre of the area should receive at least two hours of sunlight on 21st March.
- 3.6.2 We have undertaken analysis of the nearest applicable surrounding amenity areas relating to the rear gardens of Nos. 100 & 102A Agar Grove. We now present the analysis for the amenity areas reviewed in **Table A** below:

TABLE A: Ability to receive 2-hour sun on the ground at the equinox (21st March)

Property / Amenity Area	Existing 2-ho (ability to re hours sun at	ceive 2	Proposed 2- (ability to re hours sun at	ceive 2	Proposed / Existing for Sun		
	Sun	Shaded	Sun	Shaded			
100 Agar Grove – A1	68%	32%	67%	33%	0.98		
102A Agar Grove – A2	40%	60%	32%	68%	0.80		

The above is also presented as **Drawing No. 104 (revA)**, areas that are hatched orange have the ability to receive 2 hours of sunlight at the equinox (please see **Appendix B**).

- 3.6.3 Thus, for the nearest applicable amenity areas for review, where there are reductions in reference to the area having the ability to receive 2 hours of sun on the ground on the 21st of March Equinox, these meet BRE Guide default target criteria.
- 3.6.4 In reference to the rear garden area to No. 38 St. Paul's Crescent, there would be no loss to the area having the ability to receive 2 hours of sun on the ground on the 21st of March Equinox, given the proposal is to the 'north' (north-east) of this amenity area.
- 3.6.5 In summary, the proposals satisfy the BRE Guide default target criteria thus for any applicable reductions, these should be considered acceptable.



APPENDICES

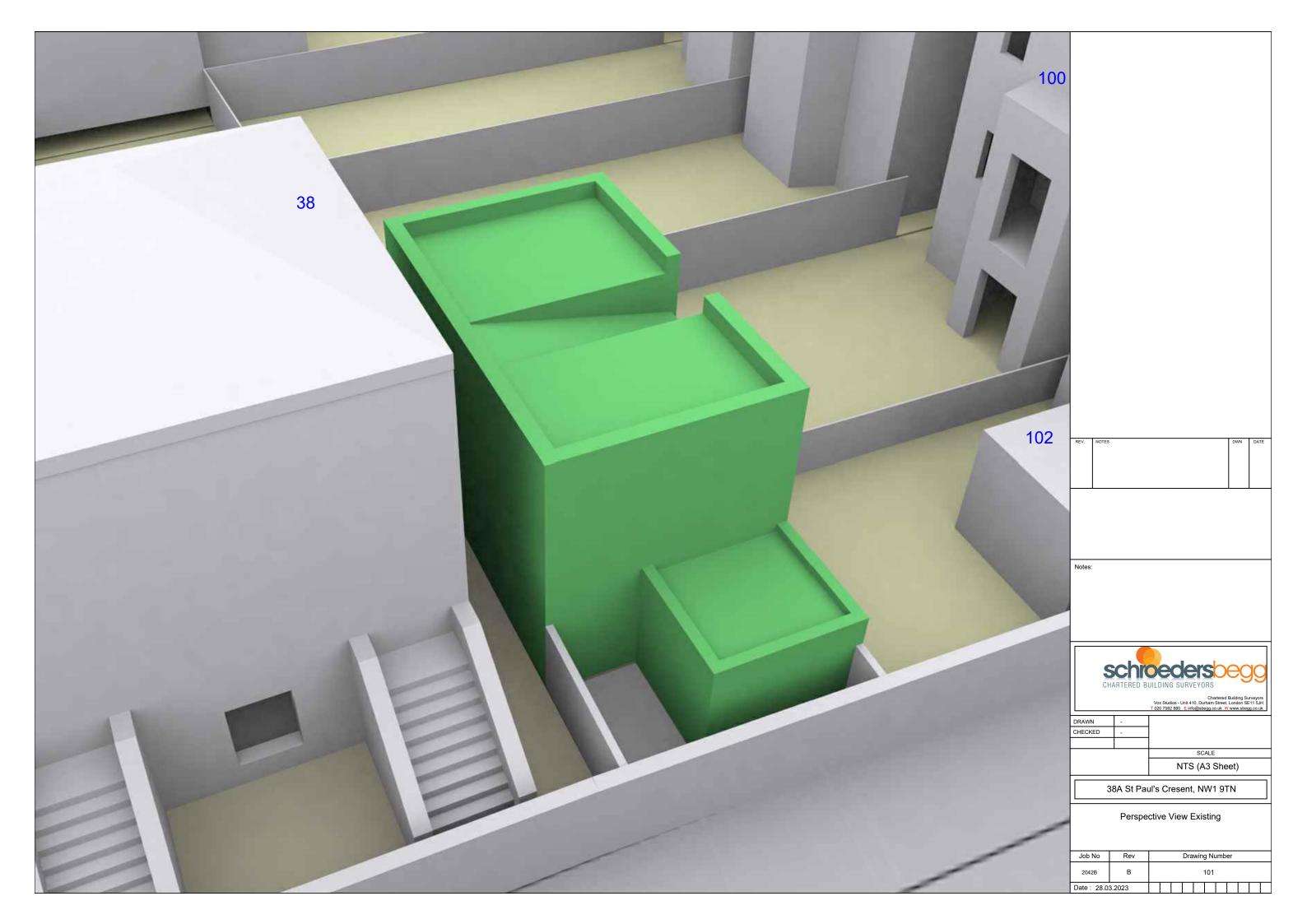
- A. 3D Perspective Views with Neighbouring Context (existing and proposed), associated Window / Room Reference Plans.
- B. Neighbouring Analysis:

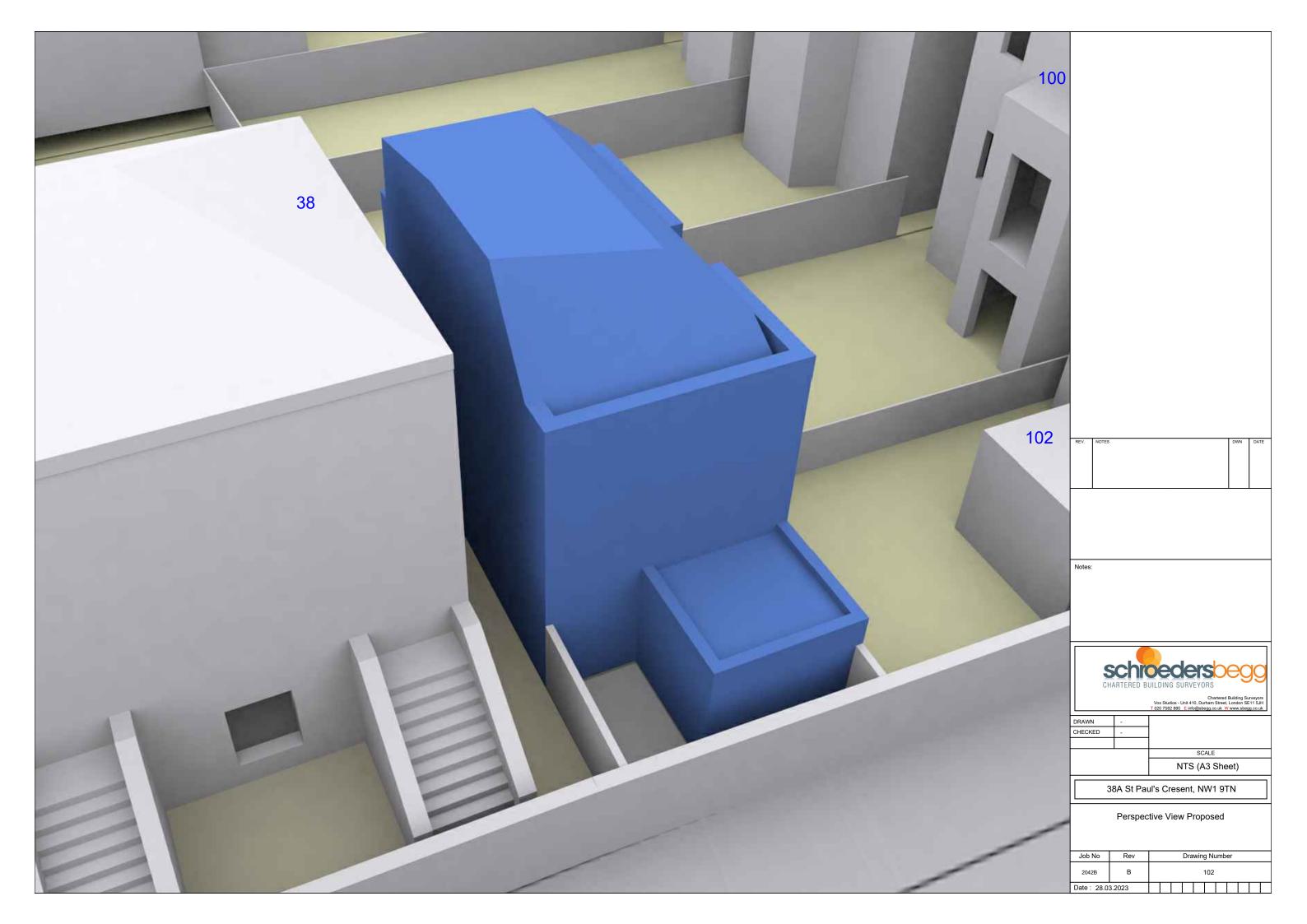
 Table 1 VSC and Sunlight for surrounding buildings
 Table 2 Daylight Distribution for surrounding buildings
 2hr Sun on the ground amenity test.

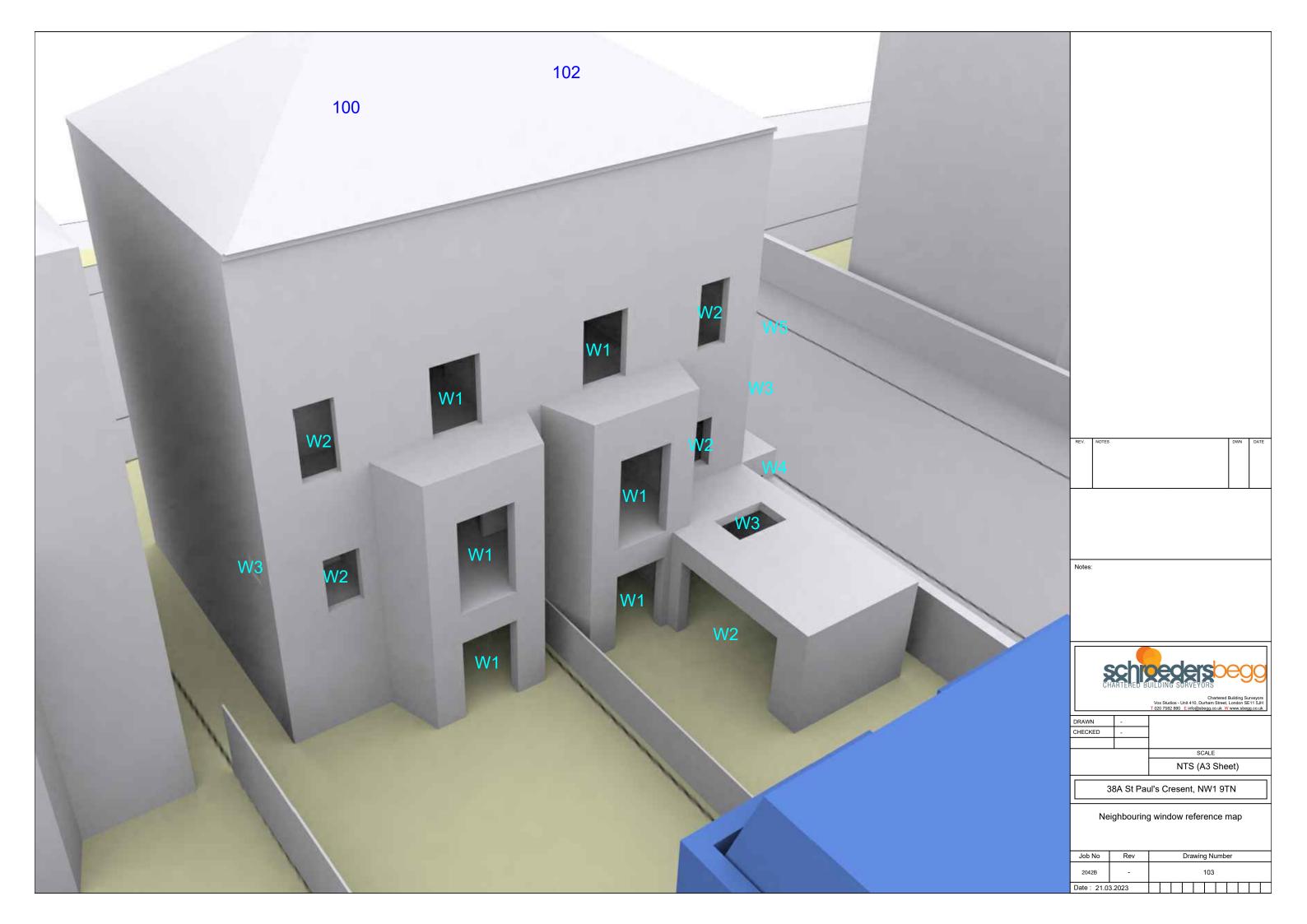


Appendix A

3D Perspective Views with Neighbouring Context (existing and proposed), associated Window / Room Reference Plans.









Appendix B

Neighbouring Analysis:

Table 1 - VSC and Sunlight for surrounding buildings Table 2 - Daylight Distribution for surrounding buildings 2hr Sun on the ground amenity test.

						Table 1	- VSC	and Su	ınlight	for sur	round	ing b	uildin	gs						
	Room Ref.	Room Use	Window Ref.		VSC	Pr/Ex	Meets BRE Criteria	Room VSC	Pr/Ex	Meets BRE Criteria	Annual	Pr/Ex	Winter	Pr/Ex	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteri	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
								100 Aga	ır Grove l	ondon NV	/1 9TL									
Lower Ground	R1	Living Room	W1	Existing Proposed	29.69 28.44	0.96	YES				73 71	0.97	17 15	0.88	73			17		
Ground	R1	Bathroom	W2	Existing Proposed	n/a	- non-habit	able								71	0.97	YES	15	0.88	YES
			W3	Existing Proposed	n/a	- non-habit	able													
	R2	Bedroom	W1	Existing Proposed	35.19 34.30	0.97	YES				84 83	0.99	25 24	0.96	84 83	0.99	YES	25 24	0.96	YES
First	R1	Bathroom	W2	Existing Proposed	n/a	- non-habit	able								63	0.99	163	24	0.96	TES
	R2	Bedroom	W1	Existing Proposed	38.36 38.33	1.00	YES				89 89	1.00	30 30	1.00	89 89	1.00	YES	30 30	1.00	YES
								102 Aga	ır Grove l	ondon NV	/1 9TL				65	1.00	123	30	1.00	123
Lower	R1	Living Room	W1	Existing	21.04	0.95	YES				51	0.96	13	0.85						
Ground				Proposed	19.89						49		11		51 49	0.96	YES	13 11	0.85	YES
	R2	Kitchen	W2	Existing Proposed	20.40 19.94	0.98	YES				38 35	0.92	9	0.67						
			W3	Existing Proposed	68.50 68.12	0.99	YES	28.08 27.63	0.98	YES	94 94	1.00	30 30	1.00	94 94	1.00	YES	30 30	1.00	YES
	R3	Bedroom	W4 W5	Existing Proposed	18.91 18.91 20.37	1.00	YES				36 36 *North	1.00	9 9 *North	1.00 *North						
			VVS	Existing Proposed	20.37	1.00	163	19.64	1.00	YES	North	NOILII	NOILII	NOITH	36			9		
Ground	R1	Living Room	W1	Existing Proposed	35.31 34.53	0.98	YES	19.64			85	0.98	26 24	0.92	36	1.00	YES	9	1.00	YES
	R2	Bedroom	W2	Existing	30.12	0.98	YES				62	0.98	20	0.95	85 83	0.98	YES	26 24	0.92	YES
			W3	Proposed Existing	29.65 33.28	1.00	YES				61	*North	19							
				Proposed	33.28			30.75 30.37	0.99	YES					63 62	0.98	YES	21 20	0.95	YES
First	R1	Living Room	W1 W2	Existing Proposed Existing	38.33 38.27 38.36	1.00	YES				89 89 89	1.00	30 30 30	1.00						
				Proposed	38.28			38.34 38.27	1.00	YES	89		30		89 89	1.00	YES	30 30	1.00	YES
KFY:-								55.27								1.00		50	1.00	163

KEY:*NORTH - denotes window with orientatio not facing within 90 degrees of south

	Table 2 - I	Daylight Dist	ribution fo	or surro	unding l	ouildings				
Floor Ref.	Room Ref	Room Use		Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria		
		100 Agai	Grove Londo	n NW1 9TL						
Lower Ground	R1	Living Room	Area m2	20.69	14.59	14.04				
			% of room		70.49%	67.82%	0.96	YES		
Ground	R1	Bathroom	Area m2	n/a - non-ł	nabitable					
			% of room							
	R2	Bedroom	Area m2	18.56	17.94	17.94				
			% of room		96.69%	96.69%	1.00	YES		
First	R1	Bathroom	Area m2	n/a - non-habitable						
			% of room							
	R2	Bedroom	Area m2	12.37	12.19	12.19				
			% of room		98.61%	98.61%	1.00	YES		
		102 Agai	Grove Londo	n NW1 9TL						
Lower Ground	R1	Living Room	Area m2	14.10	12.10	11.55				
			% of room		85.77%	81.89%	0.95	YES		
	R2	Kitchen	Area m2	15.35	15.08	15.08				
			% of room		98.27%	98.27%	1.00	YES		
	R3	Bedroom	Area m2	10.65	10.53	10.53				
			% of room		98.85%	98.85%	1.00	YES		
Ground	R1	Living Room	Area m2	14.10	14.01	14.01				
			% of room		99.38%	99.38%	1.00	YES		
	R2	Bedroom	Area m2	7.04	6.43	6.34				
			% of room		91.44%	90.07%	0.99	YES		
First	R1	Living Room	Area m2	20.94	20.59	20.59				
			% of room		98.31%	98.31%	1.00	YES		

