daylight&sunlight

Daylight and Sunlight Report
for the Proposed Development at
1 Perrins Lane, Hampstead, NW3 1QY

Prepared for:	House of Design
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1. EXECUTIVE SUMMARY

1.1 Scope of Service

1.1.1 We have been instructed by House of Design to consider the potential impact upon the amenity of the surrounding residential properties, which may arise from the proposed development at 1 Perrins Lane, Hampstead, NW3 1QY.

1.2 BRE Assessment Criteria

1.2.1 To ensure that this assessment has been appropriately considered, daylight and sunlight assessments have been undertaken in accordance with the Building Research Establishment Report 'Site Layout Planning for Daylight and Sunlight – A Guid e to Good Practice' 2022 (the "BRE guide"). It is intended to be used with BS EN 17037, and its UK National Annex, which gives specific minimum recommendations for habitable rooms in dwellings in the United Kingdom.

1.2.2 The standards and tests applied within this assessment are briefly described in Section 3.

1.3 Daylight and Sunlight

1.3.1 Regarding the surrounding properties, the proposed development is in accordance with the BRE guidelines for daylight, sunlight and overshadowing.

1.3.2 For overshadowing specifically, the adjacent beer garden to King William IV PH will only lose about 12% of its sun of ground, remaining comfortably within the BRE criteria. During April and May, a few weeks later, when the beer garden is most likely used, equivalent criteria will be achieved with a much greater sun on ground exposure, ecen more for the summer months.

1.4 Generally

1.4.1 When considering the numerical results, it is important to approach and interpret the BRE guidelines flexibly along with the following material mitigating factors:

*The BRE guidelines recognises that buildings located uncommonly close to the site boundary, as is the case here, may be considered as "bad" neighbours, taking more than their fair share of light. Accordingly, a greater reduction in daylight or sunlight may be unavoidable and so the local authority may wish to apply different target values.
*Kitchens and bedrooms are given less weighting than that of a living room.

2. INTRODUCTION

2.1 Scope of Service

2.1.1 We have been instructed by House of Design to consider the potential impact upon the amenity of the surrounding residential properties, which may arise from the proposed development at 1 Perrins Lane, Hampstead, NW3 1QY.

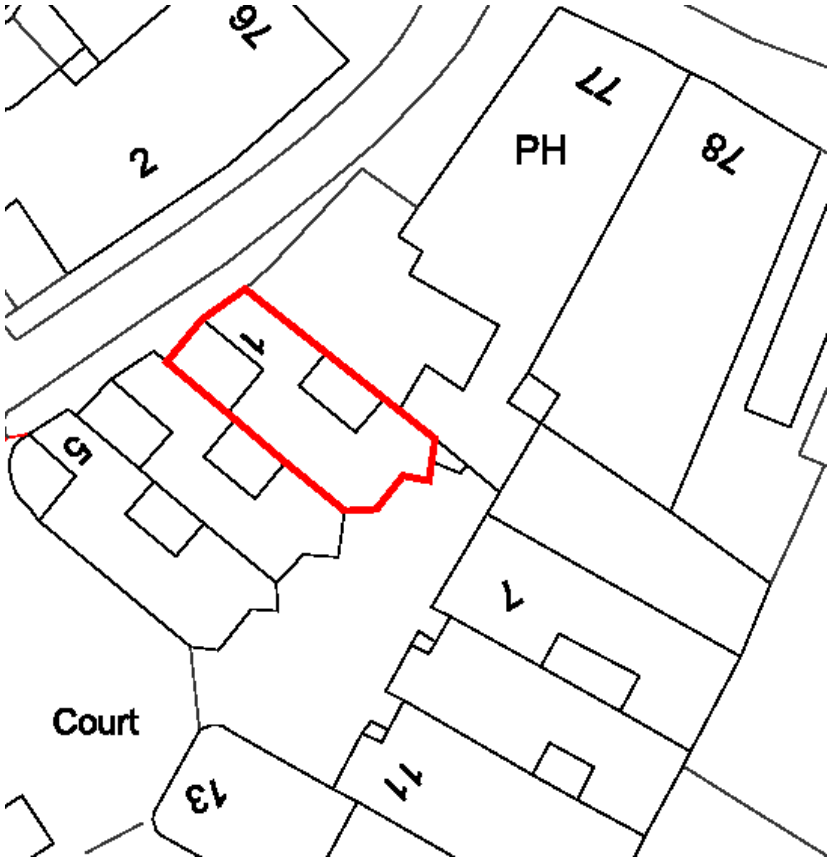
2.2 Assessment

2.2.1 To ensure that this assessment has been appropriately considered, daylight and sunlight assessments have been undertaken in accordance with the Building Research Establishment Report 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice' 2022 (the "BRE guide"). It is intended to be used with BS EN 17037, and its UK National Annex, which gives specific minimum recommendations for habitable rooms in dwellings in the United Kingdom.

2.2.2 The standards and tests applied within this assessment are briefly described in Section 3.

2.2.3 The existing buildings adjacent to the site are shown on the Site Location Plan below.

Site Location Plan



2.2.4 The existing buildings adjacent to the site considered for this report are listed in the following table. Some of these buildings may not require a comprehensive assessment with the reasons for these findings given later in this report under section 3: Results and Consideration.

Adjacent Building Summary Table		
Name/Address of Building	**Assumed Use of Building**	**Position in Relation to the Proposed Development**
King William PH	Mixed Use	North
5 and 7 Prince Arthur Mews	Residential	East
3 Perrins Lane	Residential	South

2.3 Limitations

2.3.1 Our assessment is based on the proposed development drawings by House of Design.

2.3.2 Topographical survey information was provided in relation to the existing buildings on site and ground heights. Where buildings were not surveyed, the locations and heights were derived from site photographs and oblique aerial photography.

2.3.3 We refer you to the drawings which accompany this report for a list of the third party information relied upon which our 3D computer model and resultant analyses are based.

3. BRE CRITERIA AND MITIGATING FACTORS

3.1 BRE Daylight Criteria

3.1.1 The BRE guide target value for the Annual Probable Sunlight Hours (APSH) to a living room, is 25%, 5% of which should be enjoyed during the winter months. However, where the values are lower than this in the existing situation, the BRE allows a reduction of 20%, again, *subject to mitigating factors*.

3.1.2 The overshadowing assessment is undertaken on 21 March, the spring equinox. This assessment shows areas of a subject amenity area where less than 2 hours of sunlight will be available during the winter period, however, the subject area may still receive some sunlight during the summer. if an open amenity area, is more than 50% in shade for more than 2 hours in either existing or proposed situations, and is reduced by more than 20% of its existing value of a new development, then that loss is likely to be noticeable.

3.1.3 These criteria are, however, purely numerical guidelines. They can be misinterpreted as a hard and fast rule, which is of course an unsustainable argument at planning. A loss of greater than 20% implies that the loss may be noticeable by its occupants, but noticeable does not mean, significant or adverse, it just means that it needs to be considered in the broader context. Namely, is the development acceptable in respect of all the surrounding circumstances? This leads us on to the mitigating factors.

3.2 Mitigating Factors

3.2.1 As with all development sites, it would be helpful at this stage to outline the mitigating factors.

3.2.2 Mitigating factors are to be considered in conjunction with the numerical data, particularly with regards to the specific surrounding circumstances, to arrive at a more balanced view.

3.2.3 By balanced, it is meant that the two often conflicting material considerations at planning, (to have amenity protected (neighbours) and to utilise adjacent land in a reasonable manner (developer), need to be considered fairly.

3.2.4 The BRE guidelines states at the beginning and throughout that it is "to be interpreted flexibly"; "not intended to constrain but help the designer"; and "not to be used as an instrument of planning policy".

3.2.5 The simplest way of approaching all the above is to keep in mind one basic question – "is it [the development] fair/balanced/acceptable in consideration of all the surrounding circumstances".

<u>Mitigating Factor #1</u>

3.2.6 The main mitigating factor is, that where buildings located uncommonly close to the site boundary, they may be considered as "bad" neighbours, taking more than their fair share of light. Accordingly, a greater reduction in daylight or sunlight may be unavoidable and so the local authority may wish to apply different target values.

Mitigating Factor #2

3.2.7 Where sites are undeveloped or are infill sites, again a higher degree of obstruction may be unavoidable leading to a higher frequency of non-compliance. So, for example, you have a gap in a line of terraced properties, or an existing street scape of 6-storey high buildings. Where a developer wishes to fill this gap, or indeed reinstate a previous building, it would certainly be acceptable in planning terms, irrespective of the potential effect on surrounding buildings.

Mitigating Factor #3

3.2.8 The BRE guidelines also recognises that where buildings match the height and proportions of existing surrounding buildings a higher degree of obstruction may be unavoidable, leading to a higher frequency of non-compliance.

Mitigating Factor #4

3.2.9 Additionally, kitchens and bedrooms are generally given less weighting than that of a principal room such as a living room.

4. RESULTS AND CONSIDERATION

4.1 Daylight and Sunlight

4.1.1 Detailed test results are shown in Appendix A.

4.2 Our Approach

4.2.1 We have assessed the surrounding residential buildings that are most likely to be affected by the proposed development. Other properties are either not residential, aligned at an oblique angle, or are considered to be too far away to be affected. They have therefore not been assessed.

4.2.2 We have also considered the windows and the rooms of each building listed. With some buildings, we generally obtain floor plans from the local authority planning portal, or sales brochures. Where building plans are not readily available, generally, we designate the windows and rooms as habitable within the BRE framework, unless there are obvious clues that would suggest otherwise.

4.2.3 Things such as opaque glazing, soil pipes, stairwells etc., suggest toilets, bathrooms, or circulation spaces, which in accordance with the BRE guidelines need not be assessed.

4.2.4 For habitable rooms, we look for paraphernalia in the windows, blinds, flue pipes, which might suggest a kitchen, smaller windows with net curtains which suggests bedrooms and say larger windows for living rooms etc.

4.3 Our 3D Model.

4.3.1 We have constructed our 3D model using the data provided by the survey and House of Design's proposed planning drawings.

Existing Baseline

4.3.2 The Site is situated to the east side of Perrins Lane, adjacent to the King William IV public House. It is currently a 2-storey dwelling with a single storey rear terrace, see accompanying drawing 2047/DSO/01.

Proposed Development

4.3.3 The proposed development seeks to partially extend the first floor on to the roof terrace, see accompanying drawing 2047/DSO/01.

4.3.4 We have considered and/or assessed the habitable windows and rooms of the adjacent buildings at that are most likely to be affected by the proposed development.

4.3.5 In accordance with the BRE guidelines, circulation space, hallways, storerooms, toilets, and bathrooms, need not be assessed.

King William PH

4.3.6 This part commercial, part residential building is situated immediately north of the site along the common boundary.

4.3.7 At ground floor level, all windows etc. are likely to serve commercial and auxiliary areas of the public house, and so they need not be assessed. At first floor level, the windows probably serve residential quarters of the owners and possibly staff. Referring you to the accompanying drawing 2047/DSO/01, W1 serves what appears to be a bathroom, and W2 to W5 serve what appear to be bedrooms.

4.3.8 Turning now to the assessment results, the windows and habitable rooms were assessed for Vertical Sky Component (VSC), Daylight Distribution (DD) respectively.

4.3.9 Regarding VSC, all windows meet the BRE guidelines.

4.3.10 Regarding DD, all rooms assessed meet the BRE criteria.

4.3.11 Regarding sunlight, all windows meet the BRE guidelines.

4.3.12 We have also been requested to consider the beer garden for overshadowing. The BRE recommends 2 hours of sun on ground on 21 March over half of an amenity area, or if the values are less than half, a loss of 20% is suggested.

4.3.13 We found that the Beer garden comfortably meets the BRE criteria on 21 March, with a loss of sun at just 12%. In April/May, just a few weeks later, when the beer garden is most likely to be used it meets the equivalent criteria will be achieved with a much greater sun on ground exposure, even more for the summer months.

4.3.14 In any event, the beeer garden is located to the common boundary of the application site and because of its orientation, it would be overly sensitive to any modest change massing to the south of it.

5 and 7 Prince Arthur Mews

4.3.15 These dwellings are situated immediately east of the site along the common boundary.

4.3.16 The ground floor window to these dwellings cannot not see the proposed extension due to being situated at a much lower level and behind the rear wall of the application site. They therefore have not been assessed. The first floor windows likely serve bedrooms.

4.3.17 These windows and the rooms served by them will comfortably meet the BRE guidelines for daylight and sunlight.

3 Perrins Lane

4.3.18 This dwelling is situated immediately south of the site. The roof lantern and roof light comfortably meet the BRE guidelines for daylight and sunlight.

4.3.19 There will be a very slight reduction to daylight within the room served by these windows, however, the reduction is small and comfortably remains within the BRE criteria.

5. CONCLUSION

5.1 Daylight and Sunlight

5.1.1 Regarding the surrounding properties, the proposed development is in accordance with the BRE guidelines for daylight, sunlight and overshadowing.

5.1.2 For overshadowing specifically, the adjacent beer garden to King William IV PH will only lose about 12% of its sun of ground, remaining comfortably within the BRE criteria. During April and May, a few weeks later, when the beer garden is most likely used, equivalent criteria will be achieved with a much greater sun on ground exposure, even more for the summer months.

5.2 Generally

5.2.1 When considering the numerical results, it is important to approach and interpret the BRE guidelines flexibly along with the following material mitigating factors:

*The BRE guidelines recognises that buildings located uncommonly close to the site boundary, as is the case here, may be considered as "bad" neighbours, taking more than their fair share of light. Accordingly, a greater reduction in daylight or sunlight may be unavoidable and so the local authority may wish to apply different target values.
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Appendix A

Daylight/Sunlight Results

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Vertical Sky Component (VSC) Assessment/ Sunlight (APSH) Assessment

Floor Ref.	Room Ref.	Room	Use.	Window Ref.	Scenario	VSC	Difference	Condtn	Total VSC for Room			Available Sunlight Hours						Total APSH for Room					
									Room VSC	Pr/Ex	Meets BRE Criteria	Annual %	Diff %	Condtn	Winter %	Diff %	Condtn	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
King William IV PH																							
First	R1	WC	W1	Existing	30.65	0.96	YES				66.00	0.95	YES	18.00	0.83	YES							
				Proposed	29.40						63.00			15.00									
								30.65	0.96	YES							66.00			18.00			
								29.40									63.00	0.95	YES	15.00	0.83	YES	
	R2	Bedroom	W2	Existing	30.07	0.97	YES				66.00	0.98	YES	19.00	0.95	YES							
				Proposed	29.10						65.00			18.00									
								30.07	0.97	YES							66.00			19.00			
								29.10									65.00	0.98	YES	18.00	0.95	YES	
	R3	Bedroom	W3	Existing	25.23	0.96	YES				28.00	*North	*North	5.00	*North	*North							
				Proposed	24.30						27.00			5.00									
			W4	Existing	23.72	0.97	YES				49.38	0.93	YES	8.38	0.95	YES							
				Proposed	22.91						46.00			8.00									
								24.62	0.96	YES							51.22			10.22			
								23.74									50.00	0.98	YES	10.00	0.98	YES	
3 Perrins Road																							
Ground	R1	LKD	W1	Existing	44.19	0.98	YES				35.00	0.97	YES	3.00	1.00	YES							
				Proposed	43.26						34.00			3.00									
			W2	Existing	57.65	0.98	YES				59.00	0.98	YES	16.00	1.00	YES							
				Proposed	56.56						58.00			16.00									
			W3	Existing	72.23	0.88	YES				64.00	0.95	YES	16.00	1.00	YES							
				Proposed	63.73						61.00			16.00									
			W4	Existing	33.82	0.95	YES				49.00	*North	*North	14.00	*North	*North							
				Proposed	32.05						45.00			14.00									
			W5	Existing	24.99	0.99	YES				32.00	*North	*North	8.00	*North	*North							
				Proposed	24.68						31.00			8.00									
								46.21	0.95	YES							71.00			19.00			
								44.01									70.00	0.99	YES	19.00	1.00	YES	
5 Prince Arthur Mews																							
First	R1	Bedroom	W1	Existing	27.31	0.99	YES					*North	*North		*North	*North							
				Proposed	27.17																		
			W2	Existing	33.59	1.00	YES					*North	*North		*North	*North							
				Proposed	33.46																		
								31.76	1.00	YES													
								31.63										*North	*North		*North	*North	

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Vertical Sky Component (VSC) Assessment/ Sunlight (APSH) Assessment

Floor Ref.	Room Ref.	Room	Use.	Window Ref.	Scenario	VSC	Difference	Condtn	Total VSC for Room			Available Sunlight Hours								Total APSH for Room					
									Room VSC	Pr/Ex	Meets BRE Criteria	Annual %	Diff	%	Condtn	Winter %	Diff	%	Condtn	Total Suns per Room Annual	Pr/Ex	Meets BRE Criteria	Total Suns per Room Winter	Pr/Ex	Meets BRE Criteria
7 Prince Arthur Mews																									
First	R1	Bedroom	W1		Existing	12.69	0.99	YES					*North		*North		*North		*North						
					Proposed	12.58																			
									12.69	0.99	YES														
									12.58												*North	*North		*North	*North

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Daylight Distribution (DD) Assessment

Floor Ref.	Room Ref.	Room Use	Property Type	Room Area	Lit Area Existing	Lit Area Proposed	Pr/Ex	Meets BRE Criteria
King William IV PH								
First	R1	WC	Area m2	2.89	2.86	2.86		
			% of room		98.89%	98.89%	1.00	YES
	R2	Bedroom	Area m2	9.62	6.37	6.37		
			% of room		66.20%	66.19%	1.00	YES
	R3	Bedroom	Area m2	12.78	11.68	11.68		
			% of room		91.40%	91.37%	1.00	YES
3 Perrins Road								
Ground	R1	LKD	Area m2	51.09	31.99	30.23		
			% of room		62.63%	59.16%	0.94	YES
5 Prince Arthur Mews								
First	R1	Bedroom	Area m2	21.72	20.74	20.74		
			% of room		95.48%	95.48%	1.00	YES
7 Prince Arthur Mews								
First	R1	Bedroom	Area m2	9.26	7.70	7.70		
			% of room		83.12%	83.12%	1.00	YES

Appendix B

Context Drawings