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Daylight and Sunlight Report
for the Proposed Development at
1 Hurdwick Place, Morning Crescent, NW1 2JE

Prepared for:	GA & A Design
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1. Executive Summary

1.1 Scope of Service

1.1.1 We have been instructed by GA & A Design to consider the potential impact upon the amenity of the surrounding buildings, which may arise from the proposed development at 1 Hurdwick Place, Morning Crescent, NW1 2JE. We have also been requested to determine the daylighting potential of the proposed accommodation.

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 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.

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

1.3 Daylight and Sunlight

1.3.1 The proposed development comfortably meets the BRE guidelines for daylight and sunlight.

1.3.2 There are no valid grounds to challenge the proposed development with regards to daylight and sunlight amenity.

1.4 Spatial Daylight Autonomy for the Proposed Accommodation

1.4.1 We found that all habitable rooms achieved the requite lux over at least 50% of their areas for at least half of the daylight hours in a typical year, save for one of the rooms at lower ground floor level, which does not.

1.5 Generally

1.5.1 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 GA & A Design to consider the potential impact upon the amenity of the surrounding buildings, which may arise from the proposed development at 1 Hurdwick Place, Morning Crescent, NW1 2JE. We have also been requested to determine the daylighting potential of the proposed accommodation.

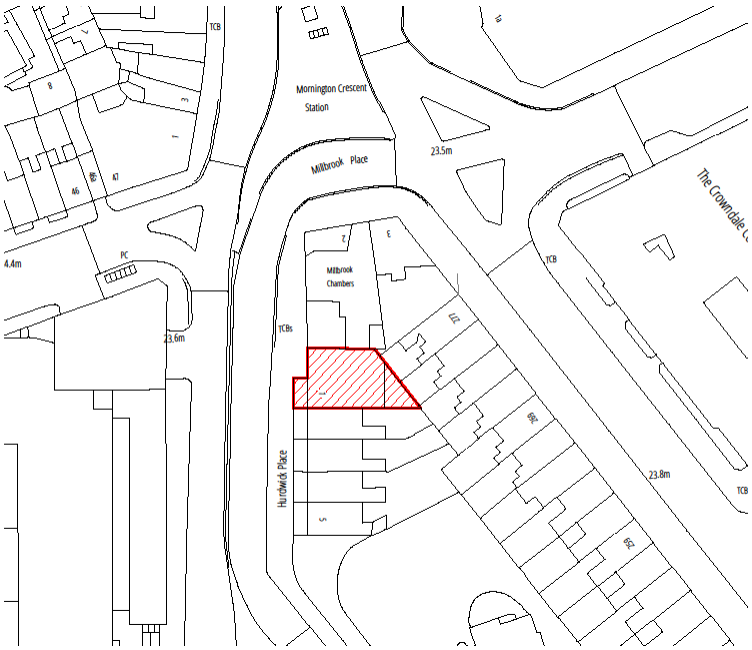
2.2 Assessment

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' 2011 (the "BRE guide") and with the British Standard 8206 – 2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting', to which the BRE report refers.

2.2.2 The standards and tests applied within this assessment are briefly described at section 3 below.

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 Extension**
3 Millbrook Place	Mixed Use	North
273 to 277 Eversholt Street	Mixed Use	East

2.3 Limitations

2.3.1 Our assessment is based on the proposed extension drawings by GA & A Design.

2.3.2 Topographical survey information was not provided with relation to the existing buildings on site along with elevations of surrounding buildings. Where buildings were not surveyed, the locations and heights were derived from the aforementioned drawings, 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.

2.3.4 Evergreen trees, hedges and shrubs have been represented in our 3D model where appropriate, but deciduous trees have not.

3. BRE Criteria and Mitigating Factors

3.1 BRE Daylight Criteria

3.1.1 The BRE guide target value for the Vertical Sky Component Assessment (VSC) is 27%. However, where the values are lower than this in the existing situation, the BRE allows a reduction of 20%, *subject to mitigating factors*.

3.1.2 For Daylight Distribution, namely, sky visibility at table level, the BRE allows a reduction of 20%, *subject to mitigating factors*.

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

Mitigating Factor #1

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 The results for the buildings tested for daylight availability in accordance with the BRE recommendations 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 planning drawings by GA & A Design.

Existing Baseline

4.3.2 The site is located adjacent to the Morning Crescent Tube Station, see accompanying drawing 2073/DSO/01.

4.3.3 The site has previously benefited from a planning consent ref 2015/1630/P for a side extension to the upper levels and a part single part double storey from first floor level.

Proposed Extension

4.3.4 The proposed development will alter the previous part single part double storey by unifying the massing at first floor level to create a flat roof, and also the addition of a small, pitched roof to the former side extension, see accompanying drawing 2073/DSO/01.

4.3.5 We have considered the rooms and windows that are most likely to be affected by the proposed extension. Other properties are considered to be too far away to be affected or aligned at an oblique angle.

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

3 Millbrook Place

4.3.7 This mixed use building is located directly north. The windows to the rear elevation at first floor level and above would appear to serve residential accommodation.

4.3.8 The windows and habitable rooms were assessed for Vertical Sky Component (VSC), Daylight Distribution (DD) respectively.

4.3.9 Regarding VSC, all windows assessed meet the BRE criteria.

4.3.10 Regarding Daylight Distribution, all rooms assessed meet the BRE criteria.

4.3.11 It is considered that this building would not be adversely affected by the proposed development.

273 to 277 Eversholt Street

4.3.12 This mixed use buildings are located directly east of the site sharing a common boundary. Again, generally, the windows to the rear elevation at first floor level and above would appear to serve residential accommodation.

4.3.13 The windows and habitable rooms were assessed for Vertical Sky Component (VSC), Daylight Distribution (DD) respectively.

4.3.14 Regarding VSC, all windows assessed meet the BRE criteria.

4.3.15 Regarding Daylight Distribution, all rooms assessed meet the BRE criteria.

4.3.16 The amenity areas to the rear were also assessed for overshadowing. The only loss noted was a fractional reduction to amenity area A1 to #277, nonetheless, it remains well within the BRE guidelines.

4.3.17 It is considered that these buildings would not be adversely affected by the proposed development.

4.4 Proposed Accommodation

4.4.1 The proposed flats are self-contained and are locate at lower ground floor level, see accompanying drawings 2073/DSO/ 02.

4.4.2 For our 3D assessment model, we have modelled the proposed flats in detail, along with the surrounding buildings.

4.4.3 GA&A design have carefully considered this site and have incorporated elements within the designs to the proposed flats to maximise ambient daylighting potential. These include: -

- Multiple windows to rooms where appropriate

- Light coloured internal finishes

4.4.4 We have also been supplied with technical specifications of those light coloured internal finishes. The Floor will be a Karndean White Painted Oak Floor KP105 (gloss), which comes with a high Light Reflectance Value (LRV), (equivalent specifications of white floors are at least 0.76) and a Benjamin Moore Chantilly Lace white paint, which comes with a LRV of 92.2.

4.4.5 The BRE guidelines, however, states at paragraph C24 –

"Where surface finishes have been specified or measured on site, they can be used in the calculations with appropriate factors for maintenance and furniture. To allow for these factors, maximum reflectances for white painted surfaces in the calculations should not exceed 0.8 indoors…and maximum reflectances for light wood floors should not exceed 0.4."

4.4.6 We have therefore reduced the LRV of the internal surface finishes accordingly.

4.4.7 For the window glass, we have used a generic glass transmission of 0.64, a value of 0.1 reflectance for the ground, and 0.2 for exterior obstructions.

4.4.8 Turning now to the Spatial Daylight Autonomy (SDA) assessment results: -

4.4.9 We undertook the Illuminance Method of assessment per the BS EN 17037, and its UK National Annex. It states that illuminance recommendations of 100 lux in bedrooms, 150 lux in living rooms and 200 lux in kitchens are the median illuminances, to be exceeded over at least 50% of the assessment points in the room for at least half of the daylight hours.

4.4.10 We now refer you to the accompanying drawings 2073/DSO/ 02 at Appendix B and the results table at Appendix C.

4.4.11 We found that all habitable rooms achieved the requite lux over at least 50% of their areas for at least half of the daylight hours in a typical year, save for one of the rooms at lower ground floor level, which does not.

4.4.12 The above statement is in part mirrored by paragraph 125 (c) of The National Planning Policy Framework, which states:

"…authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use for the site (as long as the resulting scheme would provide acceptable living standards."

5. Conclusion

5.1 Daylight and Sunlight

5.1.1 The proposed development comfortably meets the BRE guidelines for daylight and sunlight.

5.1.2 There are no valid grounds to challenge the proposed development with regards to daylight and sunlight amenity.

5.2 Spatial Daylight Autonomy for the Proposed Accommodation

5.2.1 We found that all habitable rooms achieved the requite lux over at least 50% of their areas for at least half of the daylight hours in a typical year, save for one of the rooms at lower ground floor level, which does not.

5.3 Generally

5.3.1 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.

Appendix A

Daylight Results / 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	Available Sunlight Hours							
										Annual %	Diff	%	Condtn	Winter %	Diff	%	Condtn
277 Eversholt Road																	
First	R1		Kitchen	W1		Existing	16.04	1.00	YES	17.00	1.00		YES	2.00	1.00		YES
						Proposed	16.04			17.00				2.00			
Second	R1		Kitchen	W1		Existing	28.01	1.00	YES	47.00	1.00		YES	13.00	1.00		YES
						Proposed	28.01			47.00				13.00			
Third	R1		Kitchen	W1		Existing	32.71	1.00	YES	53.00	1.00		YES	16.00	1.00		YES
						Proposed	32.71			53.00				16.00			
275 Eversholt Road																	
Second	R1		Kitchen	W1		Existing	28.43	1.00	YES	48.00	1.00		YES	15.00	1.00		YES
						Proposed	28.43			48.00				15.00			
Third	R1		Kitchen	W1		Existing	32.62	1.00	YES	54.00	1.00		YES	16.00	1.00		YES
						Proposed	32.62			54.00				16.00			
273 Eversholt Road																	
First	R1		Kitchen	W1		Existing	19.51	1.00	YES	27.00	1.00		YES	6.00	1.00		YES
						Proposed	19.51			27.00				6.00			
Second	R1		Kitchen	W1		Existing	29.98	1.00	YES	48.00	1.00		YES	16.00	1.00		YES
						Proposed	29.98			48.00				16.00			
Third	R1		Kitchen	W1		Existing	33.43	1.00	YES	55.00	1.00		YES	18.00	1.00		YES
						Proposed	33.43			55.00				18.00			
3 Millbrook Place																	
First	R1		Kitchen	W1		Existing	28.13	1.01	YES	67.00	1.00		YES	15.00	1.00		YES
						Proposed	28.29			67.00				15.00			
Second	R1		Kitchen	W1		Existing	32.97	1.00	YES	77.00	1.00		YES	20.00	1.00		YES
						Proposed	32.98			77.00				20.00			
Third	R1		Kitchen	W1		Existing	36.84	1.00	YES	84.00	1.00		YES	27.00	1.00		YES
						Proposed	36.84			84.00				27.00			

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Daylight Distribution (DD) Assessment

Floor Ref.	Room Ref.	Room Attribute	Property Type	Room Use.		Room Area	Lit Area Proposed	Meets BRE Criteria
277 Eversholt Road								
First	R1	Kitchen	Area m2	6.74	6.65	6.65		
			% of room		99%	99%	100.00%	YES
Second	R1	Kitchen	Area m2	6.74	6.74	6.74		
			% of room		100%	100%	100.00%	YES
Third	R1	Kitchen	Area m2	6.74	6.74	6.74		
			% of room		100%	100%	100.00%	YES
275 Eversholt Road								
Second	R1	Kitchen	Area m2	6.74	6.74	6.74		
			% of room		100%	100%	100.00%	YES
Third	R1	Kitchen	Area m2	6.74	6.74	6.74		
			% of room		100%	100%	100.00%	YES
273 Eversholt Road								
First	R1	Kitchen	Area m2	6.74	6.74	6.74		
			% of room		100%	100%	100.00%	YES
Second	R1	Kitchen	Area m2	6.74	6.74	6.74		
			% of room		100%	100%	100.00%	YES
Third	R1	Kitchen	Area m2	6.74	6.74	6.74		
			% of room		100%	100%	100.00%	YES
3 Millbrook Place								
First	R1	Kitchen	Area m2	6.74	6.34	6.34		
			% of room		94%	94%	100.00%	YES
Second	R1	Kitchen	Area m2	6.74	6.34	6.34		
			% of room		94%	94%	100.00%	YES
Third	R1	Kitchen	Area m2	6.74	6.09	6.09		
			% of room		90%	90%	100.00%	YES

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Spatial Daylight Autonomy Assessment (BS_EN17037) - Illuminance Method

Floor Ref	Room Ref	Property Type	Room Use	Room Area m2	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux	Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	Meets Criteria
Proposed Accommodation													
Lower Ground	R1	Residential	Living Room	20.63	15.24	119	5.81	38%	150	50%	50%	4380	NO
	R2	Residential	Bedroom	16.26	11.61	132	10.30	89%	100	50%	50%	4380	YES
	R3	Residential	LKD	27.28	19.90	205	10.86	55%	200	50%	50%	4380	YES

Appendix B

Context Drawings