

RIGHT OF LIGHT CONSULTING Chartered Surveyors

# Daylight and Sunlight Report

(Neighbouring Properties)

20 November 2023

235 to 237 Broadway Bexleyheath DA6 7EL



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## CONTENTS

1 EXE	CUTIVE SUMMARY	2
1.1	Overview	2
2 INFC	ORMATION SOURCES	3
2.1	Drawings	3
2.2	Daylight Distribution Room Layout Information	
3 MET	HODOLOGY OF THE ASSESSMENT	5
3.1	Local Planning Policy	5
3.2	National Planning Policy Framework	
3.3	National Planning Practice Guidance	
3.4	Daylight to Windows	
3.5	Sunlight availability to Windows	8
3.6	Overshadowing to Gardens and Open Spaces	8
4 RES	ULTS OF THE ASSESSMENT	10
4.1	Windows & Amenity Areas Considered	10
4.2	Daylight to Windows	
4.3	Sunlight to Windows	
4.4	Overshadowing to Gardens and Open Spaces	10
4.5	Conclusion	
5 CLA	RIFICATIONS	12
5.1	General	.12

#### APPENDICES

APPENDIX 1	WINDOW & GARDEN KEY
APPENDIX 2	DAYLIGHT AND SUNLIGHT RESULTS
APPENDIX 3	OVERSHADOWING TO GARDENS AND OPEN SPACES

#### 1 EXECUTIVE SUMMARY

#### 1.1 Overview

- 1.1.1 Right of Light Consulting has been commissioned by Better Properties Ltd to undertake a daylight and sunlight assessment of the proposed development at 235 to 237 Broadway, Bexleyheath DA6 7EL.
- 1.1.2 The assessment is based on the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice, 3<sup>rd</sup> Edition' by P J Littlefair 2022.
- 1.1.3 The aim of the assessment is to consider the impact of the development on the light receivable by the neighbouring properties at 206a to 208, 210, 210a, 212 to 214, 227, 229, 231 & 233 Broadway and Broadway House (Future Building).
- 1.1.4 The window key in Appendix 1 identifies the windows analysed in this assessment. Appendix 2 gives the numerical results of the various daylight and sunlight tests.
- 1.1.5 206a to 208, 210 & 212 to 214 Broadway appear to be non-domestic buildings which in our opinion do not have a requirement for daylight or sunlight. Nevertheless, all rooms and windows to these buildings pass numerical tests. We have therefore not included these results in the discussion below.
- 1.1.6 All neighbouring windows (that have a requirement for daylight or sunlight) pass the relevant BRE diffuse daylight and direct sunlight tests. The development also passes the BRE overshadowing to gardens and open spaces test.
- 1.1.7 In summary, the numerical results in this assessment demonstrate that the proposed development will have a low impact on the light receivable by its neighbouring properties. In our opinion, the proposed development sufficiently safeguards the daylight and sunlight amenity of the neighbouring properties.

#### 2 INFORMATION SOURCES

#### 2.1 Drawings

2.2

Mab Architecture, Design & Development Ltd

A-100 A-110 A-200 A-300 A-400 A-500 E-100 E-100 E-120 E-200	Existing & Proposed Ground Floor Plans Proposed 2nd & 3rd Floor Plans Existing & Proposed 1st Floor Plans Existing & Proposed 2nd Floor Plans Existing & Proposed 3rd Floor Plans Existing & Proposed Roof Plans Existing & Proposed Elevations Existing & Proposed West Elevations Proposed Elevations Existing & Proposed Elevations South &	Rev C Rev NEW Rev C Rev B Rev E Rev A Rev B Rev NEW Rev - Rev B
E-300	East Proposed External Finishes	Rev A
Measured Survey by Right of	Light Consulting	
	Point Cloud Data	Rev -

# 2 Daylight Distribution Room Layout Information

2.2.1 The daylight distribution test has been applied based on the following room layout information:

Online Local Authonity plannin	<u>ig records</u>	
206a to 208 Broadway: 3443/P/11	Proposed Ground Floor Plan	Rev -
210 Broadway: 3443/P/11	Proposed Ground Floor Plan	Rev -
210a Broadway: 3443/P/11	Proposed Ground Floor Plan	Rev -
212 to 214 Broadway: 3443/P/11	Proposed Ground Floor Plan	Rev -
227 Broadway: 95105	Floor Plans	Rev -
229 Broadway: 2748/01 EFP/229 Broadway-1	Proposed Hot Food Shop Existing and Proposed Floor Plans and	Rev - Rev -

Online Local Authority planning records

#### Elevations

233 Broadway: NB/GM/07	Ground Floor - As Proposed	Rev -
Broadway House (Future Buil	ding):	
3443/P/11	Proposed Ground Floor Plan	Rev -
3443/P/12	Proposed First Floor Plan	Rev -
3443/P/13	Proposed Second Floor Plan	Rev -
3443/P/14	Proposed Third Floor Plan	Rev -
3443/P/15	Proposed Fourth Floor Plan	Rev -
3443/P/16	Proposed Roof Plan	Rev -

## 3 METHODOLOGY OF THE ASSESSMENT

#### 3.1 Local Planning Policy

- 3.1.1 We understand that the Local Authority takes the conventional approach of considering daylight and sunlight amenity with reference to the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice, by P J Littlefair. This report is based on the 3<sup>rd</sup> edition of the BRE guide which was published on 8 June 2022.
- 3.1.2 The standards set out in the BRE guide are intended to be used flexibly. The BRE guide states:
- 3.1.3 "The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly, since natural lighting is only one of many factors in site layout design."
- 3.1.4 In reference to applying different numerical target values in different locations, the BRE guide states:
- 3.1.5 "These values are purely advisory and different targets may be used based on the special requirements of the proposed development or its location."

#### 3.2 National Planning Policy Framework

- 3.2.1 The BRE numerical guidelines should be considered in the context of the National Planning Policy Framework (NPPF), which stipulates that local planning authorities should take a flexible approach to daylight and sunlight to ensure the efficient use of land. The NPPF states:
- 3.2.2 "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)."

#### 3.3 National Planning Practice Guidance

3.3.1 The BRE numerical guidelines should also be considered in the context of the National Planning Practice Guidance (NPPG). The NPPG states that developments should maintain acceptable living standards. It goes on to explain that what this means in practice is that appropriate levels of sunlight and daylight, will depend to some extent on the context for the development. This is consistent with the BRE guide which as noted in paragraphs 3.1.4 to 3.1.5 above, states that site location is a relevant factor when setting sunlight and daylight targets.

#### 3.4 Daylight to Windows

- 3.4.1 Diffuse daylight is the light received from the sun which has been diffused through the sky. Even on a cloudy day, when the sun is not visible, a room will continue to be lit with light from the sky. This is diffuse daylight.
- 3.4.2 Diffuse daylight calculations should be undertaken to all rooms within domestic properties, where daylight is required, including living rooms, kitchens and bedrooms. The BRE guide states that windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. These room types are non-habitable and do not have a requirement for daylight.
- 3.4.3 The BRE guide states that the tests may also be applied to non-domestic buildings where there is a reasonable expectation of daylight. The BRE guide explains that this would normally include schools, hospitals, hotels and hostels, small workshops and some offices. The BRE guide is not explicit in terms of which types of offices it regards as having a requirement for daylight. However, it is widely accepted amongst consultants and local authorities, that for planning purposes, offices (which are commercial in nature) do not have a requirement for daylight. The point is touched on in the 'Daylighting and Sunlighting' guidance note published by the Royal Institution of Chartered Surveyors (RICS), which gives guidance to surveyors on how to produce their reports:

- 3.4.4 "The report should establish the limits of the assessment. For example, existing commercial premises are rarely assessed for loss of amenity."
- 3.4.5 The BRE guide contains two tests which measure diffuse daylight:

#### Test 1 Vertical Sky Component

- 3.4.6 The Vertical Sky Component is a measure of available skylight at a given point on a vertical plane. Diffuse daylight may be adversely affected if after a development the Vertical Sky Component is both less than 27% and less than 0.8 times its former value.
- 3.4.7 The BRE guide states that the total amount of skylight can be calculated by finding the Vertical Sky Component at the centre of each main window. However, the guide states that if there would be a significant loss of light to the main window but the room also has one or more smaller windows, an overall Vertical Sky Component may be derived by weighting each Vertical Sky Component element in accordance with the proportion of the total glazing area represented by its window.

#### **Test 2 Daylight Distribution**

- 3.4.8 The distribution of daylight within a room can be calculated by plotting the 'no sky line'. The no sky line is a line which separates areas of the working plane that do and do not have a direct view of the sky. Daylight may be adversely affected if, after the development, the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value.
- 3.4.9 The BRE guide states that both the total amount of skylight (Vertical Sky Component) and its distribution within the building (Daylight Distribution) are important. The BRE guide states that the daylight distribution calculation can only be carried out where room layouts are known. It states that using estimated room layouts is likely to give inaccurate results and is not recommended. Therefore, we don't endorse the practice of applying the test based on assumed room layouts. However, we can provide additional daylight distribution data upon request by the local authority, if neighbouring room layout information is confirmed.

#### 3.5 Sunlight availability to Windows

- 3.5.1 The BRE sunlight tests should be applied to all main living rooms and conservatories which have a window which faces within 90 degrees of due south. The BRE guide states that kitchens and bedrooms are less important, although care should be taken not to block too much sunlight. It also states that normally loss of sunlight need not be analysed to kitchens and bedrooms, except for bedrooms which also comprise a living space. The tests should also be applied to non-domestic buildings where there is a particular requirement for sunlight.
- 3.5.2 The test is intended to be applied to main windows which face within 90 degrees of due south. However, the BRE guide explains that if the main window faces within 90 degrees of due north, but a secondary window faces within 90 degrees of due south, sunlight to the secondary window should be checked. For completeness, we have tested all windows which face within 90 degrees of due south. The BRE guide states that sunlight availability may be adversely affected if the centre of the window:
  - receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and
  - receives less than 0.8 times its former sunlight hours during either period and
  - has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

#### 3.6 Overshadowing to Gardens and Open Spaces

- 3.6.1 The availability of sunlight should be checked for all open spaces where sunlight is required. This would normally include:
  - Gardens, usually the main back garden of a house
  - Parks and playing fields
  - Children's playgrounds
  - Outdoor swimming pools and paddling pools
  - Sitting out areas, such as those between non-domestic buildings and in public squares
  - Focal points for views such as a group of monuments or fountains.

- 3.6.2 One way to consider overshadowing is by preparing shadow plots. However, the BRE guide states that it must be borne in mind that nearly all structures will create areas of new shadow, and some degree of transient overshadowing is to be expected. Therefore, shadow plots are of limited use as interpretation of the plots is subjective. Shadow plots have not been undertaken as part of this assessment.
- 3.6.3 The BRE guide also contains an objective overshadowing test which has been adopted for the purpose of this assessment. The guide recommends that at least 50% of the area of each amenity space listed above should receive at least two hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sunlight on 21 March is less than 0.8 times its former value, then the loss of light is likely to be noticeable.

#### 4 RESULTS OF THE ASSESSMENT

#### 4.1 Windows & Amenity Areas Considered

- 4.1.1 The aim of the assessment is to assess the impact of the development on the light receivable by the neighbouring properties at 206a to 208, 210, 210a, 212 to 214, 227, 229, 231 & 233 Broadway and Broadway House (Future Building).
- 4.1.2 Appendix 1 provides a plan and photographs to indicate the positions of the windows and outdoor amenity areas analysed in this assessment. Appendix 2 lists the detailed numerical daylight and sunlight test results.
- 4.1.3 206a to 208, 210 & 212 to 214 Broadway appear to be non-domestic buildings which in our opinion do not have a requirement for daylight or sunlight. Nevertheless, all rooms and windows to these buildings pass numerical tests. Therefore, we have not included these results in the discussion below.

#### 4.2 Daylight to Windows

#### Vertical Sky Component

4.2.1 All windows with a requirement for daylight pass the Vertical Sky Component test.

#### Daylight Distribution

4.2.2 We have undertaken the Daylight Distribution test where room layouts are known. All rooms with a requirement for daylight pass the daylight distribution test.

#### 4.3 Sunlight to Windows

4.3.1 All windows that face within 90 degrees of due south have been tested for direct sunlight. All windows with a requirement for sunlight pass both the total annual sunlight hours test and the winter sunlight hours test. The proposed development therefore satisfies the BRE direct sunlight to windows requirements.

#### 4.4 Overshadowing to Gardens and Open Spaces

4.4.1 All gardens and open spaces tested meet the BRE recommendations.

#### 4.5 Conclusion

4.5.1 In summary, the numerical results in this assessment demonstrate that the proposed development will have a low impact on the light receivable by its neighbouring properties. In our opinion, the proposed development sufficiently safeguards the daylight and sunlight amenity of the neighbouring properties.

#### **5 CLARIFICATIONS**

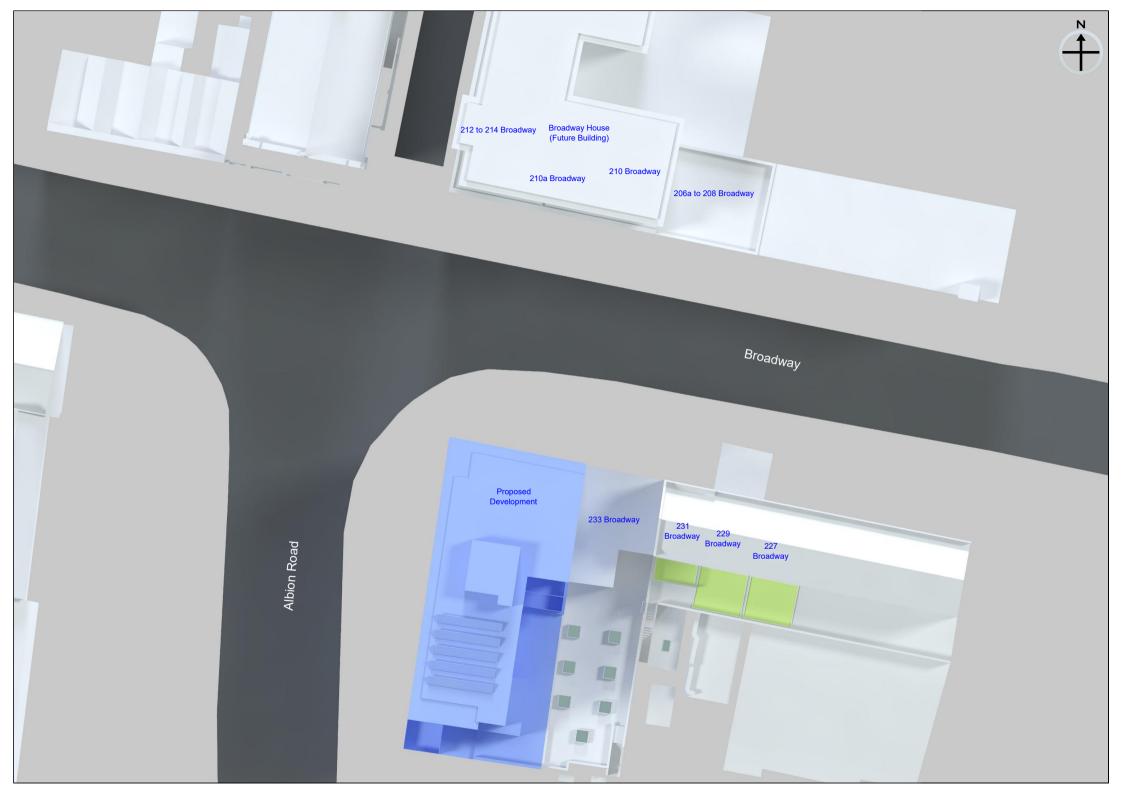
#### 5.1 General

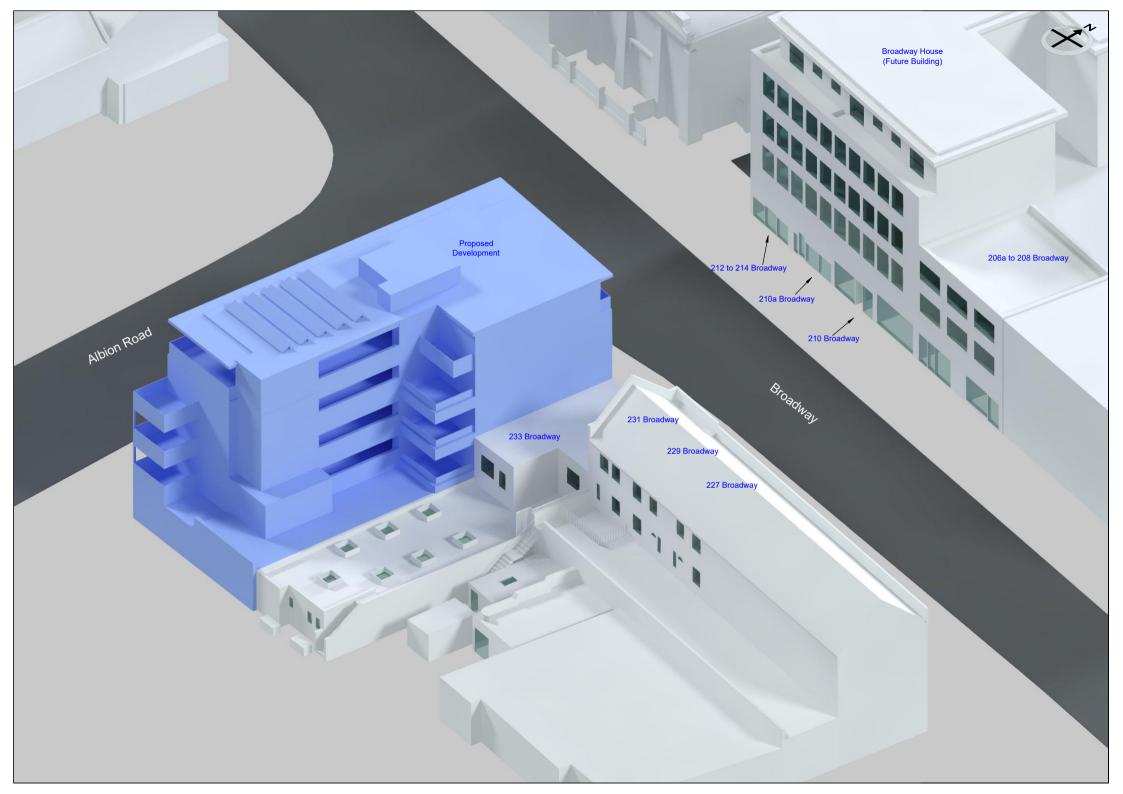
- 5.1.1 The report provided is solely for the use of the client and no liability to anyone else is accepted.
- 5.1.2 The assessment is limited to assessing daylight, sunlight and overshadowing to neighbouring windows, gardens and open spaces as set out in section 2.2, 3.2 and 3.3 of the BRE Guide.
- 5.1.3 The assessment is based on the information listed in section 2 of this report and a site visit undertaken on 5 August 2022. We have not had access to neighbouring properties.
- 5.1.4 This assessment does not calculate the effects of trees and hedges on daylight, sunlight and overshadowing to gardens. The BRE guide states that it is usual to ignore the effect of existing trees.
- 5.1.5 We have undertaken the assessment following the guidelines of the RICS publication "Surveying Safely". Where limited access or information is available, assumptions will have been made which may affect the conclusions reached in this report. For example, where neighbouring room uses are not known, we will either make an assumption regarding the use, or take the prudent approach of treating the use of the room as being used for domestic purposes. Therefore, the report may need to be updated if room uses are confirmed by the local authority or by the consultation responses.
- 5.1.6 This report is based upon and subject to the scope of work set out in Right of Light Consulting's quotation and standard terms and conditions.

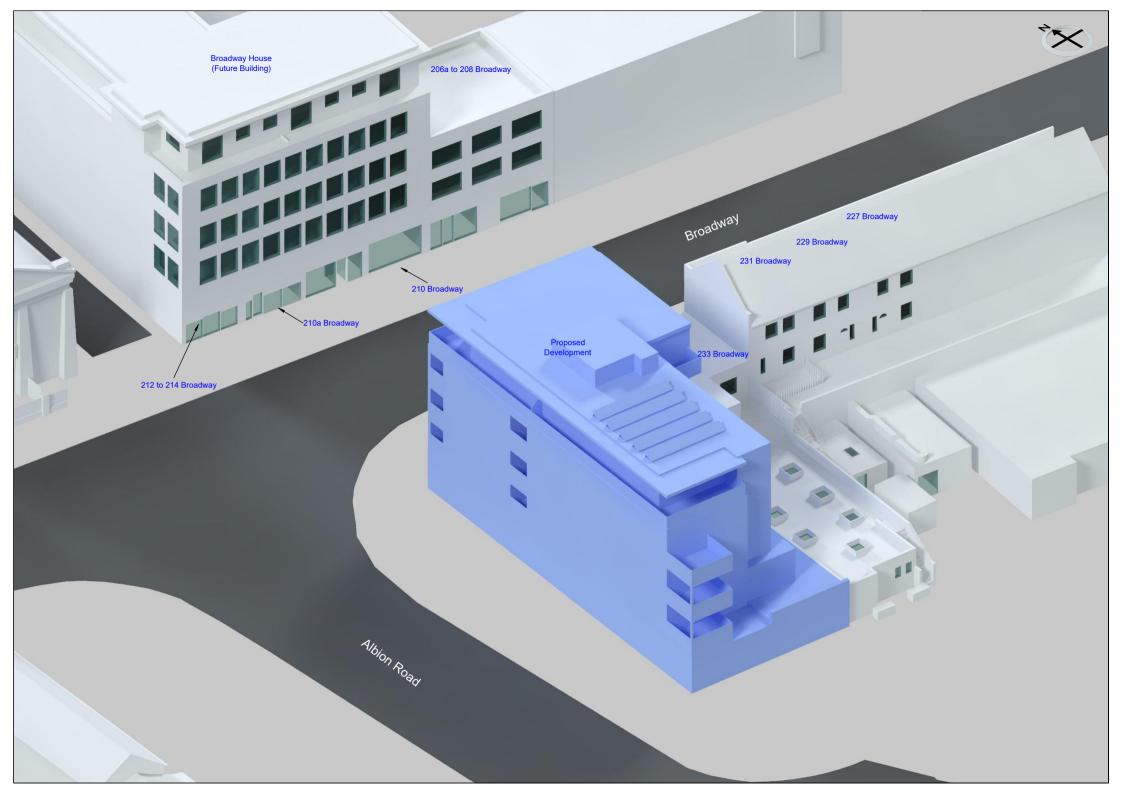
APPENDICES

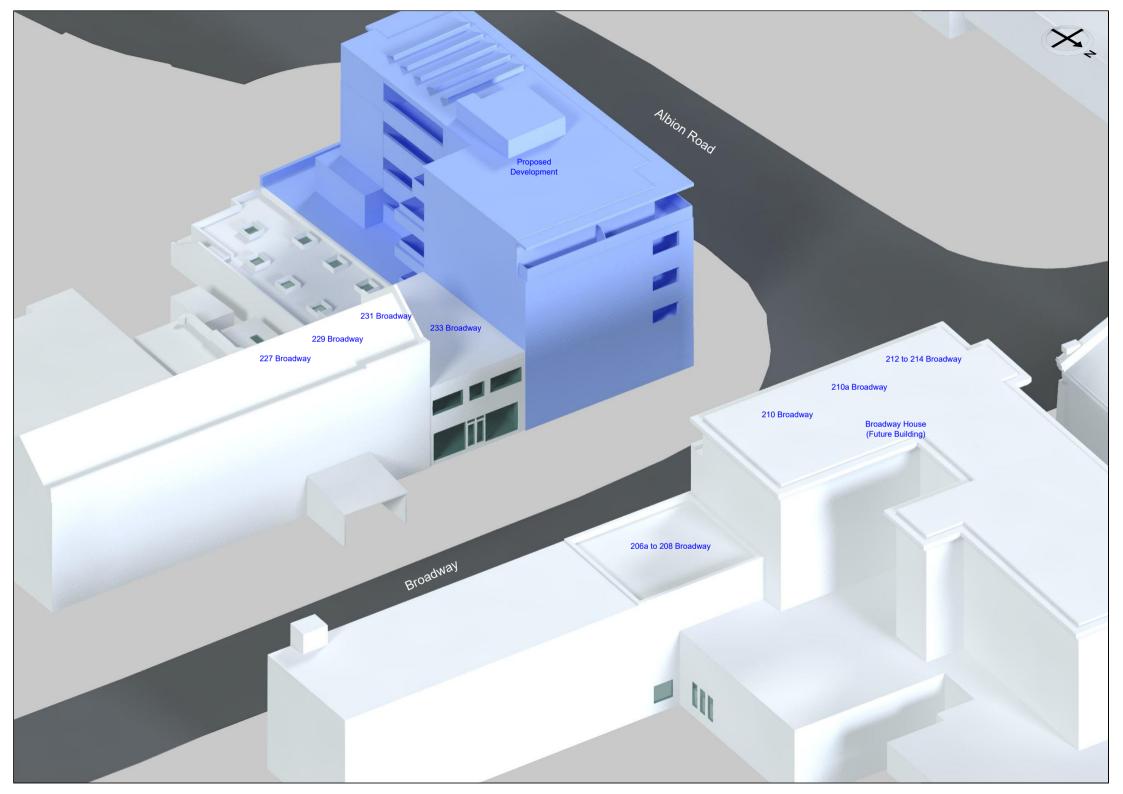
# **APPENDIX 1**

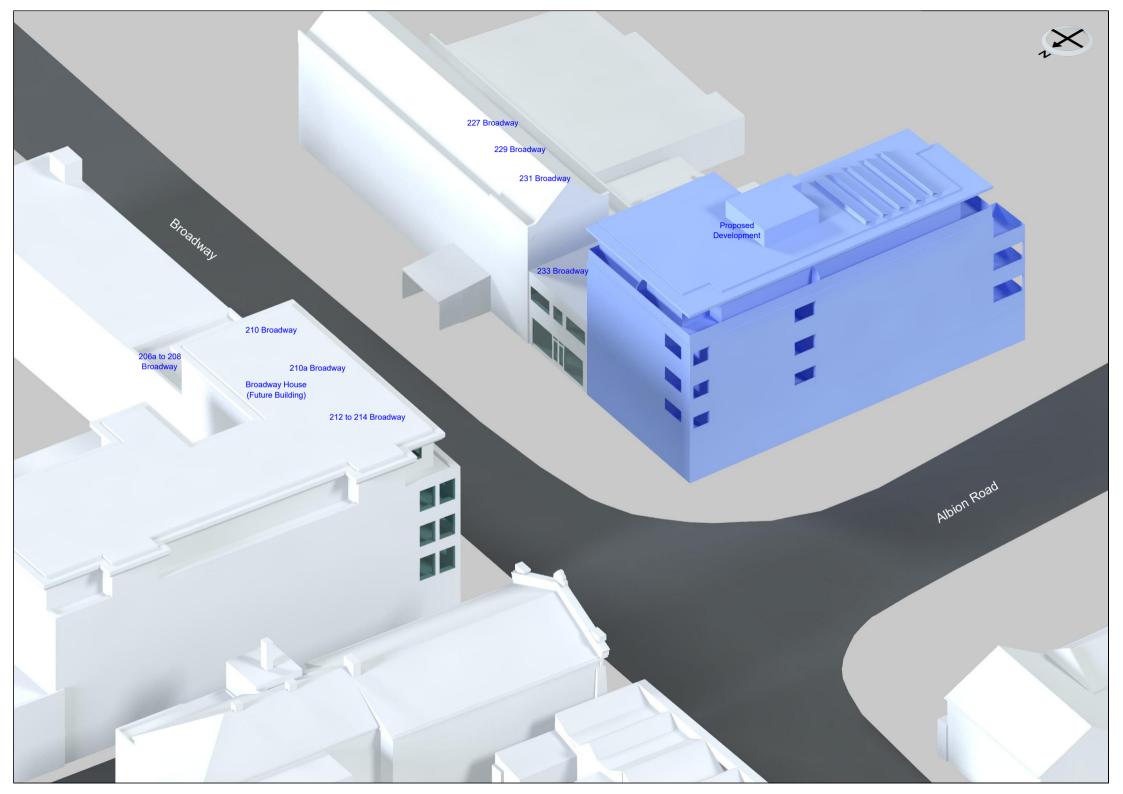
WINDOW & GARDEN KEY











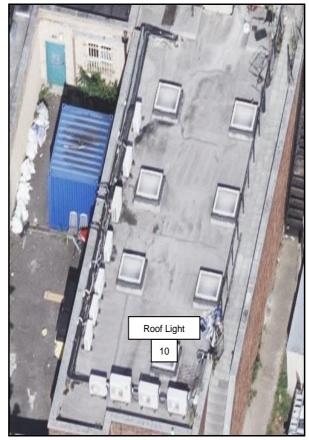
# **Neighbouring Windows**



233 Broadway



# 233 Broadway



233 Broadway



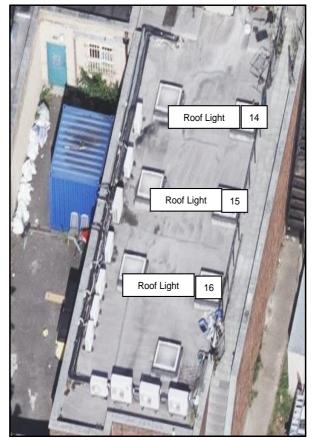
233 Broadway



233 Broadway



233 Broadway



233 Broadway



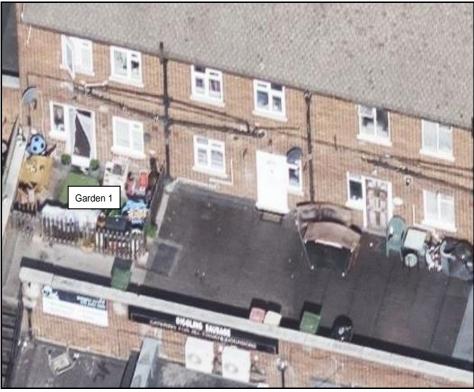
233 Broadway



231 Broadway



231 Broadway



231 Broadway



229 Broadway



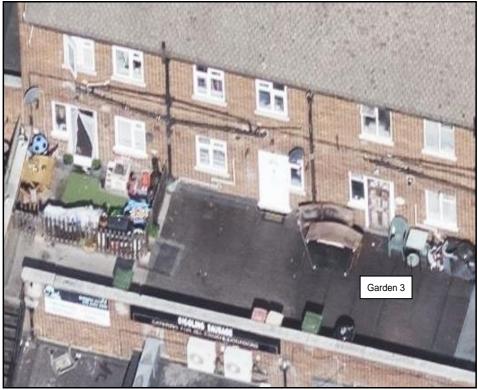
229 Broadway



229 Broadway



227 Broadway



227 Broadway



206a to 208 Broadway



206a to 208 Broadway



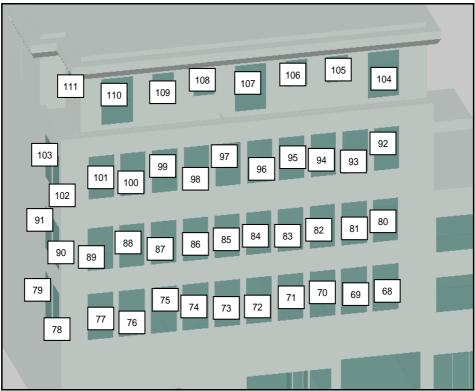
210 Broadway



210a Broadway



212 to 214 Broadway



Broadway House (Future Building)

# **APPENDIX 2**

DAYLIGHT AND SUNLIGHT RESULTS

Reference	Room Use		Vertical Sky Component				
		Before	After	Loss	Ratio		
233 Broadway							
Ground Floor							
Window 1	Office	28.3%	28.3%	0.0%	1.0		
Window 2	Office	27.9%	27.9%	0.0%	1.0		
Window 3	Office	25.5%	25.5%	0.0%	1.0		
Window 4	Office	27.9%	27.9%	0.0%	1.0		
Window 5	Office	24.8%	24.8%	0.0%	1.0		
Window 6	Office	28.1%	28.1%	0.0%	1.0		
Window 7	Non Domestic	26.5%	26.5%	0.0%	1.0		
Window 8	Non Domestic	39.1%	39.1%	0.0%	1.0		
Window 9	Non Domestic	39.4%	39.4%	0.0%	1.0		
Window 10	Non Domestic	76.4%	70.2%	6.2%	0.92		
Window 11	Non Domestic	75.9%	53.6%	22.3%	0.71		
Window 12	Non Domestic	76.4%	58.3%	18.1%	0.76		
Window 13	Non Domestic	76.4%	62.3%	14.1%	0.82		
Window 14	Non Domestic	75.9%	65.6%	10.3%	0.86		
Window 15	Non Domestic	76.4%	68.4%	8.0%	0.9		
Window 16	Non Domestic	76.4%	70.5%	5.9%	0.92		
First Floor							
Window 17	Domestic	31.7%	31.7%	0.0%	1.0		
Window 18	Domestic	32.0%	32.0%	0.0%	1.0		
Window 19	Domestic	32.2%	32.2%	0.0%	1.0		
Window 20	Domestic	39.6%	28.1%	11.5%	0.71		
Window 21	Domestic	39.5%	30.9%	8.6%	0.78		
Window 22	Domestic	31.5%	30.5%	1.0%	0.97		
231 Broadway							
Ground Floor							
Window 23	Non Domestic	25.1%	25.1%	0.0%	1.0		
Window 24	Non Domestic	88.7%	82.3%	6.4%	0.93		
First Floor							
Window 25	Domestic	38.9%	34.7%	4.2%	0.89		
Window 26	Domestic	39.3%	35.8%	3.5%	0.91		
Second Floor							
Window 27	Domestic	39.3%	36.0%	3.3%	0.92		
Window 28	Domestic	39.2%	36.5%	2.7%	0.93		
		00.270	20.070	,0	5100		

Reference	Room Use	Vertical Sky Component					
Reference		Before	After	Loss	Ratio		
220 Proodwov							
229 Broadway							
Ground Floor		<b></b>	<b>66</b> 464	0.00/			
Window 29	Garage	33.7%	33.4%	0.3%	0.99		
First Floor							
Window 30	Domestic	39.5%	36.8%	2.7%	0.93		
Window 31	Domestic	39.5%	37.5%	2.0%	0.95		
Window 32	Domestic	39.5%	37.5%	2.0%	0.95		
Second Floor							
Window 33	Domestic	39.2%	37.2%	2.0%	0.95		
Window 34	Domestic	39.2%	37.6%	1.6%	0.96		
227 Broadway							
First Floor							
Window 35	Domestic	39.6%	37.9%	1.7%	0.96		
Window 36	Domestic	39.6%	38.1%	1.5%	0.96		
Window 37	Domestic	39.6%	38.3%	1.3%	0.97		
	2011/0010	001070	001070	11070	0.01		
Second Floor							
Window 38	Domestic	39.2%	38.1%	1.1%	0.97		
Window 39	Domestic	39.2%	38.3%	0.9%	0.98		
206a to 208 Broadway							
Ground Floor							
Window 40	Shop	32.4%	30.0%	2.4%	0.93		
Window 41	Shop	32.2%	30.0%	2.2%	0.93		
Window 42	Shop	24.6%	24.6%	0.0%	1.0		
Window 43	Shop	23.5%	23.5%	0.0%	1.0		
Window 44	Shop	25.4%	25.4%	0.0%	1.0		
Window 45	Shop	27.0%	27.0%	0.0%	1.0		
Window 46	Office	32.9%	30.2%	2.7%	0.92		
Window 47	Office	33.1%	30.2%	2.9%	0.91		
Window 48	Office	33.2%	30.3%	2.9%	0.91		
First Floor							
Window 49	Non Domestic	35.6%	33.3%	2.3%	0.94		
Window 50	Non Domestic	36.0%	33.4%	2.6%	0.93		
Window 51	Non Domestic	36.3%	33.5%	2.8%	0.92		
Second Floor		0					
Window 52	Non Domestic	37.5%	35.6%	1.9%	0.95		
Window 53	Non Domestic	37.8%	35.7%	2.1%	0.94		
Window 54	Non Domestic	38.1%	35.7%	2.4%	0.94		

Reference	Room Use		Vertical Sky	Component	
		Before	After	Loss	Ratio
210 Broadway					
Ground Floor					
Window 55	Office	33.7%	30.6%	3.1%	0.91
210a Broadway					
Ground Floor					
Window 56	Shop	34.2%	30.9%	3.3%	0.9
Window 57	Shop	4.1%	3.7%	0.4%	0.9
Window 58	Shop	5.3%	3.0%	2.3%	0.57
Window 59	Shop	2.7%	2.5%	0.2%	0.93
Window 60	Shop	34.7%	31.2%	3.5%	0.9
212 to 214 Broadway					
Ground Floor					
Window 61	Shop	34.5%	31.1%	3.4%	0.9
Window 62	Shop	34.8%	31.5%	3.3%	0.91
Window 63	Shop	35.6%	32.4%	3.2%	0.91
Window 64	Shop	35.2%	32.1%	3.1%	0.91
Window 65	Shop	35.5%	32.6%	2.9%	0.92
Window 66	Shop	35.7%	32.8%	2.9%	0.92
Window 67	Shop	35.8%	33.0%	2.8%	0.92
Broadway House (Fut	ure Building)				
First Floor					
Window 68	Living/Kitchen	37.3%	34.2%	3.1%	0.92
Window 69	Living/Kitchen	37.4%	34.2%	3.2%	0.91
Window 70	Bedroom	37.6%	34.3%	3.3%	0.91
Window 71	Bedroom	37.7%	34.3%	3.4%	0.91
Window 72	Bedroom	37.9%	34.5%	3.4%	0.91
Window 73	Bedroom	38.0%	34.7%	3.3%	0.91
Window 74	Bedroom	38.2%	34.9%	3.3%	0.91
Window 75	Living/Kitchen	38.3%	35.2%	3.1%	0.92
Window 76	Living/Kitchen	38.4%	35.5%	2.9%	0.92
Window 77	Living/Kitchen	38.5%	35.7%	2.8%	0.93
Window 78	Living/Kitchen	33.5%	33.5%	0.0%	1.0
Window 79	Living/Kitchen	32.2%	32.2%	0.0%	1.0
Conned Flags					
Second Floor	Living/Vitcher	20.00/	26 40/	2 20/	0.04
Window 80	Living/Kitchen	38.6%	36.4%	2.2%	0.94
Window 81	Living/Kitchen	38.7%	36.4%	2.3%	0.94
Window 82	Bedroom	38.8%	36.4%	2.4%	0.94
Window 83	Bedroom	38.9%	36.5%	2.4%	0.94
Window 84	Bedroom	39.0%	36.5%	2.5%	0.94
Window 85	Bedroom	39.0%	36.6%	2.4%	0.94

Reference	Room Use		Vertical Sky	Component	
		Before	After	Loss	Ratio
Window 86	Bedroom	39.1%	36.8%	2.3%	0.94
Window 87	Living/Kitchen	39.2%	36.9%	2.3%	0.94
Window 88	Living/Kitchen	39.2%	37.1%	2.1%	0.95
Window 89	Living/Kitchen	39.3%	37.2%	2.1%	0.95
Window 90	Living/Kitchen	36.9%	36.9%	0.0%	1.0
Window 91	Living/Kitchen	36.3%	36.3%	0.0%	1.0
Third Floor					
Window 92	Living/Kitchen	39.5%	38.4%	1.1%	0.97
Window 93	Living/Kitchen	39.5%	38.4%	1.1%	0.97
Window 94	Bedroom	39.5%	38.4%	1.1%	0.97
Window 95	Bedroom	39.5%	38.3%	1.2%	0.97
Window 96	Bedroom	39.5%	38.4%	1.1%	0.97
Window 97	Bedroom	39.5%	38.4%	1.1%	0.97
Window 98	Bedroom	39.5%	38.4%	1.1%	0.97
Window 99	Living/Kitchen	39.5%	38.5%	1.0%	0.97
Window 100	Living/Kitchen	39.6%	38.5%	1.1%	0.97
Window 101	Living/Kitchen	39.6%	38.6%	1.0%	0.97
Window 102	Living/Kitchen	39.5%	39.5%	0.0%	1.0
Window 103	Living/Kitchen	39.4%	39.4%	0.0%	1.0
Fourth Floor					
Window 104	Living/Kitchen	35.4%	35.2%	0.2%	0.99
Window 105	Living/Kitchen	32.2%	32.1%	0.1%	1.0
Window 106	Bathroom/WC	32.2%	32.1%	0.1%	1.0
Window 107	Bedroom	35.4%	35.1%	0.3%	0.99
Window 108	Living/Kitchen	32.2%	32.1%	0.1%	1.0
Window 109	Living/Kitchen	32.2%	32.1%	0.1%	1.0
Window 110	Living/Kitchen	35.4%	35.2%	0.2%	0.99
Window 111	Living/Kitchen	26.4%	26.4%	0.0%	1.0
	-				

# Appendix 2 - Daylight Distribution 235 to 237 Broadway, Bexleyheath DA6 7EL

Reference	Room Use		Daylight D	istribution	
		Before	After	Loss	Ratio
233 Broadway					
Ground Floor Windows 1 to 6	Office	98%	98%	0%	1.0
229 Broadway					
<u>Ground Floor</u> Window 29	Garage	100%	100%	0%	1.0
206a to 208 Broadway					
<u>Ground Floor</u> Windows 40 to 45 Windows 46 to 48	Shop Office	97% 100%	97% 100%	0% 0%	1.0 1.0
<u>First Floor</u> Window 49 Window 50 Window 51	Non Domestic Non Domestic Non Domestic	100% 99% 99%	100% 99% 99%	0% 0% 0%	1.0 1.0 1.0
<u>Second Floor</u> Windows 52 & 53 Window 54	Non Domestic Non Domestic	100% 99%	100% 99%	0% 0%	1.0 1.0
210 Broadway					
<u>Ground Floor</u> Window 55	Office	100%	100%	0%	1.0
210a Broadway					
<u>Ground Floor</u> Windows 56 to 60	Shop	86%	86%	0%	1.0
212 to 214 Broadway					
<u>Ground Floor</u> Windows 61 to 67	Shop	100%	100%	0%	1.0
Broadway House (Future	Building)				
First Floor Windows 68 & 69 Windows 70 & 71 Windows 72 to 74 Windows 75 to 79	Living/Kitchen Bedroom Bedroom Living/Kitchen	99% 100% 100% 100%	99% 100% 100% 100%	0% 0% 0%	1.0 1.0 1.0 1.0
<u>Second Floor</u> Windows 80 & 81 Windows 82 & 83 Windows 84 to 86	Living/Kitchen Bedroom Bedroom	99% 100% 100%	99% 100% 100%	0% 0% 0%	1.0 1.0 1.0

# Appendix 2 - Daylight Distribution 235 to 237 Broadway, Bexleyheath DA6 7EL

Reference	Room Use		Daylight Distribution				
		Before	After	Loss	Ratio		
Windows 87 to 91	Living/Kitchen	100%	100%	0%	1.0		
Third Floor							
Windows 92 & 93	Living/Kitchen	99%	99%	0%	1.0		
Windows 94 & 95	Bedroom	100%	100%	0%	1.0		
Windows 96 to 98	Bedroom	100%	100%	0%	1.0		
Windows 99 to 103	Living/Kitchen	100%	100%	0%	1.0		
Fourth Floor							
Windows 104 & 105	Living/Kitchen	98%	98%	0%	1.0		
Window 106	Bathroom/WC	92%	92%	0%	1.0		
Window 107	Bedroom	99%	99%	0%	1.0		
Windows 108 to 111	Living/Kitchen	99%	99%	0%	1.0		

			Sunlight to Windows						
Reference	Room Use	Т	Total Sunlight Hours				/inter Sur	nlight Hou	ırs
		Before	After	Loss	Ratio	Before	After	Loss	Ratio
233 Broadway									
Ground Floor									
Window 7	Non Domestic	54%	54%	0%	1.0	21%	21%	0%	1.0
Window 8	Non Domestic	82%	82%	0%	1.0	30%	30%	0%	1.0
Window 9	Non Domestic	84%	84%	0%	1.0	30%	30%	0%	1.0
Window 10	Non Domestic	42%	42%	0%	1.0	1%	1%	0%	1.0
Window 11	Non Domestic	42%	30%	12%	0.71	1%	1%	0%	1.0
Window 12	Non Domestic	42%	34%	8%	0.81	1%	1%	0%	1.0
Window 13	Non Domestic	42%	40%	2%	0.95	1%	1%	0%	1.0
Window 14	Non Domestic	42%	36%	6%	0.86	1%	1%	0%	1.0
Window 15	Non Domestic	42%	39%	3%	0.93	1%	1%	0%	1.0
Window 16	Non Domestic	42%	42%	0%	1.0	1%	1%	0%	1.0
First Floor									
Window 20	Domestic	89%	60%	29%	0.67	30%	23%	7%	0.77
Window 21	Domestic	89%	64%	25%	0.72	30%	23%	7%	0.77
Window 22	Domestic	67%	65%	2%	0.97	23%	23%	0%	1.0
231 Broadway									
Ground Floor									
Window 23	Non Domestic	57%	57%	0%	1.0	16%	16%	0%	1.0
Window 24	Non Domestic	79%	73%	6%	0.92	23%	23%	0%	1.0
First Floor									
Window 25	Domestic	84%	71%	13%	0.85	29%	25%	4%	0.86
Window 26	Domestic	86%	74%	12%	0.86	29%	27%	2%	0.93
Second Floor									
Window 27	Domestic	86%	74%	12%	0.86	30%	27%	3%	0.9
Window 28	Domestic	85%	76%	9%	0.89	30%	27%	3%	0.9
229 Broadway									
Ground Floor									
Window 29	Garage	72%	71%	1%	0.99	22%	22%	0%	1.0
First Floor									
Window 30	Domestic	87%	77%	10%	0.89	30%	28%	2%	0.93
Window 31	Domestic	87%	79%	8%	0.91	30%	28%	2%	0.93
Window 32	Domestic	87%	79%	8%	0.91	30%	28%	2%	0.93
Second Floor									
Window 33	Domestic	85%	79%	6%	0.93	30%	28%	2%	0.93

			Sunlight to Windows						
Reference	Room Use	Т	Total Sunlight Hours			N	nlight Hou	ht Hours	
		Before	After	Loss	Ratio	Before	After	Loss	Ratio
227 Broadway									
First Floor									
Window 35	Domestic	86%	79%	7%	0.92	30%	28%	2%	0.93
Window 36	Domestic	86%	80%	6%	0.93	30%	28%	2%	0.93
Window 37	Domestic	86%	81%	5%	0.94	30%	28%	2%	0.93
Second Floor									
Window 38	Domestic	85%	80%	5%	0.94	30%	28%	2%	0.93
Window 39	Domestic	85%	80%	5%	0.94	30%	28%	2%	0.93
206a to 208 Broad	dway								
Ground Floor									
Window 40	Shop	80%	78%	2%	0.98	23%	21%	2%	0.91
Window 41	Shop	79%	77%	2%	0.97	22%	20%	2%	0.91
Window 43	Shop	15%	15%	0%	1.0	0%	0%	0%	1.0
Window 44	Shop	18%	18%	0%	1.0	0%	0%	0%	1.0
Window 45	Shop	21%	21%	0%	1.0	0%	0%	0%	1.0
Window 46	Office	83%	79%	4%	0.95	26%	22%	4%	0.85
Window 47	Office	83%	79%	4%	0.95	26%	22%	4%	0.85
Window 48	Office	83%	79%	4%	0.95	26%	22%	4%	0.85
First Floor									
Window 49	Non Domestic	86%	83%	3%	0.97	29%	26%	3%	0.9
Window 50	Non Domestic	87%	84%	3%	0.97	30%	27%	3%	0.9
Window 51	Non Domestic	87%	84%	3%	0.97	30%	27%	3%	0.9
Second Floor									
Second Floor Window 52	Non Domestic	87%	85%	2%	0.98	30%	28%	2%	0.93
Window 52 Window 53	Non Domestic	87%	85%	2%	0.98	30%	28%	2%	0.93
Window 53 Window 54	Non Domestic	87%	86%	2 % 1%	0.90	30 <i>%</i>	20 <i>%</i>	2 % 1%	0.93
210 Broadway		0170	0070	170	0.00	0070	2070	170	0.01
Ground Floor									
Window 55	Office	84%	80%	4%	0.95	27%	23%	4%	0.85
210a Broadway									
Ground Floor									
Window 56	Shop	85%	79%	6%	0.93	28%	22%	6%	0.79
Window 58	Shop	12%	8%	4%	0.67	12%	8%	4%	0.67
Window 59	Shop	11%	10%	1%	0.91	11%	10%	1%	0.91
Window 60	Shop	86%	80%	6%	0.93	29%	23%	6%	0.79
	3	00,0	2370	0.10	0.00	_0/0	_0/0	0,0	0.10

			Sunlight to Windows						
Reference	Room Use	1	Total Sun	- light Hour				nlight Hou	irs
		Before	After	Loss	Ratio	Before	After	Loss	Ratio
212 to 214 Broa	<u>dway</u>								
Ground Floor									
Window 61	Shop	84%	79%	5%	0.94	27%	22%	5%	0.81
Window 62	Shop	85%	78%	7%	0.92	28%	21%	7%	0.75
Window 63	Shop	85%	79%	6%	0.93	28%	22%	6%	0.79
Window 64	Shop	85%	80%	5%	0.94	28%	23%	5%	0.82
Window 65	Shop	86%	80%	6%	0.93	29%	23%	6%	0.79
Window 66	Shop	84%	79%	5%	0.94	27%	22%	5%	0.81
Window 67	Shop	84%	80%	4%	0.95	27%	23%	4%	0.85
Broadway House	e (Future Building)								
First Floor									
Window 68	Living/Kitchen	87%	84%	3%	0.97	30%	27%	3%	0.9
Window 69	Living/Kitchen	87%	83%	4%	0.95	30%	26%	4%	0.87
Window 70	Bedroom	87%	84%	3%	0.97	30%	27%	3%	0.9
Window 71	Bedroom	87%	84%	3%	0.97	30%	27%	3%	0.9
Window 72	Bedroom	87%	83%	4%	0.95	30%	26%	4%	0.87
Window 73	Bedroom	87%	84%	3%	0.97	30%	27%	3%	0.9
Window 74	Bedroom	87%	83%	4%	0.95	30%	26%	4%	0.87
Window 75	Living/Kitchen	87%	84%	3%	0.97	30%	27%	3%	0.9
Window 76	Living/Kitchen	87%	83%	4%	0.95	30%	26%	4%	0.87
Window 77	Living/Kitchen	87%	84%	3%	0.97	30%	27%	3%	0.9
Second Floor									
Window 80	Living/Kitchen	87%	85%	2%	0.98	30%	28%	2%	0.93
Window 81	Living/Kitchen	87%	85%	2%	0.98	30%	28%	2%	0.93
Window 82	Bedroom	87%	86%	1%	0.99	30%	29%	1%	0.97
Window 83	Bedroom	87%	86%	1%	0.99	30%	29%	1%	0.97
Window 84	Bedroom	87%	86%	1%	0.99	30%	29%	1%	0.97
Window 85	Bedroom	87%	86%	1%	0.99	30%	29%	1%	0.97
Window 86	Bedroom	87%	86%	1%	0.99	30%	29%	1%	0.97
Window 87	Living/Kitchen	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 88	Living/Kitchen	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 89	Living/Kitchen	87%	87%	0%	1.0	30%	30%	0%	1.0
Third Floor									
Window 92	Living/Kitchen	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 93	Living/Kitchen	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 94	Bedroom	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 95	Bedroom	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 96	Bedroom	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 97	Bedroom	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 98	Bedroom	87%	87%	0%	1.0	30%	30%	0%	1.0
Window 99	Living/Kitchen	87%	87%	0%	1.0	30%	30%	0%	1.0

			Sunlight to Windows							
Reference	Room Use	т	Total Sunlight Hours				Winter Sunlight Hours			
		Before	After	Loss	Ratio	Before	After	Loss	Ratio	
Window 100	Living/Kitchen	87%	87%	0%	1.0	30%	30%	0%	1.0	
Window 101	Living/Kitchen	87%	87%	0%	1.0	30%	30%	0%	1.0	
Fourth Floor										
Window 104	Living/Kitchen	75%	75%	0%	1.0	30%	30%	0%	1.0	
Window 105	Living/Kitchen	65%	65%	0%	1.0	30%	30%	0%	1.0	
Window 106	Bathroom/WC	65%	65%	0%	1.0	30%	30%	0%	1.0	
Window 107	Bedroom	74%	74%	0%	1.0	30%	30%	0%	1.0	
Window 108	Living/Kitchen	65%	65%	0%	1.0	30%	30%	0%	1.0	
Window 109	Living/Kitchen	65%	65%	0%	1.0	30%	30%	0%	1.0	
Window 110	Living/Kitchen	78%	78%	0%	1.0	30%	30%	0%	1.0	

# Appendix 2 - Overshadowing to Gardens and Open Spaces 235 to 237 Broadway, Bexleyheath DA6 7EL

Reference	Total Area	Area receiving at least two hours of sunlight on 21st March							
Reference	Total Alea	Before	After	Loss	Ratio				
231 Broadway									
<u>First Floor</u> Garden 1	9.37 m2	9.37 m2 100%	9.37 m2 100%	0.0 m2 0%	1.0				
229 Broadway									
<u>First Floor</u> Garden 2	21.21 m2	17.47 m2 82%	17.47 m2 82%	0.0 m2 0%	1.0				
227 Broadway									
First Floor Garden 3	21.21 m2	17.47 m2 82%	17.47 m2 82%	0.0 m2 0%	1.0				

# **APPENDIX 3**

OVERSHADOWING TO GARDENS AND OPEN SPACES

