RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Daylight and Sunlight Report

(Neighbouring Properties)

14 February 2024

89 High Street
Billericay
Essex
CM12 9AT

RICS
Regulated by RICS

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CONTENTS

1 EXECUTIVE SUMMARY

1.1 Overview

1.1.1 Right of Light Consulting has been commissioned by Klara 89 Limited to undertake a daylight and sunlight assessment of the proposed developments at 89 High Street, Billericay, Essex CM12 9AT. The proposals comprise of two separate standalone applications for development within the same curtilage of 89 High Street comprising:

1.1.2 Planning Application 1 (flats):

7 x flats, comprising 4 x 1B/2P, 1 x 2B/3P and 2 x 2B/4P units, and a retained 173sqm Class E commercial unit.

Description of Development:

Proposed partial change of use of the existing building from Class E to Class C3, with works including infill loft extension, introduction of south facing dormer and a 1.5-storey rear and upward extension to create 7 x self-contained C3 residential units plus façade amendments to incorporate new windows; removal of ATM and reinstatement of front façade window; alongside associated landscaping, parking, and refuse storage.

1.1.3 Planning Application 2 (houses):

Comprising 2 x 3B/6P semi-detached houses

Description of Development:

Proposed removal of surface car park to enable the erection of 2 x semi-detached houses alongside associated landscaping, parking, and refuse storage.

1.1.4 The aim of the assessment is to consider the impact of the developments on the light receivable by the neighbouring residential property at Squire House.

1.1.5 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, 3rd Edition' by P J Littlefair 2022.

1.1.6 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.

1.1.7 All neighbouring windows pass the relevant BRE diffuse daylight and direct sunlight tests. The developments also pass the BRE overshadowing to gardens and open spaces test.

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

2 INFORMATION SOURCES

2.1 Drawings

2.1.1 This report is based on the following drawings:

T2S Architecture Ltd

	Architect 3D Model	Rev -
133_PL2_GA_00	Proposed Ground Floor Plan General Arrangement	Rev F
133_PL2_GA_01	Proposed First Floor Plan General Arrangement	Rev E
133_PL2_GA_-01	Proposed Basement Plan General Arrangement	Rev C
133_PL2_GA_02	Proposed Second Floor Plan General Arrangement	Rev F
133_PL2_GA_10	Proposed Ground & First General Arrangement - House	Rev E
133_PL2_GA_11	Proposed Second Floor & Roof Plan General Arrangement	Rev D
133_PL2_GA_RF	Proposed Roof Plan General Arrangement	Rev E
133_PL2_GE_01	Proposed East & West Elevations General Arrangement	Rev E
133_PL2_GE_02	Proposed South Elevations General Arrangement	Rev E
133_PL2_GE_03	Proposed North Elevations General Arrangement	Rev E
133_PL2_GE_10	Proposed South & North Elevations General Arrangement - House	Rev E
133_PL2_GE_11	Proposed East & West Elevations General Arrangement - House	Rev E
133_PL2_GE_20	Proposed South Site Elevation General Arrangement	Rev D
133_PL2_GS_01	Proposed Sections A & B General Arrangement	Rev D
133_PL2_GS_02	Proposed Section C General Arrangement	Rev D
133_PL2_GS_10	Proposed Sections D & E General Arrangement	Rev D
133_PL2_S_01	Proposed Site Plan General Arrangement	Rev E

Arena Property Services Limited

22149-13-B-1	Existing First Floor Plan	Rev -
22149-13-B-G	Existing Ground Floor Plan	Rev -
22149-13-B-LG	Existing Lower Ground Floor Plan	Rev -
22149-13-B-R	Existing Roof Plan	Rev -
22149-13-B-T	Existing Topographical Survey	Rev -

22149-13-E-GA	Existing Elevations 1 and 2	Rev -
22149-13-E-GA	Existing Elevations 3 and 4	Rev -
22149-13-S-GA	Existing Sections A-A and B-B	Rev -

2.2 Daylight Distribution Room Layout Information

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

Online Local Authority planning records

Squire House:

114_PL4_GA_00	Proposed Ground Floor Plan	Rev J
114_PD1_GA_01	Proposed First Floor Plan	Rev B
114_PD1_GA_02	Proposed Second Floor Plan	Rev C

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 3rd 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 skyline 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 developments on the light receivable by the neighbouring residential property at Squire House.

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.

4.2 Daylight to Windows

Vertical Sky Component

4.2.1 All windows 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 pass the daylight distribution test.

4.3 Sunlight to Windows

4.3.1 None of the windows included in this assessment face within 90 degrees of due south. Therefore, none of the windows need to be tested for direct sunlight. It follows that the proposed development 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 developments will have a low impact on the light receivable by its neighbouring properties. In our opinion, the proposed development sufficiently safeguard 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 19 December 2023. 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.

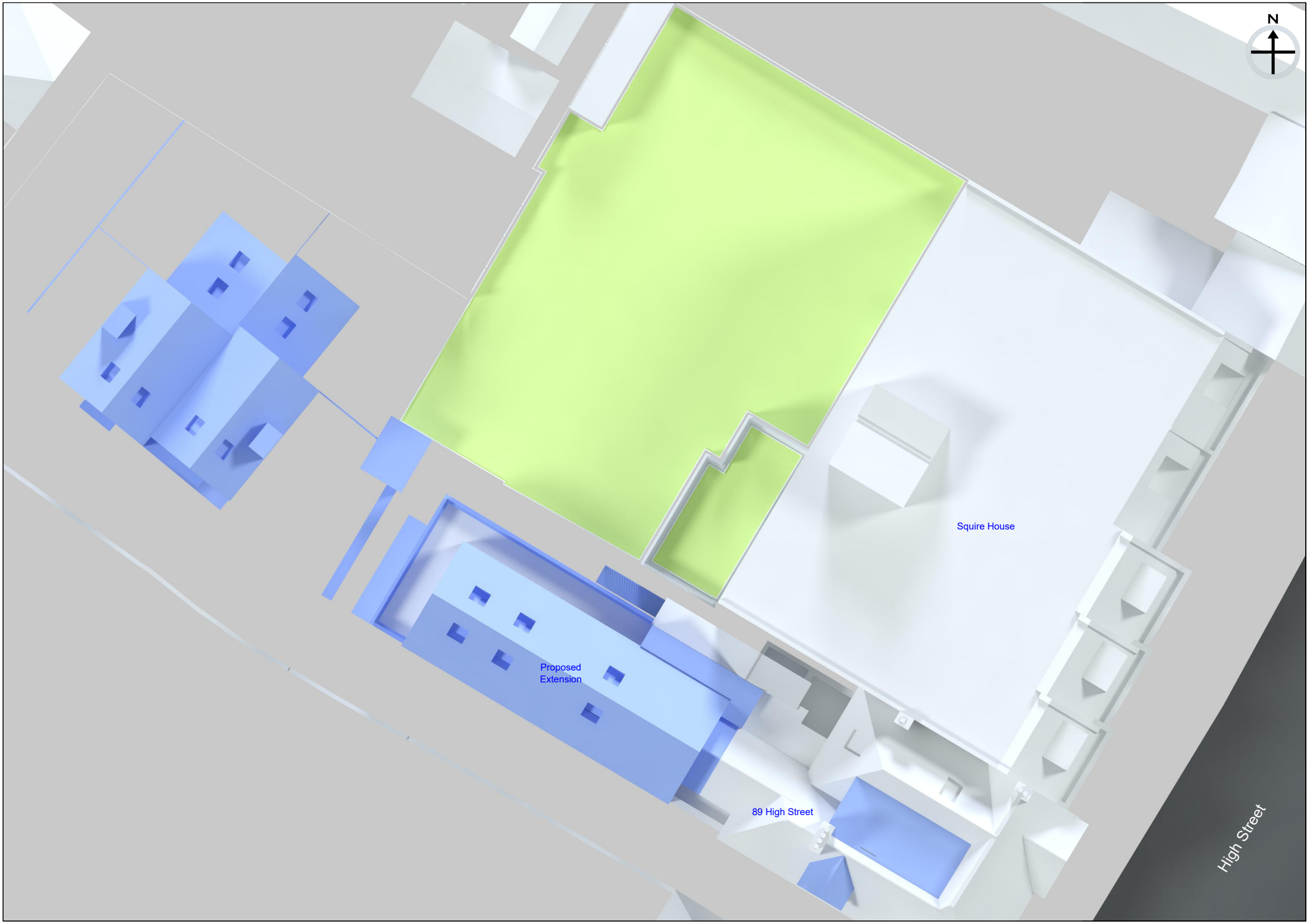
5.1.5 We have undertaken the assessment following the guidelines of the RICS publication "Surveying Safely". Where limited access or information is available, assumptions will have been made which may affect the conclusions reached in this report. For example, where neighbouring room uses are not known, we will either make a reasonable assumption regarding the use based on external observations, or take the prudent approach of assuming the room is of domestic purposes.

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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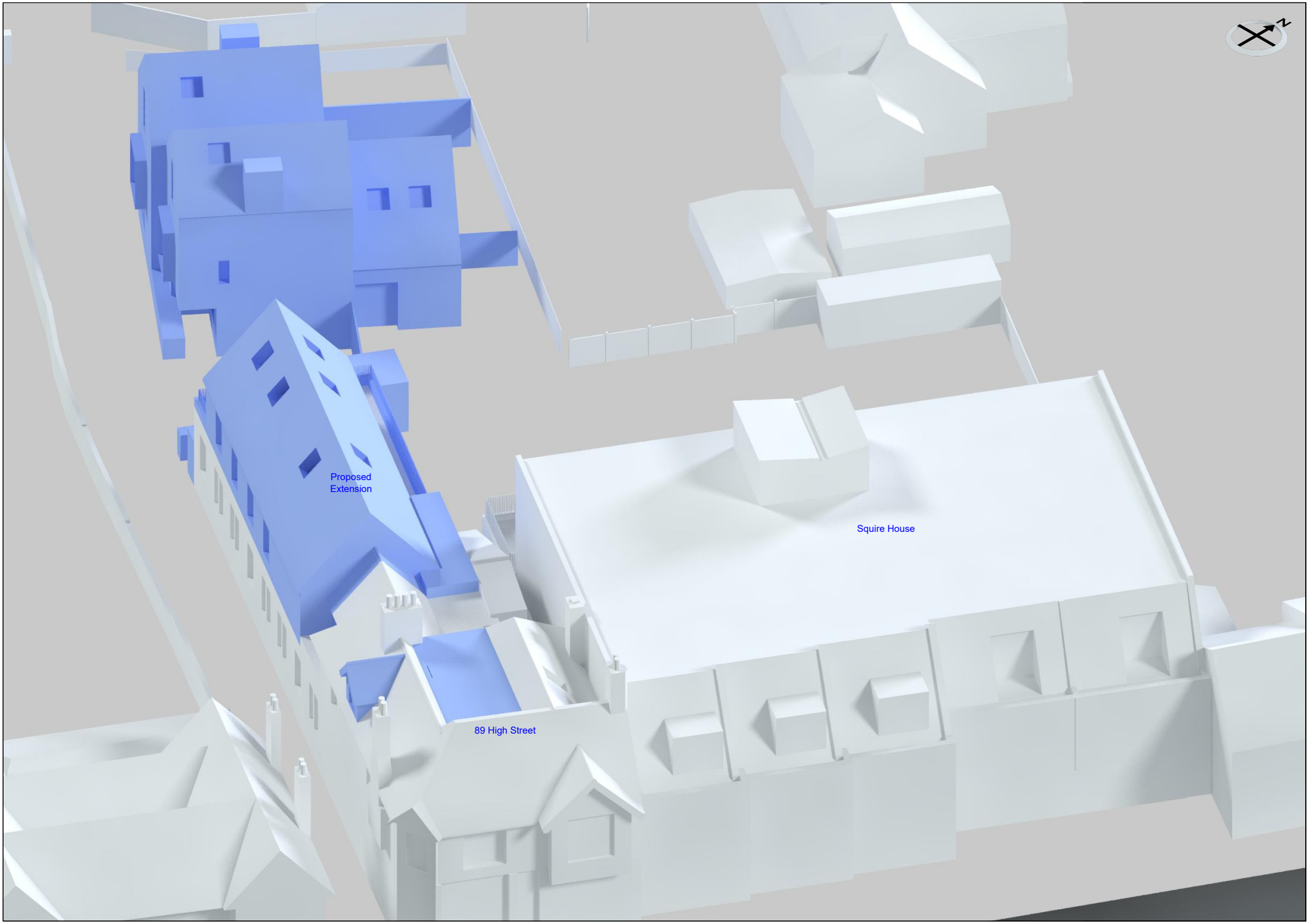
Proposed
Extension
89 High Street
High Street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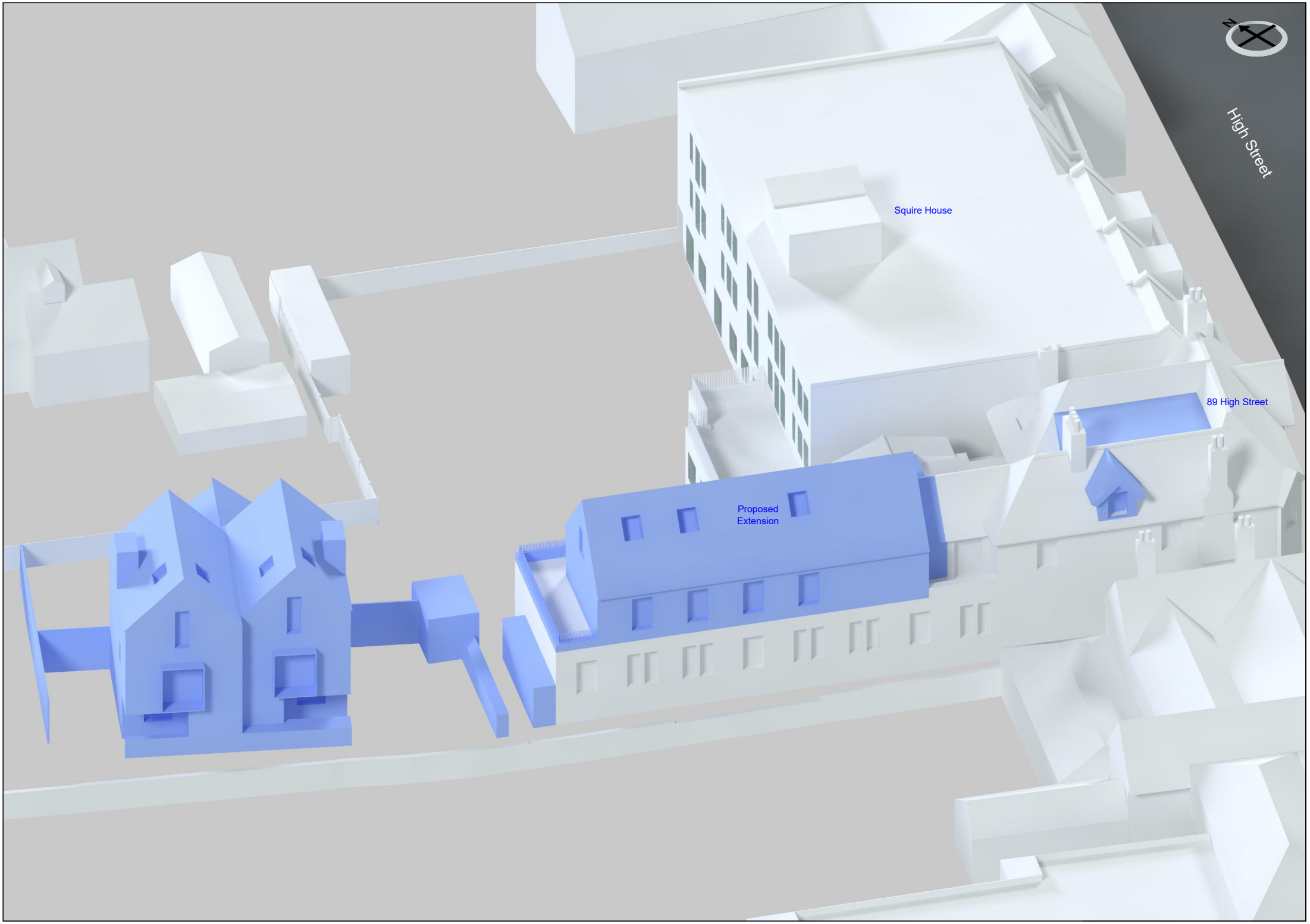
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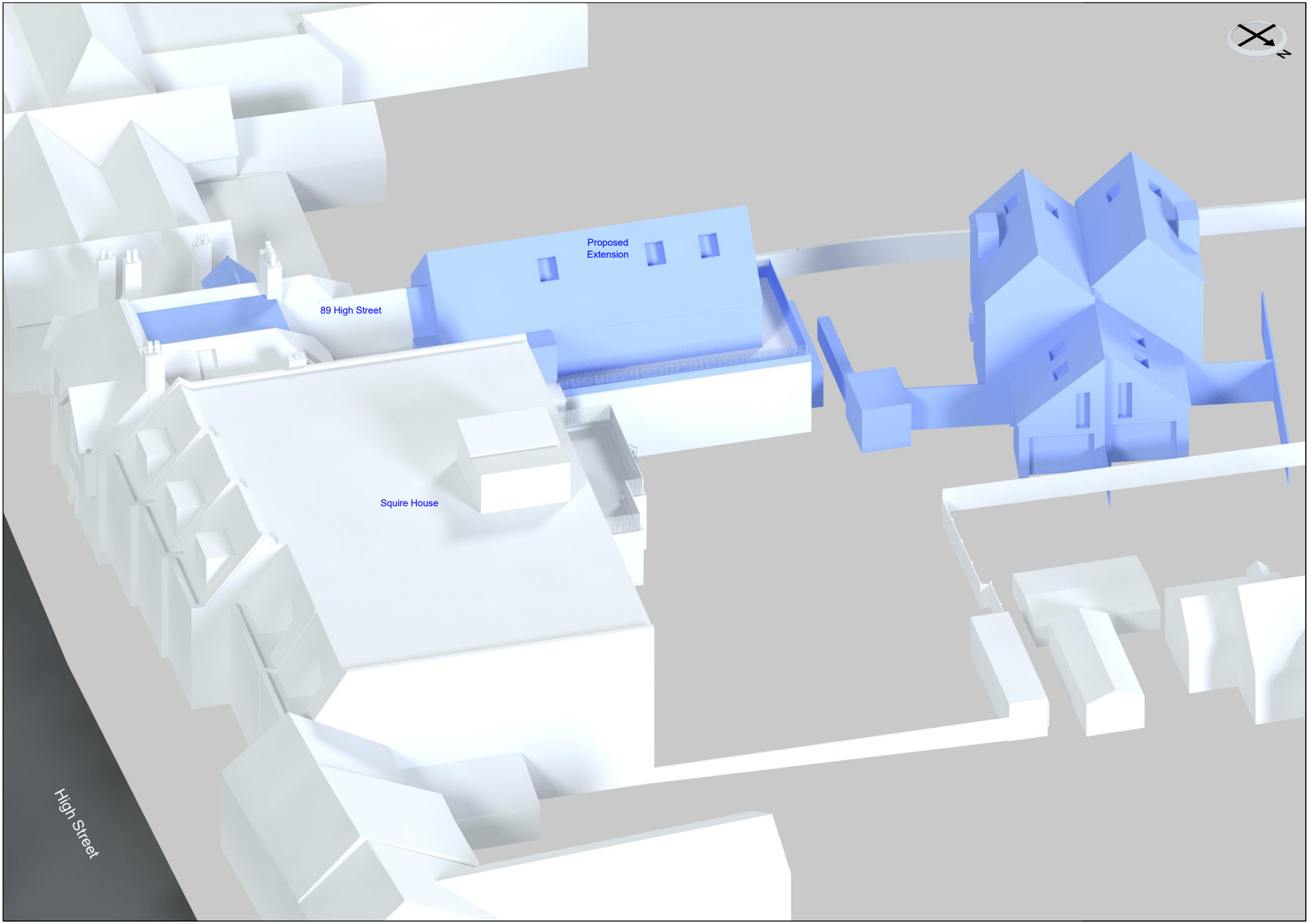
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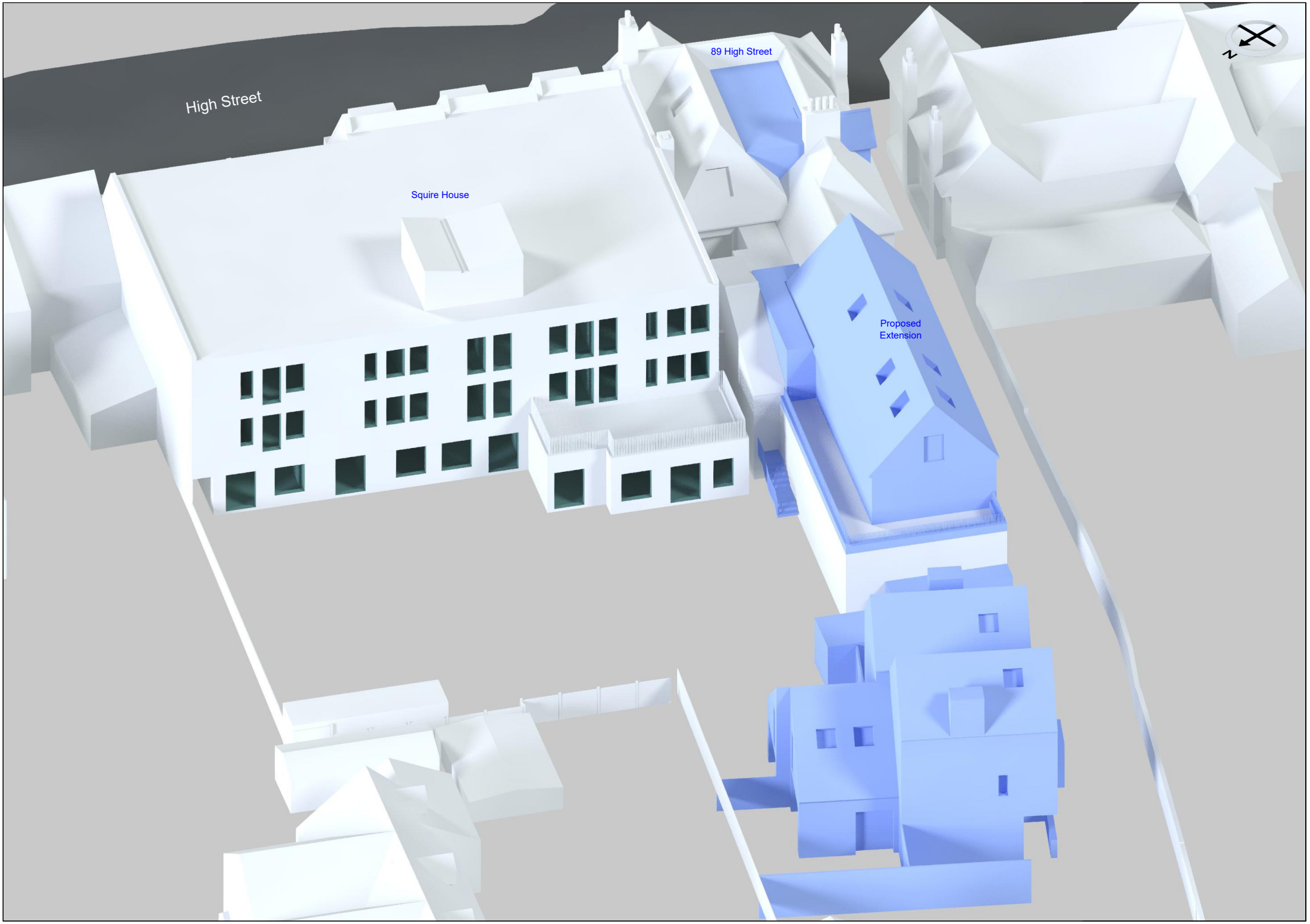
High Street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Squire House
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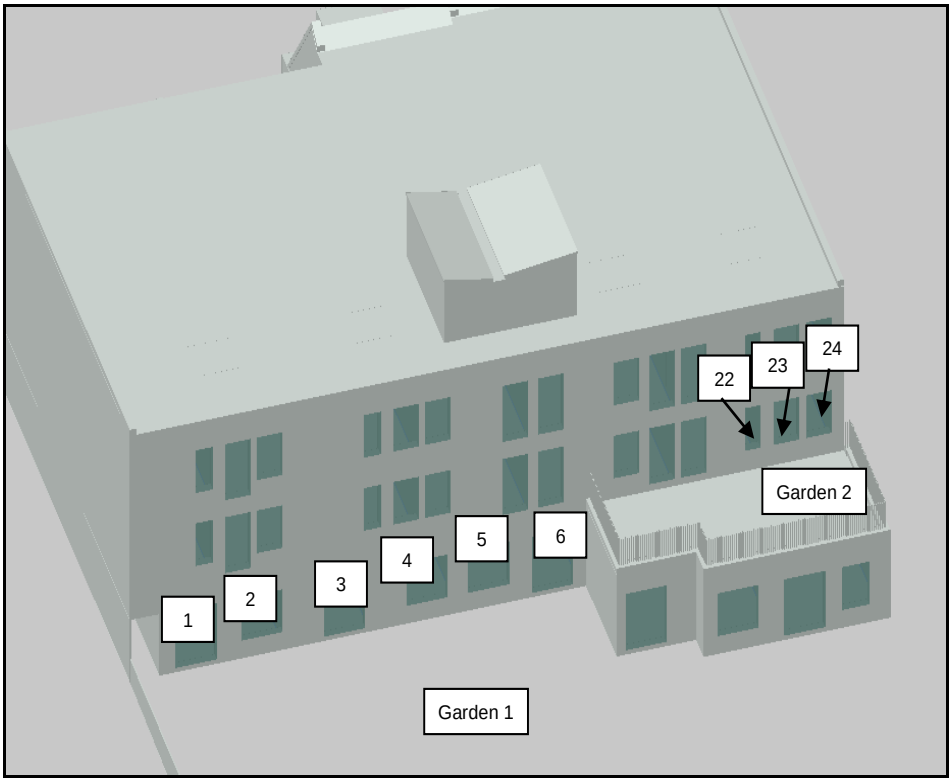
Neighbouring Windows



Squire House

Squire House

Squire House

APPENDIX 2

DAYLIGHT AND SUNLIGHT RESULTS

Appendix 2 - Vertical Sky Component

89 High Street, Billericay, Essex CM12 9AT

Reference	Room Use	Vertical Sky Component			
		Before	After	Loss	Ratio
Squire House					
Ground Floor					
Window 1	Living/Dining/Kitchen	36.7%	36.0%	0.7%	0.98
Window 2	Living/Dining/Kitchen	36.3%	35.6%	0.7%	0.98
Window 3	Bedroom	36.0%	35.2%	0.8%	0.98
Window 4	Bedroom	35.0%	34.2%	0.8%	0.98
Window 5	Living/Dining/Kitchen	33.0%	32.2%	0.8%	0.98
Window 6	Living/Dining/Kitchen	25.7%	25.7%	0.0%	1.0
Window 7	Bedroom	32.4%	31.0%	1.4%	0.96
Window 8	Bedroom	32.0%	29.6%	2.4%	0.93
Window 9	Living/Dining/Kitchen	30.9%	28.4%	2.5%	0.92
Window 10	Living/Dining/Kitchen	27.9%	26.5%	1.4%	0.95
First Floor					
Window 11	Bedroom	38.2%	37.7%	0.5%	0.99
Window 12	Living/Dining/Kitchen	38.0%	37.5%	0.5%	0.99
Window 13	Living/Dining/Kitchen	38.1%	37.5%	0.6%	0.98
Window 14	Bedroom	37.8%	37.1%	0.7%	0.98
Window 15	Bedroom	37.8%	36.9%	0.9%	0.98
Window 16	Living/Dining/Kitchen	37.7%	36.7%	1.0%	0.97
Window 17	Living/Dining/Kitchen	37.4%	36.1%	1.3%	0.97
Window 18	Bedroom/Living	37.3%	35.8%	1.5%	0.96
Window 19	Bedroom/Living	37.4%	35.4%	2.0%	0.95
Window 20	Bedroom/Living	37.1%	34.8%	2.3%	0.94
Window 21	Living/Dining	37.1%	34.4%	2.7%	0.93
Window 22	Living/Dining	37.3%	33.9%	3.4%	0.91
Window 23	Bedroom	37.3%	33.2%	4.1%	0.89
Window 24	Bedroom	37.2%	32.4%	4.8%	0.87
Second Floor					
Window 25	Bedroom	39.0%	38.8%	0.2%	0.99
Window 26	Living/Dining/Kitchen	38.9%	38.7%	0.2%	0.99
Window 27	Living/Dining/Kitchen	39.0%	38.8%	0.2%	0.99
Window 28	Bedroom	38.9%	38.5%	0.4%	0.99
Window 29	Bedroom	38.8%	38.5%	0.3%	0.99
Window 30	Living/Dining/Kitchen	38.8%	38.4%	0.4%	0.99
Window 31	Living/Dining/Kitchen	38.6%	38.0%	0.6%	0.98
Window 32	Bedroom/Living	38.6%	37.9%	0.7%	0.98
Window 33	Bedroom/Living	38.6%	37.8%	0.8%	0.98
Window 34	Bedroom/Living	38.5%	37.5%	1.0%	0.97
Window 35	Living/Dining	38.5%	37.3%	1.2%	0.97
Window 36	Living/Dining	38.6%	37.1%	1.5%	0.96
Window 37	Bedroom	38.6%	36.8%	1.8%	0.95
Window 38	Bedroom	38.6%	36.4%	2.2%	0.94

Appendix 2 - Daylight Distribution

89 High Street, Billericay, Essex CM12 9AT

Reference	Room Use	Daylight Distribution			
		Before	After	Loss	Ratio
Squire House					
Ground Floor					
Windows 1 & 2	Living/Dining/Kitchen	99%	98%	1.0%	0.99
Window 3	Bedroom	98%	95%	3.0%	0.97
Window 4	Bedroom	99%	98%	1.0%	0.99
Windows 5 & 6	Living/Dining/Kitchen	99%	97%	2.0%	0.98
Window 7	Bedroom	77%	76%	1.0%	0.99
Window 8	Bedroom	86%	84%	2.0%	0.98
Windows 9 & 10	Living/Dining/Kitchen	96%	90%	6.0%	0.94
First Floor					
Window 11	Bedroom	74%	74%	0.0%	1.0
Windows 12 & 13	Living/Dining/Kitchen	94%	94%	0.0%	1.0
Windows 14 & 15	Bedroom	96%	96%	0.0%	1.0
Windows 16 & 17	Living/Dining/Kitchen	95%	95%	0.0%	1.0
Windows 18 to 20	Bedroom/Living	98%	98%	0.0%	1.0
Windows 21 & 22	Living/Dining	98%	98%	0.0%	1.0
Windows 23 & 24	Bedroom	94%	94%	0.0%	1.0
Second Floor					
Window 25	Bedroom	75%	75%	0.0%	1.0
Windows 26 & 27	Living/Dining/Kitchen	95%	95%	0.0%	1.0
Windows 28 & 29	Bedroom	96%	96%	0.0%	1.0
Windows 30 & 31	Living/Dining/Kitchen	95%	95%	0.0%	1.0
Windows 32 to 34	Bedroom/Living	98%	98%	0.0%	1.0
Windows 35 & 36	Living/Dining	98%	98%	0.0%	1.0
Windows 37 & 38	Bedroom	96%	96%	0.0%	1.0

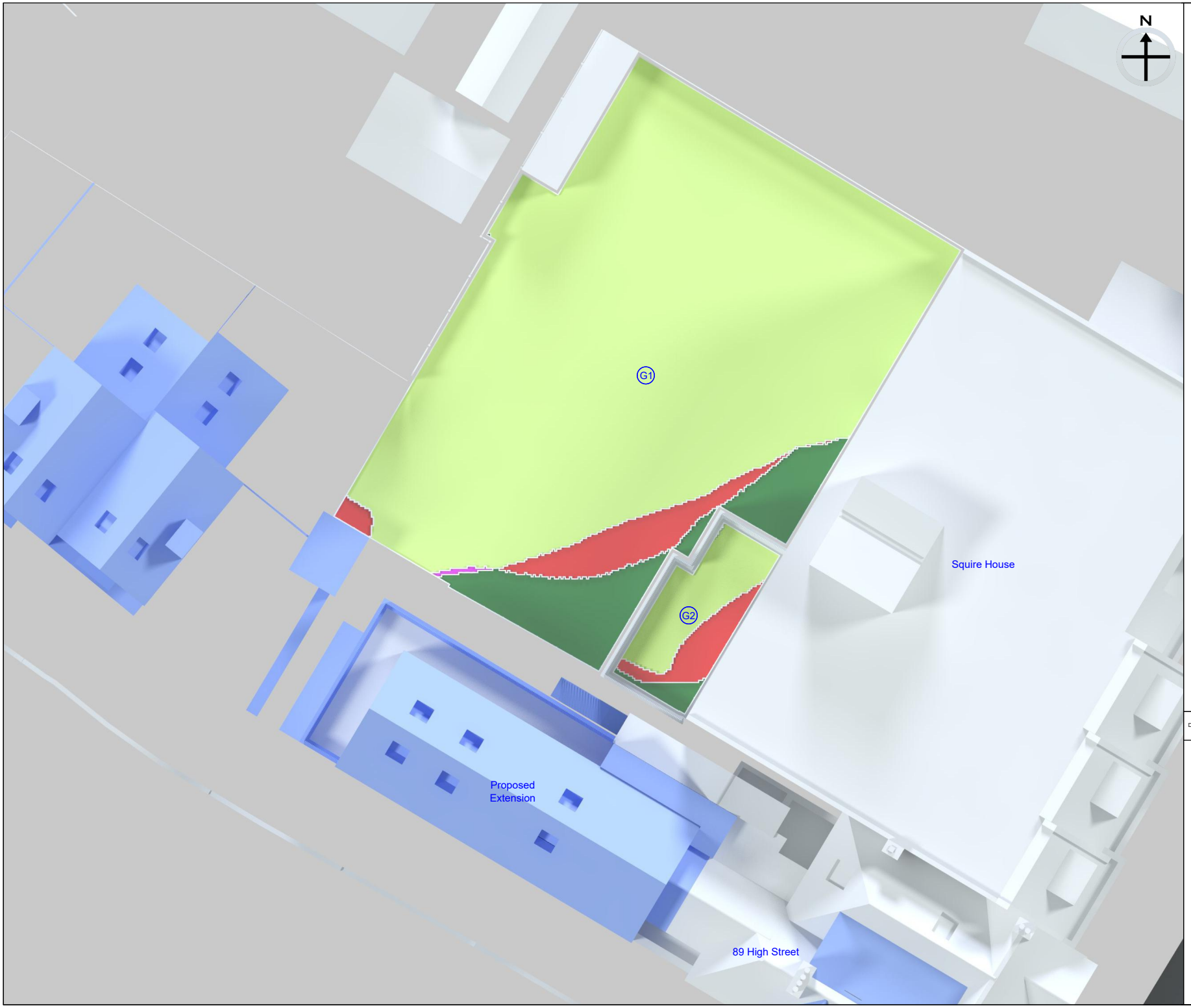
Appendix 2 - Overshadowing to Gardens and Open Spaces

89 High Street, Billericay, Essex CM12 9AT

Reference	Total Area		Area receiving at least two hours of sunlight on 21st March									
			Before			After			Loss			Ratio
Squire House												
Ground Floor												
Garden 1	439.25	m2	398.71	m2	91%	380.1	m2	87%	18.6	m2	4%	0.95
First Floor												
Garden 2	31.42	m2	28.47	m2	91%	19.71	m2	63%	8.76	m2	28%	0.69

APPENDIX 3

OVERSHADOWING TO GARDENS AND OPEN SPACES



Key

- Receives under two hours sunlight on 21st March before and after the development.
- Receives under two hours sunlight on 21st March before the development; but will receive at least two hours sunlight on 21st March after the development (light improved).
- Receives at least two hours sunlight on 21st March before the development; but will receive under two hours sunlight after the development (light loss).
- Receives at least two hours sunlight on 21st March before and after the development.
- G1 Neighbouring Gardens and Amenity Areas

Drawing Title: Appendix 3 - Overshadowing to Gardens and Open Spaces

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