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Client: Sega Investments Limited

Assessment for the Provision Daylight and Sunlight within the Development at
296 Joel St, Pinner HA5 2PY

July 2025

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Contents Amendment Record

This report has been issued and amended as follows:

Revision	Description	Date	Written by	Checked by
0	Draft Issue	27th June 2025	LH	NAV
1	Final Issue	8th July 2025	LH	NAV

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Contents

1 Background and Scope of Appraisal

1.1 Study Objectives

Herrington Consulting has been commissioned by Sega Investments Limited to analyse and quantify the provision of natural daylight and sunlight to the habitable rooms within the proposed development at 296 Joel St, Pinner HA5 2PY.

1.2 Site Location

The site is situated in the area of Pinner in north-west London, and is located within the administrative boundaries of the London Borough of Hillingdon. The location of the site is shown in Figure 1.1 and the site plan included in Appendix A.1 gives a more detailed reference to the site location and layout.

Figure 1.1 - Location map (contains Ordnance Survey data © Crown copyright and database rights 2025)

1.3 The Development

The proposal for development is convert the existing offices to 8 residential units. Drawings of the proposed scheme are included in Appendix A.1 and a 3D rendered image of the development proposals is shown in Figure 1.2.

It is understood that the applicant will be submitting the scheme for Prior Approval. Therefore, the plans for this scenario have been assessed. In addition, it is understood that there will be a second full application running concurrently with the Prior Approval application. This scheme will implement changes improving the daylight and sunlight received by the proposed habitable rooms. Therefore, this scheme has also been considered.

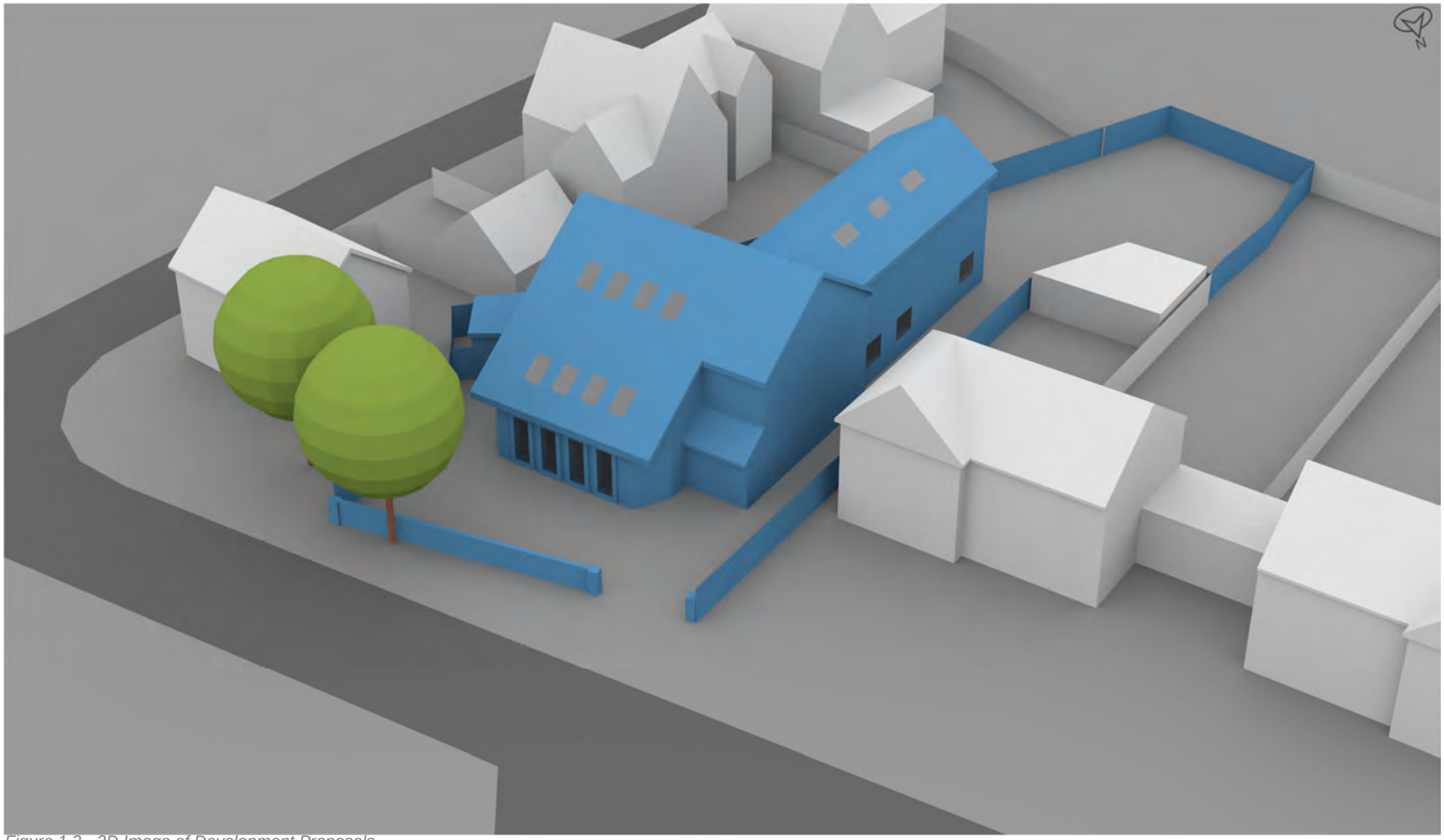


Figure 1.2 - 3D Image of Development Proposals

2 Policy and Guidance

2.1 National Planning Policy

National Planning Policy Framework (December 2024, as amended February 2025)

Paragraph 130 on 'Achieving appropriate densities' states that *"c) 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)."*

2.2 Regional Planning Policy

The London Plan – The Spatial Development Strategy for Greater London – (March 2021)

Policy D6 on 'Housing quality and standards' states that *"C) Housing development should maximise the provision of dual aspect dwellings and normally avoid the provision of single aspect dwellings. A single aspect dwelling should only be provided where it is considered a more appropriate design solution to meet the requirements of Part B in Policy D3 Optimising site capacity through the design-led approach than a dual aspect dwelling, and it can be demonstrated that it will have adequate passive ventilation, daylight and privacy, and avoid overheating."*

The London Plan – Supplementary Planning Guidance – Housing (March 2016)

Policy 7.6Bd on 'Standards for privacy, daylight and sunlight' states that *"An appropriate degree of flexibility needs to be applied when using BRE guidelines to assess the daylight and sunlight impacts of new development on surrounding properties, as well as within new developments themselves. Guidelines should be applied sensitively to higher density development, especially in opportunity areas, town centres, large sites and accessible locations, where BRE advice suggests considering the use of alternative targets."*

Similarly, Paragraph 2.3.47 on 'Daylight and Sunlight' includes the following statement *"Quantitative standards on daylight and sunlight should not be applied rigidly, without carefully considering the location and context and standards experienced in broadly comparable housing typologies in London."*

Standard 32 on 'Daylight and Sunlight' states that *"All homes should provide for direct sunlight to enter at least one habitable room for part of the day. Living areas and kitchen dining spaces should preferably receive direct sunlight."*

2.3 Local Planning Policy

Local Plan Part 2 - Development Management Policies - January 2020

Policy DMHB17: Residential Amenity "*The Council will seek to ensure that new development within residential areas complements or improves the amenity and character of the area. Planning permission will not be granted for new buildings or extensions which by reason of their siting, bulk and proximity, would result in a significant loss of residential amenity. Buildings should be laid out so that adequate daylight and sunlight can penetrate into and between them and the*

amenities of existing houses are safeguarded. Planning permission will not be granted for new buildings or extensions that create unacceptable levels of noise, vibration, artificial light, odour, fumes or dust pollution."

The section 'Residential Density' states in Paragraph 5.65 that *"A habitable room is defined as a room within a dwelling, the primary use of which is for living, sleeping or dining. This definition includes living rooms, dining rooms, bedrooms, studies and conservatories but excludes halls, corridors, bathrooms and lavatories. For the purpose of this policy, kitchens which provide space for dining and have windows, will be considered habitable rooms and should be fully considered as part of the assessment of amenity impacts."*

2.4 The Town and Country Planning (General Permitted Development etc.) (England) (Amendment) Order 2021

Legislation on permitted development related to Class MA – *"Development consisting of a change of use of a building and any land within its curtilage from a use falling within Class E (commercial, business and service) of Schedule 2 to the Use Classes Order to a use falling within Class C3 (dwellinghouses) of Schedule 1 to that Order"* states in conditions MA.2. that *"(1) Development under Class MA is permitted subject to the following conditions… (f) the provision of adequate natural light in all habitable rooms of the dwellinghouses."*

2.5 Best Practice Guidance

In the absence of official national planning guidance/legislation on daylight and sunlight, the most recognised guidance document is published by the Building Research Establishment and entitled 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice', Third Edition, 2022; herein referred to as the '**BRE Guidelines**'.

The BRE Guidelines are not mandatory and themselves state that they should not be used as an instrument of planning policy, however in practice they are heavily relied upon as they provide a good guide to approach, methodology and evaluation of daylight and sunlight impacts.

In conjunction with the BRE Guidelines, further guidance is given within **BS EN 17037:2018 - Daylight in Buildings**. This British Standard is the UK implementation of the European Standard and supersedes BS 8206 - 2:2008.

Whilst the BRE Guidelines provide numerical guidance for daylight, sunlight and overshadowing, these criteria should not be seen as absolute targets. The document states that the intention of the guide is to aid rather than constrain the designer. The Guide is not an instrument of planning policy, therefore whilst the methods given are technically robust, it is acknowledged that some level of flexibility should be applied where appropriate.

3 Assessment Techniques

3.1 Background

Natural light refers to both daylight and sunlight. However, a distinction between these two concepts is required for the purpose of analysis and quantification of natural light in buildings. In this assessment, the term '*Daylight*' is used for natural light where the source is the sky in overcast conditions, whilst '*Sunlight*' refers specifically to the light coming directly from the sun.

The BRE Guidelines recommends two methodologies for calculating daylight provision. These are based on the assessment methods included within the BS EN 17037, but with the adaptions as set out in the UK National Annex. The two methods are described as follows.

3.2 Illuminance

The Illuminance method involves using climatic data based on the location of the site to calculate the illuminance of the specified reference plane resulting from natural daylight entering the room via windows and other glazed apertures. The analysis is carried out across an assessment grid on the reference plane for at least hourly intervals for a typical year. The objective of this test is to achieve a target illuminance (E_T), which varies depending on room use, across at least half of the reference plane. This level of illuminance needs to be achieved for at least half of the daylight hours.

For UK dwellings, there are specific recommendations for daylight provision, and these are set out in the UK National Annex. These minimum recommendations for habitable rooms acknowledge the specific challenges faced in the UK and these are used throughout this appraisal. The minimum illuminance recommendations are:

- 100 lux in bedrooms
- 150 lux in living rooms
- 200 lux in kitchens/studios

These 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. The National Annex also states that the recommended levels over 95% of a reference plane need not apply to dwellings in the UK.

3.3 Daylight Factor

In the same way as for the Illuminance method, this method calculates the Daylight Factor (DF) at each calculation point on an assessment grid within each room. DF is the illuminance at a point on the reference plane in a space, divided by the illuminance on an unobstructed horizontal surface outdoors. The CIE standard overcast sky is used, and the ratio is expressed as a percentage.

Given that the numerical modelling process uses an overcast sky model, the orientation of the window(s) serving the room has no bearing on the daylight availability. However, in order to account for different climatic conditions at different locations around the UK, the National Annex provides daylight factor targets (D_T) corresponding to the target illuminances for locations of differing

latitude. These are shown in Table 3.1 and for each assessment, the targets associated with the location with the closest latitude are adopted.

Location	DT for 100 lx (Bedroom)	DT for 150 lx (Living room)	DT for 200 lx (Kitchen)
St Peter (Jersey)	0.6%	0.9%	1.2%
London (Gatwick Airport)	0.7%	1.1%	1.4%
Birmingham	0.6%	0.9%	1.2%
Hemsby (Norfolk)	0.6%	0.9%	1.3%
Finningley (Yorkshire)	0.7%	1.0%	1.3%
Aughton (Lancashire)	0.7%	1.1%	1.4%
Belfast	0.7%	1.0%	1.4%
Leuchars (Fife)	0.7%	1.1%	1.4%
Oban	0.8%	1.1%	1.5%
Aberdeen	0.7%	1.1%	1.4%

Table 3.1 - Minimum Target Daylight Factors (DT)

The recommendations are met if the daylight factors calculated in a room meets or exceeds the specific minimum target for room type and location.

3.4 Sunlight Exposure

The BRE document provides guidance in respect of sunlight quality for new developments, stating in Paragraph 3.1.2 that *"In housing, the main requirement for sunlight is in living rooms, where it is valued at any time of the day, but especially in the afternoon. Sunlight is also required in conservatories. It is viewed as less important in bedrooms and in kitchens where people prefer it in the morning rather than the afternoon."*

The requirements for access to sunlight are set out within BS EN 17037 and this standard is adopted by the BRE Guidelines, which recommends that a space should receive a minimum of 1.5 hours of direct sunlight on the spring equinox (21st March) with cloudless conditions. The medium level of recommendation is three hours and the high level of recommendation four hours. The number of sunlight hours received by each window is calculated using specialist software described in Section 4.2.

The Guidelines state that at least one habitable room, preferably a main living room, should meet at least the minimum criterion.

For new development, and especially where existing buildings are being re-developed, it is important to acknowledge that these are aspirational targets intended to aid and not constrain the designer.

The BS EN 17037 criterion applies to rooms of all orientations, although it is recognised that if a room faces significantly north of due east or west it is unlikely to be met.

It should be noted that where rooms have more than one window, it is acceptable to sum the non-coincident sunlight hours to achieve a 'room total'. This approach is acknowledged by the BRE Guidelines and facilitates a greater understanding of the sunlight received within a room by taking into account the fact that some windows will receive sunlight at different times during the day.

3.5 Sunlight to Amenity Areas

The BRE Guidance suggests that where new development is served by amenity areas, then analysis can be undertaken to quantify the amount of sunlight these amenity areas will enjoy. Typical examples of areas that could be considered as open spaces or amenity areas are main back gardens of houses, allotments, parks and playing fields, children's playgrounds, outdoor swimming pools, sitting-out areas, such as in public squares and focal points for views, such as a group of monuments or fountains.

Sun Hours on Ground

The BRE Guidelines recommend that for a garden or amenity area to appear adequately sunlit throughout the year, at least 50% of an amenity area should receive at least 2 hours of sunlight on 21st March.

When undertaking this analysis, sunlight from an altitude of 10° or less has been ignored as this is likely to be obscured by planting and undulations in the surrounding topography. Driveways and hard standing for cars is also usually left out of the area used for this calculation. Fences or walls less than 1.5 metres high are also ignored. Front gardens which are relatively small and visible from public footpaths are omitted with only main back gardens needing to be analysed.

The Guidelines also state that *"normally, trees and shrubs need not be included, partly because their shapes are almost impossible to predict, and partly because the dappled shade of a tree is more pleasant than a deep shadow of a building."* This is especially the case for deciduous trees, which provide welcome shade in the summer whilst allowing sunlight to penetrate during the winter months.

4 Assessment Methodology

4.1 Method of Baseline Data Collation

The following data has been used to inform this study:

- OS Mastermap mapping
- Scheme drawings in AutoCAD format (Provided by USL Architects – June 2025)
- Aerial photography (Google Maps and Bing)

4.2 Numerical Modelling

The numerical analysis used in this assessment has been undertaken using the Waldrum Tools (Version 7.0.0.5) software package.

4.3 Calculation Assumptions

When assessing the Illuminance and/or Daylight Factor for internal rooms and in the absence of specific information, the parameters in Table 4.1 are assumed. The internal reflectance values have been agreed with Stirling Rose Group.

Parameter	Value
Glazing Transmittance: Double Glazed	0.68
Correction Factor for Frames and Glazing Bars	0.8
Maintenance Factor	0.92
Working Plane/ Assessment Calculation Height	0.85m
Grid Spacing	0.3m
Assessment Grid	0.3m from walls
Internal Walls Reflectance Value	0.8 (White Walls)
Internal Ceiling Reflectance Value	0.8 (White Ceilings)
Internal Flooring Reflectance Value	0.4 (Light Wood / Cream Carpet)
Exterior Walls and Obstructions Reflectance Value	0.2
Exterior Ground Reflectance Value	0.2

Table 4.1 - Assumed Calculation Parameters

4.4 Location Specific Data

In terms of latitude, the subject site is located in closest proximity to London (Gatwick Airport), and therefore climatic conditions and DF targets are set using values for this latitude.

5 Daylight Provision

5.1 Principles of Analysis

As discussed in Section 3, there are two tests for daylight; Illuminance and Daylight Factor. The Illuminance test has been applied to the habitable rooms within the development in the first instance, and the results are discussed in Section 5.2. In circumstances where the Illuminance test is not compliant, the Daylight Factor analysis has also been calculated. The detailed numerical outputs are included in Appendix A.3.

When setting the target illuminance value (E_T), it is important to account for rooms that have a shared use, as it is necessary to apply the highest target. For example, in a bedroom/sitting room in a studio apartment, the value for a living room should be used as the occupants would be spending the majority of the daylight hours using the space as a living room.

However, in the case of a living/dining/kitchen area, the BRE Guidelines fully acknowledge that in the majority of situations, the kitchen element of these open plan living areas is not treated as a habitable space. Therefore, it is acceptable to adopt the target for the dominant room use, i.e. a living room. It is, nevertheless, still necessary to include the kitchen space as part of the assessment area, albeit that the interpretation of the daylighting results reflects the non-habitable status of the kitchen area.

In addition, if a kitchen is less than 13m^2, then it is conventional for this room to be considered as a non-habitable space. In which case, such rooms are not necessarily included within the reported outputs of the model.

5.2 Assessment of the Impact of Trees

The Guidelines acknowledge that quantifying the impact that trees have on daylighting is not a straightforward process as the tree canopy only causes partial shade; additionally, the daylight radiating through it varies depending on the time of year and the amount of leaf cover.

The BRE Guidelines therefore include specific analytic procedures that allow the impact that trees have on the provision of daylight to be quantified. This is based on the optical transparency of deciduous tree crowns for winter and summer conditions, i.e. when they are in leaf or bare branch condition. These values are obtained from Table G1 of Appendix G of the BRE Guidelines. The guidelines also acknowledge that some light is reflected from the tree canopy. The reflectance values used are based on those set out in Table G2 of the BRE Guidelines.

The way in which the influence of trees is taken into account differs between the two methods of assessing daylight. The Illuminance method uses location specific climatic data at hourly intervals over a typical year. Therefore, to consider this annual cover, the tree crown has been run utilising MBS material ‘Annual’ Tree Cover.

5.3 Illuminance Analysis

Using the analytical techniques and assumptions discussed in Sections 3.2 and 4 respectively, the illuminance within each habitable room has been calculated.

For each room, the percentage of the assessment area that meets or exceeds the target illuminance value (E_T) is presented in the detailed outputs included in Appendix A.3. To meet the assessment criteria, 50% or more of the assessment area will need to achieve illuminance that meets or exceeds E_T. The results are summarised in Table 5.1 for the Permitted Development Scheme. It should be noted that where rooms are shown to have a curtain separating them, these have been assessed as two separate rooms in the first instance as a worst-case scenario.

Property	No. Rooms Tested	Rooms satisfying BRE Criteria		Rooms not satisfying BRE Criteria
		No.	%	
Flat 1	2	2	100%	0
Flat 2	3	2	67%	1
Flat 3	2	2	100%	0
Flat 4	2	2	100%	0
Flat 5	2	2	100%	0
Flat 6	2	2	100%	0
Flat 7	2	2	100%	0
Flat 8	2	2	100%	0
Total	17	16	94%	1

Table 5.1 - Results of the Illuminance Analysis (PD Scheme)

From the results in Table 5.1, it can be seen that all but one of the habitable rooms within the proposed development meet or exceed the target illuminance value (E_T) for the Permitted Development scheme.

It should be noted that the room not meeting the recommended illuminance values serves a kitchen in Flat 2. The area of this room is 6.91m^2 and according to the Metric Handbook it is recognised that if a kitchen is less than 13m^2, then it is conventional for this room to be considered as a non-habitable space.

Nevertheless, it is understood that the PD application will run concurrently with a Full Planning application to introduce additional windows/doors to the proposed flats. In the case of the kitchen in Flat 2, a rooflight is proposed as per Image 5.1 below. A secondary assessment has been undertaken to consider this rooflight, and from inspecting the results in Appendix A.3 for the full planning application, the Flat 2 kitchen will meet the Illuminance targets to 100% of its area when the additional rooflight is considered. Therefore, will be compliant with the BRE criteria.

Image 5.1 – Proposed new rooflight to Flat 2 Kitchen

When considering the proposed alterations, as the rooms are fully compliant with the Illuminance test, it has not been necessary to carry out the Daylight Factor test in this instance. This is because the UK National Annex to BS EN 17037 states that the provision of natural daylight be adequate provided that at least one of the two daylight tests are passed.

Consequently, it can be concluded that these habitable spaces will be **well lit** and will have a reduced reliance on supplementary electric lighting when the proposed alterations are considered.

6 Sunlight Provision

6.1 Sunlight Exposure Analysis

Using the assessment techniques discussed in Section 3.4, the results of the Sunlight Exposure analysis are summarised below and the detailed outputs from the assessment are presented in Appendix A.3.

The aspirational requirements of the BRE Guidelines are that living spaces should receive a minimum of 1.5 hours of direct sunlight on 21st March. From the detailed results in Appendix A.3, for the PD scheme, it can be seen that 6 out of the 8 proposed units will have a main habitable room with windows that exceed the minimum requirements set out within the BRE Guidelines. In fact, the main habitable room within these 6 units will have a 'high' rating for sunlight.

Whilst there are two units not meeting the recommended targets for sunlighting, from inspection of the results in Appendix A.3, it is evident that these are facing within 90 degrees of dure north. It is generally accepted that in the conversion of an existing building such as this, in order to make efficient use of the site it is not always possible to orientate every unit to have a window facing due south. The site has had previous consent for a permitted development conversion from office to residential (Ref: 51321/APP/2022/1861). This scheme had similar constraints and was deemed to be acceptable.

Nevertheless, as discussed in Section 5.3, it is understood that a full planning application will run concurrently with the PD scheme. In this case, the two flats not meeting the sunlight targets (Flat 1 on the ground floor and Flat 5 on the first floor) will have additional high-level window included on the southern elevation serving the LKDs. When these windows are considered, the two flats will achieve 1.5 hours and 2.8 hours of sunlight respectively (please see Appendix A.3), and therefore will be compliant with the BRE criteria.

6.2 Sun on the Ground

The BRE Guidelines acknowledge that good site layout planning for daylight and sunlight should not limit itself to providing good natural light inside buildings. Sunlight in the space between buildings has an important effect on the overall appearance and ambiance of a development. The worst situation is to have significant areas on which the sun does not shine for a large part of the year. These areas would, in general, be damp, chilly and uninviting.

The BRE Guidelines set out the following principal benefits of sunlight in the spaces between buildings:

- To provide attractive sunlit views (all year)
- To make outdoor activities, like sitting out and children's play more pleasant (mainly during the warmer months)
- To encourage plant growth (mainly in spring and summer)
- To dry out the ground, reducing moss and slime (mainly during the colder months)
- To melt frost, ice and snow (in winter)
- To dry clothes (all year)

The assessment criteria set out within the BRE Guidelines is based on the recommendation that for an amenity space to appear adequately sunlit

throughout the year, at least half of this area should receive at least two hours of sunlight on 21st March.

Inspection of the site plan shows that residents of the 8 apartments will have access to a communal area of green space, which lies to the southeast of the property. This will receive 2 hours of direct sunlight to over 50% of its area on 21st March, achieving 52%. In exceeding this target, this amenity area will deliver the principal benefits derived from sunlight, and as such will serve as a high-quality and valuable outdoor space for residents.

7 Conclusions

The detailed analysis undertaken as part of this assessment has examined the provision of natural daylight and sunlight to the habitable rooms within the proposed development at 296 Joel St, Pinner HA5 2PY. Using detailed numerical modelling applications, the Illuminance, and Sunlight Exposure have been quantified for each room.

In line with the assessment criteria prescribed by the BRE Guidelines, whilst the permitted development scheme does identify one room that will fall short of the daylight targets, when considering alterations to be made as part of the full planning application, all of the habitable rooms will meet the minimum required threshold set out in the BRE Guidelines Consequently, it can be concluded that these habitable spaces will be **well lit** and will have a reduced reliance on supplementary electric lighting, when the proposed alterations are considered.

It has also been possible to demonstrate that 6 out of the 8 units in the Permitted Development scheme will receive at least 1.5 hours of direct sunlight to the main habitable room and are therefore compliant with the BRE criteria. For the remaining two units falling short, this is due to north facing windows. However, additional windows will be included to serve this unit in a supporting full planning application, and when implemented all units will achieve the minimum sunlight targets set out in the BRE Guidelines. As a consequence of the light and additional visual interest provided by sunlight, the amenity value of these rooms will be enhanced.

Furthermore, the proposed communal amenity area identified in Section 6.2 will benefit from at least 2 hours of direct sunlight to over 50% of its area on 21st March, and as such will serve as a high-quality and valuable outdoor space for residents.

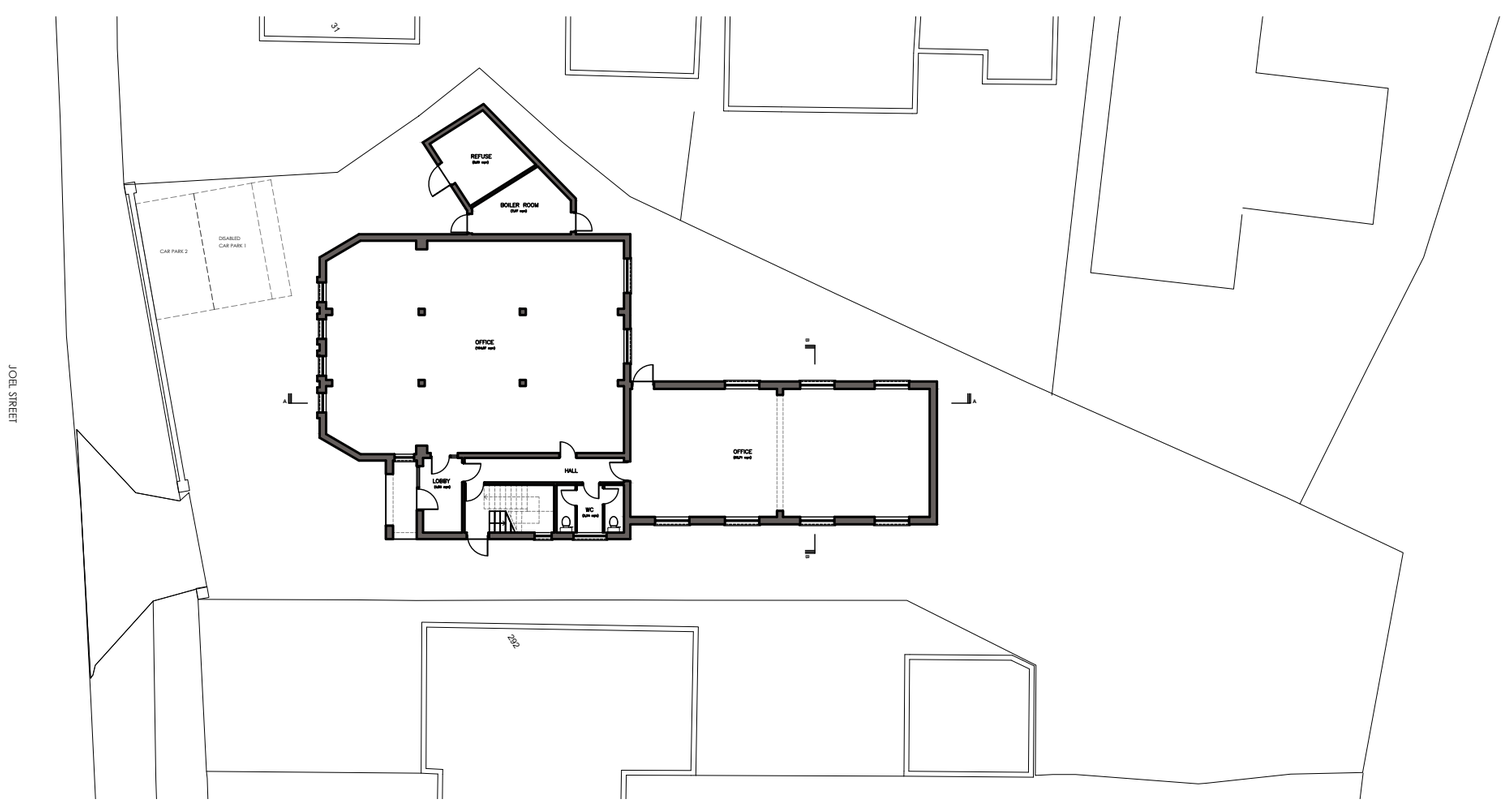
A Appendices

Appendix A.1 – Scheme Drawings

Appendix A.2 – Graphical Model Outputs

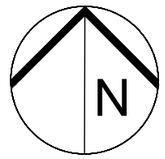
Appendix A.3 – Tabulated Results for Daylight & Sunlight Calculations

Appendix A.1 – Scheme Drawings



EXISTING BLOCK PLAN - 1:250

EXISTING SITE LOCATION PLAN 1:1250



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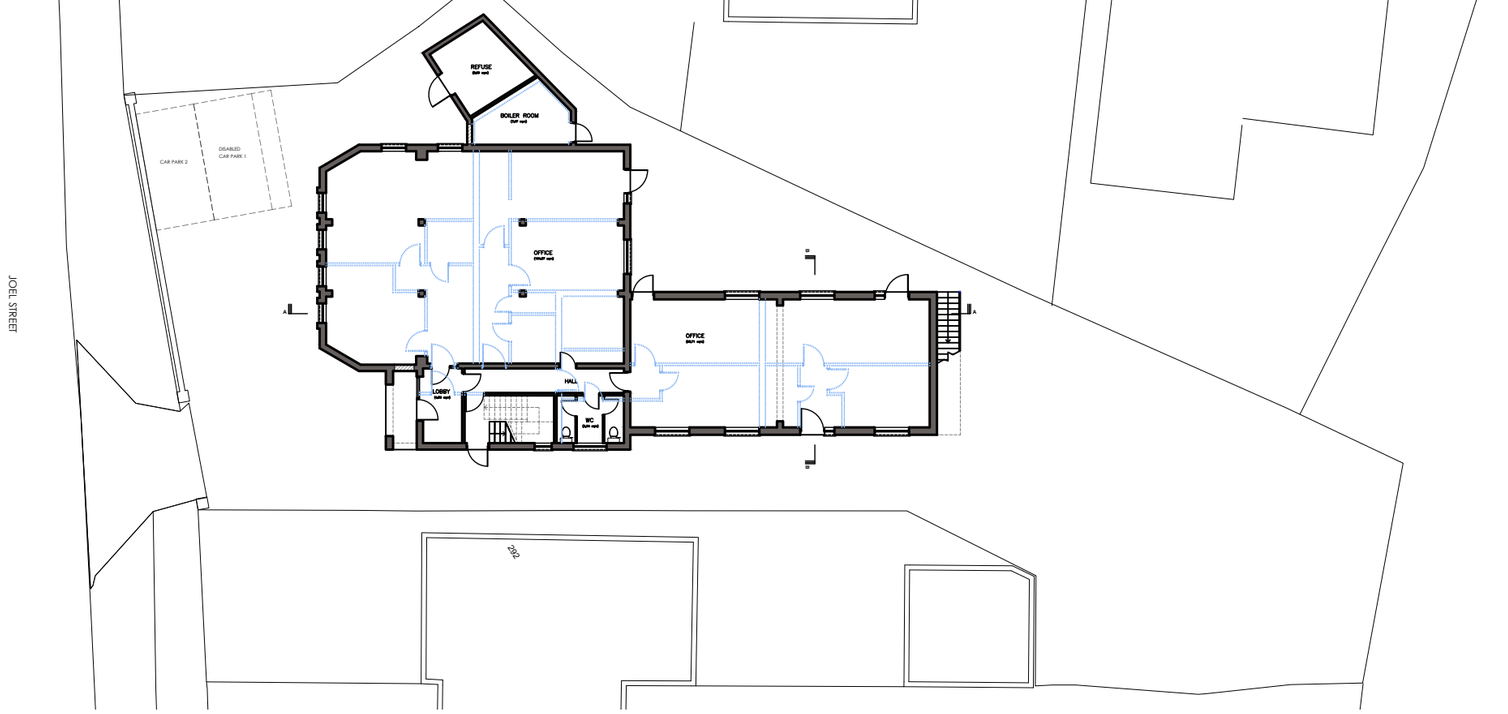
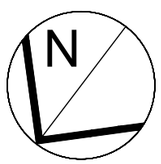


PROPOSED BLOCK PLAN - 1:250



0 5 m 10 m

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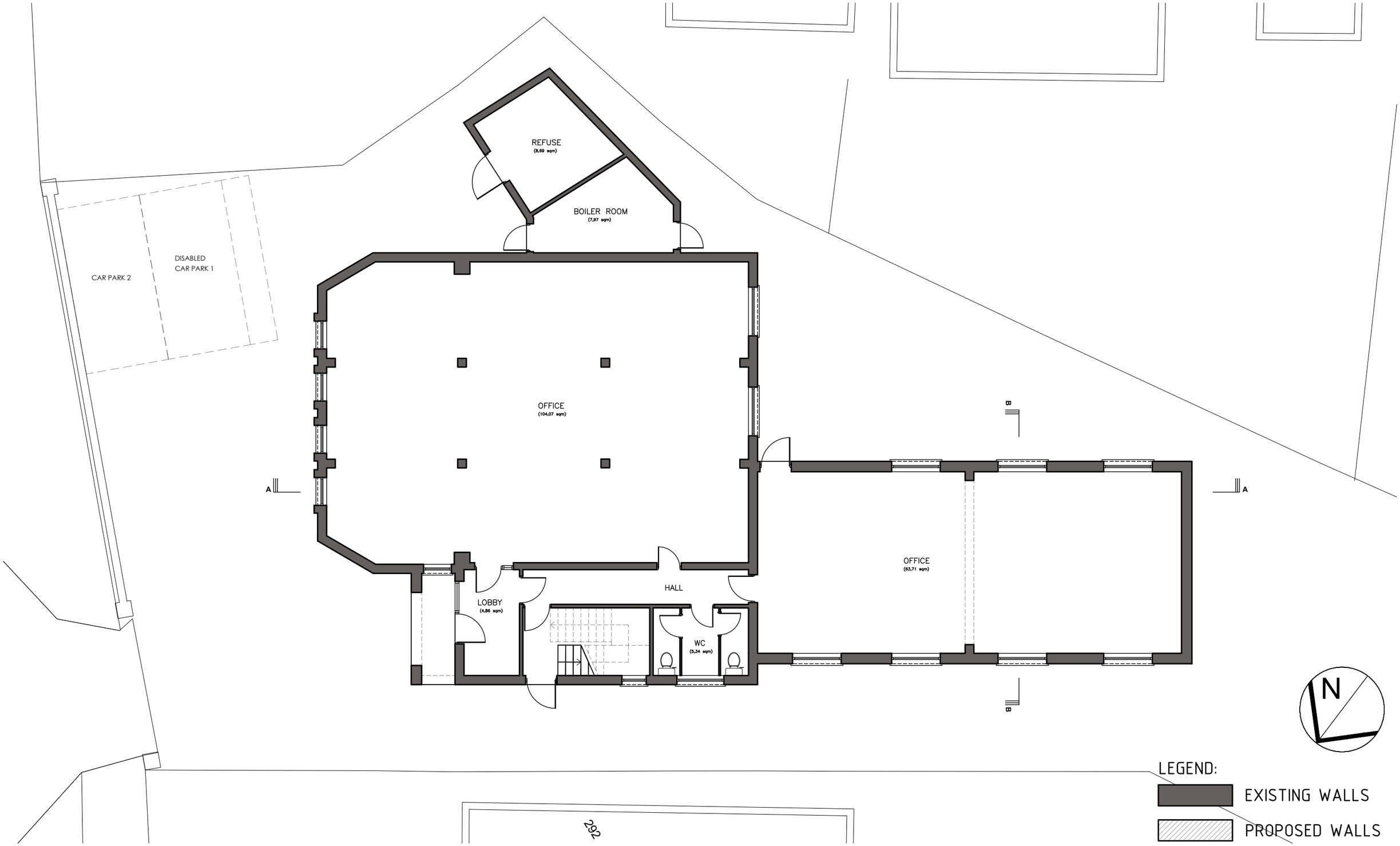

EXISTING GROUND FLOOR PLAN

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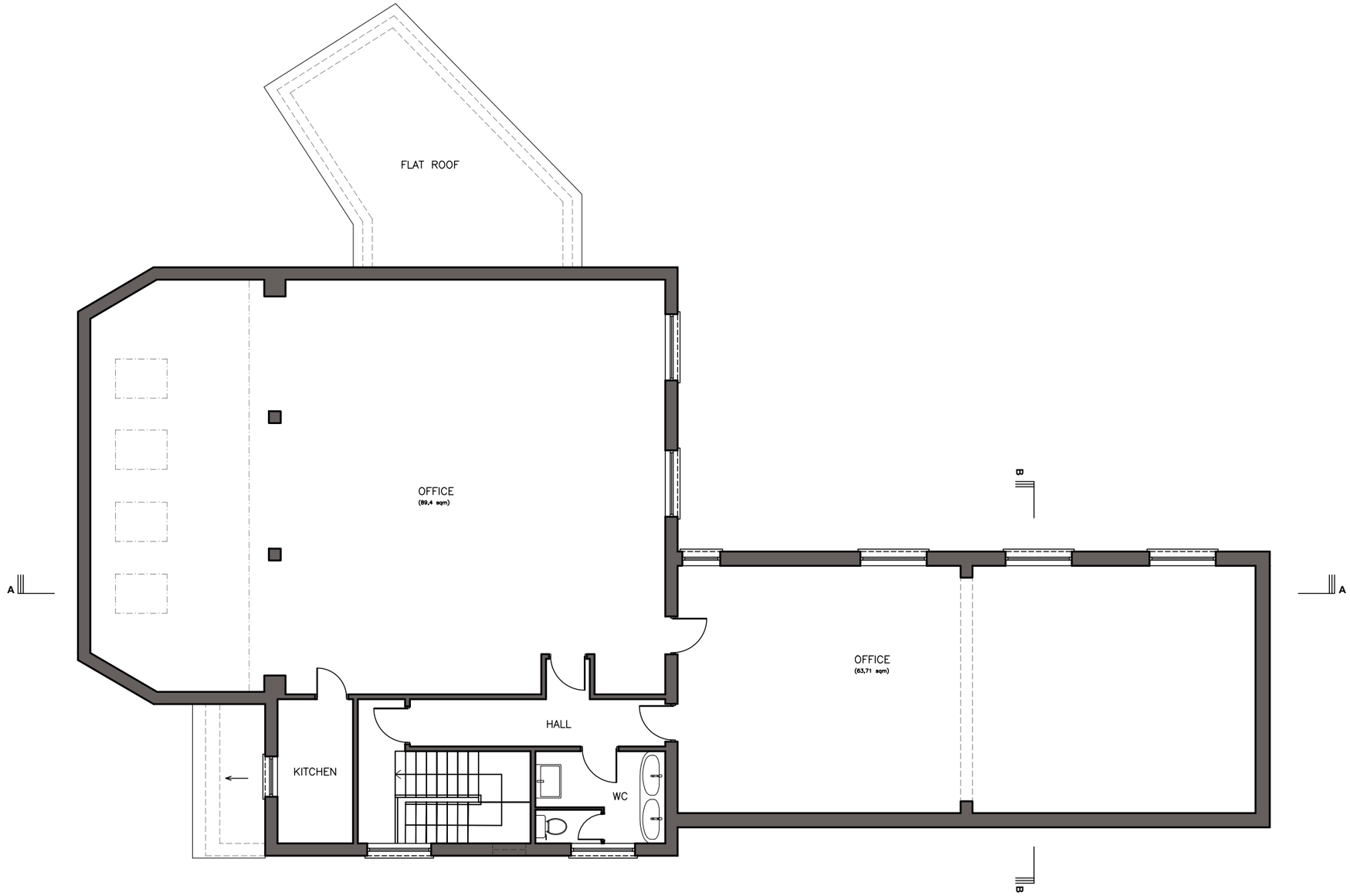
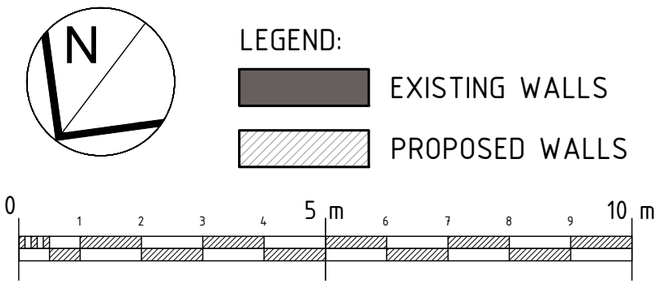


EXISTING FIRST FLOOR PLAN



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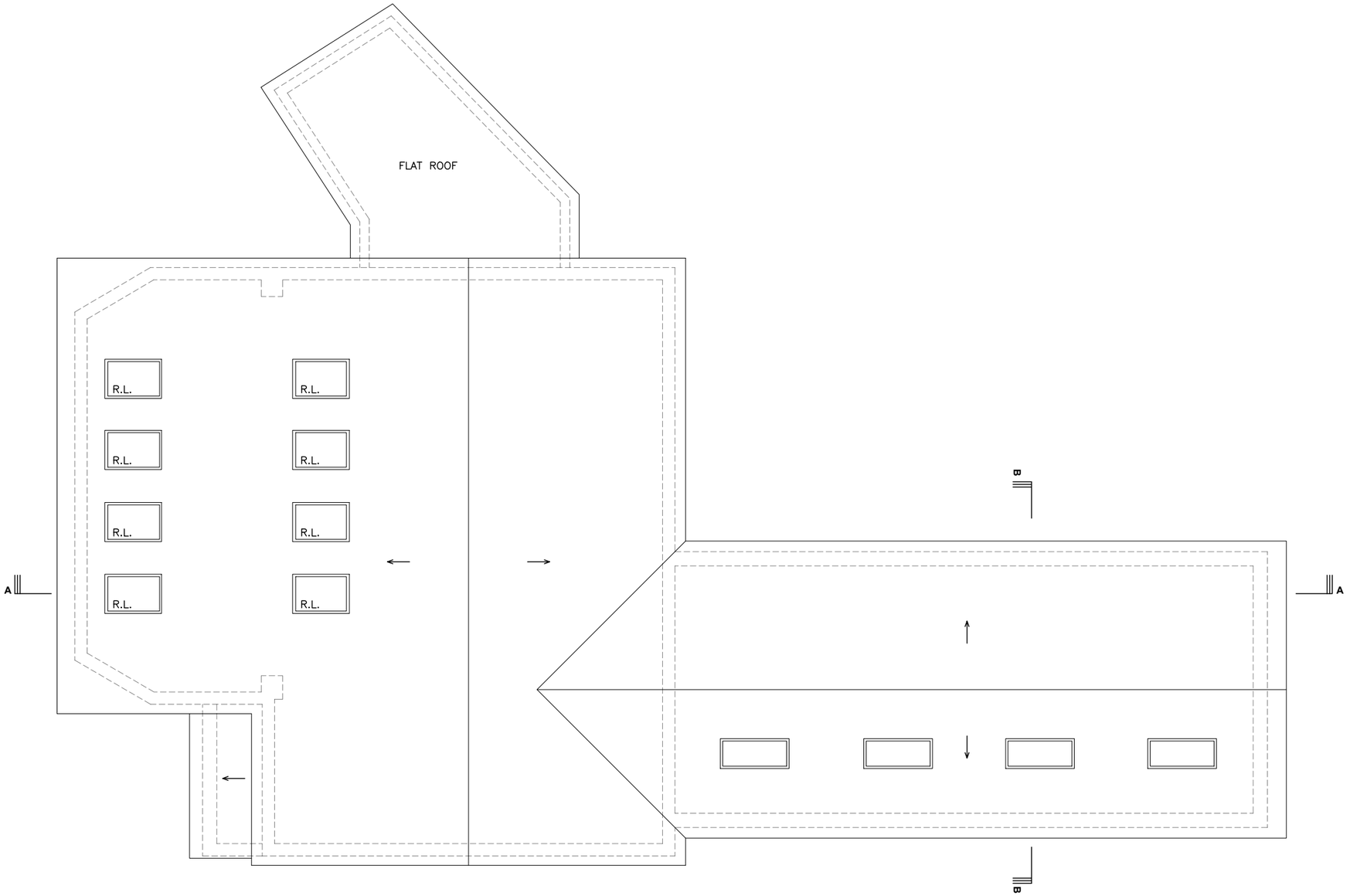
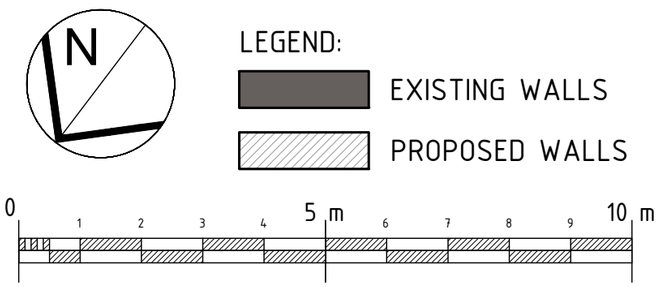


EXISTING ROOF PLAN



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				DRAWING No.: 004	27.06.2025 Rev A

EXISTING SECTION A-A

EXISTING SECTION B-B

LEGEND:

EXISTING WALLS

PROPOSED WALLS

0 1 2 3 4 5 m 6 7 8 9 10 m

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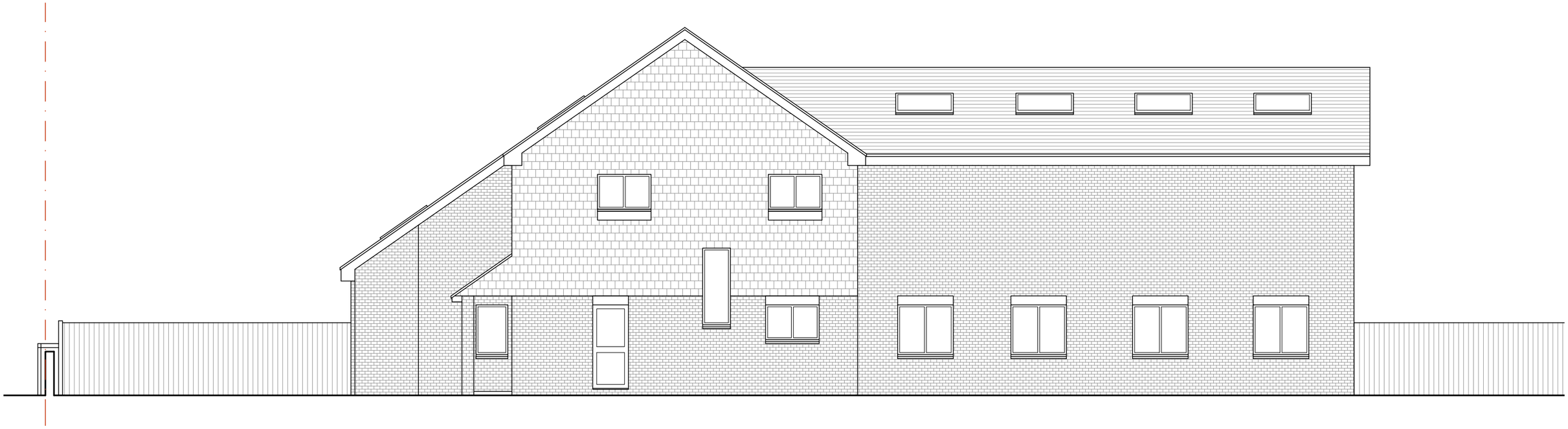
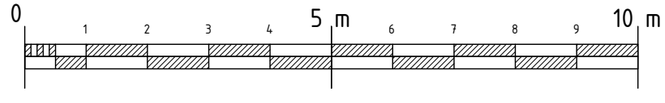


EXISTING SIDE ELEVATION

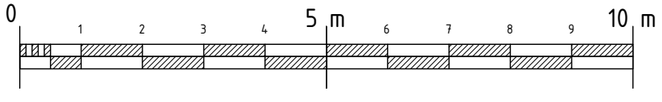
EXISTING SIDE ELEVATION



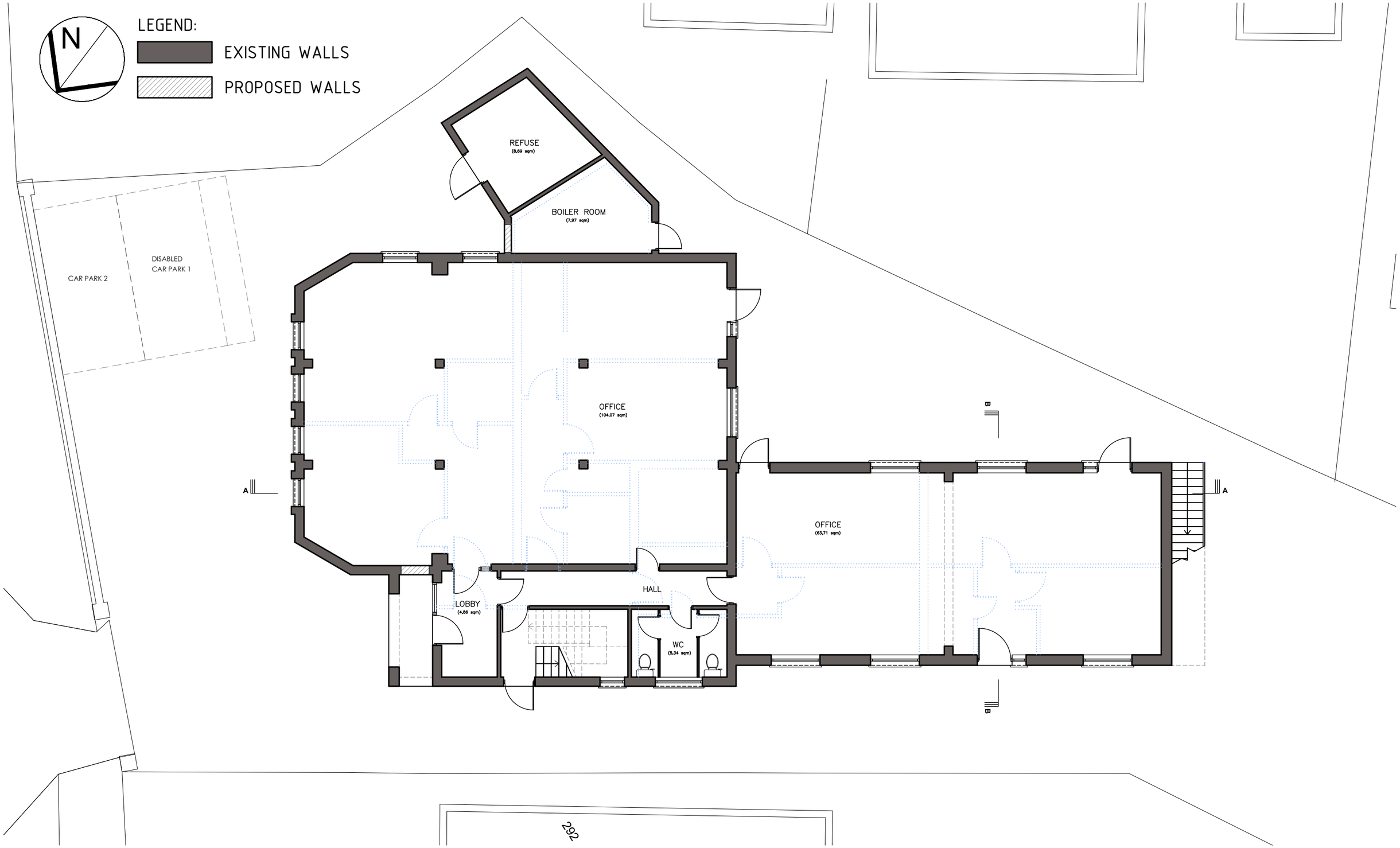
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Alteration to Elevations	Existing Side Elevations	1:100@A3	09/05/25
				DRAWING No.: 006	27.06.2025 Rev A

EXISTING FRONT ELEVATION

EXISTING REAR ELEVATION

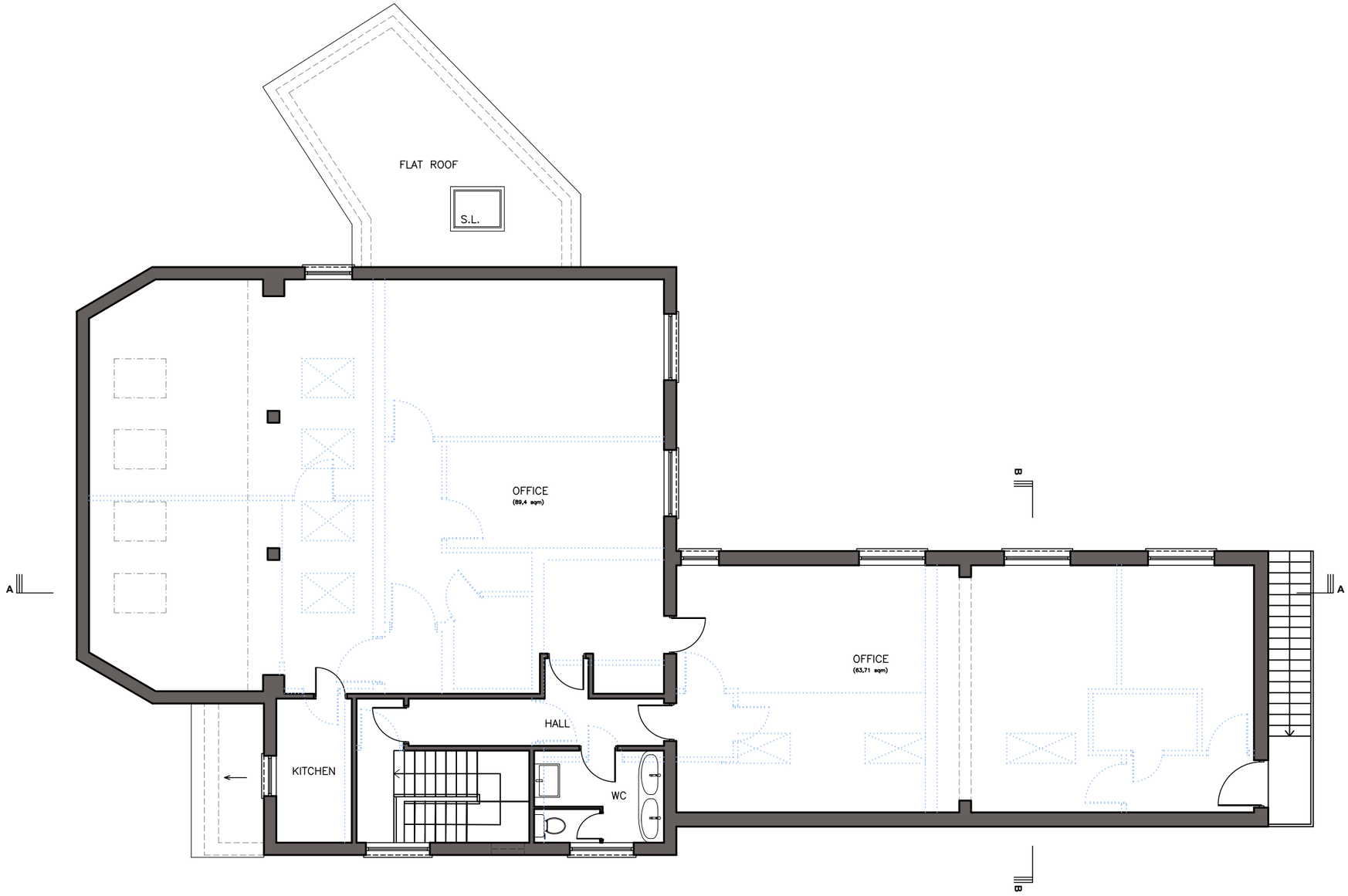


	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Alteration to Elevations	Existing Front and Rear Elevations	1:100@A3	09/05/25
				DRAWING No.: 007	27.06.2025 Rev A

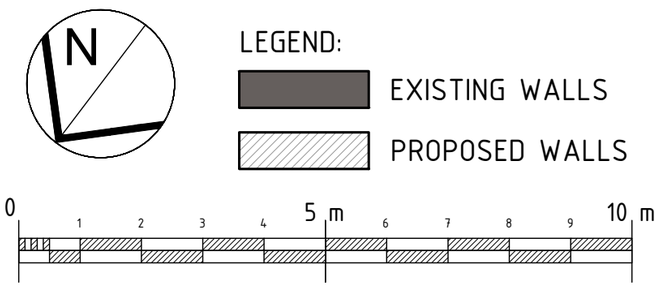


PROPOSED GROUND FLOOR PLAN

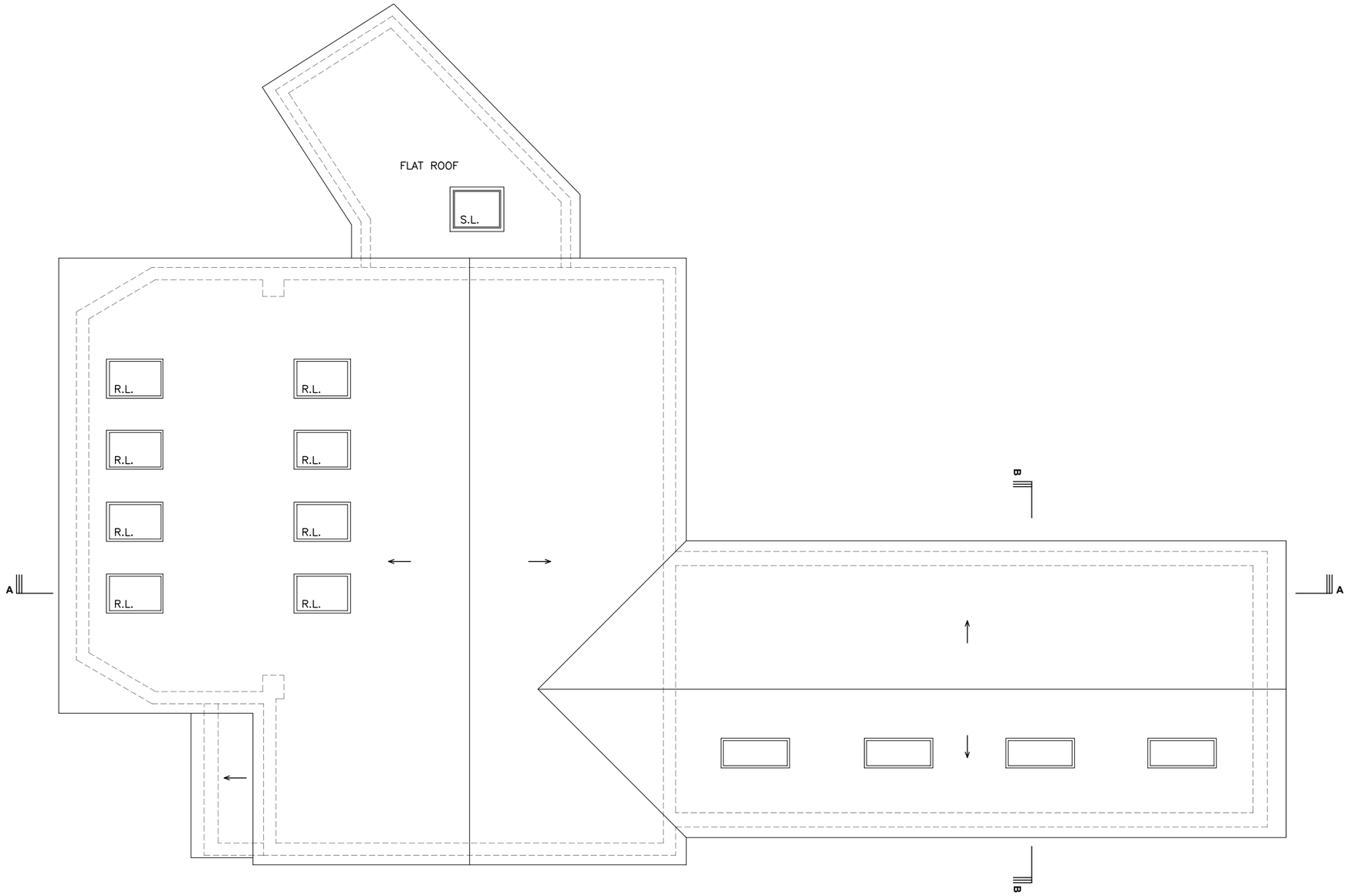
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Alteration to Elevations	Proposed Ground floor plan	1:100@A3	09/05/25
				DRAWING No.: 008	27.06.2025 Rev A



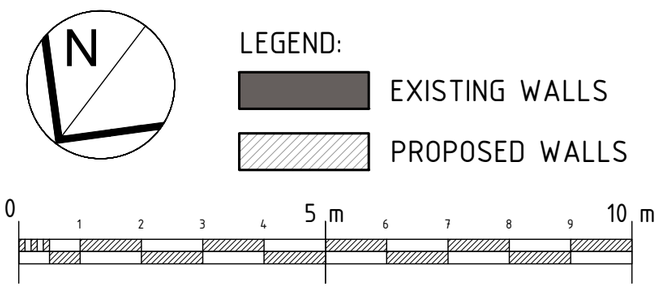
PROPOSED FIRST FLOOR PLAN



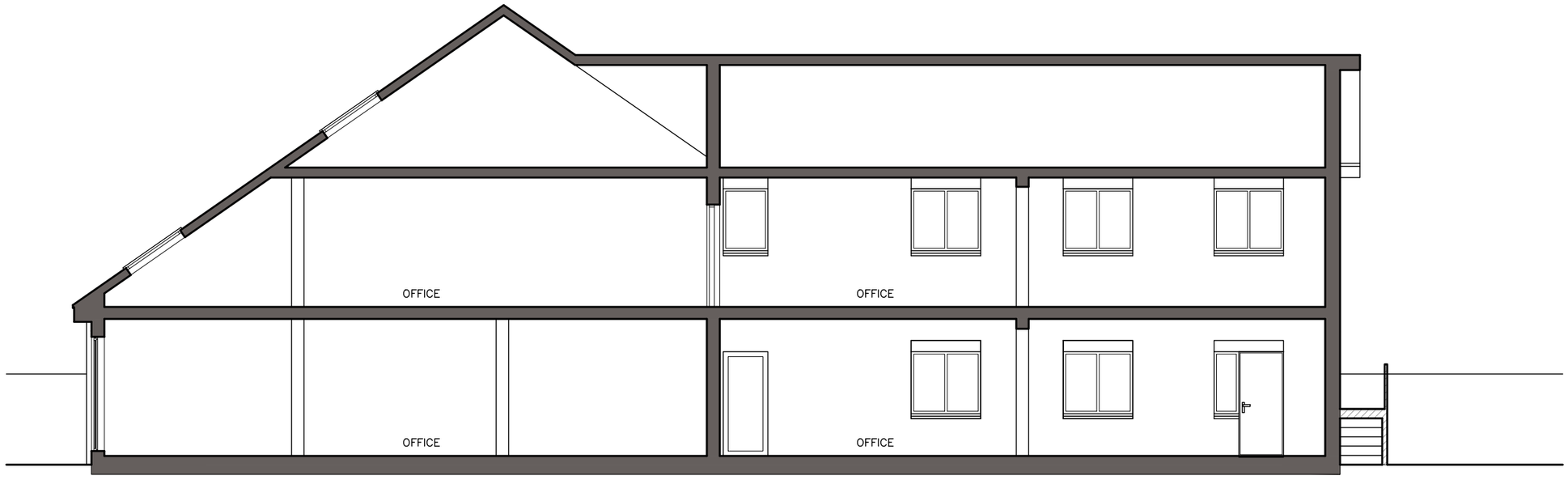
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Alteration to Elevations	Proposed First floor plan	1:100@A3	09/05/25
				DRAWING No.: 009	27.06.2025 Rev A



PROPOSED ROOF PLAN



	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Alteration to Elevations	Proposed Roof plan	1:100@A3	09/05/25
				DRAWING No.: 010	27.06.2025 Rev A



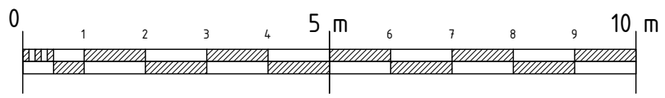
PROPOSED SECTION A-A

PROPOSED SECTION B-B

LEGEND:

EXISTING WALLS

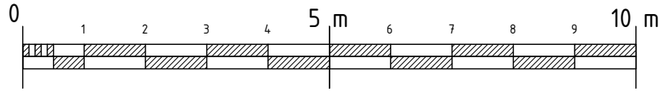
PROPOSED WALLS



	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Alteration to Elevations	Proposed Sections A-A and B-B	1:100@A3	09/05/25
				DRAWING No.: 011	27.06.2025 Rev A

PROPOSED SIDE ELEVATION

PROPOSED SIDE ELEVATION



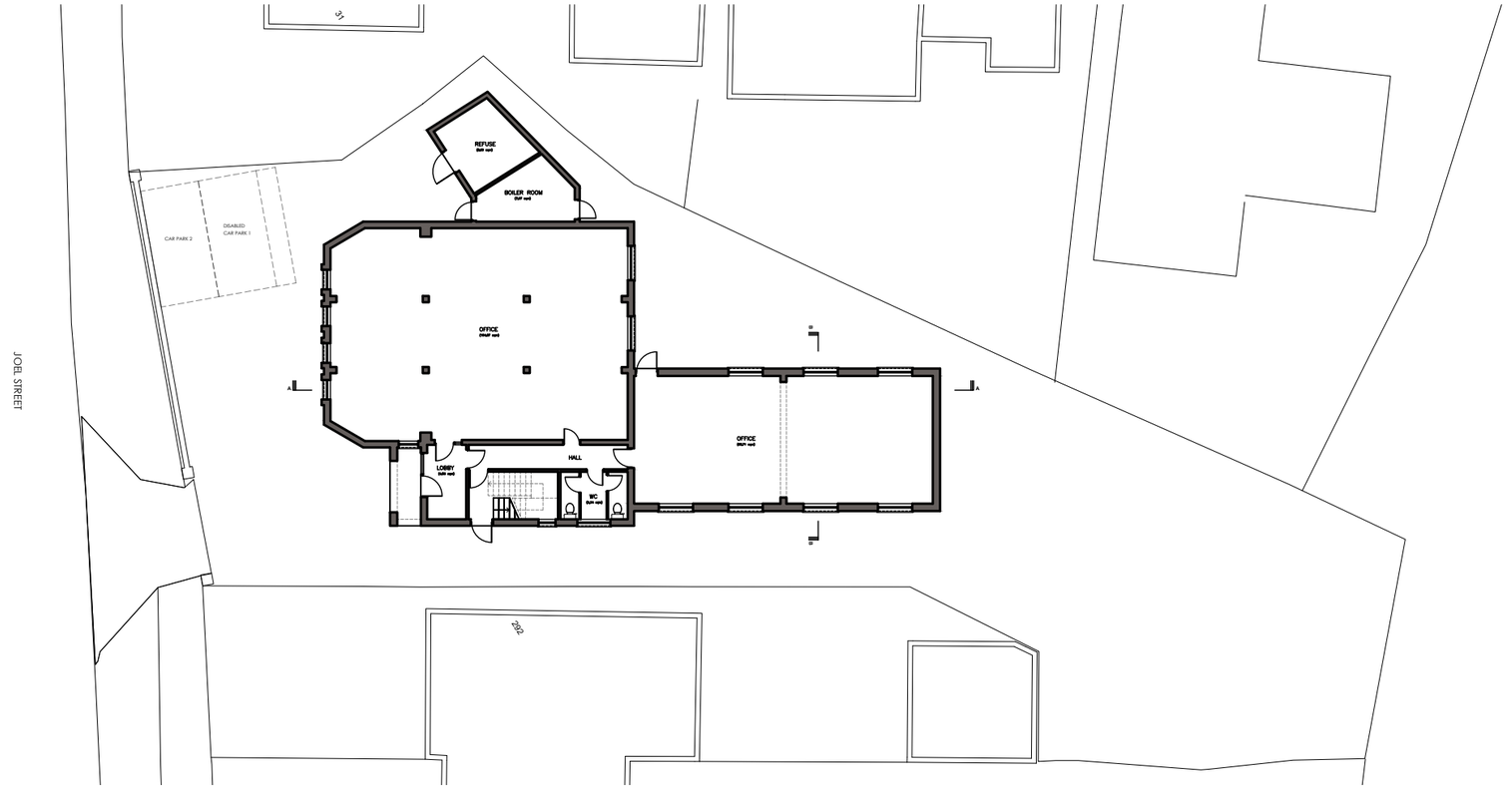
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Alteration to Elevations	Proposed Side Elevations	1:100@A3	09/05/25
				DRAWING No.: 012	27.06.2025 Rev A

PROPOSED FRONT ELEVATION

PROPOSED REAR ELEVATION

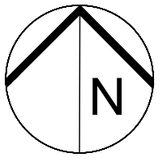
0 1 2 3 4 5 m 6 7 8 9 10 m

	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Alteration to Elevations	Proposed Front and Rear Elevations	1:100@A3	09/05/25
				DRAWING No.: 013	27.06.2025 Rev A

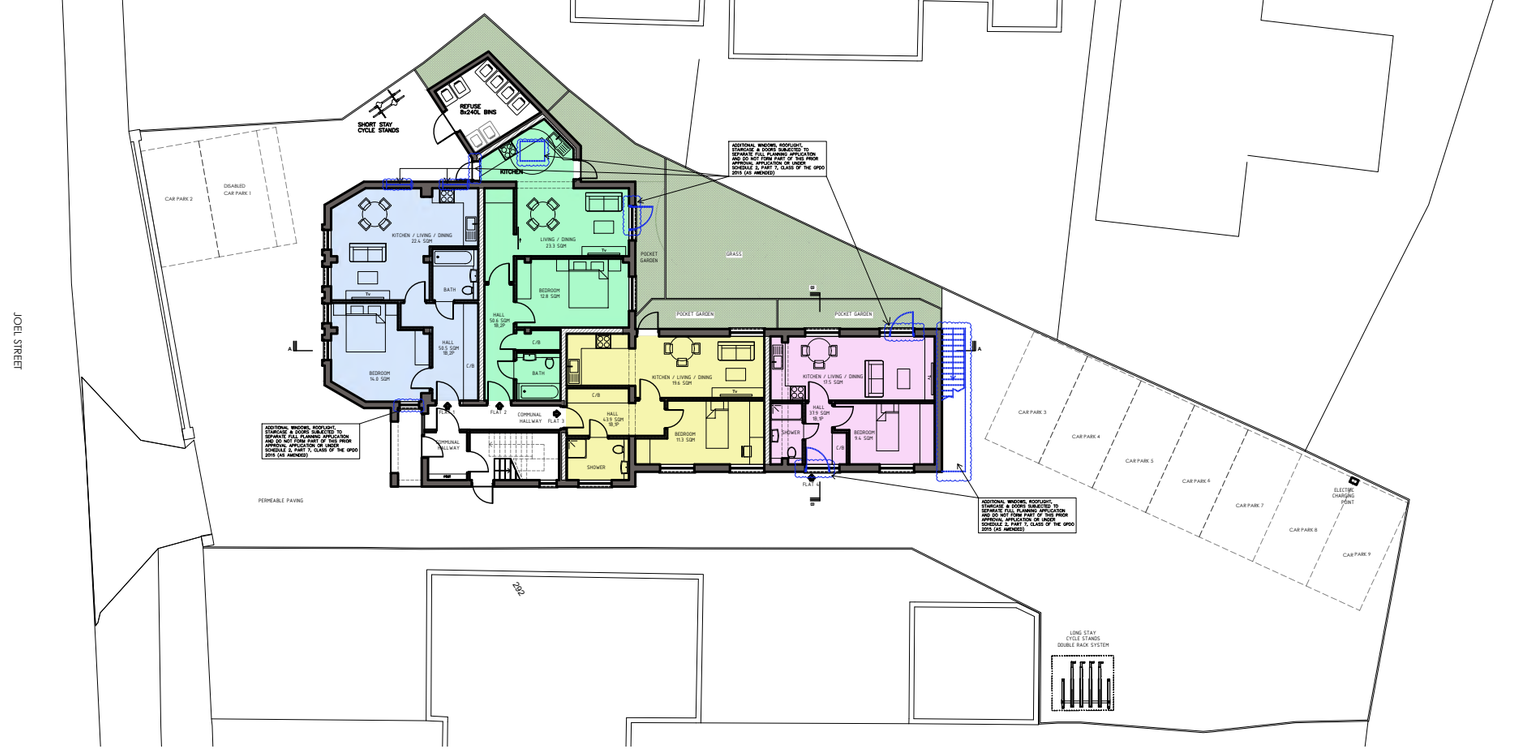


EXISTING BLOCK PLAN - 1:250

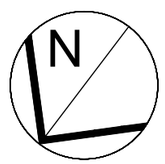
EXISTING SITE LOCATION PLAN 1:1250



0 20 40 50 METERS

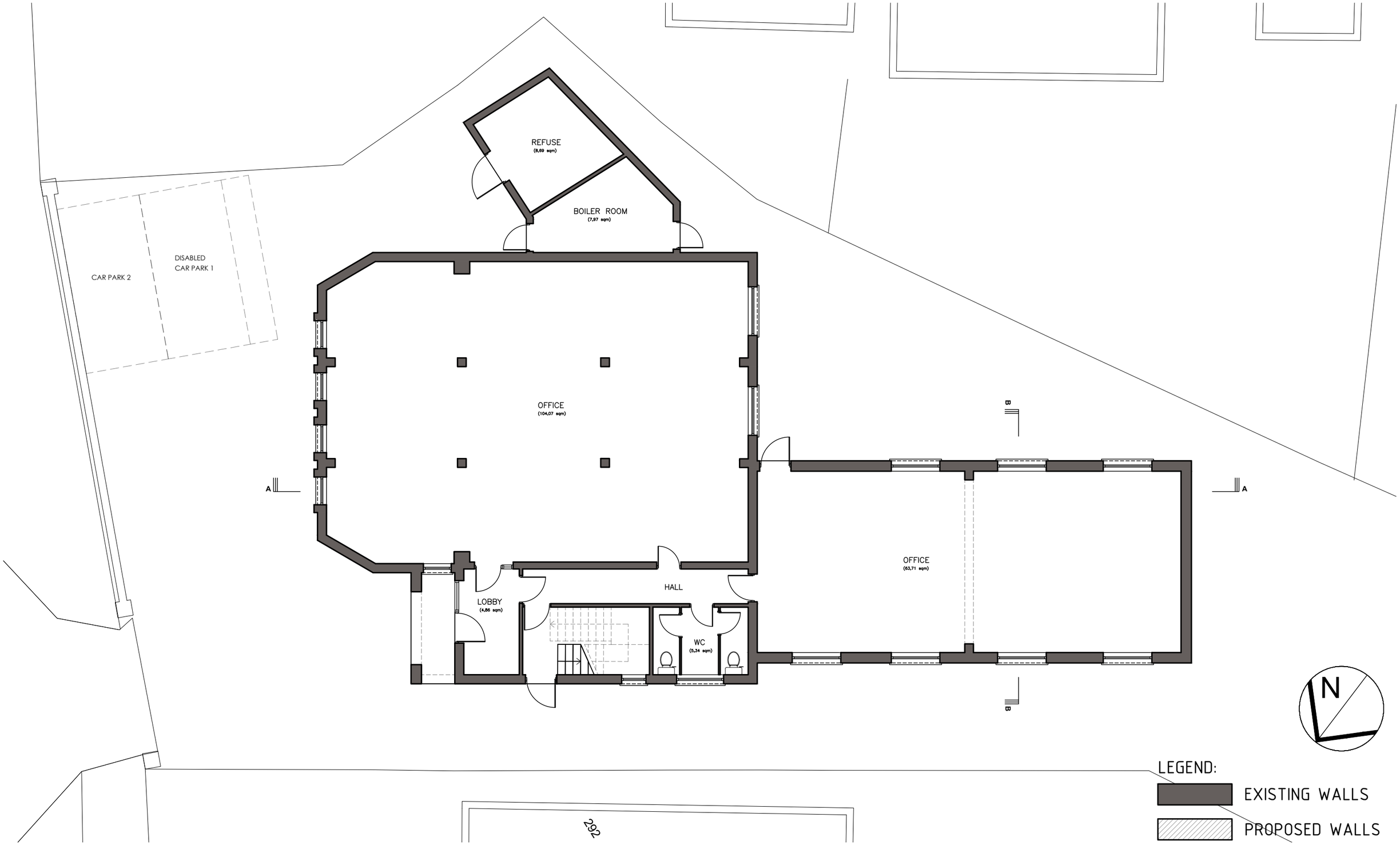


PROPOSED BLOCK PLAN - 1:250



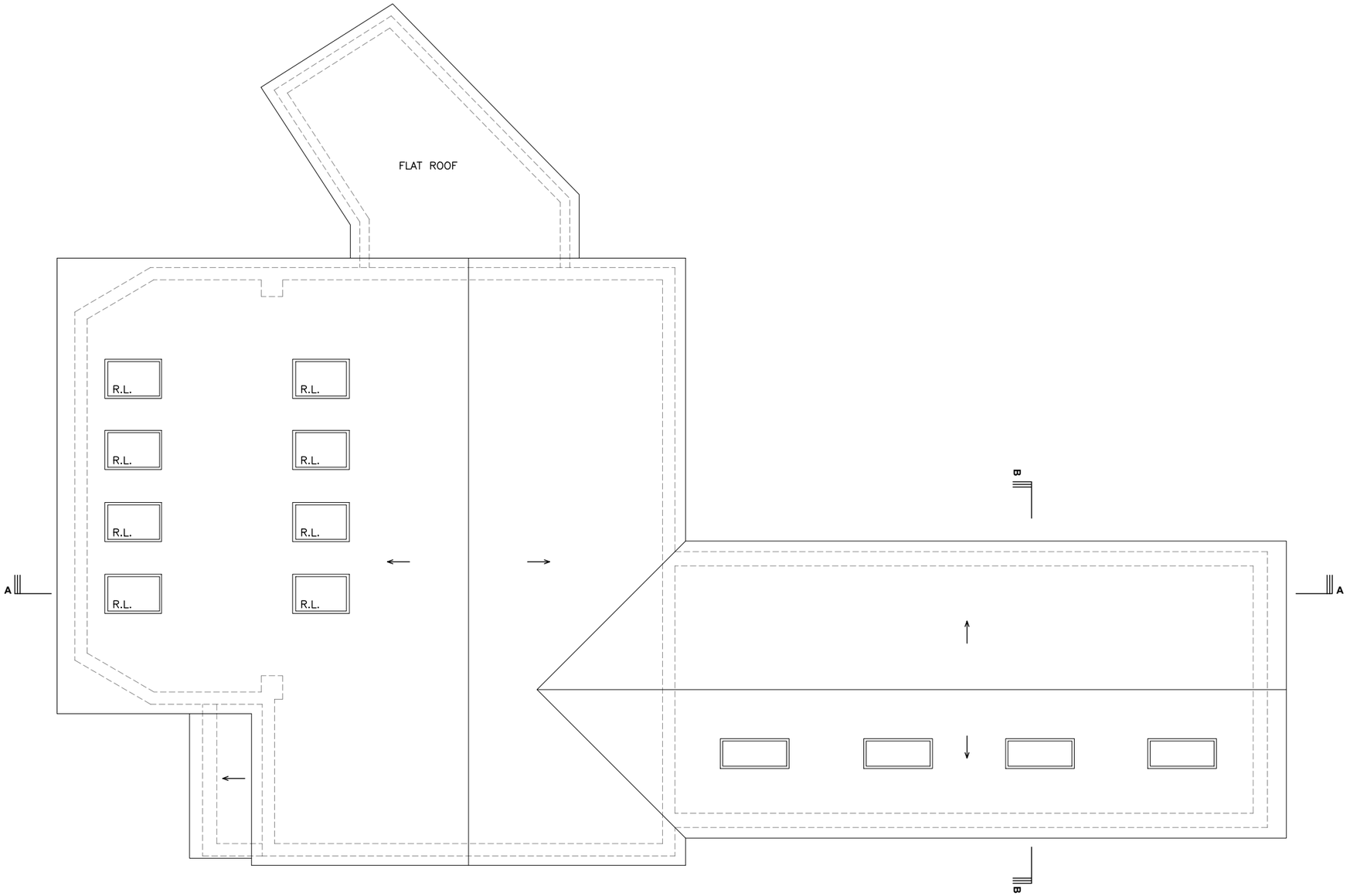
0 5 m 10 m

	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Existing and Proposed Block plans and Site Location plan	1:1250@A3 1:250@A3	09/05/25
				DRAWING No.: 001	27.06.2025 Rev A

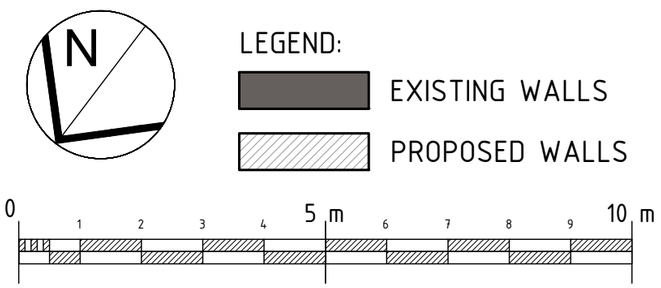


EXISTING GROUND FLOOR PLAN

	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Existing Ground floor plan	1:100@A3	09/05/25
				DRAWING No.: 002	27.06.2025 Rev A



EXISTING ROOF PLAN



	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Existing Roof plan	1:100@A3	09/05/25
				DRAWING No.: 004	27.06.2025 Rev A

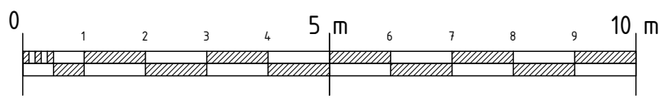
EXISTING SECTION A-A

EXISTING SECTION B-B

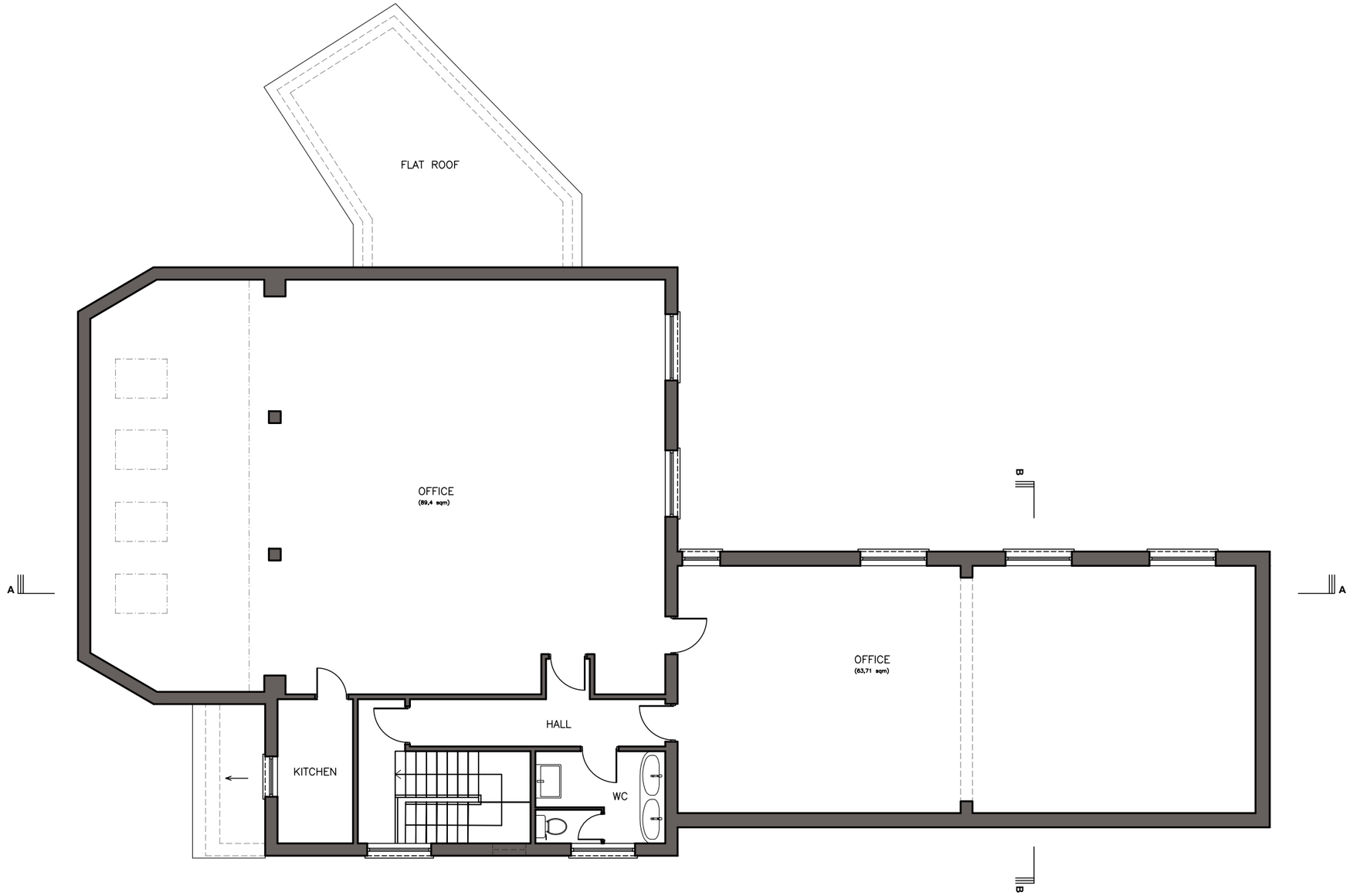
LEGEND:

EXISTING WALLS

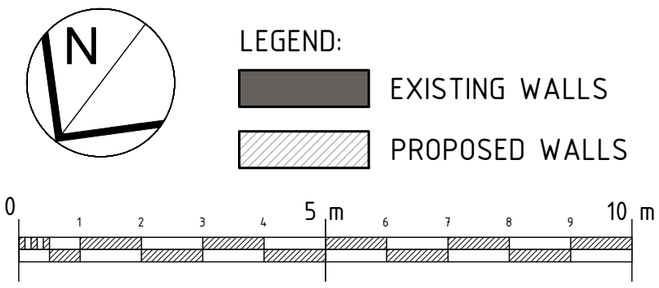
PROPOSED WALLS



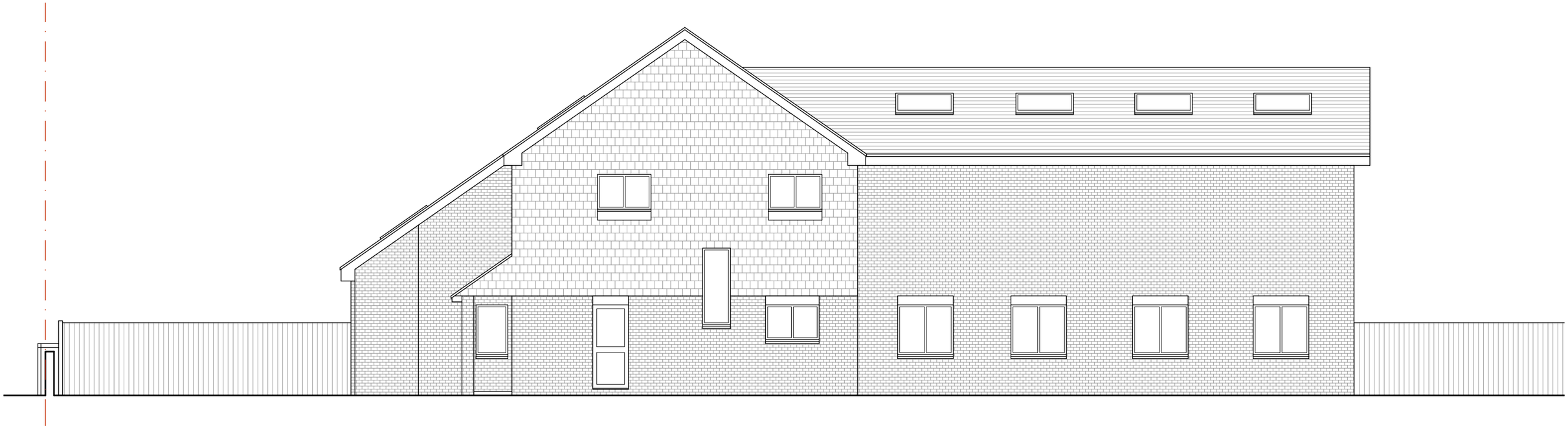
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Existing Sections A-A and B-B	1:100@A3	09/05/25
				DRAWING No.: 005	27.06.2025 Rev A



EXISTING FIRST FLOOR PLAN

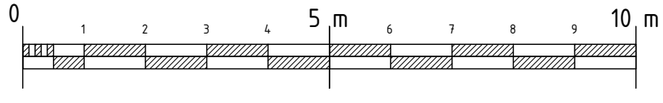


	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Existing First floor plan	1:100@A3	09/05/25
				DRAWING No.: 003	27.06.2025 Rev A



EXISTING SIDE ELEVATION

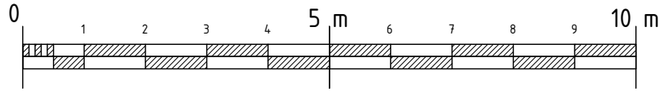
EXISTING SIDE ELEVATION



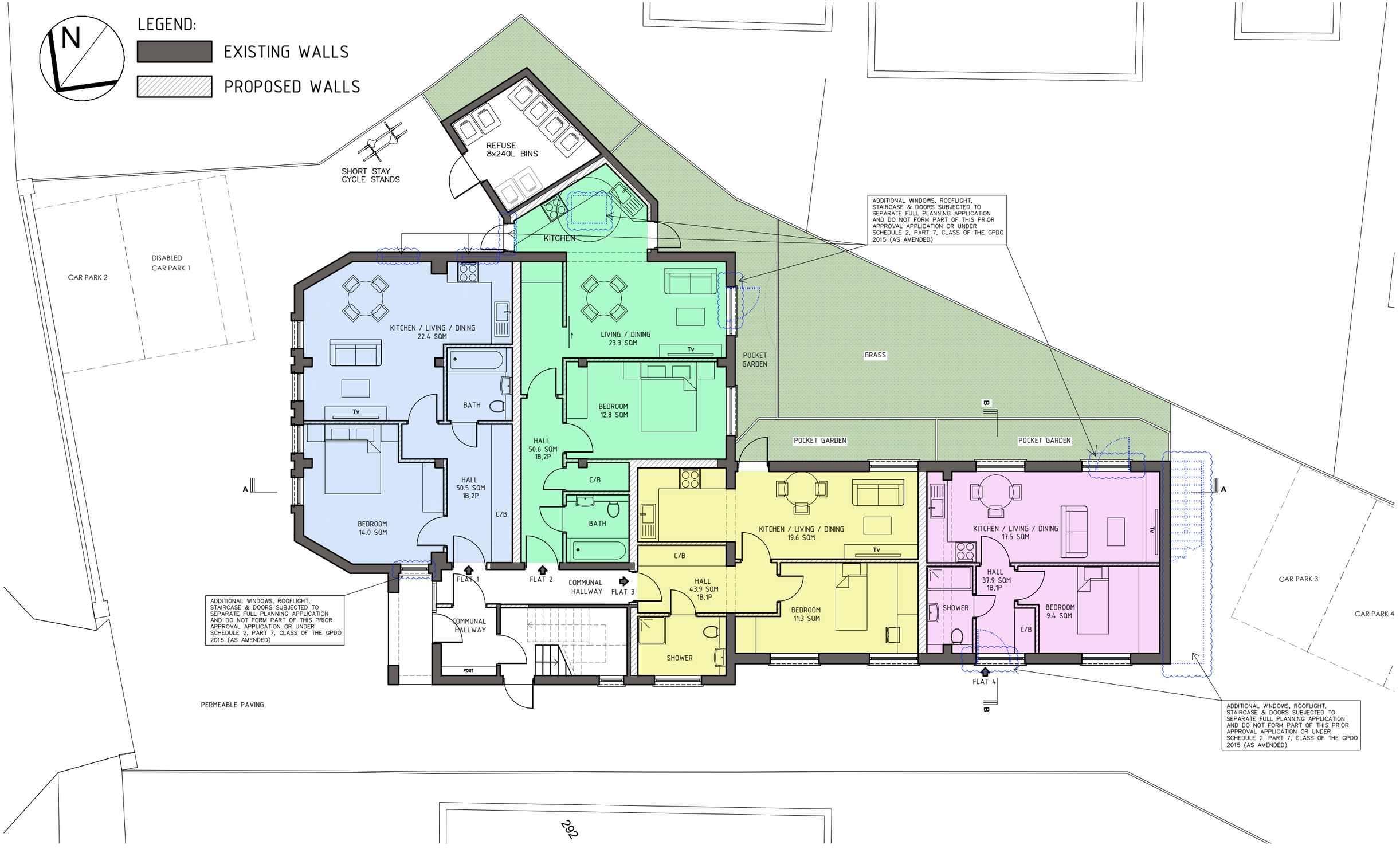
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Existing Side Elevations	1:100@A3	09/05/25
				DRAWING No.: 006	27.06.2025 Rev A

EXISTING FRONT ELEVATION

EXISTING REAR ELEVATION



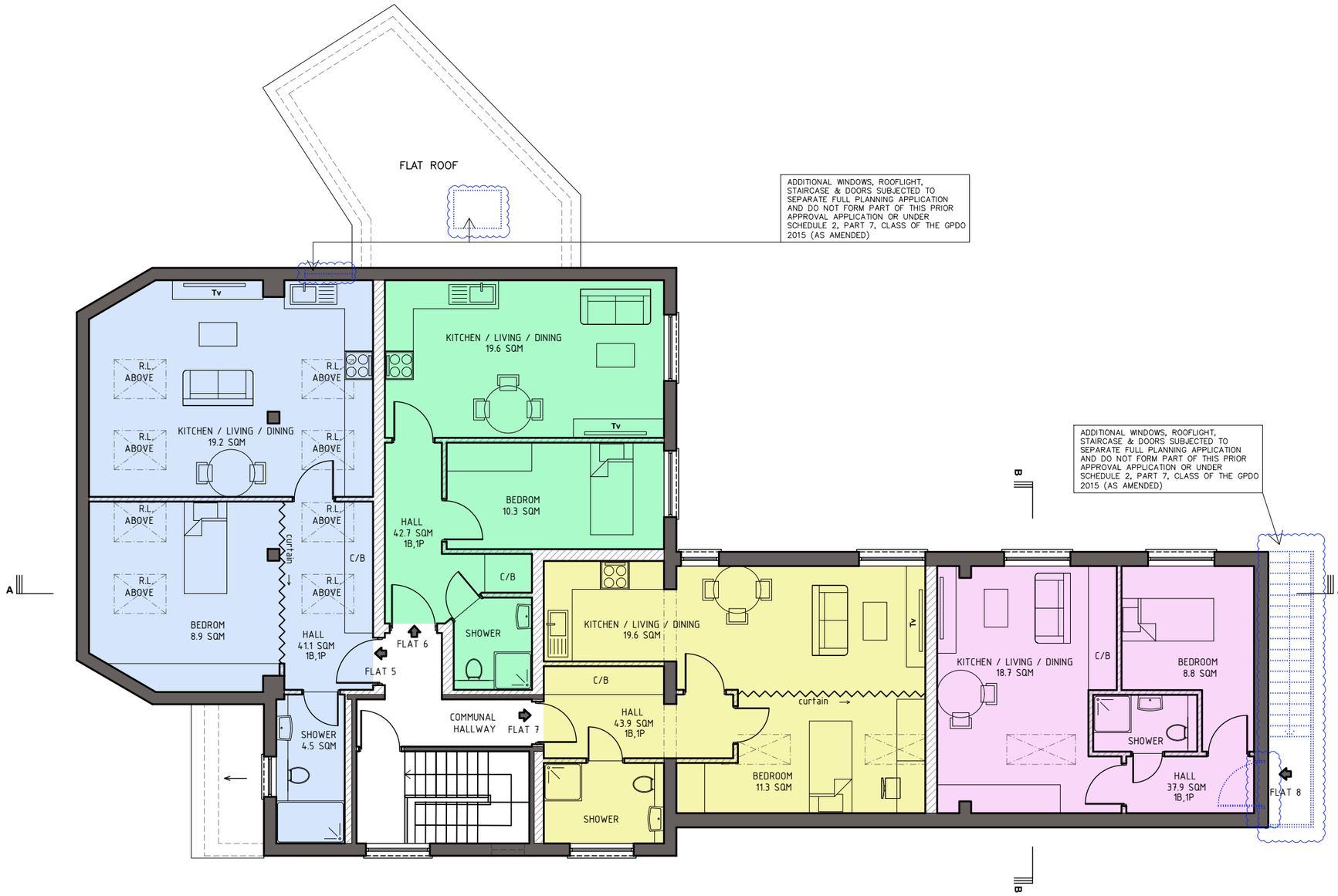
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Existing Front and Rear Elevations	1:100@A3	09/05/25
				DRAWING No.: 007	27.06.2025 Rev A



PROPOSED GROUND FLOOR PLAN

0 1 2 3 4 5 m 6 7 8 9 10 m

	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Proposed Ground floor plan	1:100@A3	09/05/25
				DRAWING No.: 008	27.06.2025 Rev A



PROPOSED FIRST FLOOR PLAN

N

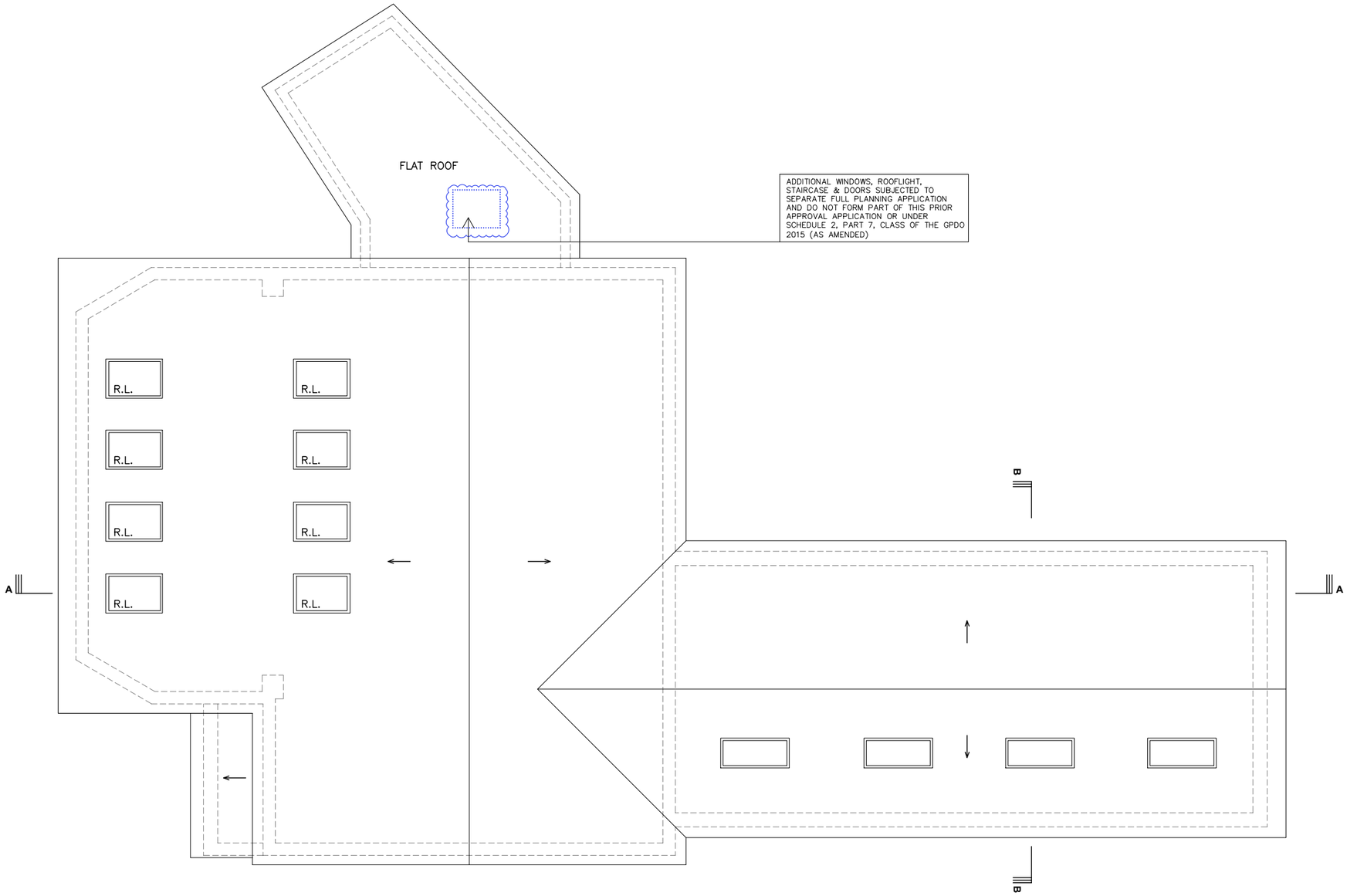
LEGEND:

EXISTING WALLS

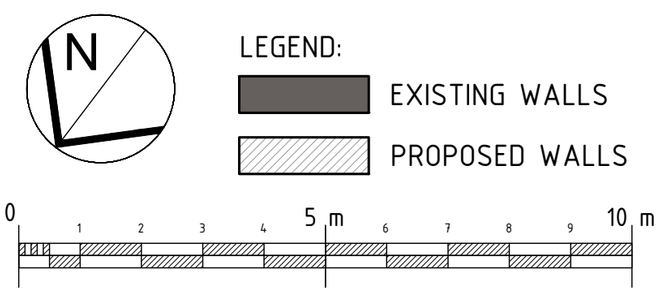
PROPOSED WALLS

0 1 2 3 4 5 m 6 7 8 9 10 m

	SITE: 296 Haydon House HA5 2PY	JOB TITLE: Conversion into 8 flats	DRAWING TITLE: Proposed First floor plan	SCALE: 1:100@A3	DATE: 09/05/25
				DRAWING No.: 009	27.06.2025 Rev A



PROPOSED ROOF PLAN



	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
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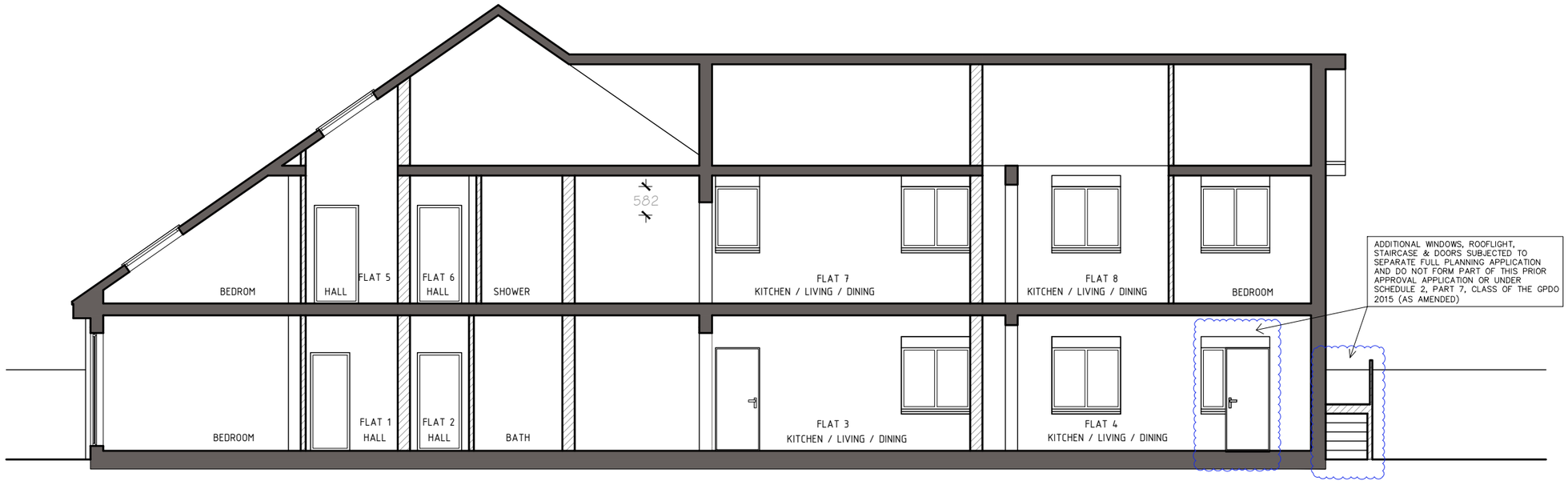
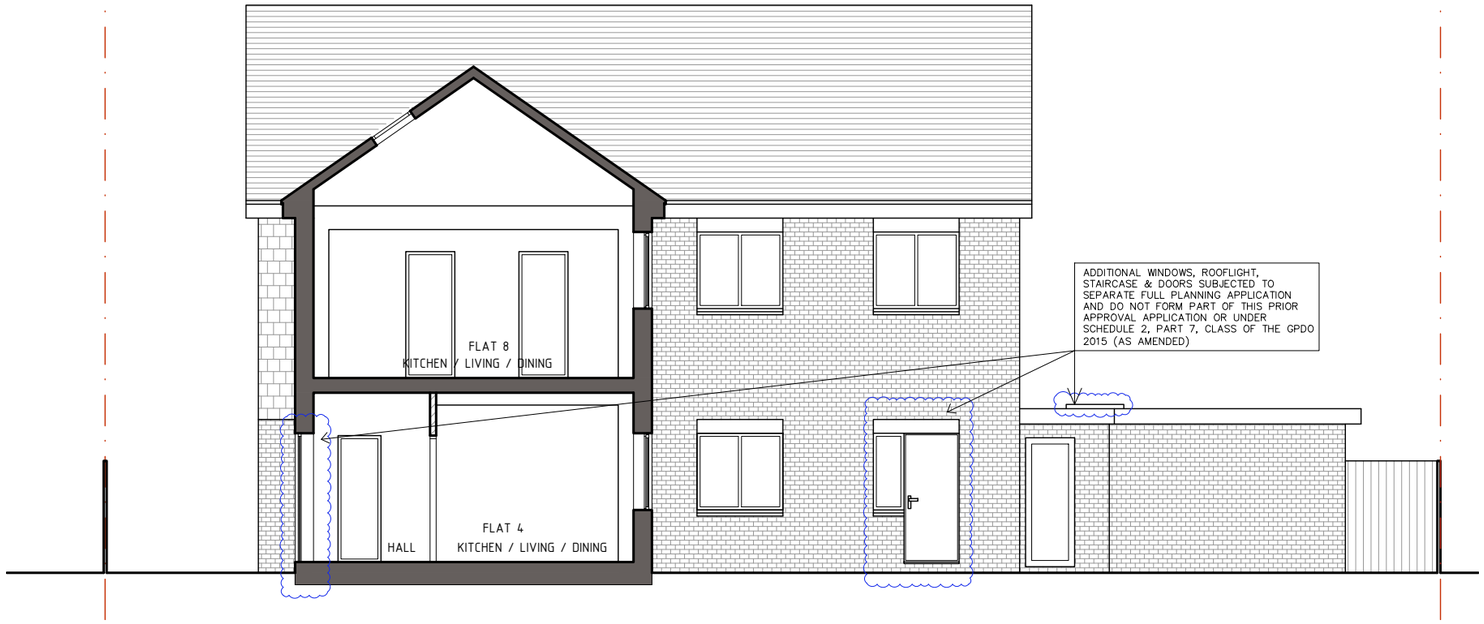
				DRAWING No.: 010	27.06.2025 Rev A



PROPOSED SECTION A-A



PROPOSED SECTION B-B

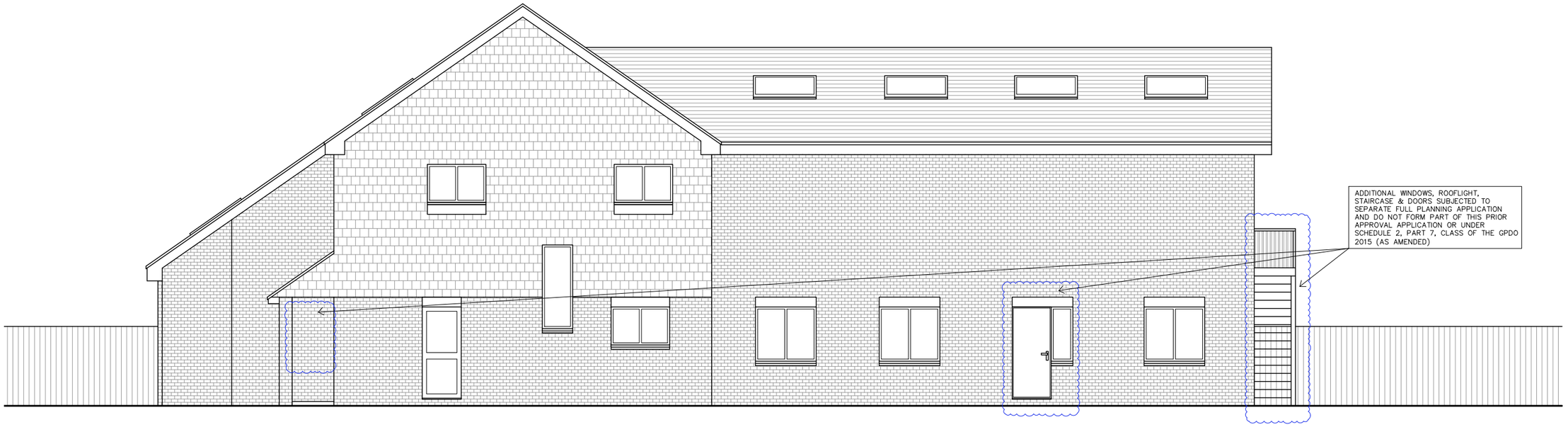
LEGEND:

EXISTING WALLS

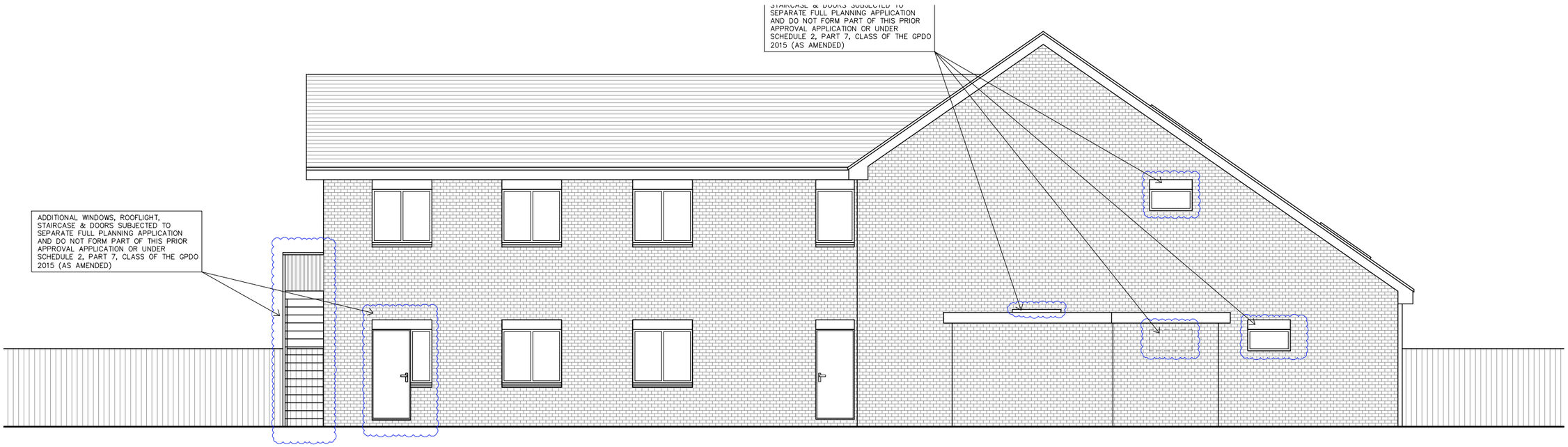
PROPOSED WALLS

0 1 2 3 4 5 m 6 7 8 9 10 m

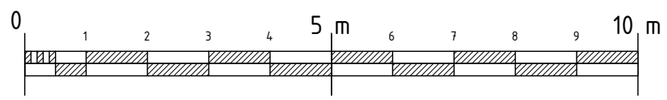
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Proposed Sections A-A and B-B	1:100@A3	09/05/25
				DRAWING No.: 011	27.06.2025 Rev A



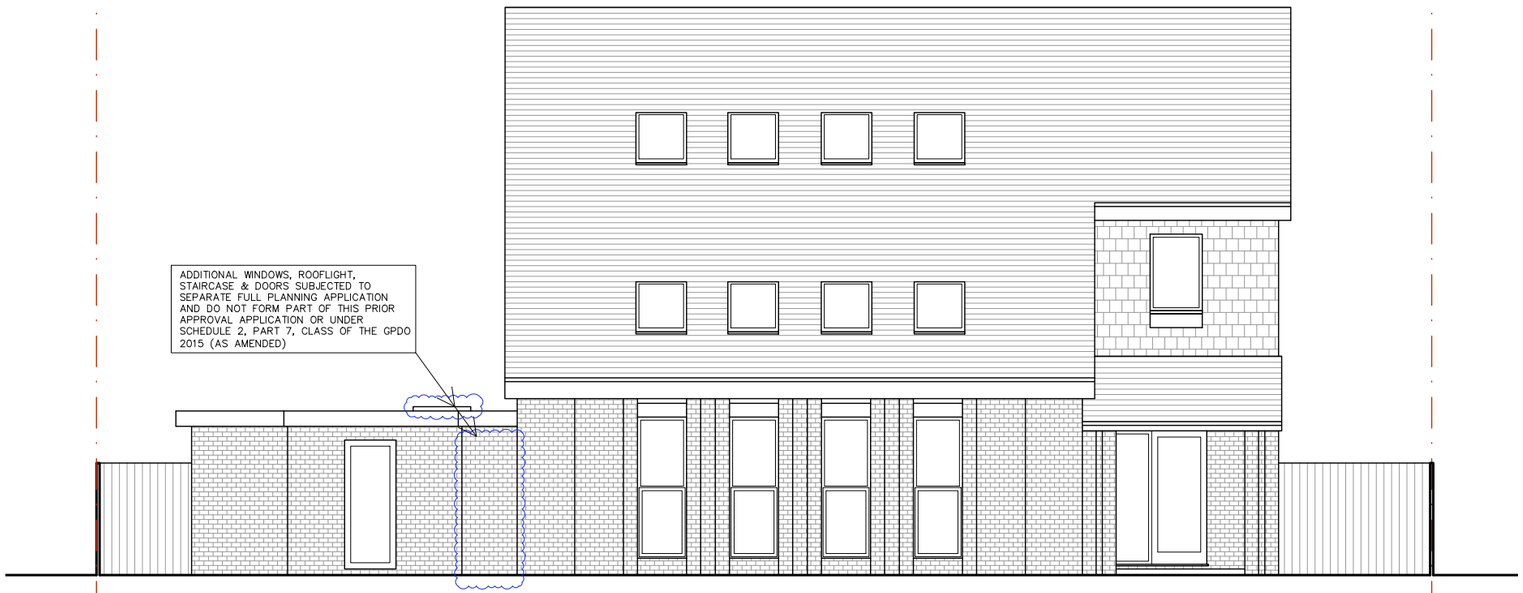
PROPOSED SIDE ELEVATION



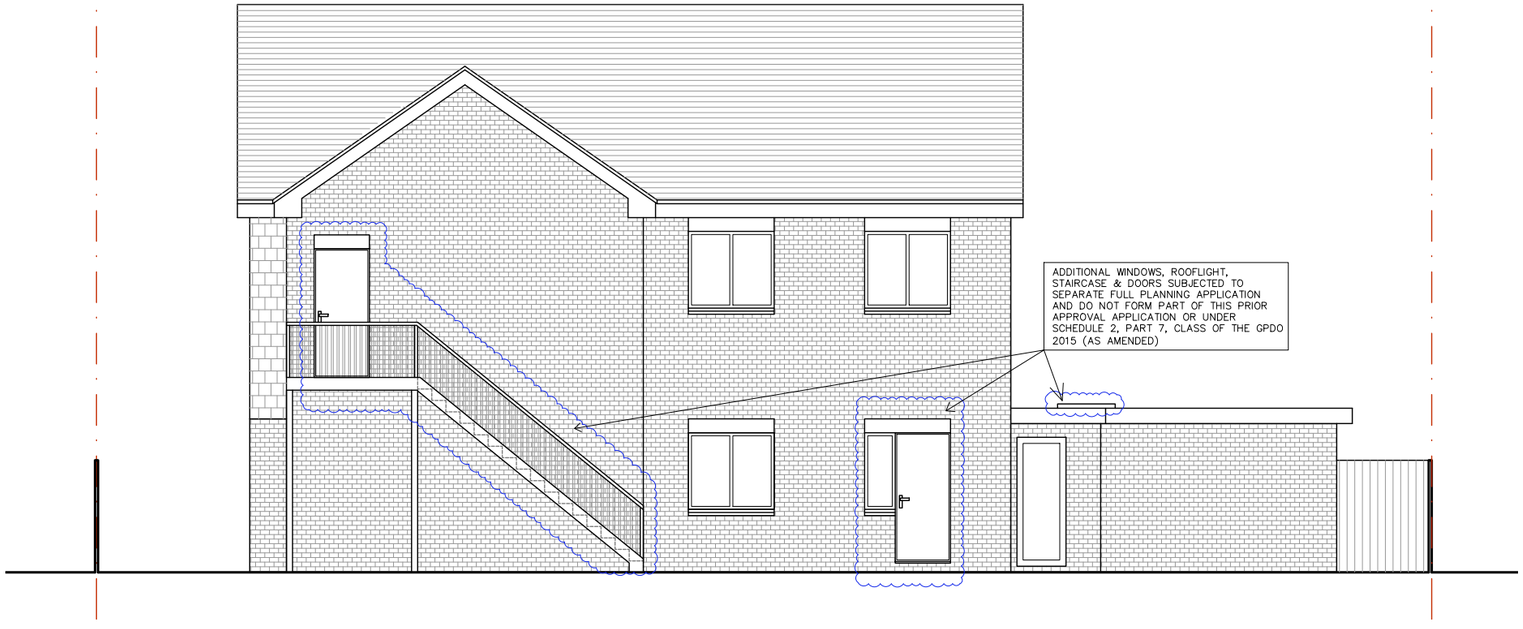
PROPOSED SIDE ELEVATION



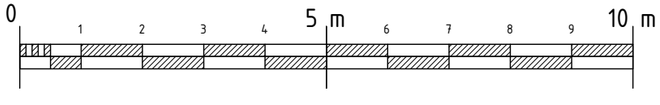
	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Proposed Side Elevations	1:100@A3	09/05/25
				DRAWING No.: 012	27.06.2025 Rev A



PROPOSED FRONT ELEVATION

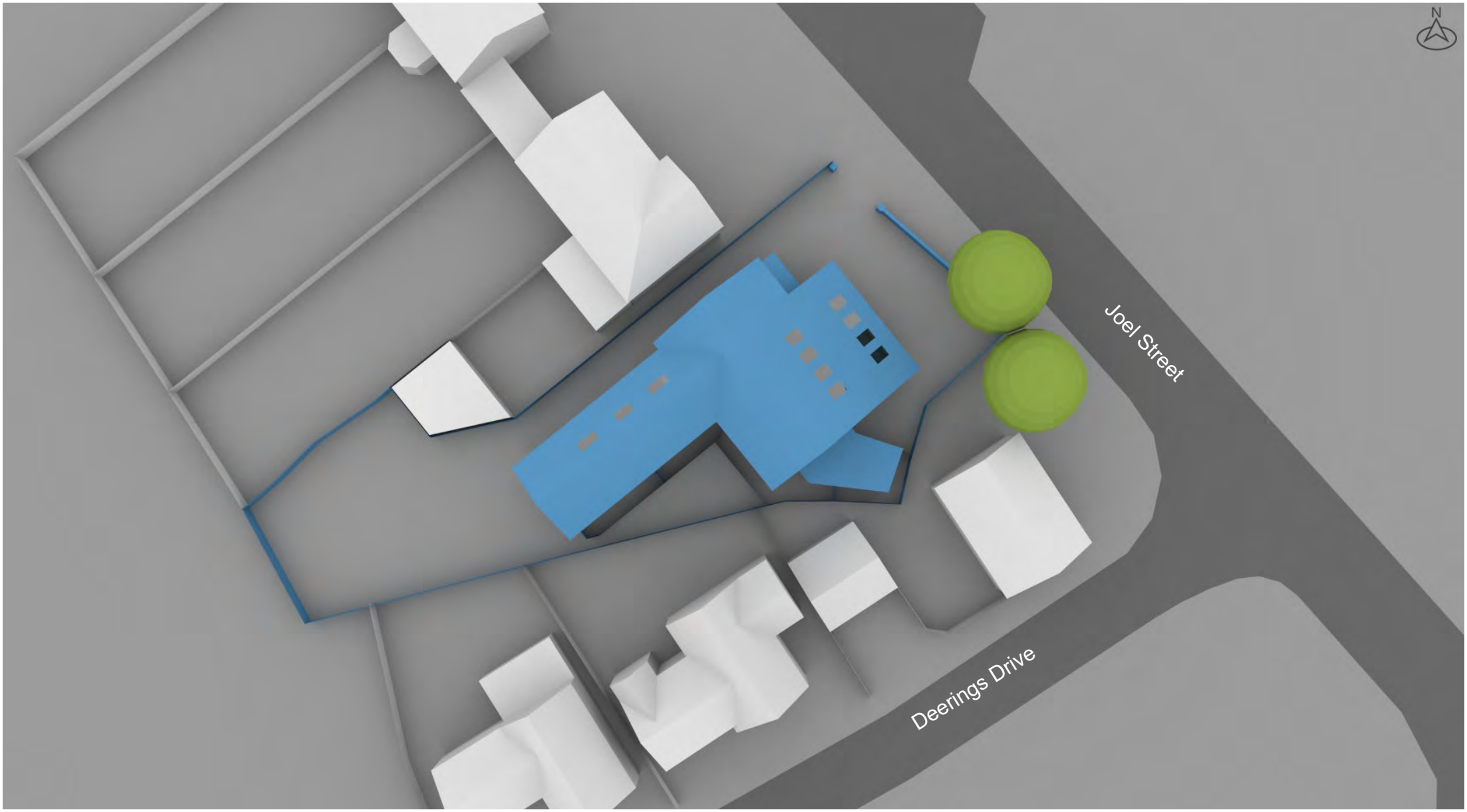


PROPOSED REAR ELEVATION



	SITE:	JOB TITLE:	DRAWING TITLE:	SCALE:	DATE:
	296 Haydon House HA5 2PY	Conversion into 8 flats	Proposed Front and Rear Elevations	1:100@A3	09/05/25
				DRAWING No.: 013	27.06.2025 Rev A

Appendix A.2 – Graphical Model Outputs



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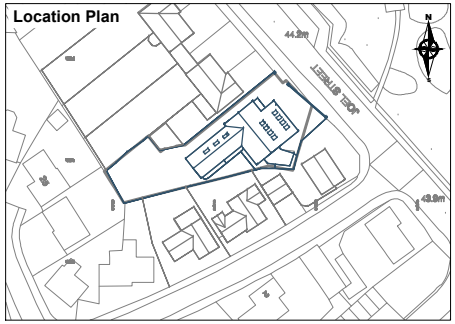
Specialists in the built environment - Coastal, Flood Risk, Drainage, Light Analysis

Location Plan



Legend

- Proposed Buildings
- Surrounding Buildings

Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

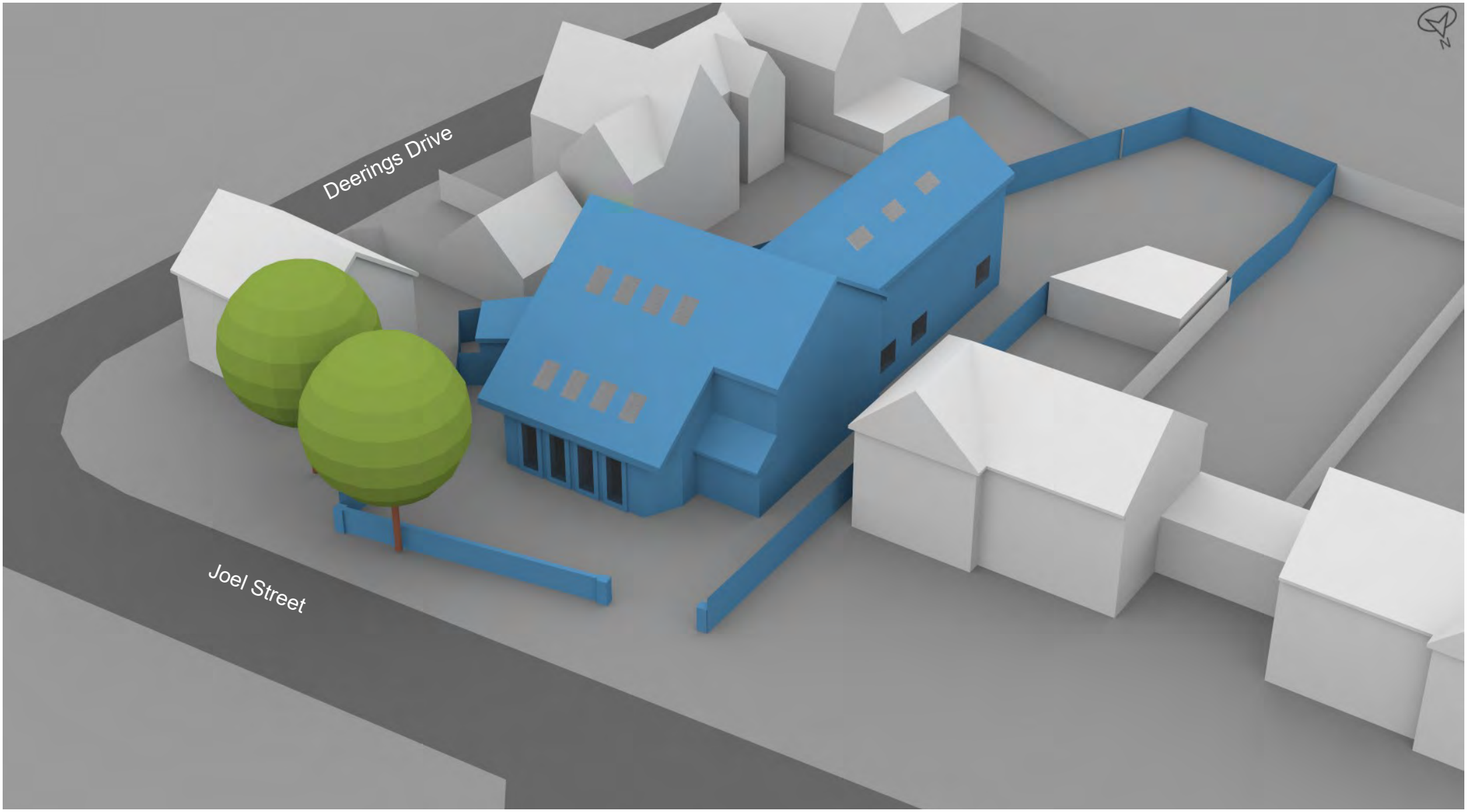
CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF: 3D Model - Proposed Location Plan

DWG No.: 4348_01



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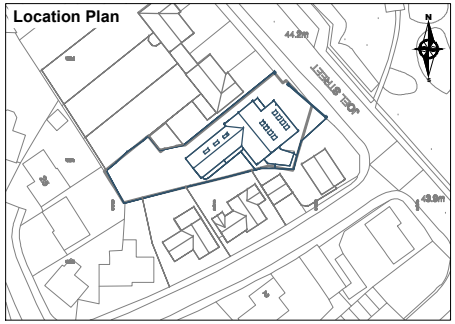
Location Plan



Legend

- Proposed Buildings
- Surrounding Buildings

Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

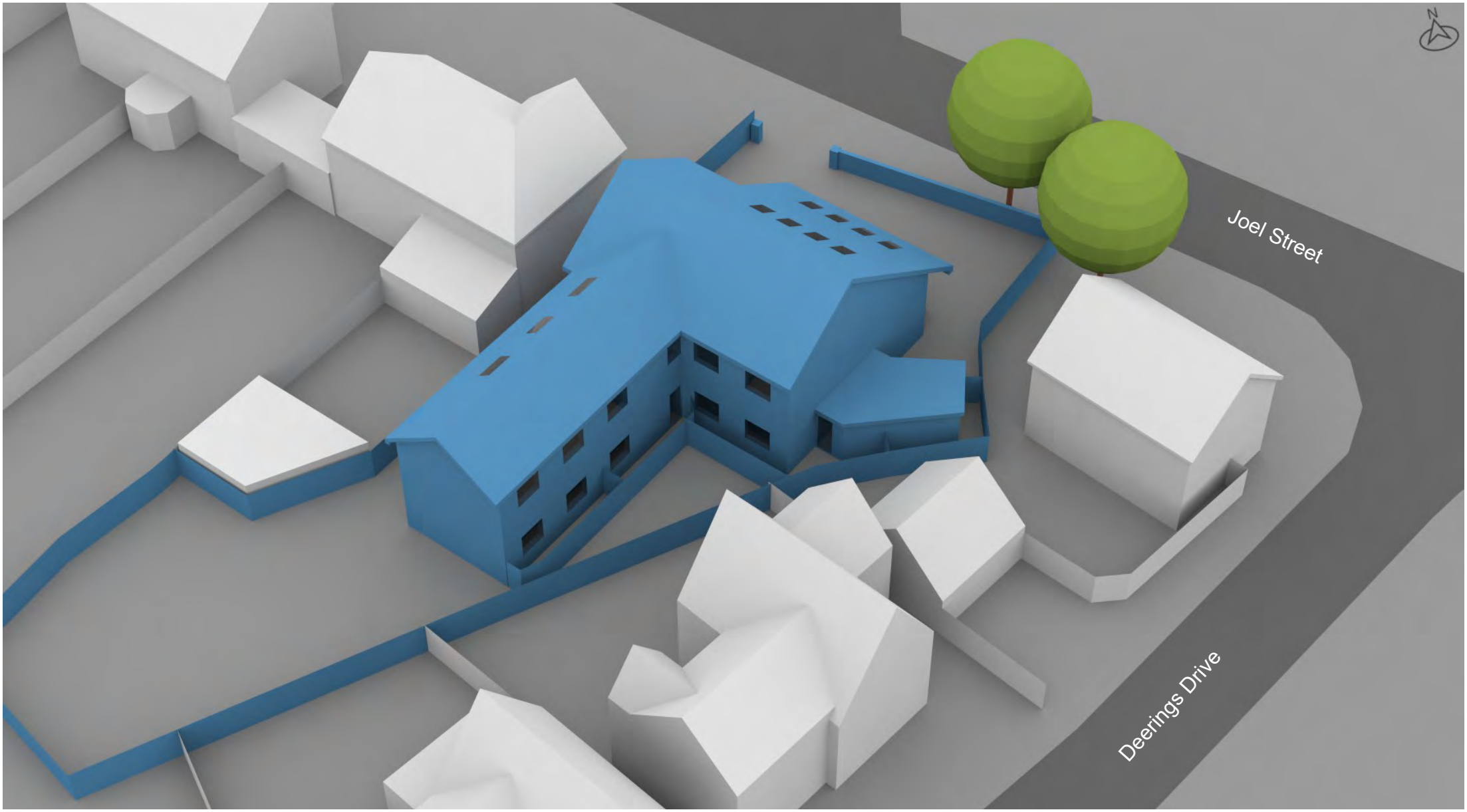
CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF.: 3D Model - Proposed Site Scenarios

DWG No.: 4348_02



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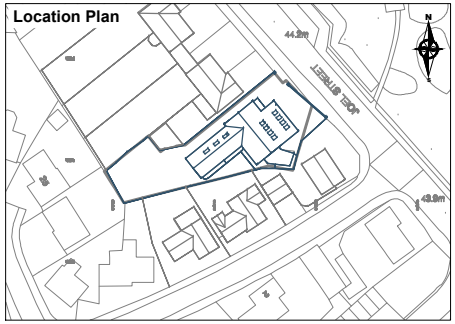
Location Plan



Legend

Proposed Buildings

Surrounding Buildings

Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF.: 3D Model - Proposed Site Scenarios

DWG No.: 4348_03

Proposed Building
Ground Floor Plan
Permitted Development

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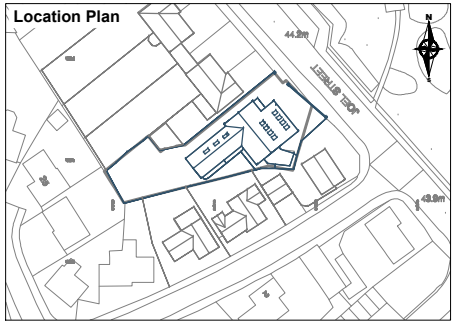
Specialists in the built environment - Coastal, Flood Risk, Drainage, Light Analysis

Location Plan



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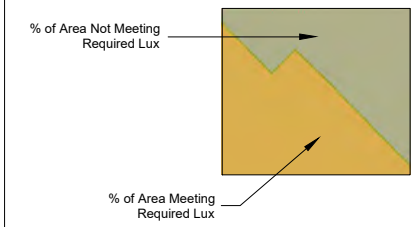

Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF.: SDA contours

DWG No.: 4348_04

Proposed Building
First Floor Plan
Permitted Development

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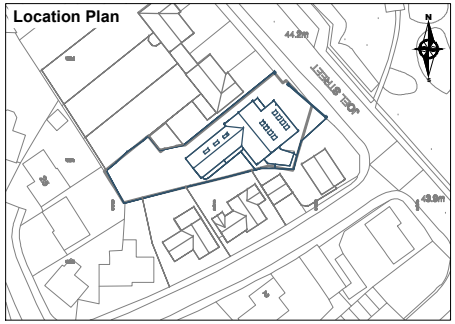
Specialists in the built environment - Coastal, Flood Risk, Drainage, Light Analysis

Location Plan



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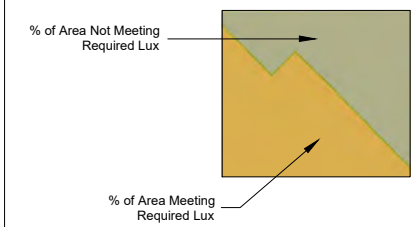


Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

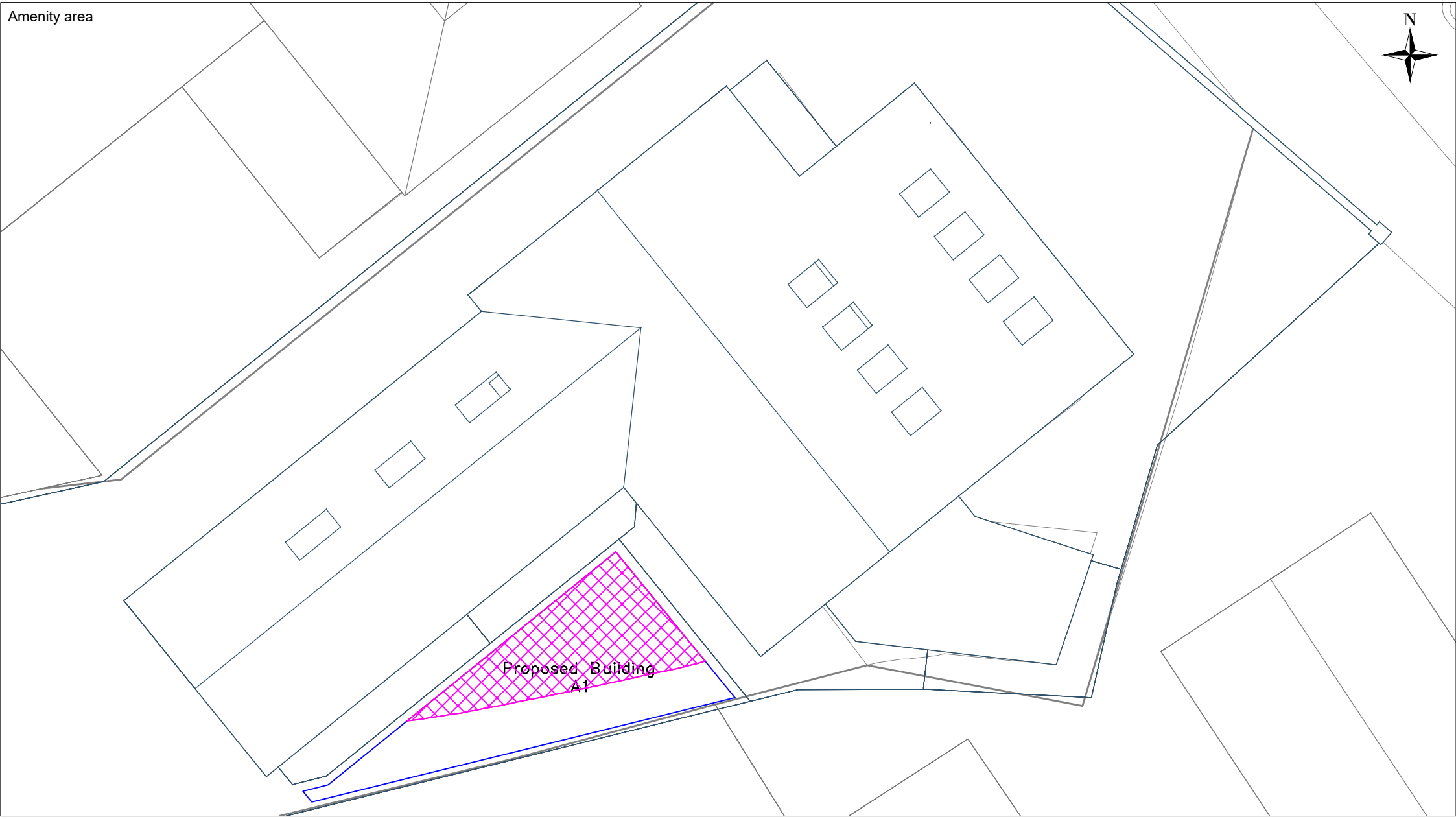
CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF.: SDA contours

DWG No.: 4348_05



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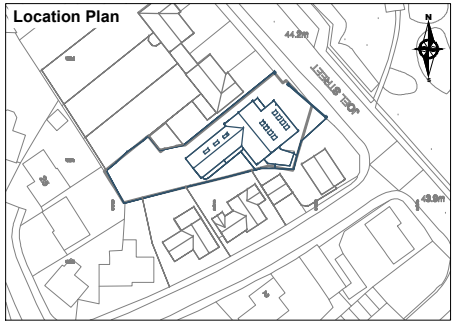
Location Plan



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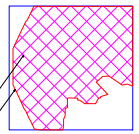


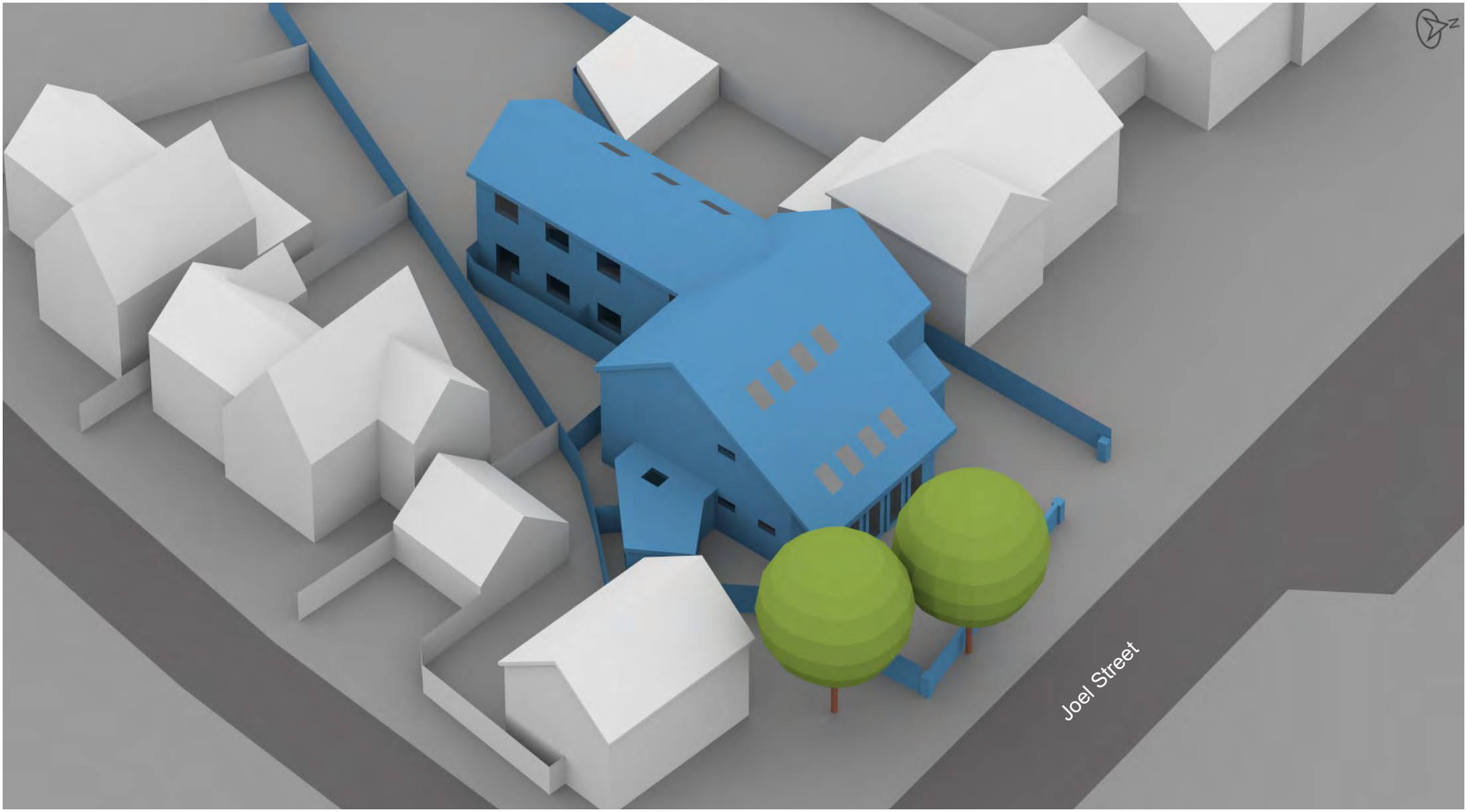
Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF.	DWG No.
SDA contours	4348_06



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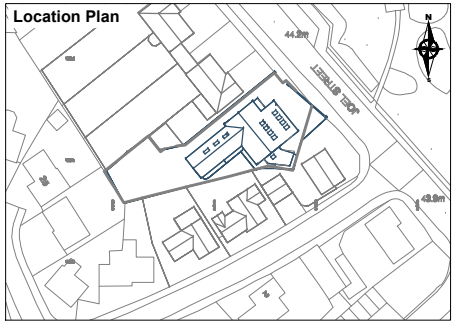
Location Plan



Legend

Proposed Buildings

Surrounding Buildings

Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF.: 3D Model - Proposed Site Scenarios

DWG No.: 4348_07

Proposed Building
Ground Floor Plan
Full Planning

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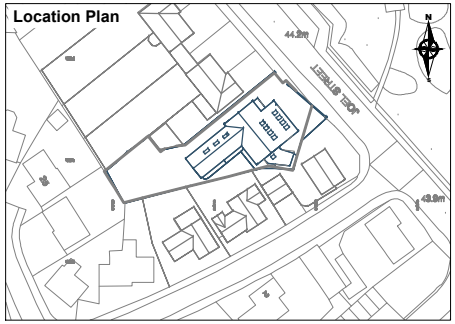
Location Plan



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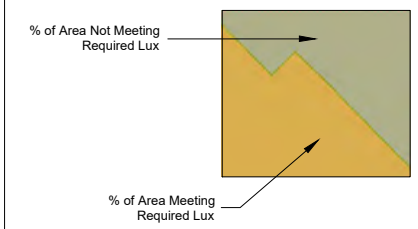

Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF.: SDA contours

DWG No.: 4348_08

Proposed Building
First Floor Plan
Full Planning

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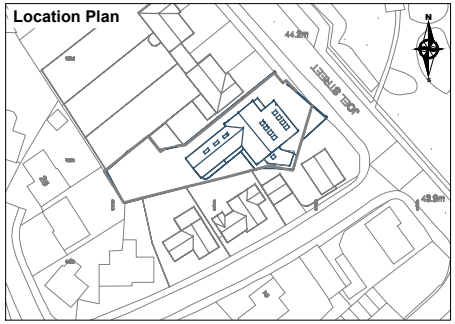
Location Plan



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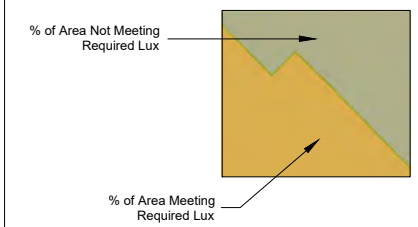

Rev	Description	Date
01	Second issue	
00	First issue	27/06/2025

CLIENT: Sega Investments Limited

PROJECT: Development at 296 Joel St, Pinner

SCALE	PROJ REF	ANALYST	DRAWN BY
Not to scale	4348	LH	LR

DWG REF.: SDA contours

DWG No.: 4348_09

Appendix A.3 – Tabulated Results for Daylight & Sunlight Calculations

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Illuminance Analysis - Proposed Scheme
Date of Analysis: 25/06/2025
Permitted Development Scheme

Floor Ref	Room Ref	Property Type	Room Use	Room Area m2	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux	Criteria				Meets Criteria
									Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	
Flat 1													
Ground	R1	Residential	Bedroom	13.96	9.51	330	9.51	100%	100	50%	50%	4380	YES
	R2	Residential	LKD	22.24	15.91	227	12.53	79%	150	50%	50%	4380	YES
Flat 2													
Ground	R1	Residential	Bedroom	12.78	8.66	121	5.33	62%	100	50%	50%	4380	YES
	R2	Residential	LKD	13.02	8.90	152	4.63	52%	150	50%	50%	4380	YES
	R3	Residential	Kitchen	6.91	3.98	109	0.69	17%	200	50%	50%	4380	NO
Flat 3													
Ground	R1	Residential	LKD	13.23	8.92	168	4.74	53%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	11.63	7.28	359	7.28	100%	100	50%	50%	4380	YES
Flat 4													
Ground	R1	Residential	LKD	17.48	12.13	243	10.64	88%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	9.35	5.77	345	5.77	100%	100	50%	50%	4380	YES
Flat 5													
First	R1	Residential	Bedroom	15.66	11.33	434	10.88	96%	100	50%	50%	4380	YES
	R2	Residential	LKD	26.71	20.68	472	19.95	96%	150	50%	50%	4380	YES
Flat 6													
First	R1	Residential	LKD	19.63	14.45	181	8.65	60%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	10.33	6.59	336	6.59	100%	100	50%	50%	4380	YES
Flat 7													
First	R1	Residential	LKD	19.53	13.12	238	10.03	76%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	11.36	7.05	393	7.05	100%	100	50%	50%	4380	YES

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Illuminance Analysis - Proposed Scheme
Date of Analysis: 25/06/2025
Permitted Development Scheme

Floor Ref	Room Ref	Property Type	Room Use	Room Area m2	Effective Area	Median Lux	Area Meeting Req Lux	% of Area Meeting Req Lux	Criteria				Meets Criteria
									Req Lux	Req % of Effective Area	Req % of Daylight Hours	Daylight Hours	
Flat 8													
First	R1	Residential	Bedroom	8.77	5.09	463	5.09	100%	100	50%	50%	4380	YES
	R2	Residential	LKD	18.97	13.26	498	13.26	100%	150	50%	50%	4380	YES

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Sunlight Exposure Analysis - Proposed Scheme
Date: 25/06/2025
Permitted Development Scheme

Floor Ref	Room Ref	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure	Rating
			Flat 1				
Ground	R1	Residential	Bedroom	W1	51°N	0	
				W2	51°N	0	
						0	Failed
Ground	R2	Residential	LKD	W3	51°N	0	
				W4	51°N	0	
						0	Failed
			Flat 2				
Ground	R1	Residential	Bedroom	W1	231°	4.2	
						4.2	High
Ground	R2	Residential	LKD	W2	231°	4.9	
						4.9	High
Ground	R3	Residential	Kitchen	W3	231°	3.5	
						3.5	Medium
			Flat 3				
Ground	R1	Residential	LKD	W1	141°	3.2	
				W2	141°	6.2	
						6.2	High
Ground	R2	Residential	Bedroom	W3	321°N	0.1	
				W4	321°N	0.1	
						0.1	Failed
			Flat 4				
Ground	R1	Residential	LKD	W1	141°	5.6	
				W2	141°	3.9	
						6.2	High
Ground	R2	Residential	Bedroom	W3	321°N	0.1	
						0.1	Failed
			Flat 5				
First	R1	Residential	Bedroom	W1	51°N Inc	0	
				W2	51°N Inc	0	
				W3	51°N Inc	0	
				W4	51°N Inc	0	
						0	Failed
First	R2	Residential	LKD	W5	51°N Inc	0	
				W6	51°N Inc	0	
				W7	51°N Inc	0	
				W8	51°N Inc	0	
						0	Failed

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Sunlight Exposure Analysis - Proposed Scheme
Date: 25/06/2025
Permitted Development Scheme

Floor Ref	Room Ref	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure	Rating
			Flat 6				
First	R1	Residential	LKD	W1	231°	5.2	
						5.2	High
First	R2	Residential	Bedroom	W2	231°	4.7	
						4.7	High
			Flat 7				
First	R1	Residential	LKD	W1	141°	3.6	
				W2	141°	6.1	
						6.1	High
First	R2	Residential	Bedroom	W3	321°N Inc	0	
				W4	321°N Inc	2.6	
						2.6	Minimum
			Flat 8				
First	R1	Residential	Bedroom	W1	141°	6.1	
						6.1	High
First	R2	Residential	LKD	W2	141°	6.1	
				W3	321°N Inc	2.6	
						8.7	High

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Two hours Sunlight to Amenity Analysis - Proposed Scheme
Date of Analysis: 25/06/2025

Floor Ref	Amenity Ref		Amenity Area	Lit Area Proposed	Meets BRE Criteria
Proposed Building					
Ground	A1	Area m2	28.70	14.94	YES
		Percentage		52%	

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Illuminance Analysis - Proposed Scheme
Date of Analysis: 25/06/2025
Full Planning Scheme

									Criteria				
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
Flat 1													
Ground	R1	Residential	Bedroom	13.96	9.51	330	9.51	100%	100	50%	50%	4380	YES
	R2	Residential	LKD	22.24	15.91	297	15.91	100%	150	50%	50%	4380	YES
Flat 2													
Ground	R1	Residential	Bedroom	12.78	8.66	121	5.33	62%	100	50%	50%	4380	YES
	R2	Residential	LKD	13.02	8.90	207	6.09	68%	150	50%	50%	4380	YES
	R3	Residential	Kitchen	6.91	3.98	533	3.98	100%	200	50%	50%	4380	YES
Flat 3													
Ground	R1	Residential	LKD	13.23	8.92	168	4.74	53%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	11.63	7.28	359	7.28	100%	100	50%	50%	4380	YES
Flat 4													
Ground	R1	Residential	LKD	17.48	12.13	252	10.99	91%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	9.35	5.77	345	5.77	100%	100	50%	50%	4380	YES
Flat 5													
First	R1	Residential	Bedroom	15.66	11.33	434	10.88	96%	100	50%	50%	4380	YES
	R2	Residential	LKD	26.71	20.68	577	19.95	96%	150	50%	50%	4380	YES
Flat 6													
First	R1	Residential	LKD	19.63	14.45	181	8.65	60%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	10.33	6.59	336	6.59	100%	100	50%	50%	4380	YES
Flat 7													
First	R1	Residential	LKD	19.53	13.12	238	10.03	76%	150	50%	50%	4380	YES
	R2	Residential	Bedroom	11.36	7.05	393	7.05	100%	100	50%	50%	4380	YES

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Illuminance Analysis - Proposed Scheme
Date of Analysis: 25/06/2025
Full Planning Scheme

									Criteria				
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
Flat 8													
First	R1	Residential	Bedroom	8.77	5.09	463	5.09	100%	100	50%	50%	4380	YES
	R2	Residential	LKD	18.97	13.26	498	13.26	100%	150	50%	50%	4380	YES

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Sunlight Exposure Analysis - Proposed Scheme
Date: 25/06/2025
Full Planning Scheme

Floor Ref	Room Ref	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure	Rating
			Flat 1				
Ground	R1	Residential	Bedroom	W1	51°N	0	
				W2	51°N	0	
						0	Failed
Ground	R2	Residential	LKD	W3	51°N	0	
				W4	51°N	0	
				W5	141°	0.8	
				W6	141°	1.2	
						1.5	Minimum
			Flat 2				
Ground	R1	Residential	Bedroom	W1	231°	4.2	
						4.2	High
Ground	R2	Residential	LKD	W2	231°	5.3	
				W4	231°	4.4	
						5.7	High
Ground	R3	Residential	Kitchen	W3	231°	3.5	
				W5	90° Hz	3.9	
						5.1	High
			Flat 3				
Ground	R1	Residential	LKD	W1	141°	3.2	
				W2	141°	6.2	
						6.2	High
Ground	R2	Residential	Bedroom	W3	321°N	0.1	
				W4	321°N	0.1	
						0.1	Failed
			Flat 4				
Ground	R1	Residential	LKD	W1	141°	5.6	
				W2	141°	4.1	
				W4	141°	3.3	
						6.4	High
Ground	R2	Residential	Bedroom	W3	321°N	0.1	
						0.1	Failed
			Flat 5				
First	R1	Residential	Bedroom	W1	51°N Inc	0	
				W2	51°N Inc	0	
						0	Failed
First	R2	Residential	LKD	W5	51°N Inc	0	
				W6	51°N Inc	0	
				W7	51°N Inc	0	
				W8	51°N Inc	0	
				W9	141°	2.8	
						2.8	Minimum

Project Name: Joel Street, Pinner
Project No.: 4348
Report Title: Sunlight Exposure Analysis - Proposed Scheme
Date: 25/06/2025
Full Planning Scheme

Floor Ref	Room Ref	Property Type	Room Use	Window Ref	Window Orientation	Proposed Sunlight Exposure	Rating
			Flat 6				
First	R1	Residential	LKD	W1	231°	5.2	
						5.2	High
First	R2	Residential	Bedroom	W2	231°	4.7	
						4.7	High
			Flat 7				
First	R1	Residential	LKD	W1	141°	3.6	
				W2	141°	6.1	
						6.1	High
First	R2	Residential	Bedroom	W3	321°N Inc	0	
				W4	321°N Inc	2.6	
						2.6	Minimum
			Flat 8				
First	R1	Residential	Bedroom	W1	141°	6.1	
						6.1	High
First	R2	Residential	LKD	W2	141°	6.1	
				W3	321°N Inc	2.6	
						8.7	High