BROOKE VINCENT + PARTNERS

CHARTERED BUILDING SURVEYORS, ENTERPRISE HOUSE, THE CREST, LONDON NW4 2HN

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Nicholas Taylor Associates
Second Floor
46 James Street
London W1U 1EZ

Our Ref: DS/RM/10801

Date: 11th January 2019

For the attention of Mandip Singh Sahota

Dear Sirs

Belsize Fire Station – 36 Lancaster Grove, NW3 4PB London

Daylight and Sunlight

1. INTRODUCTION

1.1 We are instructed to report on the Daylight and Sunlight aspects of this Planning Application, reference no.2018/4394/P.

1.2 BVP have also prepared the daylight and sunlight report in support of the planning application for other residential units within this Grade II Listed Building, reference numbers 2016/5813/P and 2016/6119/L.

PLANNING POLICY

2. London Borough of Camden

2.1.1. The Camden Local Plan replaced the Council's Core Strategy and Development Policies in July 2017. The relevant policy is listed below:

Policy A1 Managing the impact of development

The Council will seek to protect the quality of life of occupiers and neighbours. We will grant permission for development unless this causes unacceptable harm to amenity. We will:

a. seek to ensure that the amenity of communities, occupiers and neighbours is protected;…
d. require mitigation measures where necessary.

The factors we will consider include:
…
e. visual privacy, outlook; f. sunlight, daylight and overshadowing;
…

Camden's Local Plan also refer to supplementary planning document Camden Planning Guidance CPG: Amenity, which states as follows:

KEY MESSAGES:

- *The Council expects applicants to consider the impact of development schemes on daylight and sunlight levels. Where appropriate a daylight and sunlight assessment should be submitted which should be follow the guidance in the BRE's Site layout planning for daylight and sunlight: A guide to good practice.*
- *The 45° and 25° tests cited in the BRE guidance should be used to assess ('screen') whether a sunlight and daylight report is required.*
- *Levels of reported daylight and sunlight will be considered flexibly taking into account site-specific circumstances and context.*
- *The Council may seek independent verification of sunlight and daylight reports if necessary.*

The London Plan 2016 (Including Housing Standards minor alterations - March 2016)

2.3 The London Plan forms part Camden's Local Plan. The Housing Supplementary Planning Guidance (HSPG) 2016, defines in greater detail the London Plan's approach to Housing requirements and standards. Those aspects of the HSPG that are relevant to this report are mostly relevant to the London Plan **Policy 3.5 – Quality and Design of Housing Development**.

3. METHOD OF CALCULATION

3.1 Building Research Establishment

3.1.1 Like all Local Authorities, Camden refers to the Building Research Establishment (BRE) publication 2011 ''Site Layout Planning to Daylight and Sunlight. A Guide to Good Practice'', in order to apply numerical values to its policy. It is within the terms of these guidelines that we have considered this matter and report below. In particular:

3.1.2 BRE confirm that the Guide does not contain mandatory requirements and in the Introduction, paragraph 1.6, provides a full explanation of its purpose: "*The Guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and this document should not be seen as an instrument of planning policy; it aims 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".*

3.1.3 The method of calculation for proposed accommodation is known as Average Daylight Factor (ADF). This is the most comprehensive of daylight calculations defined by BRE and is appropriate to proposed accommodation, because all relevant information is available.

3.1.4 The initial calculation is Vertical Sky Component which measures the value of daylight received at the centre of the window face. The area of glazing through which the light is transmitted and the transmission value of the glazing is then considered. Within the room the total surface area is calculated and a degree of reflection applied. The outcome is then compared to the values recommended by BRE. Assuming that the rooms are used in conjunction with artificial lighting the minimum recommended ADF levels are:

2%	Kitchen or combined kitchen and living space where the kitchen is served by a local window.
1.5%	Living room and study
1%	Bedroom

Where kitchens have been sited at the rear of the room these are to be served by task lighting in the modern mode.

3.1.5 Where a room is served by more than one window, ADF calculations are made in relation to each window and the individual results added together to provide the true ADF for that room.

3.1.6 The following assumptions have been made with regard to the various elements that together are computed to produce the ADF value;

- Glazing transmittance – 0.68 for the double glazing (BRE default reading);
  – 0.8 for the single glazing;
- Net glazed area of the window – British Standard 8206 References:
  – 0.6 (wooden frame panelled windows);
  – 0.8 (new glazed panes and dormers);
- Interior surface reflectance – 0.6 (BRE default 0.5)

4. DAYLIGHT AND SUNLIGHT

4.1 Proposed Accommodation

4.1.1 We have analysed ADF for the proposed accommodation and the results are detailed within Appendix 2. These confirm that the proposed daylight readings within the dining room at third floor level and the living room at fourth floor level would be slightly below the BRE recommended value. This is due to the size of the existing windows which cannot be altered.

4.1.2 The proposed results ADF would be 1.28% for the dining room and 1.45% for the living room, against a recommended value of 1.5% ADF. These would be respectively 85% and 96% the reference value. Were we reporting in the terms of an Environmental Statement, this would be defined as an effect of minor adverse significance. The bedroom at fifth floor level would achieve ADF significantly above the BRE recommended value of 1%.

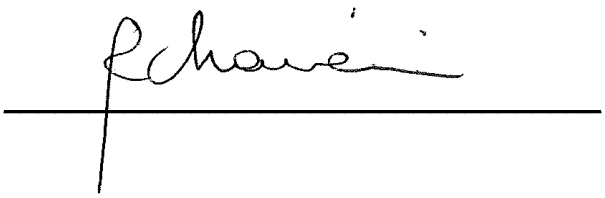
4.1.3 This residential unit would be located within an existing Grade II Listed building, which means the existing fenestration and architectural form is of the foremost importance. Other aspects inevitably demand a degree of compromise and, in any case, good results have been achieved.

4.1.4 All the habitable rooms would face within 90° of due south and this would satisfy the BRE recommendation. The results confirm that both the annual and winter sunlight availability would be above the recommended values of 25% and 5%.

5. SUMMARY

5.1 Within the proposed accommodation, the layout ensures the habitable rooms would receive the benefit of good daylight and sunlight, especially when considering the constraints imposed by the existing Grade II Listed building.

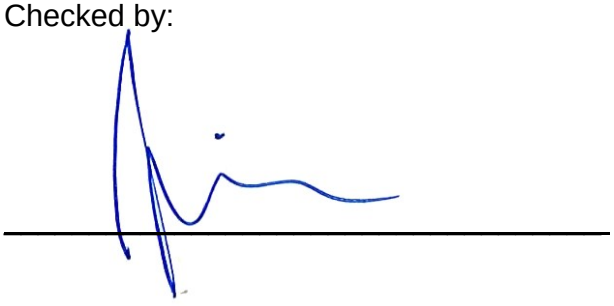
Yours sincerely



Roberta Mancini MArch
For Brooke Vincent + Partners

email: roberta.mancini@brooke-vincent.co.uk

Checked by:



David Sirman MRICS
For Brooke Vincent + Partners

email: david.sirman@brooke-vincent.co.uk

APPENDIX 1

LOCATION PLAN
CAD MODEL

N

KEY:

Existing Neighbouring Buildings

Existing Site Building

Proposed Site Building

Sources of Information:

Survey- Survey Solution Drg.No. 16523 se

Council- Camden
Photos- Aerial photos

Proposed Drawings- Tate Harmer

received: 07.01.2019.
THA_BFS_PR_AL_130-210.dwg

Rev.	Date	Description

BVP
BROOKE VINCENT + PARTNERS
RICS

Chartered Building Surveyors
Enterprise House The Crest London NW4 2HW
Tel: 020 8202 1013
E-mail: info@brooke-vincent.co.uk

CLIENT / ARCHITECT:
Tate Harmer

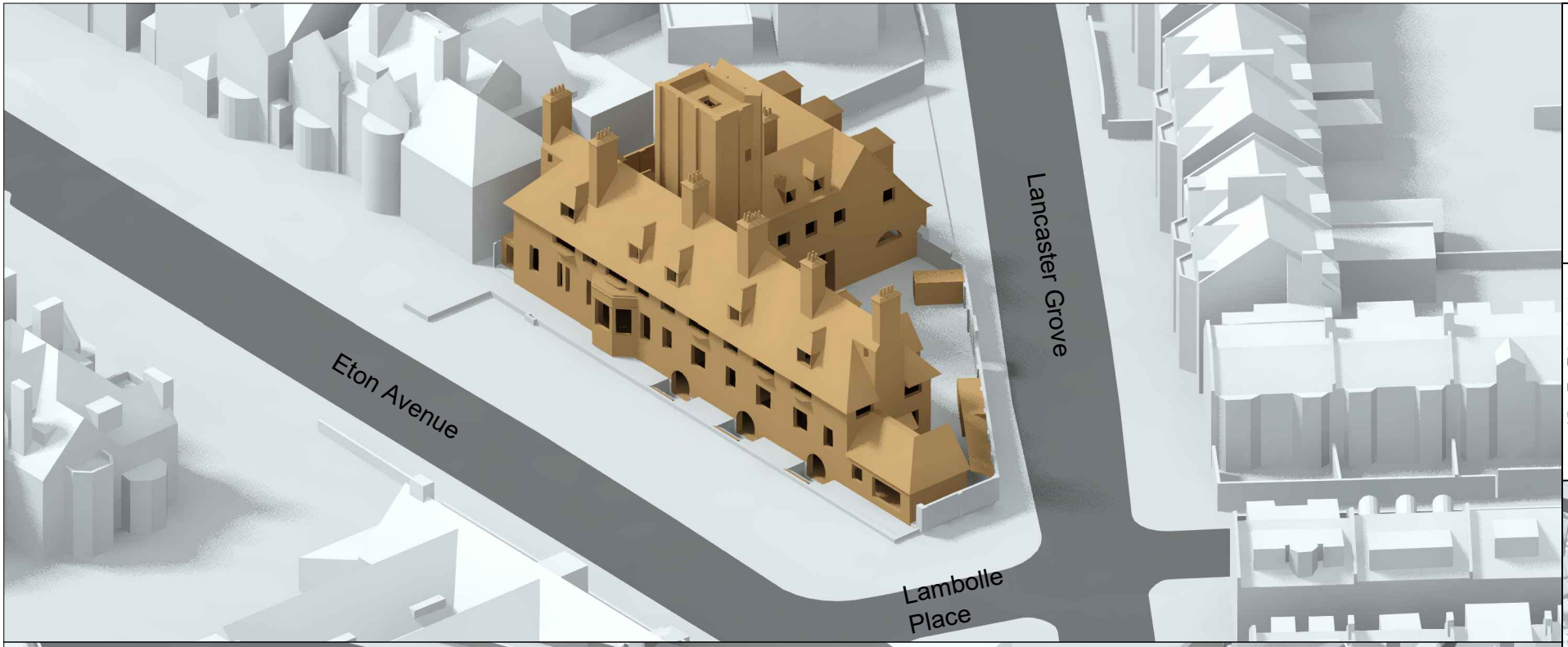
PROJECT:
Belsize Fire Station
36 Lancaster Grove
NW3

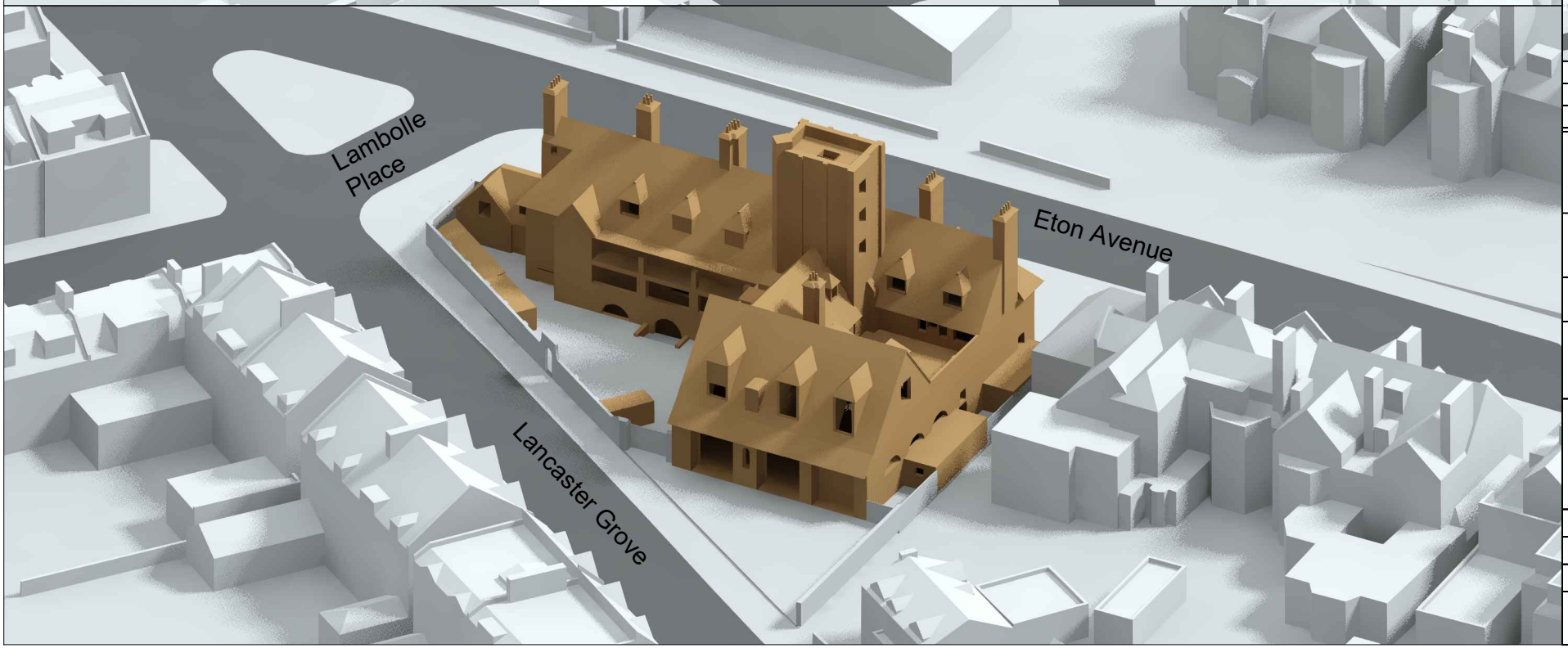
DRAWING:
Plan View
Proposed

DRAWN: RM	PROJECT NO: 10801
SCALE: NTS	
DATE: 10.01.2019	

DRAWING NO: 10801-301

REV:





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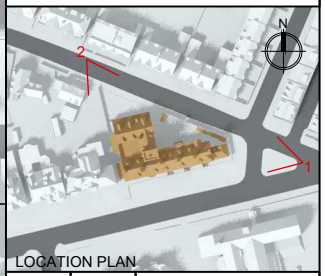

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Rev.	Date	Description

BVP BROOKE VINCENT + PARTNERS
RICS
Chartered Building Surveyors
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E-mail: info@brooke-vincent.co.uk

CLIENT / ARCHITECT:
Tate Harmer

PROJECT:
Belsize Fire Station
36 Lancaster Grove
NW3

DRAWING:
Perspective View
Proposed

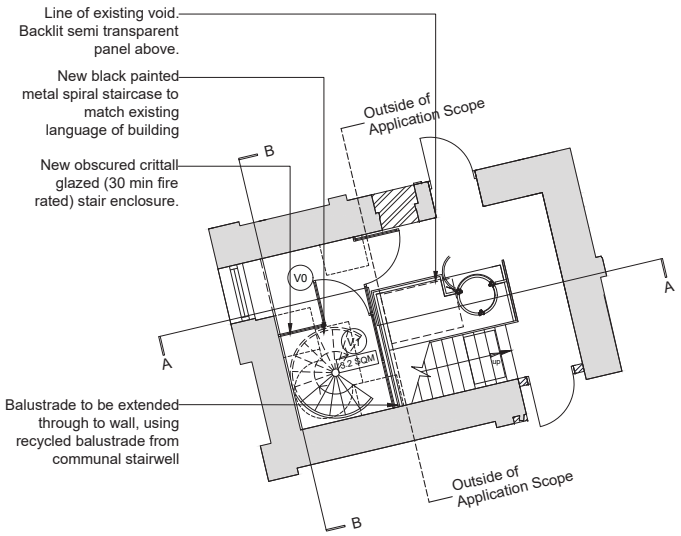
DRAWN: RM	PROJECT NO: 10801
SCALE: NTS	
DATE: 10.01.2019	

DRAWING NO: 10801-302

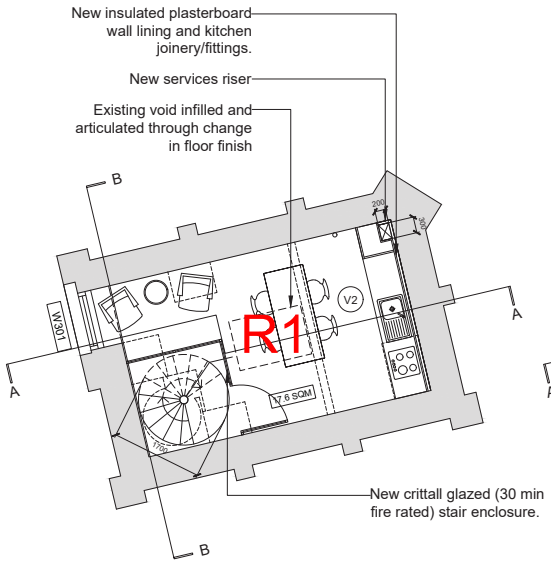
REV:

APPENDIX 2

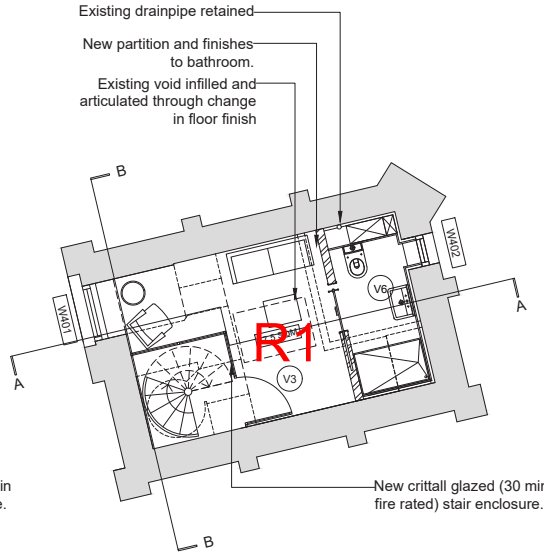
ROOM REFERENCES
DAYLIGHT AND SUNLIGHT RESULTS
PROPOSED ACCOMMODATION



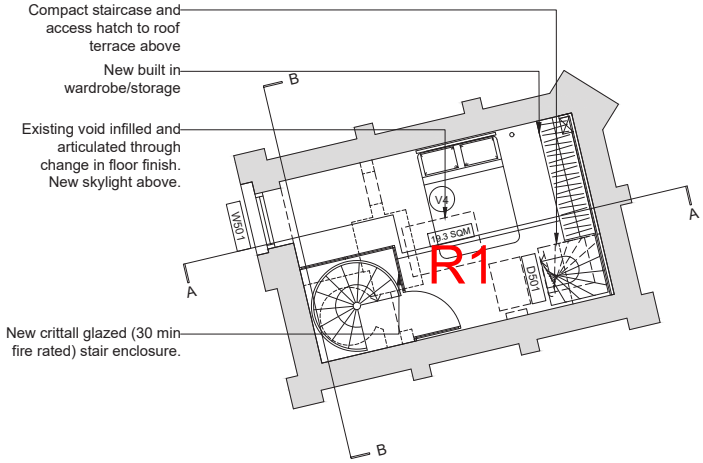
1 - PROPOSED SECOND FLOOR PLAN
2nd to 3rd 13 stair risers @ 212mm
F-F Height: 3021mm



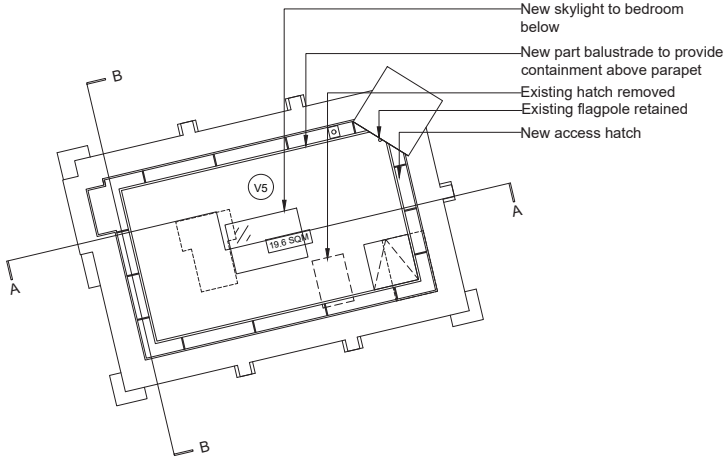
2 - PROPOSED THIRD FLOOR PLAN
3rd to 4th 12 stair risers @ 210mm
F-F Height: 2749mm



3 - PROPOSED FOURTH FLOOR PLAN
4th to 5th 12 stair risers @ 200mm
F-F Height: 2437mm



4 - PROPOSED FIFTH FLOOR PLAN
4th to 5th 12 stair risers @ 200mm
F-F Height: 2437mm



5 - PROPOSED ROOF TERRACE

TOTAL AREA: 59.6m²

0 2 4 6 8 10M

KEY

EXISTING RETAINED BUILDING FABRIC
PROPOSED BUILDING FABRIC
REMOVED EXISTING

V0 - COMMUNAL FIRE LOBBY
V1 - ENTRANCE/STAIR ENCLOSURE
V2 - KITCHEN/DINING
V3 - LIVING
V4 - BEDROOM
V5 - ROOF TERRACE
V6 - BATHROOM

Note: Areas indicative only, shown including all stairs and stair voids.

Paper size: A1

Rev	Date	By	Description	Checked	Approved
P1	08.01.17	ABF	DRAFT Preliminary Issue	LP	RH
P2	09.01.17	ABF	DRAFT Preliminary Issue - Tags Added	LP	RH
P3	19.04.18	RB	Preliminary Issue - For Comment	JM	RH
P4	03.07.18	DM	Preliminary Issue - For Comment	JM	RH
P5	23.07.18	RB	Statutory Approvals	JM	RH
P6	24.08.18	RB	Statutory Approvals	JM	RH

North

Architect / Originator: Tate Harmer — Unit G1B2, Stamford Works, 3 Gillett Street, London N16 8JH. Tel: +44 (0)207 241 7481 Email: studio@tateharmer.com

Client: Platinum Land — 8 Quantiel House, 1 Duke of York Square, Kings Road, London, SW3 4LY

Project: Belsize Park Firestation

Date of Origin: 26.11.17 — Drawn By: ABF

Drawing Title: Proposed Tower Unit Plans

Scale(s): 1:50

Drawing Number: BFS THA PR AL 130 P6 — Revision

Drawing Status: Planning

Client Sign Off

Project Name: Belsize Fire Station - 36 Lancaster Grove
Project No.: 10801
Report Title: Average Daylight Analysis - Proposed accommodation
Date: 09/01/19

Floor Ref.	Room Ref.	Room Use.	Window Ref.	Glass Transmittance	Glazed Area	Clear Sky Angle Proposed	Room Surface Area	Average Surface Reflectance	Below Working Plane Factor	ADF Proposed	Recom'd Value	Meets BRE Criteria
Proposed Tower Unit												
Third	R1	Dining Room	W1	0.80	0.81	73.60	58.17	0.60	1.00	1.28		
										1.28	1.50	NO
Fourth	R1	Living Room	W1	0.80	0.81	76.52	53.48	0.60	1.00	1.45		
										1.45	1.50	NO
Fifth	R1	Bedroom	W1	0.80	0.81	76.84	65.20	0.60	1.00	1.19		
			W2 rooflight	0.68	1.04	178.15	65.20	0.60	1.00	3.01		
										4.20	1.00	YES

Project Name: Belsize Fire Station - 36 Lancaster Grove
Project No.: 10801
Report Title: Sunlight - Proposed accommodation
Date of Analysis: 09/01/19

Floor Ref.	Room Ref.	Room Use.	Window Ref.		Window Orientation	Annual	Winter
Proposed Tower Unit							
Third	R1	Dining Room	W1	Proposed	257°	29	6
Fourth	R1	Living Room	W1	Proposed	257°	30	7
Fifth	R1	Bedroom	W1	Proposed	257°	30	7
			W2 rooflight	Proposed	90° Hz	42	0