



**STRUCTURAL REPORT**

**ON**

**26A FERNCROFT AVENUE  
LONDON  
NW3 7PH**

**FOR**


**Mr JENS CREMER**

**PROJECT NO: P5641**

**JULY 2023**

**Version 1.1**

DOCUMENT CONTROL SHEET

	26a Ferncroft Avenue, NW3 7PH	Project No.	P5641
Prepared by:	Isaac Hudson, Michael Alexander Ltd MEng MA(Cantab.) CEng MIStructE Director		
Issue No.	Status	Date	
1.0	Issued for Planning	7 July 2023	
1.1	Issued for Planning, revised to reflect comments.	18 July 2023	

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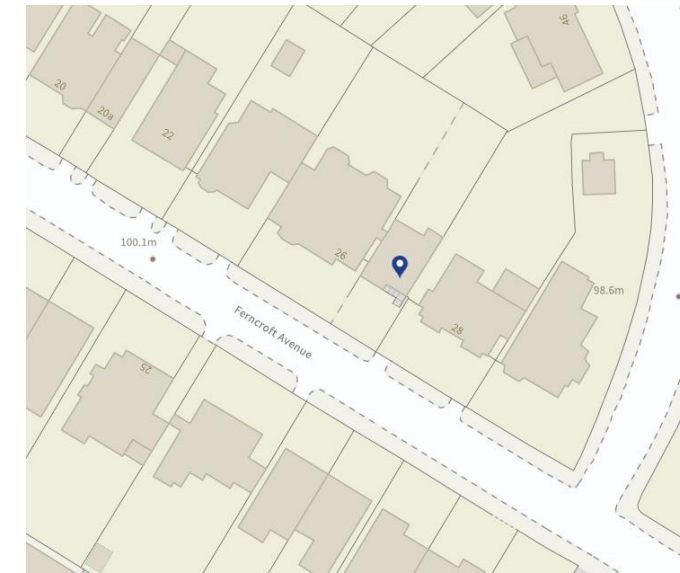
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## 1.00 INTRODUCTION

- 1.01 Michael Alexander Consulting Engineers has been instructed by Mr Jens Cremer (Owner of the property) to carry out a review of 26A Ferncroft Avenue, London NW3 7PH and comment on the impact of the proposed works structurally on the Grade II listed building.
- 1.02 Mr Isaac Hudson MEng MA(Cantab) CEng MStructE, a Director of Michael Alexander Consulting Engineers, visited the property on 20 June 2023 to carry out the inspection.
- 1.03 This report provides a summary of the findings and recommendations.
- 1.04 The inspection was purely visual. No opening up was carried out. Opening up works will be carried out prior to the detailed design stage.
- 1.05 This report is for the sole use of Mr Jens Cremer and their advisors.
- 1.06 The Listing for the building is shown below and is as follows:

- *Red brick.*
- *Tiled hipped and gables roofs with overhanging eaves and eaves cornice extending across the gabled left-hand bay to form a pediment.*
- *Asymmetrical design. 2 storeys.*
- *Irregular fenestration of 2 windows.*
- *Former vehicle entrance in gabled bay converted to a window and entrance with central casement above having relieving arch in pediment with arrow slit window above.*
- *Right hand bay with segmental-arched window appearing behind a C20 window and staircase leading to 1st floor entrance with porch formed by entablature carried on a column; 3-light 1st floor window.*



**Extract from Historic England map of Listed Buildings.**

CAMDEN
TQ2585NW FERNCROFT AVENUE 798-1/24/433 (North East side) Nos.26 AND 26A
GV II
<p>Detached house and attached former coach/motor house now converted to a dwelling. 1898, coach/motor house possibly later. By CHB Quennell; built by GW Hart. No.26: red brick with tile-hung 1st floor. Tiled hipped and gabled roofs with overhanging bracketed eaves, tall brick chimney-stacks and dormer with small gable. Asymmetrical design. 3 storeys. 3 windows plus single storey 2-window right hand bay. Left hand gabled bay with canted bowed bay sash windows to ground having entablature lintel which continues across the facade on columns and 1st floor with pulvinated lintel and cornice and tile-hung apron. 3rd floor Venetian type sash window in gable with short lengths of moulded cornice at angles to appear as a broken pediment. Central entrance bay with porch formed by entablature and columns with enriched capitals and cast-iron and glass hood; part-glazed panelled door with overlight. To right, a tripartite sash with corresponding sash at 1st floor and single sash above porch. Single storey bay has 2 sashes with gauged brick flat arches, a brick modillion cornice and blocking course. No.26A: red brick. Tiled hipped and gables roofs with overhanging eaves and eaves cornice extending across the gabled left hand bay to form a pediment. Asymmetrical design. 2 storeys. Irregular fenestration of 2 windows. Former vehicle entrance in gabled bay converted to a window and entrance with central casement above having relieving arch in pediment with arrow slit window above. Right hand bay with segmental-arched window appearing behind a C20 window and staircase leading to 1st floor entrance with porch formed by entablature carried on a column; 3-light 1st floor window. INTERIORS: not inspected. (British Architect: 2 September 1898).</p>
Listing NGR: TQ2546985978

**Historic England Listing  
26 and 26A Ferncroft Avenue**



## 2.00 BRIEF DESCRIPTION OF PROPERTY

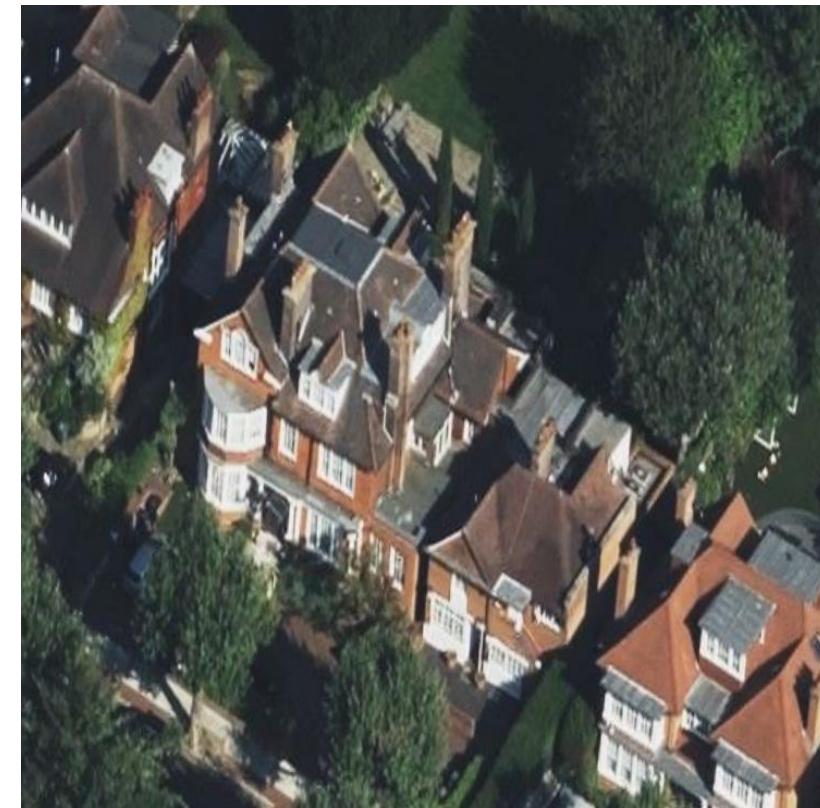
Refer to Floor Plans in **Appendix A** and Photographs in **Appendix B**.

### Existing property

- 2.01 The site is located on the north/north east side of Ferncroft Avenue, in the London Borough of Camden.
- 2.02 No. 26A Ferncroft Avenue was originally a stables/coach house to the larger house of no. 26. It was built circa 1902. It was converted to residential use in the 1980s. The buildings at no. 26 & no. 26A were Grade II listed in 1999.
- 2.03 The building is a two-storey detached house. It appears to be of traditional load bearing masonry construction with timber floors. There have historically been three extensions to the rear of the house at ground floor level.
- 2.04 The area to the front garden is a paved driveway, with mature shrubs at the boundary. To the side of the driveway are shallow steps leading up to the house.
- 2.05 There is a small paved courtyard to the rear of the house, with steps up to a garden laid to lawn. There are a number of large and mature trees and shrubs, and a large hedge at the boundary with no. 26.
- 2.06 The rear garden is accessed by a narrow alleyway between no. 26A and no. 26. The alleyway, and access to the alleyway via the drive, is owned by no. 26A, with no. 26 having access rights.

### Adjacent buildings

- 2.07 To the north-west of no. 26A, is the main house at 26 Ferncroft Avenue. It was designed, along with the majority of houses on Ferncroft Avenue and the surrounding roads, by CHB Quennell, a noted architect of the time. It was constructed as a single family home but is now subdivided into three flats. The property is three storeys, with a small basement along the boundary with no. 26A. The basement dates from 1980s.
- 2.08 To the south-east of no. 26A, no. 28 Ferncroft Avenue is a four-storey house, including basement. It dates from the early twentieth century. It is not listed.



**Aerial view looking north**



**Aerial view looking south**



### 3.00 EXISTING STRUCTURE

Refer also to Floor Plans in **Appendix A** and additional Photographs in **Appendix B**.

#### General

- 3.01 The property appears to be in reasonable structural condition, commensurate with a building of its age. It has been subject to a number of past alterations, both internally and externally.
- 3.02 A major alteration was the conversion to residential accommodation, carried out in the late 1980s.
- 3.03 There have also been extensions to the rear of the building, believed to have been carried out before the 1980's conversion.
- 3.04 There have been three planning applications, made in the early 2000s, to convert the attic space to second floor residential accommodation. They have all been withdrawn or refused and the work not carried out.

#### External Walls

- 3.05 The brickwork of the front elevation appears to be in generally good condition. There is a crack above and to the right of the right-hand opening, which we assume relates to a defect in the lintel. Refer **photo 3.05**.
- 3.06 There have been some repairs to the brickwork around the external staircase, which appear to have been carried out with cement mortar, rather than traditional lime mortar.
- 3.07 There is a slight bulge to the left-hand side of the side elevation, at first floor level. A restraint detail is visible on the side of the house at this level. Refer **photo 3.07**. It is assumed this is due to a lack of connection between floor joists and masonry wall, which has not been rectified. This will be verified by opening up works, once the building work begins, and additional ties added as required.
- 3.08 The other external walls to the house are load bearing masonry. The rear walls are assumed to be of more recent construction than the front and side original walls. These were generally in good condition.



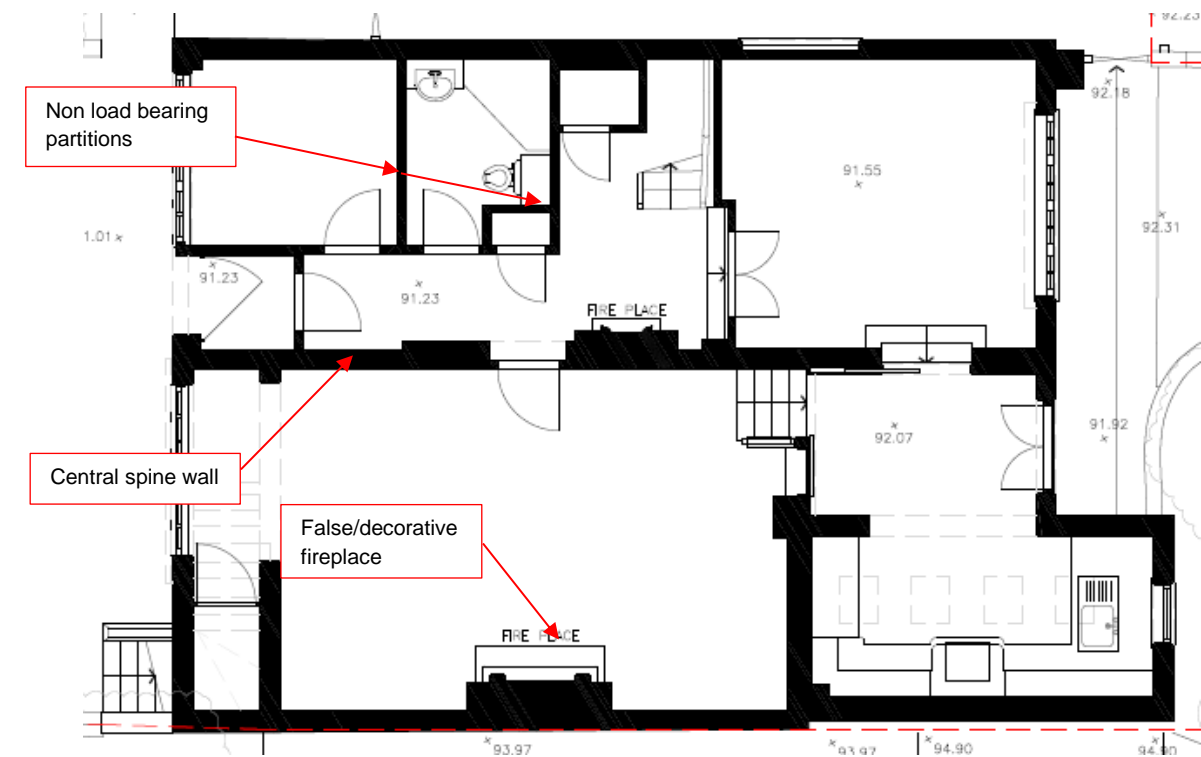
**Photo 3.05**



**Photo 3.07**

### Ground floor

- 3.09 It is assumed that the main loadbearing wall internally is the central spine wall, running from front to back. There are fireplaces on this wall at ground and first floor, and a chimney stack above. Refer **photo 3.09/1** and **photo 3.09/2**. Other walls at ground floor are assumed to be partitions added later and not load bearing.
- 3.10 The fireplace and chimney breast in the living room, on the external wall, is decorative only, as there is no chimney breast at first floor and above.



Existing ground floor plan

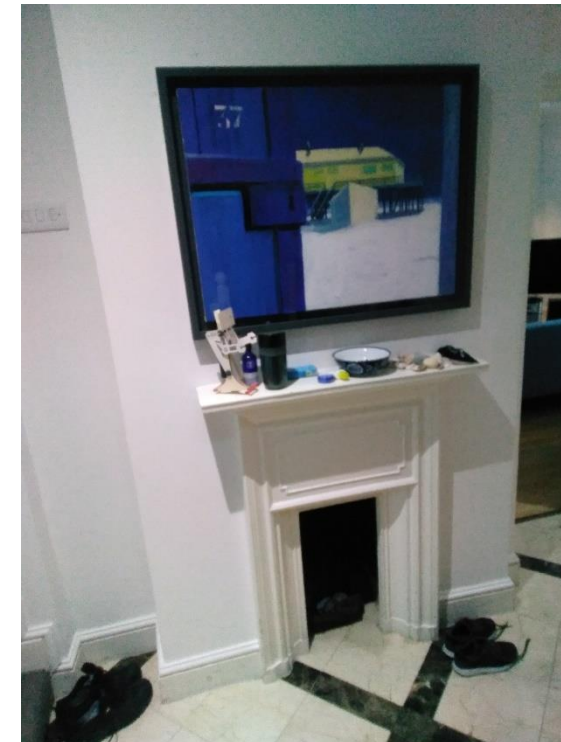


Photo 3.09/1

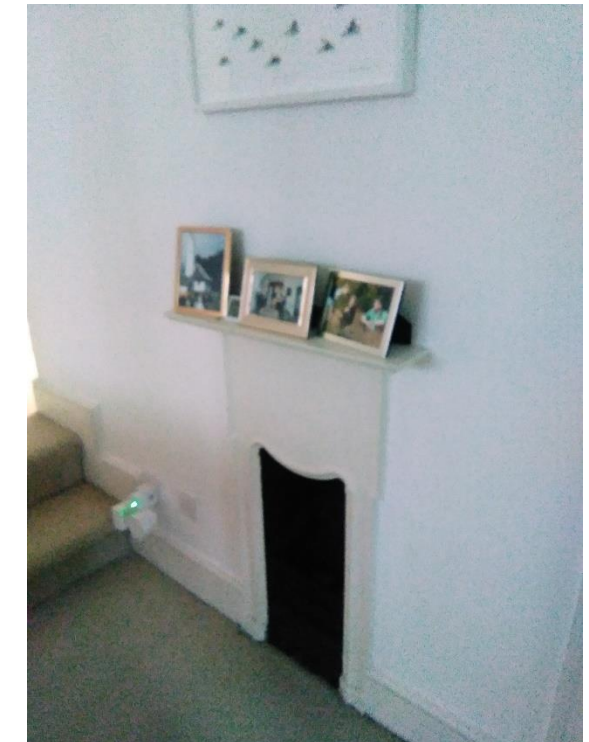
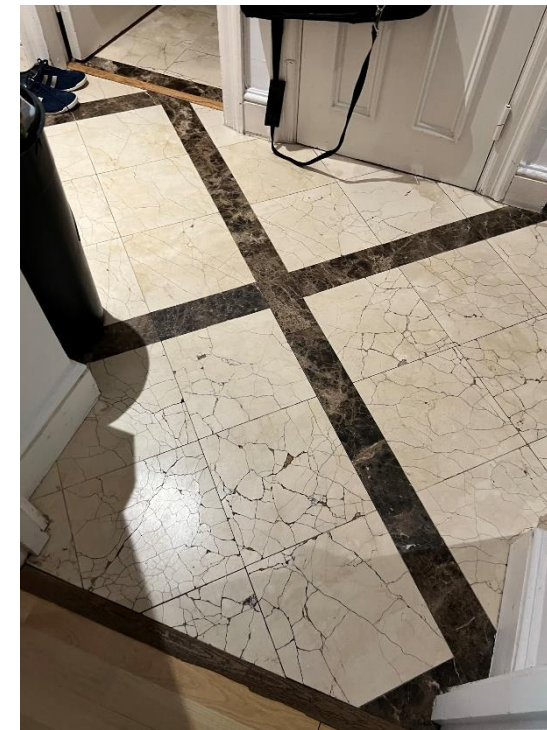


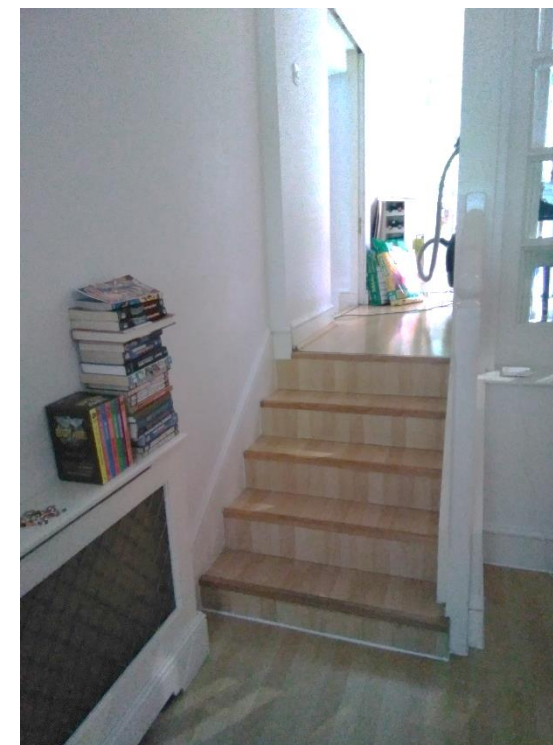
Photo 3.09/2



- 3.11 The ground floor is of generally solid construction, with the exception of the rear reception room, which has a timber suspended floor. The tiling to the hallway shows extensive crazing/cracking. Refer **photo 3.11**
- 3.12 The ground floor is on three different levels. To the rear, there are steps up to a living area, and a further set of steps up to the kitchen. Refer **photo 3.12**



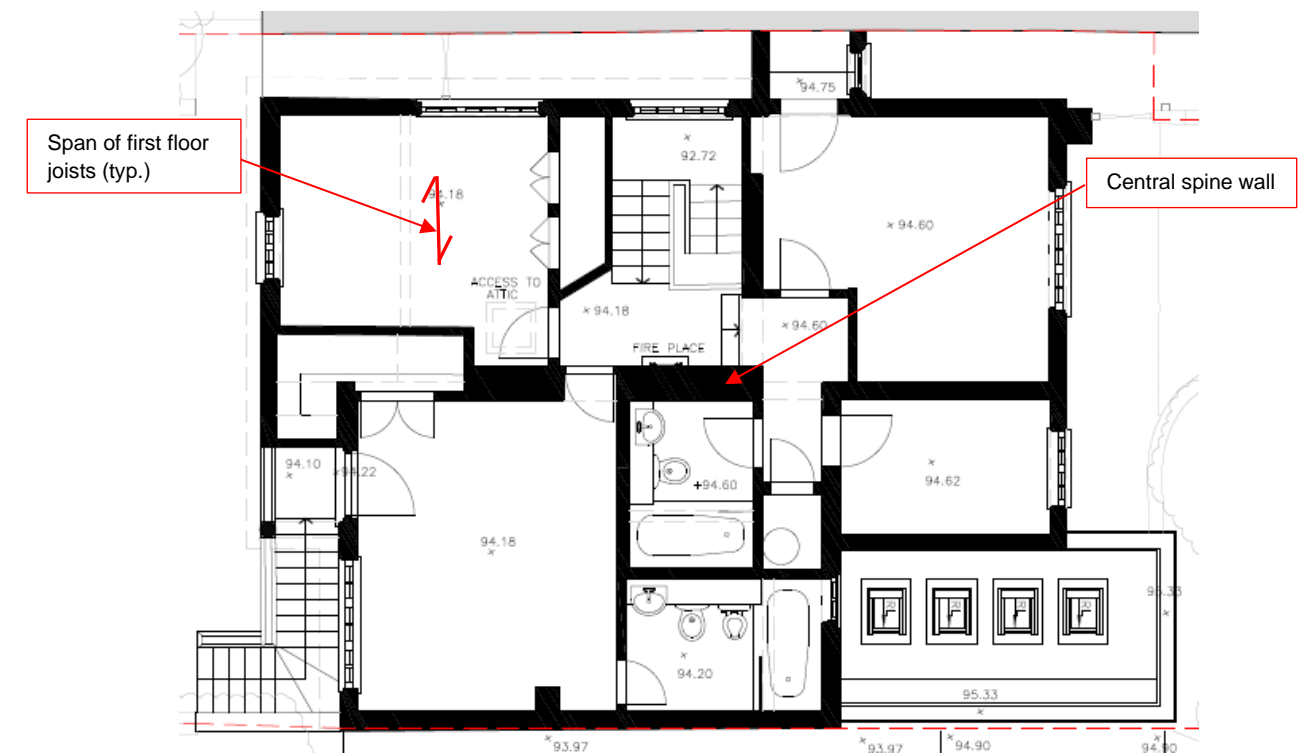
**Photo 3.11**



**Photo 3.12**

### First Floor

- 3.13 The first floor is formed of timber joists spanning side to side, bearing on the flank walls and the central spine wall described in 3.09 above.
- 3.14 To the rear, the extended areas are constructed from masonry, with assumed timber joist floors.
- 3.15 Some cracking is apparent in the ceiling of the ground floor living room, and in the first floor bathroom above. The floor joists in this area will be inspected and rectification works carried out if required.
- 3.16 On the ceiling of the rear bedroom, there was a line of staining. This is believed to be at the junction of the flat roof to the pitched roof, and so is likely to be associated with water ingress at this junction. Refer **photo 3.16**.



Existing first floor

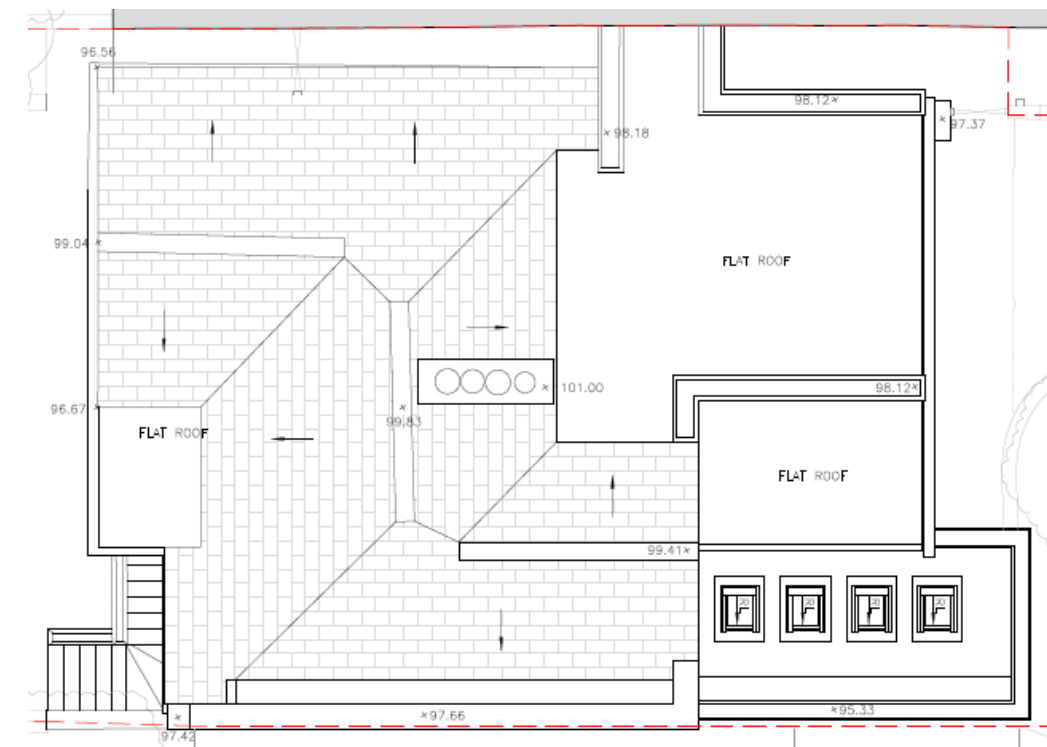


Photo 3.16



### Attic/Roof

- 3.17 The attic space is currently empty, and is not used for storage. The attic has been insulated at rafter level and within the loft floor. Refer **photo 3.17**.
- 3.18 There was limited visibility of the attic joists, but from what could be seen, they appeared to be in reasonable condition.
- 3.19 The chimney breast was visible in the attic space, and looked to be in good condition. Refer **photo 3.19**.
- 3.20 The pitched roof structure was visible from the attic space. The rafters appeared to be in good condition, with some obvious distortion of the roof.



Existing roof plan

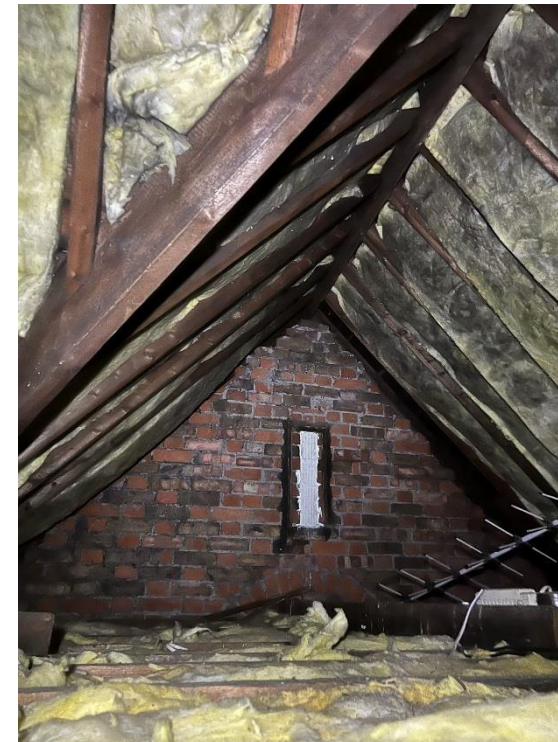


Photo 3.17

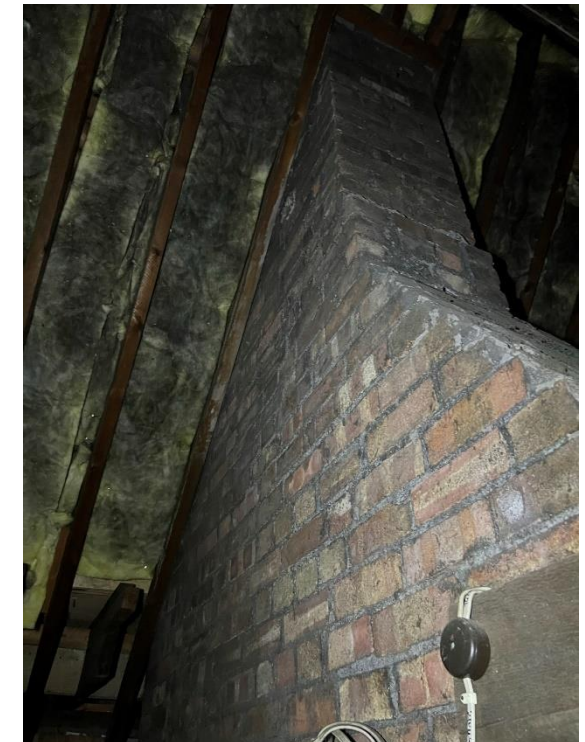


Photo 3.19

### Rear Garden

- 3.21 The rear garden contains a large tree, immediately adjacent to the rear of the house. Refer **photo 3.21**.
- 3.22 There are short retaining walls around the patio, with steps up, to allow access between the area immediately behind the house, which is paved, to the main garden level at the rear. Refer photo **3.22**

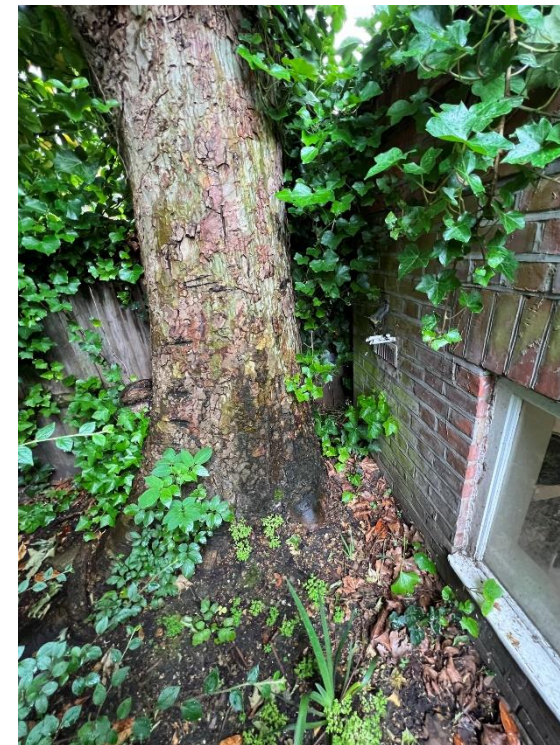


Photo 3.21

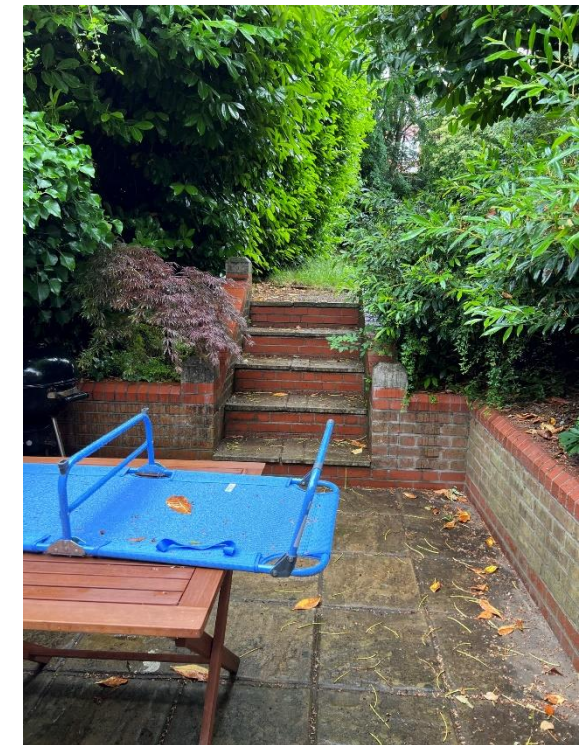


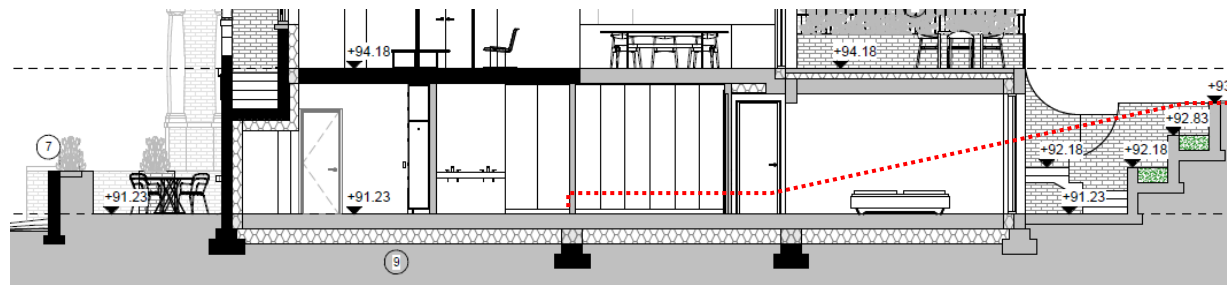
Photo 3.22



#### 4.00 PROPOSED SCHEME

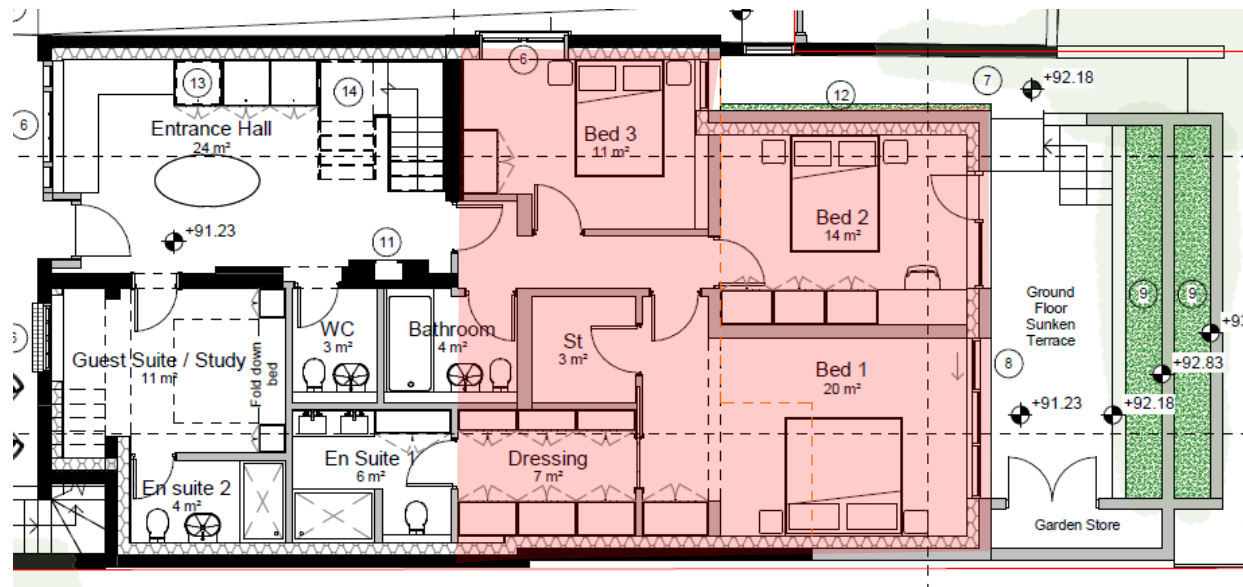
(Refer to extracts from Bere Architects drawings included in the text below)

- 4.01 The proposed scheme involves extending the ground floor, first floor and roof to the rear, including a courtyard and first floor terrace.
- 4.02 The ground floor will be replaced throughout to enable installation of insulation and to facilitate level access throughout. To the rear of the house this will result in a lowering of the floor level; the existing walls in this area may require underpinning, depending on the depth of the existing foundations.



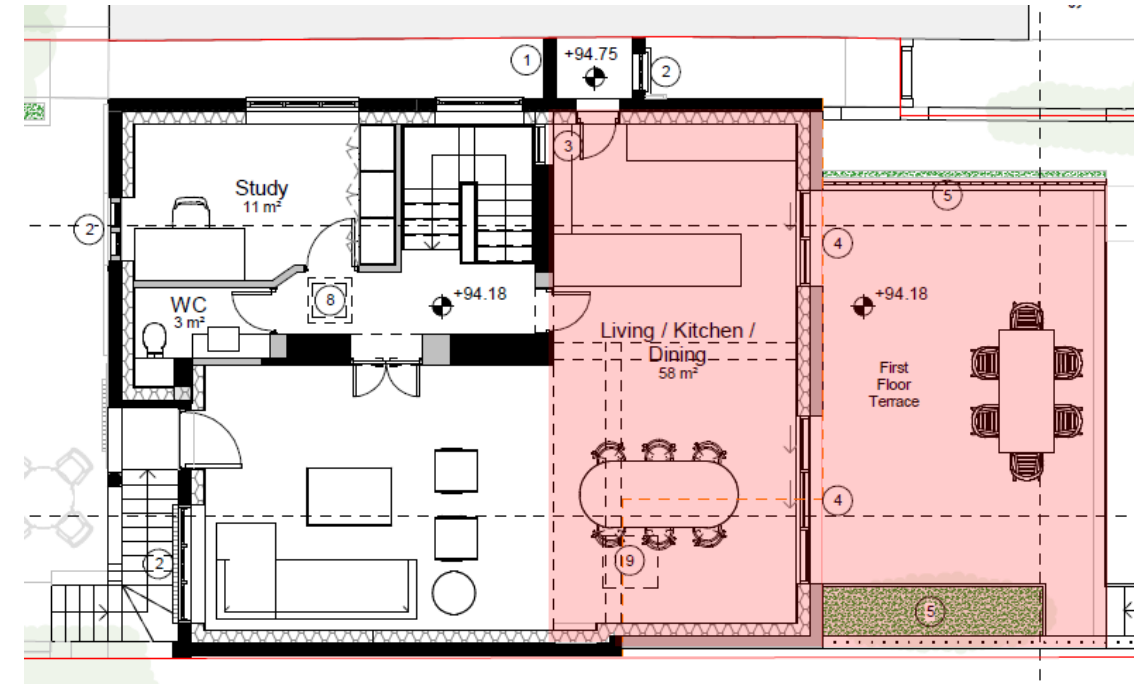
**Proposed long section**

- 4.03 Internal non-loadbearing partitions will be reconfigured. The central spine wall will not be altered.
- 4.04 The existing internal walls and rear elevation of the house will be dismantled, and new walls constructed to suit the proposed footprint and internal layout. The flank walls will be retained.



**Proposed ground floor plan (new structure shown in red)**

- 4.05 The rear section of the first floor will be dismantled and new floor joists installed to suit the proposed levels and layout, including a roof terrace.

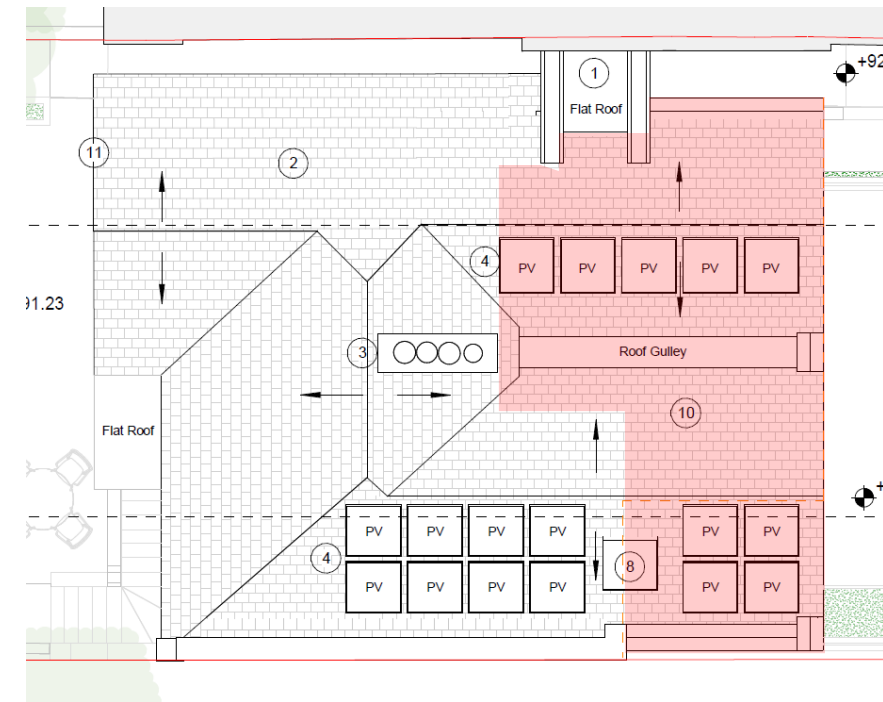


**Proposed first floor plan (new structure shown in red)**

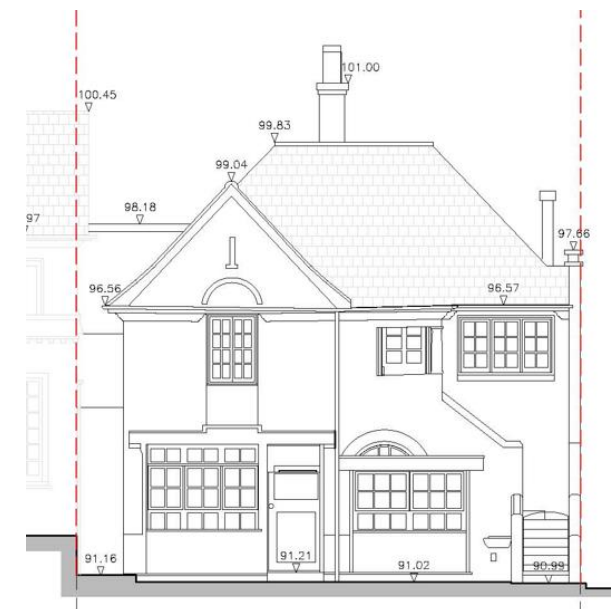


- 4.06 The existing flat roofs will be demolished. Steelwork will be installed to support the existing pitched roof at its junction with the new sections of roof.
- 4.07 The openings on the front elevation at ground floor will be altered. The opening on the left will remain the same size, and the existing lintel retained.

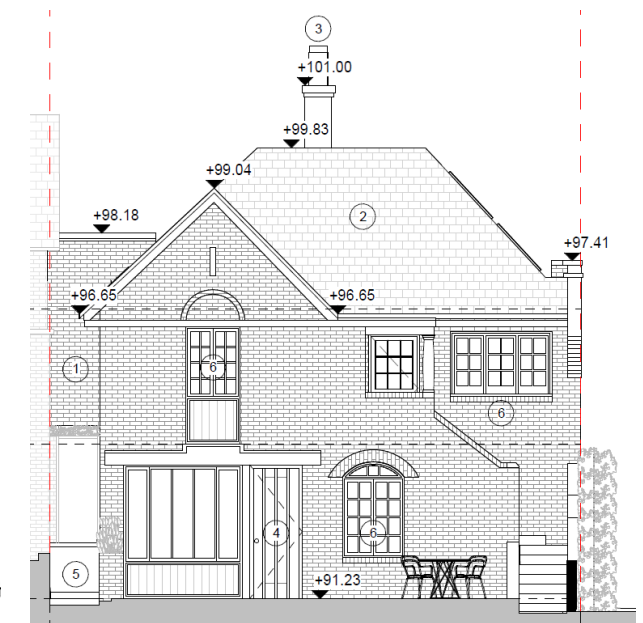
The opening on the right will be reduced to a smaller window, using the existing masonry arch. The assumed later addition of a lintel will be removed, and the remainder of the existing opening will be infilled with masonry.



**Proposed roof plan (new structure shown in red)**



**Existing Front Elevation**



**Proposed Front Elevation**

## 5.00 CONCLUSIONS

- 5.01 The condition of the building has been reviewed; a number of minor defects were recorded, and these will need to be considered when implementing the works, with investigations carried out and rectification works specified as required. However, no issues were identified which would give significant concerns or impact on the feasibility of carrying out the proposed works safely without adverse impact on the Listed Building.
- 5.02 To the front of the property, the proposed structural works are limited to replacement of the ground floor and alterations to the front façade. For the floor replacement works, investigations will be carried out to confirm the existing foundation profile to ensure the works can be carried out without undermining. For the front façade, the assumed original lintel and brick arch will be retained, but the opening to the right hand side will be infilled.
- 5.03 To rear of the house, the works involve the dismantling of the previous extensions and construction of a replacement two storey extension with a lowered ground floor level to match the front part of the house. Careful sequencing of the works and appropriate temporary works installed on the interface with the front part of the house will ensure these works can be carried out without detriment to the retained building.
- 5.04 In summary, we have reviewed the proposed works in the context of the existing structure and consider that they are structurally feasible and can be safely implemented whilst mitigating any risk to the listed building or the neighbouring listed building.

## **APPENDIX A**

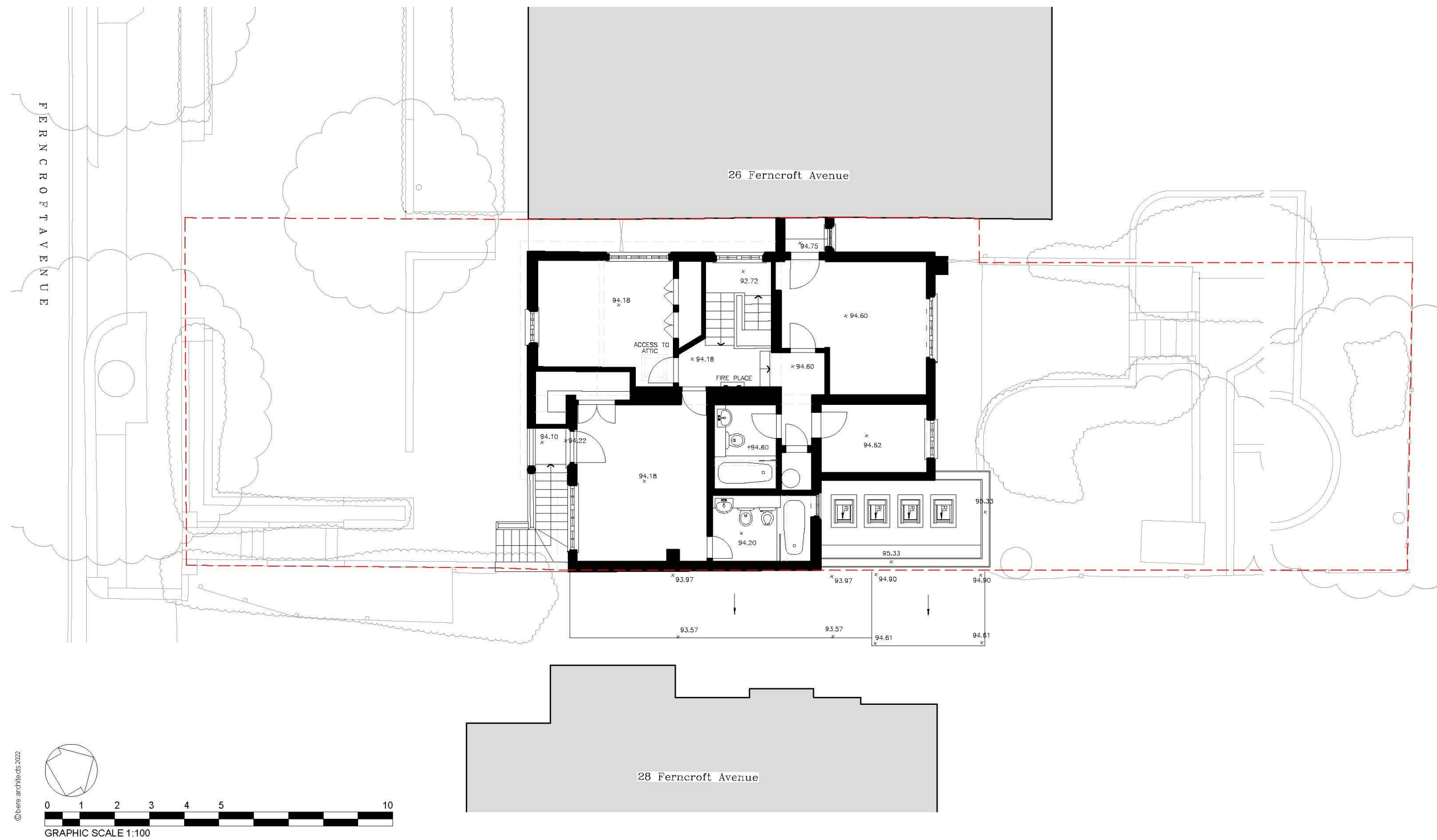
### **BERE ARCHITECTS DRAWINGS**





- | Rev | Description            | Date     | By | Chk |
|-----|------------------------|----------|----|-----|
| A   | First Issue            | 28/11/22 | EC |     |
| B   | Issued for information | 16/03/23 | AG |     |
| C   | Issued to clients      | 31/03/23 | AG |     |

Project	Drawing	Rev
494	.B3.G20.P00	C

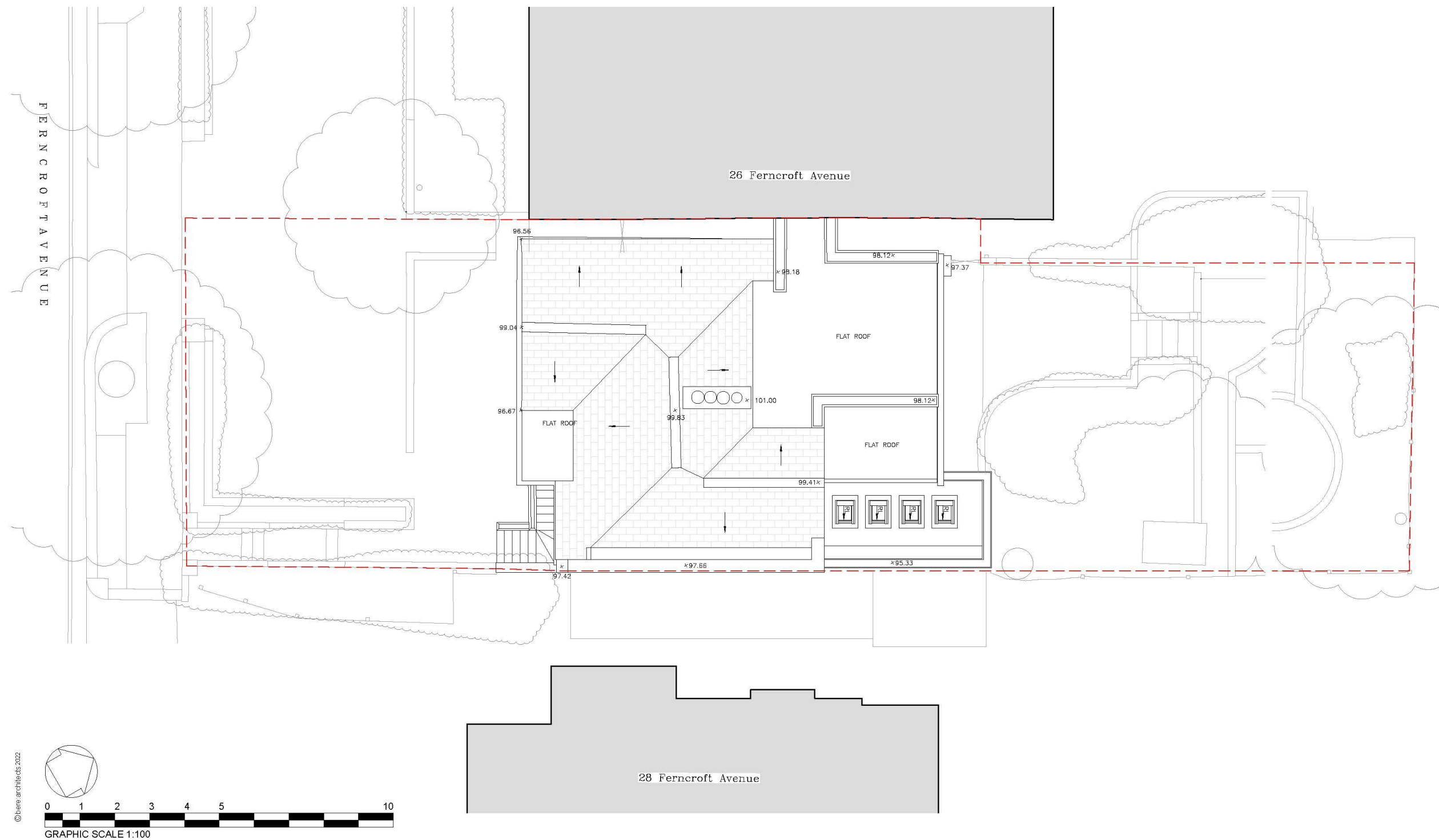


Rev	Description	Date	By	Chk
A	First Issue	28/11/22	EC	
B	Issued for information	16/03/23	AG	
C	Issued to clients	31/03/23	AG	

Project: 26A Ferncroft Avenue  
NW3 7PH  
Subject: Existing First Floor  
Scale: 1:100 @ A3  
Date: 28/11/22

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Project	Drawing	Rev
494	.B3.G20.P01	C



- 1 Use figured dimensions only.  
2 Do not scale from this drawing.  
3 All dimensions to be checked on site and the Architect to be informed of any discrepancies before construction commences.  
4 All references to drawings refer to current revision of that drawing.  
5 Structural and services information shown is indicative only. Refer to consultants' drawings for details and setting out.  
6 All work and materials to be in accordance with current applicable statutory legislation and to comply with all relevant codes of practice and British and European standards.

Rev	Description	Date	By	Chk
A	First Issue	28/11/22	EC	
B	Issued for information	16/03/23	AG	
C	Issued to clients	31/03/23	AG	

**Project:** 26A Ferncroft Avenue  
NW3 7PH

**Subject:** Existing Roof

**Scale:** 1:100 @ A3

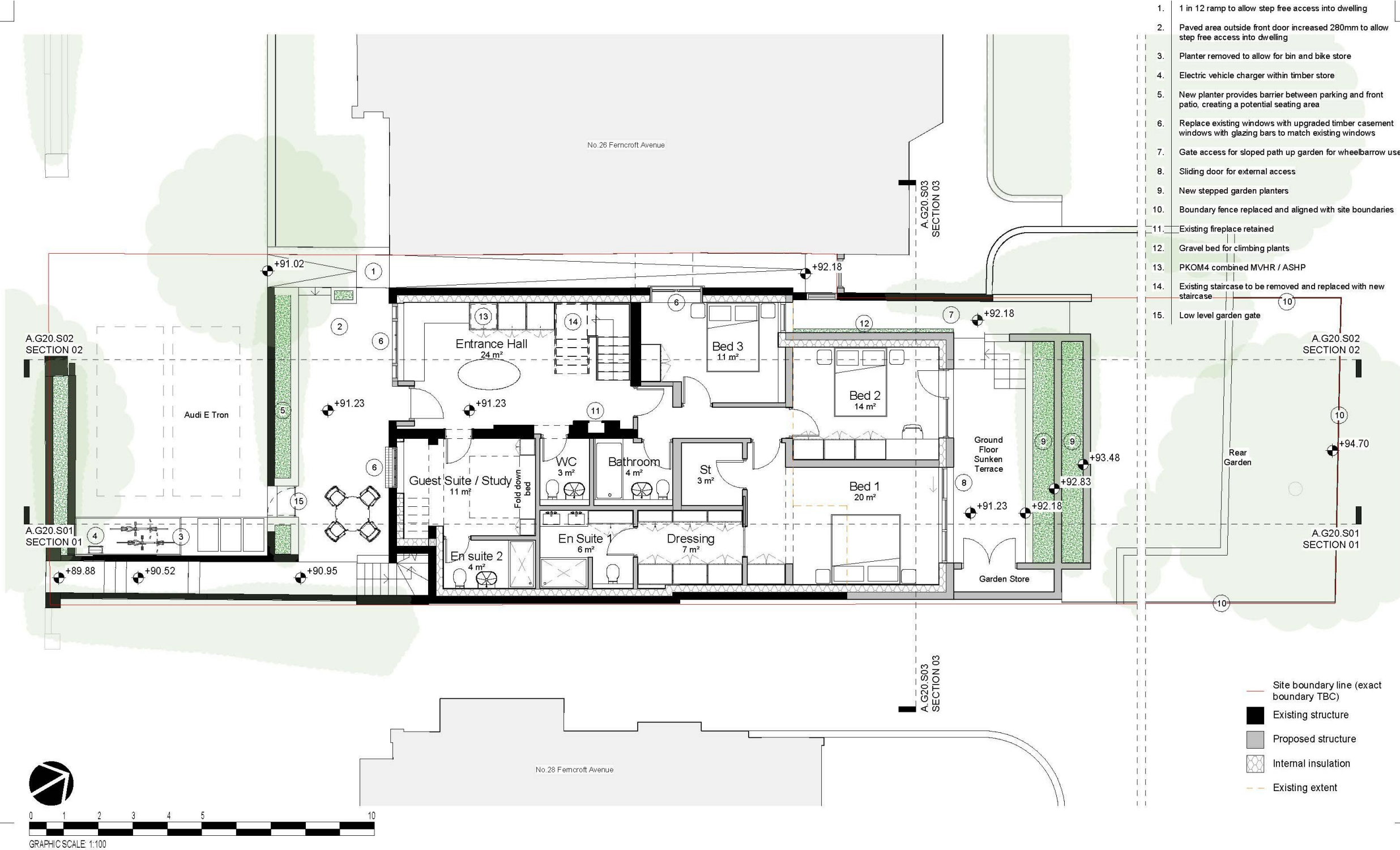
**Date:** 28/11/22

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Project	Drawing	Rev
494	.B3.G20.P02	C





- 1 in 12 ramp to allow step free access into dwelling
- Paved area outside front door increased 280mm to allow step free access into dwelling
- Planter removed to allow for bin and bike store
- Electric vehicle charger within timber store
- New planter provides barrier between parking and front patio, creating a potential seating area
- Replace existing windows with upgraded timber casement windows with glazing bars to match existing windows
- Gate access for sloped path up garden for wheelbarrow use
- Sliding door for external access
- New stepped garden planters
- Boundary fence replaced and aligned with site boundaries
- Existing fireplace retained
- Gravel bed for climbing plants
- PKOM4 combined MVHR / ASHP
- Existing staircase to be removed and replaced with new staircase
- Low level garden gate

1. Use figured dimensions only
2. Do not scale from this drawing
3. All dimensions to be checked on site and the Architect to be informed of any discrepancies before construction commences
4. All references to drawings refer to current revision of that drawing
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Rev	Description	Date	Author	Checker
A	First Issue	28/11/22	EC	
B	Issued for information	16/03/23	AG	
C	Issued to clients	31/03/23	AG	
D	Entrance Update	06/06/23	AG	
E	Issued For Planning Application	06/07/23	AG	

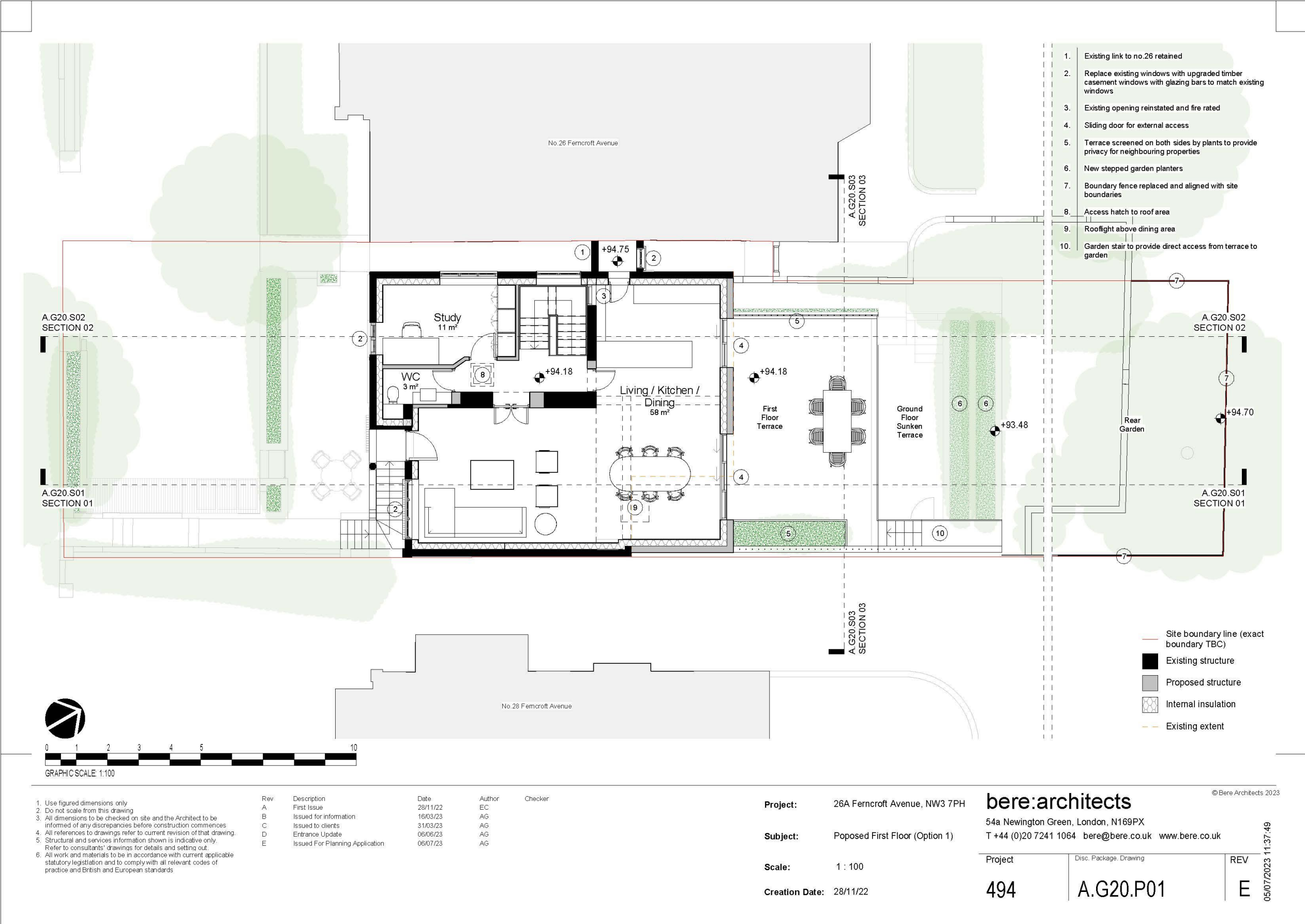
**Project:** 26A Ferncroft Avenue, NW3 7PH  
**Subject:** Proposed Ground Floor (Option 1)  
**Scale:** 1 : 100  
**Creation Date:** 28/11/22

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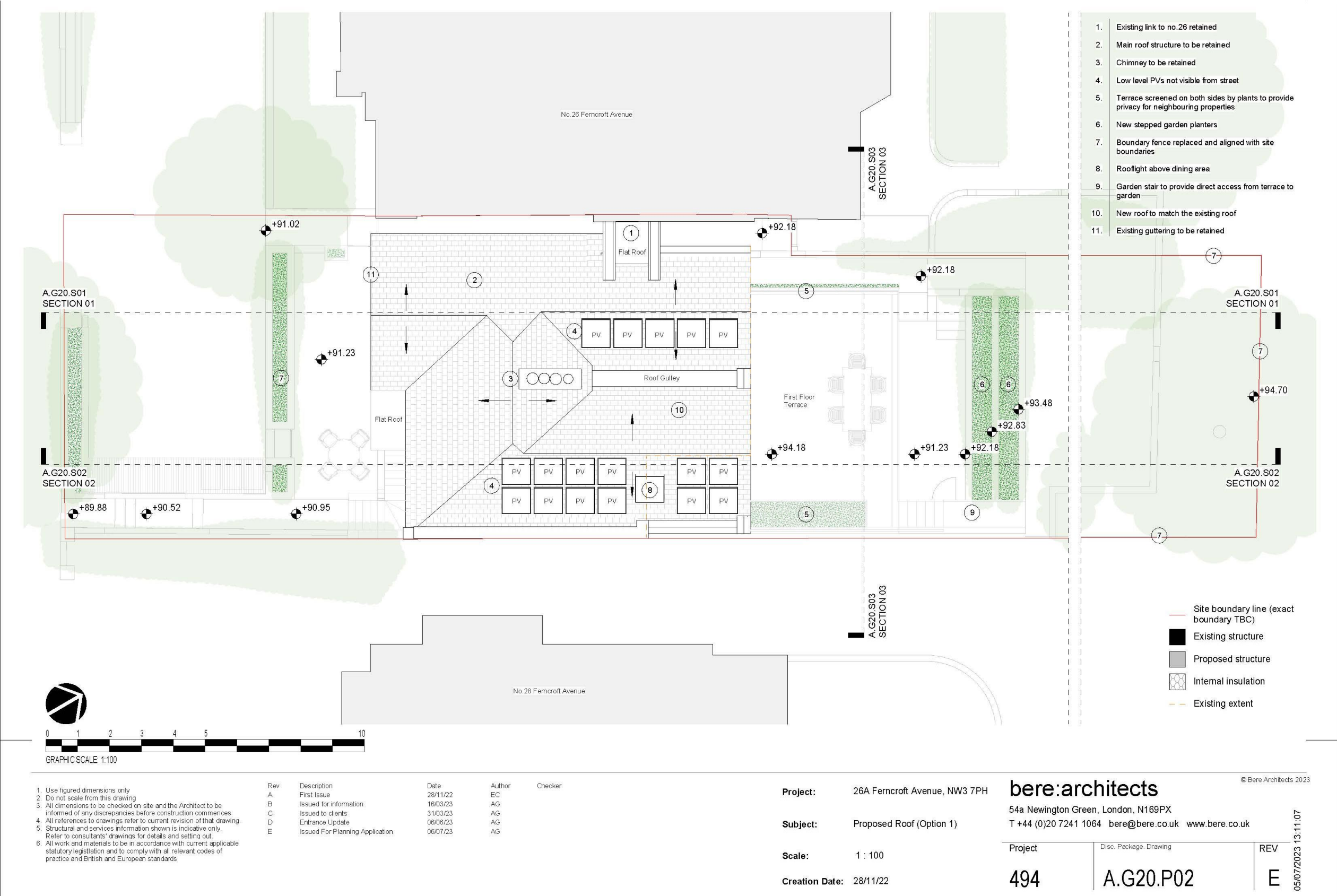
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Project	Disc. Package. Drawing	REV
494	A.G20.P00	E

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## **APPENDIX B**

### **PHOTOGRAPHS**





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