1 & 2 The Hermitage, Richmond, TW10 6SH

Planning Fire Safety Strategy





Control Sheet

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1. Introduction

1.1 - Overview

This Planning Fire Safety Strategy has been prepared by Apex Strategies Ltd. on behalf of James Carter in relation to development proposals at 1 & 2 The Hermitage, Richmond, TW10 6SH which involve the mansard conversion of the existing roofspace above both dwellings to create additional habitable spaces at second floor level.

Validation requirements introduced by LBRuT in response to London Plan (2021) Policy D12(a) 'Fire Safety', require all applications to be supported by a Planning Fire Safety Strategy report. However, the London Plan Policy D12(A) Fire Safety guidance states that;

"Where the applicant considers parts of or the whole policy do not apply, this should be justified in a Reasonable Exception Statement (RES)."

This document considers the implications of the current development proposals in the context of Policy D12(A) (detailed below) and provides commentary on where the policy does and does not apply.

"Policy D12(A): In the interests of fire safety and to ensure the safety of all building users, all development proposals must achieve the highest standards of fire safety and ensure that they:

- 1. identify suitably positioned unobstructed outside space:
 - a. for fire appliances to be positioned on
 - b. appropriate for use as an evacuation assembly point
- 2. are designed to incorporate appropriate features which reduce the risk to life and the risk of serious injury in the event of a fire; including appropriate fire alarm systems and passive and active fire safety measures
- 3. are constructed in an appropriate way to minimise the risk of fire spread
- 4. provide suitable and convenient means of escape, and associated evacuation strategy for all building users
- 5. develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in
- 6. provide suitable access and equipment for firefighting which is appropriate for the size and use of the development."



London Plan paragraph 3.12.2 notes that;

"The matter of fire safety compliance is covered by Part B of the Building Regulations. However, to ensure that development proposals achieve the highest standards of fire safety, reducing risk to life, minimising the risk of fire spread, and providing suitable and convenient means of escape which all building users can have confidence in, applicants should consider issues of fire safety before building control application stage, taking into account the diversity of and likely behaviour of the population as a whole."

The aim of this document is therefore to demonstrate the relevant fire safety aspects of the proposed development design to date. This document does not constitute the detailed fire strategy under the Building Regulations which will be developed as the scheme progresses. However, this Strategy evidences the provisions made for the safety of occupants and protection of property as well as the provision of suitable access and provisions for firefighting in light of London Plan fire safety policy requirements.

This Strategy is presented in a format which responds to the listed criteria of London Plan Policy D12(A).

The development provides residential accommodation, as such, the proposals have been considered against the requirements set out within The Building Regulations (2010) Approved Document B: Volume 1 - 2019 edition incorporating 2020 and 2022 amendments; hereafter referred to as 'ADB1'.

It should be noted that an existing application is in progress under planning ref: 23/2659/HOT for "Proposed lower ground floor rear extension, upper ground floor rear extension and all associated works" at 2 The Hermitage. The existing application is supported by a separate Planning Fire Safety Strategy which considers the fire safety implications of the relevant works.

1.2 - Drawing Information

This Strategy has been informed by the submitted layouts and elevations prepared by London Atelier, copies of which are included at **Appendix A**.

1.3 - Statement of Competency

This Planning Fire Safety Strategy has been prepared by Brett Littlewood, who is qualified with a HND in Construction and the Built Environment (Civil Engineering), a higher level apprenticeship in Construction Management, has 11+ years experience as a consulting Highways Engineer and is a Member of the Institute of Highways Engineers (MIHE). The author's qualifications and experience are considered to be commensurate with the size, scope and complexity of the development.



2. Fire Service Vehicle Access & Assembly

2.1 - Fire Service Vehicle Access

ADB1 states that for dwellinghouses;

"access for a pumping appliance should be provided to within 45m of all points inside the dwellinghouse. Every elevation to which vehicle access is provided should have a suitable door(s), not less than 750mm wide, giving access to the interior of the building."

The site (1 & 2 The Hermitage) comprises a pair of existing three-storey (basement, ground floor and first floor) semi-detached dwelling houses located at the end of the northern side of The Hermitage.

The Hermitage is a minor residential road with a varying carriageway width between approximately 5m - 6m. The wider sections of the road include marked on-street parking bays. The effective clear width for through traffic remains in the order of 3.7m or greater, which is sufficient to accommodate access by a pumping appliance.

To the north, The Hermitage becomes Church Terrace and joins Wakefield Road. To the south, The Hermitage leads onto The Vineyard. There is no requirement for a pumping appliance to turn around in proximity to the site.

The proposed mansard roof conversion will have no adverse effect on the ability of the fire service to reach and access the site in the event of a fire.

Suitable unobstructed access for fire service vehicles is achievable, therefore, London Plan (2021) Policy 12(A) Criteria 1a is satisfied.

2.2 - Assembly Points

It is not necessary to formally designate an evacuation assembly point for the existing dwellinghouses, however, it should be noted that suitable space for assembly is available either within the public footway along The Hermitage.

London Plan (2021) Policy 12(A) Criteria 1b is not applicable to the development proposal and has been covered by the above statement of reasonable exception.



3. Fire Safety Measures

3.1 - Detection and Alarm

An automatic detection and alarm system in a building provides an effective means to identify a fire scenario in the early stages of fire growth and provide an alarm notifying building occupants automatically of the fire scenario with a clear message or sound.

The proposed mansard conversion will result in the dwellings being four-storey (basement, ground, first and second floors), as such, fire detection and alarm systems designed, installed & commissioned in accordance with BS 5839-6:2019+A1:2020 (minimum Grade A Category LD2, or better) should be provided within each dwelling.

- ➤ LD2 (Additional Protection): A system incorporating detectors in all circulation areas that form part of the escape routes from the premises, and in all specified rooms or areas that present a high fire risk to occupants, including a heat alarm in any kitchen and a smoke alarm in principle habitable room(s).
- ➤ **Grade A:** Separate detectors, sounders and central control and indicating equipment with back-up power supply that conforms to British Standards BS EN 54.

Appropriate fire safety features which reduce the risk to life and the risk of serious injury in the event of a fire are to be accommodated throughout the development, therefore, London Plan (2021) Policy 12(a) Criteria 2 is considered to be satisfied.



4. Risk of Fire Spread

4.1 - Internal Fire Spread

Compartmentation is the process of dividing a structure into 'compartments' for effective risk management. The main objective of compartmentation is to contain a fire within a specific section of a building, limiting the passage of flames and smoke. This then allows more time for occupants to safely evacuate a building and for fire services to extinguish the flames.

ADB1 Table B4 sets out minimum periods of fire resistance for a range of development types. For three-storey dwellinghouses, Table B4 (Note 5) states a minimum of 30 minutes fire resistance is required, increased to 60 minutes minimum for compartment walls separating buildings. It should be noted that the basement is discounted when assessing the numbers of storeys for fire resistance and means of escape.

30 minutes fire resistance shall be provided to any internal load bearing walls, the second storey floors, as well as to the enclosure of the protected stairway. 60 minutes fire resistance shall be provided to the wall separating the adjoining mansard extensions.

Fire doors are an important feature of compartmentation and are vital for protecting escape routes, allowing residents more time to evacuate safely. Additionally, these doors help in reducing property damage by keeping the fire localised. Fire doors also assist firefighters by slowing down the fire's spread, making it easier to extinguish and reducing the fire's intensity, thereby safeguarding both lives and property.

Fire doors (FD20) shall be provided to all doors leading from habitable rooms (excluding bathrooms) onto the stairway serving all floors of each dwelling. This allows the stair to become a **protected stair**.

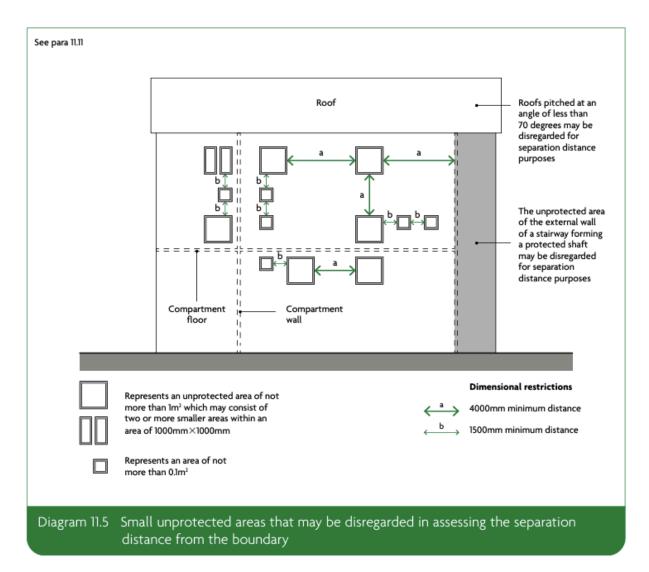
4.2 - External Fire Spread

"Unprotected areas" refer to specific parts of a building's external walls that have reduced or undetermined fire resistance. These areas typically include openings such as windows, doors, or other types of openings, especially those that are not designed or glazed to provide the necessary level of fire resistance. Unprotected areas also encompass any parts of the external wall which offer less fire resistance than is required by the relevant regulations or are constructed of materials that do not meet the required fire resistance standards.

The concept of unprotected areas is essential in the context of preventing the spread of fire between properties. The regulations dictate that the extent of unprotected areas in a building's external wall is contingent upon the distance of the wall from the boundary of the property.



External walls on, and within 1000mm of, the relevant boundary (applicable to the northern and southern boundaries) must limit individual unprotected areas to no greater than 1m² with additional requirements on spacing between unprotected areas as set out in ADB1 Diagram 11.5.



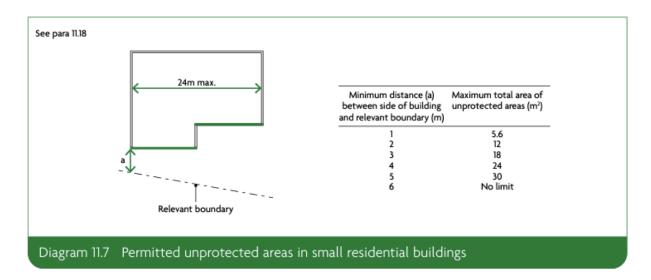
Windows are proposed to both the northern and southern elevations of the mansard roof extensions (1 N° to each elevation) which are sited approximately 900mm and 750mm from the respective relevant boundaries. Therefore, unprotected areas must comply with Diagram 11.5 above.

The proposed window (including frame) on the northern elevation has an area of 0.858m², whilst the proposed window (including frame) on the southern elevation has an area of 0.955m². These are considered to be acceptable unprotected areas.

The proposed windows to the east and west (front and rear) elevations of the mansard roof extension are sited greater than 6m from the relevant boundaries which are taken as the centreline of The Hermitage and the rear garden fence, respectively.



In accordance with ADB1 Diagram 11.7, where the distance to the relevant boundary exceeds 6m, there are no limits on unprotected areas.



Measures are proposed to limit the risk of internal and external fire spread, therefore, London Plan (2021) Policy 12(a) Criteria 3 is considered to be satisfied.



5. Escape and Evacuation

5.1 - Means of Escape

ADB1 states that:

Dwellinghouses with one internal stair and with one storey more than 4.5m above ground level should have either of the following.

- A. **Protected stairway** a stair separated by fire resisting construction (minimum REI 30) at all storeys.
- B. Alternative escape route a top storey separated from lower storeys by fire resisting construction (minimum REI 30) and with an alternative escape route leading to its own final exit.

Each dwelling has been designed to include a protected stairway (REI 30) with FD20 fire doors separating the stair from all habitable rooms on all upper storeys of the building. The lower ground floors are to be separated by fire rated doors to the head of the stairs at upper ground floor level.

The proposed mansard extensions each contain a single bedroom with en-suite bathrooms. The en-suites are regarded as "inner rooms" (i.e. a room from which escape is possible only by passing through another room (the access room). This arrangement is permitted by ADB1 paragraph 2.11.

Details of the means of escape have been provided and therefore London Plan (2021) Policy 12(a) Criteria 4 is considered satisfied.

5.2 - Evacuation Strategy

In all premises, the guiding principle for evacuation should be 'keep it simple', which should ensure that all persons likely to be in the building will correctly follow the chosen procedure.

The simplest suitable option for a dwellinghouse is single stage evacuation; i.e. in the event of a fire, all occupants should immediately evacuate to a place of safety. For individual dwellinghouses it is considered that the development of a detailed evacuation strategy is unwarranted.

London Plan (2021) Policy 12(a) Criteria 5 is not considered applicable to the development proposal and has been covered by the above statement of reasonable exception.



6. Access and Facilities for Fire Fighting

6.1 - Access

As discussed in Chapter 2 of this report, unobstructed access for fire vehicles is available within 45m of all parts of the development and doors providing access to the interior of each dwelling are over 750mm wide. It is therefore considered that suitable access is available for the fire and rescue service.

6.2 - Facilities

With regards to facilities, no specific provisions such as fire mains are required to support fire and rescue operations at the proposed development.

The nearest fire hydrant is located within the footway along Church Terrace adjacent to the junction with Warrington Road at a distance of approximately 40m from the application site.

It is considered that suitable access and equipment is available to facilitate firefighting, therefore, London Plan (2021) Policy 12(A) Criteria 6 is satisfied.



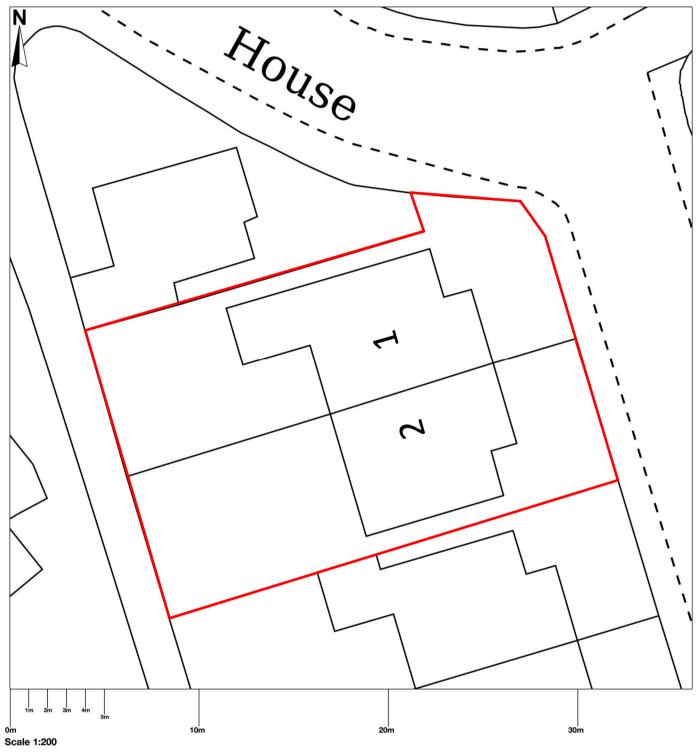
Appendices

Appendix A

Proposed Site Layout Plans



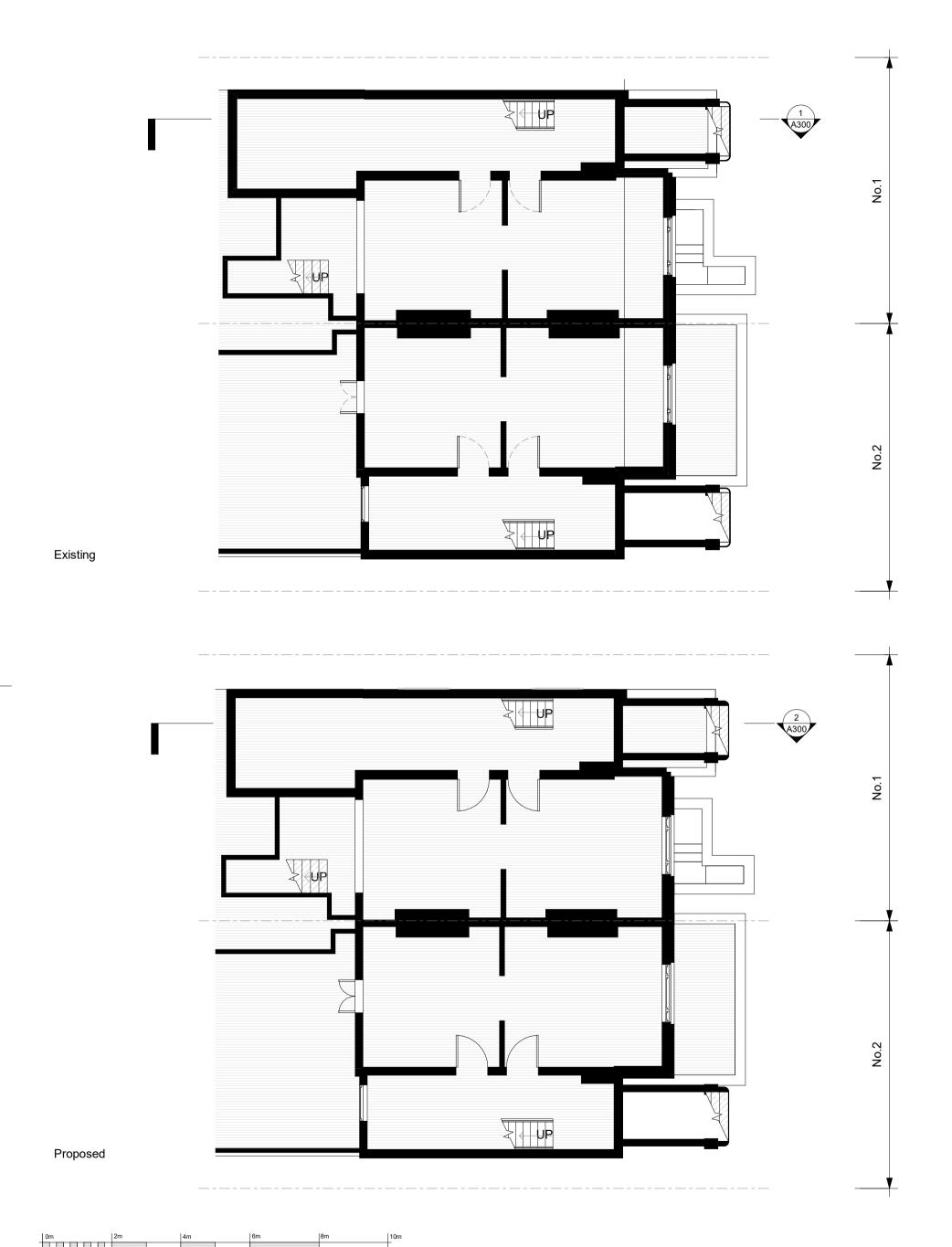
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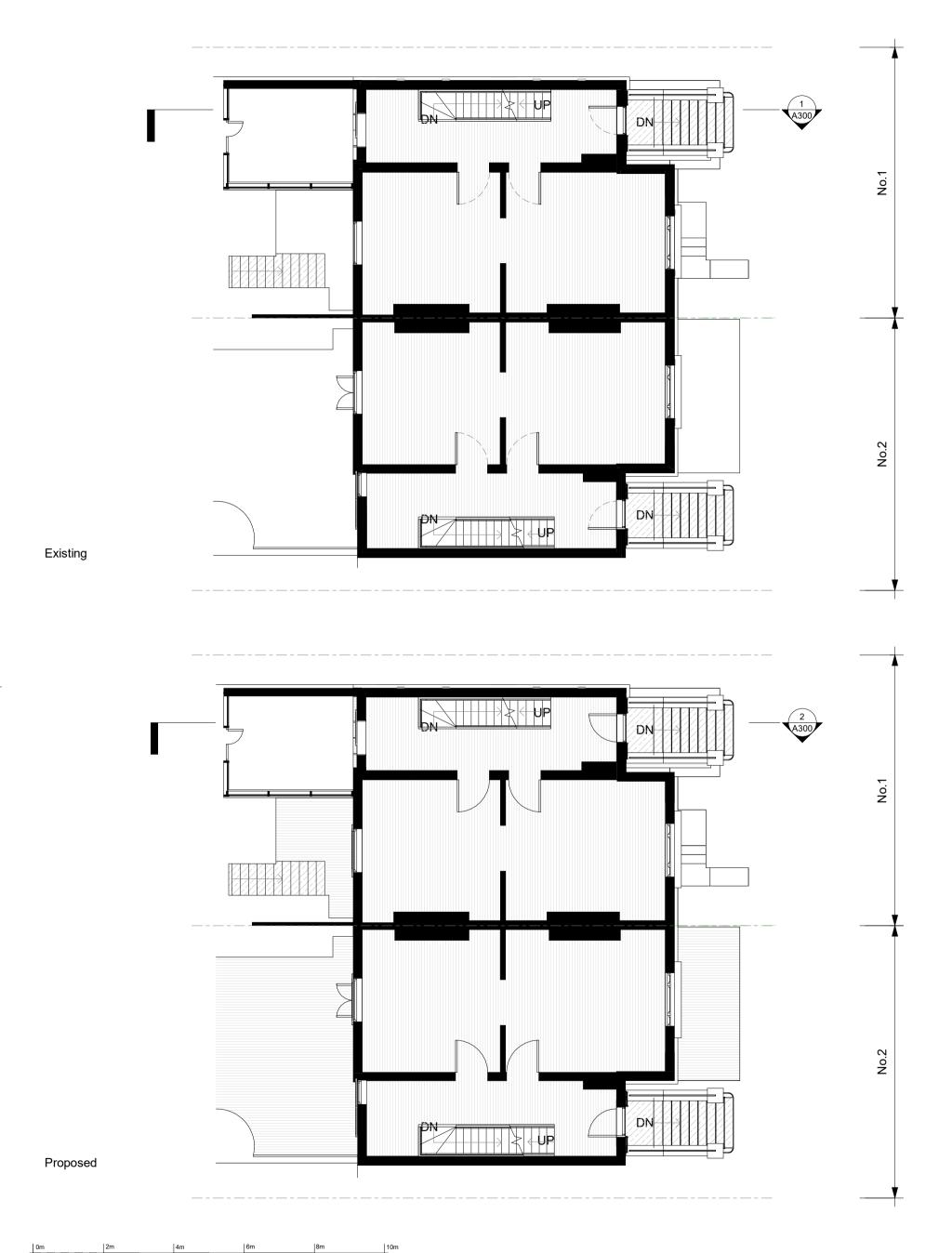
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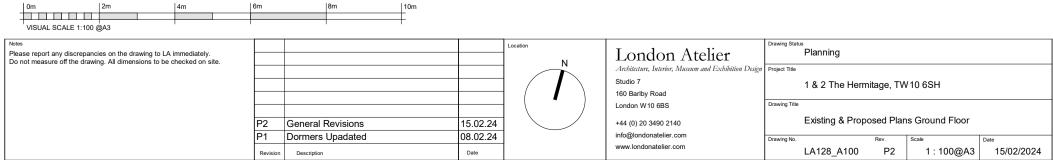


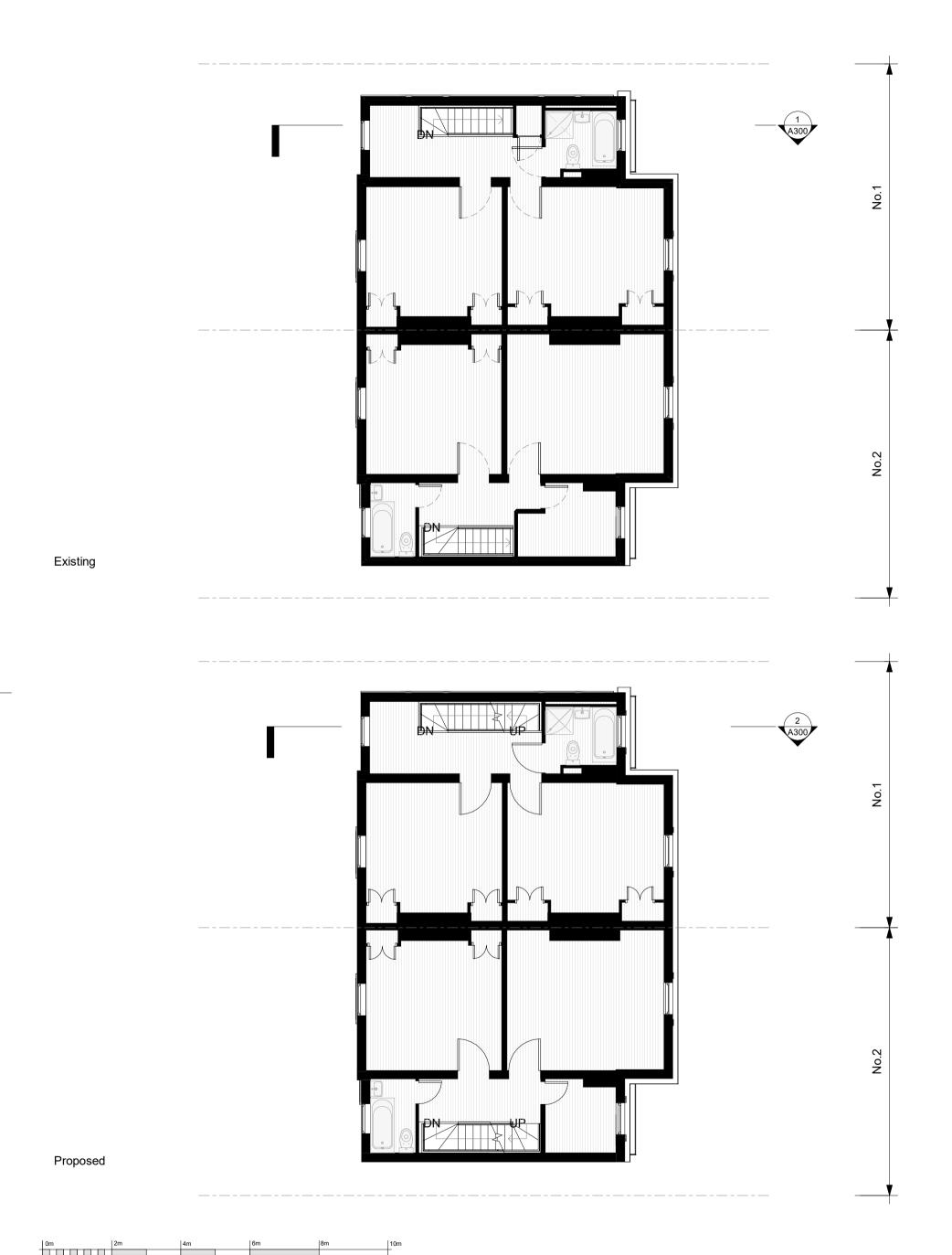
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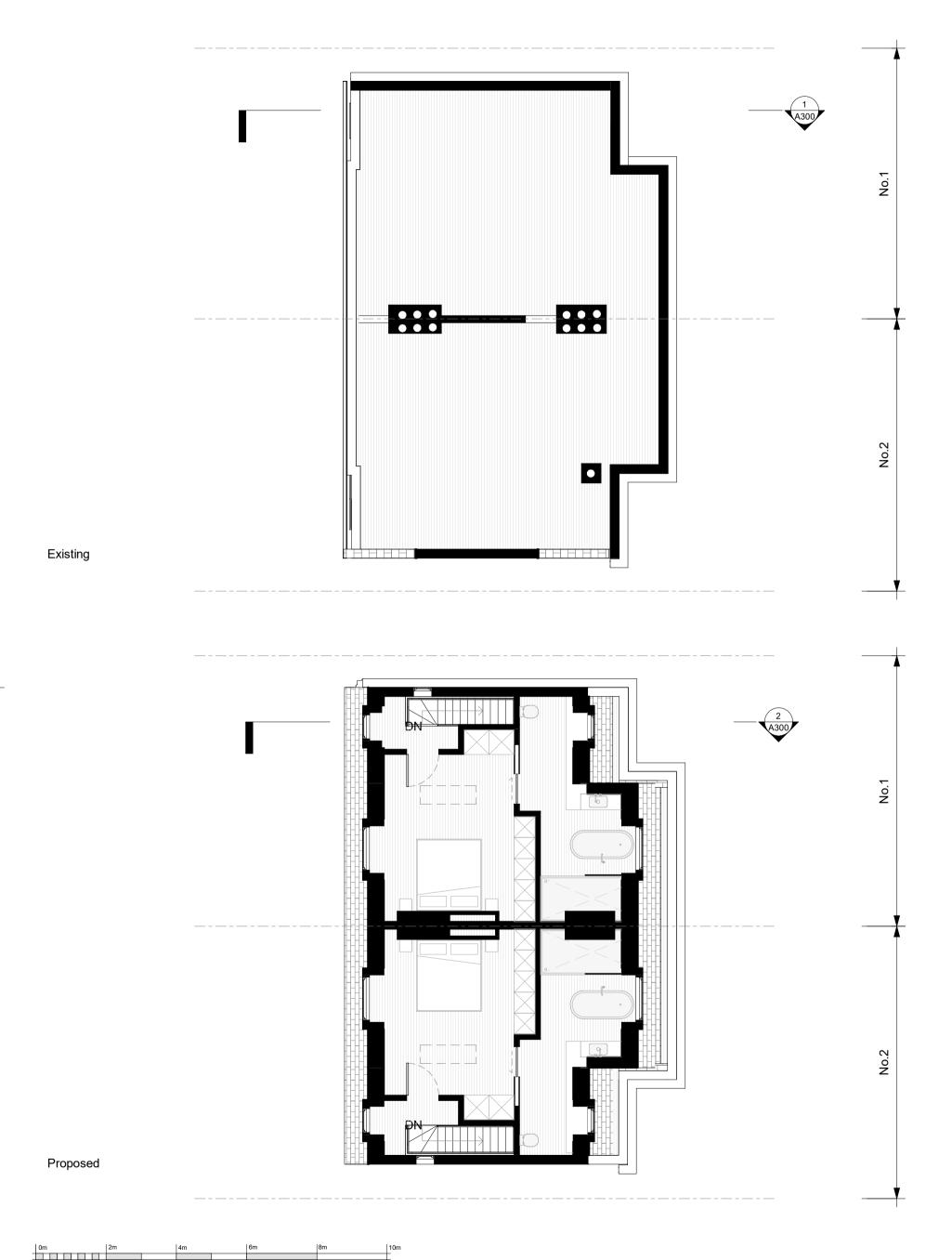
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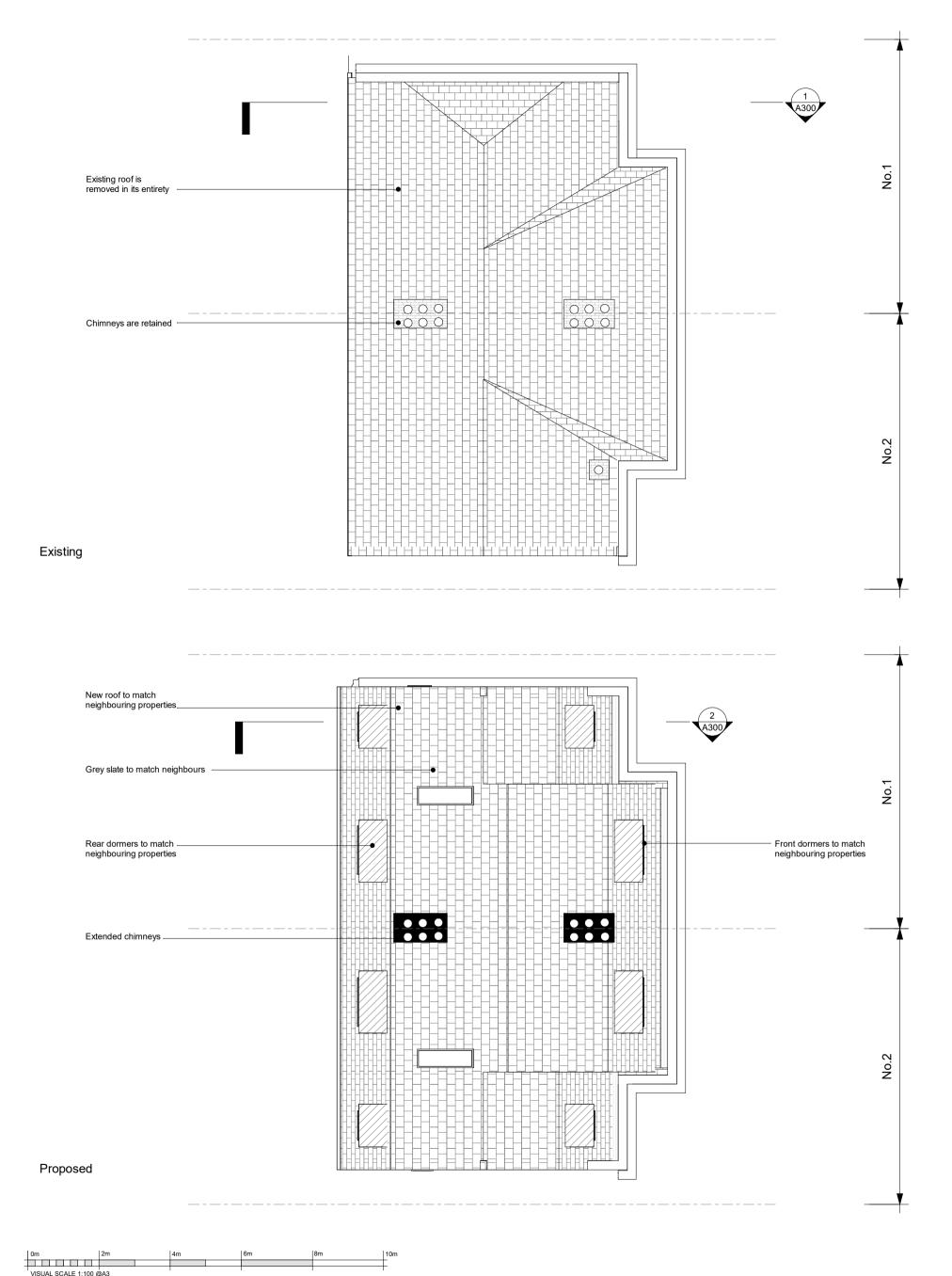




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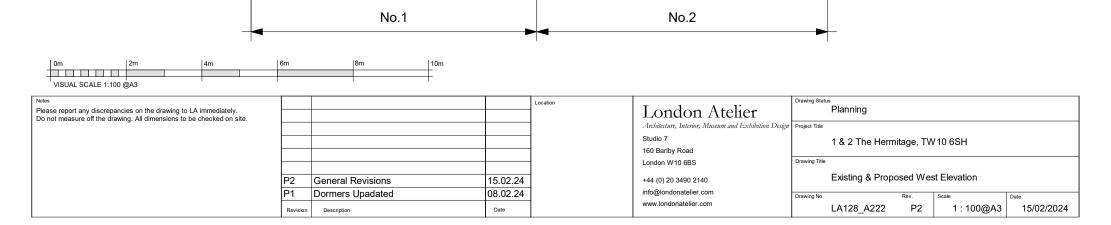
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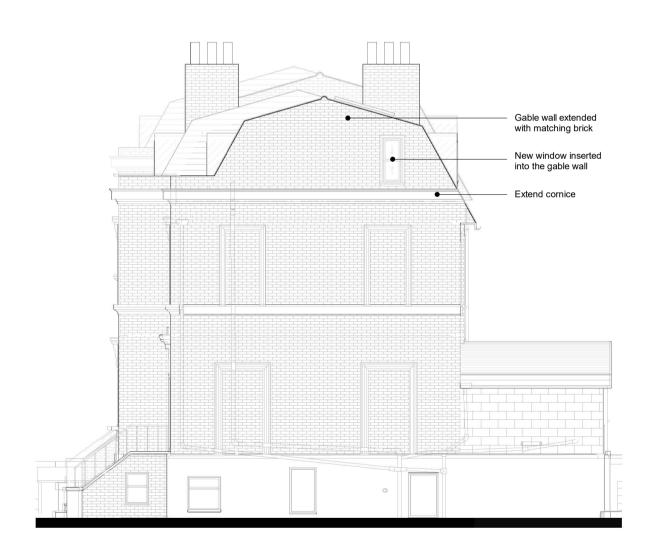


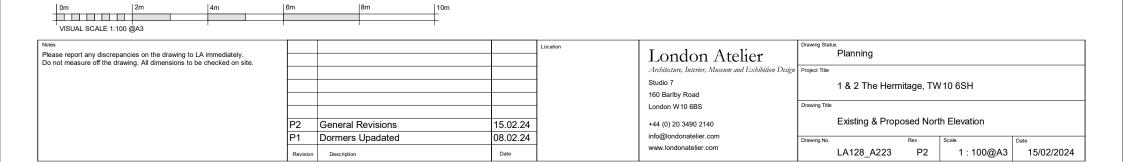


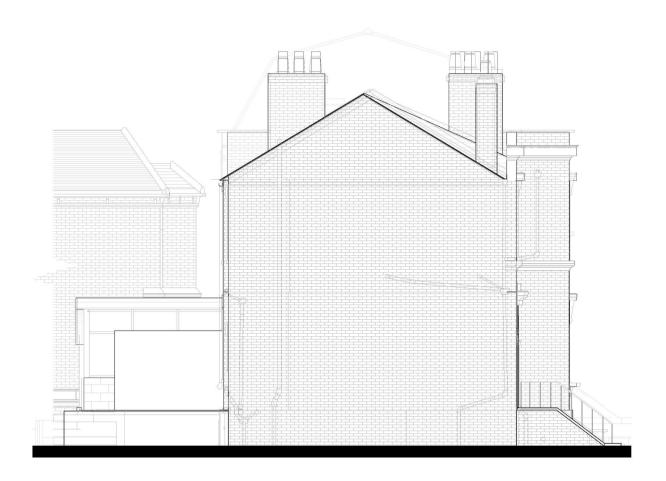


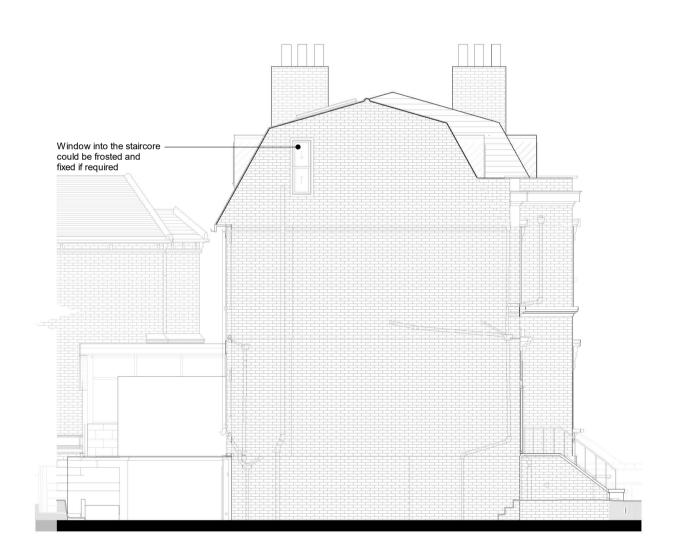


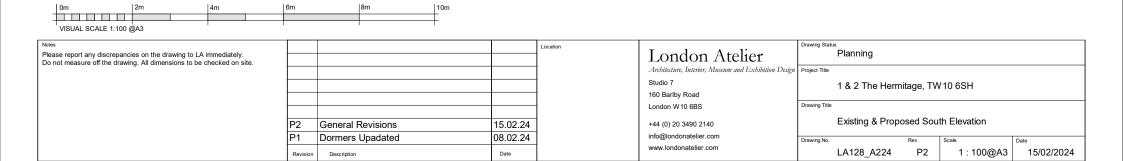


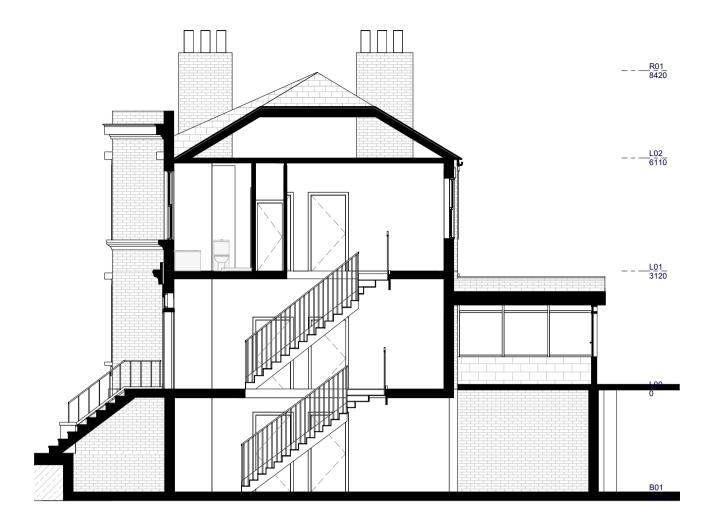




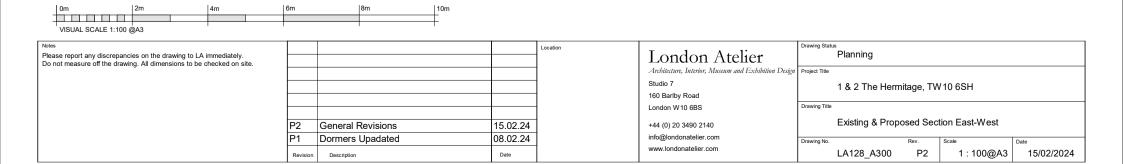


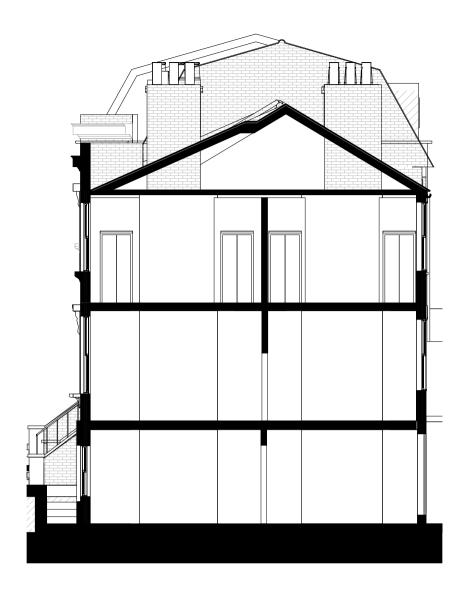


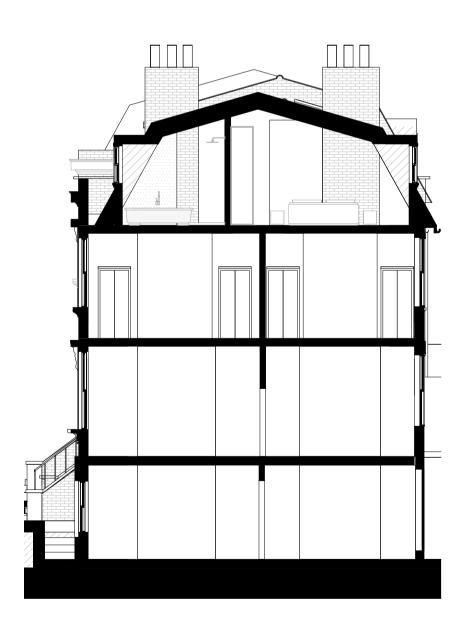












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