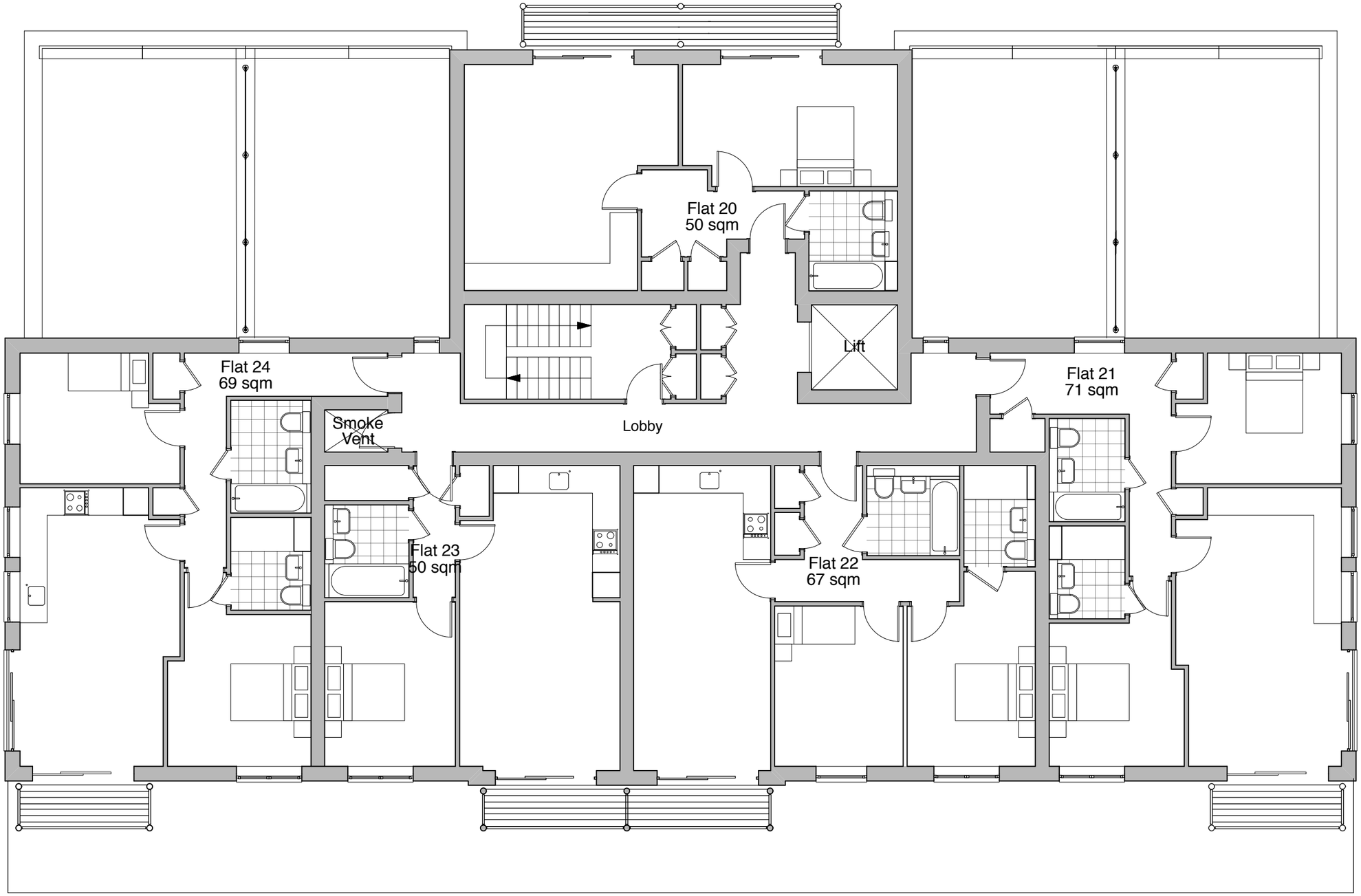

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Notes

PLANNING
APPLICATION

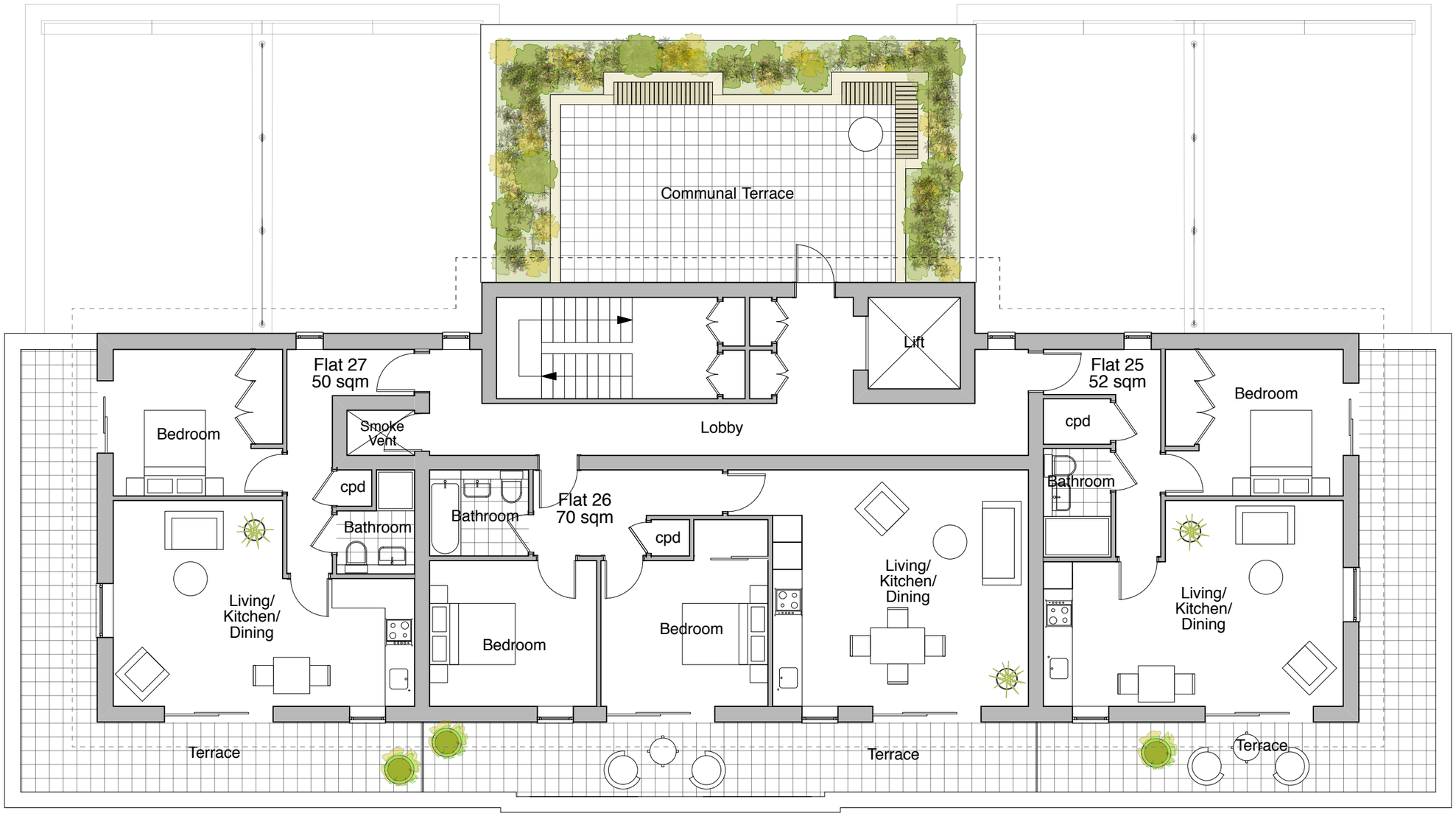
Revision	Date	Description
A	03.04.20	General Revision for Planning

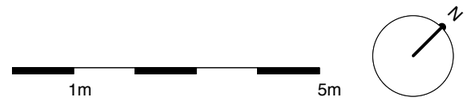
CLEMENTS
& PORTER
ARCHITECTS

A: 63 Rivington Street, London, EC2A 3QQ T: 020 7739 5799
E: info@clementsporter.co.uk W: www.clementsporter.co.uk

Project	73 Canalside, Homethrope Surrey, RH1 2NH
Title	Fourth Floor Plan Proposed
Scale	1:100@A3
Date.	29.10.19
Drawn By	AM
Drawing No.	994.204A

Do not scale from this drawing





Notes

PLANNING
APPLICATION

Revision	Date	Description
A	03.04.20	General Revision for Planning

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A: 63 Rivington Street, London, EC2A 3QQ T: 020 7739 5799
E: info@clementsporter.co.uk W: www.clementsporter.co.uk

Project	73 Canalside, Homethrope Surrey, RH1 2NH
Title	Fifth Floor Plan Proposed
Scale	1:100@A3
Date.	29.10.19
Drawn By	AM
Drawing No.	994.205A

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Notes

PLANNING APPLICATION

Revision	Date	Description
A	26.03.20	General Revision for Planning

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A: 63 Rivington Street, London, EC2A 3QQ T: 020 7739 5799
E: info@clementsporter.co.uk W: www.clementsporter.co.uk

Project	73 Canalside, Homethrope Surrey, RH1 2NH
Title	Front Elevation Proposed
Scale	1:100@A3
Date.	29.10.19
Drawn By	AM
Drawing No.	994.211A

Do not scale from this drawing

Notes

PLANNING APPLICATION

Revision	Date	Description
A	26.03.20	General Revision for Planning

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A: 63 Rivington Street, London, EC2A 3QQ T: 020 7739 5799
E: info@clementsporter.co.uk W: www.clementsporter.co.uk

Project	73 Canalside, Homethrope Surrey, RH1 2NH
Title	Rear Elevation Proposed
Scale	1:100@A3
Date.	29.10.19
Drawn By	AM
Drawing No.	994.212A

Do not scale from this drawing

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Notes

PLANNING APPLICATION

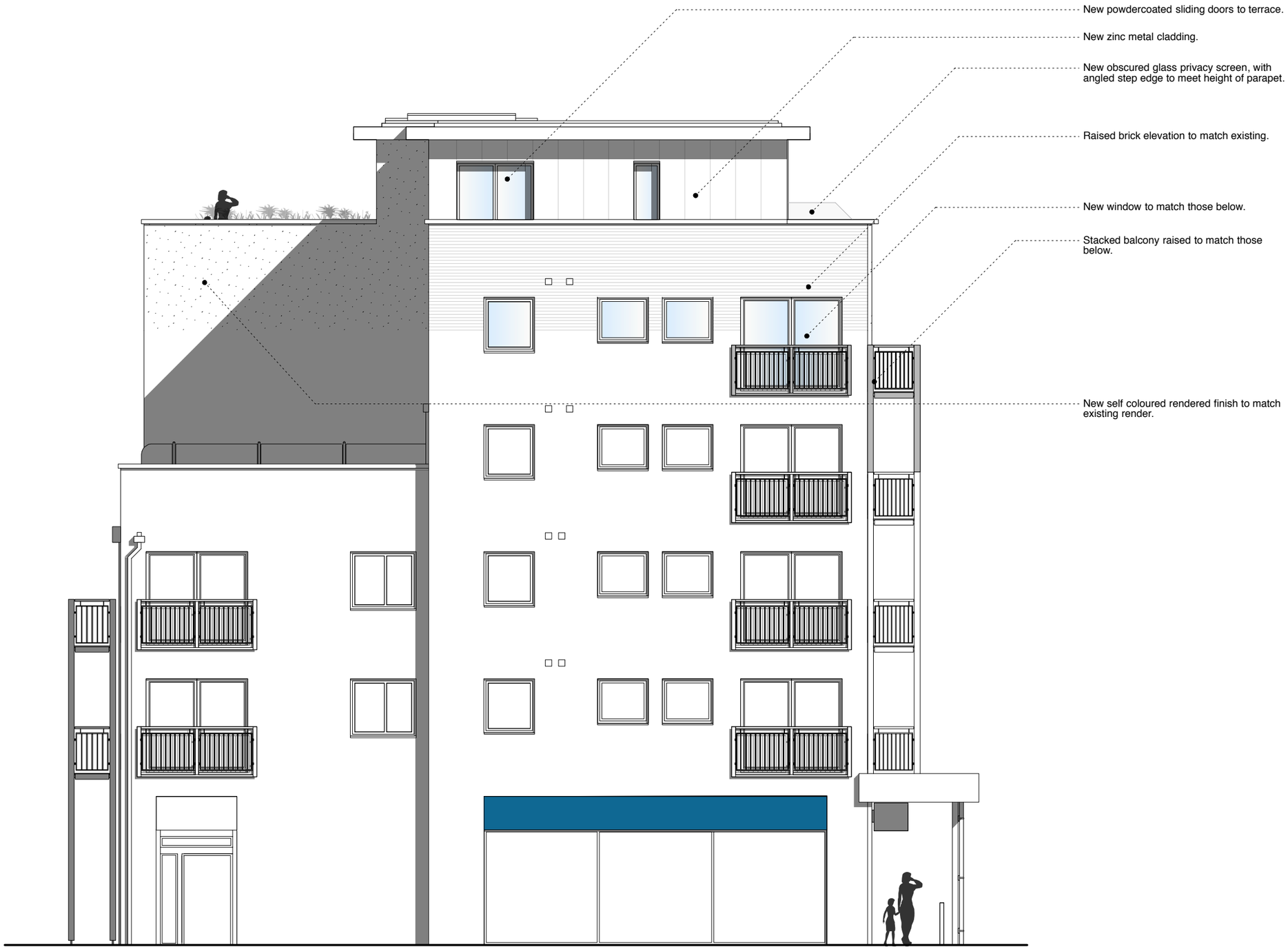
Revision	Date	Description
A	26.03.20	General Revision for Planning

CLEMENTS & PORTER ARCHITECTS

A: 63 Rivington Street, London, EC2A 3QQ T: 020 7739 5799
E: info@clementsporter.co.uk W: www.clementsporter.co.uk

Project	73 Canalside, Homethrope Surrey, RH1 2NH
Title	East Elevation Proposed
Scale	1:100@A3
Date.	29.10.19
Drawn By	AM
Drawing No.	994.213A

Do not scale from this drawing



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Notes

Revision	Date	Description
A	11.09.20	General Revision

CLEMENTS & PORTER
ARCHITECTS

A: 63 Rivington Street, London, EC2A 3QQ T: 020 7739 5799
E: info@clementsporter.co.uk W: www.clementsporter.co.uk

Project	73 Canalside, Homethrope Surrey, RH1 2NH
Title	West Elevation Proposed
Scale	1:100@A3
Date.	03/04/2020
Drawn By	AM
Drawing No.	944.214A

Do not scale from this drawing

Date 16/12/2021
Reference B184 73 Canalside RH1 2NH
Enclosed
Copy

NOW FIRST LIMITED
STRUCTURAL ENGINEERS

86-90 PAUL STREET
LONDON EC2A 4NE
STUDIO@NOWFIRST.CO.UK
T 0207 625 2388

Jeremy Davies
133 Hammersmith Road
London
W14 0QL

Dear Jeremy (on behalf of Elmdon Real Estate Collections Limited),

The structural inspection of 73 Canalside RH1 2NH

We are writing to you in our capacity as Structural Engineers. We understand you wish to add two additional storeys to the existing building in order to create additional residential units.

You have provided us with some drawings for the existing and proposed building created by Clements & Porter Architects, to illustrate the proposed scheme.

Following our site inspection, we would like to confirm the following:

The building currently occupying the site is believed to have been built in the later part of the twentieth century. It appears to have been constructed using construction techniques typically employed at that time.

A visual inspection was carried out on 1st December 2021, of external walls, accessible internal common parts and a retail space at the ground floor. The existing external walls appear to be of cavity wall construction.

The ground floor level grid plan of the building differs to that of the higher levels, with its construction being also different at the ground level compared to the higher floor levels. This change in the structural grid would have been to accommodate the open plan space on the ground floor and the residential units on above floor levels.

The following comments on the building's construction are based on the visual inspection and assumptions which would be common in buildings of this nature. The ground floor appears to be of framed construction and consists of columns supporting the first floor which we believe is a transfer structure. The first floor structure is a transfer structure, carrying the above loads which would exist due to the different grid layout of residential units above. The floor structure of second floor level upwards and roof structure appears to be of timber joists construction. Internal partition walls within residential units on upper levels are assumed to be non-load bearing and formed from stud walling construction. While internal walls separating the residential units and corridor appear to be formed from blockwork construction.

Study of the geological map of the locale indicates the sub soil is a bedrock of 'Folkestone' formation (i.e. sandstone) and 'Alluvium' (i.e. a deposit of clay, silt, and sand left by flowing floodwater in a river valley) as the superficial layer. Alluvium is generally characterised as a poor subsoil. It may be the case that the structural designers of the existing building would have chosen to reach the better subsoil deeper in the ground. A system to achieve this that is generally employed in the modern era is piled foundations. If such is the case, piled

foundations are generally designed with factors of safety for the load bearing capacity of each pile in order to minimise the settlement of the building. In theory there would be spare load bearing capacity in the existing piles. The increase of loading on the existing structure below and its foundations should be considered along with the serviceability requirement of the proposed scheme as well as the load bearing capacity of foundations system. It may be that the amount of settlement could be kept to within tolerable limits and if this is the case no strengthening of foundations would be required. This would need further investigation as part of the design process.

You have asked us to comment on the feasibility of a development consisting of the addition of two storeys on top of the building for a scheme similar to that illustrated in the Clements & Porter Architect's drawings.

The addition of two storeys on an existing four storey building will pose a significant increase in loading. We therefore recommend the proposed structure to be formed from lightweight construction such as thin gauge metal framing, floors, walls and roof. This may mitigate the need for foundation strengthening to be required, depending on the capacity of the existing foundations.

We believe that the existing building would originally have been designed as purpose-built apartments. When considering disproportionate collapse requirements, it would be classed as a Category 2A building by modern standards. The proposed change due to the additional storeys would mean that the new six-storey building with multiple apartments would be classed as Category 2B. This has the same requirement as the existing construction except that vertical ties would need to be introduced to areas of increased risk.

The need for additional remedial work would need to be carefully considered to the existing superstructure in order for it to comply with modern progressive collapse requirements. If the risk of progressive collapse to the existing units below is not increased by the creation of the proposed additional units at roof level it may not be necessary to upgrade the existing structure for category 2B requirements. The new floor structure above the existing roof structure would therefore have to resist any instantaneous additional loads that may otherwise trigger the progressive collapse of the building. If access is not possible to the units below, this would need to be incorporated into any proposed structural design.

Requirements for a category 2B building would need to be built into the new elements of superstructure in order to allow for the block as a whole to be considered to be acceptable for the proposed use as multiple residential units. This is relatively straight forward and can be achieved using readily available construction technology.

The removal of the existing roof and construction of the new storeys would necessitate the construction of a crash deck sufficiently robust as to avoid damage to the ceiling structure over the existing top floor residences during demolition.

If the crash deck was also designed to resist the impact from the collapse of the additional storey in the case of accidental impact, this could potentially also satisfy part of the progressive collapse requirements.

We assume that the developer shall have liaised with the appropriate authorities to ensure that any issues such as those relating to planning, building control and freeholder consent have been addressed before commencement of building work.

Given the above, we believe the proposed extension is structurally feasible. Due to assumptions made on the existing construction mentioned above, the design process will

have to include further investigation of the existing structure in order to determine the final structural design and scope of works.

Yours Sincerely,

Maciej Molsa
For and on behalf of Now First Limited