Studio
Partington

Design & Access Statement

Peperfield Residential Accommodation

London Borough of Camden

Ref: 2385_DAS001.pdf

Revisions:

A	First Issue	29.08.2019
B	Existing site plan on pages 6 & 16 updated	17.09.2019
C	Text on page 12 amended	23.09.2019

Contents

Introduction

This Design and Access Statement has been written by Studio Partington (SP) in support of the planning application to London Borough of Camden and relates to the conversion of the existing Council owned Peperfield Day Centre (Use Class D1) to a residential accommodation (Use Class C3) lower ground floor to provide a four bedroom wheelchair accessible (Part M4(3)) dwelling.

This statement describes the design development and consultation with London Borough of Camden. A pre-application was submitted on 11th November 2018 (2018/5515/PRE) demonstrating different layout options and advice was later issued on 12th April 2019.

The design here has been developed further and illustrates the council's preferred option, which involves a modest extension on the western elevation. The alterations would result in a good-quality residential unit, that more closely reflects the needs of a large family of six (who currently live elsewhere in the borough) who have been identified for the development while creating a highly beneficial asset for the borough.

The conversion of the existing unit is largely within the host building with a small single-storey extension in the existing courtyard of the western elevation that matches the building line of the balcony overhang on the ground floor. This minor projection would be beneficial as it increases the usable floorspace and provides a large wheelchair accessible single family unit.

Studio Partington has successfully taken this approach to organising residential accommodation with supporting spaces for adults with specific needs in a neighbouring borough.

SP is an award winning practice working in housing, regeneration and sustainability. We make buildings that enhance their locations through respectful and carefully considered design. Our approach is guided by the potential of good design to strengthen communities, enhance the public realm and minimise environmental impacts.

We have built a reputation for delivering high quality projects to a wide range of clients. From creating new communities to the refurbishment of listed buildings, we have experience of all kinds of housing types and tenure. Our work at the forefront of energy efficient housing design is contributing to research for future sustainability standards.

1.0 Planning Policy Context

The following planning policies and supplementary documents have been considered in the preparation of this document and design of the scheme:

- National Planning Policy Framework (2019)
- London Plan (2016)
- Draft London Plan (2017)
- Camden Local Plan (2017)

H1 Maximising housing supply

H6 Housing choice and mix

H8 Housing for older people, homeless people and vulnerable people

C1 Health and well being

C2 Community facilities

C5 Safety and security

C6 Access for all

A1 Managing the impact of development

D1 Design

T1 Prioritising walking, cycling and public transport

T2 Parking and car-free development

- Supplementary Guidance (SPG)

1.1 Principle of development

The proposal is to convert the now vacant Peperfield Day Centre to a large six-person single family unit, which is wheelchair accessible. The proposal and housing type maximises the provision of new-high quality accessible homes that contribute to creating a mixed and inclusive community on the Cromer Street Estate.

The site is a unit of approximately 129 sq.m. partially occupying the lower ground floor of Peperfield. It was previously used as a day centre for adults with profound and multiple learning disabilities but has recently become vacant. The upper floors of the building have a residential use and historic plans indicate each floor houses three (no.) three bed flats.

The unit presents an opportunity to provide wheelchair accessible accommodation (as described in Part M4(3) of the Building Regulations), which the Council has indicated would satisfy the likely brief.

A letter of support has been included within the application which underscores the importance of the development to the borough.

1.2 Quality of accommodation

As discussed in section 6, the new family home has been designed so that all spaces are accessible and adaptable as Building Regulations (Part M4(3)) as a minimum. Moreover, the unit is provided with two entrances, both accessed via existing external ramps that lead to a disabled parking space and to the communal garden. All communal spaces and one of the bedrooms will be suitable for occupation by a wheelchair user or easily adaptable for occupation by a wheelchair user in accordance with Building Regulations M4(3). The proposed unit will have an area of 131 sq.m., which exceeds the minimum floorspace requirements set out in the London Plan.

1.3 Impact on the character and appearance of the wider area

The scheme will respect local context and character and the proposed modest single-storey extension to the west (into the garden) will feature clay facing brickwork (to match or closely compliment existing) and high-quality windows and doors.

The proposal will be subject to limited views from the public realm due to its lower ground floor location and would retain a usable and reasonably sized garden both for the new occupiers and the communal garden. The proposal would not detract from the host property, street scene or wider area.

1.4 Impact on neighbouring land uses

The proposal only seeks to extend the building on the western elevation to match the building line of the balcony above and retain the number of the existing windows and openings. The layout for the proposed scheme on page 11 shows the additional footprint being created. Section 7 discusses the energy strategy for the scheme and the services being located in the plant room are domestic in nature and will not generate noise.

Given its siting and minor scale it is not considered that the proposed extension would have an adverse impact on any neighbouring property's amenity in terms of loss of light, outlook or result in a sense of enclosure.

1.5 Transport impacts

According to Policy T1 of the new Camden Local Plan, the site offers 2no. cycle parking spaces in the form of a Sheffield stand within a new residential garden, which is located within the secured private terrace. Policy T2 of the Local plan considers all new developments to be car-free, however considering the accessible nature of the proposal, the unit will have available to it an existing disabled parking space accessed via an existing ramp.

View from communal garden looking towards application site.

Application site

2.0 Accommodation Brief

2.1 General brief

The brief from London Borough of Camden's Adult Social Care team was to convert the existing Peperfield Day Centre building into a residential accommodation unit for a large family of six people; including a person with physical difficulties.

The design was also to be future-proof so that it can accommodate changing needs of residents in the future.

Accommodation to include:

- Four bedrooms, one of which wheelchair accessible (Part M4(3)).
- The wheelchair accessible bedroom will be provided with an en-suite WC and provision for future ceiling hoist.
- Communal living, kitchen and dining spaces
- Family bathroom
- Private outdoor amenity space accessible via the residential unit and communal garden via a ramp
- Access to a disabled parking space
- Two bike spaces within the private amenity space

3.0 Existing Site and Building

3.1 Existing Site

Peperfield is a six storey residential building. It is part of a series of nine post-war blocks designed by Hening & Chitty in 1950. It is likely to be a concrete frame / panel construction with little or no insulation. In 1982 the building was refurbished. Works included structural repairs, applying render to the building façades and replacing windows. It is not known whether thermal insulation was added at this time.

Parking with ramped access

Existing parking and a direct ramped access to the entrance provides opportunity for wheelchair accessible units (Building Regulations Part M4(3)). A disabled parking space within the parking core will be available to the residents who will also be provided with a Blue Badge.

Existing landscape and outside space

Existing mature landscape and small paved external area provides both visual and outdoor amenity. 20m plus distance to adjacent apartment provides a good outlook and privacy from direct overlooking.

Secure Access

Gated entrance provides secure access to unit and added privacy.

East-west axis of the building gives the unit access to both morning and evening sun. The lower ground floor location of the unit means access to sunlight may be more restricted. Daylight from the east is most restricted due to the building line of the flats above overhanging and the proximity of the ramp. As a result the proposed layouts have been organised to ensure primary living spaces are west facing.

Application site

Existing site plan. Not to scale 0 1 2 3 4 5

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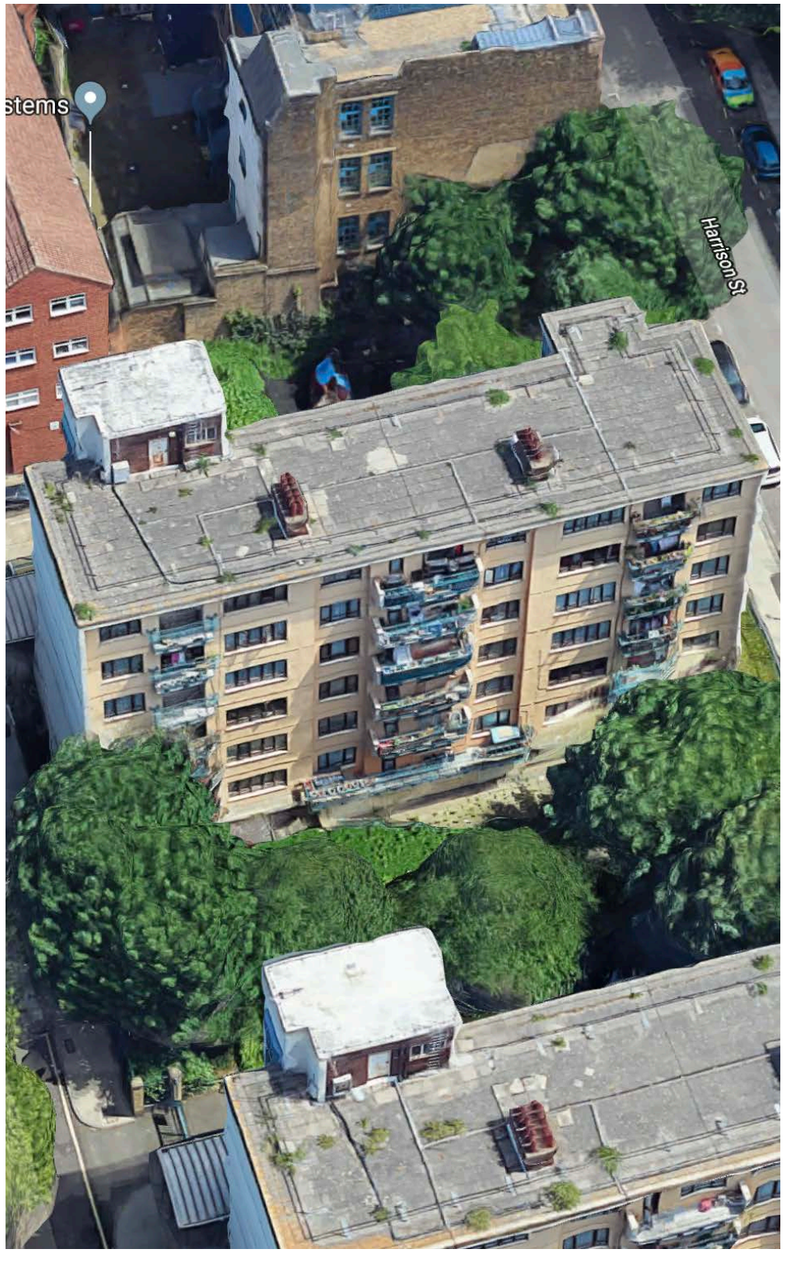
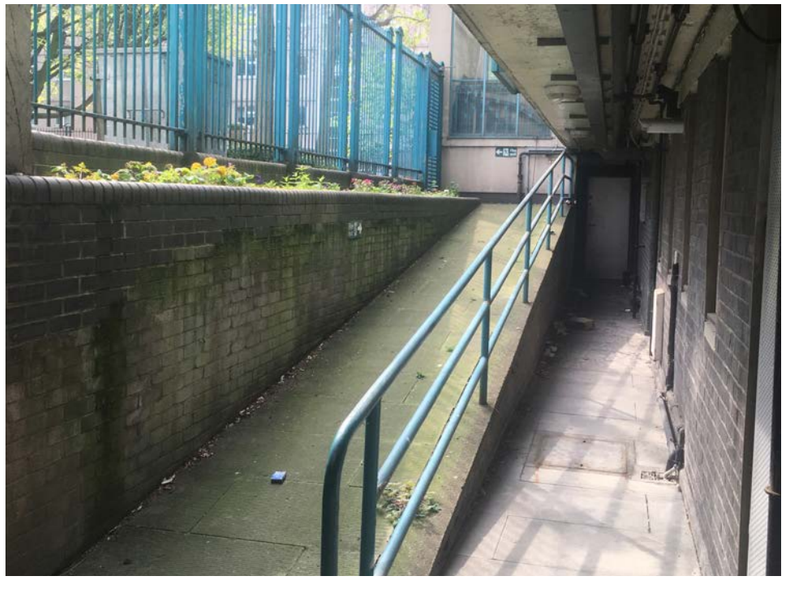


Aerial view of Peperfield block

01 Existing secure communal garden

02 Existing garden of vacant unit



03 Existing ramp leading to accessible parking bay

04 View of vacant unit and ground floor balcony

3.2 Existing Building Considerations

Brick wall

New openings and thermal upgrades are likely to be required and achieved easily.

Electrical services

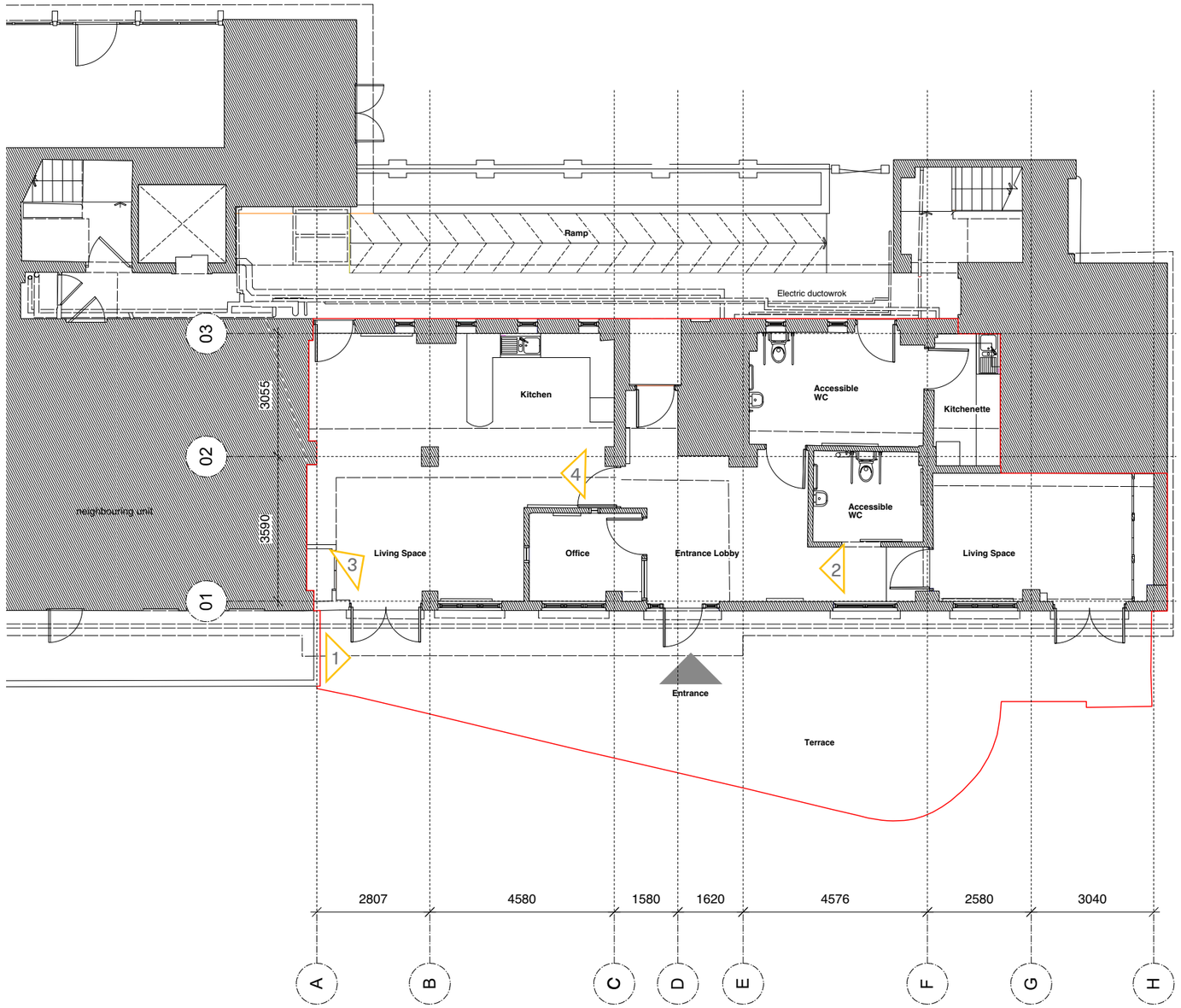
Safety of existing substation and electrical services should be reviewed in relation to the proposed residential accommodation.

Partition walls

As seen from site visits, the internal walls seems to be quite solid - likely block work. However as there appears to be a structural grid it may be easy to reconfigure the internal layout.

Floor to ceiling heights

The existing floor to ceiling height is low at approximately 2.35m. Furthermore what appears to be a structural down stand beam runs through the unit, reducing the floor to ceiling height to 2.25m. A high-quality new-build residential scheme would expect to enjoy a floor to ceiling of 2.5m. Within the current envelope, the low ceiling may affect the internal quality of space and access to daylight but this could be improved by enlarging the windows to the private amenity space.



Application site

Existing plan 0 1 2 3 4 M

01 The existing amenity space could be improved. The proposed extension will match the projection of the ground floor balcony.

03 Panoramic view of current kitchen/ open plan space.

02 Existing entrance lobby with accessible WC on the right.

04 Panoramic view from entrance door looking towards the current kitchen/ open plan space.

4.0 Design Development

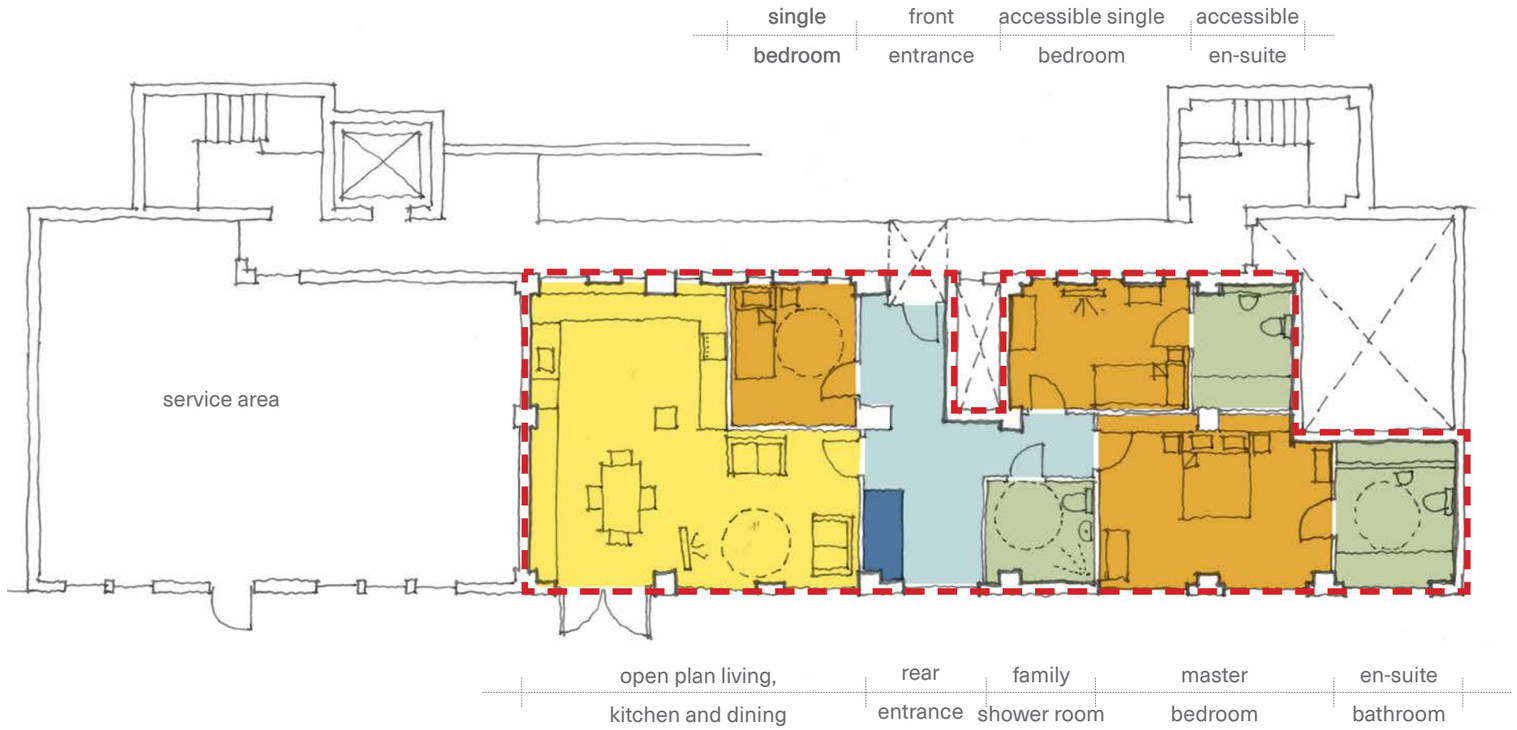
This section describes the initial response to the brief and the key decisions that have been informed by London Borough of Camden.

In its current condition, the unit would easily be converted into an open-plan office. However, with some minor alterations it could be converted into a residential accommodation that it is considered to be a more suitable approach for the site. While it would be logical (from a structural and services perspective) to repeat the residential layout from the floors above, the existing available floorspace is not considered to meet current space standards and as such, this approach is not feasible.

Option 1
The initial option (illustrated on page 10) explored what could be achieved within the current footprint of the host building. The proposal looked at making minimal alterations to the existing internal partitions. This approach could provide a three-bedroom wheelchair accessible (Part M4(3)) dwelling, however could not fully satisfy the brief requirements.

Option 2
An alternative option (illustrated on page 11) was explored to understand whether a larger unit could be accommodated to suit a larger family. This would more accurately reflect the Council's housing need. It was agreed that a four-bedroom wheelchair accessible (Part M4(3)) dwelling would be an appropriate brief.

To achieve this, a small extension is being proposed to the on the west elevation, which faces onto the private gardens. On the upper levels the building has subtle projections in both the external wall and the balconies. The intention is for the extension to align with the



Existing building footprint retained
Bedroom
Living, kitchen, dining spaces
Storage
Bathrooms
Internal circulation

Design development option1 | Not to scale

projections above.

A pre-application was submitted on 11th November 2018 (2018/5515/PRE) demonstrating different layout options. Advice was later issued on 12th April 2019 by London Borough of Camden, with the council's preferred Option 2 being acceptable in principle. Following the pre-application advice the proposal has been developed further to offer a more legible layout that responds to the future residents' needs.

Design development option 2 | Not to scale

Illustrative existing bay elevation and proposed extension.

5.1 Preferred design

The preferred layout could provide a four-bedroom flat with a new private amenity space to the west.

At this stage the brief has been developed around accommodating a family with specific needs. While the particular family's needs may change in the future, the proposed conversion is robust and could be amended to suit varying needs.

In order to improve the quality of the accommodation a minor extension is being proposed on western elevation. The intention is the extent of these works would align with the projecting balcony on the ground floor above to maintain continuity across the facade.

The private garden would have a landscaped perimeter to improve privacy for the amenity space and also to improve the outlook from the living room and bedrooms to further enhance the family's experience. Cycle provision will be provided via a Sheffield hoop installed externally inside the gated amenity space.

	GIA (sq.m)	GEA (sq.m)
Existing	119.7	323.3
Proposed	129	335.2
Additional area	9.3	11.9

Proposed plan

Proposed extension

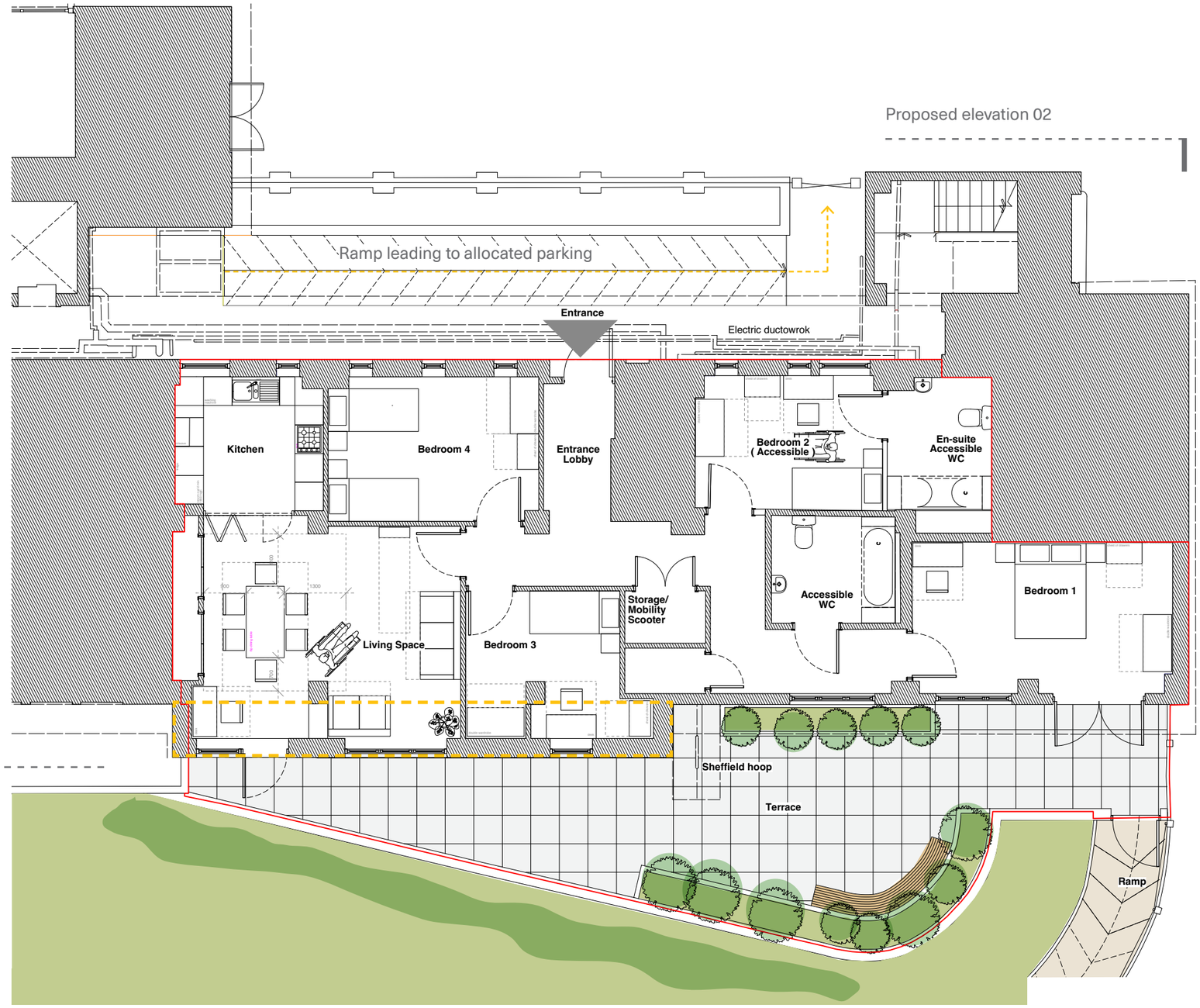
Application site

Proposed site plan | Not to scale

0 1 2 3 4 M

Proposed elevation 01

Proposed elevation 02



Proposed elevation 01| Not to scale

Proposed elevation 02 | Not to scale

- Extent of ground floor balcony
- Location of existing windows
- Proposed extension
- New opening
- (1) Rendered facade to match upper levels
- (2) Dark bricks painted white

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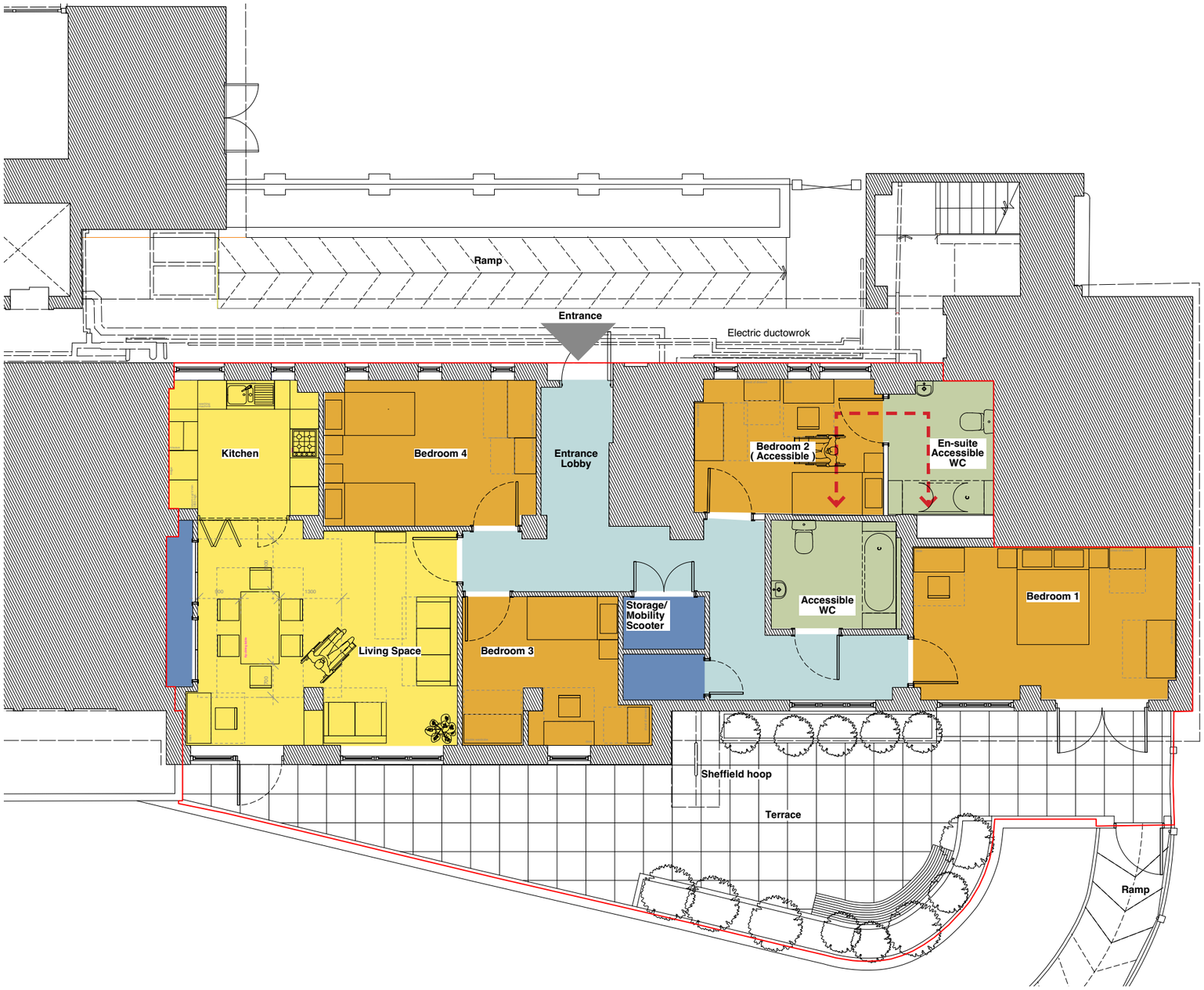
5.2 Internal layout

The internal layout has been further developed from the plans submitted for pre-application advice on November 2018. The amendments are minor and were made to allow the design to more reflect the needs of the identified residents.

- The residential unit is accessed via an existing ramp at the west side of the building and is centrally located to reduce the amount of circulation space where possible.
- The new extension will create a large open plan dining and living space for the family which will be brightly lit from windows and full height doors that will open out into a private garden.
- An existing ramp accessed via the private garden provides access to the communal gated amenity space.

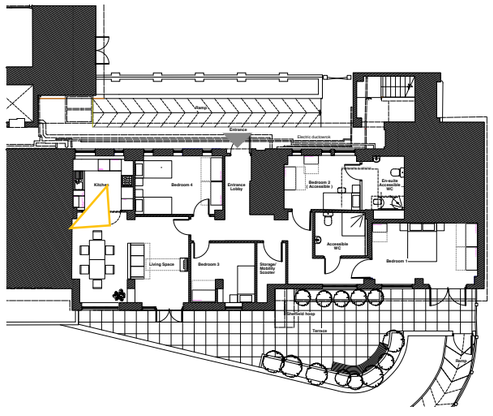
The design will also ensure that the emergency egress is in accordance with recommendations in Approved Document B (v2). The flat benefits from its location at lower ground floor and is not solely accessed directly through any common areas within the block. All habitable rooms (bedrooms and living room) open directly into a hallway that will offer protection in the event of a fire to allow occupants to safely escape via the front door. Fire detection will be provided within the home and a suitable design will be developed during Stage 4.



Proposed plan 0 1 2 3 4 M

- Bedroom
- Living, kitchen, dining spaces
- Storage
- Bathrooms
- Internal circulation

Illustrative internal view of living space looking towards private and communal garden



Key plan View

6.0 Accessibility

6.1 Transport and accessibility externally

Vehicular access to the site is provided from Cromer Street to the north, through a gated and secure entrance. Due to the site's central location, there is an excellent PTAL rating of 6b.

The dwelling will be located on the lower ground floor and there are two means of reaching the main entrance: via a lift accessed via the communal residential core; or via a ramp adjacent to an available disabled parking space that is accessed via a secure gate.

Cycle provision for the dwelling will be provided via one Sheffield hoop installed externally within the private amenity space to the rear. Provision has been calculated in accordance with the London Plan 2016.

6.2 Waste & Recycling

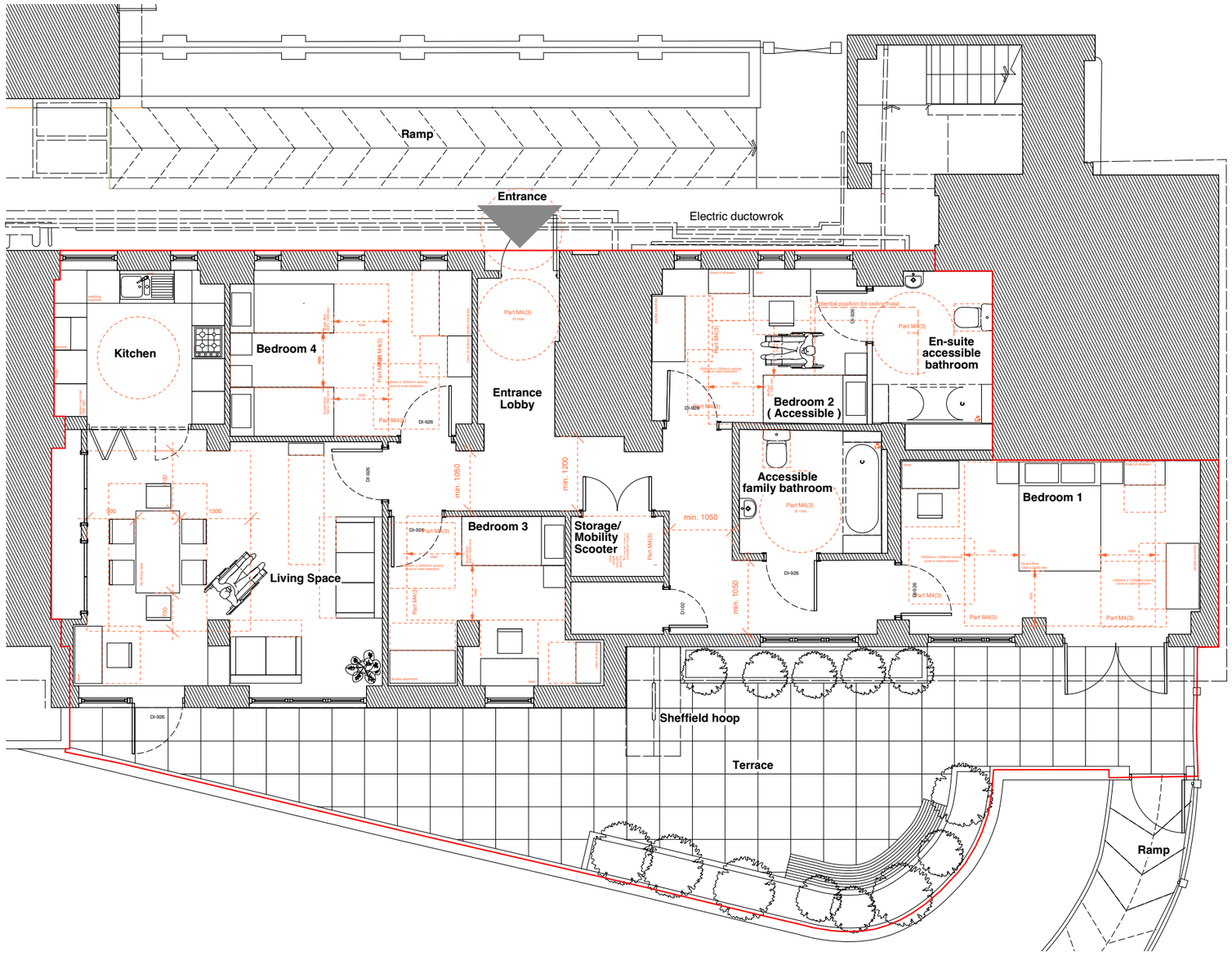
Peperfield block is an existing residential block that has an established communal refuse and recycling collection system. With this in mind, it is anticipated that the new dwelling will use the same communal facilities as the other flats in the building.

6.3 Accessibility internally

Although the dwelling is located at lower ground floor, it is easily accessible from street level and offers multiples means of secure access. The internal layout of the conversion has been planned to comply with Approved Document M4(3) of the Building Regulations. To this extent the following design measures have been incorporated:

- All private entrances will be fully accessible and suitable for wheelchair users.
- Wide internal doors have been shown internally.
- In the spirit of Approved Document M4(3), all bedrooms and other spaces will be accessible to a wheelchair user. Bedroom 01, has been designed to be occupied by the wheelchair user and has the added benefit of a fully-accessible en suite

Existing site plan illustrating external accessibility



Proposed internal layout illustrating accessibility

bathroom.

- A benefit of the existing concrete frame structure is that structure should be capable of supporting ceiling-mounted hoists as required.
- The requirements of the kitchen and living spaces are compliant with Approved Document M4(3), but the detailed fit-out of the kitchen will be determined to suit the needs of the potential identified family. In our experience this is an appropriate strategy as individuals' needs can vary from the requirements given in the Approved Document.
- An enclosed storage space large enough to accommodate a mobility scooter is proposed close to the unit entrance.

7.0 Sustainability

This section describes how the proposed new alterations to the services and fabric at Peperfield achieves savings in energy and carbon dioxide emissions (CO2) following a deliberately ordered strategy of measures to reduce energy consumption and use necessary energy more efficiently..

7.1 Energy Strategy

The typical energy strategy for a new developments encourages the conservation of energy using a defined energy hierarchy, which should be implemented in the following order: -

• Use less energy

• Supply energy efficiently

• Use renewable energy

Within this development not all of these elements will be possible because of the existing envelope of the building and the adjacent residential properties.

Step 1 - Use less energy

Complying with the first stage of the energy hierarchy can be achieved by implementing 'passive' energy efficiency measures to reduce the demand for energy.

This development will benefit from: -

• The provision of improved thermal performance by means of increased insulation to the new and

Renovated walls and double-glazed window systems which will to reduce overall heat loss.

• Air-tight construction techniques to minimise unwanted air infiltration, certified air-tight windows.

• Reducing summertime overheating by providing windows/roof lights with lower g-value glazing.

• The use of a whole house ventilation system to provide fresh air and ventilation throughout the property via a heat exchanger to reclaim heat from the exhausted air path.

• A-rated appliances.

• Water saving measures such as spray taps and low flush toilets.

• Low energy light fittings.

• Presence detection and daylight dimming within spaces which have access to daylight.

Step 2 - Supply energy efficiently

Combined heat and power (CHP) has been considered for the development. The economic viability of the CHP is heavily dependent on the consistent demand for heat and electricity. The building will have consistent heat demand during winter but sporadic heat demand during summer for domestic hot water, this will leave CHP sitting idle during summer which will make the system inefficient.

CHP has been discounted for the site due to the lack of consistent base thermal load which would mean the CHP engine being idle for most time.

Step 3 - Use renewable energy

Having established the improved emission rate through the means detailed in steps 1 and 2, further savings may be made through the integration of renewable technologies.

Each of the available technologies as set out in the London plan have been considered.

The design of the building will be environmentally responsible by adopting accepted principles of low energy and sustainability.

Photovoltaics

Photovoltaics (PV) panels must be in a generally southern facing orientation at ideally, 30° to the horizontal. Since the building is a residential and will have a reasonable steady regulated energy demand along with potentially high unregulated electricity demand, PV's could be a suitable Zero carbon technology.

However, as the property is at the bottom of a high-rise block it will not be practical to install PV panels on the main roof and efficiently cable down to this level.

Solar Hot Water

The scheme investigated based on installing a nominal active area of high efficiency (evacuated tube) solar hot water panels, accommodated on the roof of the building. Such systems are relatively low maintenance, are a proven technology and are a visible indication of the development's green aspirations. How as with the PV panels there is no available roof these units could be installed on, therefore this system has been excluded.

Biomass

We have excluded Biomass from this study, as the system emits high particulate matter (PM) and nitrogen oxide (NOx) emissions and the potential nitrous oxide (N2O) biomass and biofuel installations may not meet the air quality requirements.

Furthermore, biomass heating system requires space to site a boiler and fuel hopper along with a supply of fuel. There are issues with fuel storage and delivery which mitigate against this technology, particularly on a "tight" site like the one proposed.

Ground source heating

The site is located in the urban area with limited footprint and no large open ground, and the limited footprint of the building suggests that there will not be sufficient area for either the horizontal nor the vertical system. Hence this technology will not be pursued.

Wind turbines

Wind turbines produce electricity directly from the energy in wind. The site is in urban environment largely sheltered from the winds, and wind turbines would create unacceptable noise levels during day and night. Consequently, wind turbines are not considered to be appropriate for this project.

7.2 Conclusion

The Energy Strategy adopts a 'Lean, Clean and Green' approach, as recommended in The London Plan, to minimise energy consumption and carbon dioxide emissions through passive design, energy efficient systems and renewable energy technology respectively.

Passive 'Lean' measures include high standards of insulation in the new construction, controlled solar gain and the use of thermal mass to stabilise temperatures. These combine with 'Clean' efficient and well controlled heating and ventilation systems, and low energy lighting. Further reductions in energy consumption and carbon dioxide emissions were investigated using 'Green' renewable technologies and it was established that any of the renewable technologies were not technically and/or economically feasible for the site.

System	Parameter	Applied Values for the proposed development
Lighting Efficiency	Bedrooms	2.5 W/m^2 per 100 Lux
	Living / Common areas	3.5 W/m^2 per 100 Lux
Lighting Controls	Bedrooms	Manual on, Absence detection off and daylight switching
	Living / Common areas	Auto On-off and daylight switching

Table 1: Lighting densities and controls for the proposed building

U-values (W/m^{2}K)	Current building regulations minimum*	Values for the proposed development
Walls (New)	0.28	0.27
Walls (Existing renovated)	0.55	0.55
Floors	0.22	0.16
Windows and glazed doors	1.8	1.6
Air permeability	10m^3/m^{2}h at 50 Pa	7m^3/m^{2}h at 50 Pa

*=Simplified area weighted averages, Part L2B

Table 2: Thermal performance for the proposed new building elements in comparison with the base case building

8.0 Appendix