studio elca

18 Stukeley Street
London, WC2B 5LR

DESIGN AND ACCESS STATEMENT
Prepared for Mr Gil Levy
March 2021
Rev 01

Contents

the page intentionally left blank

1.0 Introduction

- This report has been prepared by Studio Elca Ltd. for the sole benefit, use and information of Mr. Gil Levy.

- The report outlines an application for a full planning permission at 18 Stukeley street, London, WC2B 5LR, to erect a two floors and roof terrace extension with a roof exit room, and to provide three nr. additional self-contained residential units, with total of eight self-contained residential units over lower ground to Roof floor levels, creating a sustainable residential development

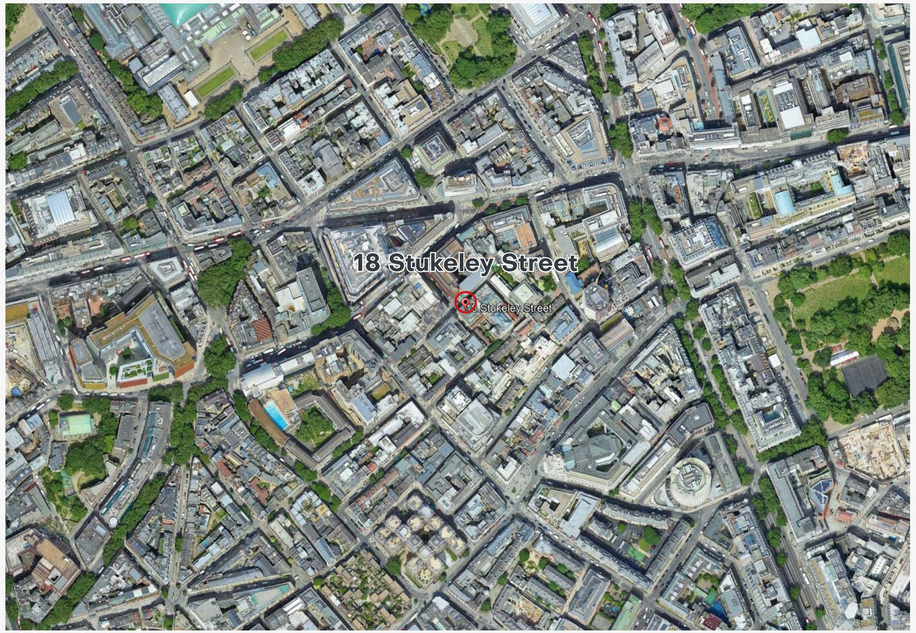
- This application also includes the deconstruction of the existing light structure roof extension, and its replacement with a new floor with the same look and appearance of the existing building.

The requested works are (but are not limited to):

- Replacement of the existing stepped back roof extension with a new floor extending the existing building outline.
- Proposed new fifth and sixth floor roof extension, with an exit room to the roof.
- Extension of the existing lift shaft to serve the new floors.
- The upgrade of the existing fire suspension system, to be in alignment with the current regulations.
- Foundation strengthening of the existing structure.

The design team includes the following:

- Designer: Studio Elca
- Structural Engineers: Taylor Whalley Spyra
- Building Services and Environmental Engineers: Taylor Project Services
- Daylight & Rights of Light: Point 2
- Planning Consultant: JLL
- Off Site Fabrication: MY Fab



18 Stukeley st. - Location

the page intentionally left blank

2.0 Planning History

2.1 Planning History Summary

- The building was constructed in the early 1980s as light industrial/warehousing (Class B8) and since then the permitted use was changed to offices (Class B1).

- An application in 2010 for a new roof extension to create a fifth floor with new windows and doors was approved and a consent was granted in 2012 for a residential scheme on the upper floors with flexible use of the ground floor as either offices (Class B1)/ education/community uses (Class D1), subject to a Section 106 legal agreement to secure car-free development. (2012/2401/P)

- The 2012 application wasn't implemented on site, and a new application was approved and granted for the erection of a mansard roof to create additional accommodation and the wholesale change of use of the building to residential (Class C3) to provide five self-contained flats with associated alterations including replacement fenestration at ground floor level and relocation of the ground floor entrance to the centre of the Stukeley Street elevation, subject to a Section 106 legal agreement, (2012/6680/P)

- Subsequently to 2012/6680/P application, a planning application for a minor material amendment was submitted by a the applicant to the City of London in March 2013, reference: 18-01376/FULL. This application described a proposal for revised form of the extension , that will allow for better quality internal space for the occupants and will be set back from the Smart's Place elevation to create additional terrace space. The parapet will be increased accordingly. The extension will be built in brick to match the existing façade (2013/1692/P) and was granted.

- In addition, the another application or a minor material amendment (2013/4021/P) was granted for changes of the layouts of the Ground and Lower Ground Floors.

2.2 Neighbouring Planning History Summary

Apart the development of 18 Stukeley Street, a number of properties in the surrounding area have been granted similar changes of use in recent years, including:

- 8 Smart's Place WC2B 5LW, March 2019 (ref: 2019/1420/P); Consent granted for erection of a three storey roof extension to create a new dwelling; including roof garden; installation of replacement plant machinery for existing four-storey office building; and alterations to the existing office building.

- 8 Smart's Place WC2B 5LW, July 2020 (ref: 2020/3390/P); Consent granted for Non material amendments to planning permission ref: 2019/1420/P dated 10/03/2020 for 'Erection of 3 storey roof extension to create 1x 3-bed self-contained flat with roof garden etc....' Namely changes to the demolition extent, changes to risers and ventilation, raising the floor level of Level 04 by 225mm, changes to exterior railings, changes to lift position and overrun increase by 225mm, changes to external bay sizes, alterations to fenestration and rooflights, and changes to internal arrangement including reconfiguration of escape stair and office WC repositioned.

- 16 Stukeley Street WC2B 5LJ, Sep 2006 (ref: 2006/3798/P); Extensions, external alterations and change of use from non-residential use (Class D1) to mixed use office / non-residential use (Class B1/D1) on the lower ground and mezzanine ground floor levels and residential use (Class C3) on the upper ground and first to fifth floors creating 10 self contained units (4x1 bed, 4x2 bed and 2x3 bed units), and formation of roof terraces at third, fourth, and fifth floor levels.

- 16 Stukeley Street WC2B 5LJ, Dec 2009 (ref: 2009/5628/P); Non-material amendments to planning permission 2006/3798/P dated 14/12/2006 to covert Flat 3 and Flat 6 from one bedroom to two bedroom apartments (Extensions, external alterations and change of use from non-residential use (Class D1) to mixed use office / non-residential use (Class B1/D1) on the lower ground and mezzanine ground floor levels and residential use (Class C3) on the upper ground and first to fifth floors creating 10 self contained units (4x1 bed, 4x2 bed and 2x3 bed units), and formation of roof terraces at third, fourth, and fifth floor levels).

- 15 Stukeley Street WC2B 5LT, May 2017 (ref: 2017/2337/P); Demolition of existing mansard roof extension and construction of a replacement glazed roof extension and rooftop plant room containing air conditioning units, together with the installation of a replacement metal balustrading to the roof terrace and replacement metal staircase to the rear.

- 15-17 Macklin Street WC2B 5NG, Sep 2011 (ref: 12011/4292/P); Alterations and extension to include two storey glazed roof extensions above no. 17, alterations to the front and rear fenestration including creation of a new opening and the erection of a plant enclosure at roof level of no. 15 in association with the refurbishment and extension of existing office accommodation.

the page intentionally left blank

3.0 Site

3.1 Site Location

- The application site is situated within the London Borough of Camden on Holborn and Covent Garden ward, south-west of Holborn underground station, and at the northen edge of the Seven Dials Conservation Area.
- The site located south of High Holborn and to the west of Kingsway and the east of Drury Lane.
- The site surroundings are characterized by narrow streets and blind alleys, with commercial and residential buildings in close proximity.

3.2 Access

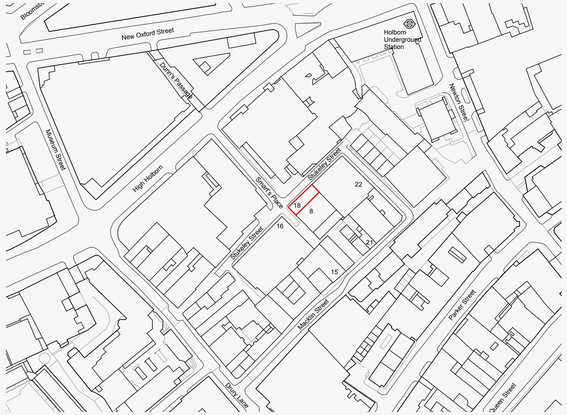
- The site is a short walk away from Holborn, Covent Garden and Tottenham Court Road/Oxford Street areas, all of which have a diverse range of uses and City centre activities and services.
- The site has excellent public transport links and has a PTAL rating of 6b.
- 18 Stukeley street is accessible by vehicle from Smart's Place and Macklin Street only.
- The existing building forms part of a block, abutted by No. 8 Smart's place, an existing 4 storey office building, with recently consented erection of two storey residential extension to the south-east and 20-22 Stukeley Street, a 5 storey office use building.

3.3 Historic Context

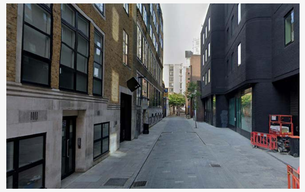
- The building was constructed in the early 1980s as light industrial/warehousing (Class B8) and since then the permitted use was changed to offices (Class B1).
- A planning permission was granted in 2013 for the change of use from office use (class B1a) to a residential use (class C3) with the erection of a mansard roof extension with a new roof terrace, with alternations to the entrance location and the fenestration.
- With this historic context in mind, the proposals set out in this statement look to respect and enhance the quality and heritage of the Chancery Lane Conservation Area, providing an exemplary residential development and enhancing the townscape.
- In the recent past, the area has undergone a major change with new development to both the all sides of 18 Stukeley street.
- Substantial developments around the site include the redevelopment of 15 Stukeley street which is west to the site, 8 Smart's place, which backs onto the application site, received recently a permission for the erection of 2 storey self contained flat with a roof terrace, and 16 Stukeley street to the south west.

3.4 Conservation Area

- The site is situated within the Seven dials Conservation Area.
- The area is sub-divided into character areas and 18 Stukeley Street sits within Character Area 3.
- The special character of the Conservation Area is found in the range and mix of building types and uses and the street layout. The character is not dominated by one particular period or style of building but rather it is their combination that is of special interest.
- The area offers a townscape with both variety and cohesiveness. Buildings from the 18th to the 20th century abut each other offering diversity and differing heights on the mainly narrow streets.
- The site has neighbouring buildings which vary in use, size, height and architectural design. The surrounding area comprises of mainly office, education and residential uses.



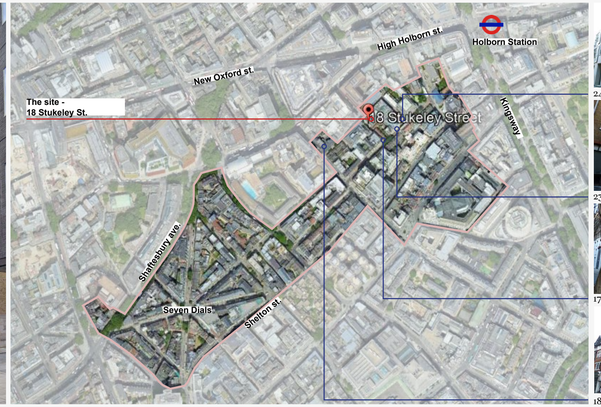
18 Stukeley st. site location



Site area photos

15 Stukeley St.

16 Stukeley St.



Seven Dials Conservation Area

24 & 25. Macklin Street

23. Macklin Street

17a. Macklin Street

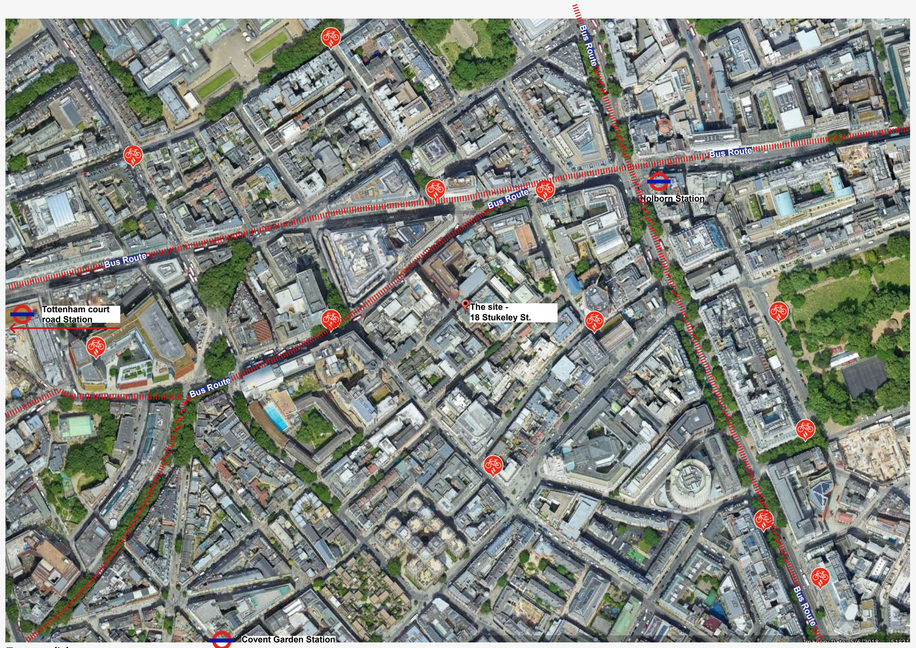
186 & 187, Drury Lane

Grade II Listed Buildings

4.0 Site Analysis

4.1 Strategic Transport Connections

- The application site has excellent access to nearby transport links. The site is a short walk away from Holborn, Covent Garden and Tottenham Court Road/Oxford Street areas, all of which have a diverse range of uses and City centre activities and services.
- The application site has a PTAL rating of 6b
- Underground/National Rail - Within 5 minutes walking distance is the Holborn underground station which provide access to the Central and Piccadilly Line. Within 5-15 minute walking distance is Covent Garden, Tottenham Court road, Leicester Square, Temple and Charing Cross which opens up connections not only to 4 other London Underground Lines (Northen, Bakerloo, Circle and District) but also to National rail services which link to Kent and East Sussex.
- Bus - Just 5-10 minutes walk from the site is the major bus route of high Holborn which connects the City of London with Waterloo, the West End as well as East End.
- Cycle - There is a Cycle hire station within 2 minutes walking distance at the junction of Museum St. and High Holborn.



Transport links map

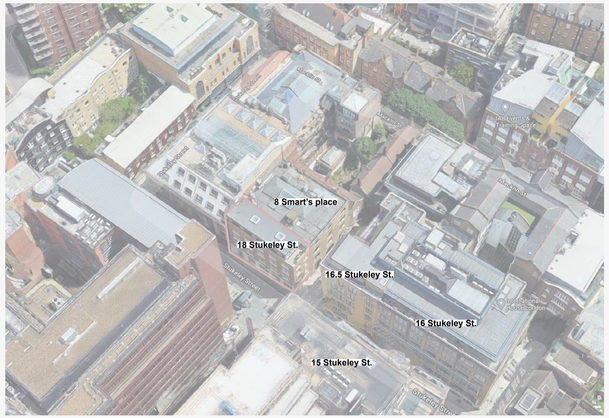
4.2 Building Use

- The existing building at No 18 Stukeley St. was The building was constructed in the early 1980s as light industrial/warehousing and converted to residential use in 2013.

4.3 Scale and Form

- The existing building consists of Six storeys, five of which are visible from the street. The lower ground floor is mostly hidden below ground.
- The existing residential building is a brick faced property with timber windows and white render faced and large timber windows with opaque glass at the ground floor.
- The building consists of two components, the original main building fronting the street and a smaller offset extension at the top.
- The top extension is set back and consists of a brick face and grey powder-coated aluminium windows, with a roof terrace to the south-west.
- The extension roof is a simple, flat roof finished with grey aluminium profile.
- In general terms No. 18 Stukeley is lower and of less volume than many other buildings in the area. No. 18 is lower than the neighbouring buildings at No. 15, 16, 20-22, 23 and No. 2 Smart's Place.
- The International House London is considerably larger than No. 18 Stukeley, occupying almost a whole urban block, and includes no.16 Stukeley Street located adjacent to the site.
- The existing building at no.18 sits between the adjacent building at No. 20 Stukeley St. and No. 8 Smart's place, and shares the same building line with the street.
- No. 16 Stukeley St. is of similar width to No. 18 Stukeley St. and consists of six floors above ground, with an additional seventh floor set back.

18 Stukeley main elevation

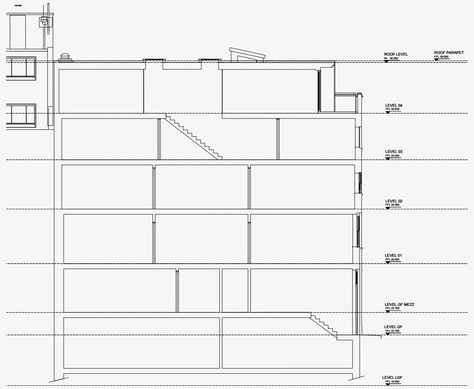


Site context

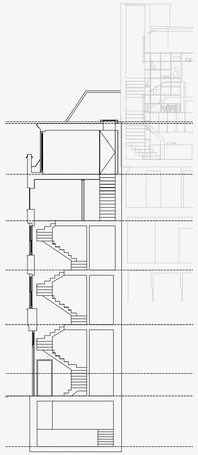
4.0 Site Analysis

4-4 Building Layout and Access

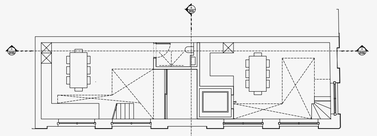
- The existing building consists of six storeys, one of which is set at lower ground level.
- The building forms an rectangular shape on plan with an front main elevation and principal entrance and apartment 1 entrance facing Stukeley street, and a narrower elevation to Smart's Place, with an entrance to apartment two.
- Internally, the circulation is arranged about a double winder staircase with landings giving access to each floor within the building. A passenger lift, from the ground floor entrance lobby, provides access to each apartment, but not the ground floor apartments. Both the stair and lift is positioned centrally on the plan.
- Apartments one and two, each accessed directly from the street level, extending over the lower ground and upper ground floors.
- Apartment five, arranged over the two top floors, accessed through the communal staircase and lift to its bottom floor, has an internal staircase for the access of the top floor and the roof terrace.



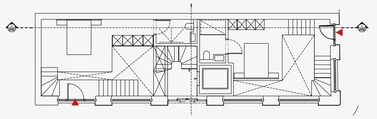
Existing Section A-A



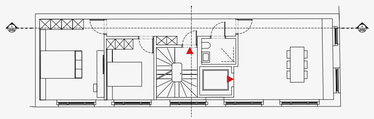
Existing Section B-B



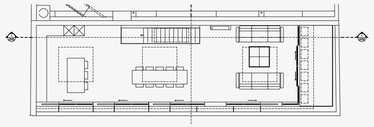
Lower Ground Floor - Existing



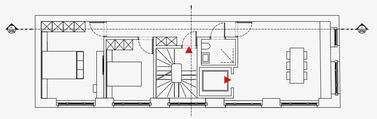
Ground Floor - Existing



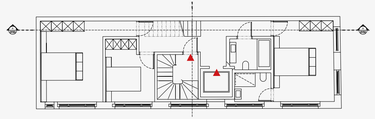
Second Floor - Existing



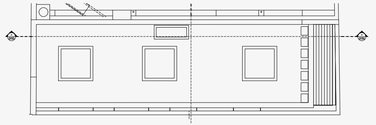
Fourth Floor - Existing



First Floor - Existing



Third Floor - Existing



Roof - Existing

4.0 Site Analysis

4.5 Appearance- Front Elevation

- The front facade of the existing building is constructed of white render ground floor with full height timber windows, and if yellow stock brickwork and with white timber sash windows on the upper floors.
- The upper floor extension constructed of similar yellow stock bricks, with grey aluminium windows, and a roof terrace facing south west.
- The front elevation arrangement is based upon a symmetrical placement of openings.
- The ground level, predominantly render-faced with large windows, has a front entrance doorway set to centre, and an additional entrance door to apartment two on the west side.
- The first and second floors elevation consist of five curved arched sash timber window, with curved brick lintels above.
- The third floor elevation has five rectangular sash windows, smaller in size than the arched windows below, with flat painted concrete lintel above.
- The front elevation doesn't display any note-able decorative qualities.

4.6 Appearance- Side Elevation

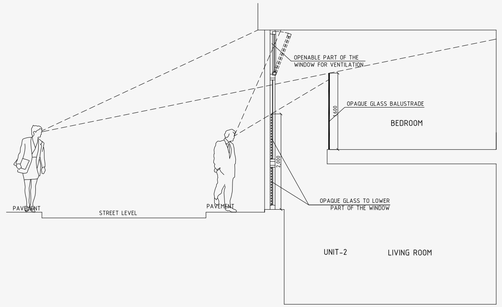
- The side elevation to Smart's place is similar in appearance to the main elevation, constructed of yellow stock brickwork with timber sash windows, and white render to the ground floor.
- A timber door at the south side of the ground floor elevation serves as the dedicated entrance to apartment one.

4.7 Levels

- The building levels are continues in section, with the top floor set back from the main elevation, creating a roof terrace above Smart's Place elevation.
- The internal ground floor level is set higher than the street level and accessible by several steps located within the ground floor apartments, allowing for duplex apartments with natural light entering the lower ground floor area.

Existing Front Elevation

Existing Side Elevation with the proposed 8 Smart's place development



Ground floor split section

Existing roof terrace

5.0 Design Proposal

5.1 Description

- This application seeks to make the following amendments for the existing structure of no. 18 Stukeley St. and achieve at the same time improving the existing design and appearance:

1. The disassembly of the existing stepped back 2013 extension, which is built off a light structure.
2. The fourth floor to be rebuilt following the form and appearance of the existing structure, strengthening the existing building's original characteristics.
3. The erection of two new stepped back floors, with a roof terrace and a roof exit room, with different materiality than the existing.

- By demolishing the existing top floor and reconstructing it with the same scale, form and rhythm of the existing building, the new façade's appearance will be more consistent towards the street.

- By keeping more of the existing structure, the proposal achieves a higher quality design for residential use and continues to both preserve and enhance the character of the Chancery Lane Conservation Area.

- The proposed design and amendments are described below, using comparison with the existing building and/or the consented scheme.

- The proposed design proposals include the following principal features:

1. Providing three new residential units to the total of eight units;
2. The disassembly of the existing stepped back 2013 extension, which is built off a light structure;
3. the fourth floor would be extending the footprint of the floor-plate to the fifth floor. The walls will be finished in the same style and materials as the existing building;
4. Extending the building vertically to provide for two additional stepped back floors, and additional roof exit rooms;
5. The fifth and sixth floors would be stepped back, creating new balconies for the use of the new apartments.
6. providing a stair enclosure and a roof terrace that is accessible to the two uppermost residential units, in accordance with the recommendations of the London Plan;
7. providing for fixed planters along with the balconies and the roof terrace, allowing for enhancement of biodiversity, improvements to appearance and resilience of the building and allowing for growing food for personal use, in accordance with the recommendations of the new London Plan;
8. Improving the quality and appearance of the detailing and use of materials of the existing structure; and
9. Adopting and meeting the energy and sustainability targets of the new London Plan.

- 18 Stukeley sits within the Seven Dials Conservation Area.

- SDCA consists of various building uses appearances and shapes, and materials that make the area's character.

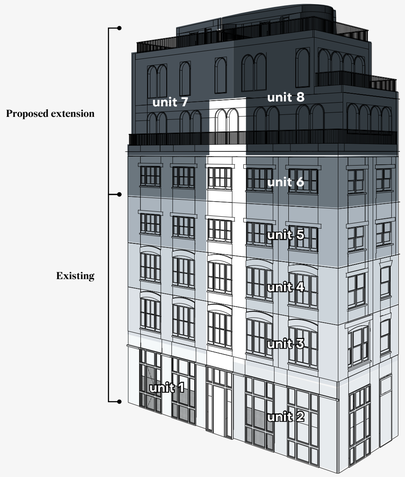
- The stepped back extension has different finishes and detailing than the existing volume, characterising the new fabric in contrast with the lower old one.

5.2 Unit Number and Mix

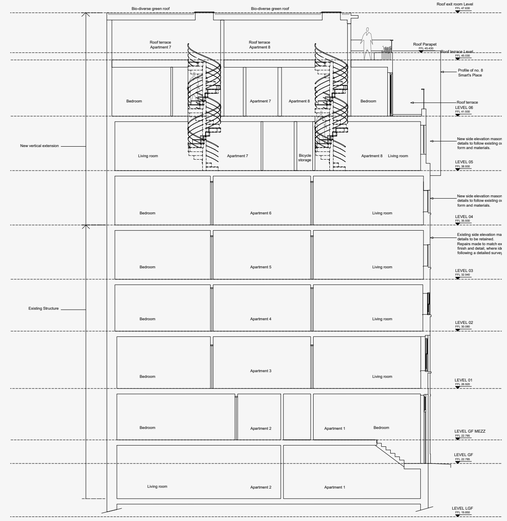
- It is proposed to increase the number of residential units to 8, and to provide an improved apartment mix with greater versatility of unit types.
- The new scheme proposes 4 unit types as per below:

1. 2 nr. 1 bedroom duplex
2. 4 nr. 2 bedroom flat
3. 1 nr. 2 bedroom duplex with roof access
4. 1 nr. 1 bedroom duplex with roof access

Unit No.	Floor No.	Type	Proposed GIA (sqm)	Existing GIA (sqm)
1	LGF + GF	1 bed 2 person	63	63
2	LGF + GF	1 bed 2 person	62	62
3	1	2 bed 4 person	65	65
4	2	2 bed 4 person	68	68
5	3	2 bed 4 person	68	132
6	4	2 bed 4 person	67	n/a
7	5+6+Rf	2 bed 4 person	81.5	n/a
8	5+6+Rf	1 bed 2 person	61	n/a
Total Residential Units GIA:			537	390
Total Common Areas GIA:			64	39
Total GIA			601	429



Perspective showing the new unit arrangement across the floors, with the circulation shaft at the centre of the structure



Proposed section A-A

5.0 Design Proposal

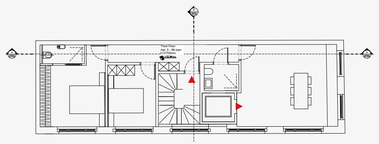
5.3 Arrangement and layout

The proposed suggests to retain the location of the stair and lift core as they are currently arranged within the existing building, with extending them to the fifth floor to allow access to the lower floor of the new duplex units.

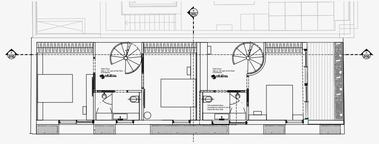
The new scheme wishes to minimize the area devoted for stairs and circulation at the new floors, and achieves that with an efficient internal stair case within the flats, and with not extruding the lift core to the top level.

The proposed layouts therefore allow for the following arrangement:

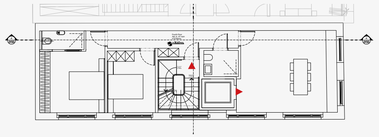
1. A single common stair providing level access to the fifth floor, the lift will provide access to entrances to all units;
2. An internal spiral stair case will connect between the fifth floor to the sixth and roof;
3. The lower ground, ground, first and second floor levels remain with their existing arrangement.
4. The ground floor the entrance door remaining in their existing location on the street elevation.
5. At the third floor, the lower part of the existing duplex apartment will be converted to a two-bed unit, which has same style and layout as the existing building.
6. At the fourth floor, the upper part of the existing duplex is to be replaced with a new self contained unit, which has same style and layout as the existing building.
7. On the new fifth and sixth floors, two new residential units will be laid across the floor, stepped back from the street elevation, allowing for planted balconies.
8. Above Smart's Place elevation, the mass steps back significantly at the sixth floor, breaking the new extension and lightness the mass.
9. At roof level the proposals allow for a roof terrace accessible through the internal spiral stairs.



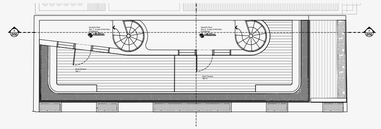
Third Floor - Proposed



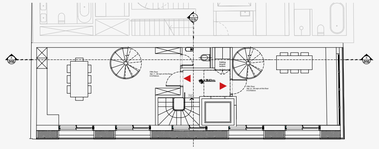
Sixth Floor - Proposed



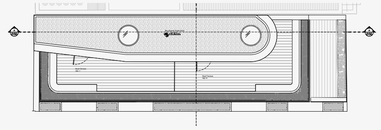
Fourth Floor - Proposed



Seventh Terrace - Proposed



Fifth Floor - Proposed



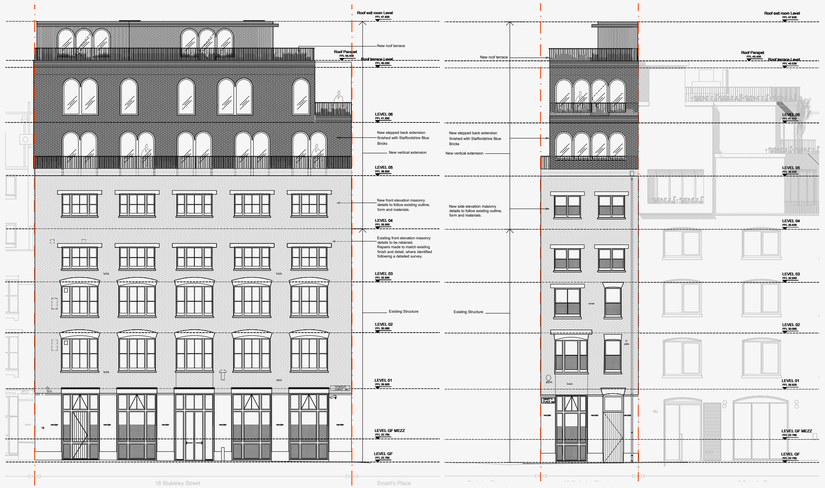
Roof - Proposed

View of proposed North West facade from Smart's Place

5.0 Design Proposal

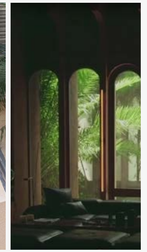
5-4 Appearance and Materiality

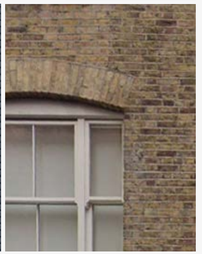
- The proposed scheme is partly identical in appearance and materiality to the existing structure below. For the fourth-floor skin, we propose to using brick slips and windows to match the existing building materiality, texture and colour for integrating in the existing fabric.
- The new mass of the fourth floor will follow the existing building outline, and will emphasis the existing qualities of the building.
- The new mass at the top floors will be stepped back at both elevations, distinguishing between the existing and new volumes.
- The stepped back mass will be finished with Staffordshire Blue Bricks, emphasising the new qualities of the extension.
- The windows on both façades will be curved shaped, maintaining the existing symmetrical fenestration arrangement.
- By stepping back the top mass, new balconies will be created along the North-west facade. These balconies will be accessible from the living areas within the new apartments, divided by planted balconies, drawn the nature to climb up to the building, creating a living, dynamic sculpture within the city..
- Thin metal railing with a colour matching to the windows frames will form the balustrades to the balconies and roof terrace.
- The sixth floor is stepped back at Smart's place elevation, creating a larger terrace finished with a similar planter and metal railing.
- The roof terrace, also planted at its perimeter, will emphasise the site's biodiversity, allow for food growing, and enhance the urban nature building appearance.
- The exit rooms roof, total of 25sqm, designed as lightweight extensive biodiverse green roofs, providing instant greening of a roof with a mixture of 36 species of wildflowers and meets the demand for native species vegetation to satisfy the requirements of BREEAM or a biodiversity strategy.



Proposed Stukeley elevation

Proposed Smart's Place elevation





Proposed Materiality

5.0 Design Proposal

5.5 Accessibility

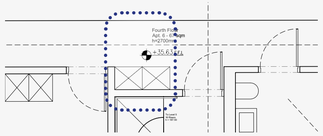
- The existing site benefits from excellent access to public transportation

- The proposed development is a car free scheme.

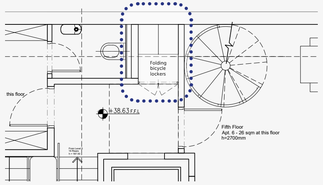
- Safe and level pedestrian access to the site is provided from Stukeley Street.

- The proposed scheme seek to retain and improve the level of access in the following way:

1. Extend the existing lift and provide access by lift to all new units;
2. Retain the level thresholds into the building and the units themselves, and will be well illuminated and have a minimum clear opening of 850mm;
3. Within each of the units, all corridors exceed 900mm in width;
4. Internal door widths will have a clear opening of 750–775mm depending upon the width of the access hall / corridor (to comply with the Building Regulations);
5. Walls in all WCs and bathrooms will be capable of firm fixing and support for adaptation for grab rails etc;
6. All ceiling structure is resilient and capable of supporting hoists and other equipment to facilitate adaptation for accessible use;
7. Handles for glazing and windows will be provided so that none is above 1.2m above the finished floor level;
8. All controls for services will be fixed between 450 and 1200mm above finished floor level, and no closer than 300mm from an internal corner;
9. Due to the site's space constraints in terms of lack of external space, it is proposed to locate foldable bicycle lockers inside units five and six and within the shared lobby of units seven and eight.
10. Each one and two Bedroom apartment will be provided with two dedicated foldable bicycles and lockers. In total eight foldable bicycle and lockers will be provided.
11. The folding bicycle will fulfil several of the mayor of London's criteria for convenience and security as well as being located within a sheltered well-lit internal spaces



Third and Fourth Floors - Proposed bicycle storage location



Fifth Floor - Proposed bicycle storage location

Folding Bicycle Lockers - Sample

5.6 Amenity

- 18 Stukeley Street is located within an area of London extremely well supplied with external amenity space that is within easy reach.
- The proposed scheme indicate a stepped back volume that provides improved privacy as the new balconies and planting creates a buffer between the residential units to the street.
- The proposed scheme provides an acceptable level of daylight into the building within heavily built up urban environment.
- The floor to ceiling heights are generous (between 2.4m-2.8m Please refer to the Daylight and Sunlight report that has been submitted with this application)
- The proposed scheme provides for a balconies along the fifth floor North-west facade, and for a balcony at the sixth floor at the South-west facade.
- The proposed scheme provides for a roof terrace as the, accessible to the two upper most units. Planting will be provided for screening purposes as well.

Proposed Amenity spaces

5.0 Design Proposal

5.7 Plant and Noise

- The proposed scheme does not include a new plant space on the roof, and will be using electrical heating and natural ventilation, providing non noise disruption to the neighbouring buildings.

5.8 Waste Management

- Each unit will be fitted with separate waste and recycling container within the kitchens. The locations of each storage unit have been indicated in the kitchen of each unit.

Example of in-kitchen waste and recycling storage

5.9 Fire Protection

The fire design of 18 Stukeley Street follow the guidance of BS 9991 and in compliance to Part B of the approved building regulations.
The key elements of the fire protection design are:

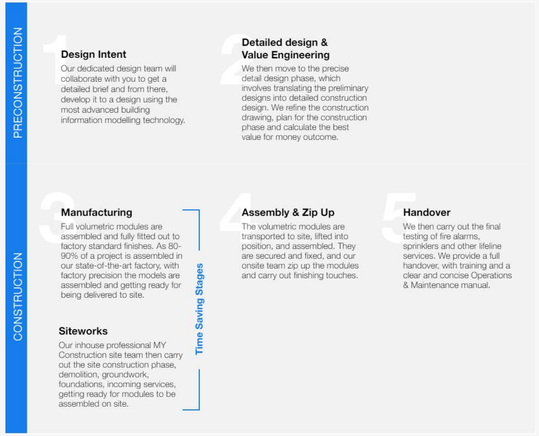
- The proposed smoke extract system within the stair well will allow for smoke free evacuation through the shared stair well.
- The proposed extension will be fitted with smoke detectors which will automatically activate the smoke extract system in a case of fire.
- The proposed extension will be fitted with a new sprinklers system, both within the apartments and in the stair core extended to the existing core, providing fire suspension to the shared escape core, subject to the approval of the fire strategy.
- The stairwell will be fitted with a new dry-riser, with an outlet situated on every landing, upgrading the existing means of fire control, subject to the approval of the fire strategy.

5.10 Off-site Construction

Having in mind the limited site access, and with the client's wish to cause minimal disturbance to the tenants and neighbours, an off-site fabrication strategy was developed together with MY-Fab, a North London based off-site contractor.

With this strategy, 80-90% of the construction will happen in a controlled factory environment, saves significant time and costs, creates robust structures with better quality control, and significantly reduces the presence on site.

Every new floor will be divided into two modules and assembled in a controlled factory environment.
Once assembled, the volumetric modules are transported to the site, lifted into position, secured and fixed. An on-site team then zips up the modules and carry out the finishing touches.



MY-Fab Design process

5.0 Design Proposal

5.11 Energy

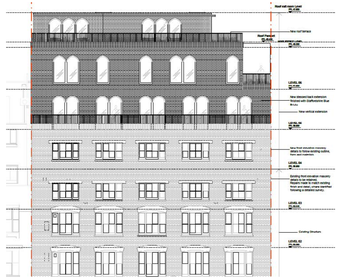
TPS.
TAYLOR PROJECT SERVICES LLP
BUILDING SERVICES CONSULTANTS

18 Stukeley Street

Executive Summary

The following energy brief is for the proposed development at 18 Stukeley Street, Holborn, London. The development sees the additional of 3 no. residential Apartments, across floors 4, 5 and 6. The new apartments add an additional 168m2 of GIA to the existing apartment block and will total 8 no. apartments

The proposed energy efficient systems and passive design features result in the two apartments achieving a 10-15% improvement when compared against the Building Regulations Part L1a notional figures and other local and national technical guidance has been reviewed to ensure the project has energy efficiency, future proofing and biodiversity at its heart.



The Energy and Sustainability Statement outlines the sustainability and energy strategies for meeting the sustainability targets set out by Camden Council and the GLA.

As this is considered a minor development, the proposal is not required to achieve carbon zero or Approved London Plan 'major development targets'.

However, excellent sustainability measures have been incorporated within the design, including:

1. Excellent building fabric values, to exceed Building Regulation Part L standards, therefore substantially reducing the buildings heat losses, compared to the existing fabric
2. Natural daylighting will improve occupancy comfort and reduce the requirement for lighting
3. Lighting will be low energy and highly efficient
4. All energy supplies will be metered using smart meters, with energy display devices located in a visible place to enable residents to monitor and therefore take actions to reduce their CO2 emissions
5. The air tightness of the building will be improved to reduce air permeability below 10m^3/hr/m^3 This will be met through improved fabric detailing and draught proofing.

Sustainable Measures

A number of sustainable measures have been proposed for the development, including:

1. Sustainably and locally sourced materials will be used where possible, to reduce transport pollution and support the local economy
2. Materials will be reused where possible, reducing the embodied carbon footprint
3. Recycling facilities will be provided on site for construction and operational waste;
4. Water use will be minimised by the specification of water efficient taps, shower heads, dual flush toilets and low water use appliances
5. Additional cycle storage will be installed for the new apartments
6. Water metering will be installed to monitor and minimise wastage;
7. A Site Waste Management Plan (SWMP) will be produced for the works;
8. A green roof is proposed, increasing the biodiversity of the site.
9. To comply with the local Air Quality Plan Action Plan, an all-electric scheme is to be implemented.

Be Lean: Use Less Energy

For all developments a balance will need to be reached between the need to retain heat, the heat generated within a development and the need to remove excess heat. As the building fabric will form a major part in the overall energy assessment and performance of the building, an upgraded thermal strategy is recommended, with the improvement of the Part L1 limiting fabric parameters where feasibly possible. The following table shows the limiting fabric parameters contained within ADL

Energy Efficient Design Measures

- Optimally sized windows that achieve good daylight levels but avoid excessive solar gain in summer and heat loss in winter
- Excellent building fabric
- A design air leakage rate of 3-5m3/m2hr to all apartments
- Careful design to reduce the effect of non-repeating thermal bridges including the use of high-performance thermal breaks where feasible
- All lighting, both in individual apartments and in the communal areas will use lamps with a luminous efficacy of at least 45 lamp-lumens/watt (equivalent to an "A" rating)
- All common area lighting will have automatic controls with occupancy and daylight sensors
- Any white goods that are supplied (fridges, freezers, washer dryers and dishwashers) will be models that are "best practice" for energy consumption
- Mechanical ventilation systems with heat recovery will be installed in every apartment

5.12 Sustainability

Energy and material performance:

The proposed development will be highly insulated and energy saving, high efficiency and electric heating will be used.

- High-performance openable windows will be installed to provide natural ventilation and good insulation.
- Off-site fabrication will allow quick assembly on-site and reduced material carbon emissions.
- Natural and recyclable materials responsibly sourced - such as FSC and Trada accredited timber.
- A living roof will administer surface water management for the attenuation of storm rainwater.

Natural life:

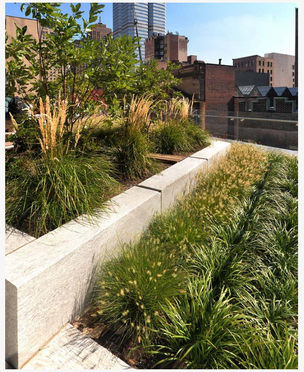
The current site has little ecological value, and the new development will enhance the support the natural life on-site by the introduction of:

- A substrate-based extensive green roof to Natural England guidance NE30 to support local insect species.
- Bird boxes will be installed on the setback elevations to provide roosting for local bird species.
- Bee bricks will be used to support solitary masonry bees.
- Roof planters will be installed by the balconies and roof terrace, enhancing the site's biodiversity and contributing to the green appearance of the extension.

extensive biodiverse green roof diagram (planting following Natural England guidance NE30)

Swift nesting bricks

bee bricks



roof planters

6.0 Appendix

6.1 Daylight and Sunlight Report summary (please refer to full report attached)

1 Executive Summary

1.1 Point 2 Surveyors have been appointed to review the amenity position in relation to the Proposed Development of 18 Stukeley Street.

1.2 The assessments contained within this report have been undertaken in accordance with the Building Research Establishment report entitled 'Site layout planning for daylight and sunlight: A guide to good practice', more commonly known as "the BRE Guidelines".

1.3 For daylight, the VSC results demonstrate that 38 out of 45 windows (84%) will meet the strict application of the BRE Guidelines. Notably, all but 1 window will record change in light within 10% of the BRE's advisory of 20% former value.

1.4 In terms of the NSL, the results demonstrate that 13 out of 14 rooms (93%) will meet the strict application of the BRE Guidelines. The single instance of alteration that does not meet the strict application of the BRE Guidelines records a change that falls within 1.3% beyond the BRE's permissible 20% from former change.

1.5 For sunlight, the results demonstrate very good levels of light, demonstrating full BRE compliance (100%).

1.6 In summary, recognising the extremely urban context of the area, the Proposed Development will relate very well to neighbouring residential properties.

8 Summary

8.1 Point 2 Surveyors have been appointed to review the amenity position in relation to the Proposed Development of 18 Stukeley Street.

8.2 The assessments contained within this report have been undertaken in accordance with the Building Research Establishment report entitled 'Site layout planning for daylight and sunlight: A guide to good practice', more commonly known as "the BRE Guidelines".

8.3 For daylight, the VSC results demonstrate that 38 out of 45 windows (84%) will meet the strict application of the BRE Guidelines. Notably, all but 1 window will record change in light within 10% of the BRE's advisory of 20% former value.

8.4 In terms of the NSL, the results demonstrate that 13 out of 14 rooms (93%) will meet the strict application of the BRE Guidelines. The single instance of alteration that does not meet the strict application of the BRE Guidelines records a change that falls within 1.3% beyond the BRE's permissible 20% from former change.

8.5 For sunlight, the results demonstrate very good levels of light, demonstrating full BRE compliance (100%).

8.6 In summary, recognising the extremely urban context of the area, the Proposed Development will relate very well to neighbouring residential properties.

6.2 Structural Report

Our ref: T8479 – REV 1 (19th March 2021)
Date: 18th March 2021

Re: Structural feasibility statement pursuant to the proposed vertical extension to 18 Stukeley St.

Executive Summary

The proposed scheme is to construct a two-storey extension to an existing five-storey building, with a basement. The original construction of the building consisted of load bearing masonry walls, with suspended concrete floors. Recent refurbishment works consisted of a single-storey vertical extension, basement lowering and existing floor replacement. A majority of the existing concrete floors were replaced with a steel and timber joist solution. To limit the increase in building load, a lightweight framing system is proposed for the extension, with timber floors supported on a steel framed system. A modular, off-site fabrication method preferred at this stage.

Initial calculations confirm that strengthening works to the existing structure will likely be required. At foundation level, traditional corbelled masonry foundations will require underpinning to increase their load bearing capacity. At fifth floor level, the existing extension is to be demolished and a new structure is to be erected, covering the full building footprint. The new two storey extension will then be constructed off this new level. To ascertain the exact scope of these works, intrusive structural investigations are to be carried out during future design stages.

The below ground drainage systems have recently been upgraded as part of the refurbishment works. It is therefore proposed that the existing drainage and connections are reused.

Existing Building

The building comprises of a refurbished basement, ground, first, second, third and extended fourth floor in a 17.5 x 5m rectangular footprint. At fourth floor, the building steps back to accommodate a recent extension of a smaller footprint on all sides. The building comprises residential flats at all levels. External facades comprise traditional brickwork.

Proposed Extension

A vertical extension is proposed above the existing fifth floor roof, creating an additional two storeys of residential space. At both extension levels, the floor area reduces, with the building stepping back to suit. To facilitate the current proposals, the existing single storey extension is to be demolished as part of the main works. A new fifth floor will cover the full building footprint, with the following two-storey extension stepping back to suit.

the An initial solution has been developed in hot-rolled steelwork to support the steps. As the scheme progresses, modular construction specialists are to be consulted regards the feasibility of producing a similar structural shape using off site manufacturing.

Below Ground Drainage & SuDS

At basement level, the existing building footprint currently occupies the entire site area, formed of a ground bearing reinforced concrete slab. The existing drainage was upgraded during the recent refurbishment, and comprises a gravity drainage system, connected into the existing Thames Water sewer beneath Stukeley Street. To the best of our knowledge, there are no flow controls on the surface nor foul water drainage.

Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable:

- Directly into the ground (infiltration)
- To a surface water body
- To a surface water sewer, highway drain or another drainage system
- To a combined sewer

The existing drainage at lower level are to remain in use during the works. As a result, it is proposed that existing drainage, inclusive of rainwater pipes, soil vent pipes, and sewer connections are reused. any additional drainage from the extension levels will be connected to existing foul wate pipes and rainwater pipes.

Due to the lower levels remaining unchanged throughout the works, there is limited scope to introduce SuDS measures to this building. It should be noted however that there will be no increase in surface water flows, nor will there be a strain on the existing drainage system from the negligible net increase in foul flows.

Yours sincerely,
SIMPSON | TWS

SAM MARGRAVE-JONES
MEng (Hons)

6.0 Appendix

6.3 Drawing issue sheet

STUDIO ELCA

6 Breams Buildings
London, EC4A 1HP

Drawing Issue Sheet

Project No.	123	Series: For Planning
Project:	18 Stukeley Street	
Client:	Gil Levy	

		day	25	24	15	22
		month	03	03	03	02
		year	21	21	21	21
Distribution						
Elleric	Gil Levy	gil@elleric.com	x	x		
JLL	Max Cartwright	max.cartwright@eu.jll.com	x	x		
JLL	Blyth Dunk	blythe.dunk@eu.jll.com	x	x		
Point 2	Justin Bolton	j.bolton@point2.co.uk	x	x		
TPS	Gerry Taylor	gerry.taylor@taylorprojectservices.com	x	x		
TWS	Simon Lane	simon.lane@tws.uk.com	x	x		

Package	**Drawing NO.**	**Title**	**Revi**	**Revision**		
Existing and Enabling Works Series 0000	**0010 Series**	**Location and Site Plans**				
	18Stu-0010	Site Location Plan	Po	Po		
	18Stu-0011	Site Plan	Po	Po		
	0100 Series	**Existing Plans**				
	18Stu-0100	Lower GF Plan	Po	Po	Po	
	18Stu-0101	Ground Floor Plan	Po	Po	Po	
	18Stu-0102	1st Floor Plan	Po	Po	Po	
	18Stu-0103	2nd Floor Plan	Po	Po	Po	
	18Stu-0104	3rd Floor Plan	Po	Po	Po	
	18Stu-0105	Roof Plan	Po	Po	Po	
	0150 Series	**Existing Sections**				
	18Stu-0150	Section A-A	Po	Po	Po	
	18Stu-0151	Section B-B	Po	Po	Po	
	0170 Series	**Existing Elevations**				
	18Stu-0170	North Elevation	Po	Po	Po	
	18Stu-0171	South West Elevation	Po	Po	Po	
	0300 Series	**Demolition Plans**				
	18Stu-0300	Lower GF Plan	Po	Po		
	18Stu-0301	Ground Floor Plan	Po	Po		
	18Stu-0302	1st Floor Plan	Po	Po		
	18Stu-0303	2nd Floor Plan	Po	Po		
	18Stu-0304	3rd Floor Plan	Po	Po		
	18Stu-0305	Roof Plan	Po	Po		
	0350 Series	**Demolition Sections**				
	18Stu-0350	Section A-A	Po	Po		
	18Stu-0351	Section B-B	Po	Po		
	0370 Series	**Demolition Elevations**				
	18Stu-0370	North Elevation	Po	Po		
	18Stu-0371	South West Elevation	Po	Po		

Package	**Drawing NO.**	**Title**	**Revi**	**Revision**		
General Arrangement Series 1000	**1100 Series**	**Proposed General Arrangement (GA) Plans**				
	18Stu-1100	Lower GF Plan	Po	Po		
	18Stu-1101	Ground Floor Plan	Po	Po		
	18Stu-1102	1st Floor Plan	Po	Po		
	18Stu-1103	2nd Floor Plan	Po	Po		
	18Stu-1104	3rd Floor Plan	Po	Po		
	18Stu-1105	4th Floor Plan	Po	Po		
	18Stu-1106	5th Floor Plan	P1	P1		Po
	18Stu-1107	6th Floor Plan	P1	P1		Po
	18Stu-1108	7th Floor Plan	P1	P1		Po
	18Stu-1108	Roof GA Plan	Po	Po		
	1150 Series	**Proposed General Arrangement (GA) Sections**				
	18Stu-1150	Section A-A	P1	P1		Po
	18Stu-1151	Section B-B	P1	P1		Po
	1170 Series	**Proposed General Arrangement (GA) Elevations**				
	18Stu-1170	North Elevation	P1	P1		Po
	18Stu-1171	South West Elevation	P1	P1		Po
Z Specifications and Reports	123	**6 Breams Buildings_Design and Access Statement**	P1	Po		
issue I information T tender A approvals P pricing C construction AS as built			I	I		
D data P paper E e-mail C cloud			E	E		
checked			MH	MH		
Issued by			MH	MH		

the page intentionally left blank