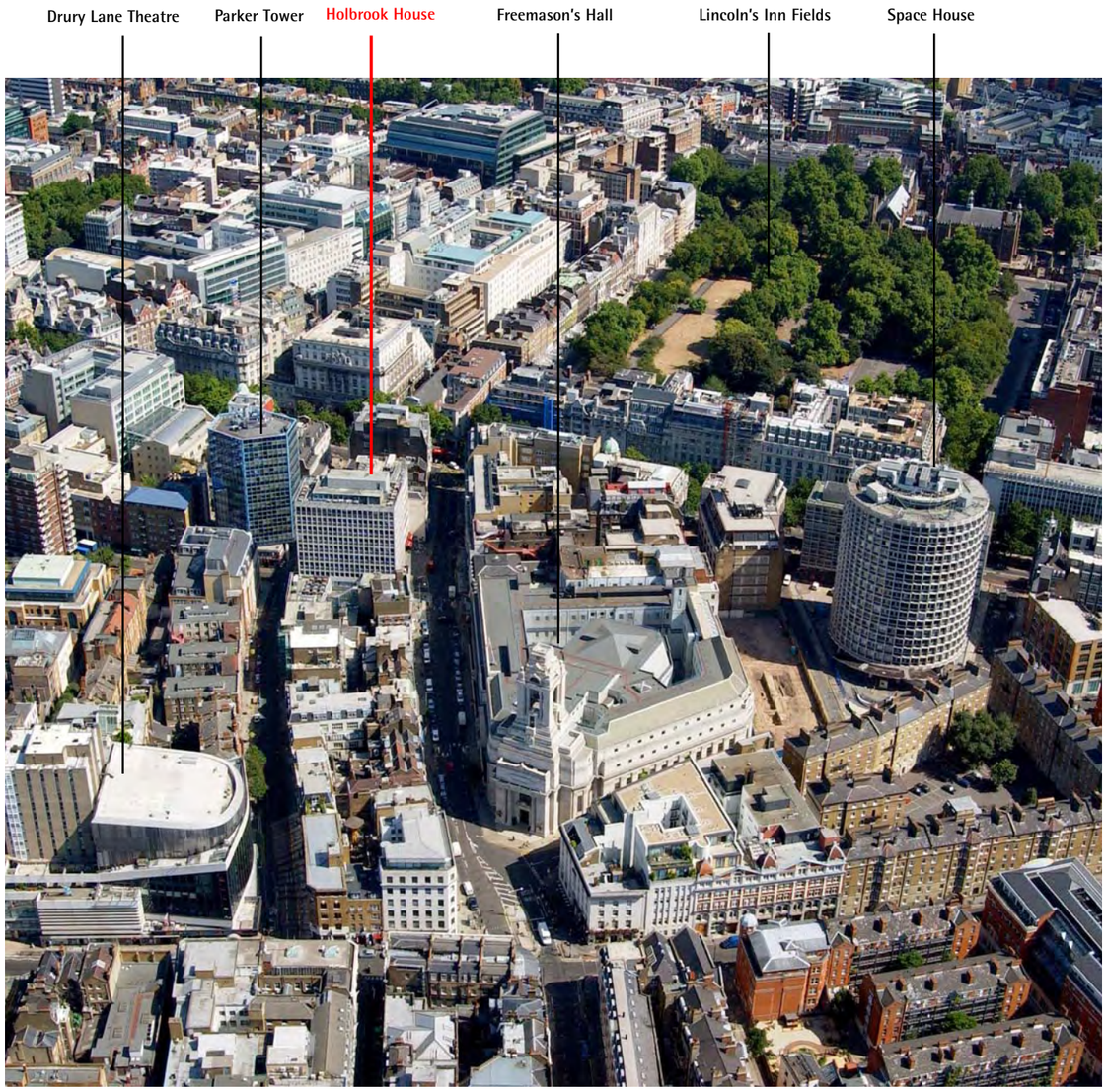
John
Robertson
Architects

Holbrook House
8-18 Great Queen Street, London WC2

Design and Access Statement

13th July 2006

Contents



Aerial photograph of Holbrook House looking east towards Kingsway and Lincolns Inn Fields

1. Holbrook House

1.1 Overview and Objectives

Overview

Holbrook House is located between Great Queen Street and Parker Street near to Kingsway and on the outer edge of Covent Garden. Holbrook House is a large imposing concrete framed building built during the early 1960's. The site is thought to be a World War II bombsite and was constructed as part of the post war property boom when there was a shortage of modern office space during the late 1950's and early 1960's.

The existing building spans Newton Street which is the main route between Great Queen Street and High Holborn. It is located within the Seven Dials conservation area, but is widely recognised as making no positive contribute to the character and appearance of the conservation area.

The building is now owned by Henderson Central London Office Fund who propose to refurbish the building and to bring the office space up to modern office standards.

Objectives

The objectives of the refurbishment are to:-

1. Significantly modernise the building.
2. Improve the main entrance arrangement to the offices.
3. Provide disabled access to the building.
4. Improve the public realm at ground floor level around and within the vicinity of the building.
5. Re-brand the building by modernising the external elevations and the entrance hall.
6. Upgrade the air conditioning system which has been extended in a fragmented and piecemeal manner over the years.
7. Improve the layout and quality of the office space by making strategic re-arrangements to the toilets, lift lobbies, office floor plates and the main cores.
8. Articulate and improve the street frontages.
9. Provide extended office space for John Charcol Financial Advisors an existing tenant within the building.
10. Improve the cleanning and maintenance strategy for the building.
11. Provide cycle parking.

View of the existing building looking east towards from Drury Lane with Freemason's Hall in the foreground

1. Holbrook House

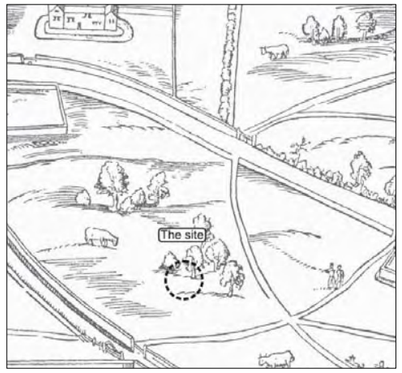
1.2 History and Land Use

Great Queen Street has been one of the main crossing routes into Covent Garden and was the site of the Kingsway Theatre until the Second World War.

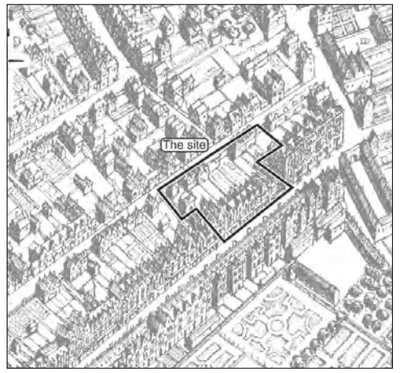
The site was developed in the early 1960's by John Laing Construction for Pearl Assurance and was originally called Elizabeth House. As part of the redevelopment, Newton Street was extended through the site to provide a new vehicle thoroughfare from Great Queen Street to Holborn.

The site is surrounded by buildings of different land uses including residential, hotel, retail and offices.

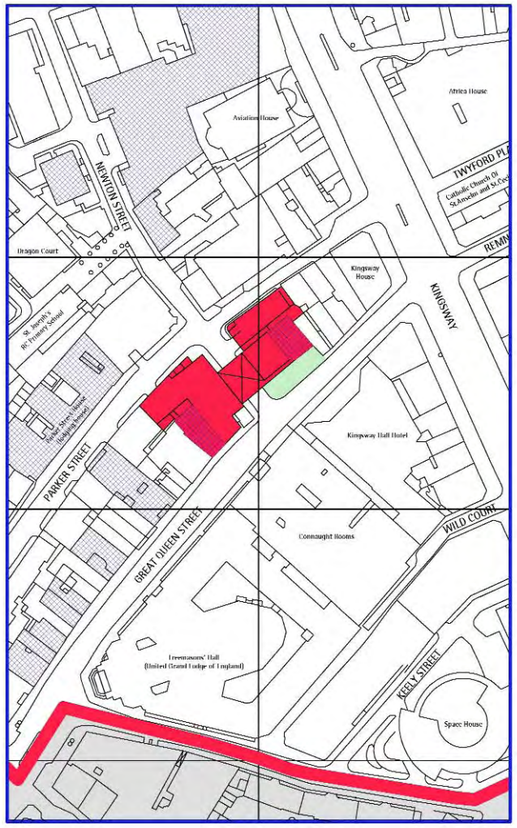
- There are a number of shops A1 units, however none of the streets are identified as a major retail frontage in the Camden UDP adopted and energing.
- John Charcol have an existing B1 unit in Holbrook House.
- There are several restaurants A4 and public houses A4 units, two of these are on site of the existing Holbrook House, the Hercules Pillars and The George Public House
- Several buildings in the street, including Holbrook House have office B1 accommodation.
- The Kingsway Hall Hotel is a C1 land use.
- There are residential units C3 in the area and there are 2 residential units on site which are associated with the public houses.
- The Conaught Rooms and The Freemason's Hall are a D1 land use for assembly.

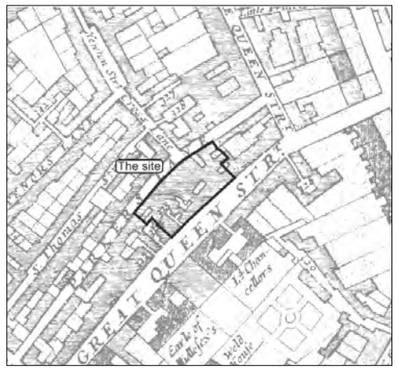


The Agas map of 1562

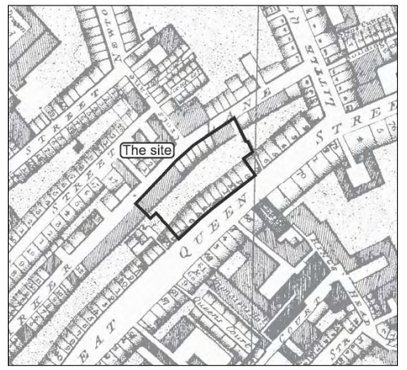


Hollar's 'Panorama' of 1658





WIlliam Morgan's map of 1682



Horwood's map of 1813

Residential

Borough Boundary

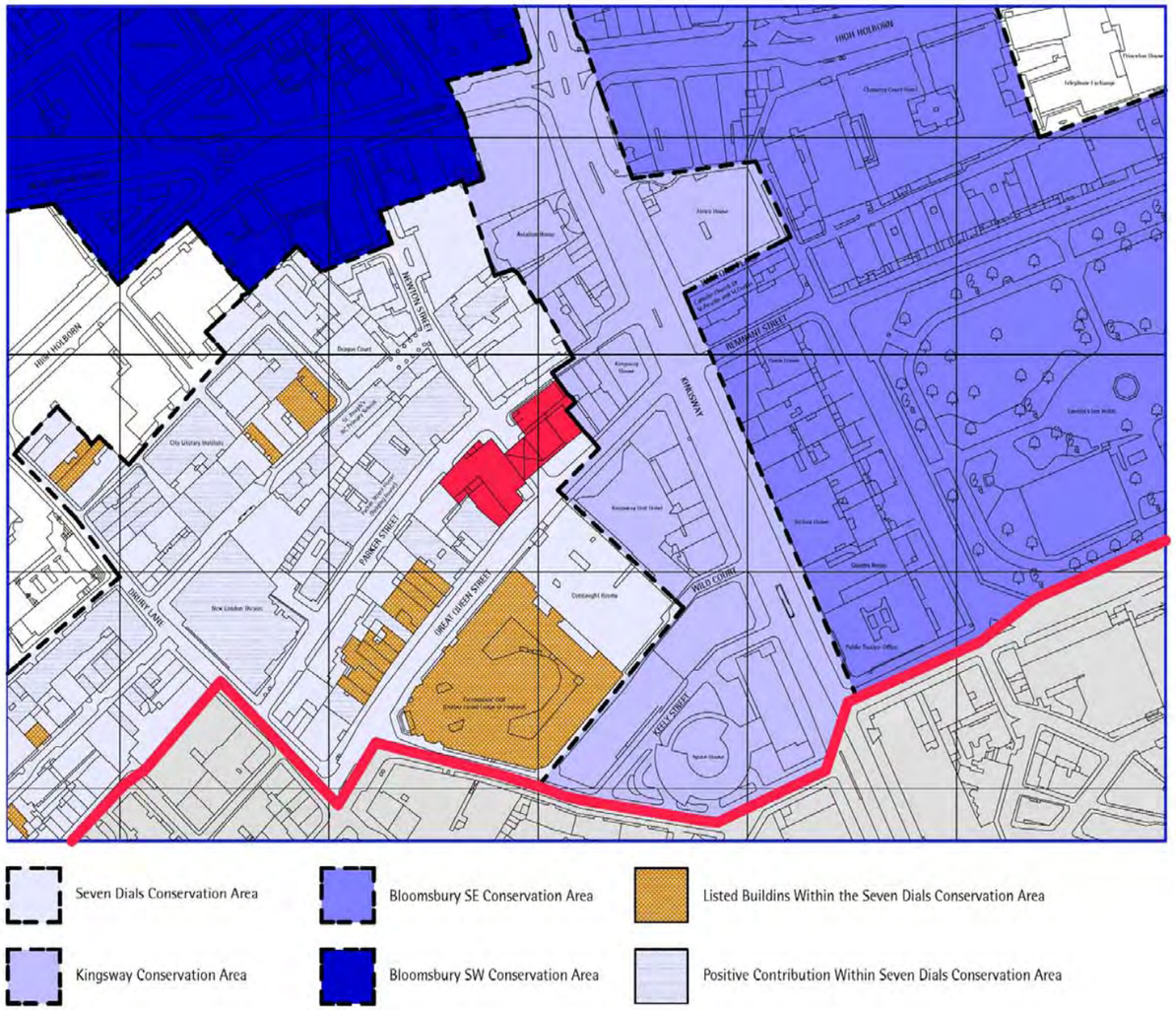
Public Space

2. Site Analysis

2.1 Listed Buildings and Conservation Areas

Holbrook House is located at the eastern edge of Seven Dials Conservation Area and adjacent to the Kingsway Conservation Area. The map opposite indicates the location of listed buildings within the locality of the site.

Aerial View



2. Site Analysis

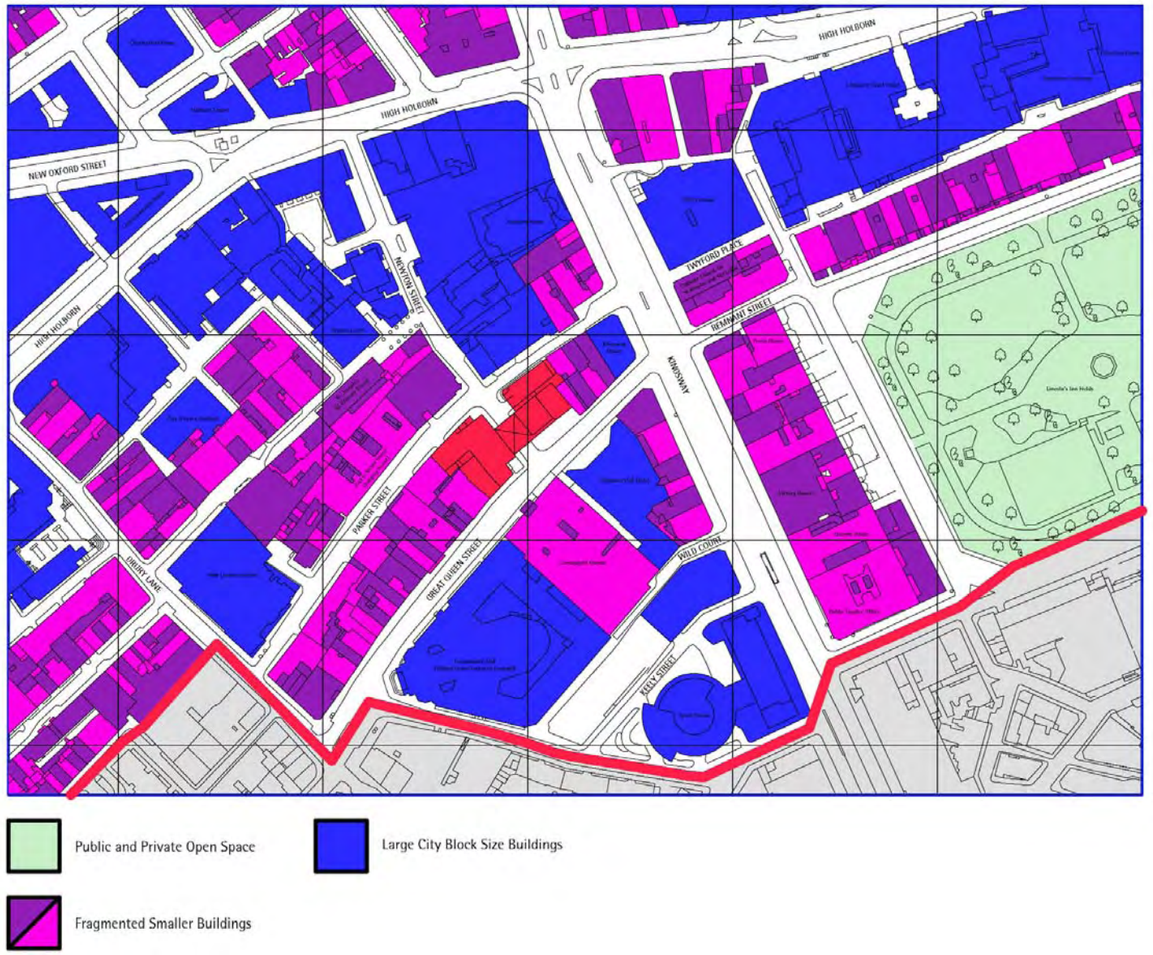
2.2 Building Scale

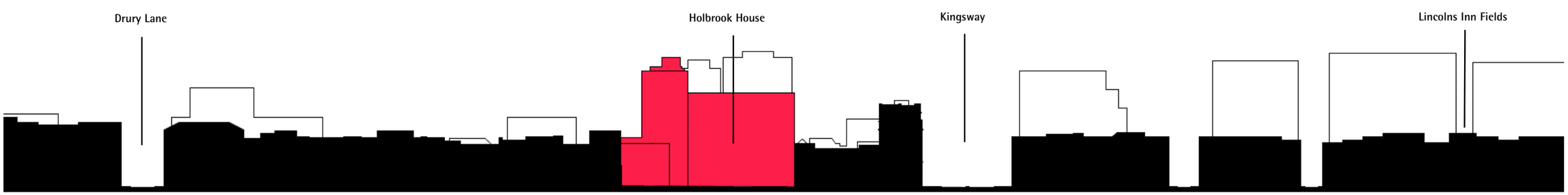
The East side of Covent Garden is a transitional area between the fragmented scale of Covent Garden and the formal civic scale of Kingsway with its large Edwardian classic buildings lining this boulevard.

Great Queen Street is made distinct by the generous width of the western end of the street, set out in the 17th century. The street combines the domestic scale of the 17th century terraced houses on the north side of the street and the later buildings by the Freemason's on the south side, the Freemason's Hall and the New Connaught Rooms.

Holbrook House, Parker Tower and Space House are 1960's interventions which disrupt the scale of the low rise Victorian buildings at the edge of the Seven Dials conservation area and interfere with the townscape within the local street scene.

The proposals seek to improve the relationship of Holbrook House within the varying urban grain in its vicinity. The proposals aim to achieve this by improved public realm and streetscape, enhanced elevations and improved roofscape.





Great Queen Street elevation showing scale shift at Holbrook House

2. Site Analysis

2.3 Highways, Access and Servicing

External Approach

Public transport links to and from Holbrook House are extremely good with a tube station within 3 minutes walk at Holborn and within 10 minutes walk at Covent Garden, Leicester Square, Tottenham Court Road, and Chancery Lane. There are several bus routes along Kingsway. Kingsway is defined as a Borough Distribution Road in the adopted and energing UDP, catering for journeys within the borough and providing links to adjoining boroughs with access to Public Transport including buses and taxis. Kingsway and Great Queen Street are classified roads within the UDP. Pavements are generally in good condition with dropped kerbs provided at crossing points.

Public Transport

The site benefits from extremely good public transport accessibly. Holborn Underground station is within easy walking distance with access to the Central and Piccadilly Lines.

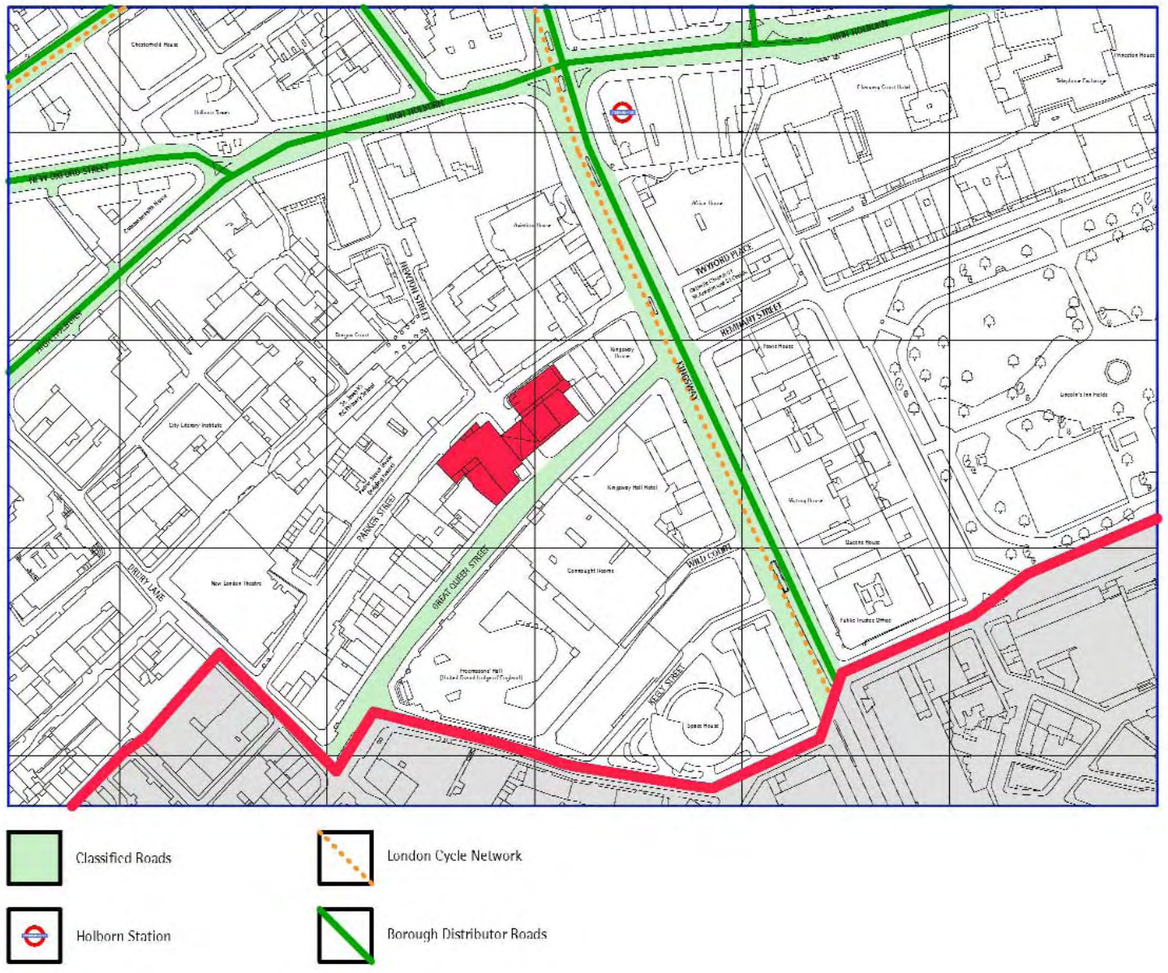
The area is well serviced by buses, particularly along Kingsway and High Holborn which from Holborn connects east/west to "Midtown", the City and the West End. Kingsway offers excellent north/south connectivity to the South Bank and Bloomsbury.

Road Access

The site has good vehicular connectivity; Kingsway is a main distribution route within Camden and Great Queen Street is a main east/west thoroughfare into Covent Garden.

The section of Newton Street between Parker Street and Great Queen Street currently allows two-way vehicular traffic, and has pedestrian footways on either side.

The eastern section of Parker Street leading from Kingsway to the junction with Newton Street is one-way westbound, though the western section between Newton Street and Drury Lane is two-way. The northern section of Newton Street between the junction with Parker Street and High Holborn is one-way northbound. There are no through side-roads joining Newton Street along this length, though it provides access to numerous street-level and underground servicing and parking areas. The local road network is shown on the map opposite, and further information is provided in the Transport Assessment prepared by WSP Transport.



3. The Existing Building

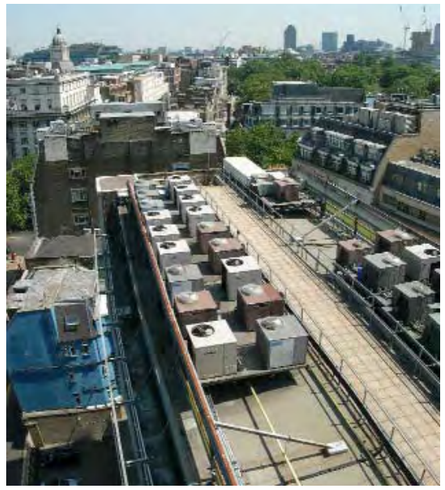
3.1 Roofscape and Plant: Eastern Podium Block

Holbrook House was designed as a naturally ventilated office building when it was originally occupied in the 1960's. Over the last 40 years the building has been altered incrementally to suit new tenant driven occupancy standards. Gradually all of the office floors have been refurbished to incorporate air conditioning in one form or another: the result has been that a proliferation of heat rejection plant and equipment for individual tenancies which has been assembled on an ad hoc basis on the different roof tops of the podium, the tower and the low rise west wings. Additional air handling plant, ductwork and pipework have been added gradually to the building over the years resulting in a fragmented unsatisfactory appearance that is thinly disguised behind plant screens at 9th floor level.

The 8th floor roof to the podium at Holbrook House has 28 heat exchange units feeding chilled water down to the office floors. An air handling unit for fresh air is located at roof level and provides air to the office floors via ductwork on the east elevation. The existing roof structure is a sloping cantilever from central columns; the depth of this structure pushes this roof plant higher making it more visible to the surrounding buildings. These units, along with the air conditioning system are a retro fit which have left an unsightly roofscape. The screen for the plant has been installed but this is largely open, allowing distant views of the equipment from street level and is an unsightly addition in itself.

There is an existing means of escape across the open roof which has a paved surface and handrails for safety. The window cleaning monorail is a permanent feature and is supported back to the roof structure at level 8 which oversails the parapet and is an unfortunate addition at the top of the building against the sky.

One of the objectives of the proposal is to remove all the extraneous plant and equipment and to replace it with a new contralised air conditioning system for the whole building. The new air handling plant and equipment will be housed in dedicated plant rooms that will be integrated within the profile of the new plant rooms at the top of the tower and on the new 9th floor of the podium.



View of South East wing and existing plant and equipment at ninth floor

East flank wall elevation showing air supply ductwork

Eighth and ninth floor detail

View of ninth floor plant equipment from Great Queen Street

3. The Existing Building

3.2 Roofscape and Plant: Tower and West Wing

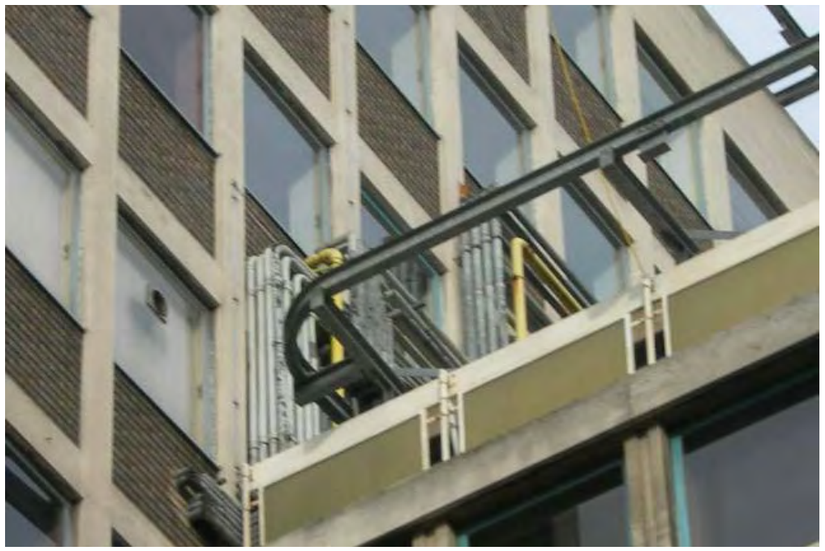
The roofscape to the tower is dominated by the existing lift motor room at level 13 and plant room and part office floor at level 12. Several air conditioning units feeding chilled water down to the office areas are located at level 12 on the flat roof, however, because of the high parapet level this is not visible from the surrounding buildings.

The low level roof to the west wing on Parker Street has 12 air conditioning units, a considerable amount of exposed pipework and the flue to the existing landlord stand-by generator. The roof to the west wing on Great Queen Street has very little existing plant but there are handrails to an existing secondary means of escape from the neighbouring building, these are visible from street level.

The galvanised steel support rails for the window cleaning equipment oversail the roof parapet on both the tower roof and the west wing on Parker Street.

View of west wing roof from the tower

West lightwell



Detail of pipework, balustrading and window cleaning monorail at the junction between the podium and the tower on Great Queen Street elevation

Tower roof plant and equipment

Tower roof

3. The Existing Building

3.3 Obsolete Office Space

The office space in Holbrook House is obsolete by today's standards and is deficient in the following respects:-

1. The air conditioning system is a perimeter unitised system which draws fresh air from the perimeter of the building through air bricks in the elevations.

2. The building fabric is not insulated and is not energy inefficient.

3. The external windows comprise the original single glazed clear glass in metal frames which are not energy efficient.

4. Electrical and IT distribution is by trunking in the screed and around the perimeter in the air conditioning unit casings, there is no raised floor system.

5. The entrance hall is out-dated and has changes in level with an existing staircase which makes access for disabled persons difficult.

6. The toilet and lift lobbies are old fashioned in appearence. No disabled toiletsare provided

7. The office floors have low floor to ceiling heights with localised bulkheads.

8. Extensions and alternations have been carried out throughout the building on a piecemeal basis.

Typical interior office space, high cills, low ceilings and poor aspect

Perimeter air conditioning units with high cills

Existing entrance hall with changes in level and no provision for disabled persons

3. The Existing Building

3.4 Opportunities for Change

A number of significant oportunities exist at Holbrook House to improve both the building and the local environment around the site. These opportunities include:-

1. Extending the building on the site of the existing car park at the junction of Parker Street and Newton Street.

2. Improvement of the entrance hall and access arrangements into the building from Great Queen Street.

3. Improving the pavement public realmand small 'piazza' outside 'The George' Public House in Great Queen Street.

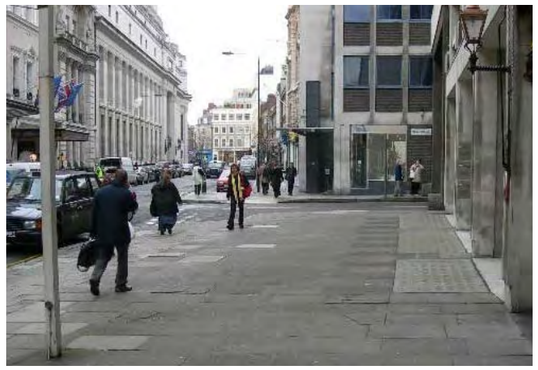
4. Improvement of the roofscape of the tower and particularly the 8th floor of the podium.

5. Improvement of the general appearance of the external facades to all the elevations.

6. Improvement to office floorplates, i.e. air conditioning, raised floors etc.

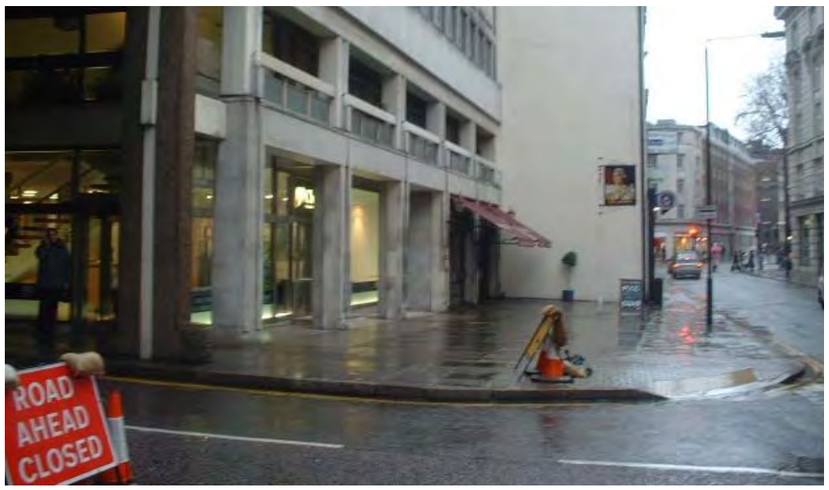
Our proposals seek to address all of these opportunities for change.

Existing main entrance and Newton Street underpass



Pavement outside The George Public House in Great Queen Street (looking west)

The existing carpark in Parker Street with the blue flank wall of number 58 Parker Street in the background



Pavement outside The George Public House in Great Queen Street (looking east)

3. The Existing Building

3.5 Structural Constraints

Existing Building

Structure is constructed from a reinforced concrete frame with pre-cast cladding elements. The floors are generally concrete ribs with hollow clay pots as permanent formers. Typical slabs in the 2 main blocks, the tower and east podium span between a double row of central columns and load bearing pre-cast concrete mullions at 1.5m centres along the perimeter.

The building is supported on piled foundations generally, but under some of the lower lightly loaded areas, pad foundations have been used.

Lateral loads are resisted by a series of concrete shear walls in the tower and eastern podium. These shear walls provide the main wind bracing within the building and limit the amount of structural alterations that can be made to the central core.

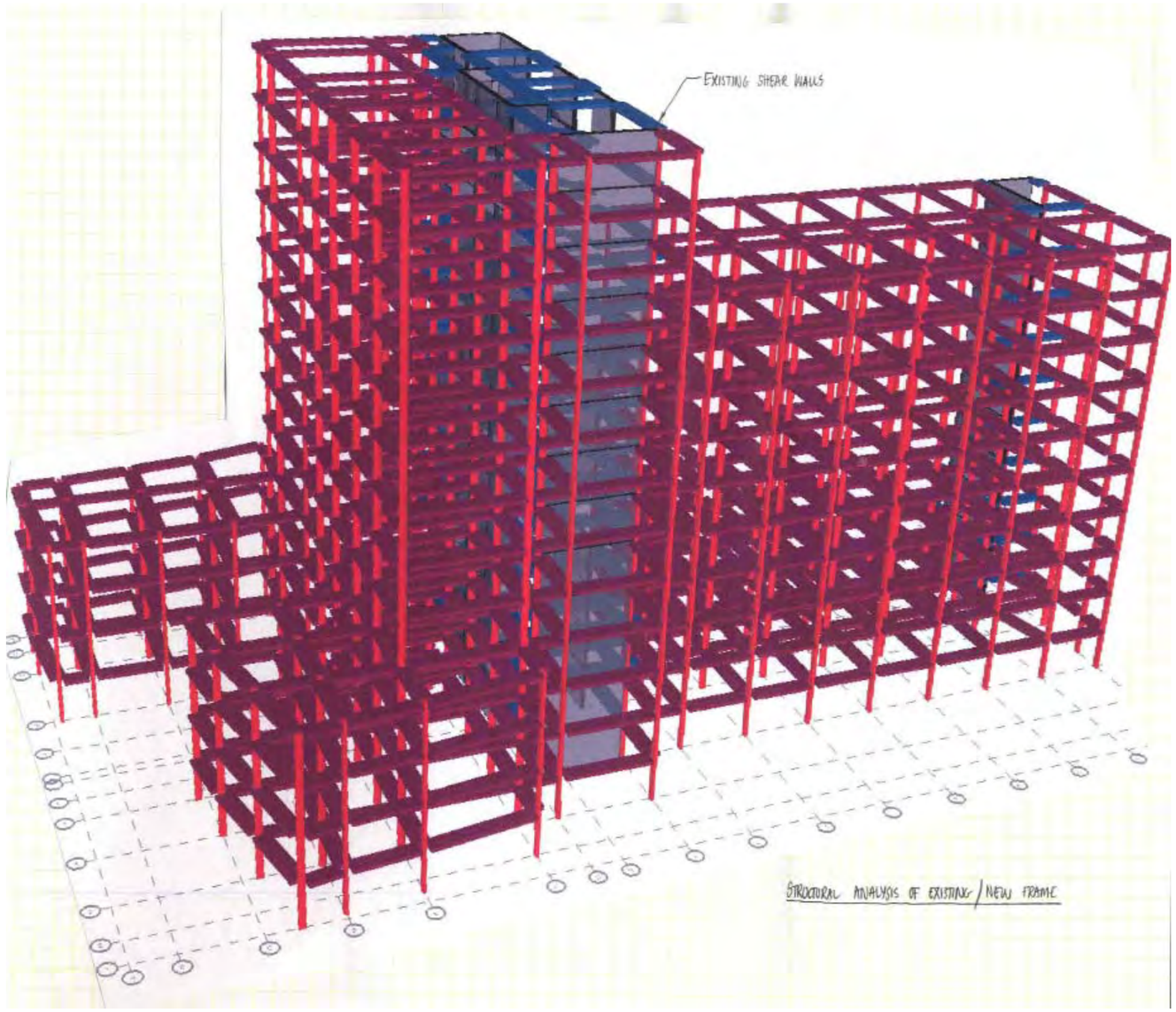
Construction of Existing Structural Slab

Typically the floor construction is 51mm non-structural screed on 51mm structural topping on 203mm clay hollow pot void formers, giving a total depth of approximately 305mm. The screed is currently being used for tenant service trunking.

Between the two central 1220mm wide beam strips the slab has been changed to a 102mm deep solid slab concrete construction.

Existing Cladding

The cladding consists of a series of precast and insitu, concrete structural mullions and cladding elements. The mullions are load bearing. Vertical loads in the mullions are generally transferred into perimeter columns at 1st and 2nd floor by deep perimeter upstand transfer beams which are up to 1.8m in depth.



4. Proposals

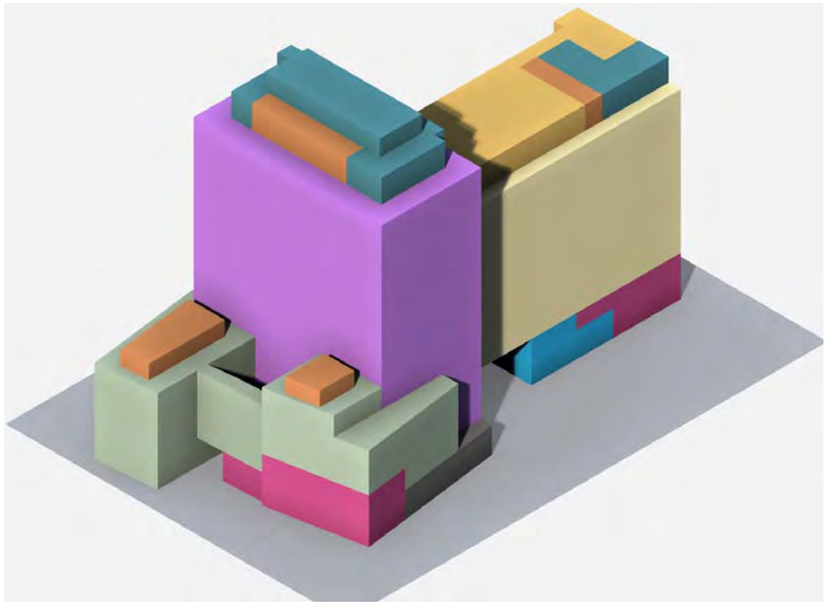
4.1 Concept: Interconnecting Blocks

The concept for the elevational treatment of the interconnecting blocks is to emphasise and express the different configuration of the building elements. The tower is essentially the vertical element of the building and this will be reinforced by the horizontal nature of the other interconnecting 'blocks' that make up Holbrook House.

The eastern podium block is a horizontal element and the windows will be enlarged and run in interlocking bands to emphasise this. Within these bands vertical glass spandrels have been introduced which have a degree of variation in colour to provide a finer grain to the elevational treatment and a distinctive visual accent.

Although the materials used are a constant theme it is also important to emphasise the different nature of the compositional elements of the building, which we see as the 'Tower', 'Podium' and 'West Wings'.

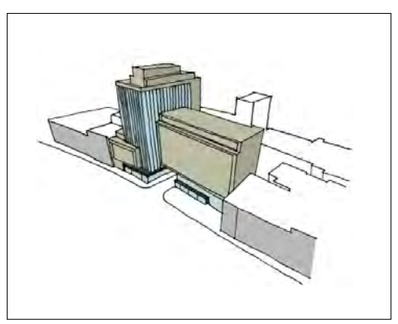
Two extensions are proposed to the existing building. Firstly a new 9th floor extension will be added in place of the existing unsightly plant on the roof of the 8th floor and secondly an extension of the offices of the existing tenant (John Charcol) to the rear of the building on Parker Street.



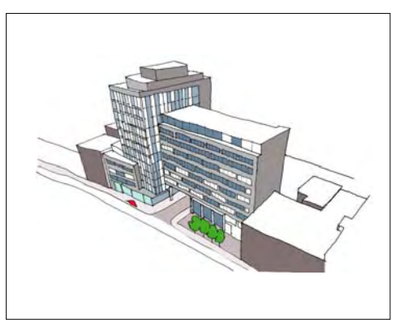
Diagramatic view from south west showing interconnection blocks

Key

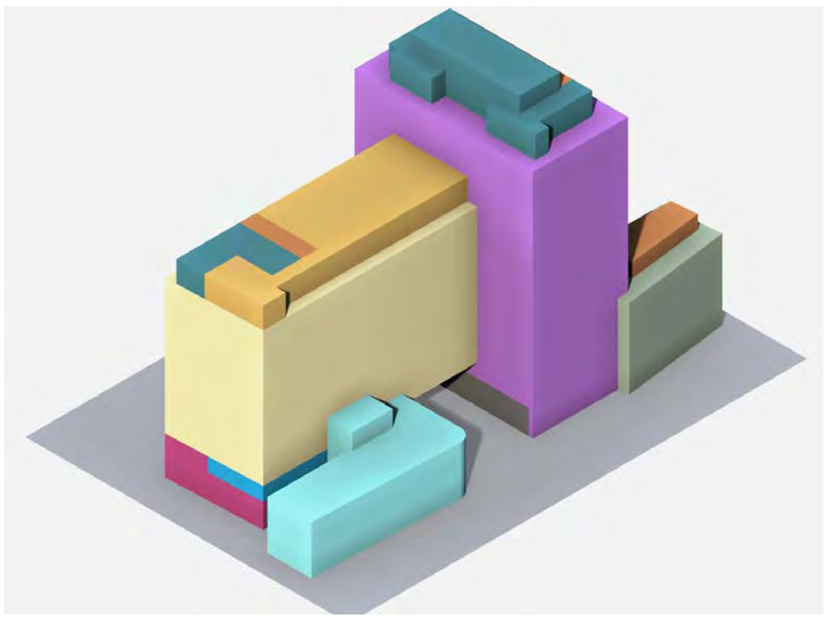
- Tower
- Podium
- West Wing
- Main Entrance
- John Charcol Unit
- Parker Street Extension
- 9th Floor Extension including 8th floor alterations
- Landlords Plant Enclosure
- Tenant Plant Enclosure
- Existing Public House and Residential



Concept sketch



Concept sketch



Diamgramatic view from north east showing interconnection blocks

4. Proposals

4.2 Concept: Altering the Elevations

Holbrook House is a significant 1960's building that has been imposed upon the existing tight grain of the fabric of Covent Garden. Refurbishment of the building provides an opportunity to modernise and enhance the building.

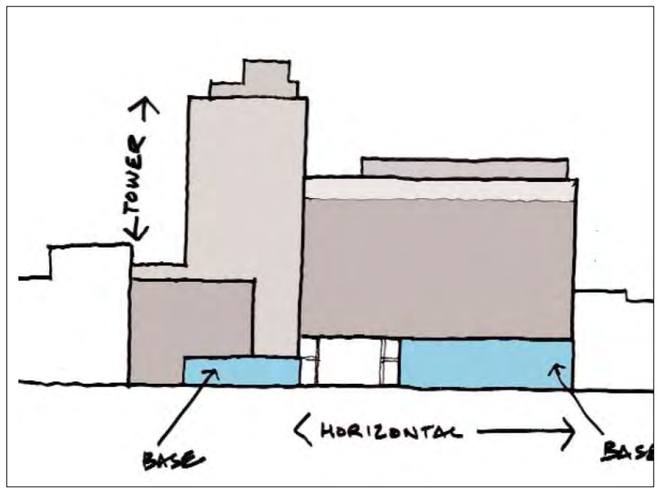
The building comprises a series of interconnecting blocks and elements or "mini-blocks" that can be divided into constituent parts as follows:-

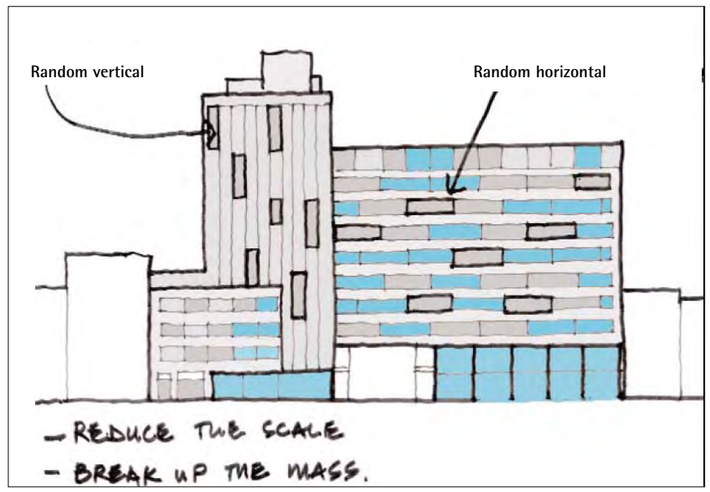
- Tower (levels 1 - 13) Provides vertical emphasis
- Podium (levels 1 - 8) Provides horizontal emphasis
- South West Wing (levels 1 - 3) Horizontal emphasis
- North West Wing (levels 1 - 4) Horizontal emphasis

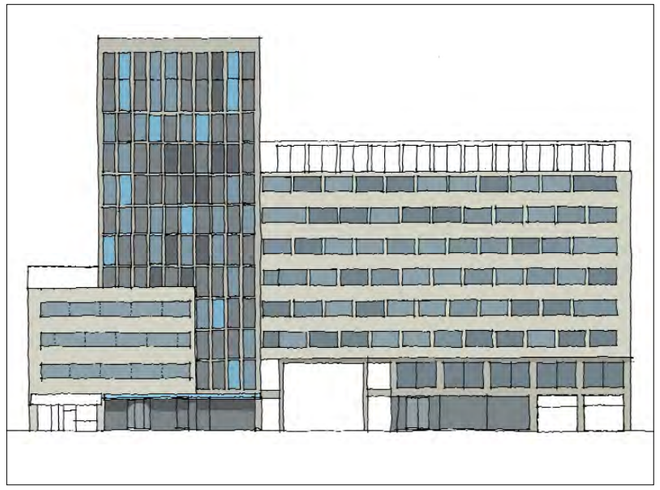
Essentially the tower acts as the central connecting element between these various parts of the existing building and forms the anchor for the other wings to lock into it. The existing elevations of each block vary in module and configuration and there are combinations of different materials used including brickwork, stone, concrete and glass.

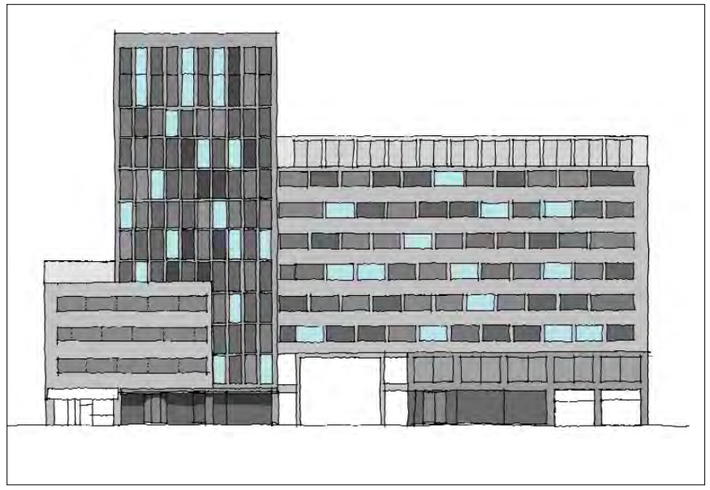
The concept is to maintain the vertical emphasis of the tower and to improve its scale and proportion by incorporating full height glazing with random clusters of extended window bays. To further strengthen the verticality of the tower it is proposed to strengthen the horizontal emphasis of the podium block by removing the vertical stone pilasters between the windows and replace these with horizontal window bands with random colour elements.

As a result, the monotonous and dual regularity of the façade will be in two ways: by incorporating window bays in a random pattern to relieve and accentuate the regular grid of the tower and by giving the building a third dimension by the incorporation of colour glass pilasters to replace the existing stone divisions between the windows in the podium block. A random pattern has evolved to articulate the facades, to add interest but and reinforce the abstract modernist theme of the 1960's architecture.









4. Proposals

4.3 Concept: Elevations, Grid, Colour and Abstraction

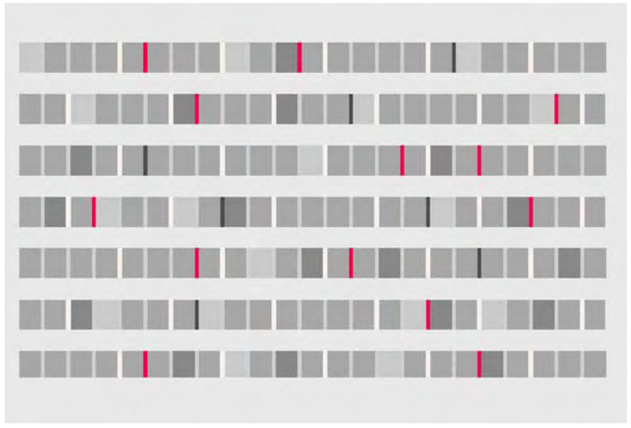
The existing architecture of the building is defined by a regular and modular structural and planning grid and by the juxtaposition of the vertical elements of the tower with the horizontal elements of the podium and west wings.

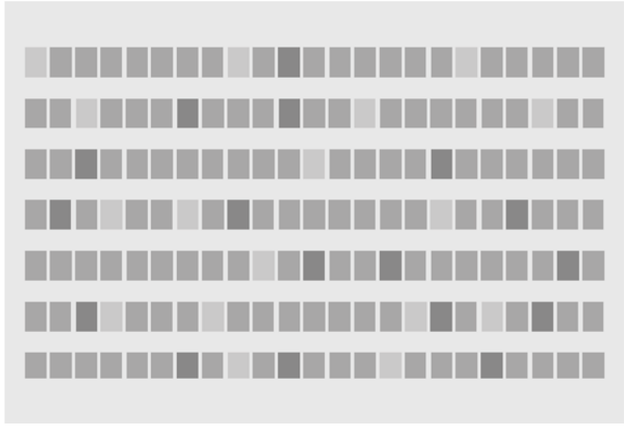
The proposals seek to reinforce this juxtaposition by creating a new layered facade and by the introduction of projecting windows bays and subtle colour into facades. The expressed use of grid and tonal colour deal with a number of key objectives of the new architectural design:-

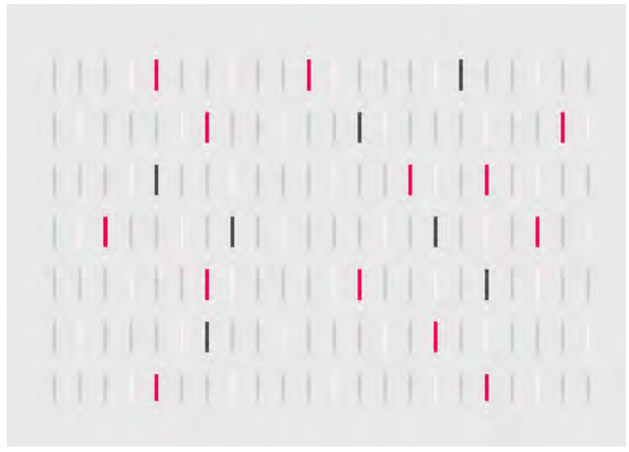
- Rebranding of the entire building by giving it a new identity
- Contrasting the verticality of the tower with the horizontality of the podium and wings
- Provide a contrast against the background neutrality of the existing Portland Stone façade

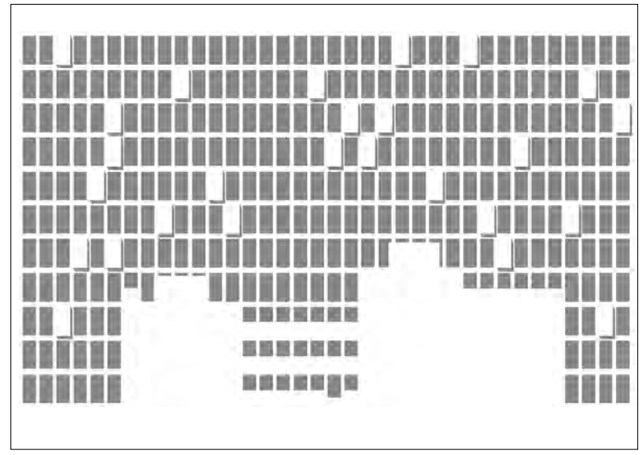
The proposals treat the Portland Stone facades as a background for the insertion of new vertical windows and window bays into the tower and for random strips of colour to be incorporated in the podium and west wings. Individual panels will be highlighted in subtle accent colours of red, black, mid-grey and light grey against the neutral underlying palette of white stone, natural anodised window frames and neutral tinted solar control glass .

The new window bays on the tower will be clustered in random groupings to further disrupt the regular grid: an abstract pattern has emerged which reinforces the modernist concept of the architecture; clean, pure geometric forms are subject to repetition in the facades. A layered series of semi-transparent plans is achieved suggesting weightlessness and immateriality of the architecture of glass.



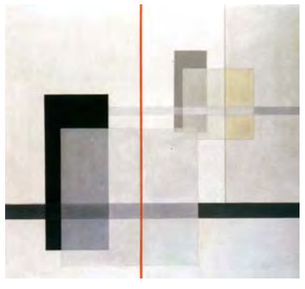




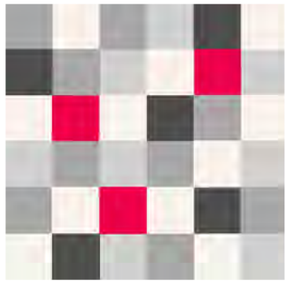


Studies of the podium and tower elevations prepared to examine the degree of random abstraction for the proposal and to explore how the colour pallette can be applied to the elevation

Nuclear I, CH 1945
by Laszlo Moholy-Nagy

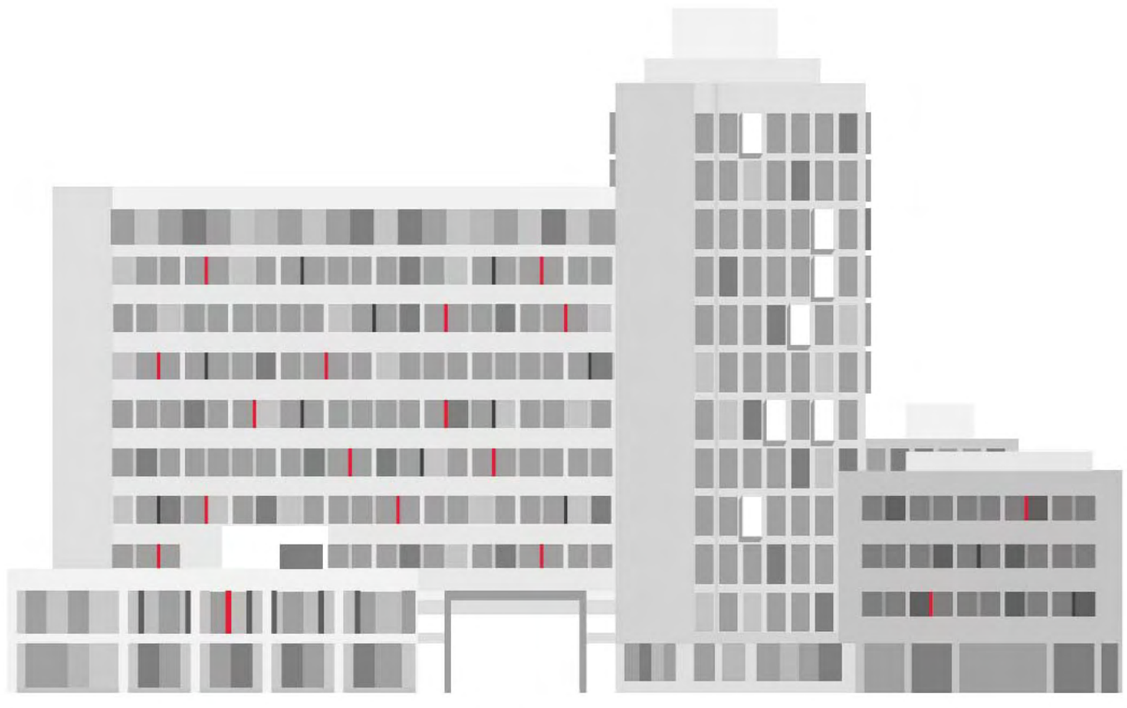


K(Construction) VII, 1922
by Laszlo Moholy-Nagy



Colour grid pallette

Abstraction of proposed Great Queen Street elevation



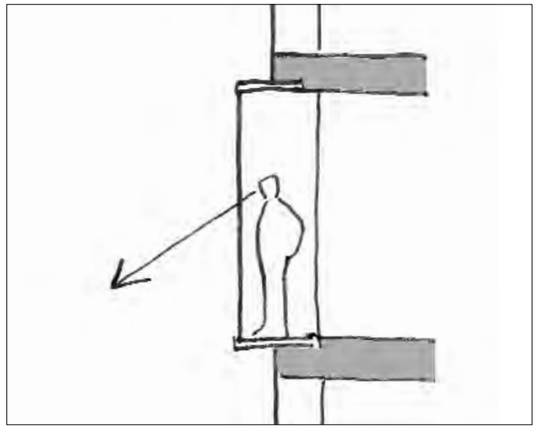
Abstraction of proposed Parker Street elevation

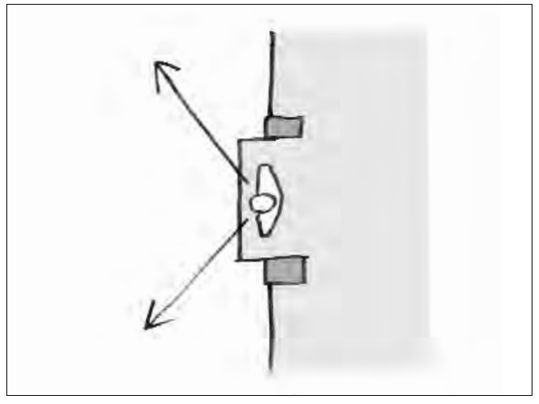
4. Proposals

4.4 The Tower: Concept

The tower element of the scheme will be reclad with the exception of the underlying gridwork of Portland Stone fins and spandrels which will be cleaned and repaired. The existing brickwork spandrel panels, windows and internal concrete upstand will be removed and replaced with new full height double glazed windows with a number of glass projecting bays. The glass window bays are located on a random pattern at each floor level in plan and elevation. On average there will be 4 bays per floor to allow occupants to enjoy the range of views that are available over Covent Garden, Lincolns Inn Fields and beyond.

The random cluster of projecting bays reflect lights in a different way to the new windows within the regular grid, adding articulation, character and shadow to the main element of the building.





Tower window bay by concept sketches

View from Dury Lane at junction with Great Queen Street

180° Panorama view over Covent Garden from 12th floor looking south and west

4. Proposals

4.4 The Tower: Concept *cont.*

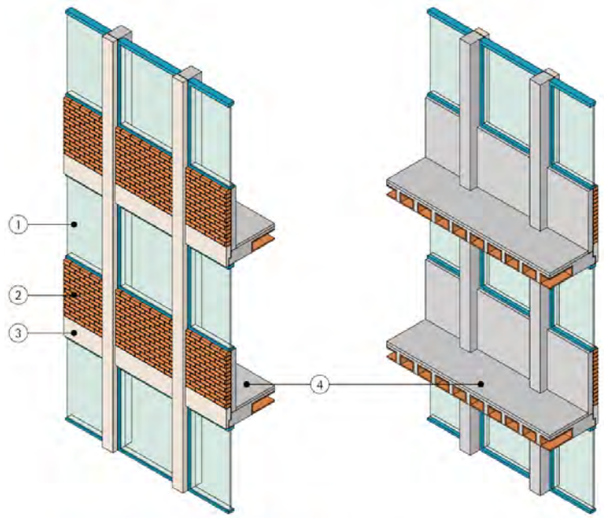
Panorama from 12th floor of tower looking south and west

4. Proposals

4.5 The Tower Recladding: Detail

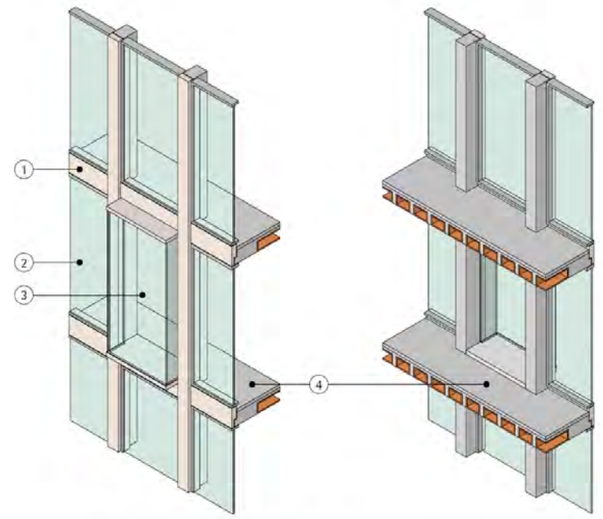
The drawings illustrate the details of the transformation proposed for the tower cladding.

New full height double glazed windows and window bays will replace the out-dated single glazed metal windows and brick and concrete spandrel panels. The quality of daylight within the office space will be dramatically improved. The reinforced concrete structural guidework of columns will remain unaltered but will be completely refurbished and insulated to modern standards.



Key:
1. Single glazed windows will be removed
2. Brick infill panels and concrete wall will be removed
3. Portland Stone cladding will be cleaned and restored
4. Existing structure to be retained

Existing cladding



Key:
1. Existing Portland Stone cleaned
2. New full height double glazed windows - neutral high performance glass
3. New projecting window bay
4. Existing structure retained

Proposed cladding

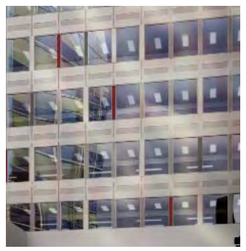
4. Proposals

4.6 The Podium and West Wing Cladding: Detail

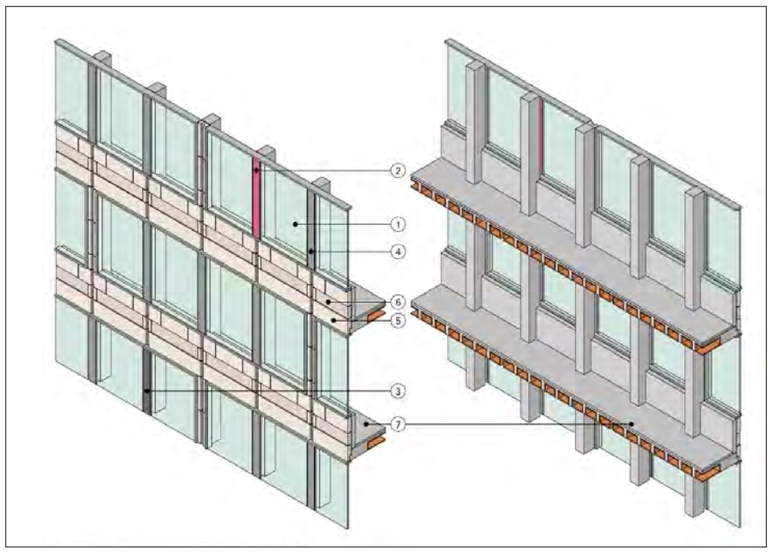
The podium and west wings will be treated in a similar way to the tower except that the existing design of the stone cladding is constructed in an ashlar type of construction with stone spandrel panels and is different from the tower in concept and detail.

To achieve the horizontal emphasis it is proposed that the top course of Portland stone will be removed together with the existing stone pilasters between windows, this will allow the size of the new windows to be increased.

New horizontal windows will be installed with vertical coloured glazing panels replacing some of the stone in different shades of red, grey and black.



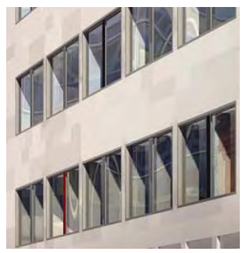
Podium cladding detail



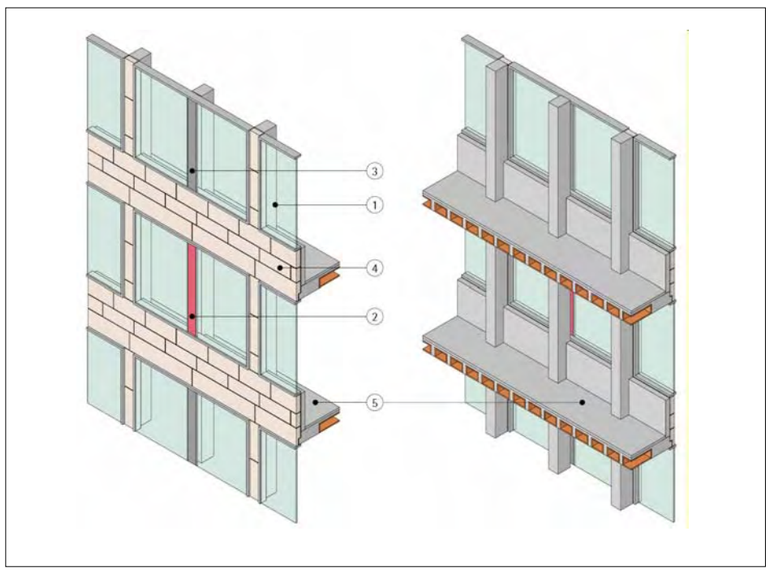
Proposed podium cladding

Key

1. New double glazed windows -neutral solar control glass
2. Red coloured glass spandrel panels
3. Anthracite coloured glass spandrel panels
4. Light grey coloured glass spandrel panels
5. Existing Portland stone cleaned and restored
6. Existing recess in cladding cleaned and painted and rendered
7. Existing structure retained



South west wing cladding detail



Proposed west wing cladding

4. Proposals

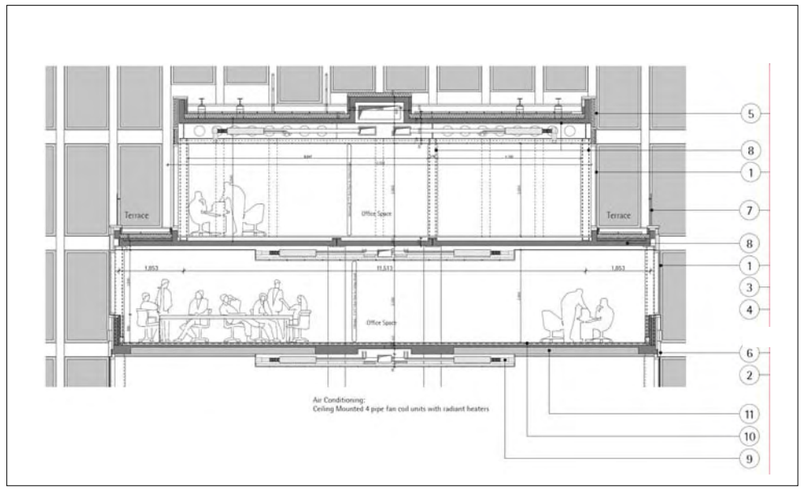
4.7 The 9th Floor Extension

One new office floor will be incorporated at 9th floor level providing additional office space and replacing the existing heat rejection plant and equipment presently located on the 8th floor roof.

It is proposed that the 9th floor extension will form a new "sky storey" which will be set back from the external eighth floor to reduce its impact and to define the profile of the building by improving its roofscape.

The 9th floor will be clad in neutral solar control glass with aluminium parapet panels and a transparent glass balustrade. 'Slide open' window frames will allow occupants access to use the 9th floor terrace.

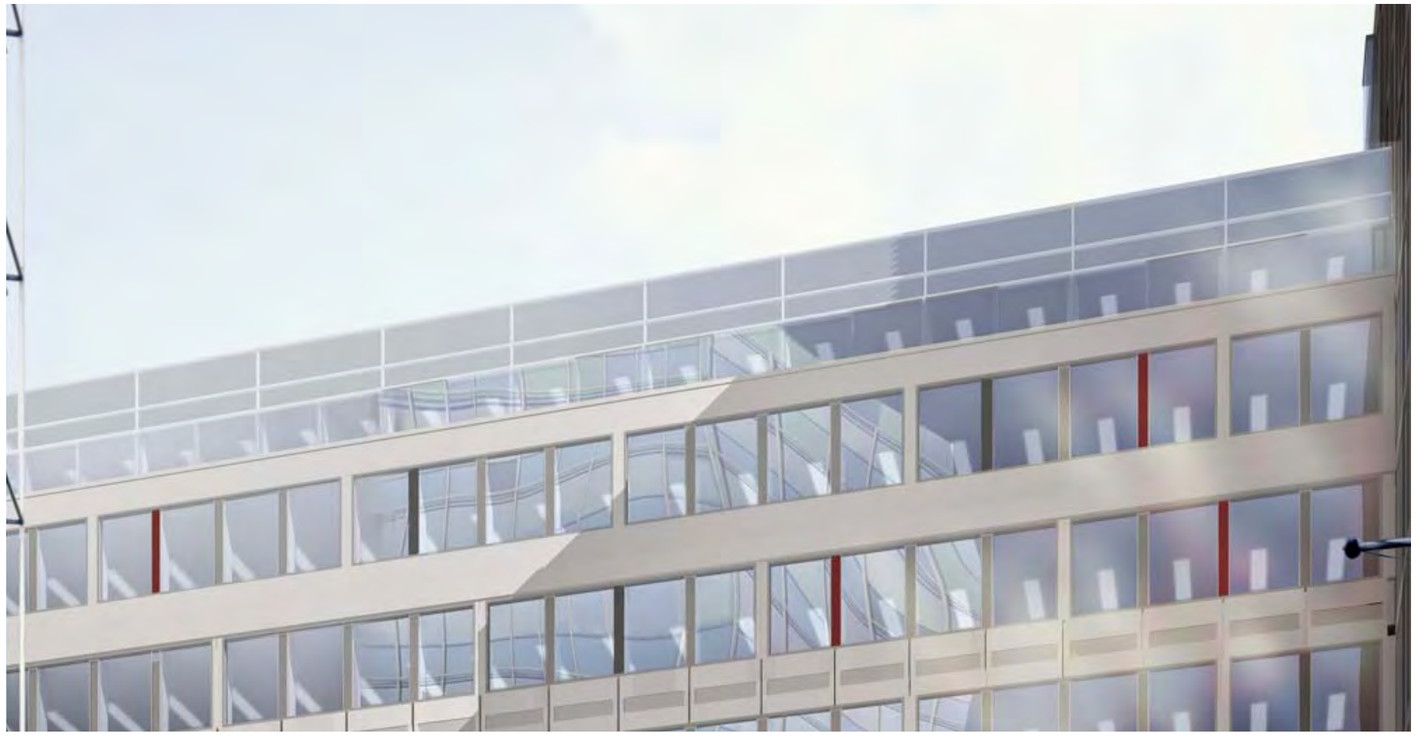
To facilitate this extension the existing structure on the 8th floor requires alteration to allow the building loads to be channeled down the existing columns. This has resulted in the existing 8th floor office accommodation extending to the full with of the podium. A new 8th floor elevation is created with materials and proportions to match the podium below.



Cross section through Level 8 & 9 of the Podium

Key

1. New double glazed windows -neutral high solar control performance glass
2. Red coloured glass spandrel panels
3. Anthracite coloured glass spandrel panels
4. Light grey coloured glass spandrel panels
5. Light grey metal panels
6. Existing Portland stone cleaned
7. New glass balustrade
8. New structure
9. Existing structure to be retained



8th & 9th floor detail viewed from Parker Street

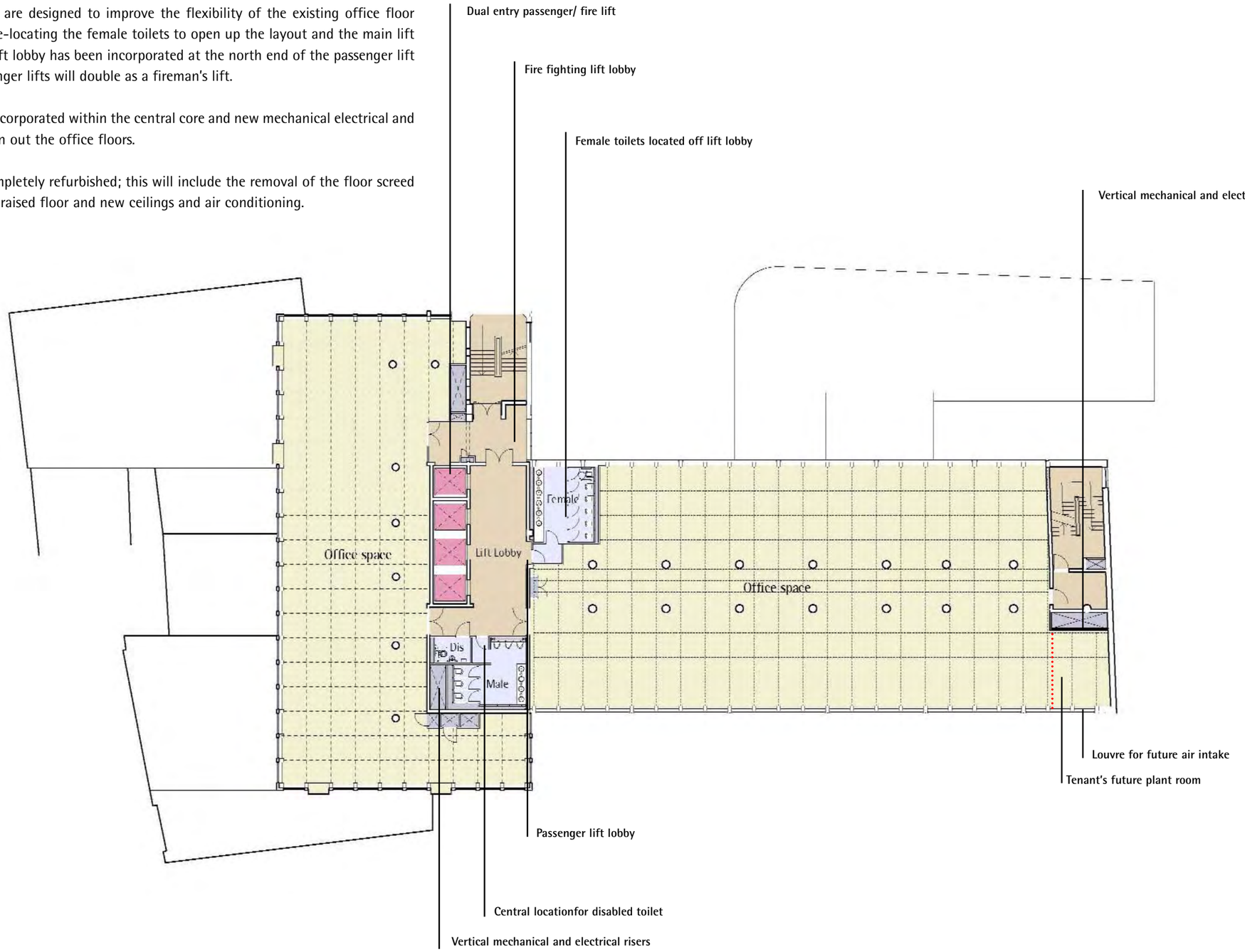
4 Proposals

4.8 Improving the Office Floor Plates

The development proposals are designed to improve the flexibility of the existing office floor plates. This is achieved by re-locating the female toilets to open up the layout and the main lift lobby. A new fire fighting lift lobby has been incorporated at the north end of the passenger lift lobby and one of the passenger lifts will double as a fireman's lift.

A disabled toilet has been incorporated within the central core and new mechanical electrical and IT risers are installed to open out the office floors.

The office floors will be completely refurbished; this will include the removal of the floor screed and the installation of new raised floor and new ceilings and air conditioning.



Typical floor plan, Levels 4-8

4. The Existing Building

4.9 Structural Alterations

Tower Block

The tower block structural mullions will be retained at 1.5m centres with the brick cladding and backing reinforced concrete panels being carefully removed.

East Block

The tower block mullions will be retained at 1.5m centres with part of the stone cladding and backing reinforced concrete panels being carefully removed.

9th Floor Podium Extension

Part of the refurbishment proposal involves adding an additional levelis to add an additional at level 9 storey to the east block and re-configure the tower block plant level slab. Building Control have restricted the design to an increase in total load to 10% at foundation level.

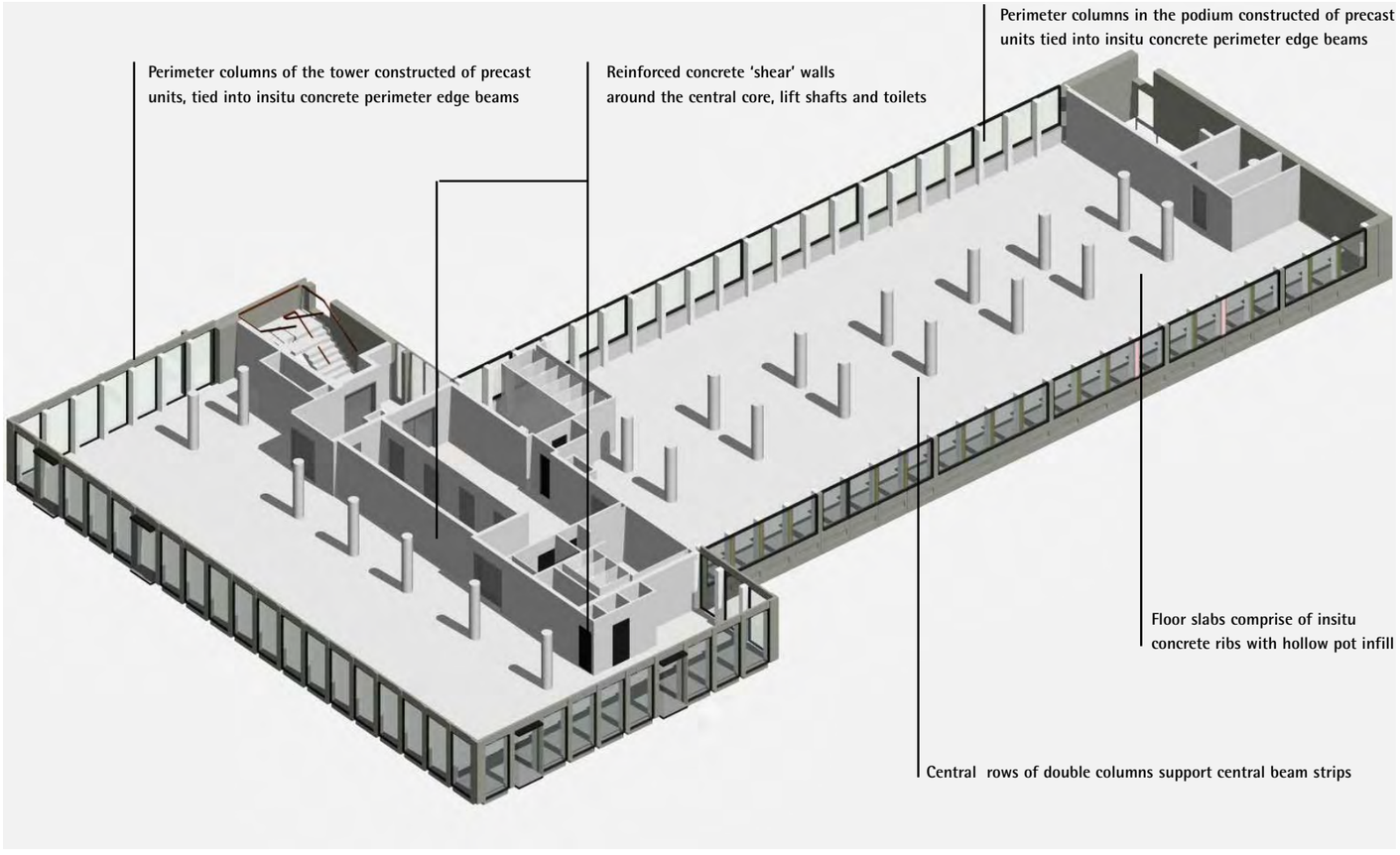
Rather than try and strengthen the existing structure the proposal is to span between existing columns. The structure will be formed in a new steel frame with a traditional composite slab spanning between steel beams at floor level. The roof will also be constructed in structural steel-work.

Parker Street Extension

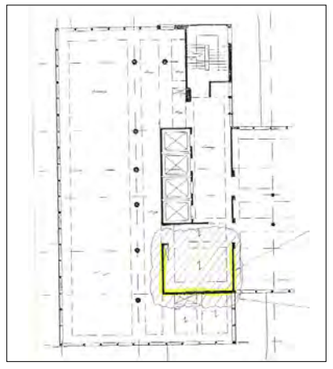
A 2 storey extension is to be provided to the rear of the existing podium block. It is intended to reuse the existing ground and basement beam, slab and bases where possible and supplement these with new structure.

A new reinforced concrete or steelwork frame will be incorporated above ground floor level. Stability will be provided by shear walls and connection back to the existing building.

Connection between the new extension and existing block will require reframing of the second floor transfer beam.



Cutaway drawing of a typical office floor plate showing the structural constraints



WSP Engineer's sketch showing the location of the 'shear' walls that are integral to the stability of the existing building

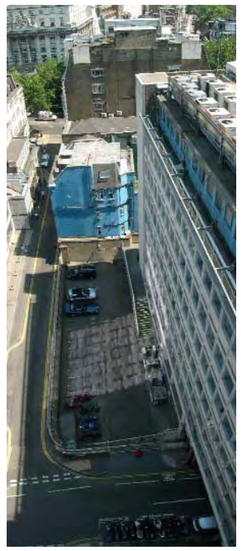
4. Proposals

4.10 The Parker Street Extension

The existing car park in Parker Street at the north side of Holbrook House presents an under-utilised opportunity for improvement.

The proposal is to build a two storey extension on the existing car park which will provide additional office space as an 'annex' to Holbrook House. This annex will provide new office space and the proposal is geared primarily for John Charcol, the existing office tenant who currently occupy space within the base of the podium. The new office floor space created has been configured to suit John Charcoal's future occupancy requirements for self contained accommodation within the east wing of Holbrook House and with a street frontage and their own main entrance.

The new extension has been designed as an integral part of the refurbished building and will be clad in Portland Stone with anodised aluminium panels, neutral solar control glass and feature coloured glazing strips in the random light/mid grey, black and red palette. The blue painted flank wall of No. 58 Parker Street will be partially concealed and the street frontages reinstated on Parker Street and Newton Street.



Parker Street site from tower

View of Parker Street extension (on left) looking south from Newston Street

Proposal for Parker Street extension at corner of Parker Street and Newton Street

4. Proposals

4.11 Main Entrance

The present main entrance arrangements to the office building is completely inadequate for the following reasons:-

- It does not provide level access to the office building for disabled persons because of the existing stairs into the entrance hall from Great Queen Street and within the entrance hall.
- It is of an inadequate size for a modern office building of this size
- It presents an old fashioned and tired image for the building
- It forms a weak base to the building in architectural terms which is unsatisfactory in the existing townscape

The proposals seek to deal with these issues by forming an entirely new entrance hall arrangement. This is achieved by converting the existing office suite at ground floor level into the main entrance hall and by converting the existing entrance hall into new elongated lift lobby. The change in level is dealt with by having one double entry lift opening into the new entrance hall to allow disabled persons level and direct access into the building.

Externally a new plinth will be formed to the base of the building, this will strengthen the connection between the tower and the pavement by introducing a black polished marble clad elevations that extend from the Hercules Public House into Newton Street.

The internal space at the corner of Newton Street and Great Queen Street will become a 'break out' space with a seating area adjacent to the lift lobby.

Existing main entrance

Elevation of proposed main entrance

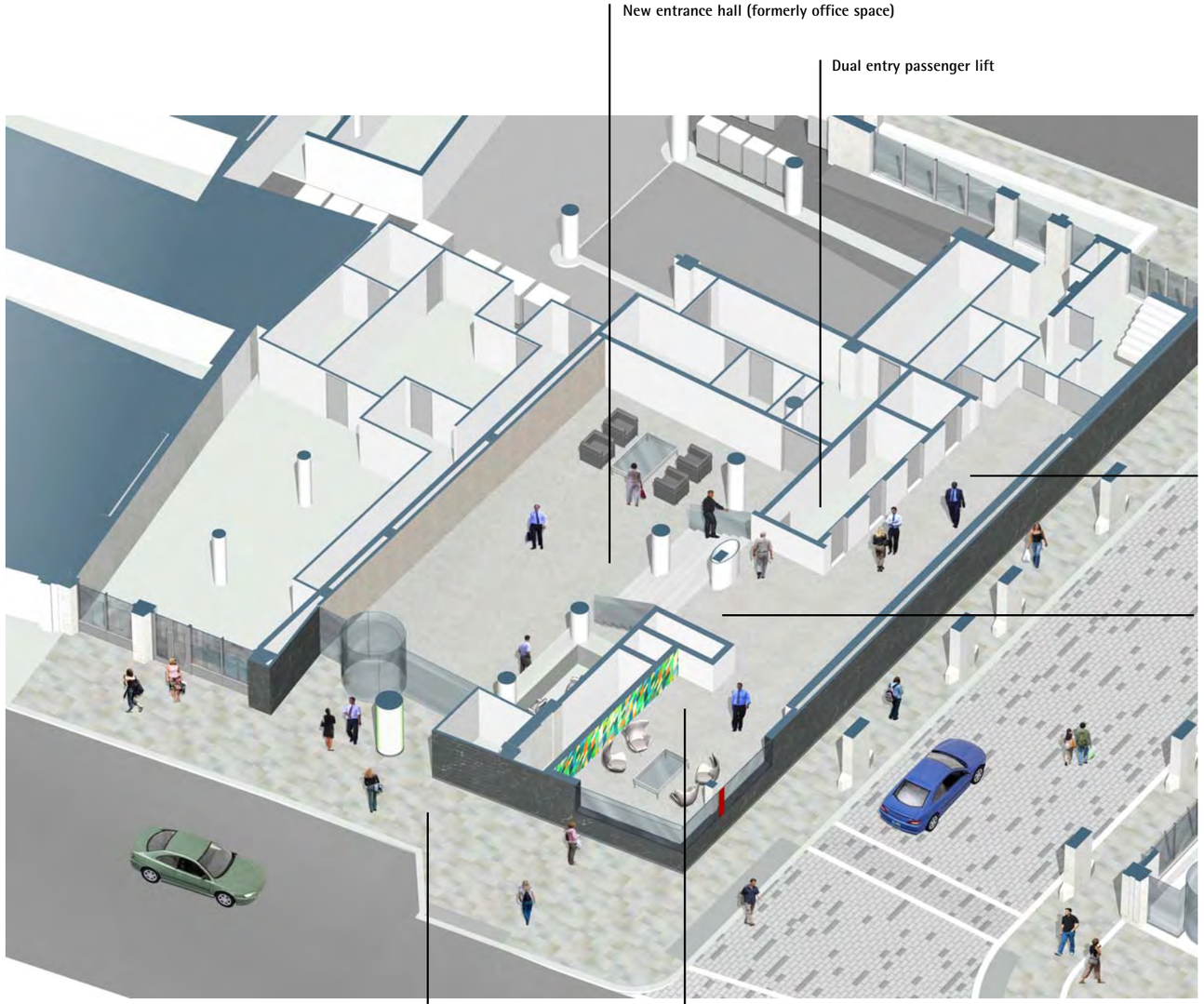
Key

1. New double glazed windows -neutral high performance glass
2. Black marble
3. Dark Grey granite plinth
4. Glass cladding to column
5. New glass circular sliding doors and entrance screen
6. Existing Portland stone cleaned
7. Public house frontage refurbished
8. Smooth render

4. Proposals

4.11 Main Entrance *cont.*

View of main entrance looking east to new 'piazza'



Elevation of proposed main entrance

4. Proposals

4.12 Public Realm

Great Queen Street is designated in the Camden UDP as 'a metropolitan walk'. Improving the hard and soft landscaping to the pavements surrounding the building will improve the public realm and the setting of the refurbished building. The existing paving surfaces will be replaced with new hard landscaping in a York stone or similar durable, robust, safe surface material, with inlays. There will be a new planter to soften the 'piazza' area in front of the existing John Charcol tenancy and The George Public House. This will be detailed in a solid stone material in a soft flowing oval shape and allow ease of movement around it. The planter will contain Lime Trees (Tilia cordata) in a pleached form curving around the planter with coverage to the planter itself in lavender (Lavandula angustifolia 'Hidcote') giving summer colour.

The proposal introduces lighting to the planter to provide a floating effect to the element and tree up lighters will be used to illuminate the foliage of the canopy. The planter will have an indirect glow which will reinforce the area as a safe secure environment.

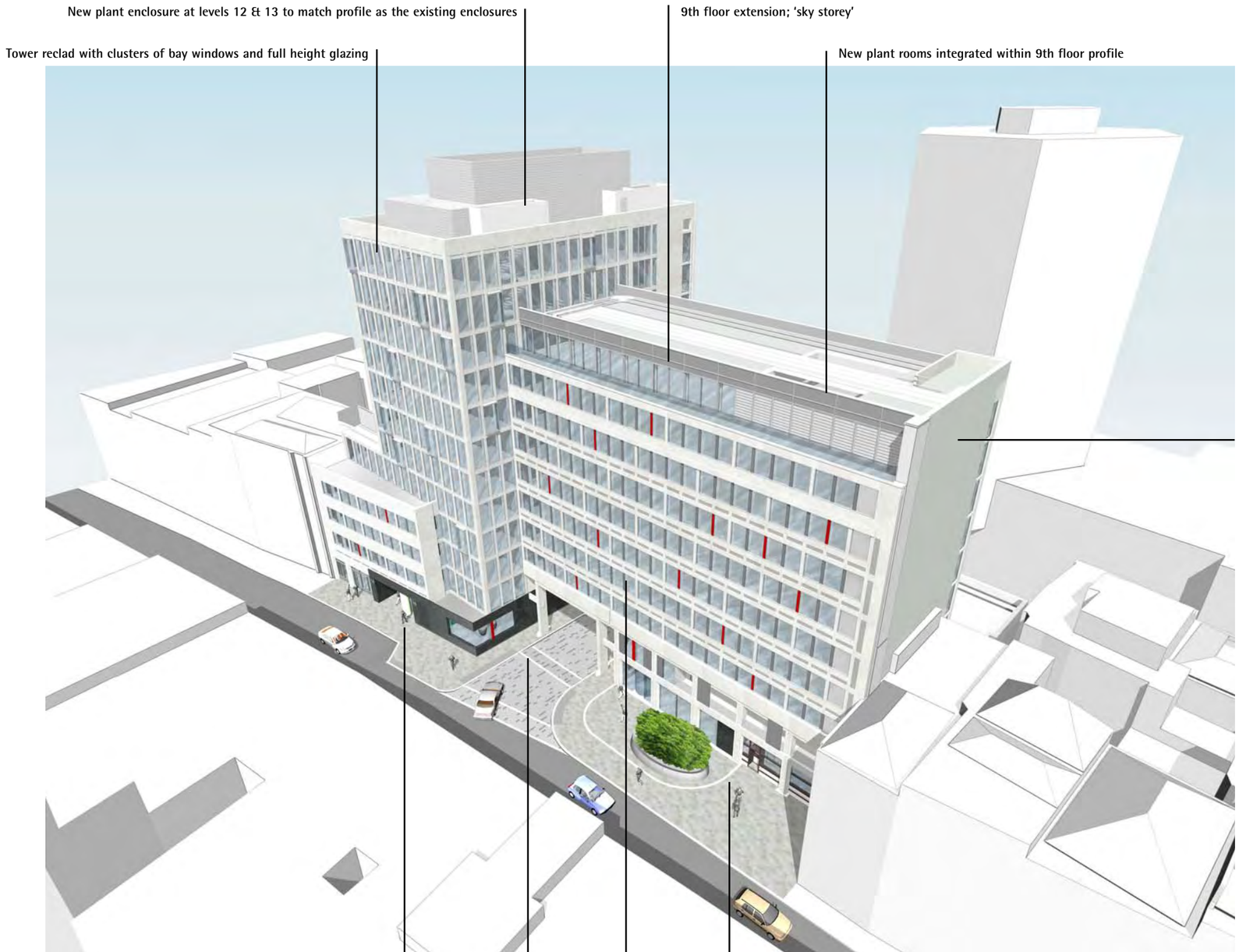
Newton Street will be improved with a new high quality road surface in granite setts and level crossing point at the junction of Great Queen Street. The road surface will be in a smooth granite stone set in a linear pattern with textured areas to signal the crossing to visually impared pedestrians and will be provided with metal studs set in the paving. New lighting to the underpass will be greatly enhanced the apperance of the area and reduce the risk of crime.

Parker Street will have the paving replaced and a level crossing for pedestrians introduced at the junction with Newton Street.

Ground floor plan showing landscaped proposals around the site

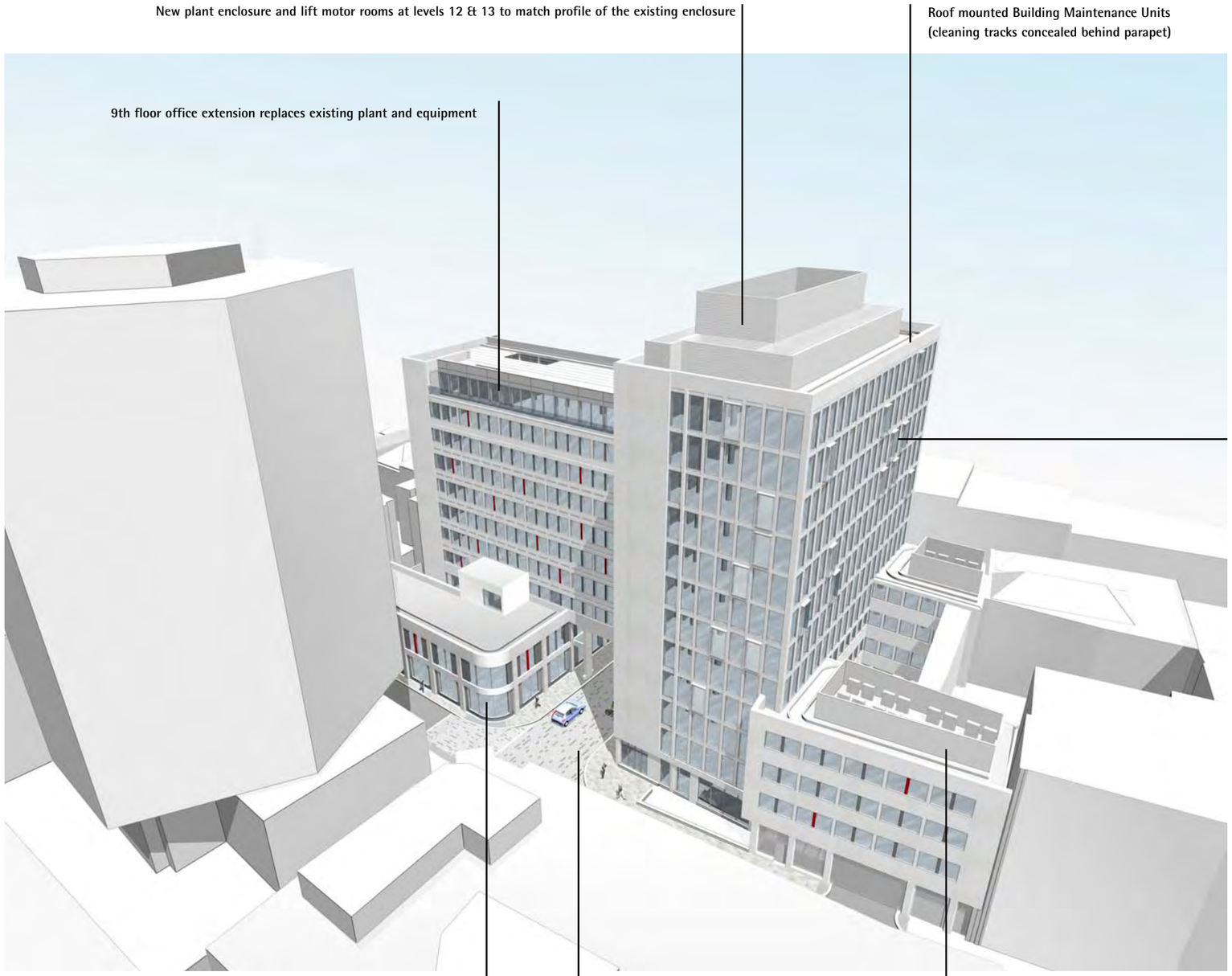
4. Proposals

4.13 Overview of the Proposals for Holbrook House from South East (Great Queen Street in the foreground)



4. Proposals

4.14 Overview of the Proposals for Holbrook House from North West (Parker Street in the foreground)



4. Proposals

4.15 Existing townscape view looking east along Great Queen Street from Drury Lane

4. Proposals

4.16 Proposed townscape view looking east along Great Queen Street from Drury Lane

4. Proposals

4.17 Existing townscape view looking west along Great Queen Street

4. Proposals

4.18 Proposed townscape view looking west along Great Queen Street

4. Proposals

4.19 Existing townscape view looking south down Newton Street towards Great Queen Street

4. Proposals

4.20 Proposed townscape view looking south down Newton Street towards Great Queen Street

4. Proposals

4.21 Existing townscape view looking east along Parker Street

4. Proposals

4.22 Proposed townscape view looking east along Parker Street

4. Proposals

4.23 Integration Airconditioning of Plant and Equipment

The existing building services installation comprises an assortment of largely obsolete mechanical air conditioning plant and equipment. As part of the overall strategy for refurbishing Holbrook House the existing services installation will be completely stripped out and a new building services infrastructure and installation will be provided.

Integrating new services and air conditioning within Holbrook House presents a challenge because of the limited 3.050m floor to floor heights. The new building services installation will be designed to comply with Part L2 of the Building Regulations and a BREEAM Appraisal indicates that a 'very good' rating will be achieved. The layout and configuration of the building has been studied by engineers WSP to evaluate how best to convert the building to make it energy efficient. The new air conditioning system will comprise ceiling mounted fan coil units served from new air handling plant rooms located on levels 12 of the tower and on level 9 within the podium.

The Parker Street extension and the new office space at basement, ground and first floor levels within the east podium will have its own dedicated plant room in the basement in Parker Street. Air will be drawn in from the internal courtyard at ground floor level and exhausted at high level in Parker Street.

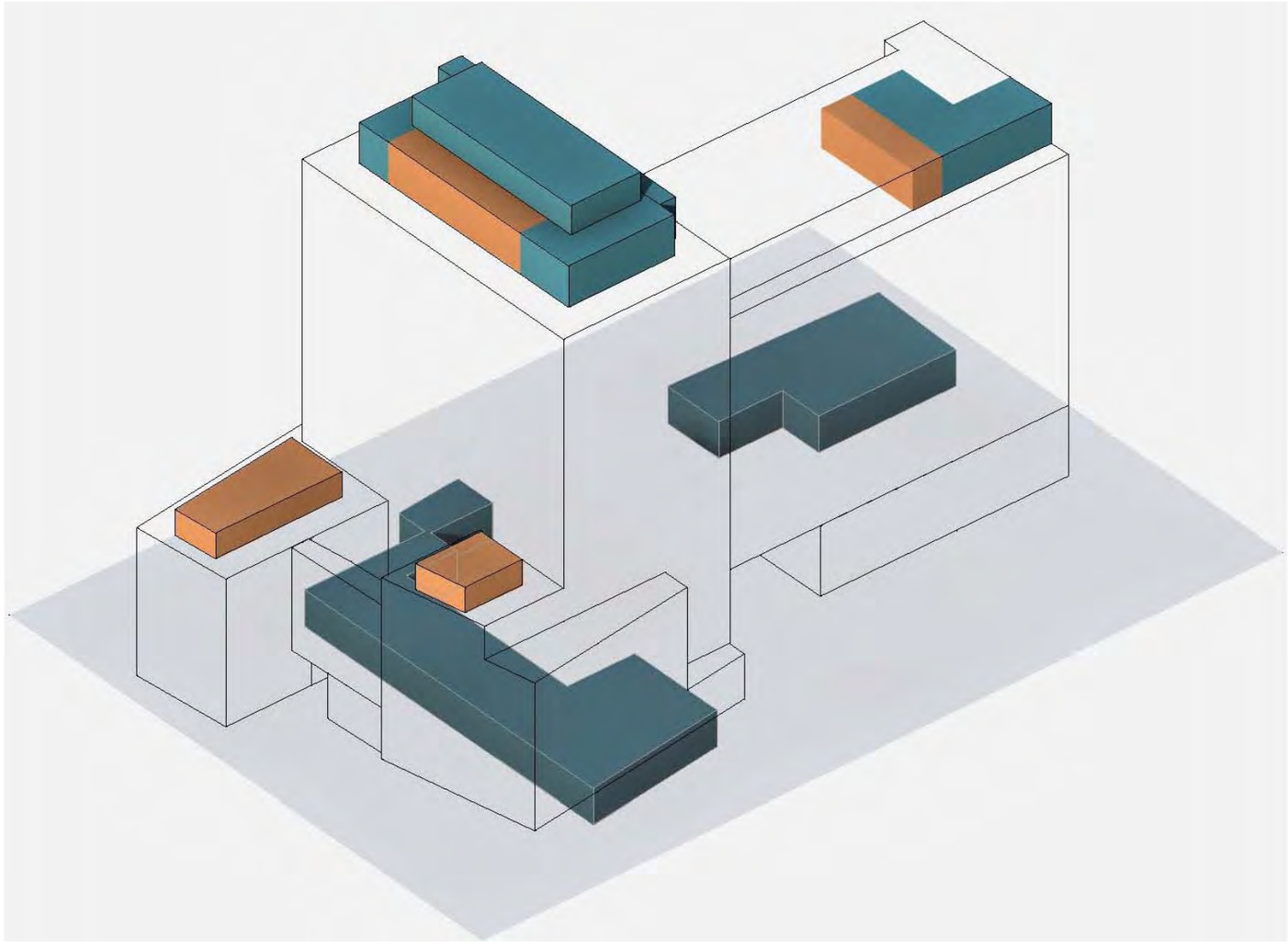
A new screened plantroom enclosure replaces the existing office and plant room at level 12 and a new air cooled chillers will be installed at level 13 to replace the former lift motor room.

The profile of new roof plant enclose follows the profile and height of the existing plantrooms. New vertical risers will be constructed within the cores to distribute services throughout the building and to the office floors.

Tenant plant space has been reviewed and has been designed to incorporate allowances:-

- Communications room, 1 per floor with a cooling capacity of 6kw per tenancy.
- Kitchen/staff restaurant at 11th floor on the tower or on 9th floor of the podium.

A new lift motor room will be located at level 12 in the tower and modifications will be required to the EDF south substation to reconfigure the access and ventilation arrangements into the existing substation.



Layout showing location of Landlord's plant rooms in green and tenant's future plant rooms in orange

4. Proposals

4.24 Basement Alterations

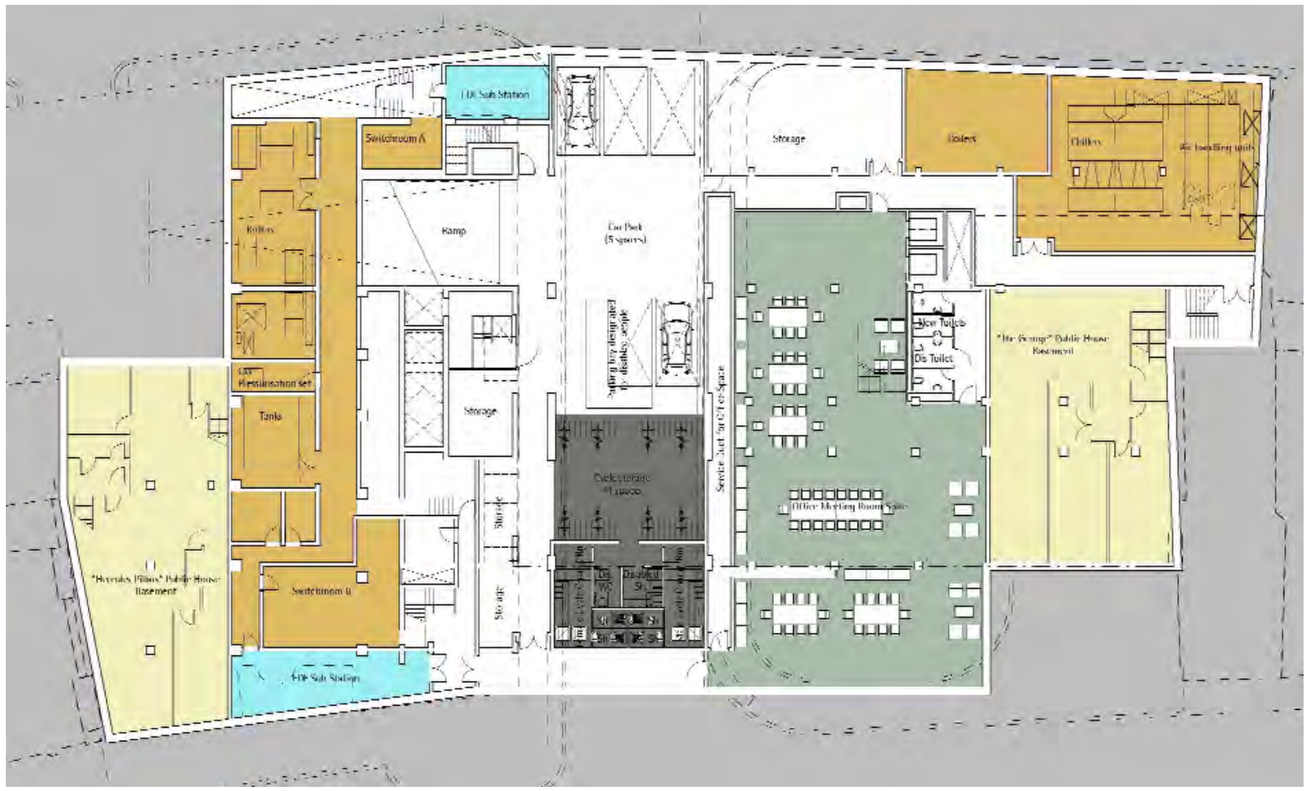
The existing basement area will be altered to provide an ancillary suite of offices meeting rooms for John Charcol's future tenancy requirements. This area is served by 2 new passenger lifts.

The basement plant rooms at the west end of the building under the tower will be refurbished and fitted out with new plant and equipment. At the north east side of the basement a new plantroom will be incorporated for the air conditioning plant and equipment to supply the office space within basement, ground and first floor levels of the podium and the Parker Street extension.

A new bicycle store, showers and changing rooms are also provided.

The basement car parking provision has been reduced from (36) to (5) car parking spaces including one space for disabled persons.

One of the main passenger lifts will be extended to serve the basement to allow disabled access to the building from the carpark.



Proposed basement floor plan showing particular aspects of the disabled access

Key

- Landlord plant
- Cycle storage and changing facilities
- EDF Substations
- Office space (to be used as a meeting room suite for John Charcol)
- Public house storage

4. Proposals

4.25 Building Services Improvements

Comfort Cooling

The floor mounted fan coil units and multiple external chiller units will be completely replaced by a fully centralised comfort cooling system comprising 4 pipe fan coil units located within ceiling bulkheads in order to tidy up the perimeter and allow full height glazing and spandrels to be fitted to the tower block.

A fully centralised comfort cooling system will incorporate chilled water and low temperature hot water systems. The chilled water system will employ two central chillers located on the tower roof so that the existing clutter of plant may be removed from the roof areas. The low temperature hot water system will employ gas boilers located in the basement. Flues will either rise to the tower roof or incorporate a fan dilution system.

Ventilation

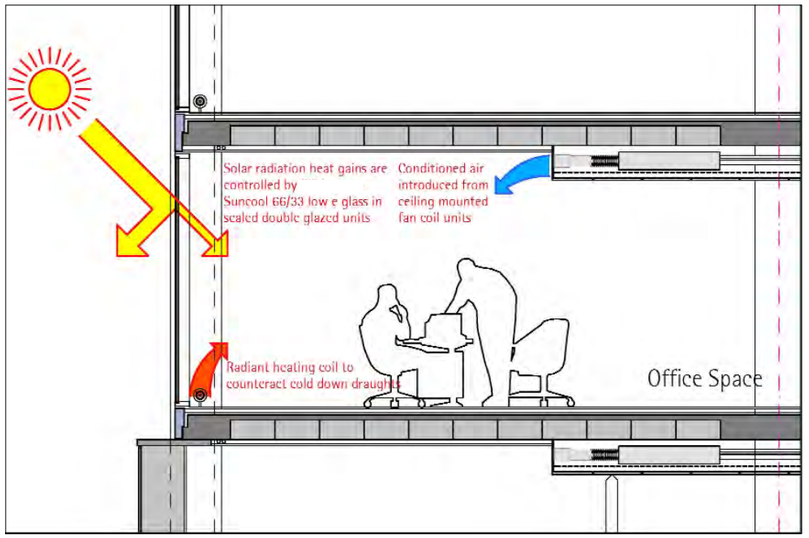
New general office ventilation is proposed so that the existing airbricks may be removed to allow full height glazing to be added to the tower block and for the façade to be tidied up. Centralised systems are proposed with air handling plant on the tower and podium roofs. New internal risers are proposed for the ductwork so that the existing external ductwork can be removed from the podium party wall.

Electrical Services

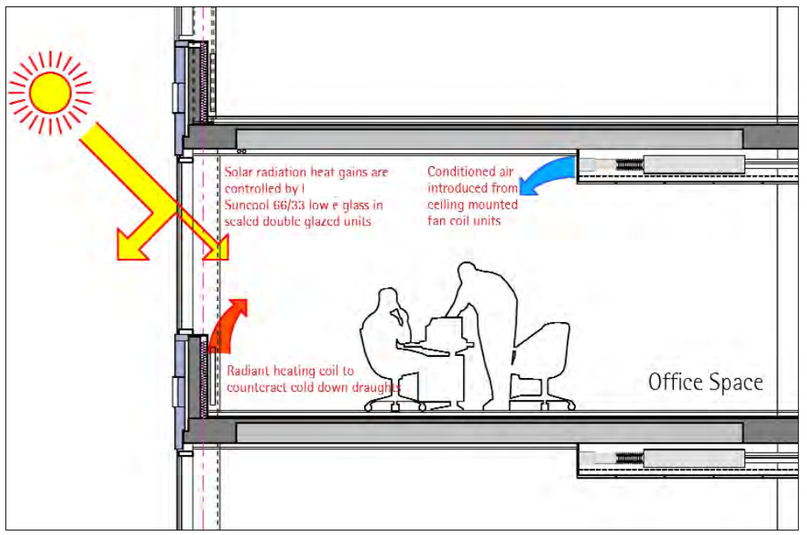
The existing unsightly sub-station vent and 24 hour access provisions in the Queen Street front façade will be re-arranged and incorporated into the new façade proposals. EDF's requirements for the re-development are not yet known but it is anticipated that the current sub-station provisions are inadequate and may need enlarging and this may require the existing ventilation grilles to be increased in size.

Tenants Plant Space

Screened space for future tenant's has been provided for roof areas to provide controlled space allowance for future tenants to locate any external plant specific to their particular fit-out requirements. Plant space for the ground and first floor unit in the podium block has been provided within the basement below the proposed extension at the rear.



Detail cross section through typical floor of refubished tower



Detail cross section through typical floor of refubished podium

4. The Proposal

4.26 Access Statement

Design Standards

The refurbished building will be designed in accordance with the requirements of Approved Document M of the Building Regulations, BS 8300:2001 Design of Buildings and their approaches to meet the need of disabled people and BS 5588:1999 Part 8, Fire precautions in the design, construction and use of buildings code of practice for means of escape for disabled people.

Disabled Car Parking within the Curtilage of the Site

On site car parking is located in the basement of Holbrook House with access via the existing ramp from Parker Street.

Roller shutters will be provided across the top of the ramp for security. These will be operated via a fob and proximity sensor. An intercom facility to contact the building security room will be provided. The facility will incorporate an induction loop for people who have impaired hearing. This facility would be available to disabled visitors to the office building by prior arrangement with tenants and the building management.

It is proposed that 6 of the 38 existing car parking spaces are retained and that one of these be designated for use by disabled drivers. The designated bay will be in accordance with Approved Document M, Diagram 2, with a hatched access zone at the side and rear of the parking bay.

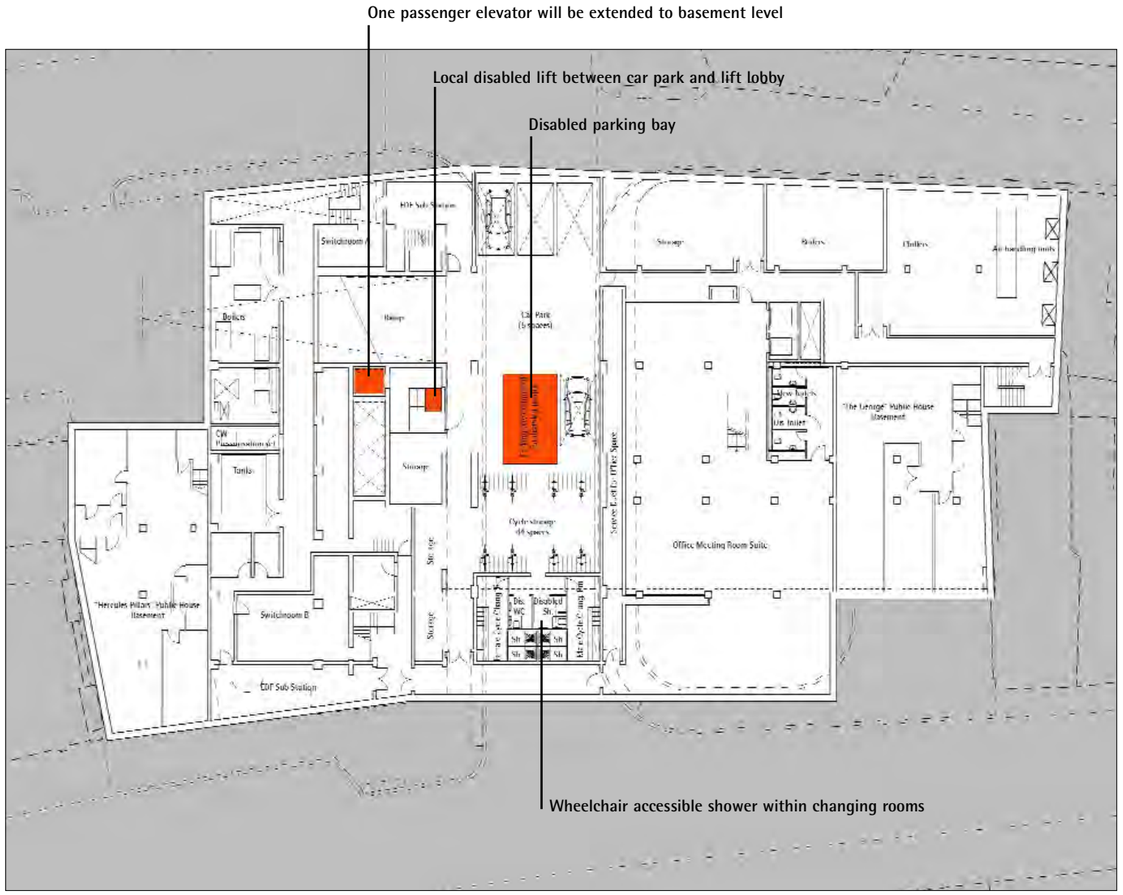
Entrances to the Building

There will be a new main entrance to the Holbrook House entrance hall off Great Queen Street. The entrance is to be level with the back edge of the pavement to allow wheelchair access. There will be a revolving door with a pass door for disabled access. The doors will be fully glazed with manifestation in contrasting tone and colour with the background against which it is seen. The clear opening width of the door leaf will be in excess of 850mm to provide wheelchair access.

There will be a new entrance to the independent office unit in the podium block, currently occupied by John Charcol. The entrance is to be level with the back edge of the pavement to allow wheelchair access. There will be a revolving door with a pass door for disabled access. The doors will be fully glazed with manifestation in contrasting tone and colour with the background against which it is seen. The clear opening width of the door leaf will be in excess of 850mm to provide wheelchair access.

Entrance Hall and Reception

A reception desk will be provided in the ground floor entrance hall. An induction loop will be provided to assist staff / visitors who may require it. Part of the desk will be reduced in height to provide a reception point for wheelchair workers and visitors. The reception desk will provide a contrast in colour with the background walls to enable people with a visual impairment to define the boundaries of the space.



Proposed basement floor plan showing particular aspects of the disabled access provision

4. The Proposal

4.26 Access Statement *cont.*

Horizontal Circulation

In general corridors will have a minimum width of 1200mm with passing places at regular intervals. Finishes will minimise reverberation time and lighting levels will be uniform throughout.

Where the unobstructed width of any corridor is less than 1800mm wide passing places at least 1800mm long will be provided at reasonable intervals.

Vertical Circulation

Four new passenger lifts within the central core provide access to all office floors. One car and shaft will be converted to have a dedicated entrance within the new main entrance hall to allow wheel chair users access to all office floors this lift will also serve the basement level. The lift cars will be designed in accordance with Part M and will be provided with both audible and visual alarms.

The independent office unit in the podium block, currently occupied by John Charcol, will have two new lifts, serving basement, ground, first and second floors. The lift cars will be designed in accordance with Part M and will be provided with both audible and visual alarms.

All the stairs, in terms of treads and risers, will be designed to conform with Approved Document M. Disabled refuges will be provided within the stair lobbies in accordance with BS 5588:1999 Part 8.

The staircases will have a minimum width of 1200mm for access by ambulant disabled users with tactile level indicators provided on the handrail.

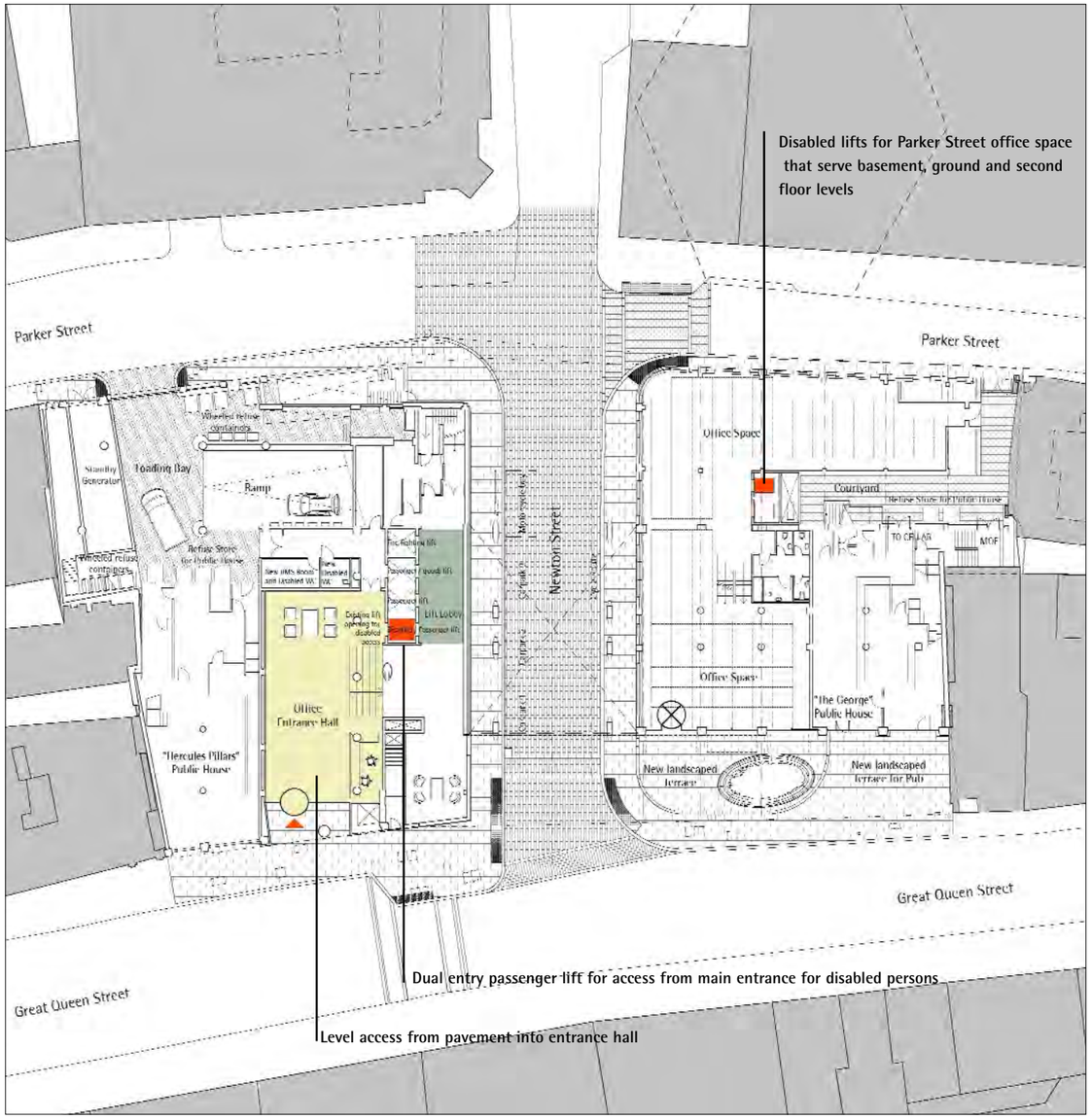
A disabled lift will be incorporated at basement level between the car park and the lift lobby to deal with the change in level between the new car park and the new lift lobby.

Doors

In general single door leaves will provide a minimum effective clear width of 800mm with a 300mm clear space adjacent to the opening edge to allow wheelchair users and people with limited mobility to approach and open the door.

Closers will only be fitted where required for fire control and will operate with a maximum force of 20 Newtons applied to the leading edge when opening the door leaf. Vision panels will be provided where required.

Ironmongery will be provided with good colour and tonal contrast to the background and will be easily grasped and operated e.g. use of lever handles in lieu of knobs and use of large thumbturns.



Proposed ground floor plan showing particular aspects of the disabled access provision

4. The Proposal

4.26 Access Statement *cont.*

Sanitary Facilities

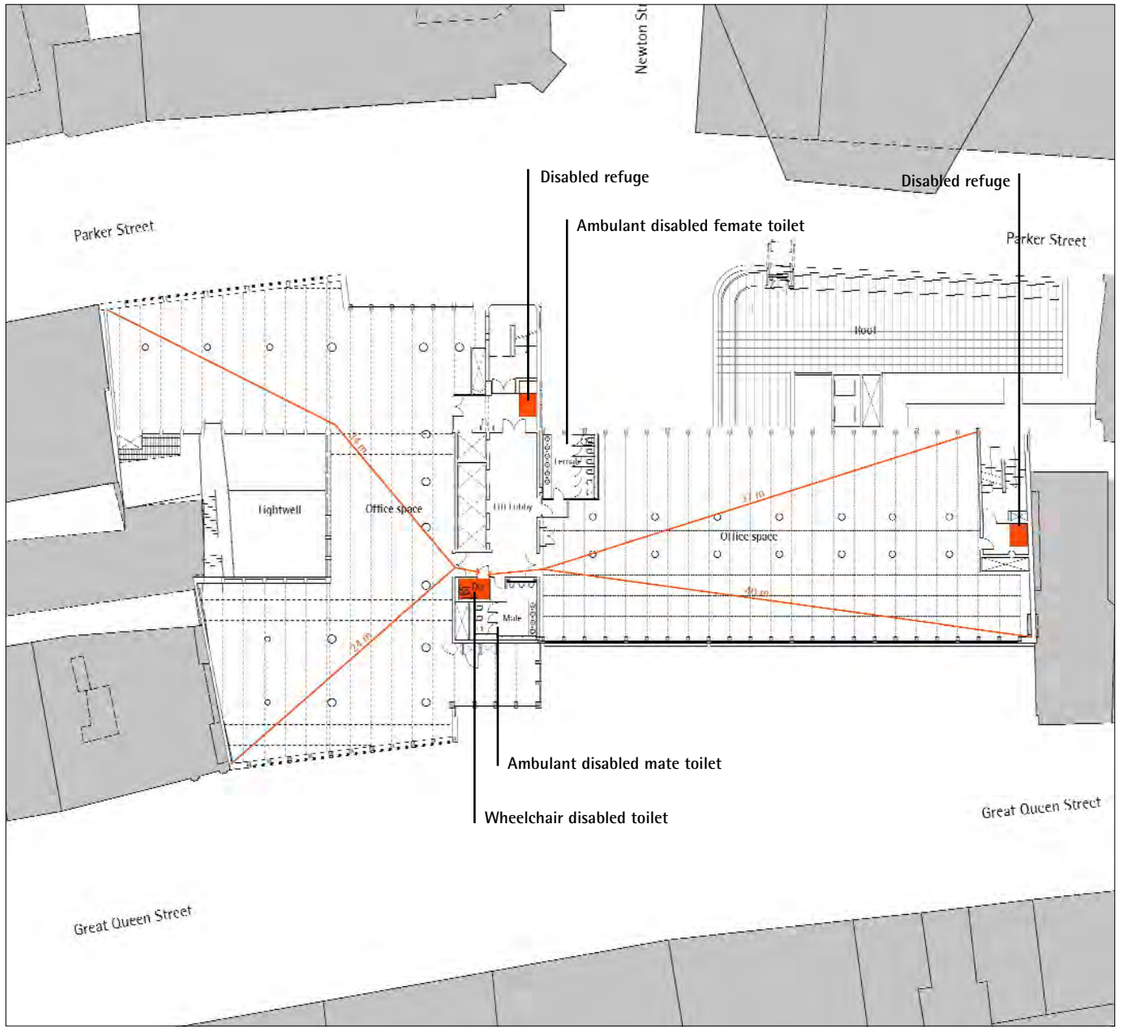
One wheelchair accessible lavatory will be provided on every office floor in a consistent location within the central core. All doors to accessible lavatories will open outwards. The accessible lavatory accommodation will be designed in accordance with Approved Document M (Diagram 18). The accessible lavatory accommodation will be designed to have a mix of left and right hand transfer arrangements in accordance with BS 8300:2001.

Designated cubicles will be provided in each male and female toilet for ambulant disabled persons in accordance with BS 8300:2001. A wheelchair accessible shower will be provided at basement level in accordance with Approved Document M (Diagram 23).

Emergency Evacuation

Escape stairs are provided in both escape cores. All lifts will return to the ground floor when the fire alarm is activated. The building is designed for simultaneous evacuation in the event of a fire. It will be the responsibility of the building management/occupants to ensure that all disabled people are evacuated from the premises when the fire alarm is activated.

On their arrival the Fire Brigade will assume responsibility for the lift and evacuation of any remaining persons. Disabled persons alarms will be provided in the new disabled refuges in both escape cores.



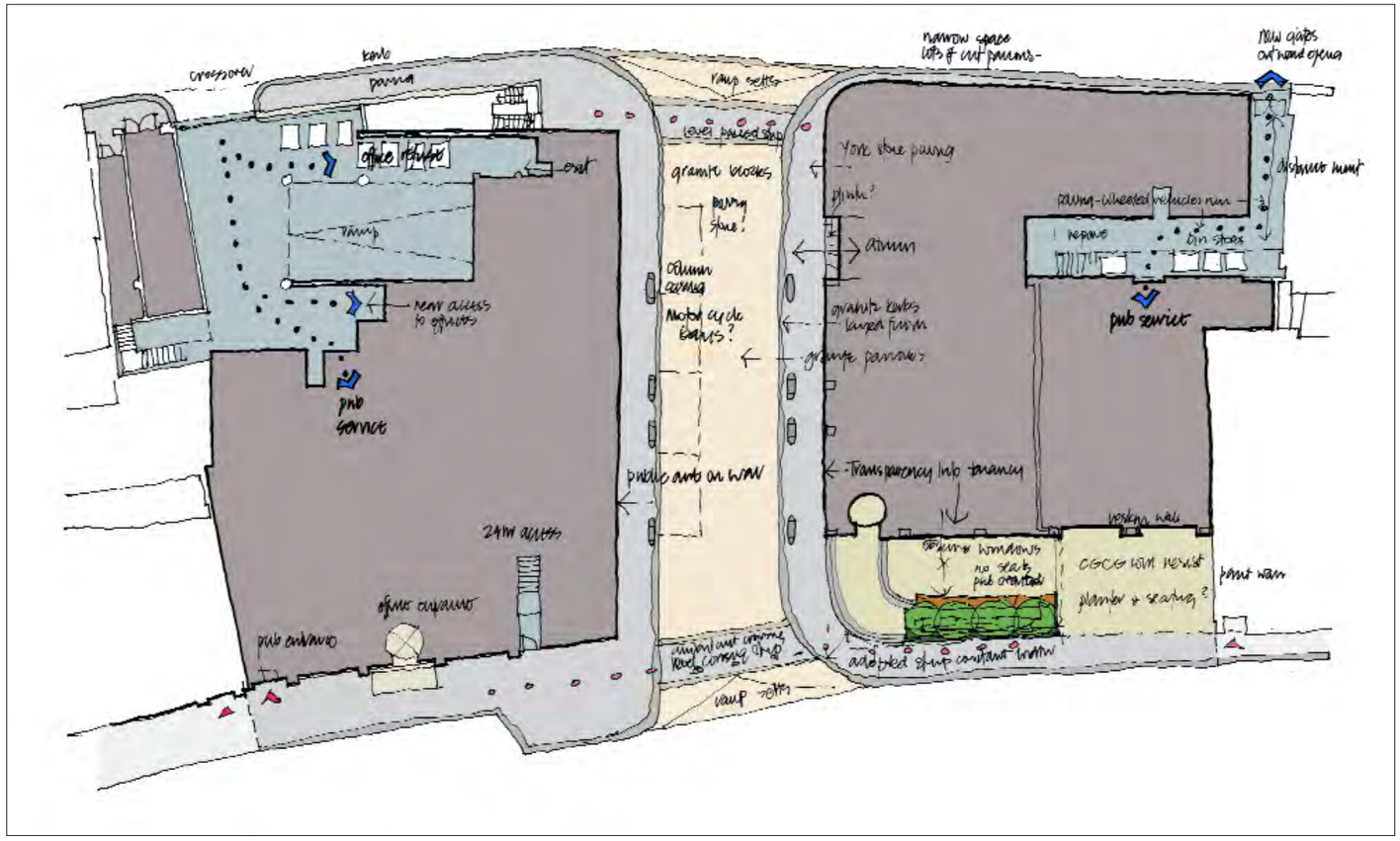
Proposed typical ground floor plan showing particular aspects of the disabled acess provision

4. Proposals

4.27 Servicing and Access Strategy

WSP Development and Transportation Ltd have prepared a study of the servicing requirements associated with the redevelopment proposals for Holbrook House, which is submitted separately. The key conclusions with respect to transport are as follows:

- The proposals will reduce the number of on site car parking spaces, and will therefore reduce the car trip potential of the site
- Cycle parking is being provided in excess of LBC standards
- The service area will be unchanged and is sufficient to accommodate the range of vehicle sizes which can already access the site as determined by the existing 2.5m entrance head room
- A Servicing Management Plan will be implemented to ensure the efficient use of the service area
- The increase in office space means that the increase in servicing trips will be minor, at only two per day
- These additional trips have been shown to be well within the service area capacity, and to have no adverse effects



Sketch of the ground floor plan showing access and servicing arrangements

Photograph of the existing Parker Street loading bay entrance showing refuse collection taking place

4. The Proposal

4.28 Cleaning and Maintenance

The Current Situation

The building is presently cleaned externally by roof mounted monorails which extend over the parapet and form a permanent feature when viewed from street level. Cradles are rigged from ground level onto the monorails. One of the key objectives of the proposals is to improve this.

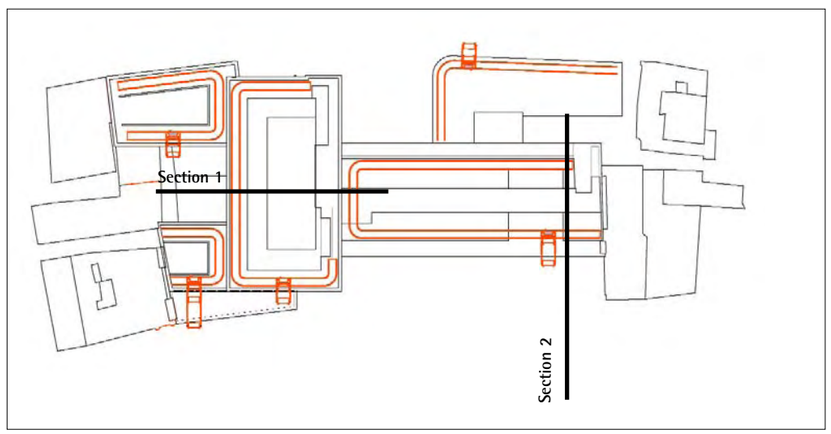
The Proposal

Maintenance and cleaning access is required to all of the external facades. It is proposed to replace the present monorail system and visible extent of equipment on the external appearance of the building. New fully automated Building Maintenance Units (BMU's) will be installed to provide full access to the principal facades for cleaning and maintenance.

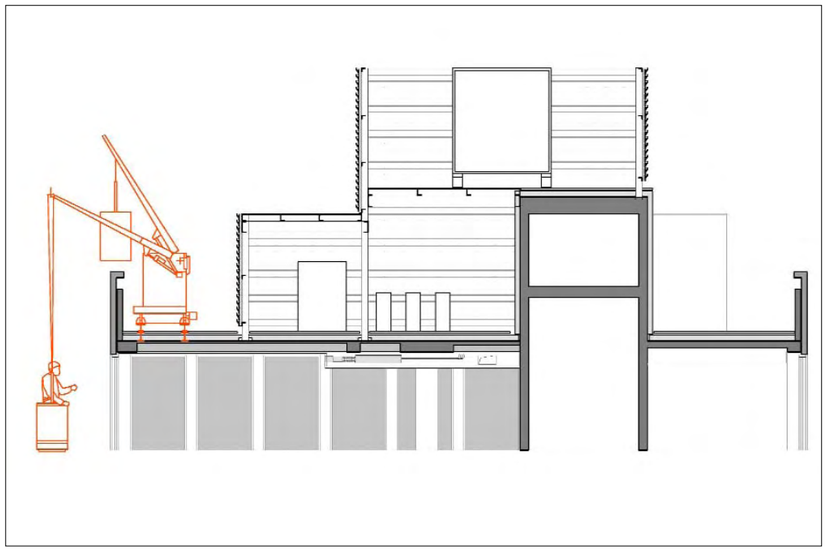
The building has been divided into operational zones for each location and means of access. The following zones have been identified:-

1. Tower area with BMU 1 located at level 12
2. Podium with BMU 2 located at level 9
3. North, West and South West: each serviced from the low rise roof at level 3 and 4 respectively BMU's 3 & 4
4. Parker Street Extension: from the second floor roof BMU 5

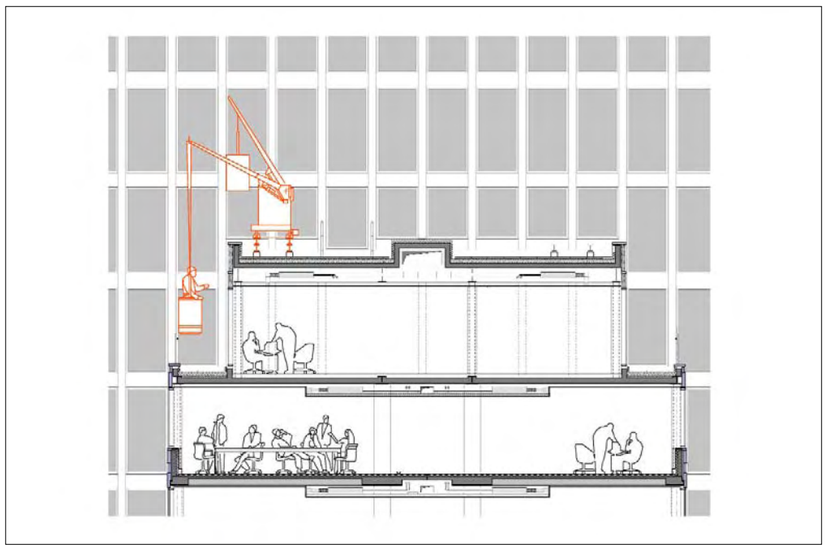
The majority of the building will be cleaned from the two main BMU's on the tower at level 13 and on the podium at level 9. The BMU's will be mounted on rails and will have a reach of [2-4m]. The BMU's will be fully powered with a luffing, telescopic main jibs.



Key roof plan



Section 1: Tower facade access with BMU located at level 12



Section 2: Podium facade access with BMU located at level 10

4. The Proposal

4.29 Sustainability and Energy Conservation

The existing building fabric and plant fall far below the energy efficient standards required of a modern office building. The refurbishment work will comply with the energy efficiency standards set down in the 2006 Building Regulations and will achieve a 'Very Good' rating under the British Research Establishment Environmental Assessment Method Office 2006 (BREEAM).

The construction work will be managed in an environmentally responsible manner using the Considerate Contractors Scheme with targets set for on site CO2 emissions.

The building will be fully commissioned to ensure all the plant and equipment are working at their most efficient and the controls will be explained to allow users to fully understand the buildings operation.

The office areas will have improved natural daylighting. The artificial lighting together with the heating and cooling controls will be zoned to be energy efficient.

The building fabric will be significantly improved to meet the requirements of Approved Document L2B of the Building Regulations.

Energy consumption will be metered throughout the building to allow individual office tenants to monitor their own energy use.

Holbrook House is a city centre site with excellent access to public transport links. Because of this and the general move away from the private car the number of parking spaces on the site has been reduced from 45 to 5. Provision has been made for 44 secure cycle spaces within the basement with showers adjacent and changing facilities. A travel plan is to be developed for tenants.

The fittings within the building will be carefully specified to reduce the consumption of water and allow tenants to monitor their water use. A major leak detection system will be installed.

The existing structure, floor slabs and external walls will be retained and new materials will be sourced from companies with a recognised environmental management system.

Provision will be made for the tenant to store re-cycleable waste within the loading bay area.

The project is of inherent environmental benefit being a refurbishment of an existing building which has no particular ecological value in an area of low flood risk.

The insulation used will have a Global Warming Potential of less than 5. An energy efficient condensing boiler will low NOx emissions will be installed. The BREEAM design advice report from WSP is included as part of the planning application.

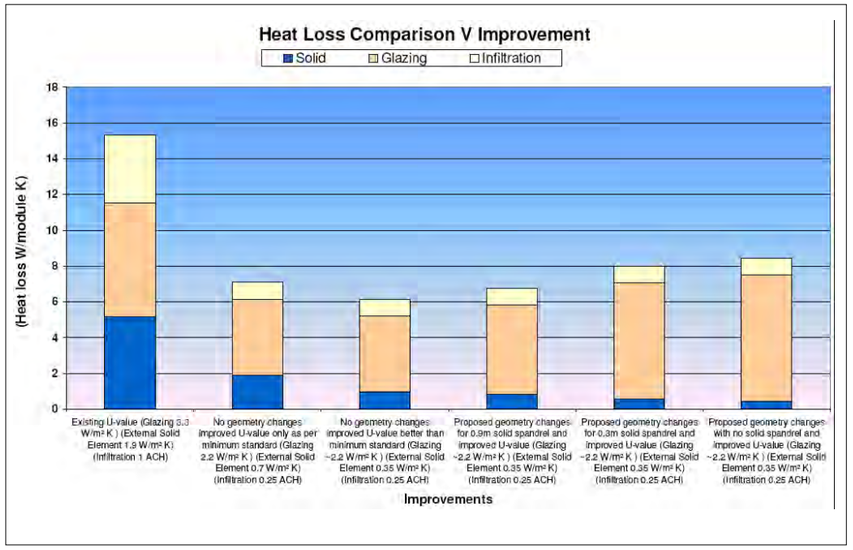


Figure 8 - Heat loss comparison versus improvement in Construction U-values and geometry

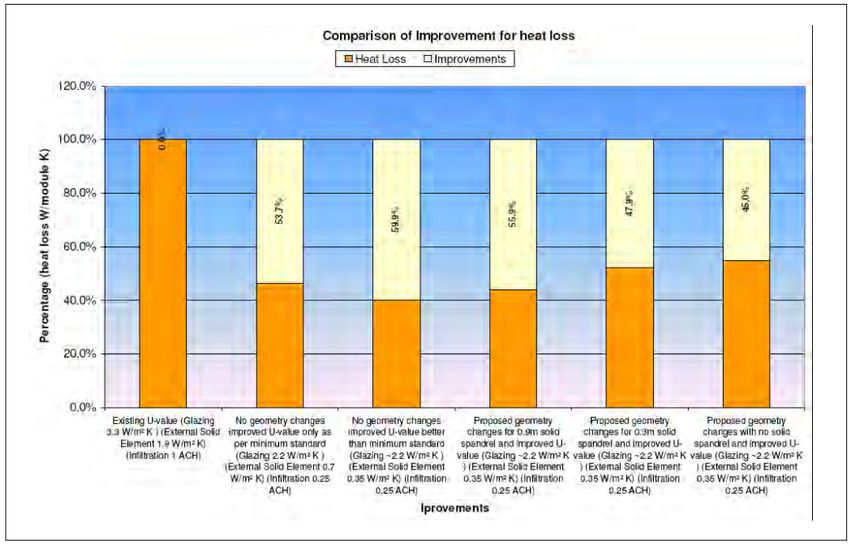


Figure 9 - Percentages of improvement between existing (based on Heat loss) for different option studied

4. The Proposal

4.30 Crime Prevention Statement

In developing the proposals for Holbrook House the issue of crime prevention and community safety has been considered with reference to the Association of Chief Police Officers for England Wales and Northern Ireland (ACPO) Secured by Design Guidelines. It is generally recognised that an environment which is well designed, attractive, clearly defined and well maintained will make the building users and the general public more likely to take pride in their surroundings and will be less prone to vandalism and crime.

A high quality landscaped settings will be provided for the building on Great Queen Street which will be well integrated with the building. By improving this area and the building surroundings generally, the public spaces will offer fewer opportunities for crime. With this refurbishment comes the long-term maintenance and management of this space, which the building owner recognises as important to deter crime and improve the setting of the building.

By opening up the façade and the extending the footprint of the building to its site boundary, the views of the surrounding public space will be enhanced. This will increase the natural surveillance particularly of the public space, in particular Parker Street. All the parking has been removed from street level in favour of secured basement areas.

The noisy access points to the rear of building have been reduced and are controlled by means of secures gates or shutters, and a new CCTV surveillance system will be installed to monitor all access points into the building including the surrounding streets.

Significant improvement will be made to the external lighting, especially within the Newton Street underpass, which will be effective in reducing fear of crime, and in certain circumstances reducing the incidence of crime.

Proposed external lightning to Newton Street underpass and Great Queen Street

Proposed external lightning to Newton Street underpass and Parker Street

5. Existing and Proposed Floor Areas

5.1 Planning Gross External Area Schedule

	EXISTING PLANNING GROSS AREAS					
LEVEL	Office space Class B1	Public House Class A4	Carpark	Service	Plant	Check Level Areas
13					104.1	104.1
12	138.0				76.2	214.3
11	473.2					473.2
10	473.2					473.2
9	473.2					473.2
8	924.0					924.0
7	1043.0					1043.0
6	1043.0					1043.0
5	1043.0					1043.0
4	1126.7					1126.7
3	1361.4					1361.4
2	1361.4					1361.4
1	919.1	199.2				1118.2
GF	633.3	340.5	65.0	192.3	56.3	1287.5
B1	17.2	337.7	1192.8		427.8	1975.5
TOTAL - sq.m	11029.54	877.4	1257.8	192.3	664.4	14021.4
TOTAL - sq.ft	*118722*	*9444*	*13539*	*2070*	*7151*	*150927*
TOTAL GEFA	14021.4 sq.m *150927 sq.ft*					

	PROPOSED SCHEME PLANNING GROSS AREAS					
LEVEL	Office space Class B1	Public House Class A4	Carpark	Service	Plant	Check Level Areas
13						0.0
12					50.9	50.9
11	474.0					474.0
10	473.6					473.6
9	814.9					814.9
8	1043.7					1043.7
7	1045.6					1045.6
6	1043.6					1043.6
5	1043.3					1043.3
4	1126.7					1126.7
3	1361.9					1361.9
2	1387.9					1387.9
1	1170.7	199.2				1369.8
GF	894.4	340.5	65.0	192.3	64.5	1556.8
B1	530.7	337.7	433.3		673.7	1975.4
TOTAL - sq.m	12411.0	877.4	498.3	192.3	789.1	14768.1
TOTAL - sq.ft	*133591*	*9444*	*5364*	*2070*	*8494*	*158964*
TOTAL GEFA	14768.14 sq.m *158964 sq.ft*					

	Area Increases & Decreases					
LEVEL	Office space Class B1	Public House Class A4	Carpark	Service	Plant	Check Level Areas
13					-104.1	-104.1
12					-163.4	-163.4
11	0.8					0.8
10	0.5					0.5
9	341.7					341.7
8	119.6					119.6
7	2.6					2.6
6	0.6					0.6
5	0.4					0.4
4	0.0					0.0
3	0.5					0.5
2	26.5					26.5
1	251.6	0.0				251.6
GF	261.1	0.0		0.0	8.3	269.4
B1	513.5	0.0	-759.5		245.9	0.0
TOTAL - sq.m	1519.4	0.0	-759.5	0.0	-13.2	746.7
TOTAL - sq.ft	*16355*	*0*	*-8175*	*0*	*-142*	*8038*
TOTAL Increase	746.7 sq.m *8038 sq.ft*					746.7

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