

Planning Applications Sub-Committee PRESENTATION PACK

Date: MONDAY, 20 MARCH 2023

Time: 10.30 am

Venue: LIVERY HALL - GUILDHALL

4. **85 GRACECHURCH STREET**

For Decision (pages 3-238)

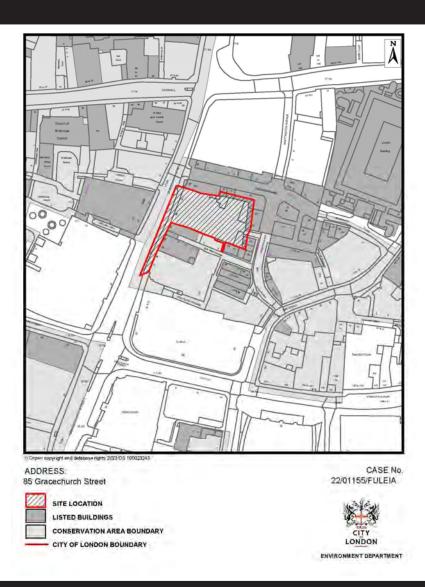
Ian Thomas
Town Clerk and Chief Executive





85 Gracechurch Street

Planning & Transportation Committee 20th March 2023



Site Location Plan

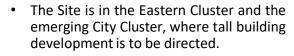
Key

- The site
 Leadenhall Market
- 3. 1 Leadenhall
- 1 Leadenhall
 Monument Underground Station
 Aldgate Underground Station
 Fenchurch Street Station
 Liverpool Street Station
 122 Leadenhall Street
 30 St Mary Axe
 20 Fenchurch Street
 Bank Underground Station
 70 Gracechurch Street
 5 Gracerburch Street

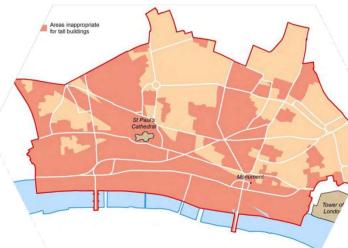
- 13. 55 Gracechurch Street



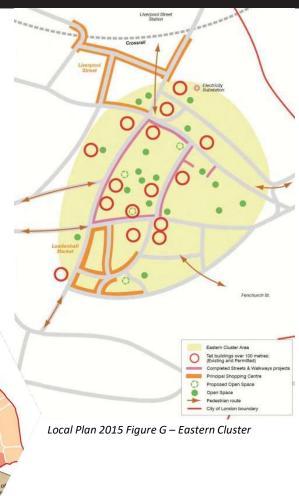
Surrounding Features

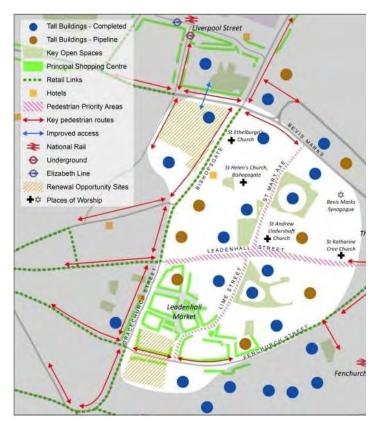


- It also sits within the Leadenhall Market Principal Shopping Centre, which serves the City Cluster.
- It is in a Conservation Area, where tall buildings are typically considered inappropriate (in the case of Leadenhall Market CA, in conflict with Eastern Cluster policy).



Local Plan 2015 Figure N – Areas inappropriate for tall buildings

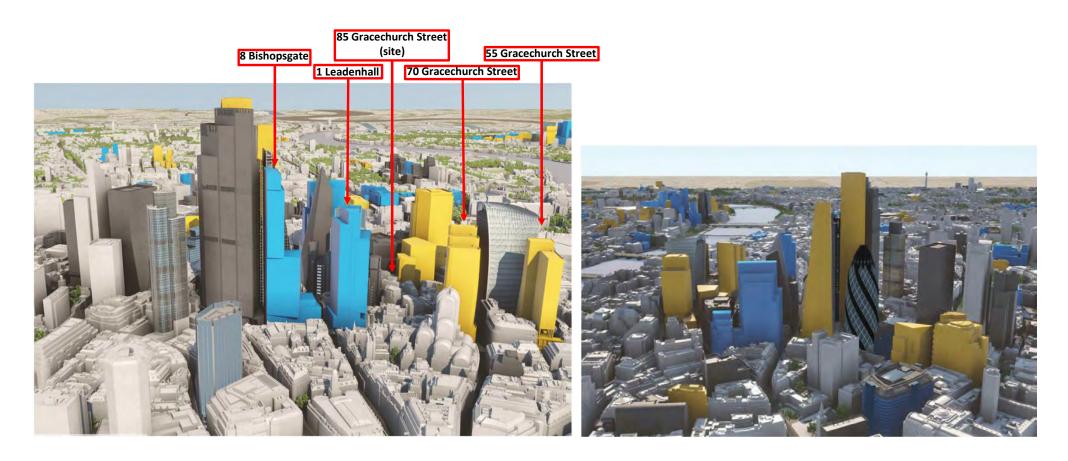




Emerging Local Plan 2036 Figure 33 – City Cluster Key Area of Change

Under construction developments in blue and developments with permission in yellow.

The site sits on Gracechurch Street between the under construction developments at 8 Biphosphate and 1 Leadenhall, and the permitted schemes at 70 and 55 Gracechurch Street.











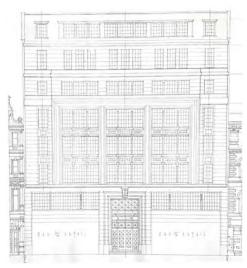






The site sits in the Leadenhall Market Conservation Area, adjacent to a number of listed buildings

- 1. Leadenhall Market
 2. Church of St Peter upon Cornhill (Grade I)
 3. 81 & 82, Gracechurch Street (Grade I)
 4. Church of St Michael, Cornhill (Grade I)
 5. Lloyd's of London (Grade I)
 6. Monument (Grade I)



Original drawing of existing frontage



Aerial view of the existing building in context



Illustration of frontage as originally built



Aerial photo of existing building's east facade



RED ROUTE Loading 20 mins

Frontage from Gracechurch Street

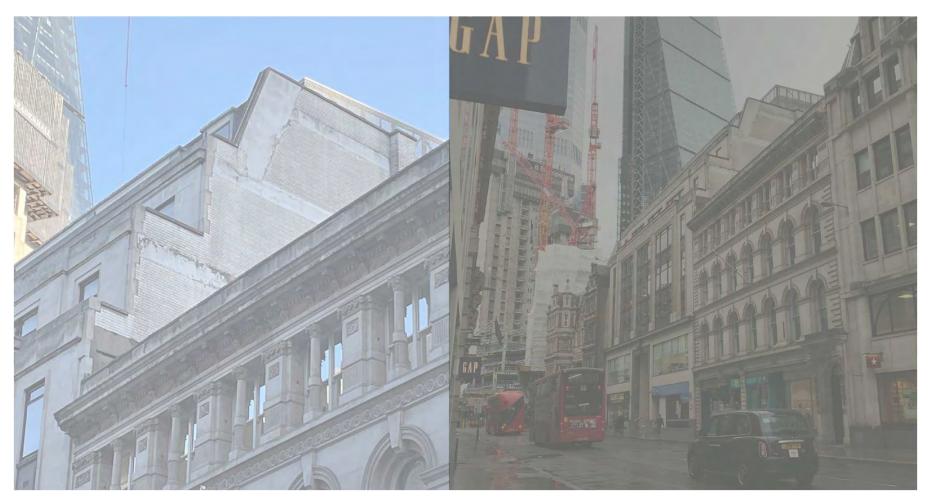
View of interface with Leadenhall Market on Gracechurch Street





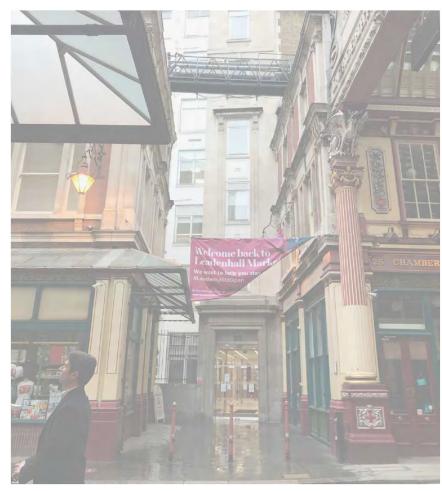
View south along Gracechurch Street

View on Gracechurch Street



Gables to the north and south elevations

View north along Gracechurch Street





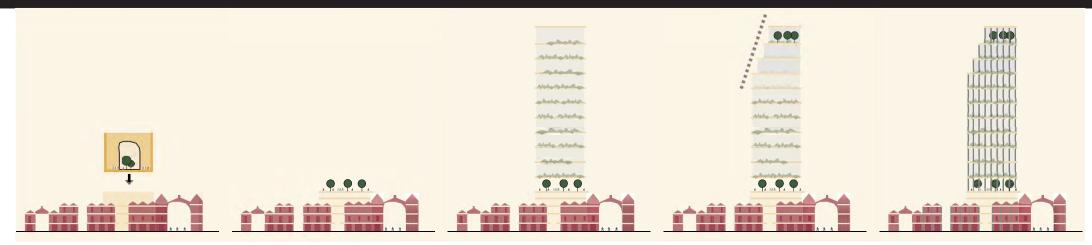
View of East Entrance

View north along Lime Street Passage





Aerial View South East Plant Enclosure



Public hall

A democratic public space for Londoners that sup- ports Leadenhall Market as a retail and cultural destina- tion.



Wellness Garden

An elevated public space that reveals new views of the heritage setting and celebrates the site's history. Accessible to all, this space broadens the demographic of visitors to the City.

Horizontal articulation

A primary architectural ex- pression that is defined by horizontal elements inspired by the horizontal string courses that unite the facades of Leadenhall Market.

Greening

An exemplary and radical urban greening develop- ment which deploys green- ing not only to support the environmental principles above, but also to enhance the character and appear- ance of the Leadenhall Market Conservation Area, defining a unique, gentle and more humane architectural statement.

Facade detail

Facade detail that distils the texture and ornament of the buildings in its heritage context that, through con-sidered contemporary artic-ulation, materiality and detailing, benefits the heritage setting and creates delight for users and visitors.











Office space

- 3 + 24 levels
- 2.75m fl-cl
- User-controlled natural ventilation panels
- Soft spots to connect floors

Ground floor

- Public Hall
- 2 fixed retail units

Level 05

- 1 fixed retail unit
- Multi-purpose cultural space
- Public seating area
- Heritage walkway

End of trip facilities

- 430 office user cycle racks
- 505 lockers
- 52 showers (including 1 accessible)
- 5 public user accessible

Sheffield stands

Automated cycle stacking system

Core and lifts

- 4 low rise double deck passenger lifts
- 4 high rise double deck passenger lifts
- 2 goods lifts
- 2 fire fighting lifts
- 2 escape stairs



Exploded axonometric drawing showing key elements of the design

Highly insulated facade

Office floorplates

Planters

Wellness Garden Hall

balconies

Retained and adapted facade Bronze

coloured metal windows Arched columns

Public lift Heritage

walkway

Lime Street Passage entrance Heritage

Garden and Cultural space







Illustrative views of scheme from south

Illustrative views of scheme from east

Scheme Overview





Leadenhall Market



the retained facade and upper tower

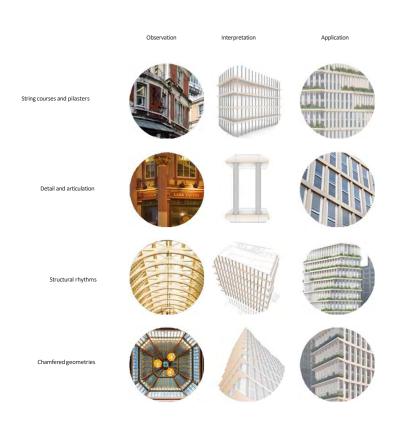
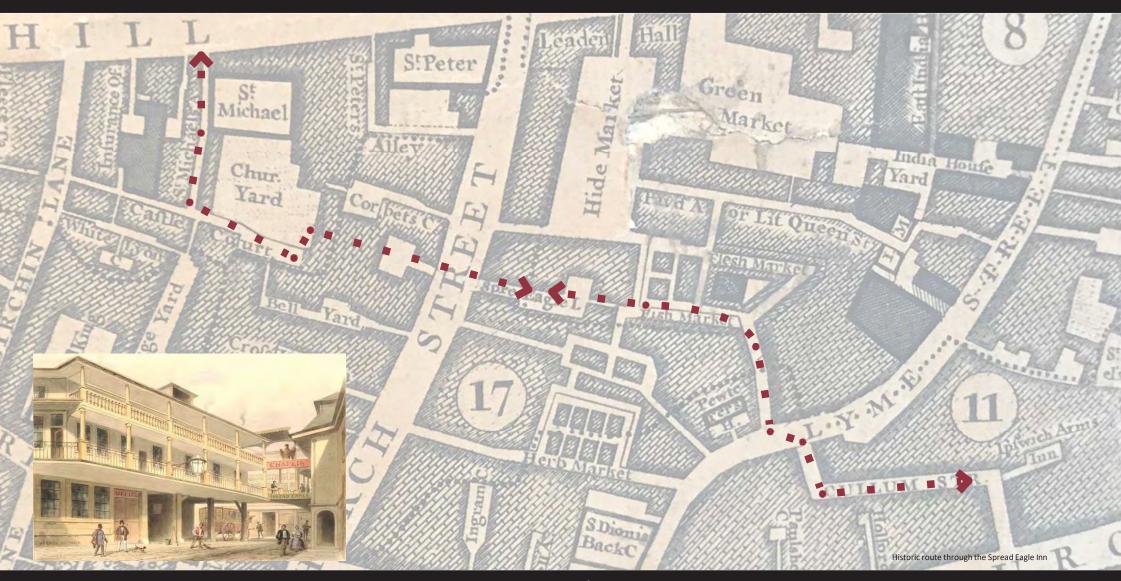


Diagram explaining the analysis of architectural elements in the Conservation Area, and their interpretation and application in the proposed scheme

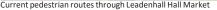


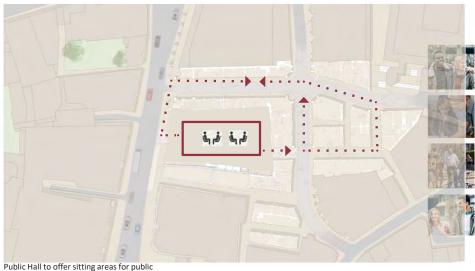
Illustrative view chamfered South west corner and projecting planters

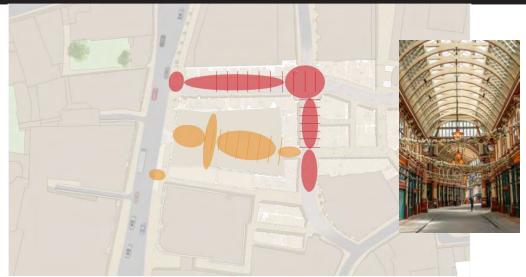


Public Realm - Site History - East / West Connection

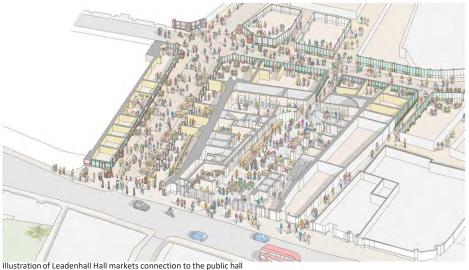








Proposed and existing public space



Public Realm - Street Permeability

Reinstated historic route through the site

Enhancing permeability into Leadenhall Market increasing footfall through the lanes of Leadenhall Market

Widened Gracechurch Street pavements, improving pedestrian comfort





Historic maps show Spread Eagle Lane once crossed the site.



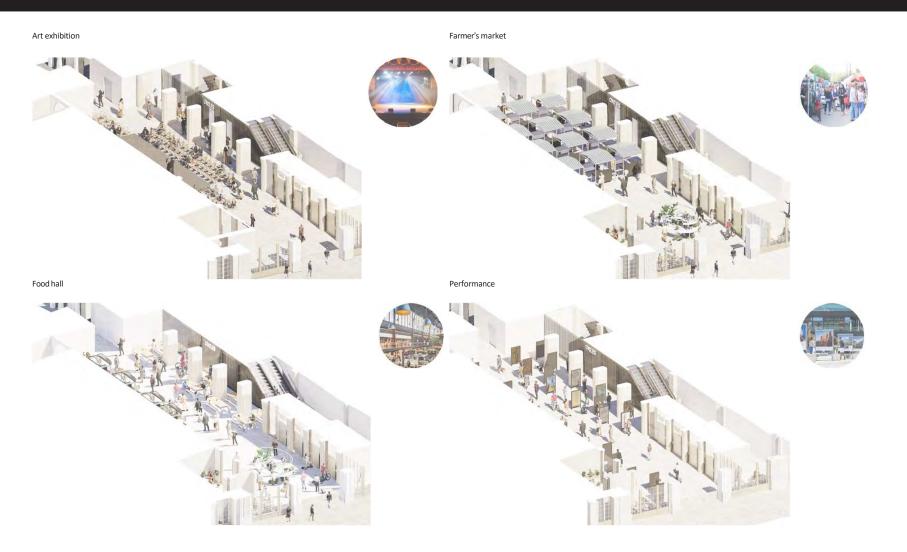
The existing granite portico to Gracechurch Street is retained, but re-imagined as a public route through a new civic space.



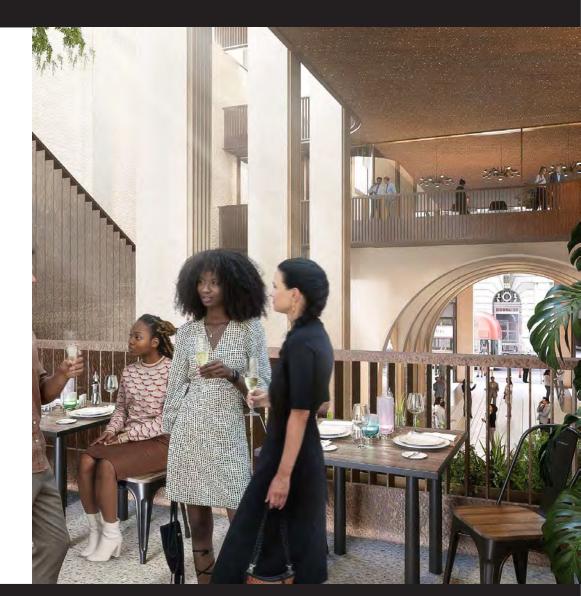
The widened pavements on Gracechurch Street make pedestrian movement more comfortable, and the new east/west pedestrian connection increases footfall to the eastern areas of the market at Beehive Passage.



Proposed - Ground Floor Plan







The Public Hall - CGI



Ground Floor Public Hall - CGI



LHM Conservation Area- Lime Street Passage



East Entrance - Lime Street Passage

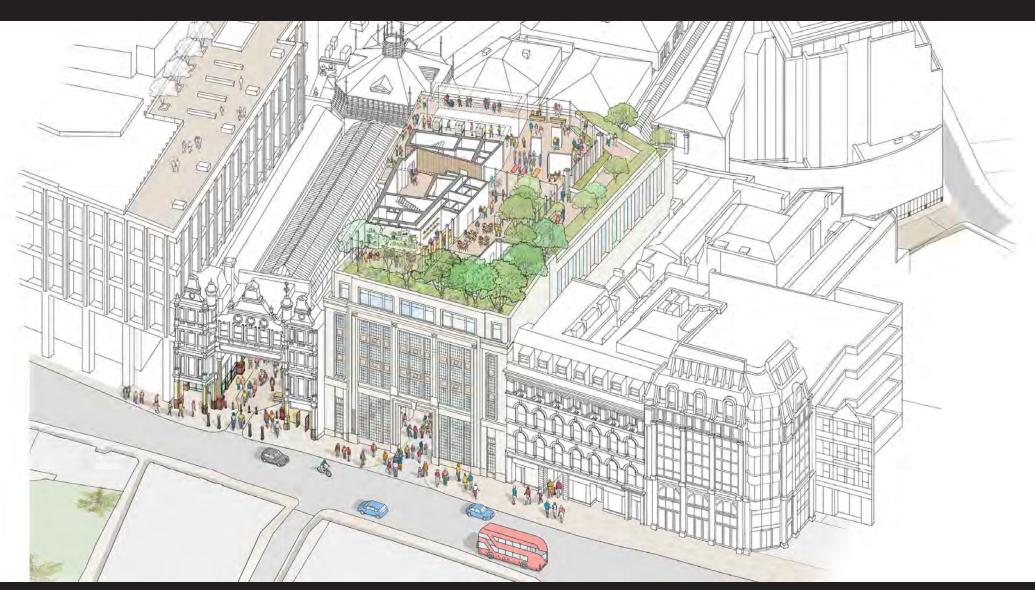




Section Through The Hall Looking North



Public Hall Illustration











Level 5 Public Access

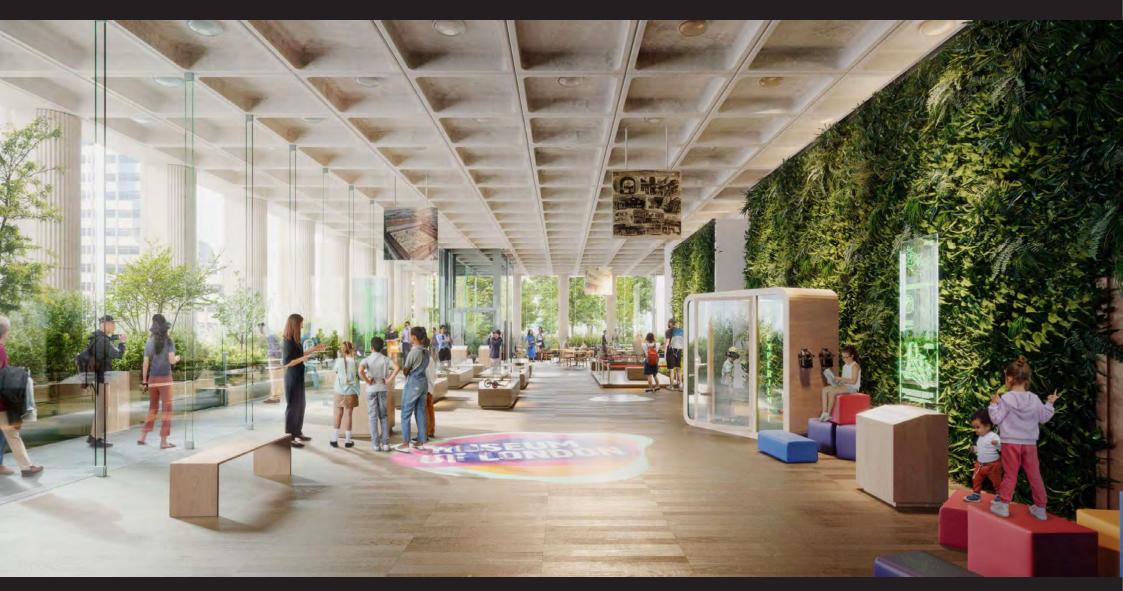


Archaeology display





Proposed Level 5 - Heritage Garden And Cultural Space



Heritage Garden And Cultural Space



Heritage Garden And Cultural Space

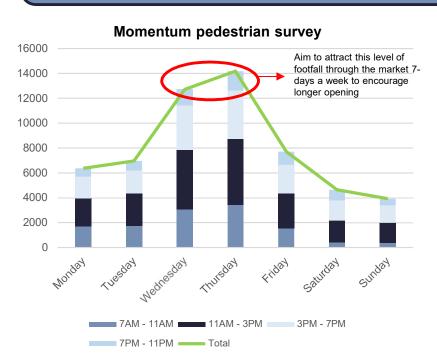


Heritage Walkway

Economic Impacts to Leadenhall Market today – Baseline data

Momentum Transport Consultants undertook two surveys:

- · A footfall survey, assessing how many people walk through the market at different times of day; and
- An additional survey asking visitors questions about their purpose for visiting the market and whether they spent money.

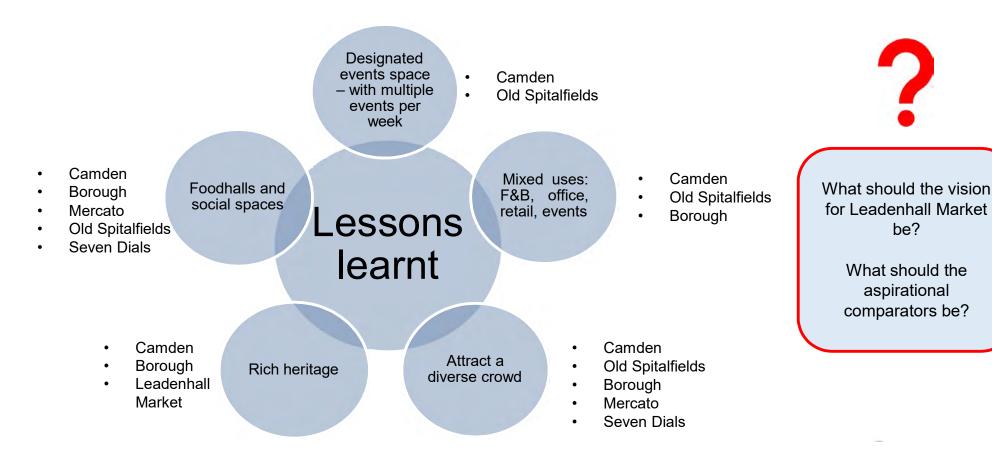


Key findings of first survey

- Low dwell time for visitors typically around five minutes;
- Wednesday and Thursday are the busiest days (pre-pandemic it was Friday);
- Majority of tourists observed did not make purchases within the market – tourists stopped to take pictures before moving on;
- Around 20-25 walking tours visit the market per day some groups enter the market but others just paused at the Gracechurch Street entrance;
- Few people visiting the shops that make up 40% of the units the majority visit the restaurants / pubs.

To help the market reach its potential, **adjacent development** needs to come forward that will attract more visitors, encourage them to stay for longer and spend more.

Lessons learnt from other markets



The Economic impact of the Proposed Development to Leadenhall Market

Volterra (Economic Consultants) has modelled the current turnover at Leadenhall Market based on industry benchmarks, and estimated the increased expenditure Leadenhall Market could achieve through the impact of the Proposed Development. Its findings are presented as follows.

Current performance of Leadenhall market

Majority of Leadenhall Market units are closed on weekends.

14 units in Leadenhall Market are currently vacant. A further 2 are temporarily closed.

Low revenue

Leadenhall market **fails** to meet its full potential.

Impact of Proposed Development

85 GCS will increase footfall and spending in Leadenhall Market through 3 key methods:

- Increase visitors to the new diverse offer: event space, Museum of London exhibition, heritage garden, public hall.
- Attract more visitors through events held at in the public hall;
- New office workers in the area will spend in Leadenhall Market

Key assumptions that underpin the uplift in Leadenhall Market revenue

Increased visitors and spending at Leadenhall Market – motivation for units to open across more days.

Increased visitors and spending at Leadenhall Market – motivation for new businesses to take up vacant units at Leadenhall Market.

Additional ways Leadenhall Market revenue can increase

The increase in visitors to the Proposed Development from the Museum of London exhibition will increase revenue at Leadenhall Market by between £185,000 – £1.1m.

The increase in visitors who spend at LM due to the public hall offer at the Proposed Development ranges between 1.5m – 3m per year.

Resulting in an increase in revenue of between £1.9m – £7.6m.

An **increase** of office workers from the Proposed Development will **increase revenue** at Leadenhall Market by between £727,000 – £995,000.



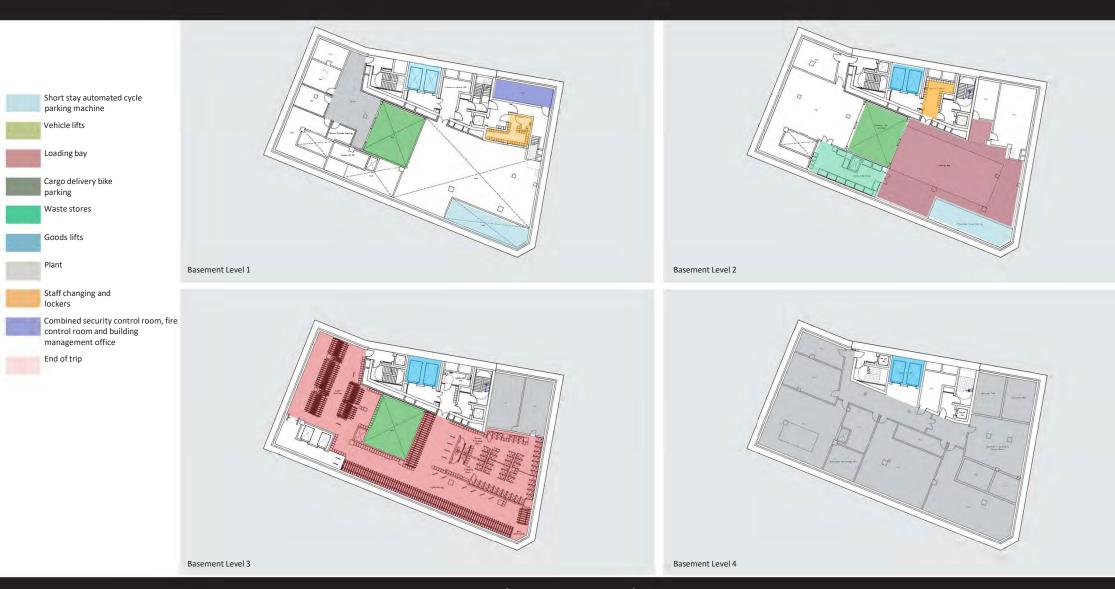
Existing - Ground Floor Plan



Proposed - Ground Floor Plan



Existing - Basement Plan



Proposed - Basement Plans



Vehicle lifts in use during servicing hours (11pm-7am)

Deliveries, Servicing & Waste

Vehicles would access the site from Gracechurch Street with all servicing being accommodated off-street.

The proposed internal servicing area would be provided at Basement Level 02 and accessed via dedicated vehicle lifts.

Servicing will occur over night between 23:00 – 07:00 with extended hours on a Sunday & Monday night between 21:00 – 07:00.

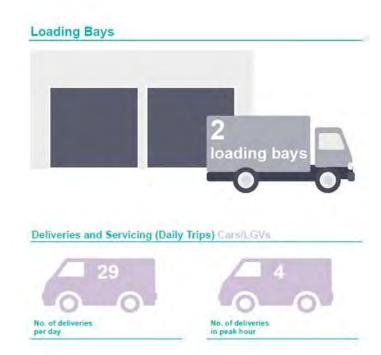
All vehicles would be required to pre-book a delivery slot prior to arrival at the site.

Cargo bikes would be utilised during the day to service the site.

Forecast delivery and servicing activity are based on:

- A minimum of 50% consolidation of trips
- 20-minute dwell times
- Managed 8-hour delivery period.

Waste would be stored at Basement Level 02 and would be collected from the internal servicing area.



End of trip provisions

430 Long stay cycle parking (2-tier racks) 26x Long

stay Sheffield stands

51x Brompton lockers

52x Showers (including 1 accessible)

505x Lockers (A mixture of 2 tier and 3 tier) (Including provisions for staff at B1 & B2)

5x WCs (Including 1x accessible)

123x Short stay cycle parking spaces (Including 5 Short stay Sheffield stands)

Kev:

Cycle lifts

Short stay Sheffield stands

Long stay Sheffield stands

Josta 2-Tier bike rack

Brompton lockers

Female showers

Male showers

Accessible shower/WCWC

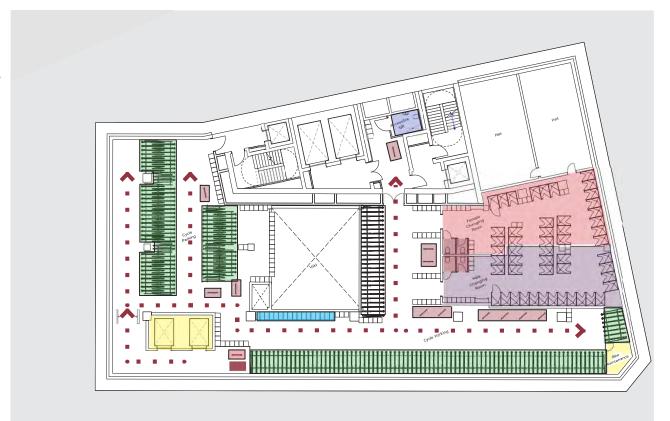
Bike fixing

Automated cycles storage

Cargo bike parking

Circulation route

(·)





Bike fixing workshop



2-Tier bike racks



Existing - L1 - L4



Proposed - L1 - L4



Proposed Level 5 - Heritage Garden And Cultural Space



Existing L5 - L8



Proposed - L5 - L8





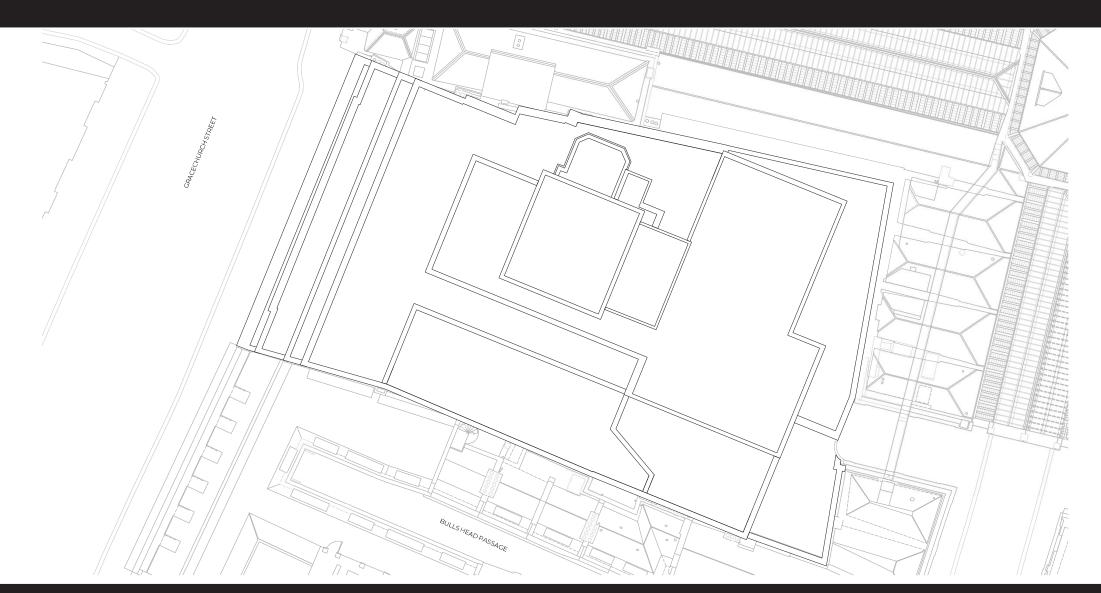
Proposed - L 21 - L 24



Proposed - L 25 - L 28

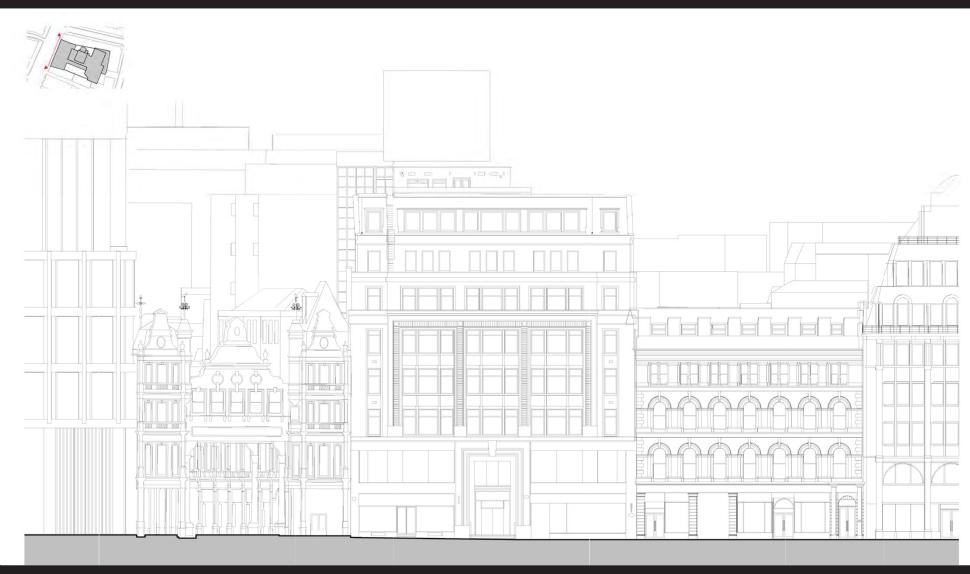


Proposed - L 29 - L 32

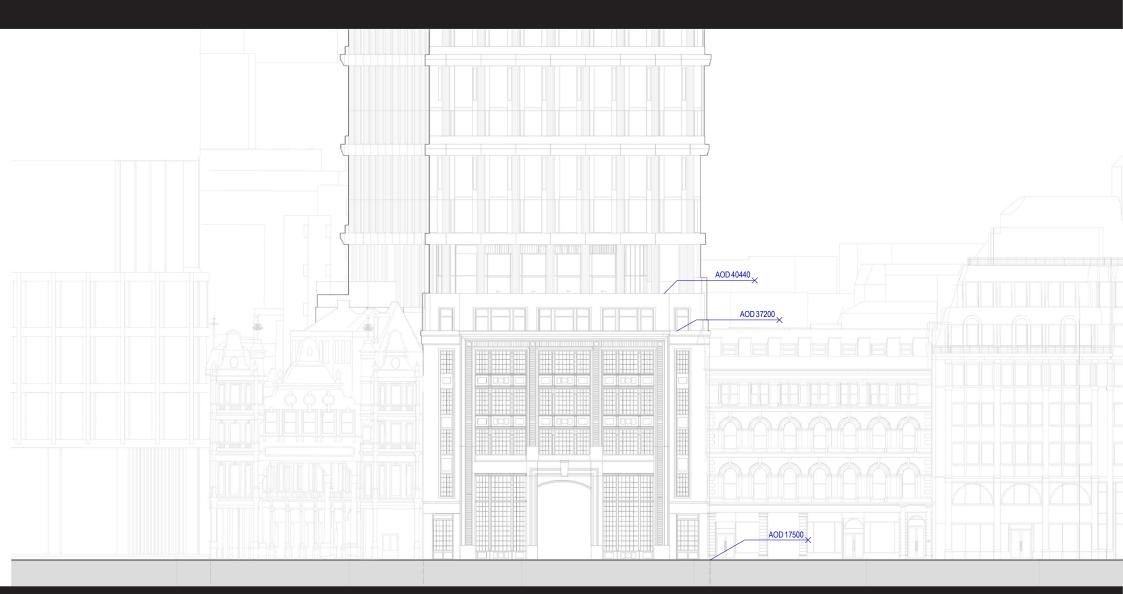




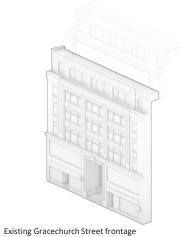
Proposed Roof Plan



Existing - West Elevation

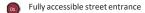


Proposed - West Elevation









Visual connection to public hall

Repairs and alteration to existing Portland stone facade

Deepening of facade

Repairs and alterations to the granite portico

Reintroduction of 'crittall' windows



Bronze-coloured metal spandrels

Limestone

Granite



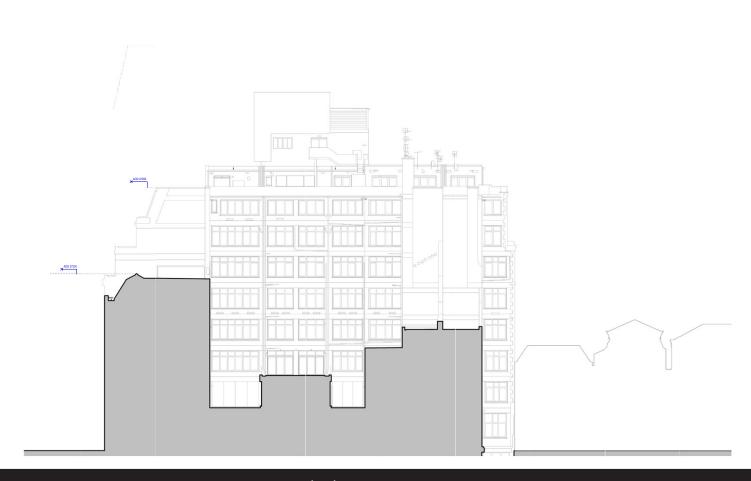
Diagram of existing elevation with retained portions highlighted



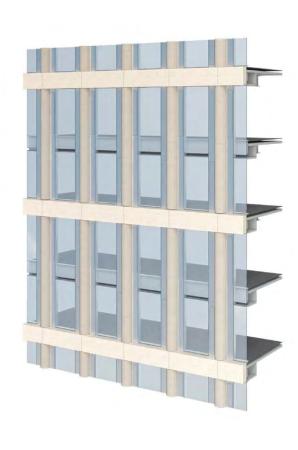
Illustrative view looking north along Gracechurch Street



Proposed - View from South West



Existing - South Elevation



South facade fragment



South elevation



View from South



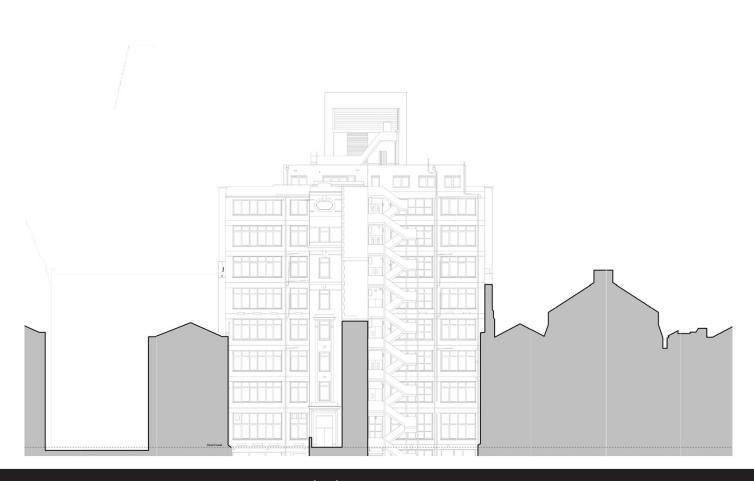
Existing - East Elevation



East facade fragment



East elevation



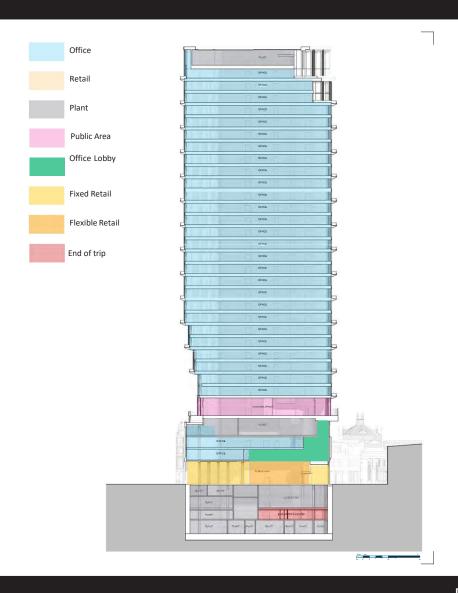
Existing - North Elevation

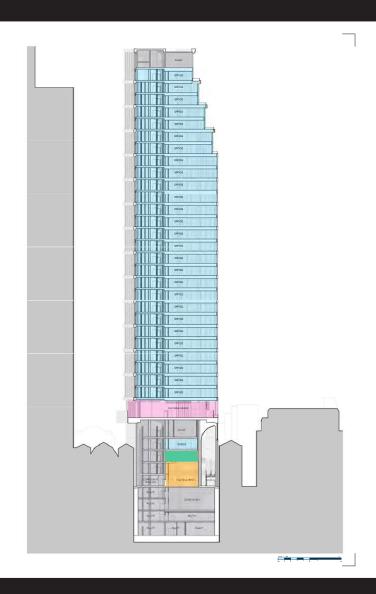






North Elevation





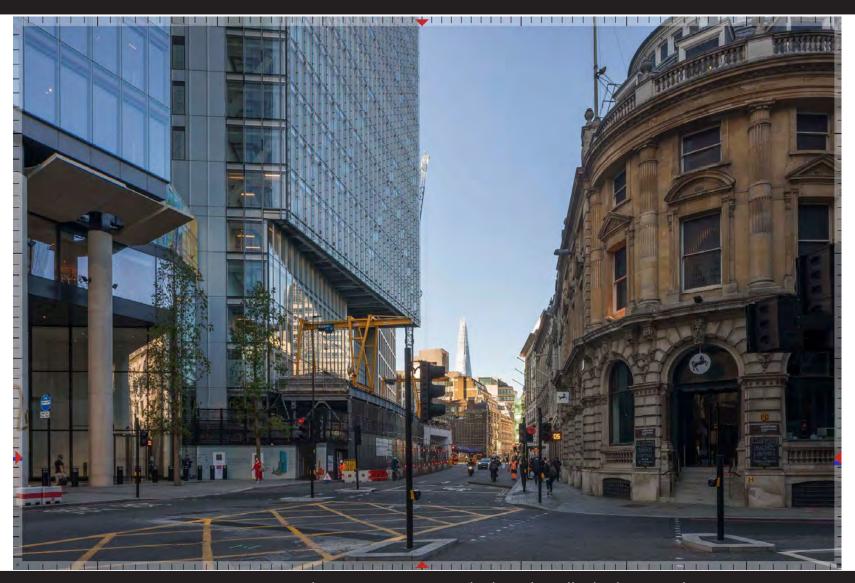
Proposed - Sections



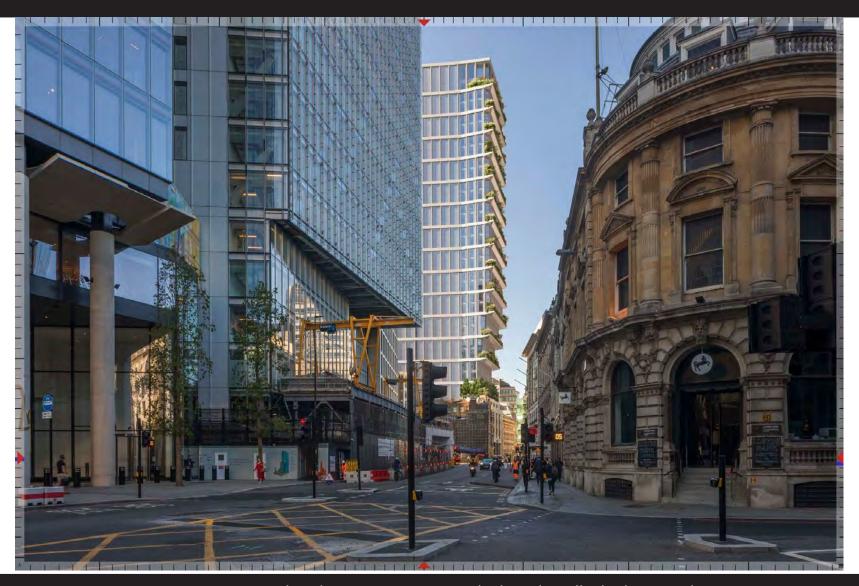
View from South East



Emerging Eastern Cluster



View 1 - Existing: Bishopsgate junction with Threadneedle, looking south-west



View 1 - Proposed: Bishopsgate junction with Threadneedle, looking south-west



View 1 - Cumulative: Bishopsgate junction with Threadneedle, looking south-west



View 2 - Existing: Gracechurch Street junction with Cornhill, looking south-west



View 2 - Proposed: Gracechurch Street junction with Cornhill, looking south-west



View 2 - Cumulative: Gracechurch Street junction with Cornhill, looking south-west



View 3 - Existing: Whittington Avenue, looking south-west



View 3 - Proposed: Whittington Avenue, looking south-west



View 3 - Cumulative: Whittington Avenue, looking south-west



View 4 - Existing: Leadenhall Place, looking north-west



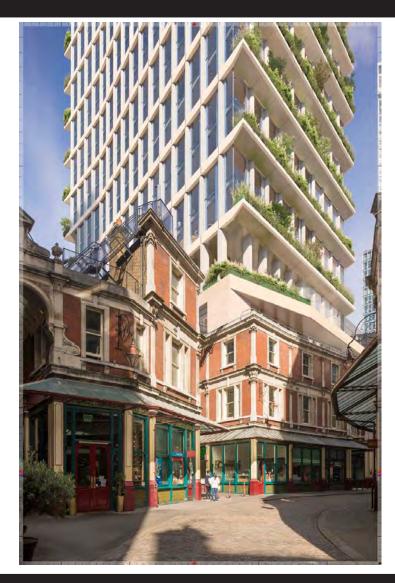
View 4 - Proposed: Leadenhall Place, looking north-west



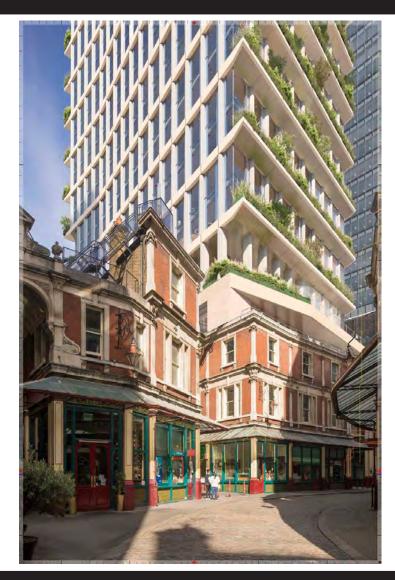
View 4 - Cumulative: Leadenhall Place, looking north-west



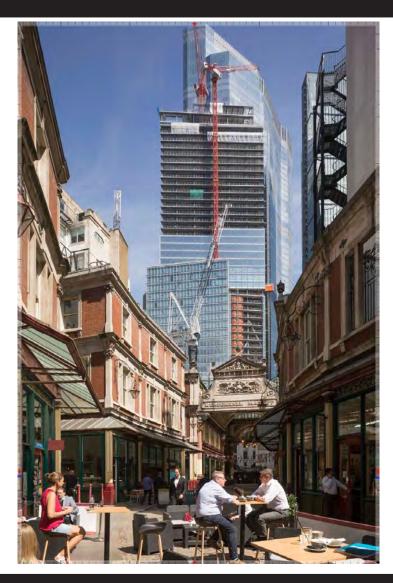
View 5A - Existing: Intersection of Lime Street and Lime Street Passage, looking north-west



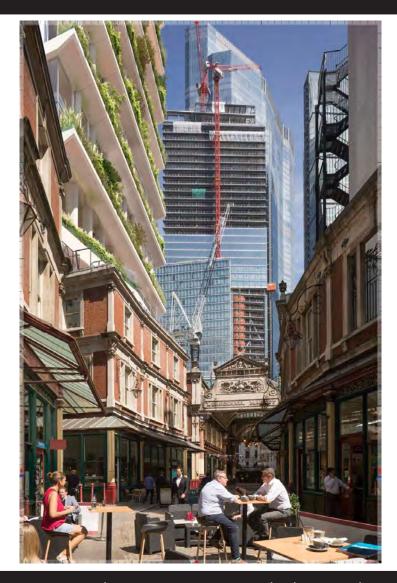
View 5A - Proposed: Intersection of Lime Street and Lime Street Passage, looking north-west



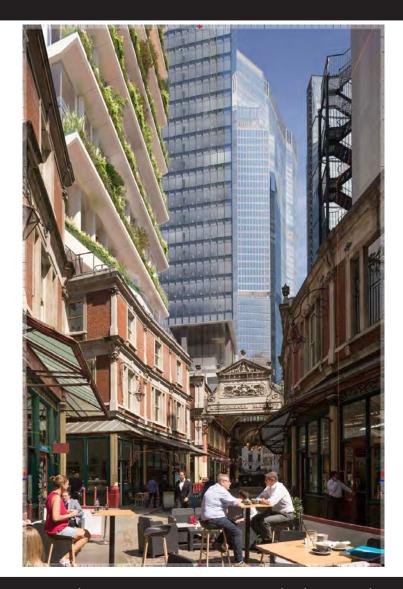
View 5A - Cumulative: Intersection of Lime Street and Lime Street Passage, looking north-west



View 5B - Existing: Lime Street Passage, looking north



View 5B - Proposed: Lime Street Passage, looking north



View 5B - Cumulative: Lime Street Passage, looking north



View 6 - Existing: Gracechurch Street junction, Lombard Street, looking north-east



View 6 - Proposed: Gracechurch Street junction, Lombard Street, looking north-east



View 6 - Cumulative: Gracechurch Street junction, Lombard Street, looking north-east



View 7 - Existing: Gracechurch Street with Eastcheap, looking north-east



View 7 - Proposed: Gracechurch Street with Eastcheap, looking north-east



View 7 - Cumulative: Gracechurch Street with Eastcheap, looking north-east



View 7 - Cumulative: Gracechurch Street with Eastcheap, looking north-east



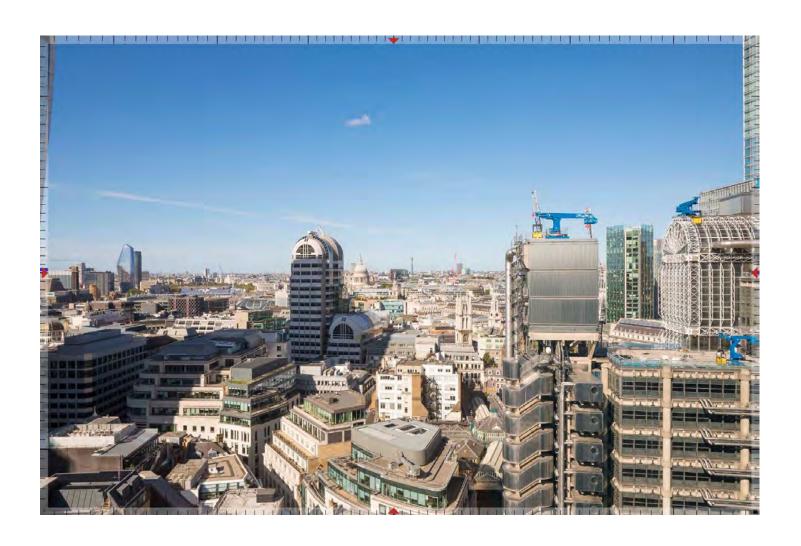
View 8 - Existing: Fish Street Hill, corner with Lower Thomas Street, looking north-east



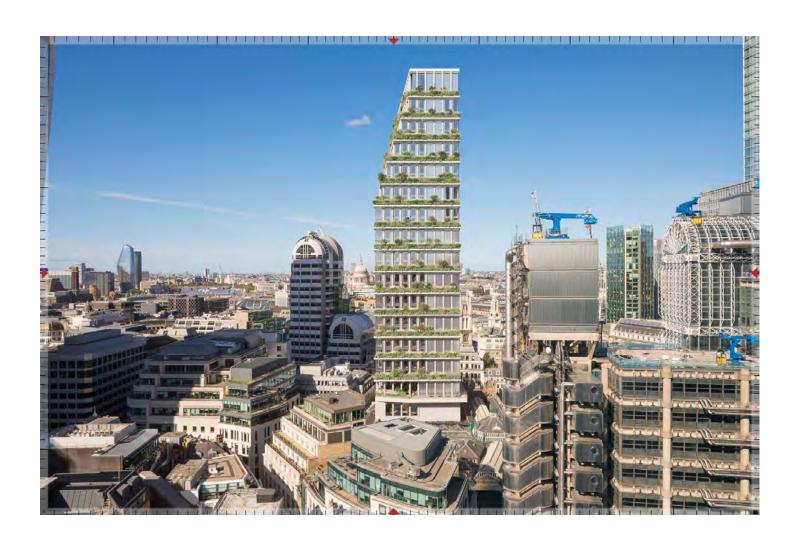
View 8 - Proposed: Fish Street Hill, corner with Lower Thomas Street, looking north-east



View 8 - Cumulative: Fish Street Hill, corner with Lower Thomas Street, looking north-east



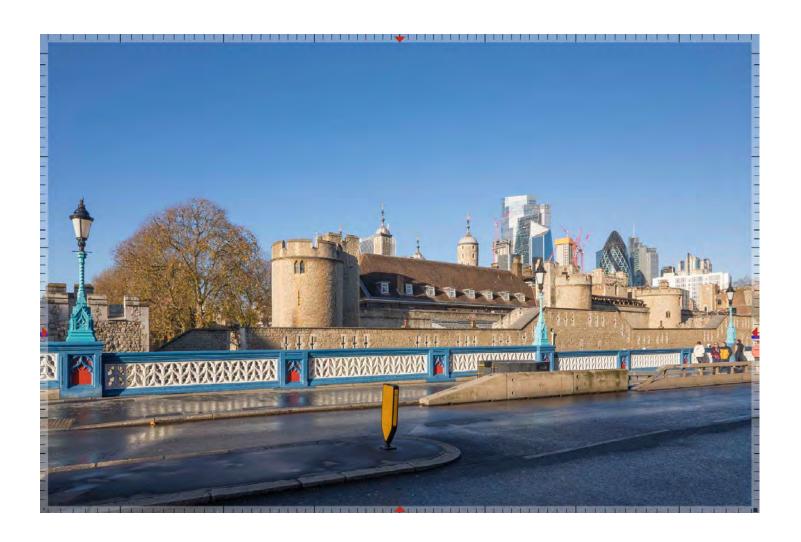
View 9 - Existing: The Garden at 120 Fenchurch Street, looking west



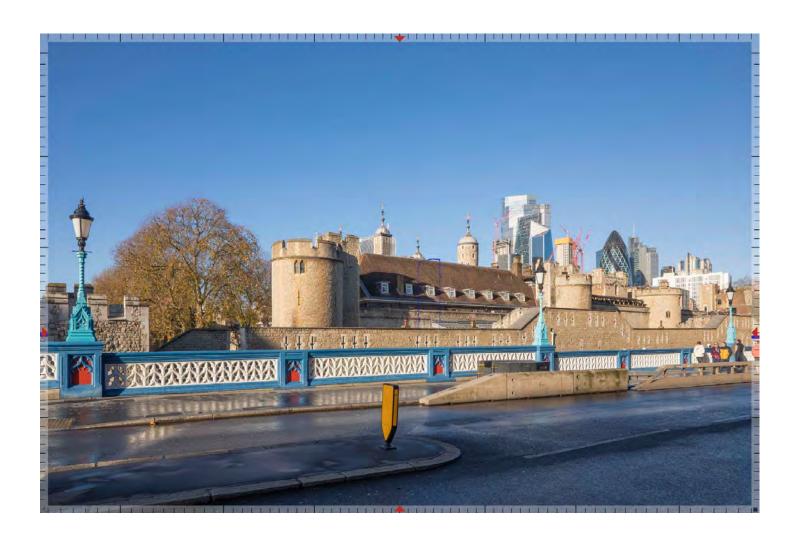
View 9 - Proposed: The Garden at 120 Fenchurch Street, looking west



View 9 - Cumulative: The Garden at 120 Fenchurch Street, looking west



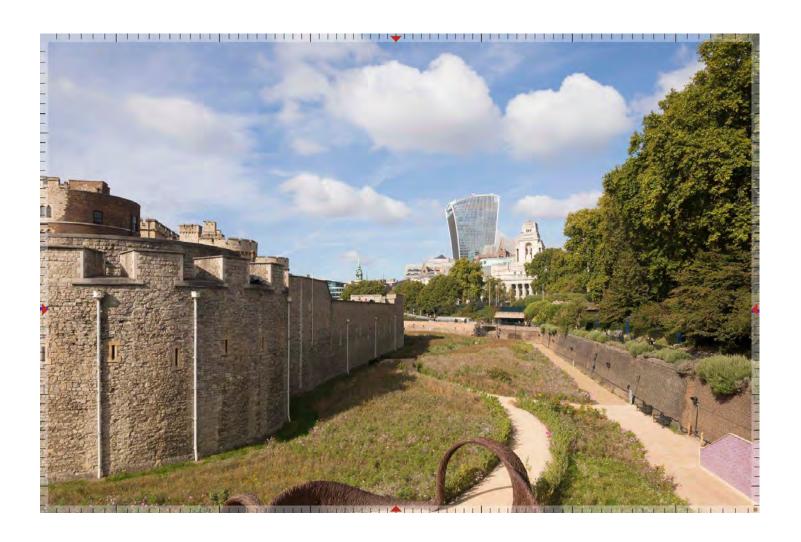
View 10 - Existing: Tower of London: Tower Bridge Approach – north, looking north-west



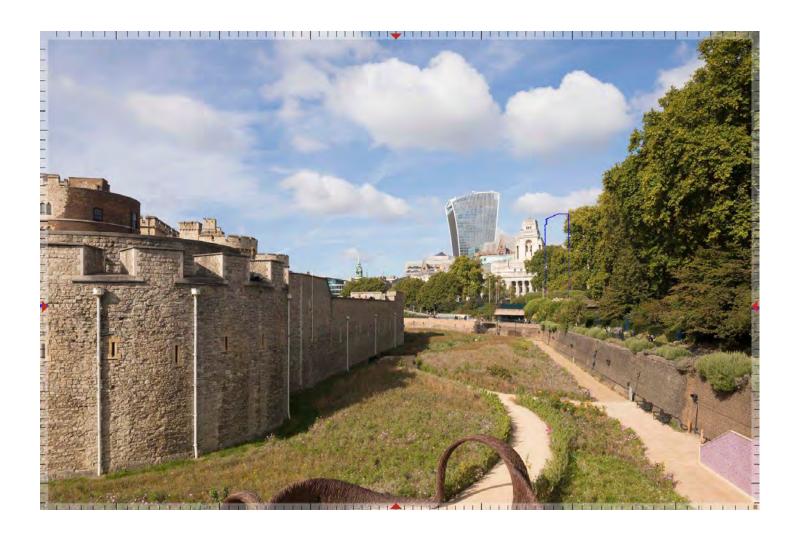
View 10 - Proposed: Tower of London: Tower Bridge Approach – north, looking north-west



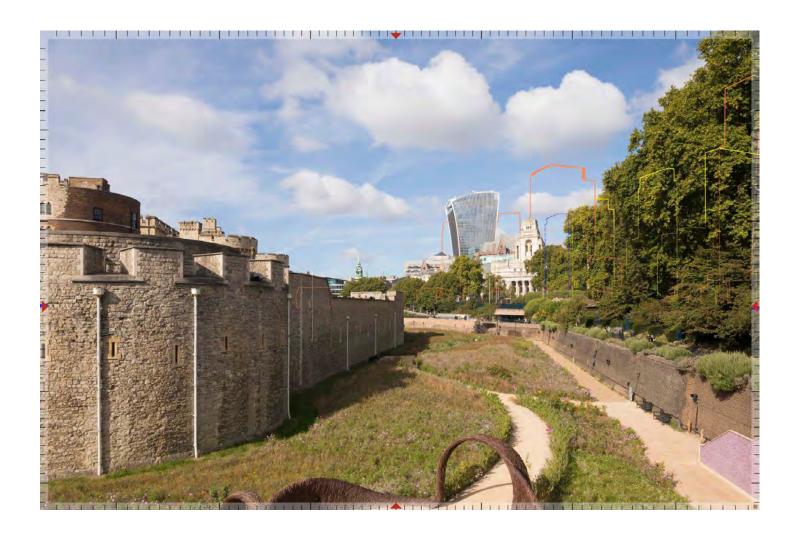
View 10 - Cumulative: Tower of London: Tower Bridge Approach – north, looking north-west



View 11 - Existing: Tower of London: Tower Bridge Approach – looking over the workshop, looking north-west



View 11 - Proposed: Tower of London: Tower Bridge Approach – looking over the workshop, looking north-west



View 11 - Cumulative: Tower of London: Tower Bridge Approach – looking over the workshop, looking north-west



View 12 - Existing: Tower of London: Tower Wharf – east of Henry VIII's Watergate, looking north-west



View 12 - Proposed: Tower of London: Tower Wharf – east of Henry VIII's Watergate, looking north-west



View 12 - Cumulative: Tower of London: Tower Wharf – east of Henry VIII's Watergate, looking north-west



View 13A - Existing: Tower of London: Inner Curtain Wall, south, looking north-west



View 13A - Proposed: Tower of London: Inner Curtain Wall, south, looking north-west



View 13A - Cumulative: Tower of London: Inner Curtain Wall, south, looking north-west



View 13B - Existing: Tower of London: Inner Ward, west of the White Tower, looking north-west



View 13B - Proposed: Tower of London: Inner Ward, west of the White Tower, looking north-west



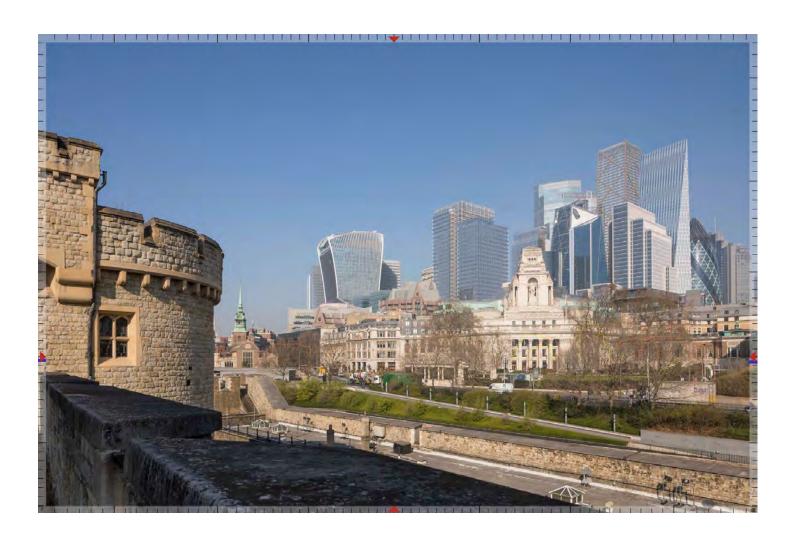
View 13B - Cumulative: Tower of London: Inner Ward, west of the White Tower, looking north-west



View 13C - Existing: Tower of London: Inner Wall, west of Bowyer Tower, looking north-west



View 13C - Proposed: Tower of London: Inner Wall, west of Bowyer Tower, looking north-west



View 13C - Cumulative: Tower of London: Inner Wall, west of Bowyer Tower, looking north-west



View 14 - Exsiting: King's Stairs Gardens, looking north-west



View 14 - Proposed: King's Stairs Gardens, looking north-west



View 14 - Cumulative: King's Stairs Gardens, looking north-west



View 15 - Exsiting: Butler's Wharf, looking north-west



View 15 - Proposed: Butler's Wharf, looking north-west



View 15 - Cumulative: Butler's Wharf, looking north-west



View 16 - Exsiting: LVMF 10A.1 – Tower Bridge: upstream – the north bastion, looking north-west



View 16 - Proposed: LVMF 10A.1 – Tower Bridge: upstream – the north bastion, looking north-west



View 16 - Cumulative: LVMF 10A.1 – Tower Bridge: upstream – the north bastion, looking north-west



View 17 - Existing: LVMF 25A.1 – The Queen's Walk at City Hall – foot of pathway from Potter's, looking north-east



View 17 - Proposed: LVMF 25A.1 – The Queen's Walk at City Hall – foot of pathway from Potter's, looking north-east



View 17 - Cumulative: LVMF 25A.1 – The Queen's Walk at City Hall – foot of pathway from Potter's, looking north-east



View 18 - Exsiting: The South Bank: London Bridge City Pier, looking north



View 18 - Proposed: The South Bank: London Bridge City Pier, looking north



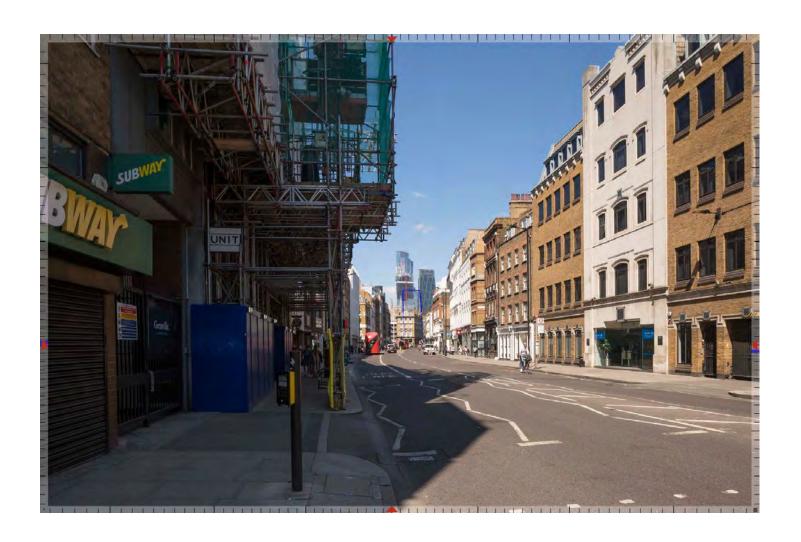
View 18 - Cumulative: The South Bank: London Bridge City Pier, looking north



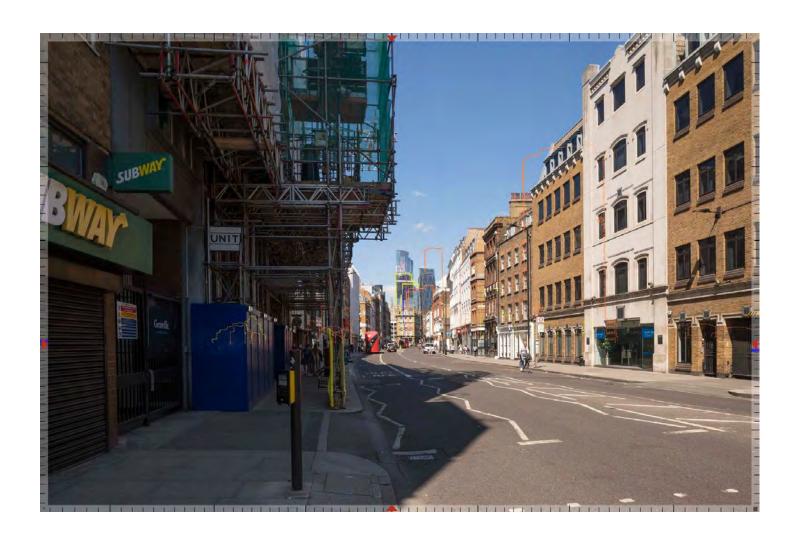
View 18 - Cumulative: The South Bank: London Bridge City Pier, looking north



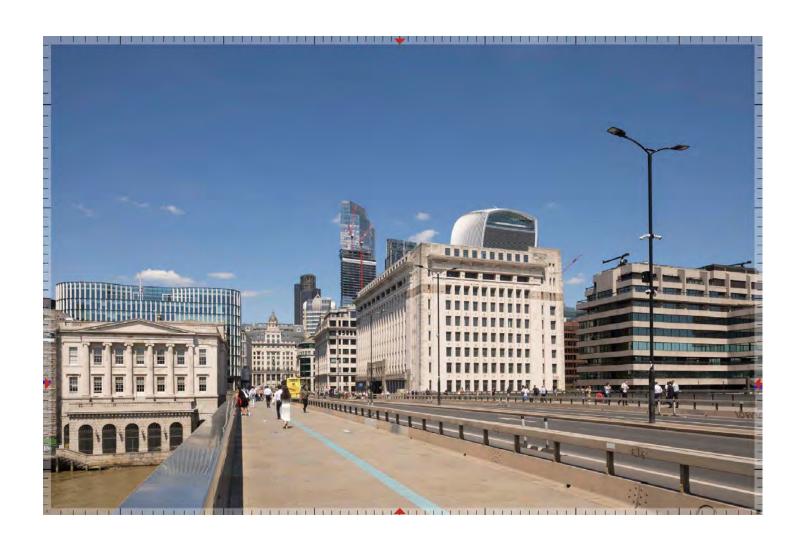
View 19 - Exsiting: Borough High Street, in front of Southwark Local Studies Library, looking north-east



View 19 - Proposed: Borough High Street, in front of Southwark Local Studies Library, looking north-east



View 19 - Cumulative: Borough High Street, in front of Southwark Local Studies Library, looking north-east



View 20 - Exsiting: London Bridge: upstream pavement – at the centre of the Bridge, looking north-east



View 20 - Proposed: London Bridge: upstream pavement – at the centre of the Bridge, looking north-east



View 20 - Cumulative: London Bridge: upstream pavement – at the centre of the Bridge, looking north-east



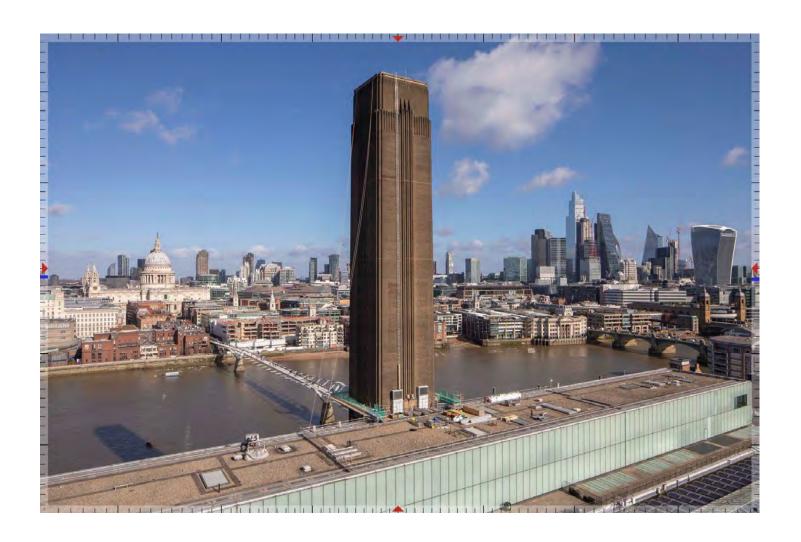
View 21 - Exsiting: Southwark Bridge: upstream pavement – at the Southwark Bank, looking north-east



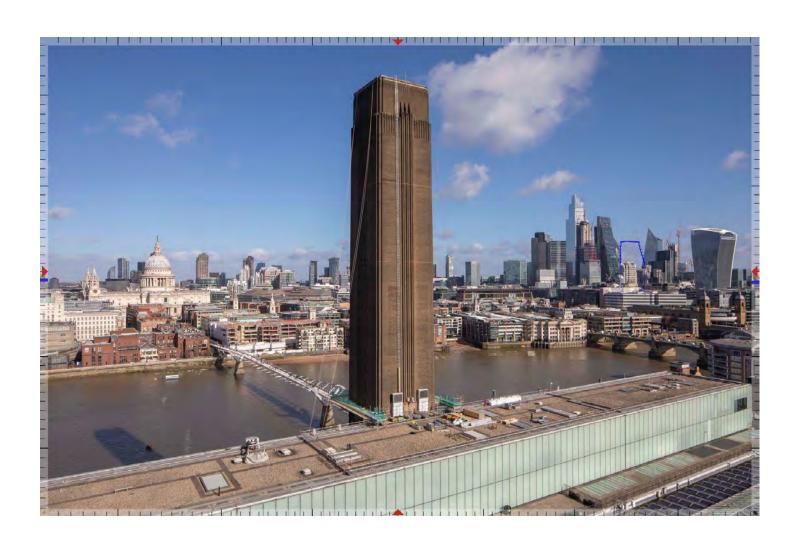
View 21 - Proposed: Southwark Bridge: upstream pavement – at the Southwark Bank, looking north-east



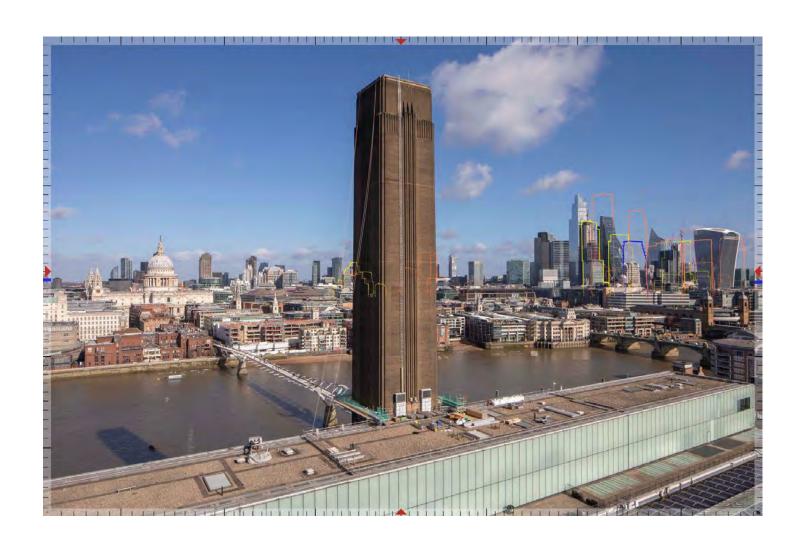
View 21 - Cumulative: Southwark Bridge: upstream pavement – at the Southwark Bank, looking north-east



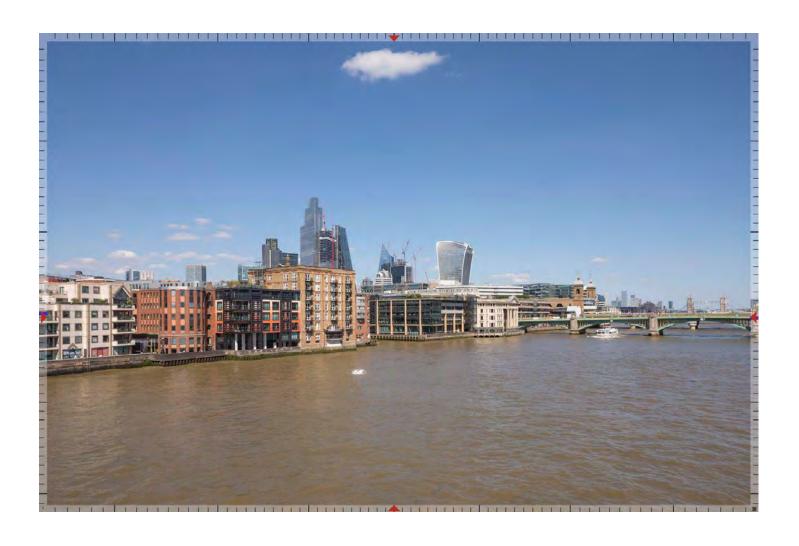
View 22 - Exsiting: Tate Modern: Blavatnik Building – viewing gallery, looking north-east



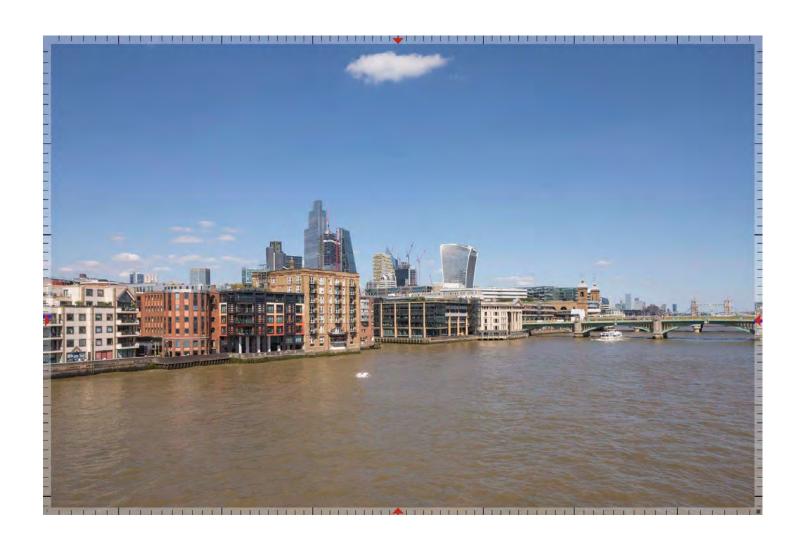
View 22 - Proposed: Tate Modern: Blavatnik Building – viewing gallery, looking north-east



View 22 - Cumulative: Tate Modern: Blavatnik Building – viewing gallery, looking north-east



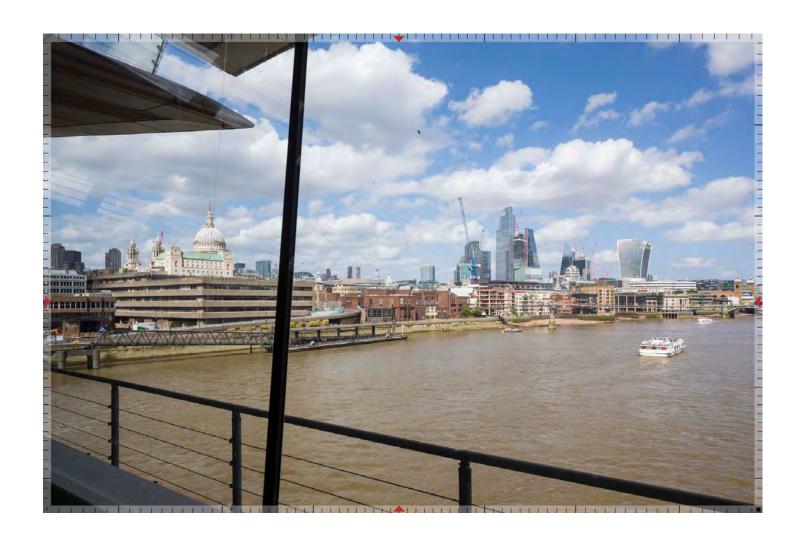
View 23 - Existing: Millennium Bridge – at the centre of the bridge, looking east



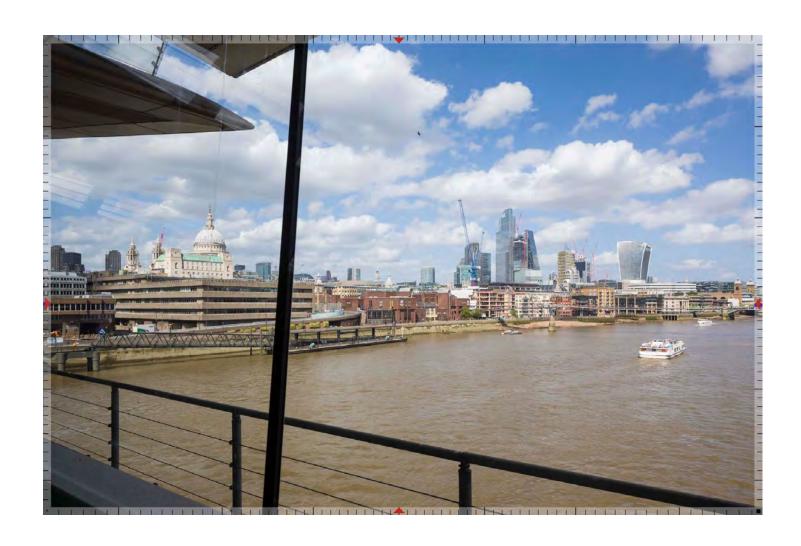
View 23 - Proposed: Millennium Bridge – at the centre of the bridge, looking east



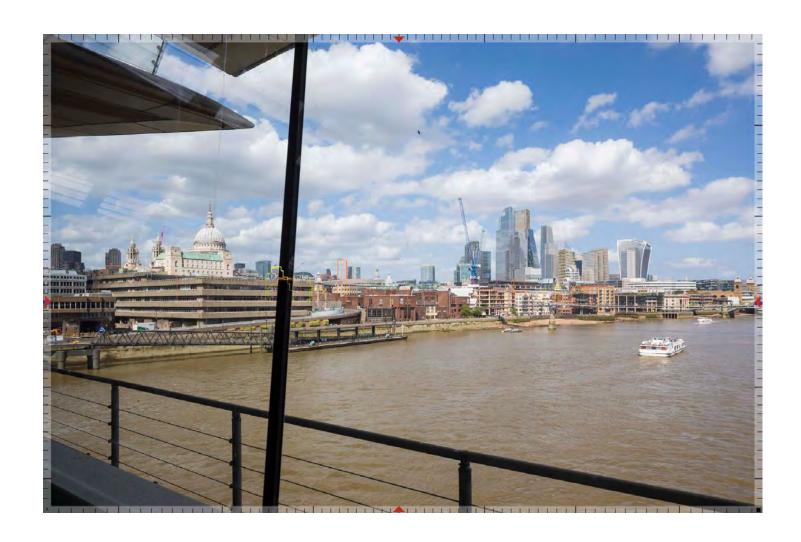
View 23 - Cumulative: Millennium Bridge – at the centre of the bridge, looking east



View 24 - Existing: Blackfriars Station, looking east



View 24 - Proposed: Blackfriars Station, looking east



View 24 - Cumulative: Blackfriars Station, looking east



View 25 - Existing: LVMF 16B.2- The South Bank: Gabriel's Wharf viewing platform, looking north-east



View 25 - Proposed: LVMF 16B.2- The South Bank: Gabriel's Wharf viewing platform, looking north-east



View 25 - Cumulative: LVMF 16B.2- The South Bank: Gabriel's Wharf viewing platform, looking north-east



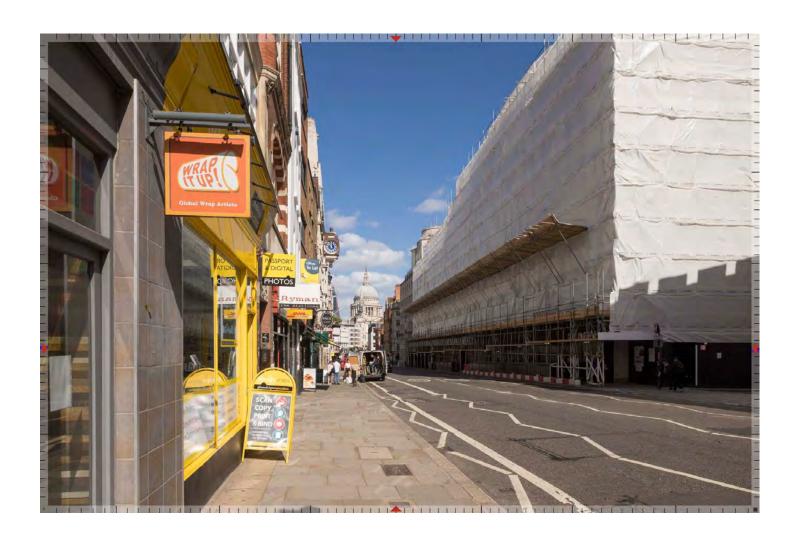
View 26 - Existing: Waterloo Bridge: LVMF 15B.2 – at the centre of the bridge, looking north-east



View 26 - Proposed: Waterloo Bridge: LVMF 15B.2 – at the centre of the bridge, looking north-east



View 26 - Cumulative: Waterloo Bridge: LVMF 15B.2 – at the centre of the bridge, looking north-east



View 27A - Existing: Fleet Street, entrance to Bolt court, looking east



View 27A - Proposed: Fleet Street, entrance to Bolt court, looking east



View 27A - Cumulative: Fleet Street, entrance to Bolt court, looking east



View 27B - Existing: Fleet Street: at junction with Shoe Lane, looking east



View 27B - Proposed: Fleet Street: at junction with Shoe Lane, looking east



View 27B - Cumulative: Fleet Street: at junction with Shoe Lane, looking east



View 27C - Existing: Fleet Street, corner with Poppins Court, looking east



View 27C - Proposed: Fleet Street, corner with Poppins Court, looking east



View 27C - Cumulative: Fleet Street, corner with Poppins Court, looking east



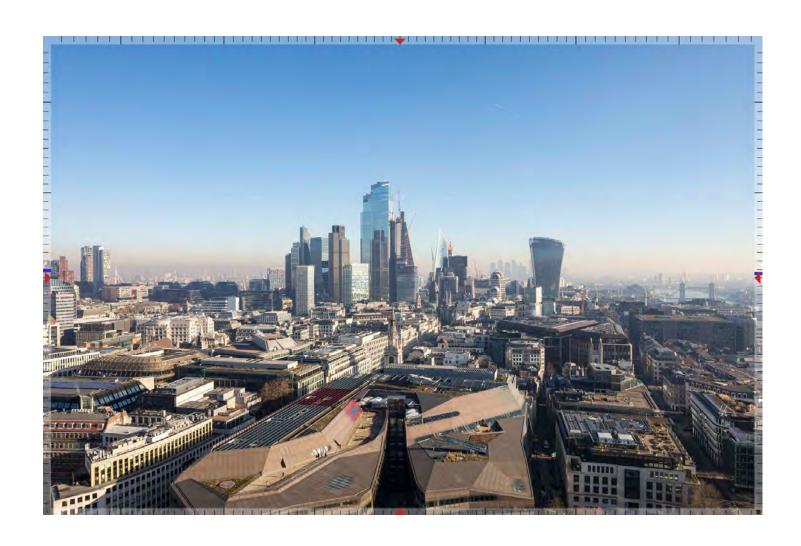
View 28 - Existing: St Paul's Churchyard, corner with Dean's Court, looking east



View 28 - Proposed: St Paul's Churchyard, corner with Dean's Court, looking east



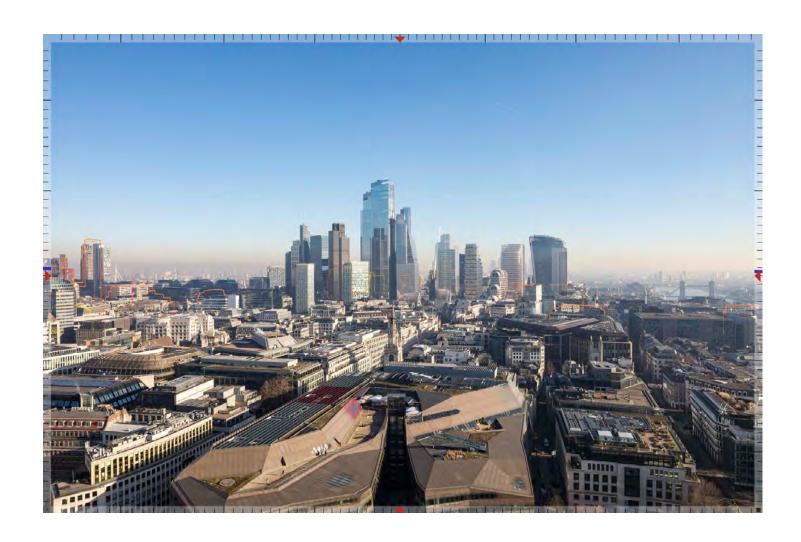
View 28 - Cumulative: St Paul's Churchyard, corner with Dean's Court, looking east



View 29 - Existing: St Paul's Cathedral, Golden Gallery, looking east



View 29 - Proposed: St Paul's Cathedral, Golden Gallery, looking east



View 29 - Cumulative: St Paul's Cathedral, Golden Gallery, looking east



View 30 - Existing: Cheapside, corner with Wood Street, looking south-east



View 30 - Proposed: Cheapside, corner with Wood Street, looking south-east



View 30 - Cumulative: Cheapside, corner with Wood Street, looking south-east



View 31 - Existing: Poultry, in front of the Royal Bank of Scotland, looking south-east



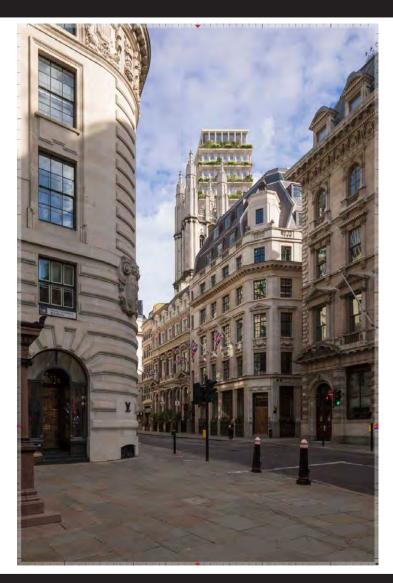
View 31 - Proposed: Poultry, in front of the Royal Bank of Scotland, looking south-east



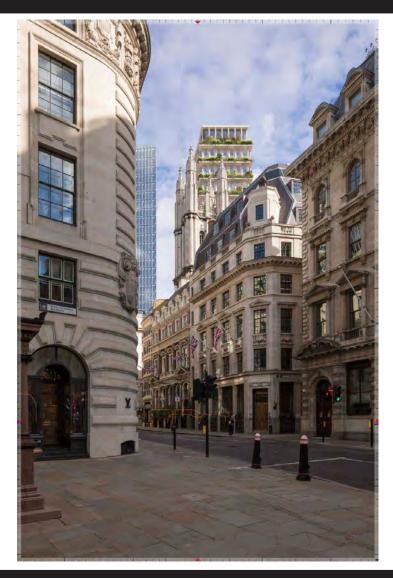
View 31 - Cumulative: Poultry, in front of the Royal Bank of Scotland, looking south-east



View 32 - Existing: Cornhill, junction with Royal Exchange, looking south-east



View 32 - Proposed: Cornhill, junction with Royal Exchange, looking south-east



View 32 - Cumulative: Cornhill, junction with Royal Exchange, looking south-east



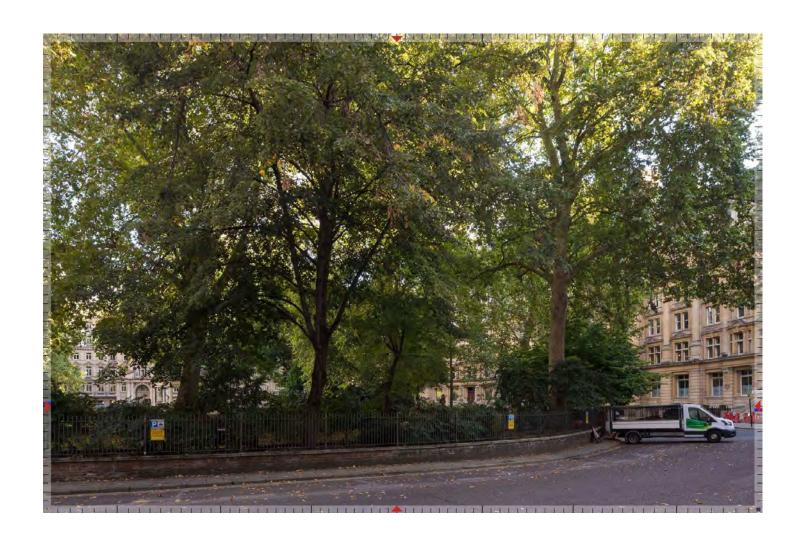
View 33 - Existing: Gresham Street, looking south-east



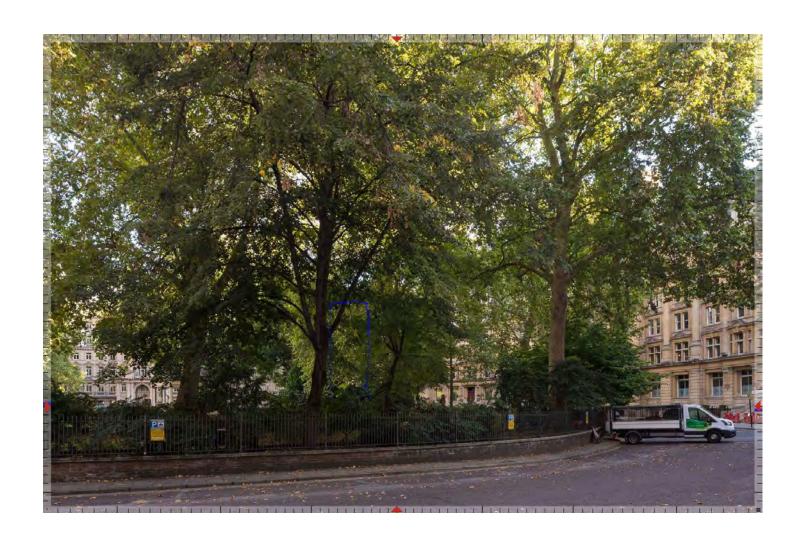
View 33 - Proposed: Gresham Street, looking south-east



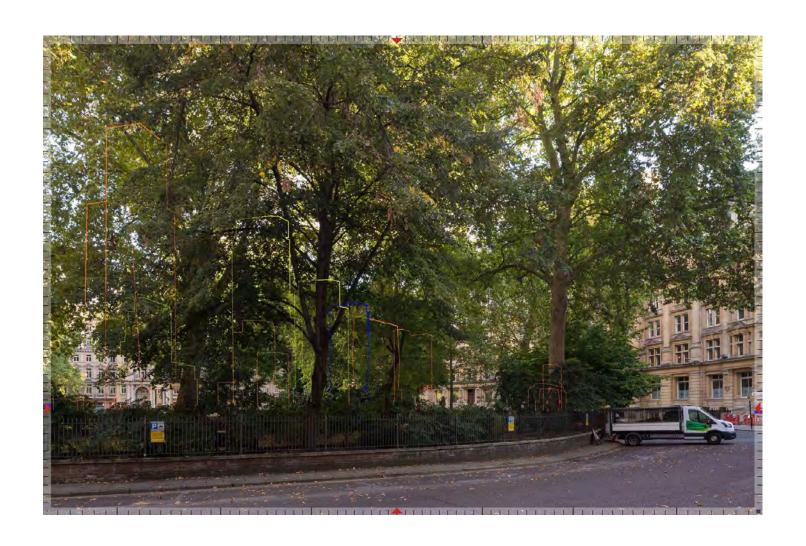
View 33 - Cumulative: Gresham Street, looking south-east



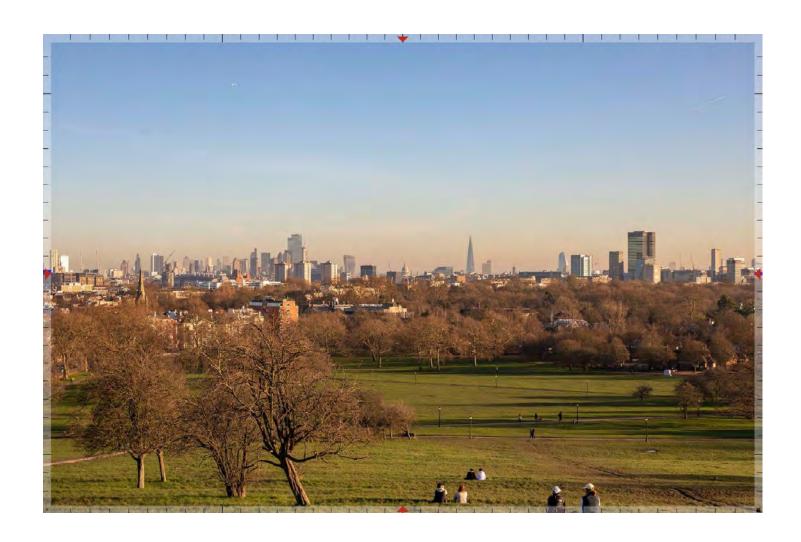
View 34 - Existing: Finsbury Circus, outside Nos. 7-11, looking south-east



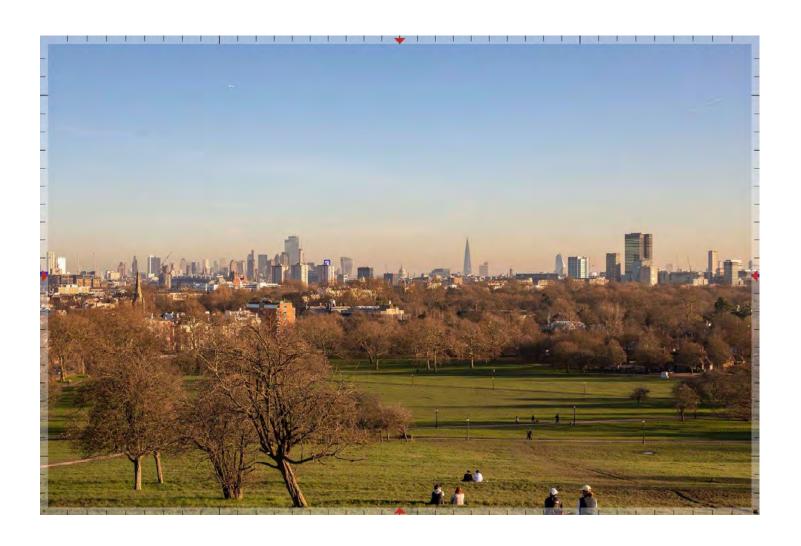
View 34 - Proposed: Finsbury Circus, outside Nos. 7-11, looking south-east



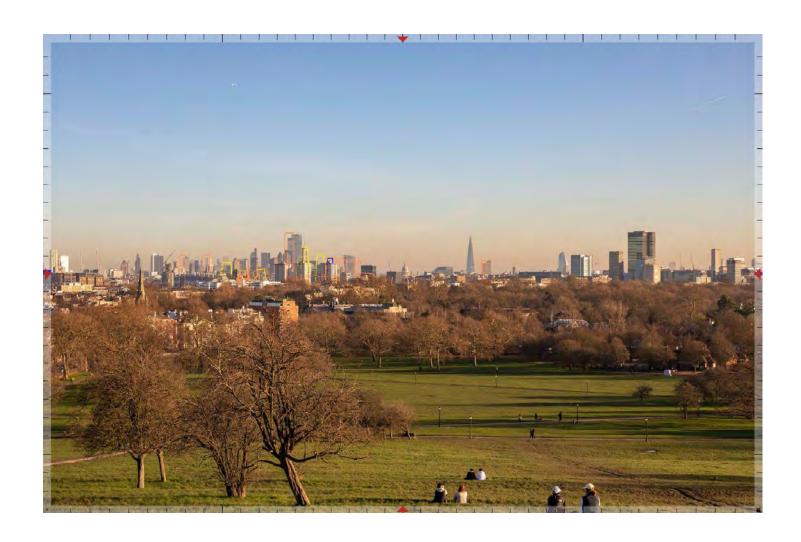
View 34 - Cumulative: Finsbury Circus, outside Nos. 7-11, looking south-east



View 35 - Existing: LVMF 4A.1 – Primrose Hill: the summit – close to the orientation board, looking south-east



View 35 - Proposed: LVMF 4A.1 – Primrose Hill: the summit – close to the orientation board, looking south-east



View 35 - Proposed: LVMF 4A.1 – Primrose Hill: the summit – close to the orientation board, looking south-east



View 36 - Existing: LVMF 2A.1 – Parliament Hill: the summit – close to the orientation board, looking south-east



View 36 - Proposed: LVMF 2A.1 – Parliament Hill: the summit – close to the orientation board, looking south-east



View 36 - Cumulative: LVMF 2A.1 – Parliament Hill: the summit – close to the orientation board, looking south-east



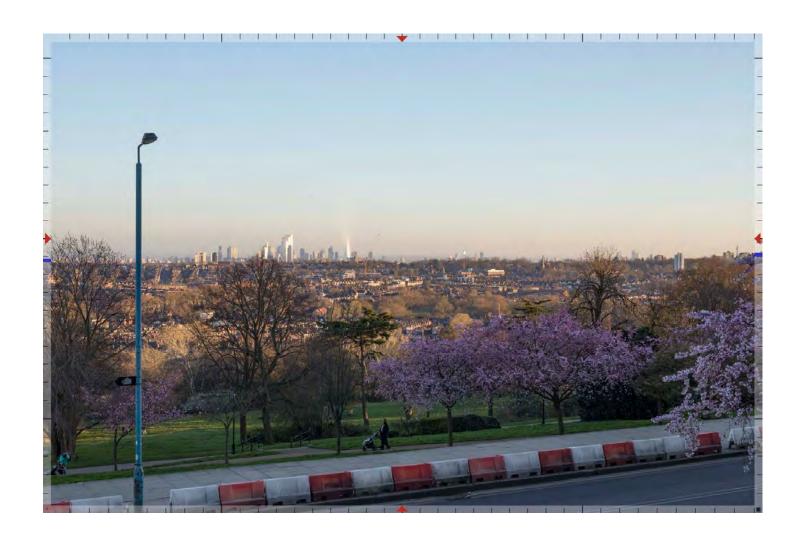
View 37 - Existing: LVMF 3A.1 – Kenwood: the viewing gazebo – in front of the orientation board, looking south



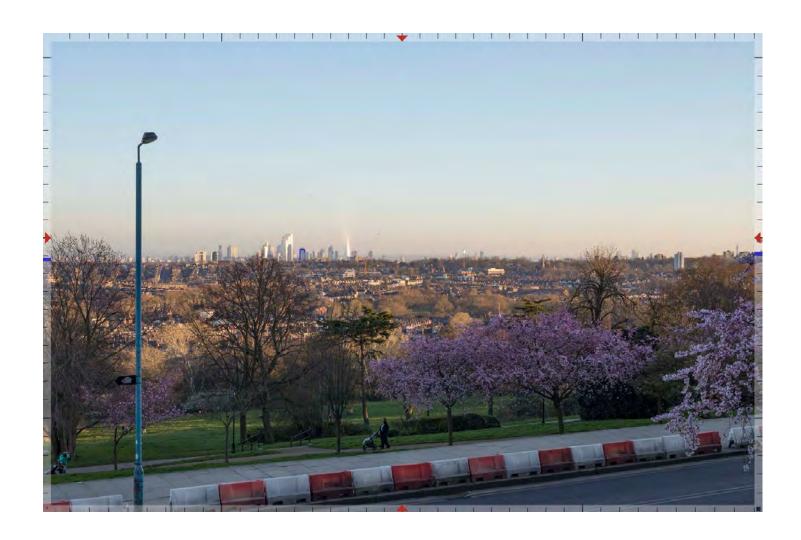
View 37 - Proposed: LVMF 3A.1 – Kenwood: the viewing gazebo – in front of the orientation board, looking south



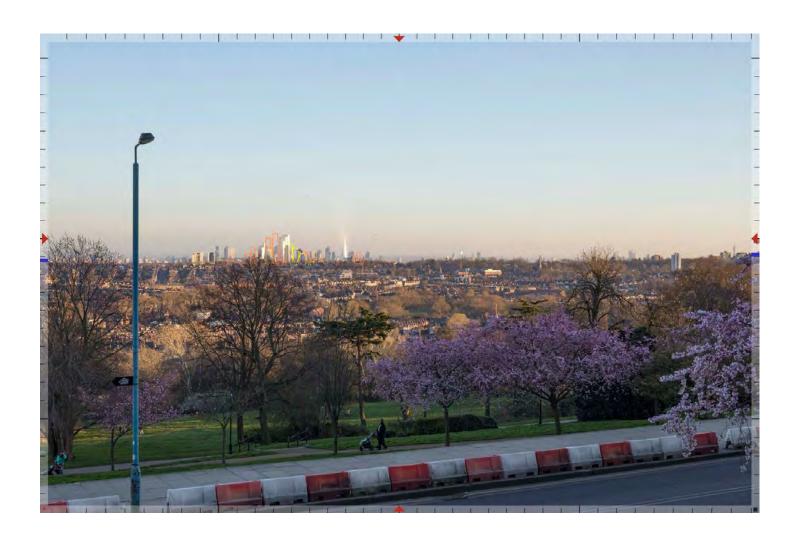
View 37 - Cumulative: LVMF 3A.1 – Kenwood: the viewing gazebo – in front of the orientation board, looking south



View 38 - Existing: LVMF 1A.2 – Alexandra Palace: viewing terrace – approaching from the north, looking south-east



View 38 - Proposed: LVMF 1A.2 – Alexandra Palace: viewing terrace – approaching from the north, looking south-east



View 38 - Cumulative: LVMF 1A.2 – Alexandra Palace: viewing terrace – approaching from the north, looking south-east



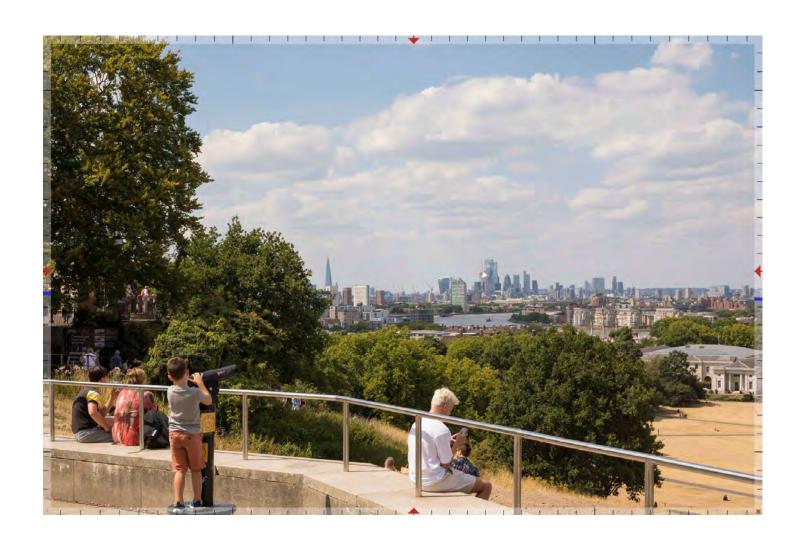
View 39 - Existing: LVMF 6A.1- Blackheath Point – near the orientation board, looking north-west



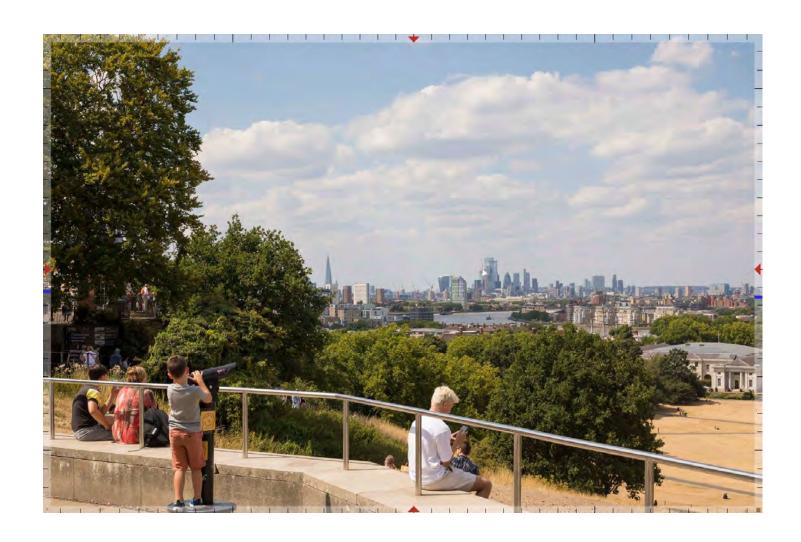
View 39 - Proposed: LVMF 6A.1- Blackheath Point – near the orientation board, looking north-west



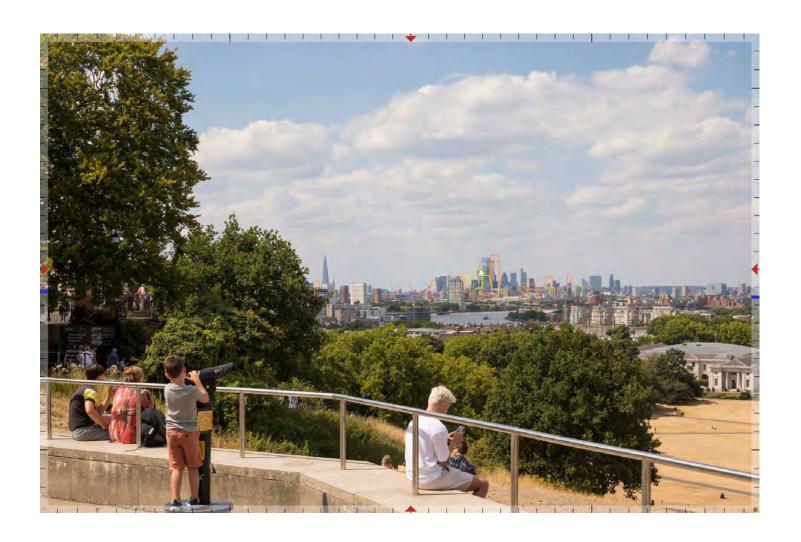
View 39 - Cumulative: LVMF 6A.1- Blackheath Point – near the orientation board, looking north-west



View 40 - Existing: LVMF 5A.2- Greenwich Park: the General Wolfe statue – north -east of the statue, looking northwest

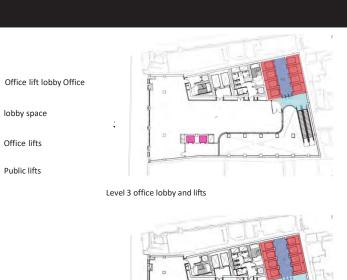


View 40 - Proposed: LVMF 5A.2- Greenwich Park: the General Wolfe statue – north east of the statue, looking northwest

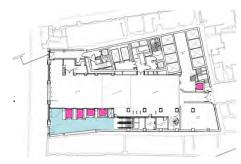


View 40 - Cumulative: LVMF 5A.2- Greenwich Park: the General Wolfe statue – north east of the statue, looking northwest

Key:



Level 2 office lobby and lifts

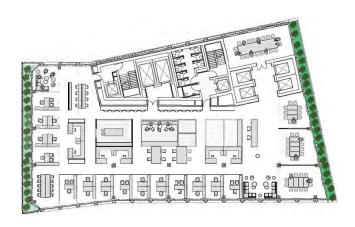


Ground floor office lobby and lifts

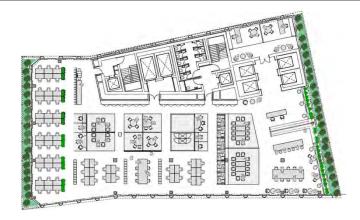


Illustrative view at Level 02 of the main office lobby

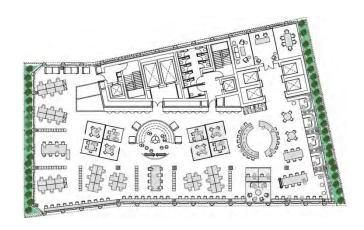
A broad range of occupiers and future uses



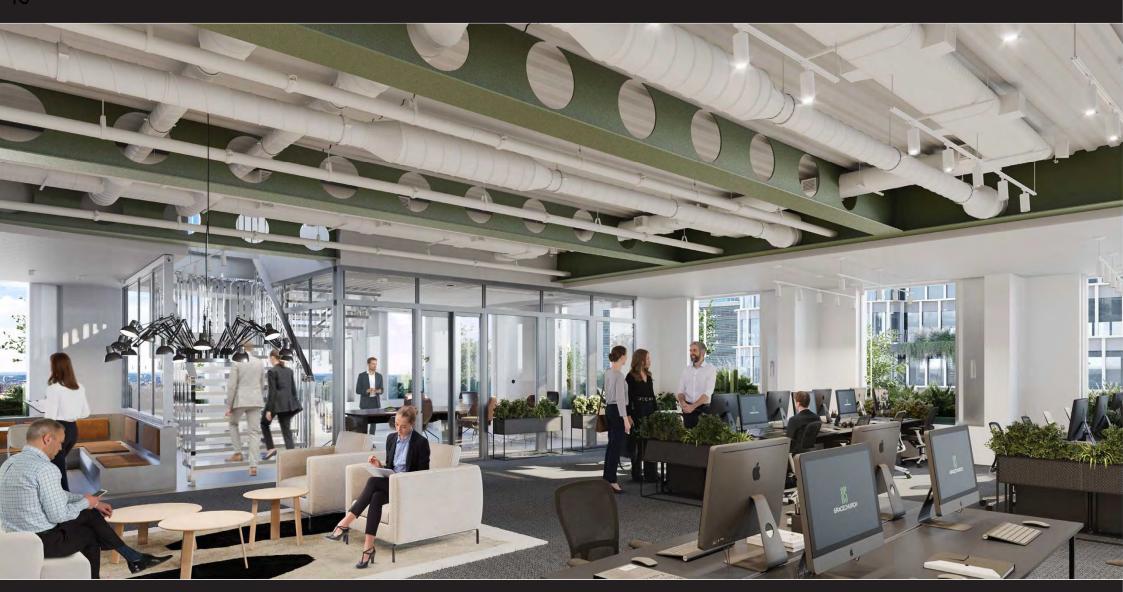
Law firm office fit out



Insurance firm office fit out



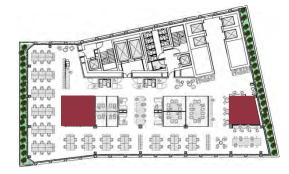
Media or technology firm fit out



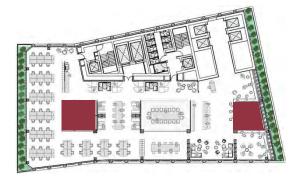
Destination Workspace

Connecting floors for variable lease sizes

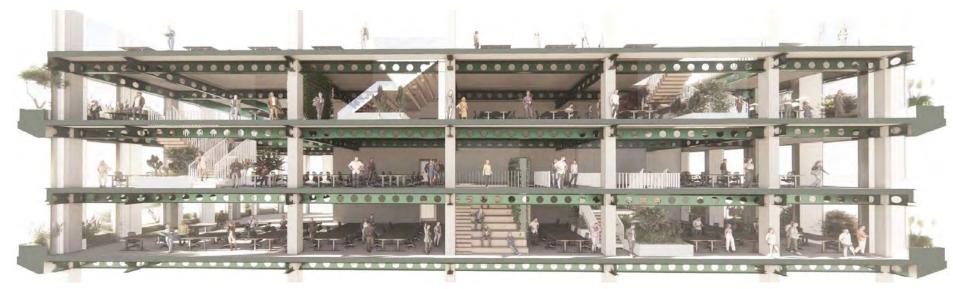
Soft spots to allow for vertical circulation



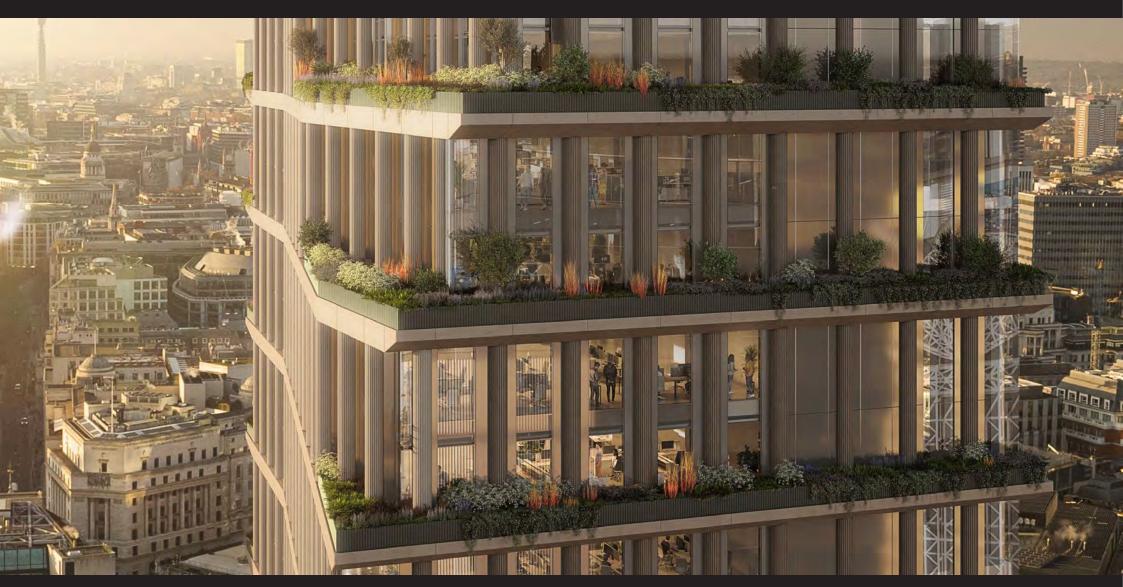
Lower floor



Upper floor



Connected floorplates

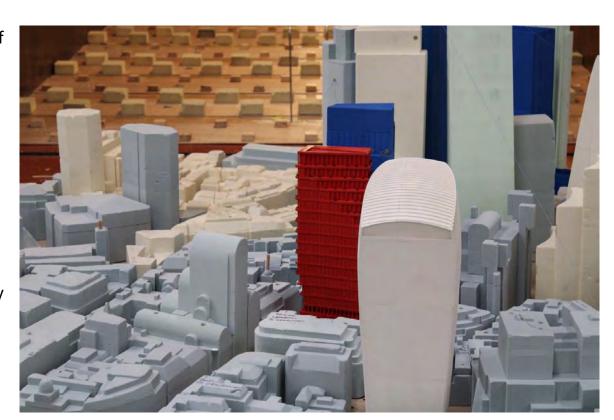


South East Corner Office View

85 Gracechurch

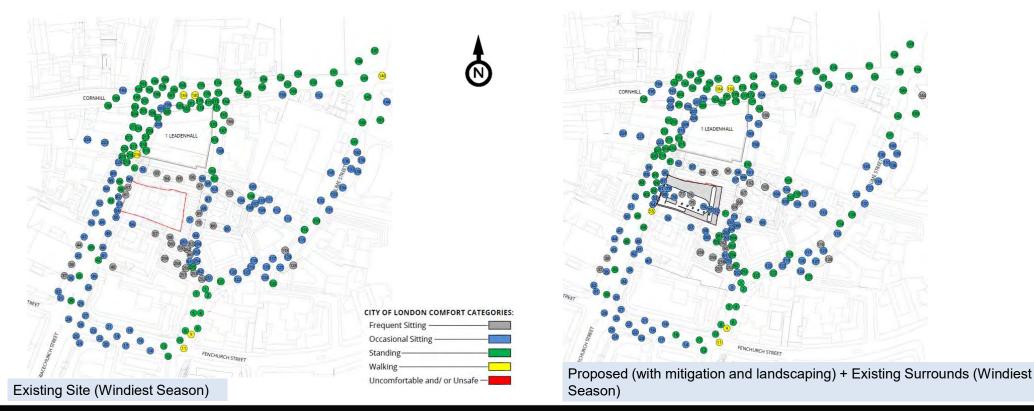
BACKGROUND

- RWDI have undertaken a series of wind tunnel assessments of the wind microclimate around the proposed 85 Gracechurch St project in the City of London.
- Tall buildings will generally increase the windiness in the surrounding public realm, however, as the development would have limited wind impacts on the surrounding environment, acceptable conditions can be achieved through considered development and retention of existing and proposed small scale wind mitigation measures.
- In the case of 85 Gracechurch St, extensive wind tunnel testing has been carried out to optimise the building massing to minimise the need for mitigation, and to develop necessary wind mitigation measures to ensure that wind conditions acceptable for the intended pedestrian activities.



EXISTING AND PROPOSED

- Wind conditions were compared against the criteria set out in the Wind Microclimate Guidelines for Developments in the City of London and the baseline (existing) scenario.
- Initial assessment in the absence of developed landscaping and wind mitigation, the Proposed Development would increase the windiness within Leadenhall Market, however, with the developed wind mitigation and proposed landscaping in place wind conditions on the surrounding streets would remain similar to those at the existing Site and suitable for thoroughfare and entrance use during the windiest season.



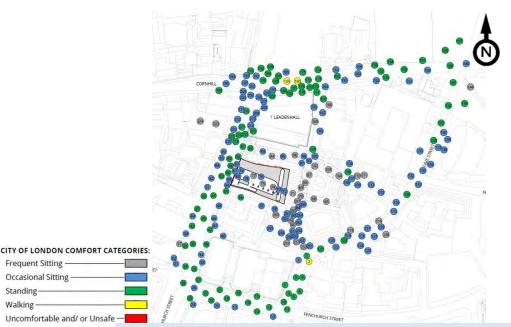
Wind Microclimate

Cumulative Surrounds

- Consented cumulative schemes within 400m radius of the site were assessed in the wind tunnel model.
- With the proposed landscaping in place, in the context of the cumulative surrounds, the majority of the areas at and around the Proposed Development would be suitable for intended use throughout the year.
- However, there would be isolated areas within Leadenhall Market and Lime Street Passage where wind conditions would be one category
 windier than suitable for spill-out seating use during the summer season.
- If café seating is identified within the areas with windier conditions, inclusion of developed wind mitigation measures would be expected to provide localised shelter to these areas.



3D Model of the Cumulative Scenario Assessed (View From the South)



Proposed (with landscaping) + Cumulative Surrounds(Windiest Season)

CONFIGURATION 3: PROPOSED DEVELOPMENT WITH CUMULATIVE SURROUNDING BUILDINGS



When the cumulative schemes are in place, the wind conditions at the Proposed Development would be suitable for the intended use, with the majority of off-Site wind conditions similar to or calmer than Configuration 2.

It should be noted that during the summer season the café seating with occasional sitting on Lime Street (location 119) would be one category windier than in Configuration 1. However, the frequent sitting conditions in the adjacent seating area (location 118) would be one category calmer than Configuration 1. On balance, wind conditions in this area would therefore be considered similar to the baseline conditions.

The 70 Gracechurch St cumulative development to the south of the Site at the junction of Fenchurch St and Gracechurch St would shelter the area east of Fenchurch Street to the east. This would reduce windiness at the junction of Fenchurch Street and Lime Street (location 11) below the threshold of the safety criteria.



Figure 13: View from the south of the Proposed Development with cumulative surrounding buildings in the wind tunnel

WIND MITIGATION

- The locations of spill-out seating provisions along Lime Street Passage and in Leadenhall Market are not fixed.
- Recent Site visits (as shown in figures below) indicate minimal seating within the Lime Street Passage and Leadenhall Market and the quantity and the position of any spill out seating is highly variable.
- Although a majority of Lime Street Passage is not currently used for spill-out seating, this area has been assessed on the basis it could be, representing the 'worst case' and aspirational scenario.
- The café partition screens ("cloth barriers") in place to demark the seating areas of existing retail units have been modelled in the Wind Tunnel assessment. These would provide localised shelter when the winds blow through these spaces.



Current Uses of Bulls Head Passage + Lime Street Passage



Current Uses of Leadenhall Market+ Lime Street Passage



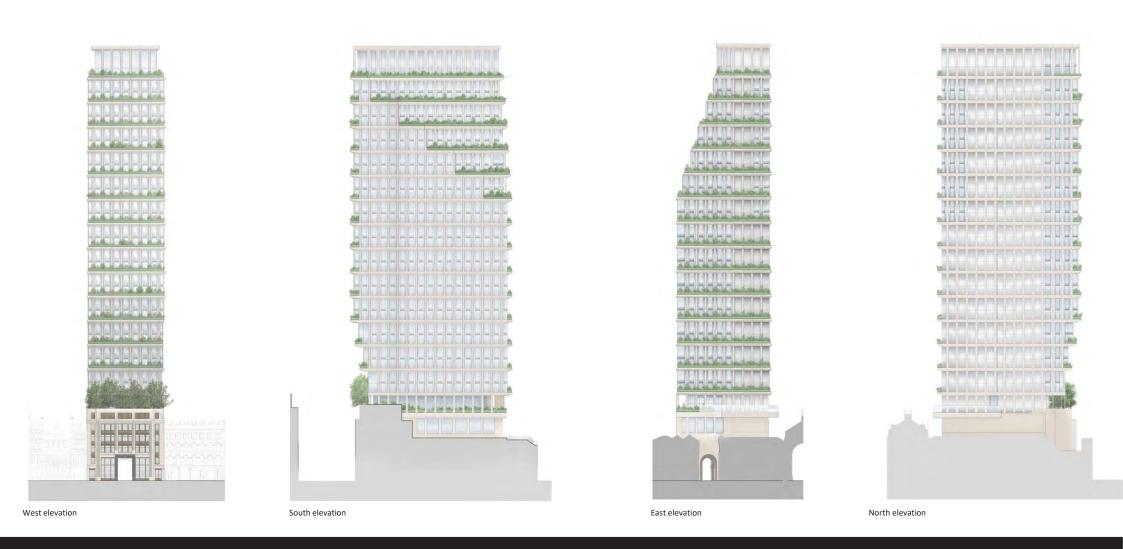


Existing partition screens within Leadenhall Market and Lime Street Passage

Wind Microclimate



Facade - Materiality and Key Features



Facade - Elevations

The proposed facades are comprised of a 1.5m unitised panel system spanning from floor to floor with areas of highly transparent vision glazing, insulation clad in low-carbon aluminium panels, and openable ventilation panels.

The unitised facade is articulated with a doubleheight order of horizontal GRC masonry elements formed in 3m wide panels, interspersed with vertical masonry elements at 3m centres.

The unitised facade system includes a discreetly designed air intake slot between panels at floor level. On the west and east facades, the horizontal masonry elements extend beyond the glass facade to incorporate metal planters. The uppermost facades of the building are expressed as a three-storey high volume to form a 'crown' at the top of the building.

Key

Aluminium Panel GRC Column Planters Clear Glazing Shadow Box







Illustrative view south facade

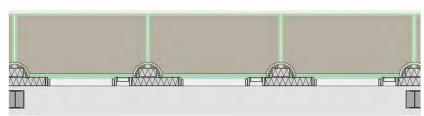


Illustrative view north facade



West elevation





Typical plan through west facade



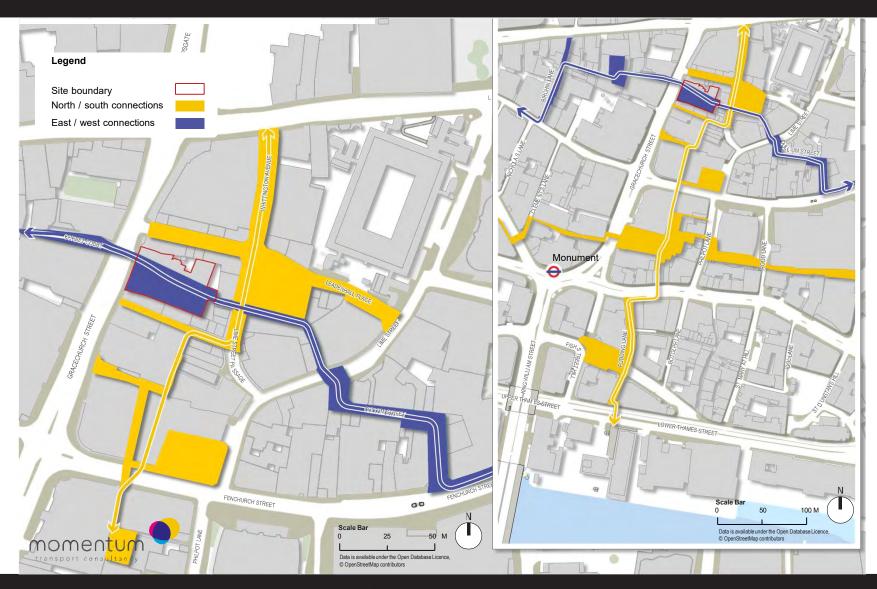
Illustrative view of west facade



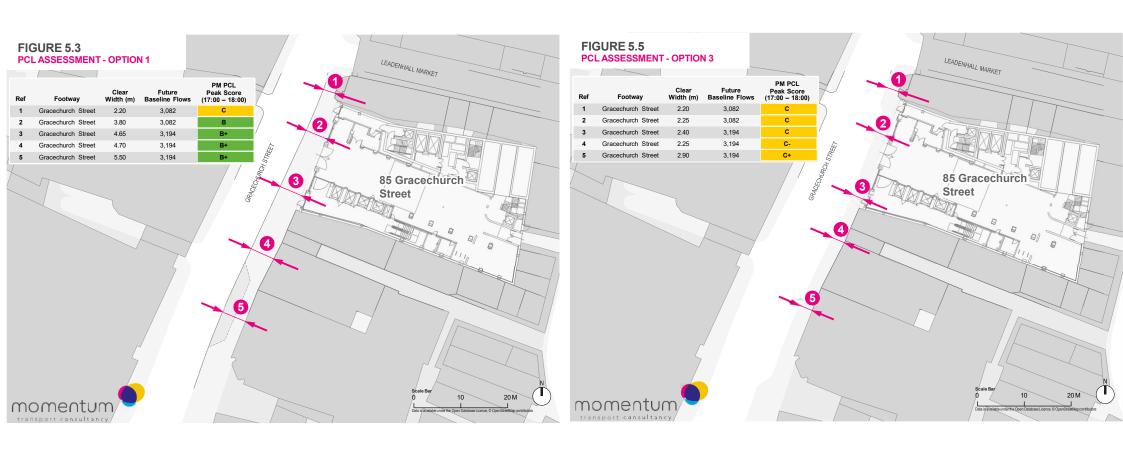
South East Corner Views



The Public Hall



Pedestrian Connectivity



Public cycle parking provision is very limited in this area of the $\mbox{\sc City}.$

The scheme provides 123 short stay cycle storage spaces for public visitors to the building and Leadenhall Market.

The scheme provides 118 spaces in a proposed automated cycle stacking machine, accessed from the ground floor hall level, and 5 accessible Sheffield stands.



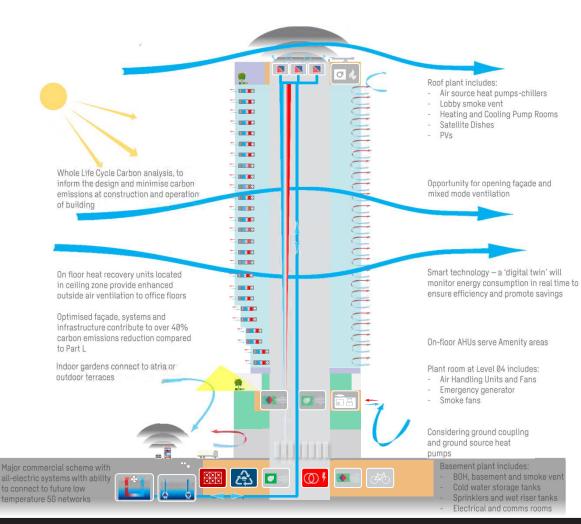
Public cycle parking (https://activethings.app/home)

Short Stay Cycle Parking

A scheme considering carbon from day one

- The scheme is all-electric with zero site emissions thanks to heat pump technology with low global warming potential.
- Highly insulated facade with reduced glazing to minimize overheating and allow mixed mode ventilation.
 - Low energy heating and cooling systems to reduce carbon emissions in use $% \left\{ 1,2,\ldots ,n\right\}$
 - Whole Life Carbon and Upfront Embodied Carbon ratings fully aligned with 'Aspirational, LETI 'C' targets for "good design"
 - Rainwater and grey water harvesting to reduce water consumption
- Target BREEAM 'Outstanding' under the 2018 scheme Greenfield run-off rates achieved via blue roofs and rainwater attenuation systems.
- Noise and wind mitigation through design and urban greening





Sustainability Overview

85 Gracechurch Street



BUILDING FACADE

- · Improved fabric efficiency
- Facade optimisation
- Low Embodied Carbon
- Sustainable sourcing materials
- Circular economy
- · Mixed mode operation with opening

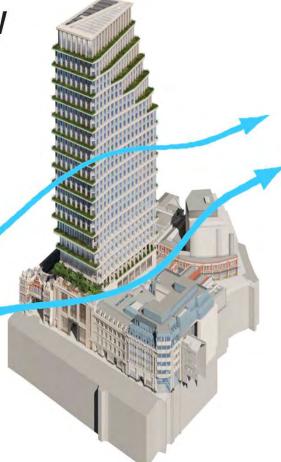


windows/vents



STREETSCAPE ENGAGEMENT

- Opportunity to unlocking the true transformational potential around Leadenhall Market
- İmproved streetscape
- · Promote cycling and walking
- Improved air quality
- Reduced urban heat island effect



PL2013: Lean: 16% Overall: 42%

PL2021: Lean: 9% Overall: 17%



PASSIVE DESIGN

- · High performance optimised façade
- · Façade openings alongside to drive natural ventilation
- Self shading façade to mitigate excess solar gains
- Mitigating overheating for thermal comfort



URBAN GREENING

- · Increased Biodiversity to help with mitigating noise and pollution from surroundings
- · Enhance biodiversity and create outdoor amenity areas on terraces and facade
- · Biophilic design to improve occupant wellbeing
- Green roofs/exercise space
- Green Market Hall Atrium

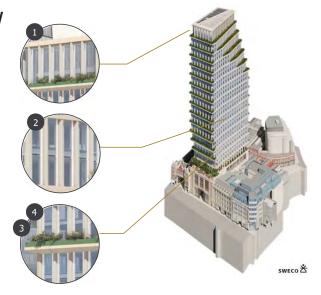


Sustainability Overview 85 Gracechurch Street



FAÇADE OPTIMISATION

- 1 Shadow box
- 2 Optimised glazing ratios for each orientation
- 3 Horizontal overhangs to provide shade
- 4 Planters to provide shade
- 5 Low g-value to manage excess solar gains
- 6 High performing thermal performance



Optimised Façade

Fabric Performance: Target U-Values

Performance of opaque thermal elements exceed Passive House Standard.

Parameter		Part L2A 2021 Limiting Value (W/m².K)	LETI (W/m².K)	Passive House (W/m².K)	85 Gracechurch (W/m².K)
U-values	Wall	0.26	0.12 - 0.15	0.15	0.15
	Roof	0.18	0.10 - 0.12	0,15	0.12
	Floor	0.18	0.10 - 0.12	0.15	0.12
	Curtain wall	1.6	1.0 (Triple glazing)	0.80 (Triple glazing)	1.2
Glazing U-value		1.6	1.2 (Double glazing)	o.co (Triple glazing)	1.2
Glazing %		N/A	25-45%	N/A	29%



Urban greening diagram



Visible urban greening across the scheme



Lower terraces - Level 6 to 12 - Rosa canina

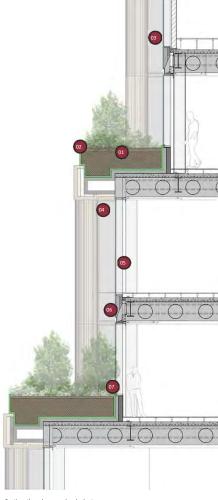


Upper terraces – Level 22 to 33 – Elaeagnus \times submacrophylla



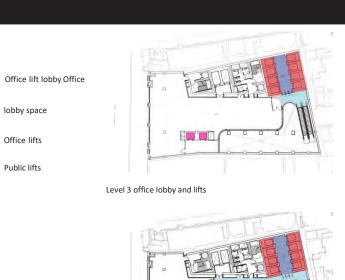
Planting and planter studies



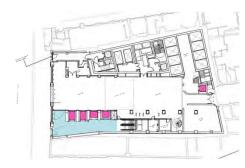


Section though upper level planters

Key:



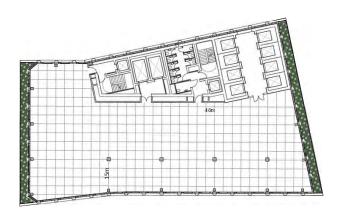
Level 2 office lobby and lifts



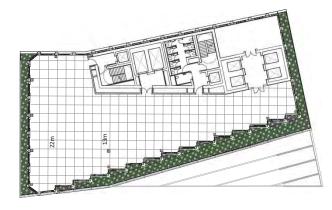
Ground floor office lobby and lifts



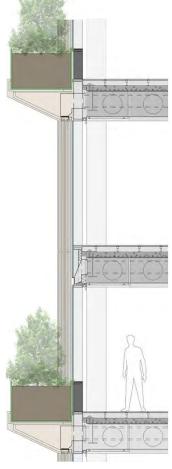
Illustrative view at Level 02 of the main office lobby



Typical Low group office floor plan (17th Floor)



Typical High group office floor plan (31st Floor)



Illustrative 1:20 Section through west facade



Illustrative internal office views



South East Corner Office View



South East Corner Views



The Public Hall

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