



**65 Crutched Friars, London, EC3N 2ES**

**Planning Applications Sub-Committee**

21 February 2023

# 65 Crutched Friars, London, EC3N 2ES



Site Location Plan

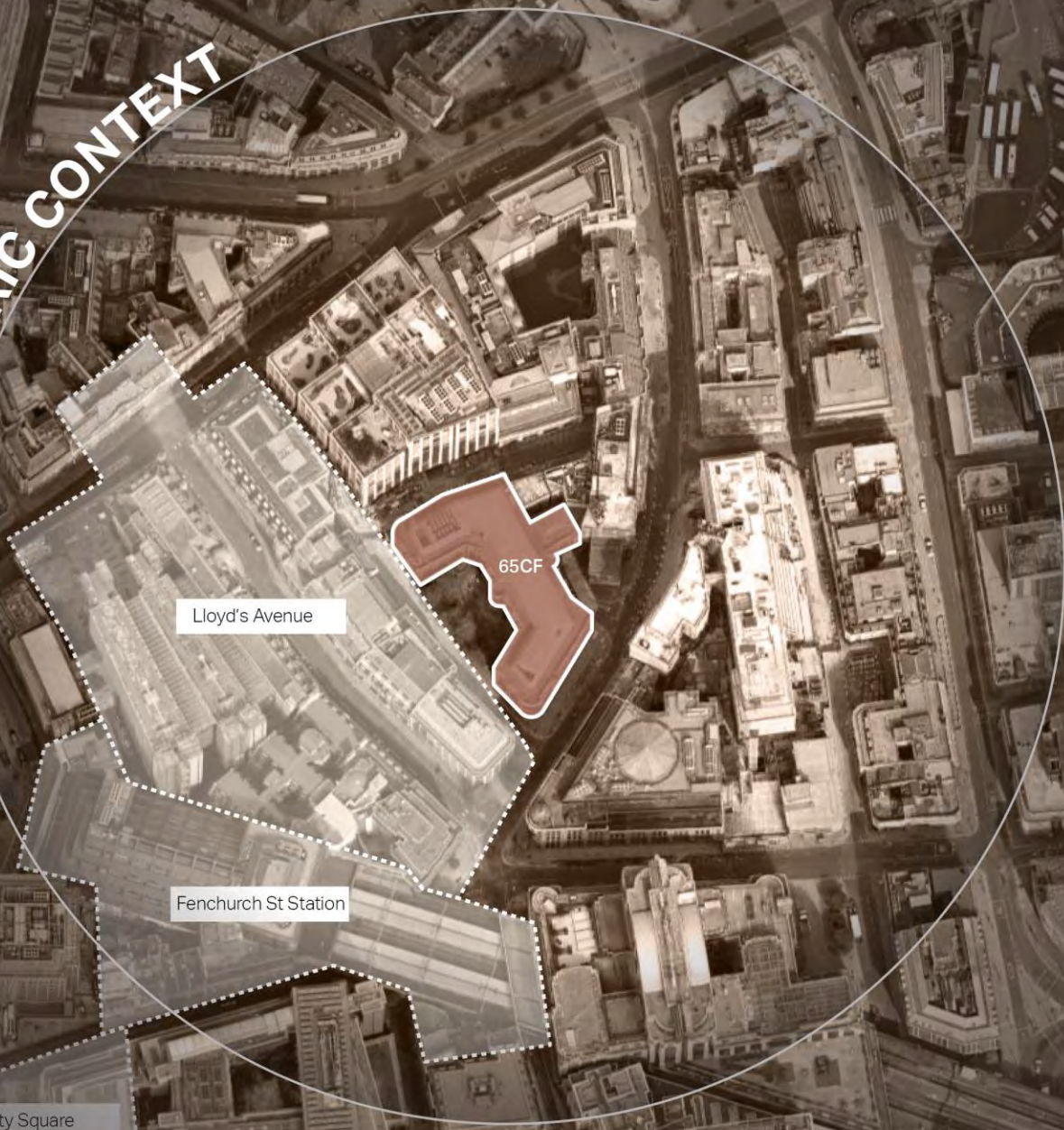




Context plan of the tower cluster and historic context



HISTORIC CONTEXT



Lloyd's Avenue

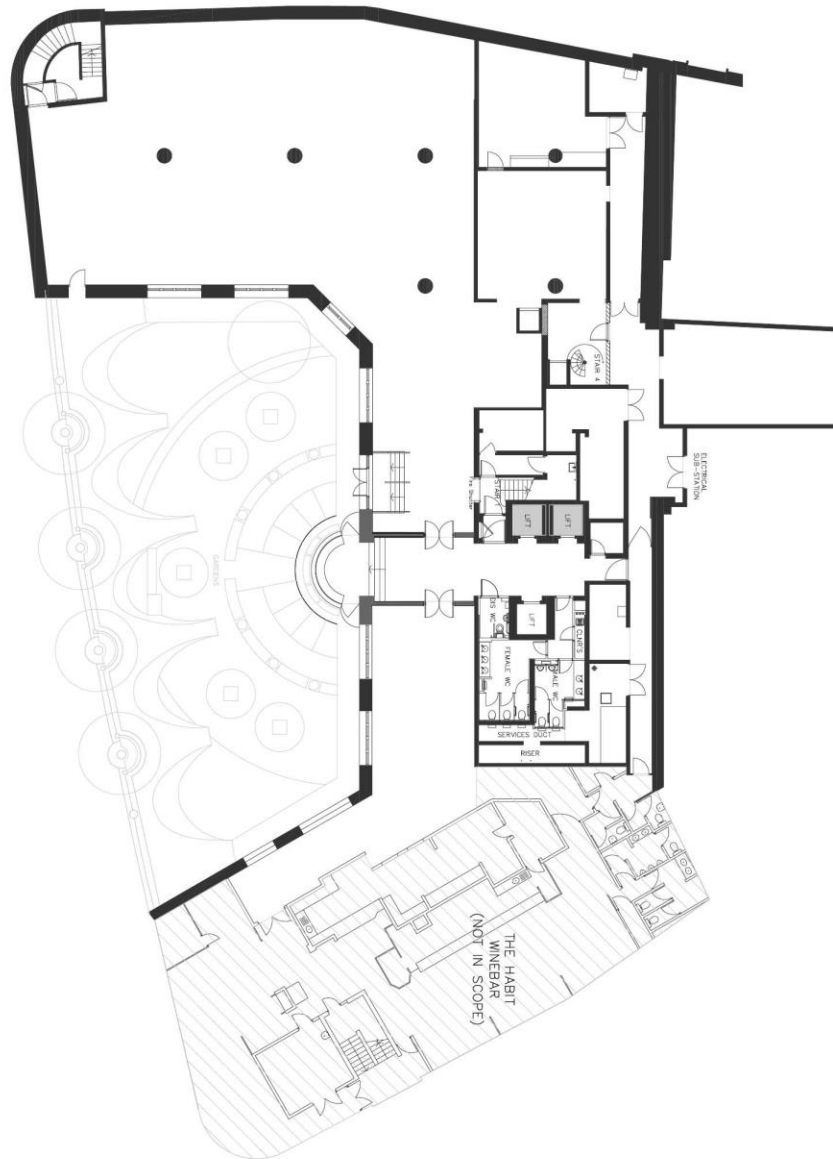
65CF

Fenchurch St Station

Trinity Square

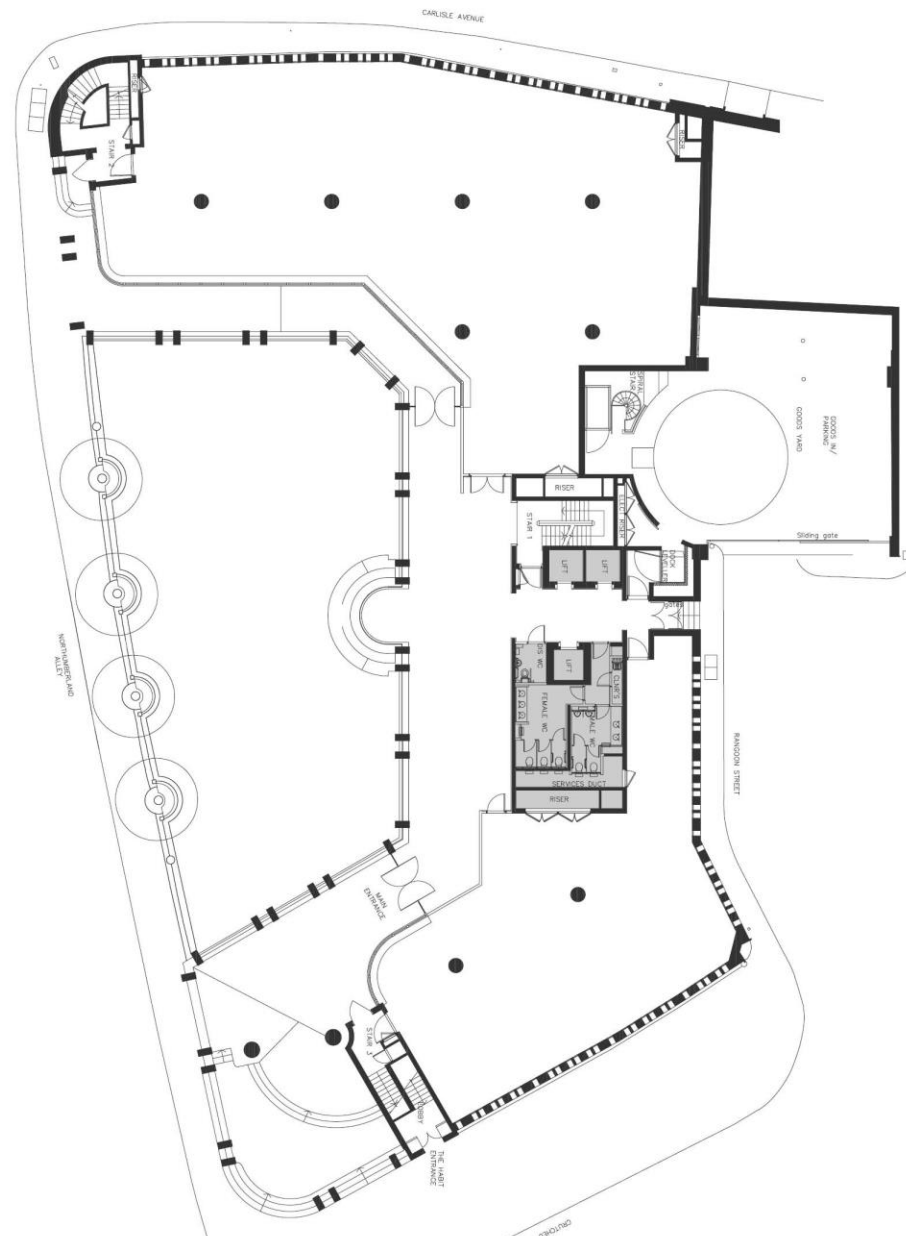
Local historic context





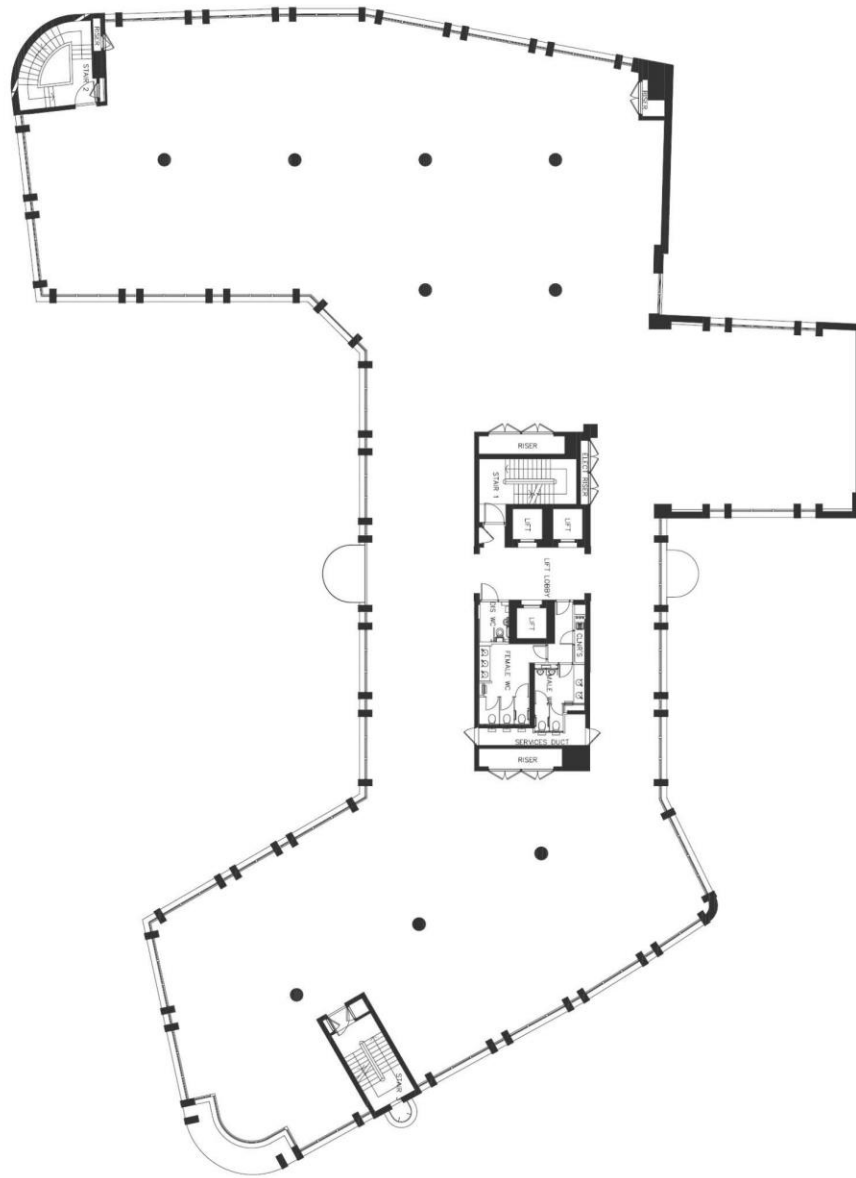
Existing: Lower Ground / Basement Floor Plan





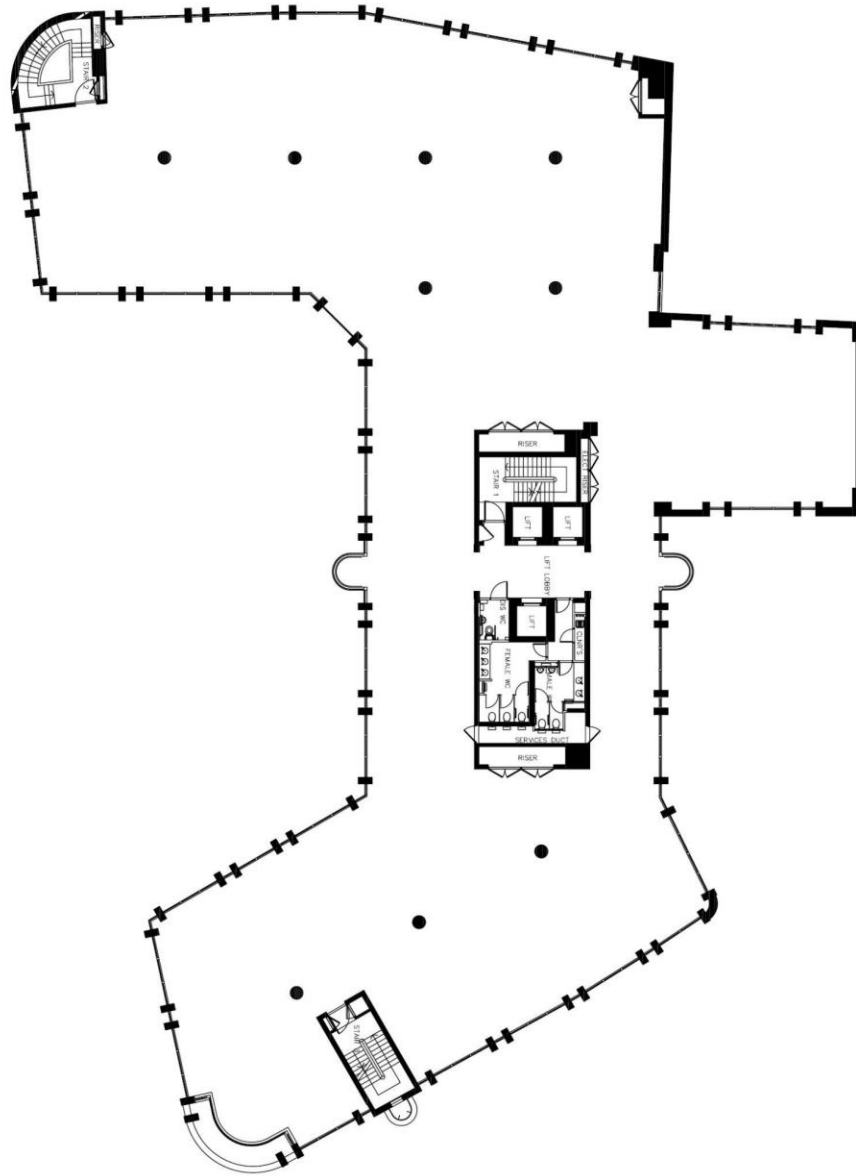
## Existing: Ground Floor Plan



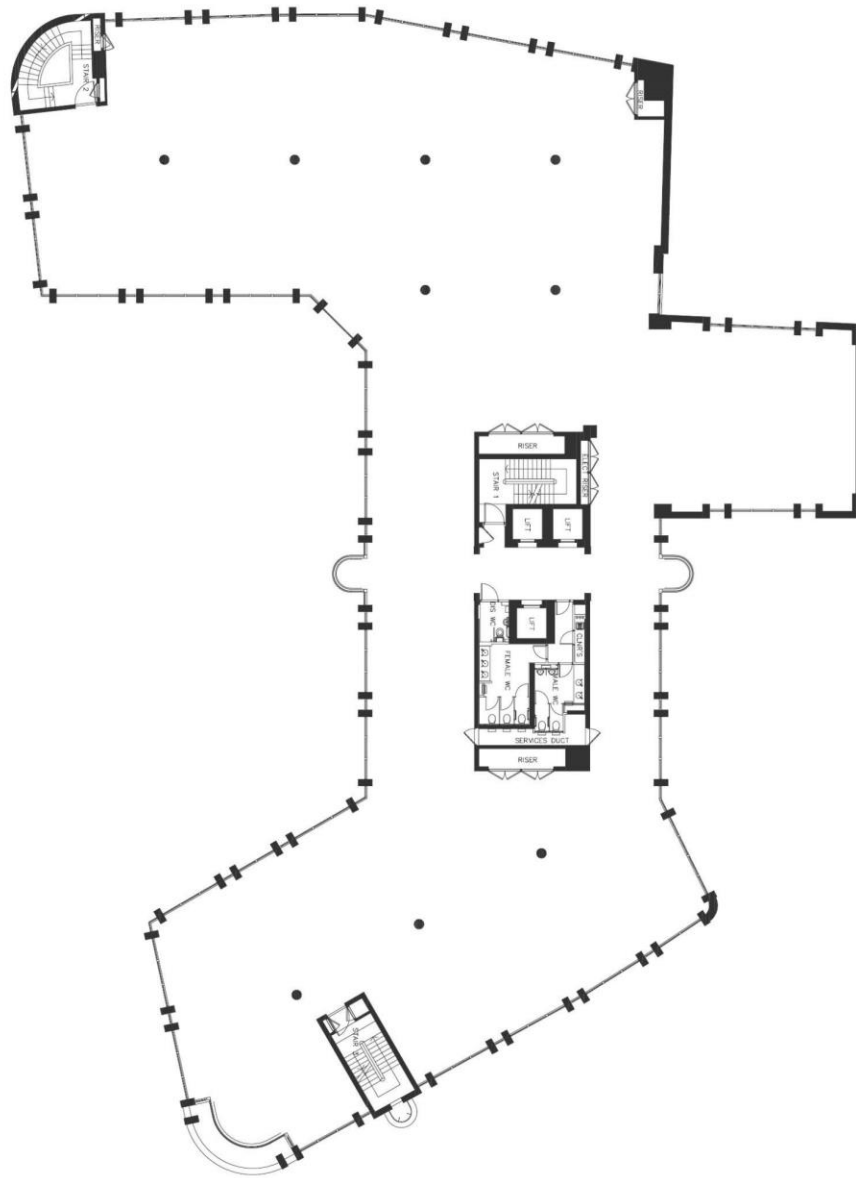


Existing: Level 01 Plan



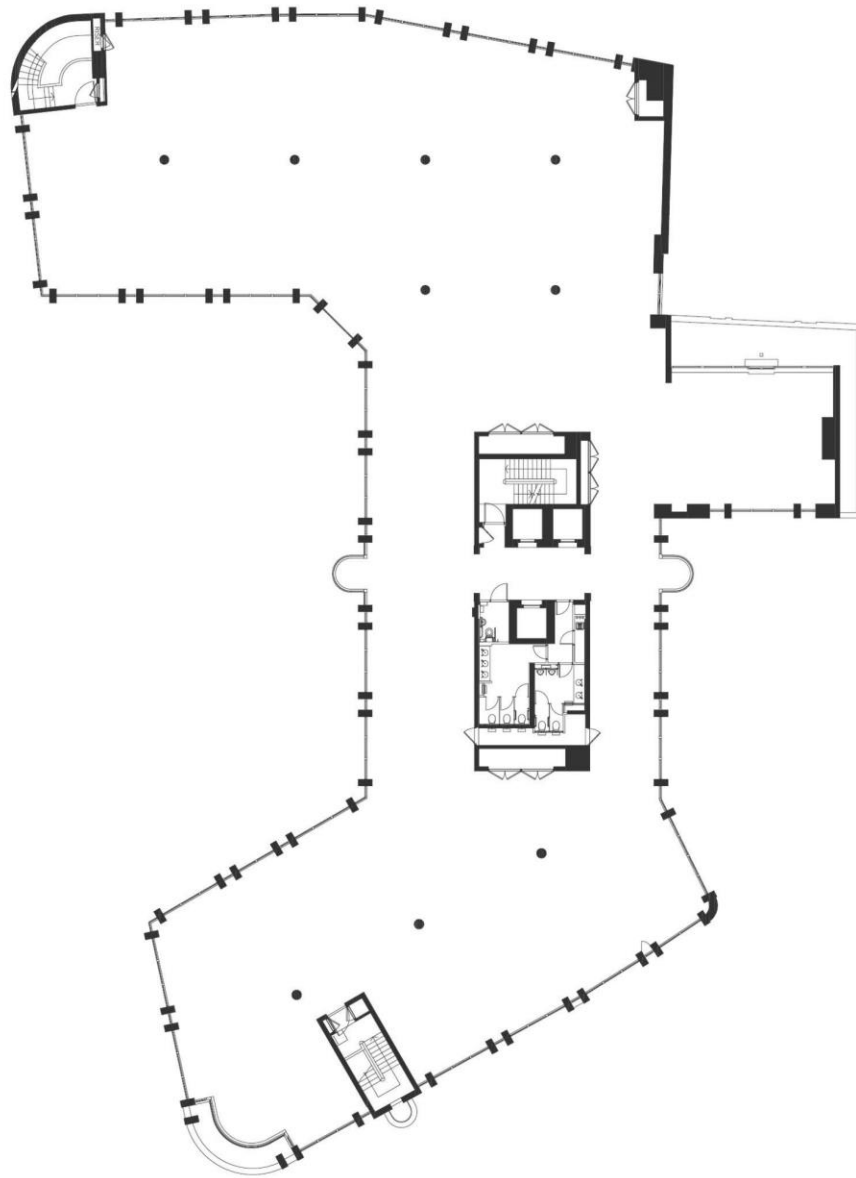


Existing: Level 02 Plan

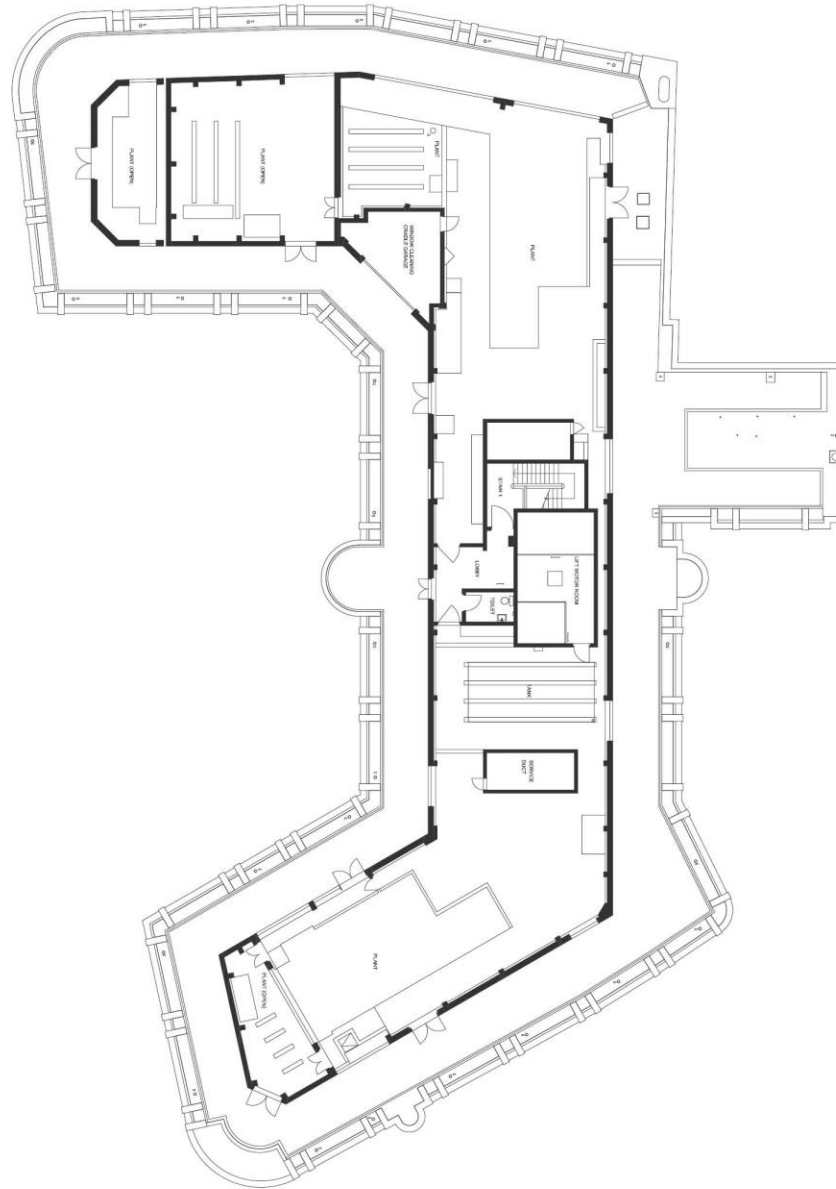


Existing: Level 03 Plan





Existing: Level 04 Plan



Existing: Roof Plan





Existing: Photo of Rangoon Street



Existing: Photo of Rangoon Street and Crutched Friars





Existing: Photo of Crutched Friars and Northumberland Alley facing East





Existing: Photo from Northumberland Alley towards sunken courtyard





Existing: Photo of Carlisle Avenue and Northumberland Alley



Existing: Photo of Carlisle Avenue facing West





Existing: Photo of Sunken courtyard adjacent to Northumberland Alley

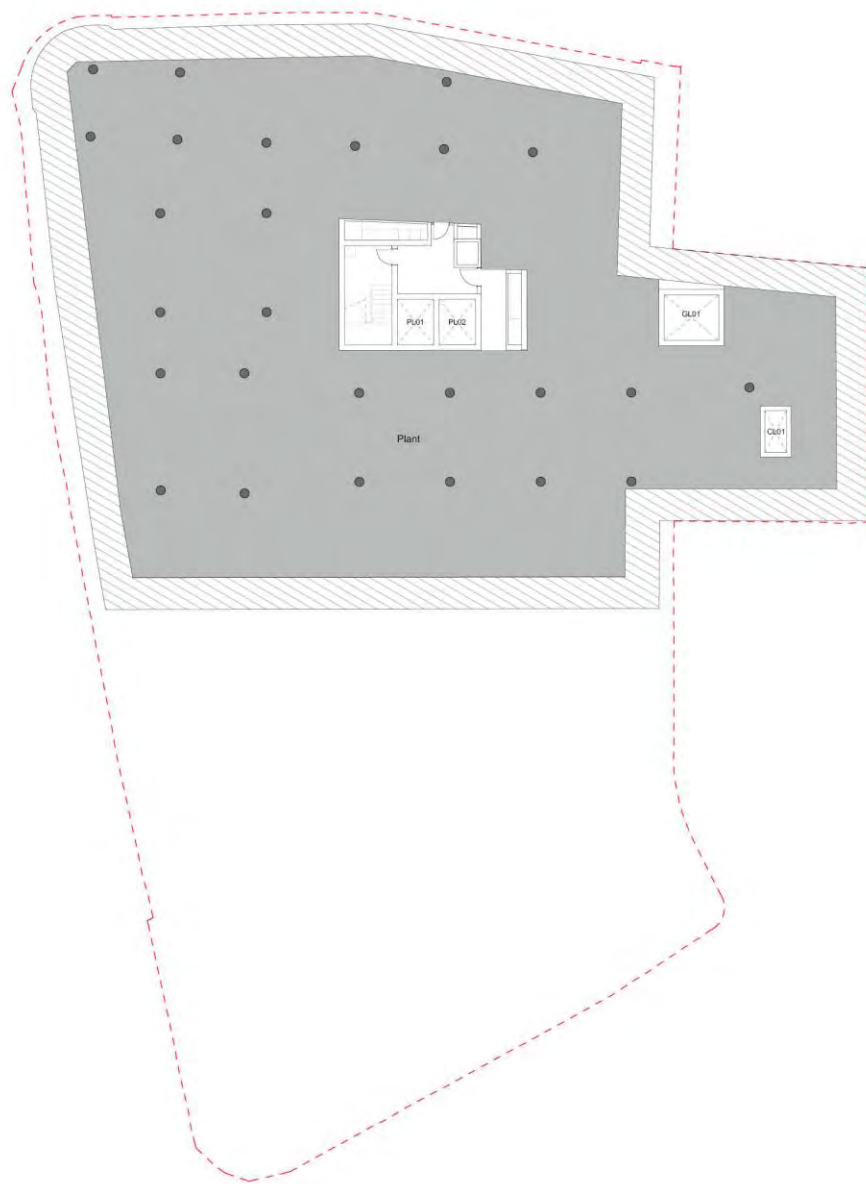




Existing: Photo of typical office interior

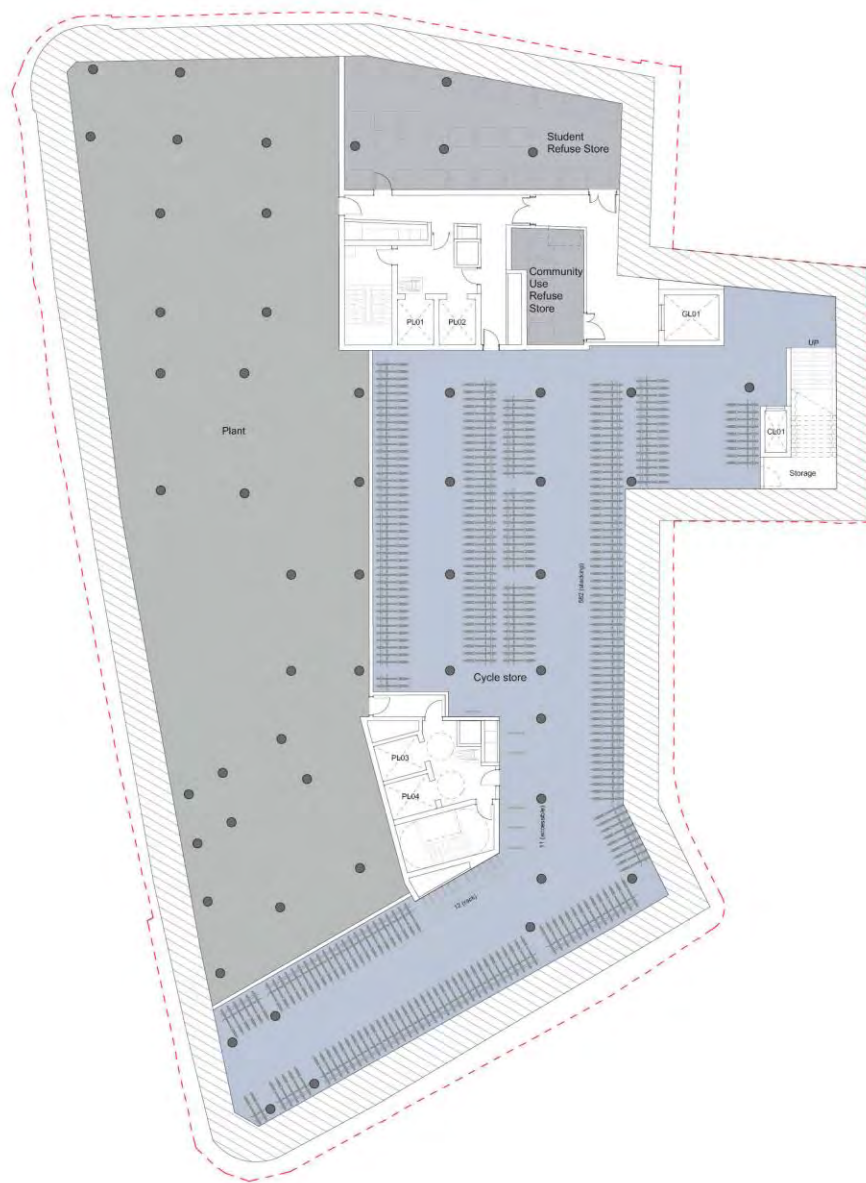


Existing: Photo of typical office interior

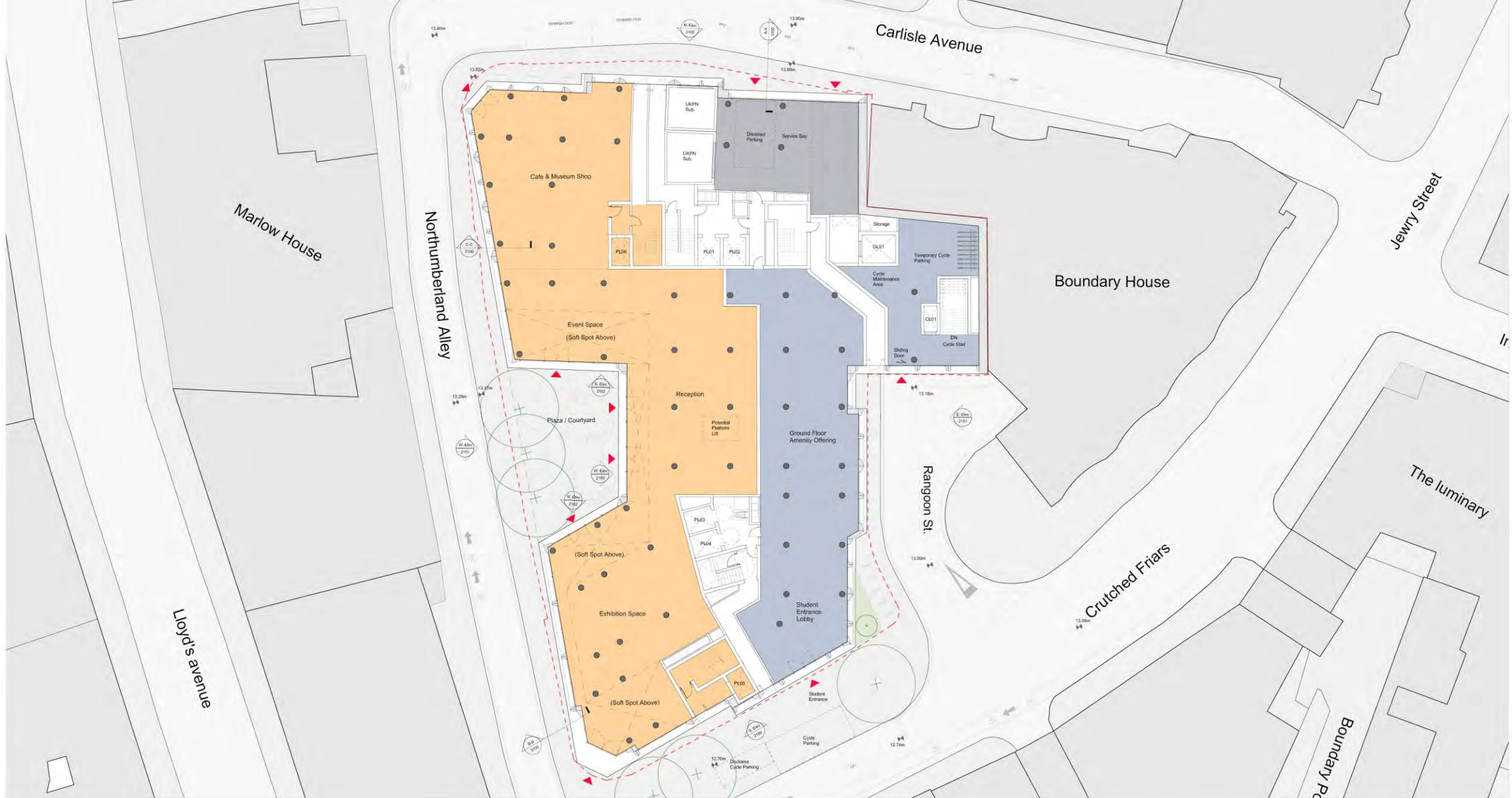


Proposal: Basement 2 Plan





Proposal: Basement 1 Plan



Proposal: Ground Floor Plan





Proposal: Level 01 Plan

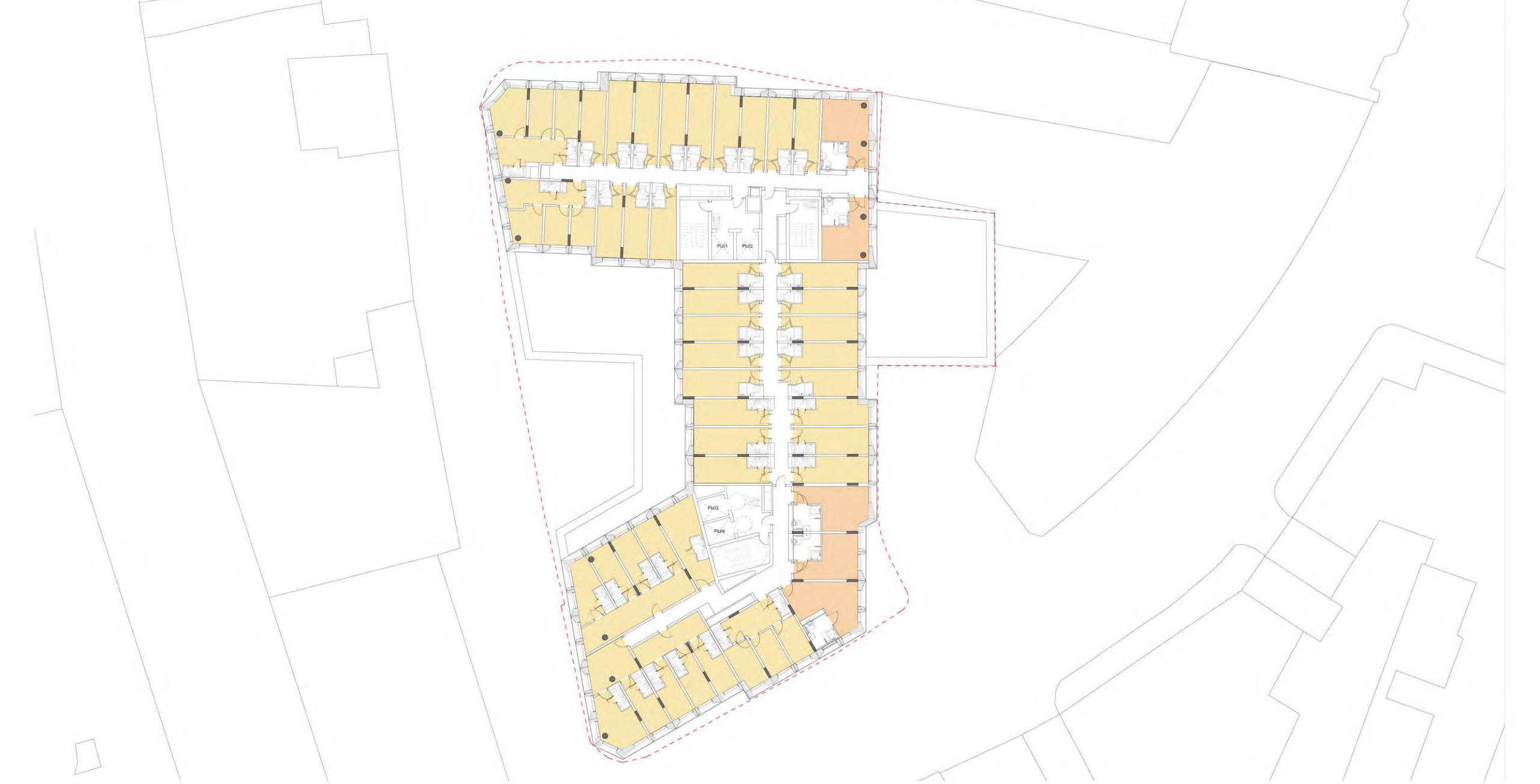


Proposal: Level 02 Plan



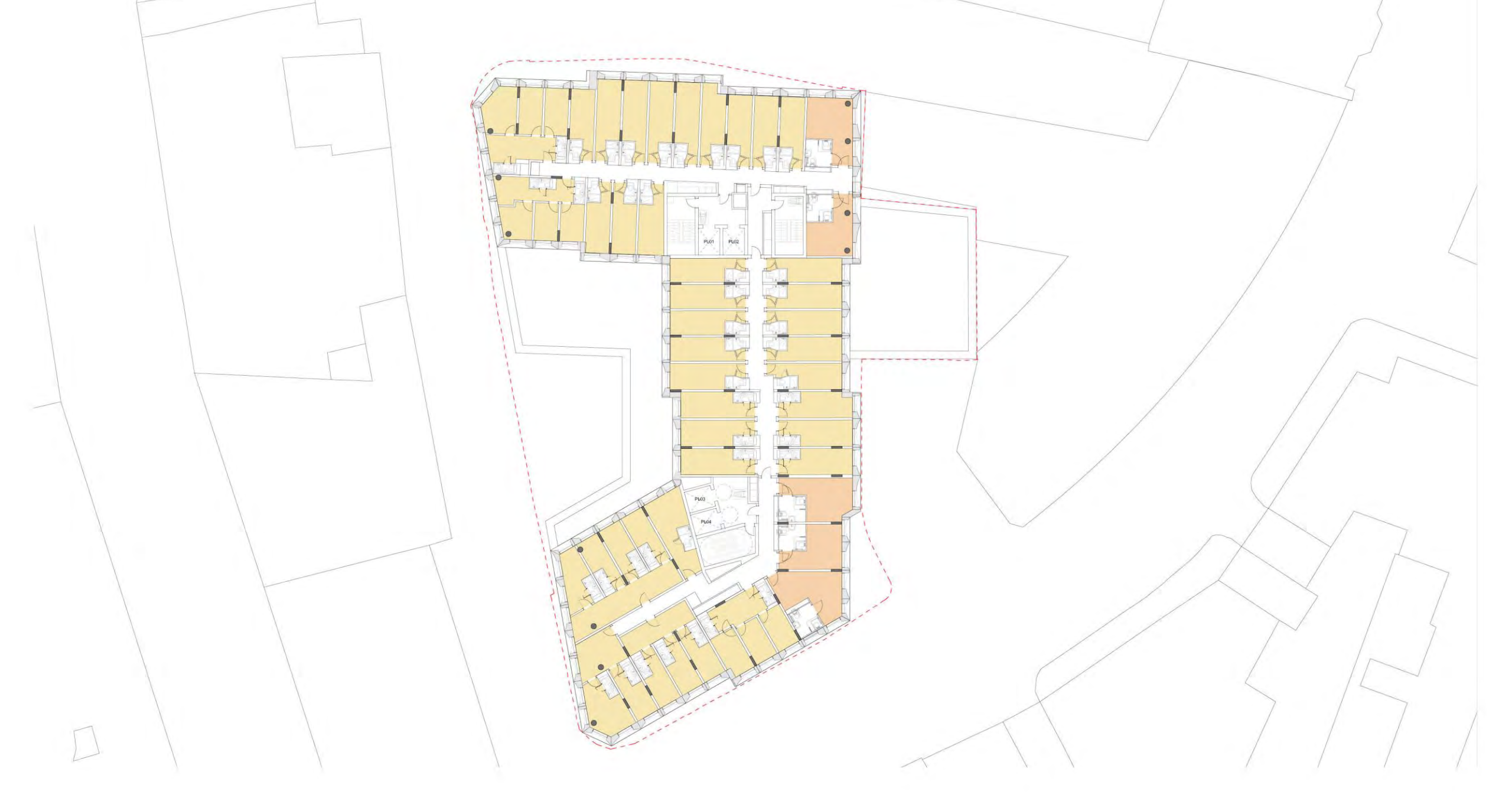


Proposal: Level 03 Plan

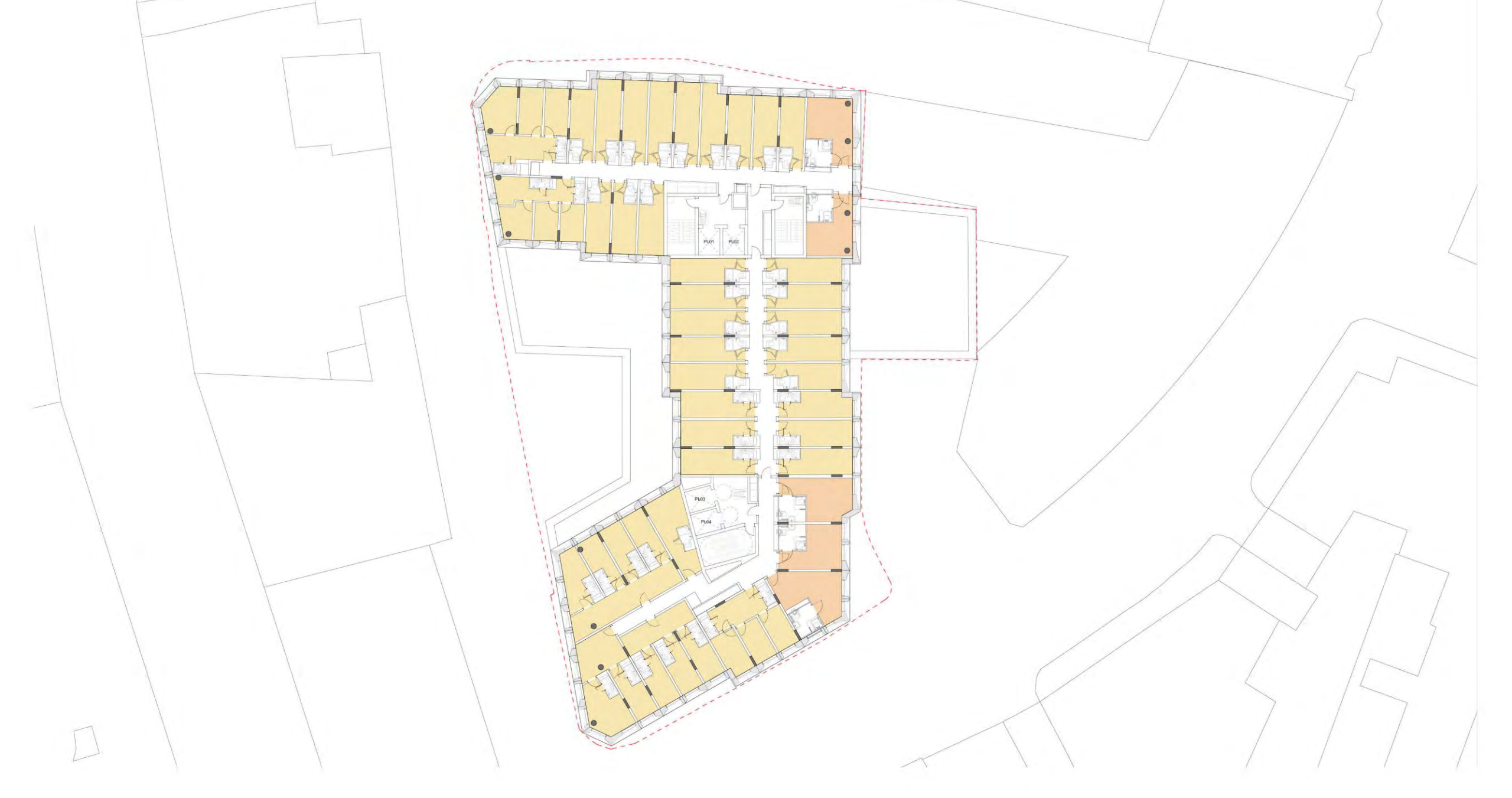


Proposal: Level 04 Plan



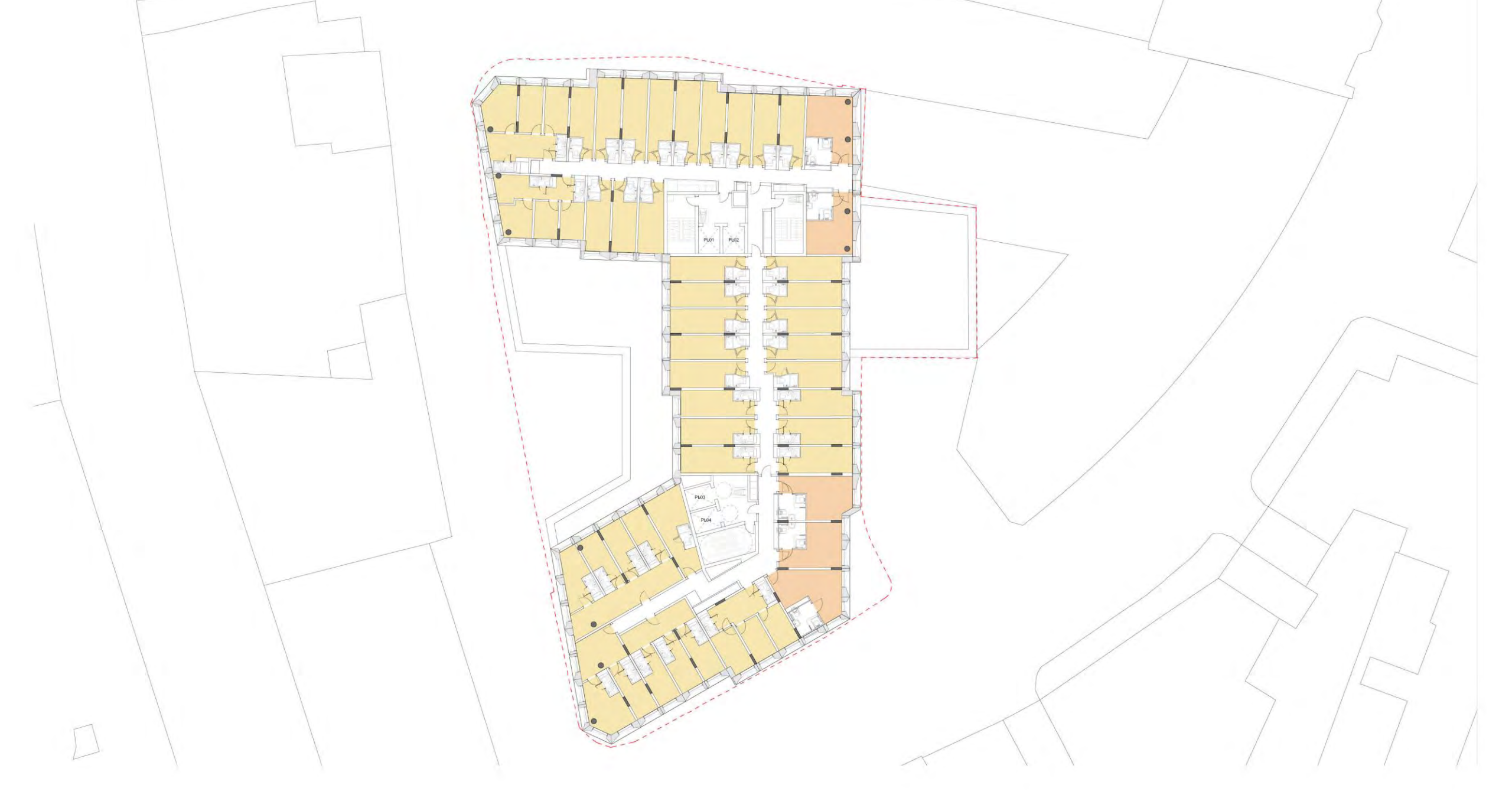


Proposal: Level 05 Plan

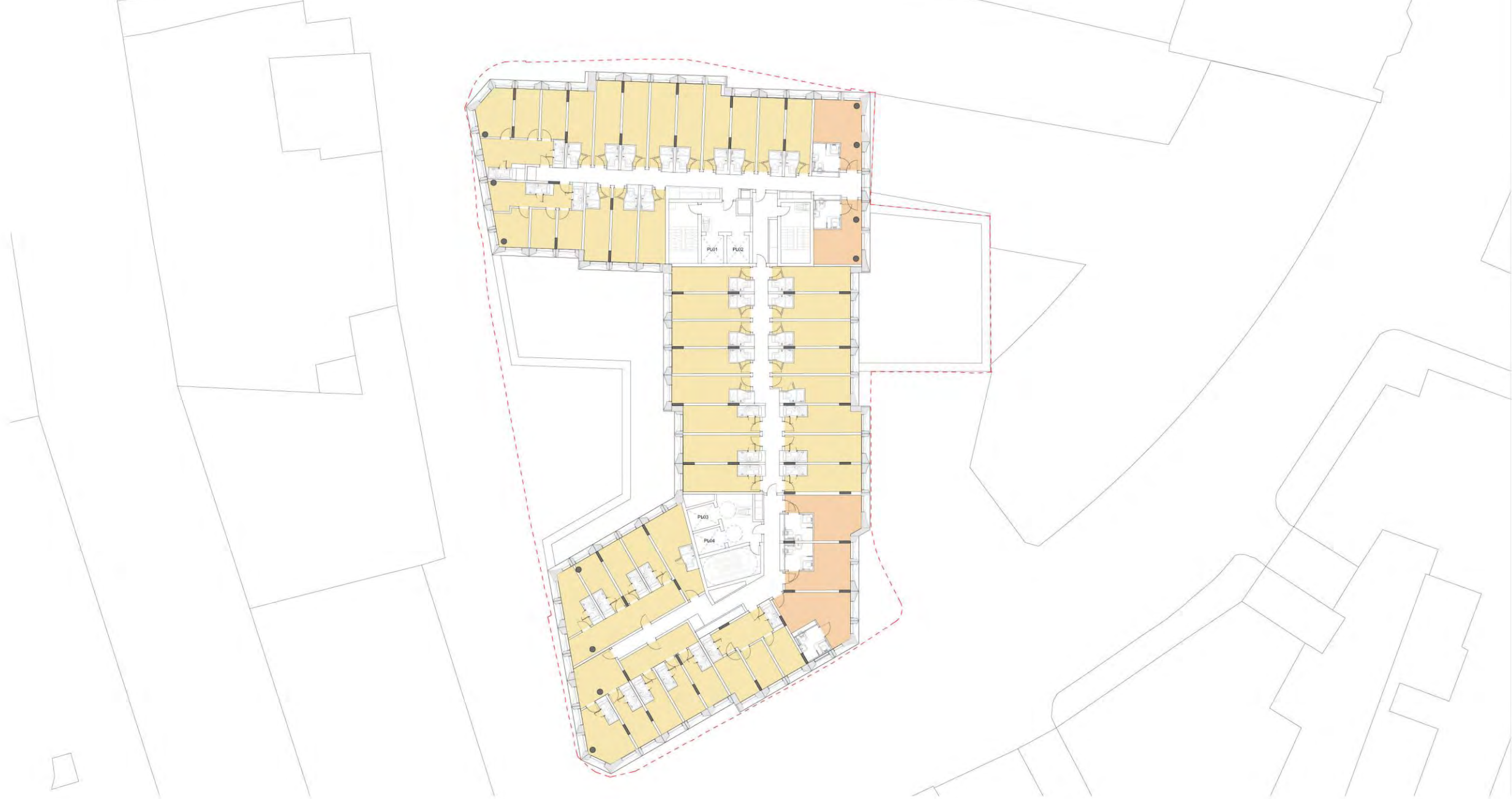


Proposal: Level 06 Plan



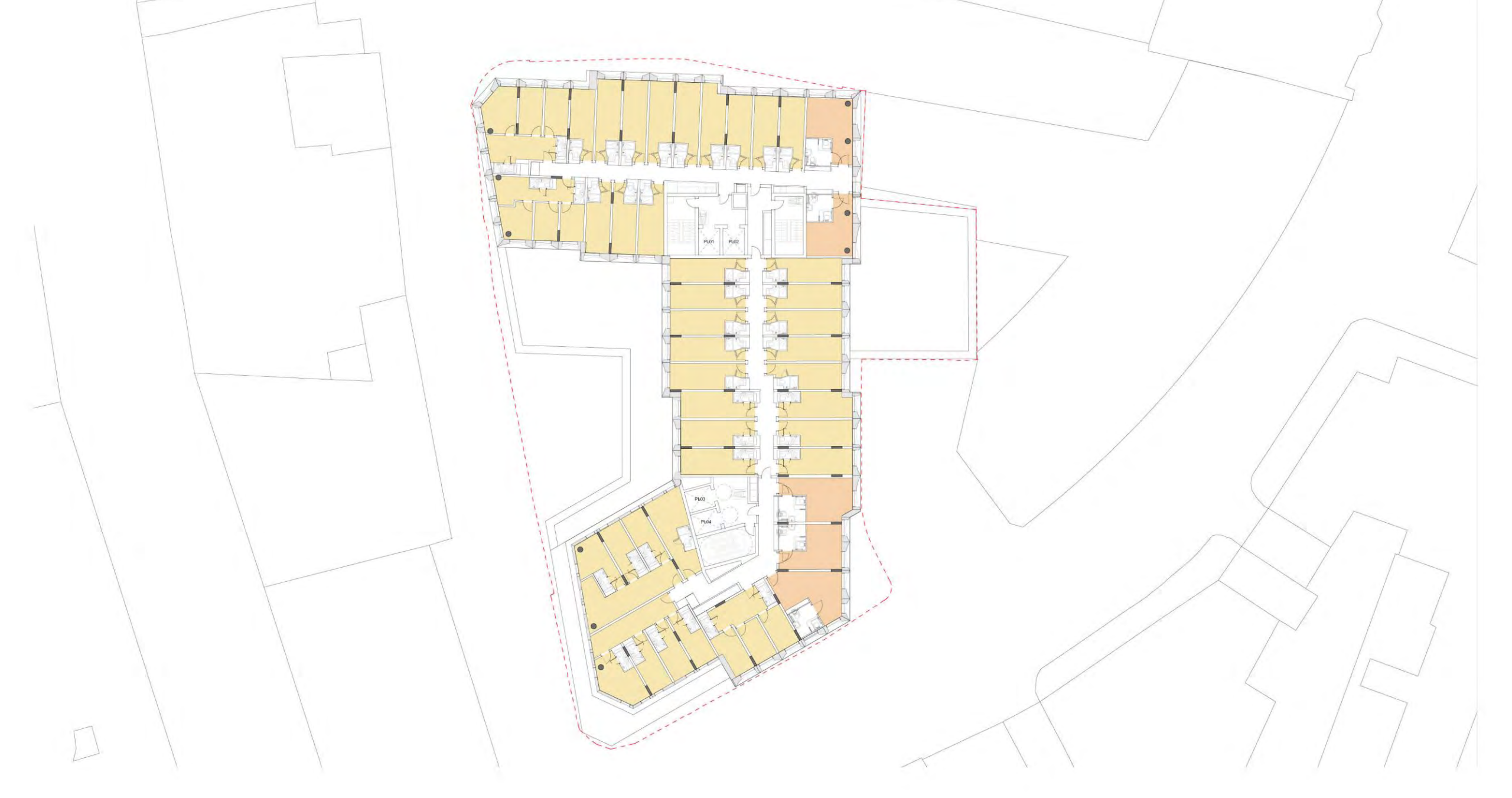


Proposal: Level 07 Plan



Proposal: Level 08 Plan



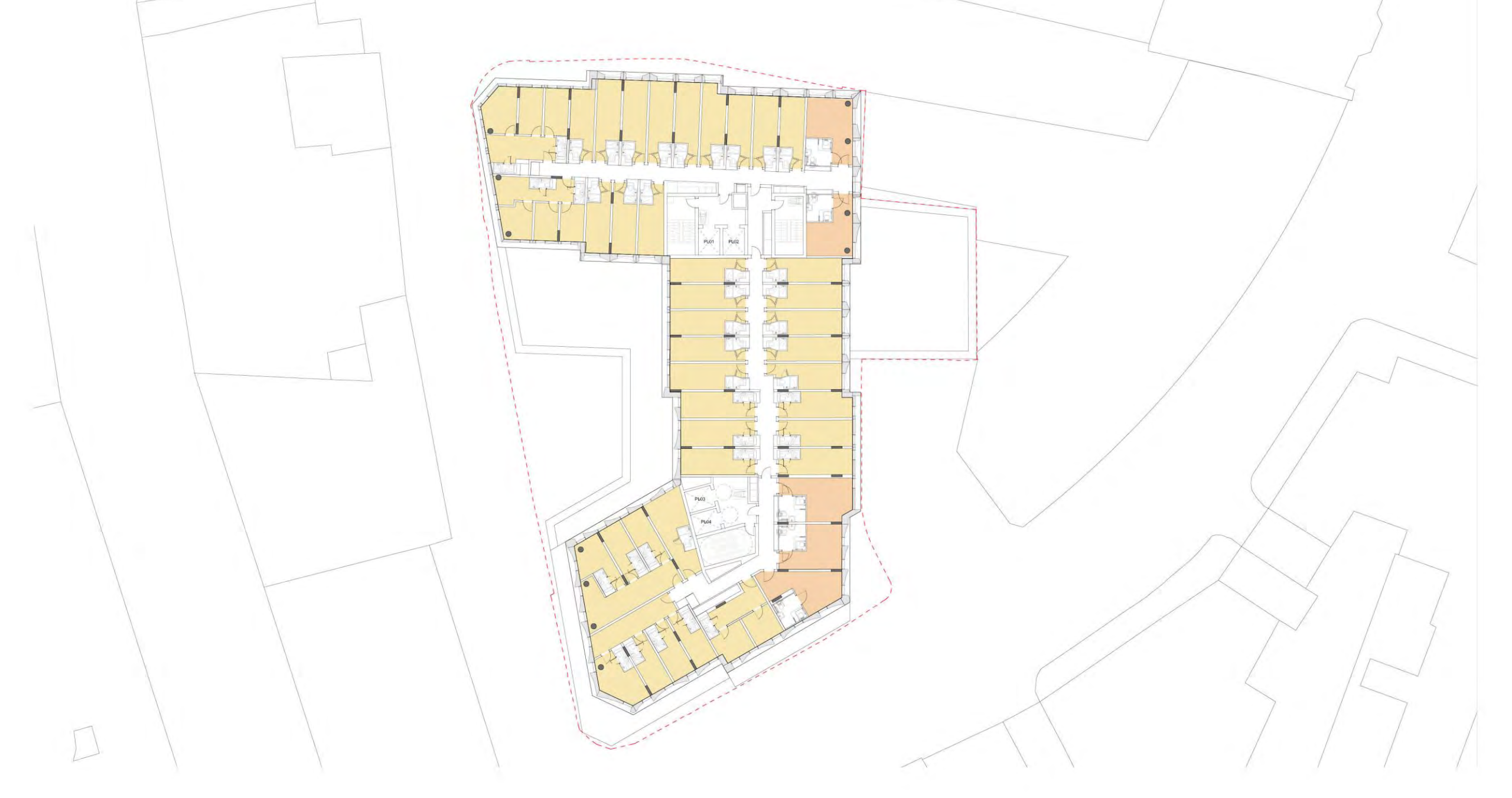


Proposal: Level 09 Plan

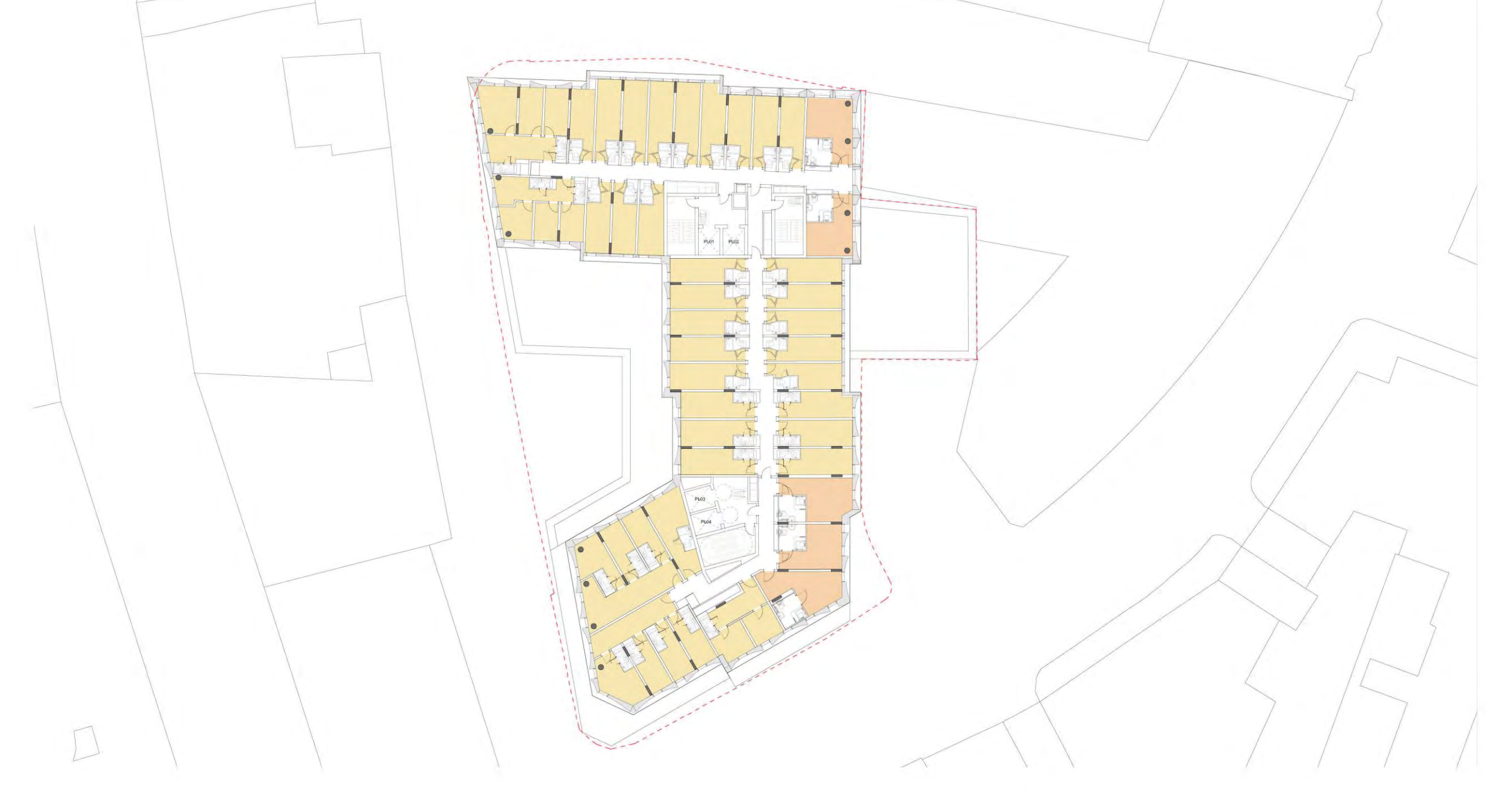


Proposal: Level 10 Plan



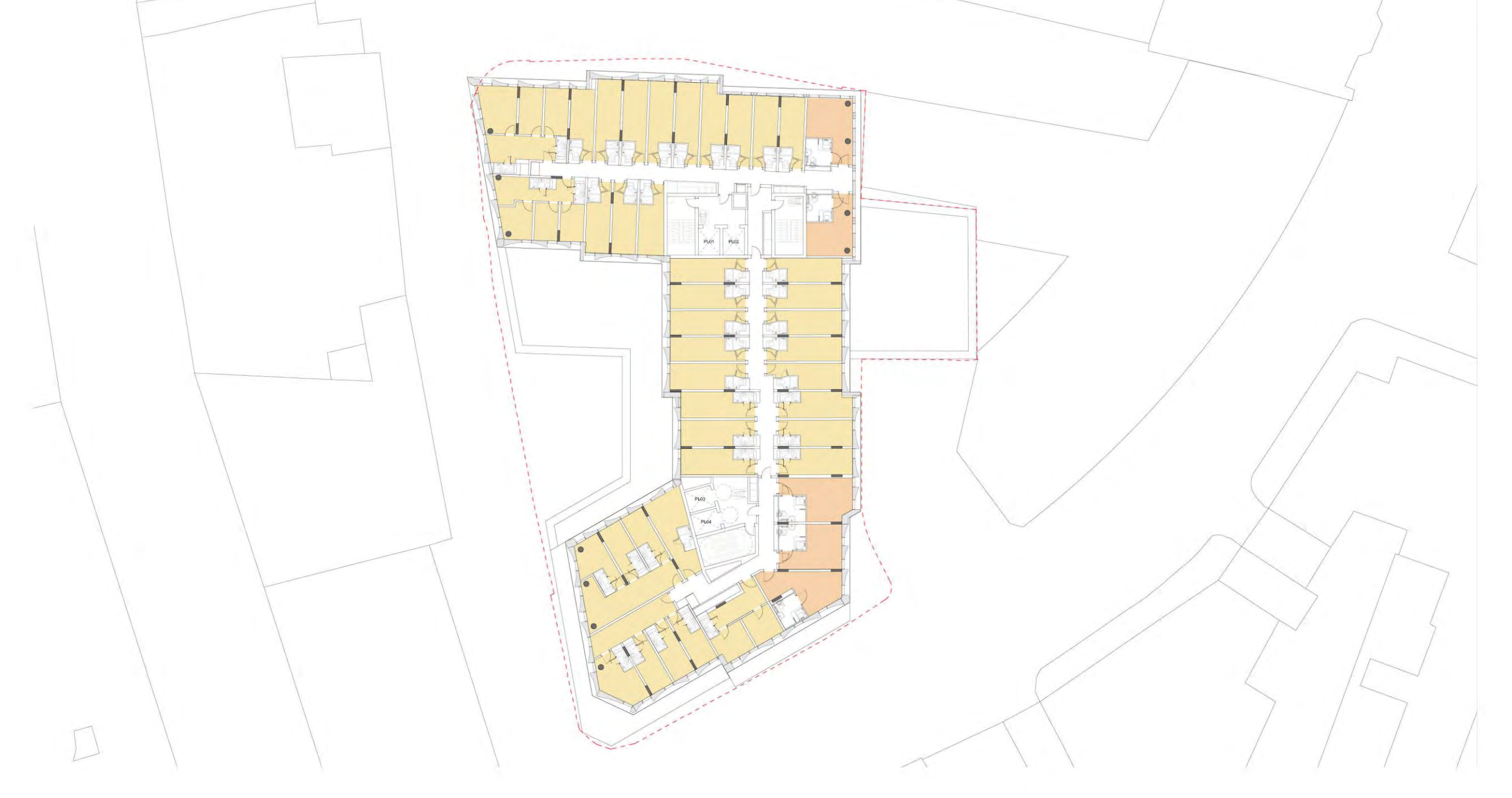


Proposal: Level 11 Plan



Proposal: Level 12 Plan



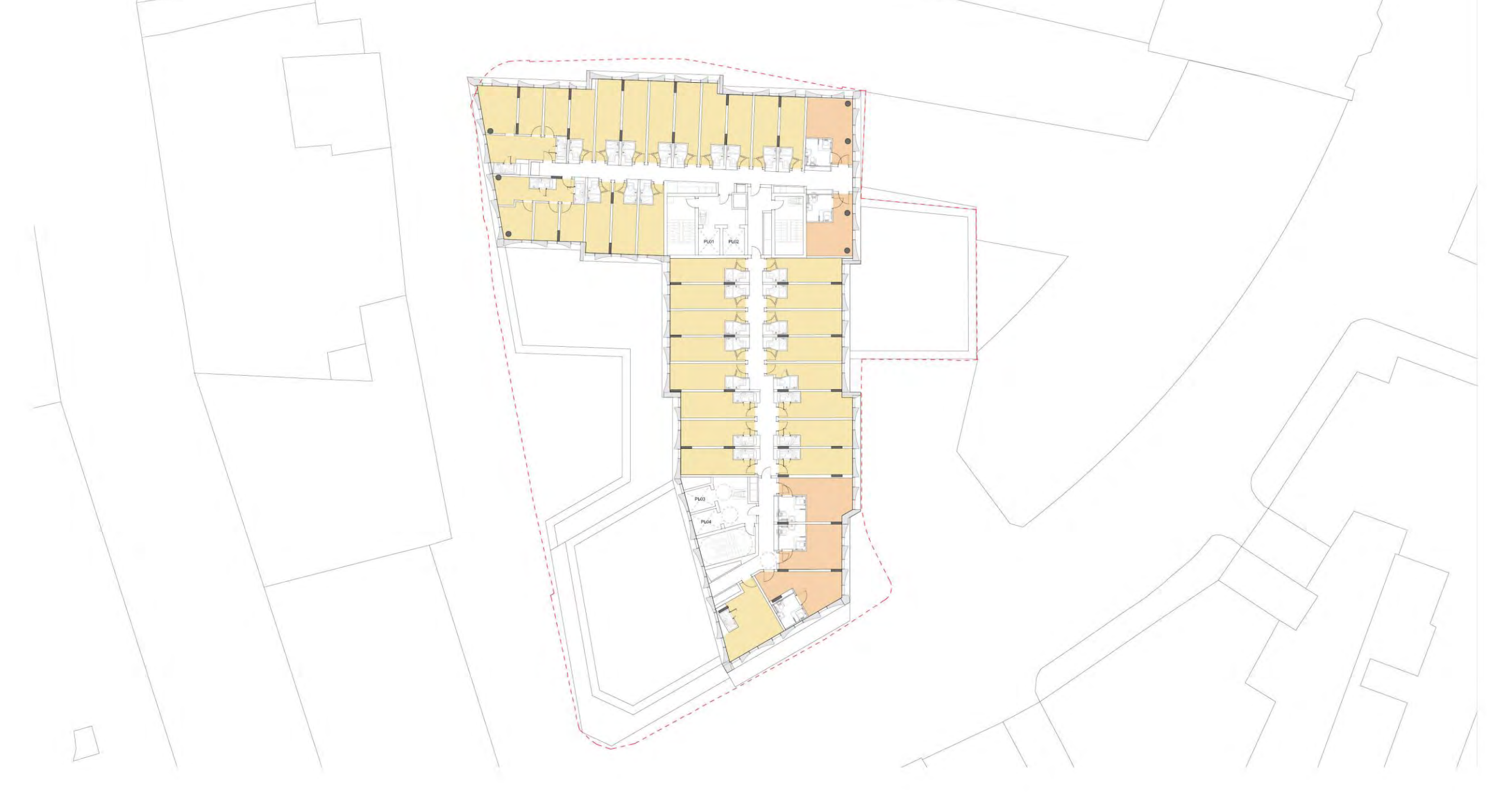


Proposal: Level 13 Plan

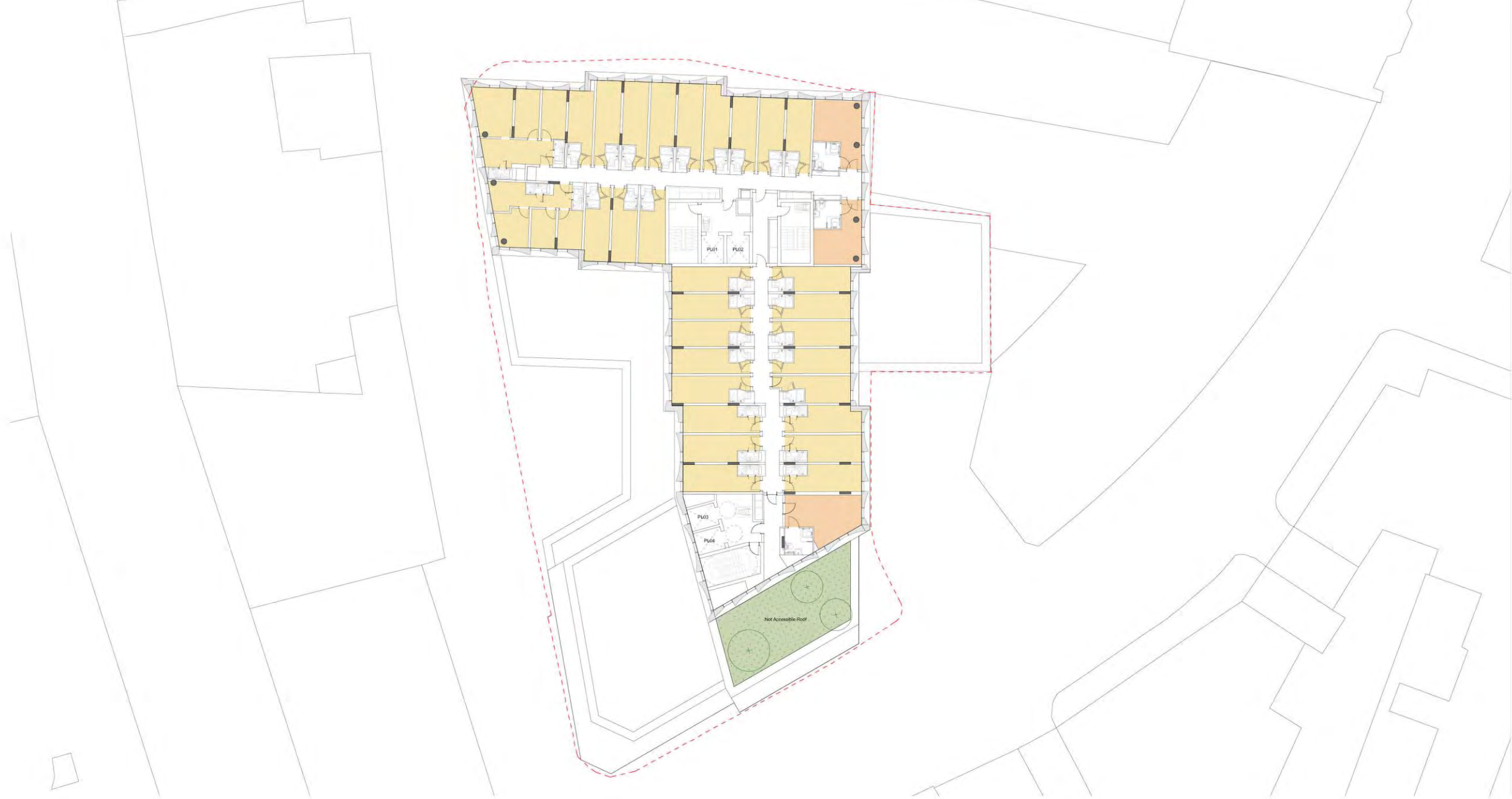


Proposal: Level 14 Plan

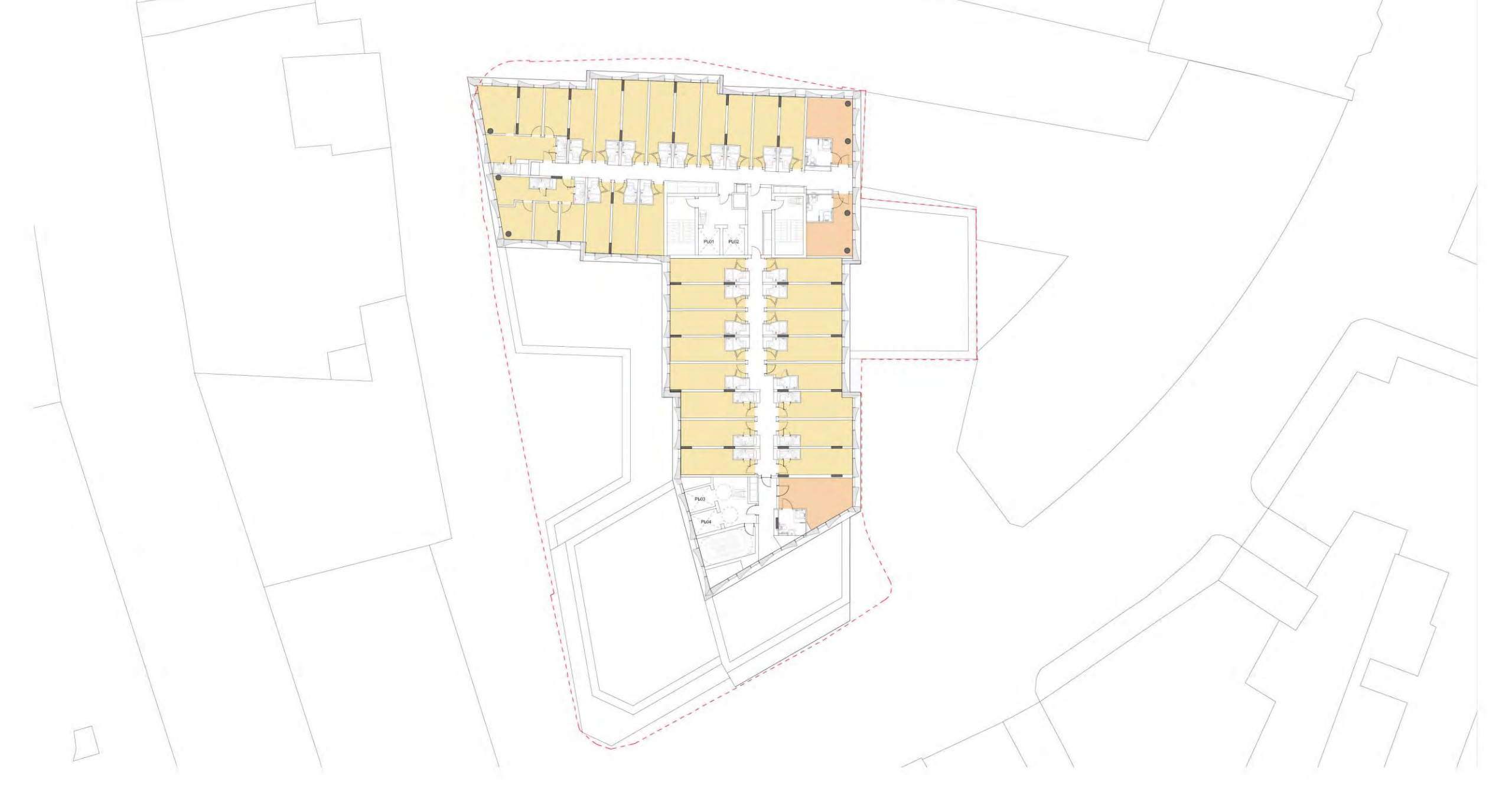




Proposal: Level 15 Plan

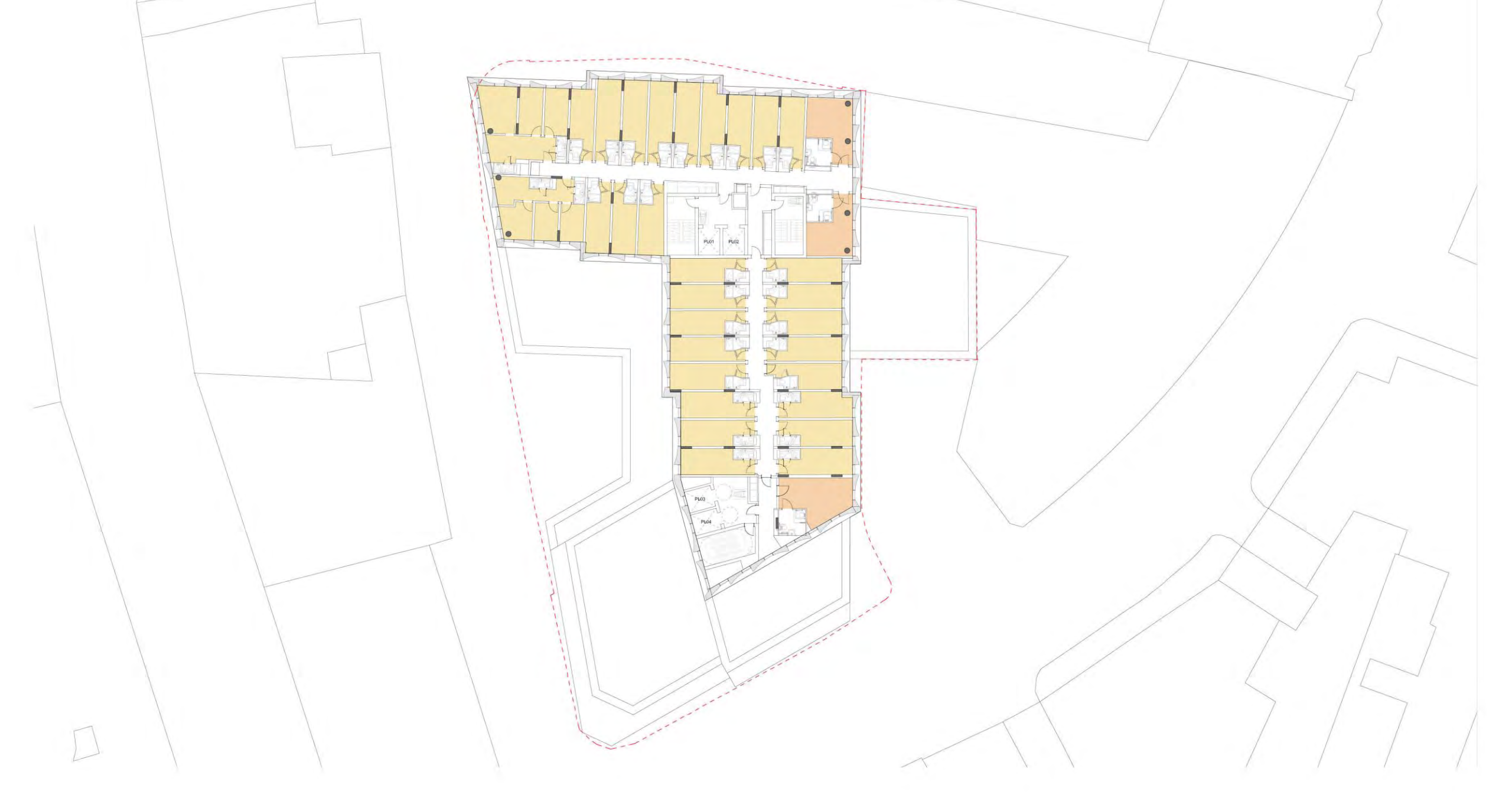


Proposal: Level 16 Plan



Proposal: Level 17 Plan





Proposal: Level 18 Plan



Proposal: Level 19 Plan



Proposal: Level 20 Plan





Proposal: Level 21 - Roof Plan



LLOYD'S AVENUE 5 LLOYD'S AVENUE LLOYD'S AVENUE 65 CRUTCHED FRIARS RANGOON STREET BOUNDARY HOUSE

Proposal: South Elevation along Crutched Friars





Proposal: West Elevation along Northumberland Alley





6 CRUTCHED FRIARS

CRUTCHED FRIARS

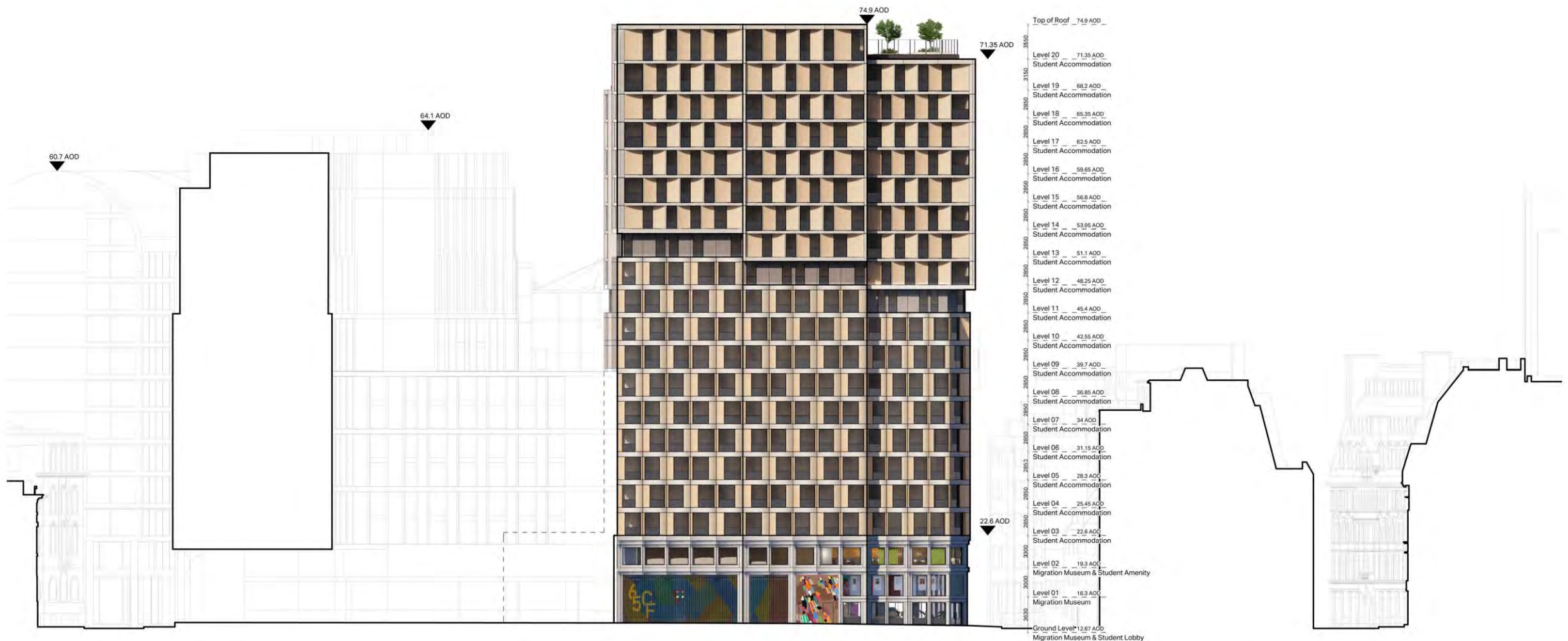
65 CRUTCHED FRIARS

BOUNDARY HOUSE

CARLISLE AVENUE

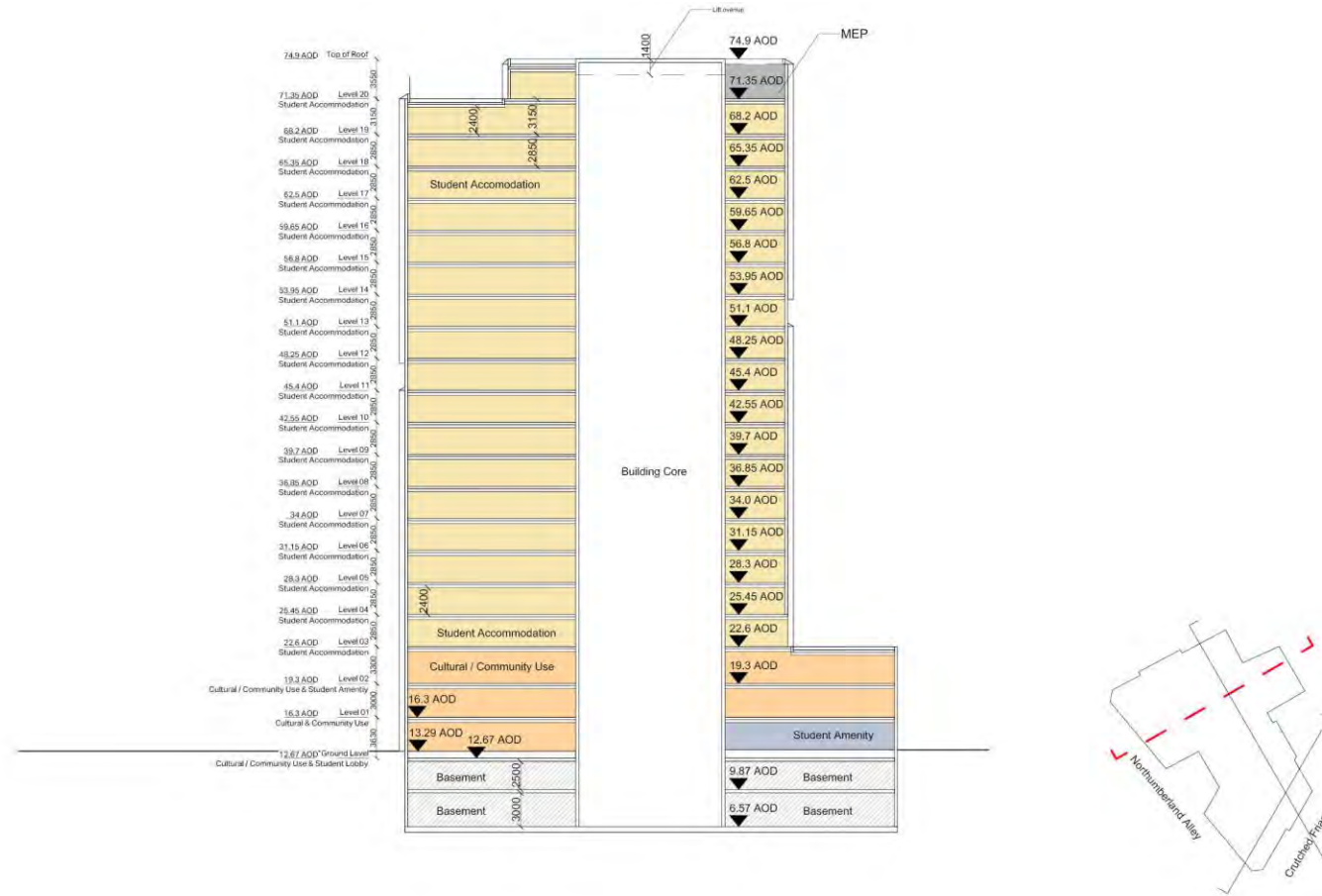
80 FENCHURCH

# Proposal: East Elevation along Rangoon Street



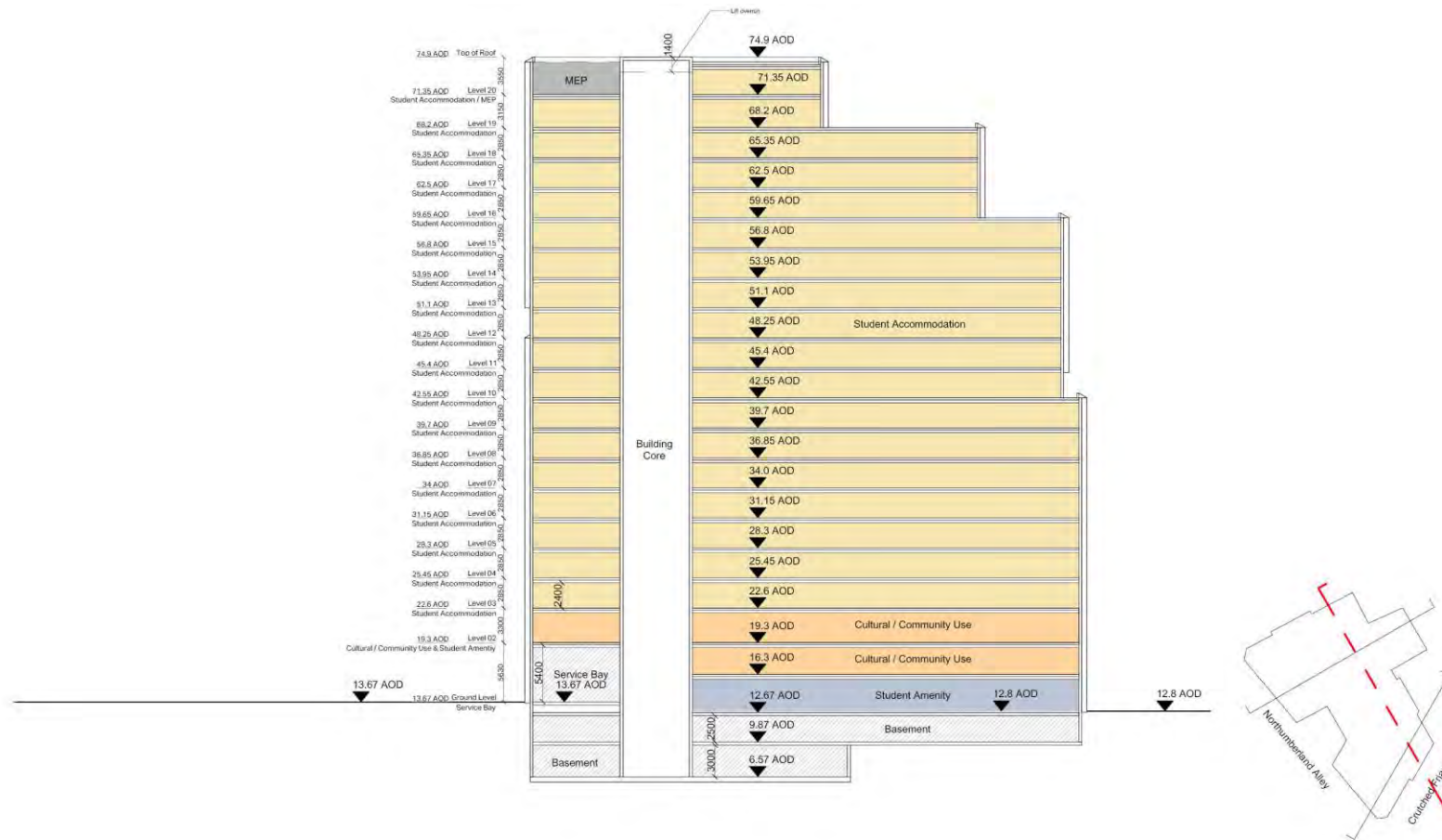
JEWRY STREET    BOUNDARY HOUSE    CARLISLE AVENUE    65 CRUTCHED FRIARS    NORTHUMBERLAND ALY.    MARLOW HOUSE    LLOYD'S AVE.

Proposal: North Elevation along Carlisle Avenue

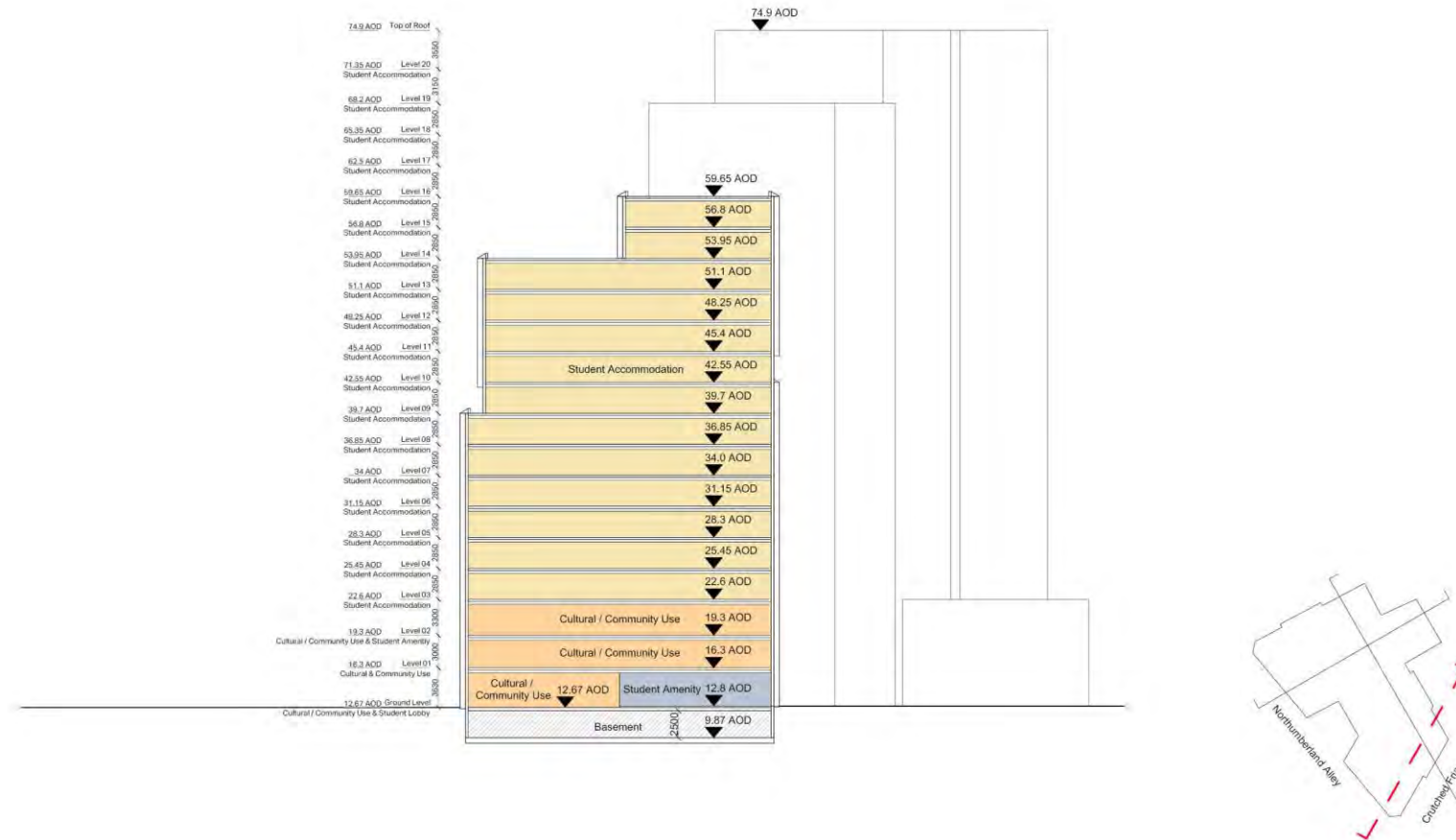


Proposal: Section A through East-West axis





Proposal: Section B through North-South Axis



Proposal: Section C through East-West Axis





Massing context diagram: key datums



## STEPPING DOWN TO THE SOUTH



## RELATING TO KEY DATUMS



Massing context diagram: massing stepping down in relation to key datums





Proposal: View of the corner of Crutched Friars and Northumberland Alley





Proposal: View of courtyard adjacent to Northumberland Alley facing North





Proposal: View from Crutched Friars facing west towards Rangoon Street





Proposal: View from Crutched Friars and Northumberland Alley





Proposal: View from Crutched Friars and Crosswall





Proposal: View from Queen's Walk facing North



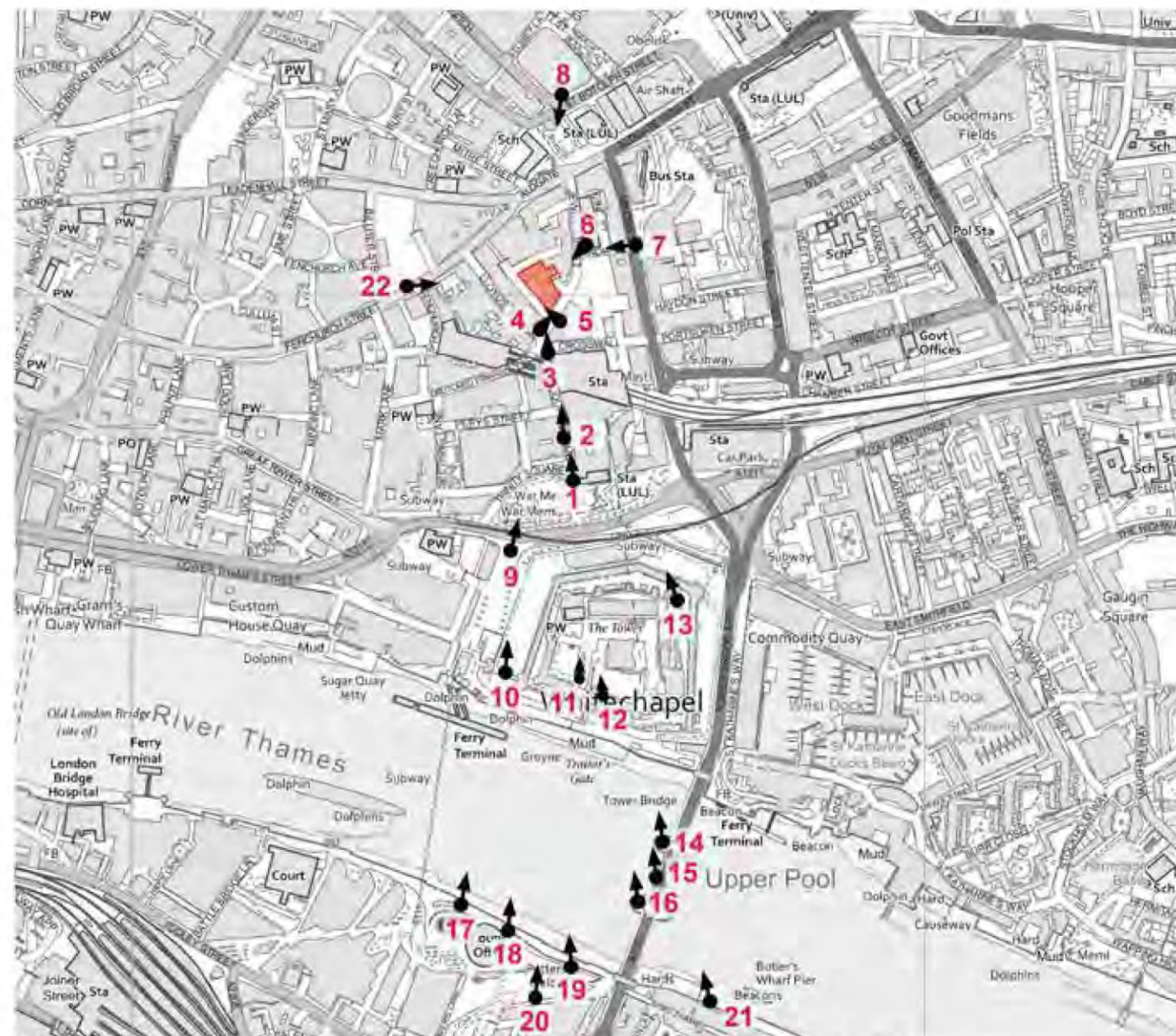
TTC view no.	Location	Render / Wireline
1	Tower Hill London Underground Station	R
2	Cooper's Row	W
3	Crutched Friars/ Crosswall	R
4	Crutched Friars/ Lloyd's Avenue	R
5	Crutched Friars/ Northumberland Alley	R
6	India Street/ Jewry Street	R
7	Minories/ India Street	W
8	Dukes Place	W
9	Tower Hill Square	W
10	ToL Local Setting Study view 5: Main entrance to the tower	R
11	Tower Green, south-east corner	W
12	ToL Local Setting Study view 4: Inner Curtain Wall (South)	W
13	ToL Local Setting Study view 2: Inner Curtain Wall (North)	R
14	Tower Bridge LVMF 10A.1	W
15	Tower Bridge, midway	W
16	Tower Bridge, south bastion	W
17	Queen's Walk LVMF 25A.2	R
18	Queen's Walk LVMF 25A.1	R
19	Queen's Walk LVMF 25A.3	W
20	Potters Fields Park	W
21	Butler's Wharf	W
22	Fenchurch Street/ Fenchurch Place	W

Approximate site boundary marked in red for indicative purposes only.



65 Crutched Friars  
Viewpoint map for Townscape and Visual Impact  
Assessment

Revision no: 7  
Date: August 2022



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Fig. 7.1: Viewpoint map.





Existing: HTVIA View 01 – Tower Hill London Underground Station





Cumulative: HTVIA View 01 – Tower Hill London Underground Station





Existing: HTVIA View 02 – Cooper's Row





Cumulative: HTVIA View 02 – Cooper's Row





Existing: HTVIA View 03 – Crutched Friars / Crosswall



Note: Ground floor, level 01, and  
level 02 façade have been updated  
in the 25 Nov 2022 addendum



Cumulative: HTVIA View 03 – Crutched Friars / Crosswall





Existing: HTVIA View 04 – Crutched Friars / Lloyd's Ave





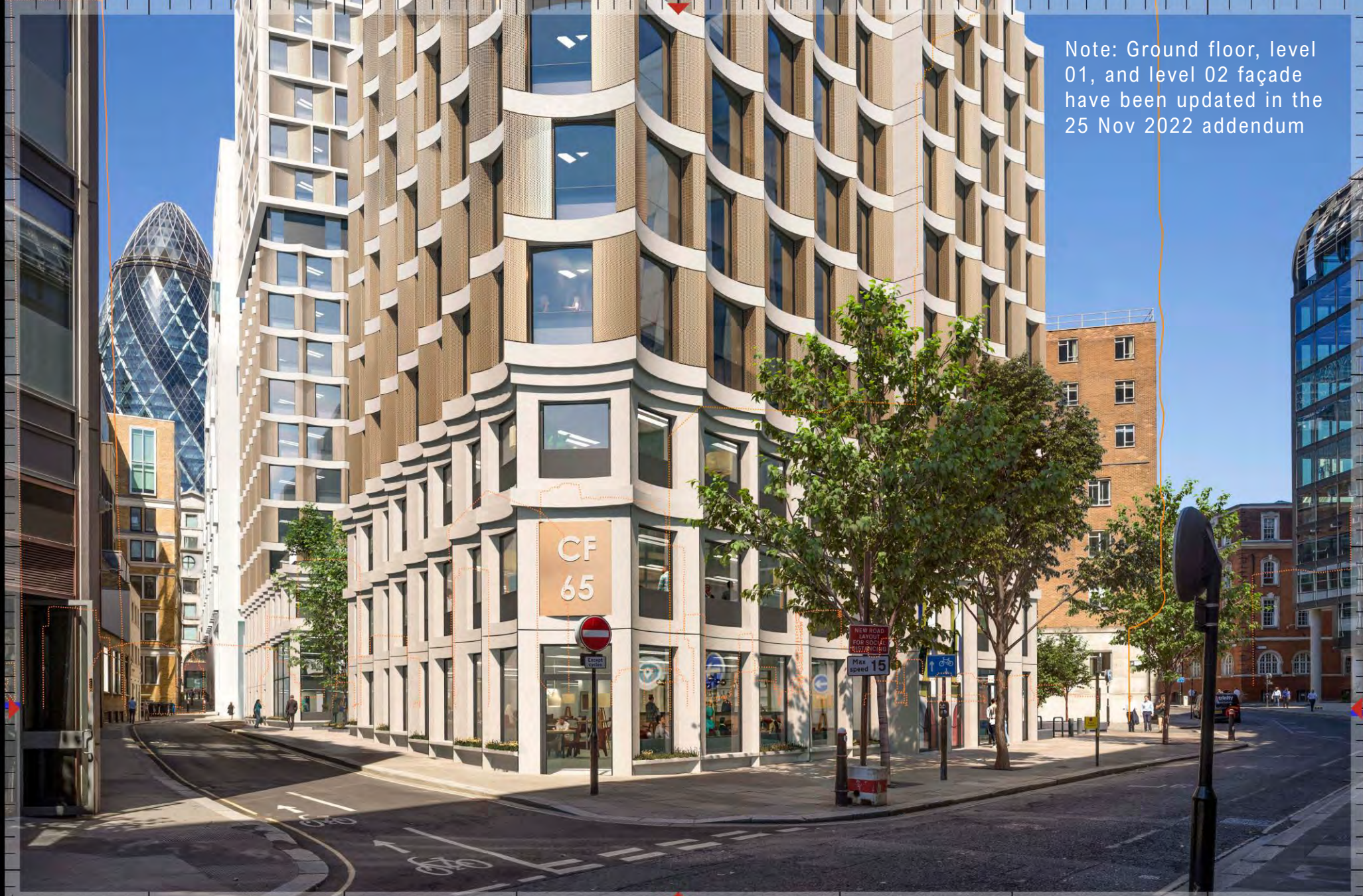
Cumulative: HTVIA View 04 – Crutched Friars / Lloyd's Ave





Existing: HTVIA View 05 – Crutched Friars / Northumberland Alley





Note: Ground floor, level 01, and level 02 façade have been updated in the 25 Nov 2022 addendum

Cumulative: HTVIA View 05 – Crutched Friars / Northumberland Alley





Existing: HTVIA View 06 – India Street / Jewry Street





Cumulative: HTVIA View 06 – India Street / Jewry Street





Existing: HTVIA View 07 – Minories / India Street





Cumulative: HTVIA View 07 – Minories / India Street





Existing: HTVIA View 09 – Tower Hill Square





Cumulative: HTVIA View 09 – Tower Hill Square





Existing: HTVIA View 10 – ToL Local Setting Study view 5: Main entrance to the tower





Cumulative: HTVIA View 10 – ToL Local Setting Study view 5: Main entrance to the tower





Existing: HTVIA View 11 – Tower Green, south-east corner





Cumulative: HTVIA View 11 – Tower Green, south-east corner





Existing: HTVIA View 12 – ToL Local Setting Study view 4: Inner Curtain Wall (South)





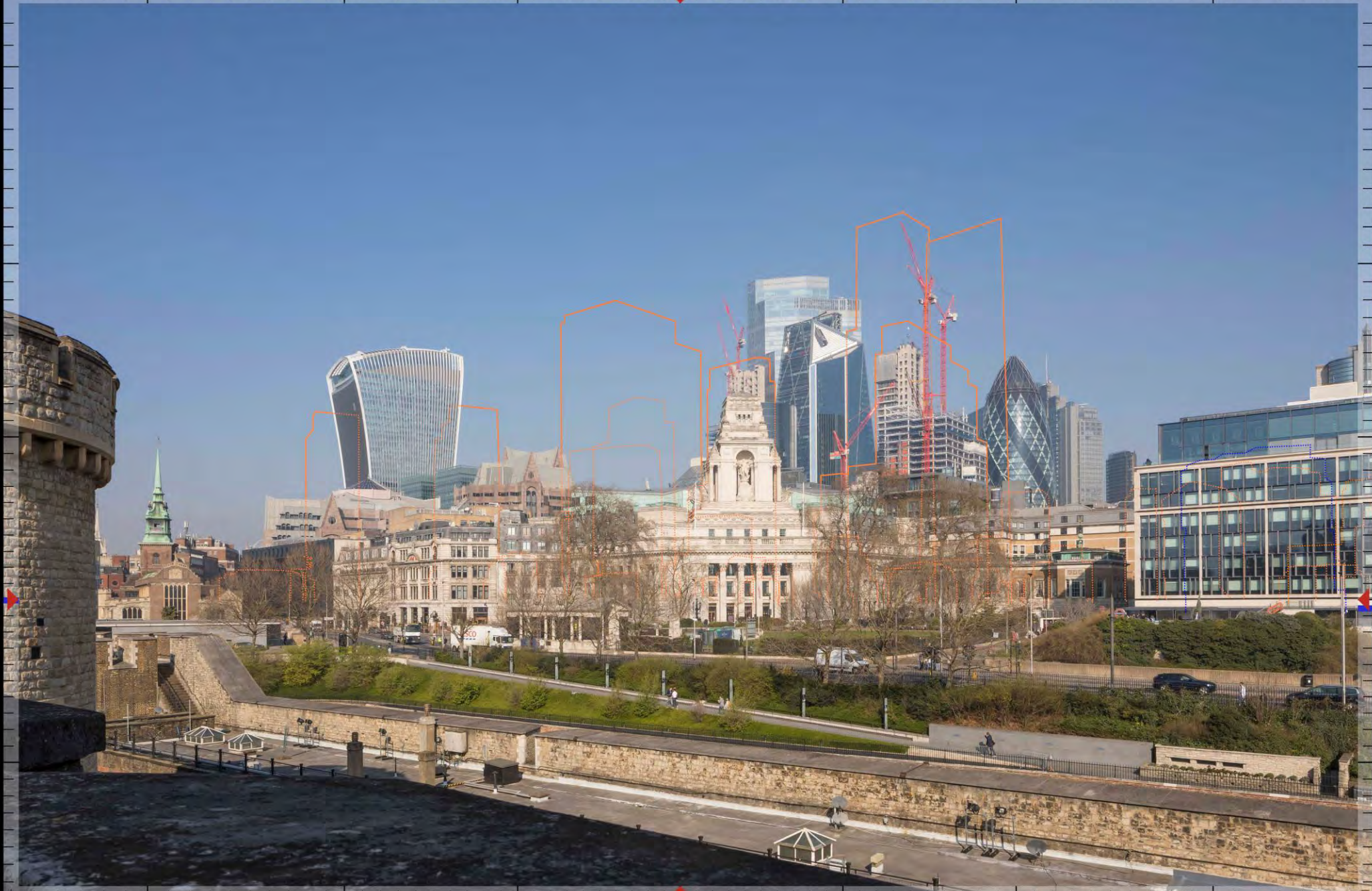
Cumulative: HTVIA View 12 – ToL Local Setting Study view 4: Inner Curtain Wall (South)





Cumulative: HTVIA View 13 – ToL Local Setting Study view 4: Inner Curtain Wall (North)





Existing: HTVIA View 13 – ToL Local Setting Study view 4: Inner Curtain Wall (North)





Existing: HTVIA View 14 – Tower Bridge LVMF 10A.1





Cumulative: HTVIA View 14 – Tower Bridge LVMF 10A.1





Existing: HTVIA View 15 – Tower Bridge, midway





Cumulative: HTVIA View 15 – Tower Bridge, midway





Existing: HTVIA View 16 – Tower Bridge, south bastion





Cumulative: HTVIA View 16 – Tower Bridge, south bastion





Existing: HTVIA View 17 – Queen's Walk LVMF 25A.2





Cumulative: HTVIA View 17 – Queen's Walk LVMF 25A.2





Existing: HTVIA View 18 – Queen's Walk LVMF 25A.1





Cumulative: HTVIA View 18 – Queen's Walk LVMF 25A.1





Existing: HTVIA View 19 – Queen's Walk LVMF 25A.3





Cumulative: HTVIA View 19 – Queen's Walk LVMF 25A.3





Existing: HTVIA View 20 – Potters Field Park





Cumulative: HTVIA View 20 – Potters Field Park





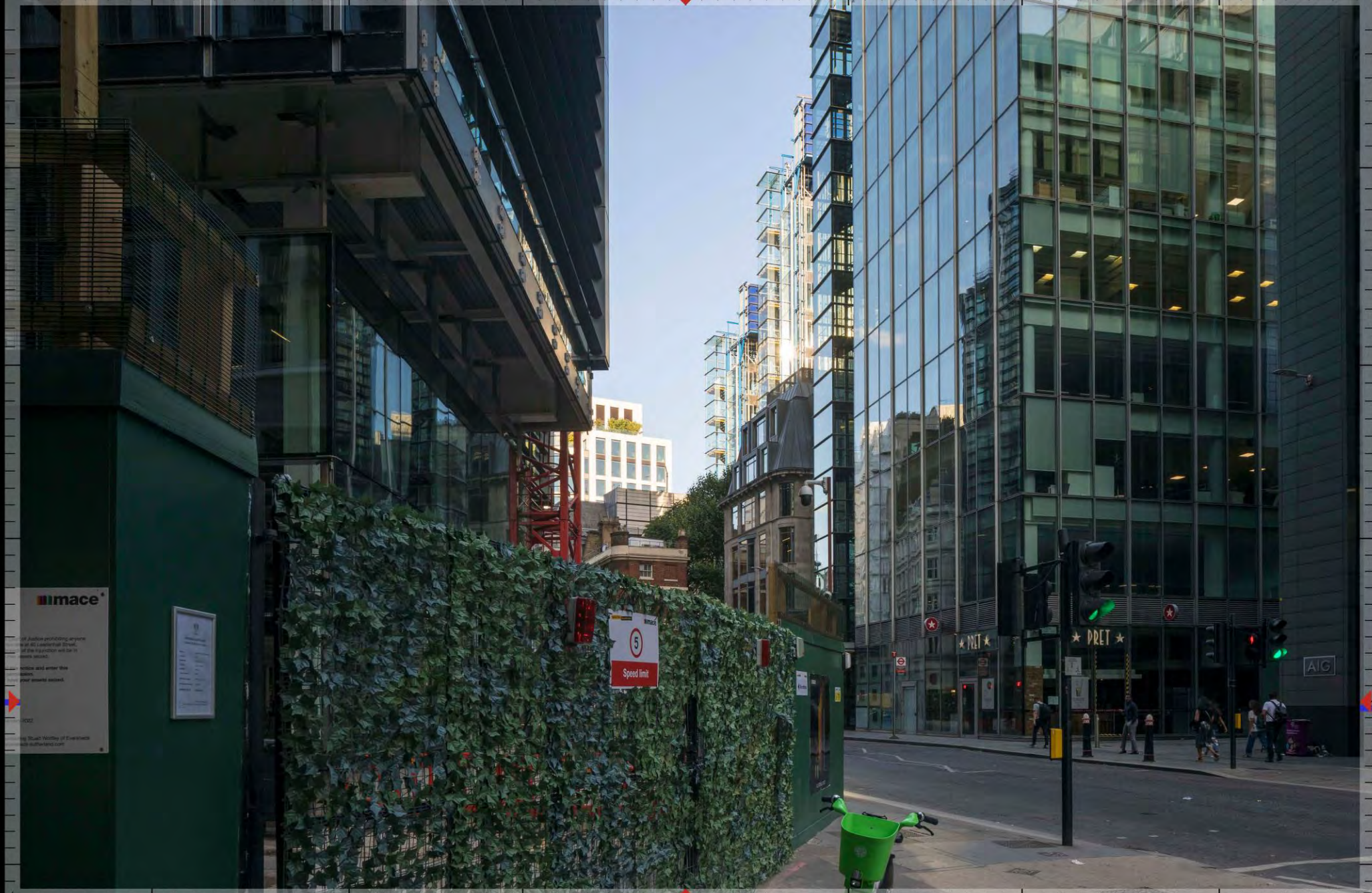
Existing: HTVIA View 21 – Butler's Wharf





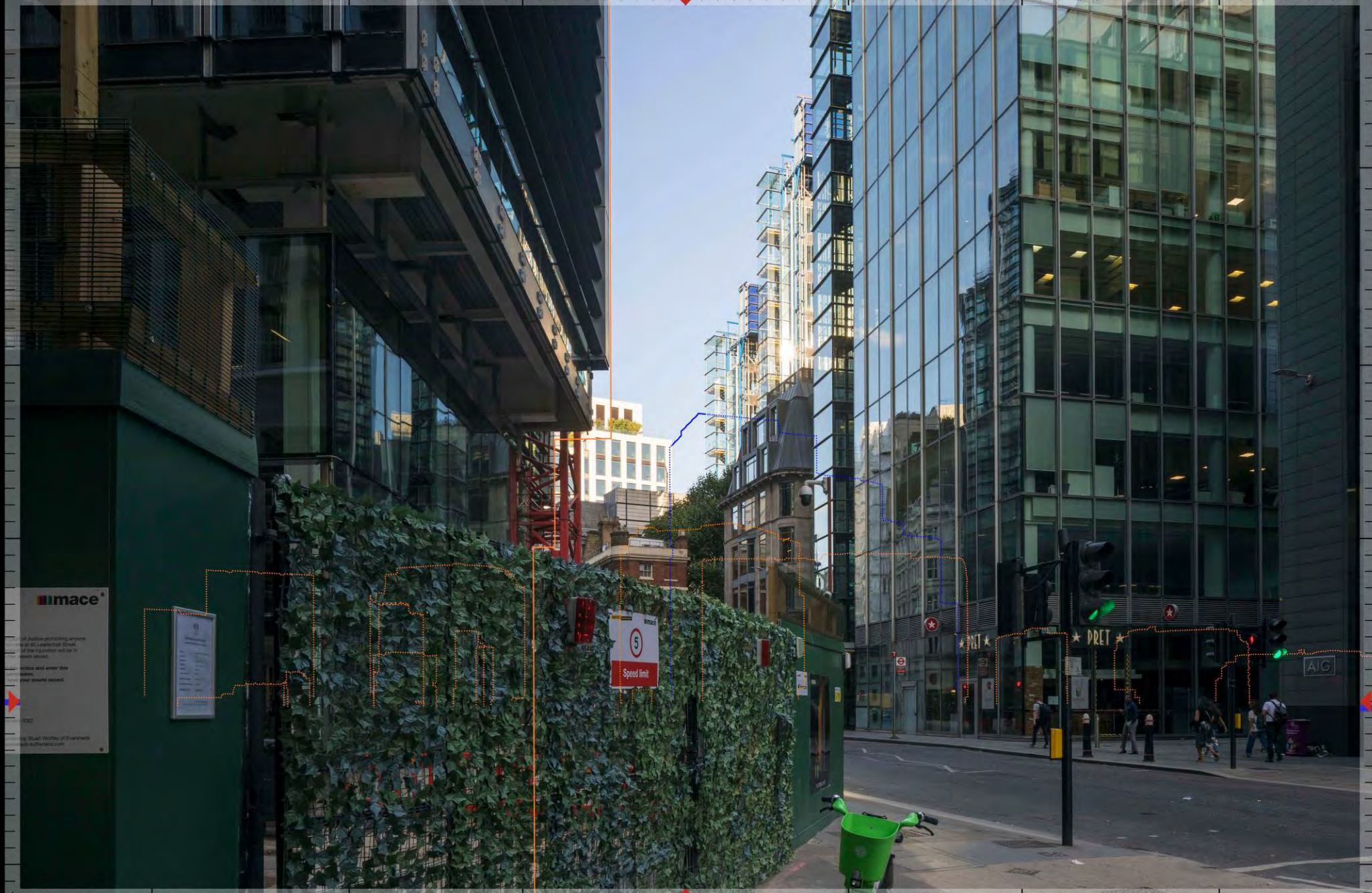
Cumulative: HTVIA View 21 – Butler's Wharf





Existing: HTVIA View 22 – Fenchurch Street / Fenchurch Place





Cumulative: HTVIA View 22 – Fenchurch Street / Fenchurch Place



View	Description	MH Reference	Type	Method	Camera Location			Camera	Lens	HFOV		Photo date/time	Bearing	distance (km)
					Easting	Northing	Height			Photo	Image			
16	Tower Bridge: the south bastion	0250	AVR1   Wireline	Verified	533634.6	180231.6	14.75	Canon EOS 5D Mark IV DSLR	24mm	74.1	73.2	06/08/2022 13:50	352.1	0.8
A1	The Tate Modern Terrace	0500	Model	Estimated	531971.7	180489.0	34.35	Canon EOS 5D Mark II DSLR	24mm	73.2	73.2	22/02/2019 14:26	70.9	1.6
A2	The Monument Viewing Platform	0510	Model	Estimated	532926.0	180762.1	61.22	na	na	69.9	69.9	na	66.2	0.7
A3	St Paul's Cathedral, Stone Gallery	0520	Model	Estimated	532075.1	181146.1	73.99	Canon EOS 5D Mark IV DSLR	24mm	74.4	73.5	05/08/2022 15:15	94.7	1.5
A4	St Paul's Cathedral, Golden Gallery	0530	Model	Estimated	532058.4	181141.4	104.36	Canon EOS 5D Mark II DSLR	24mm	73.3	73.2	15/02/2019 15:04	94.5	1.5



Index of Supplementary Views





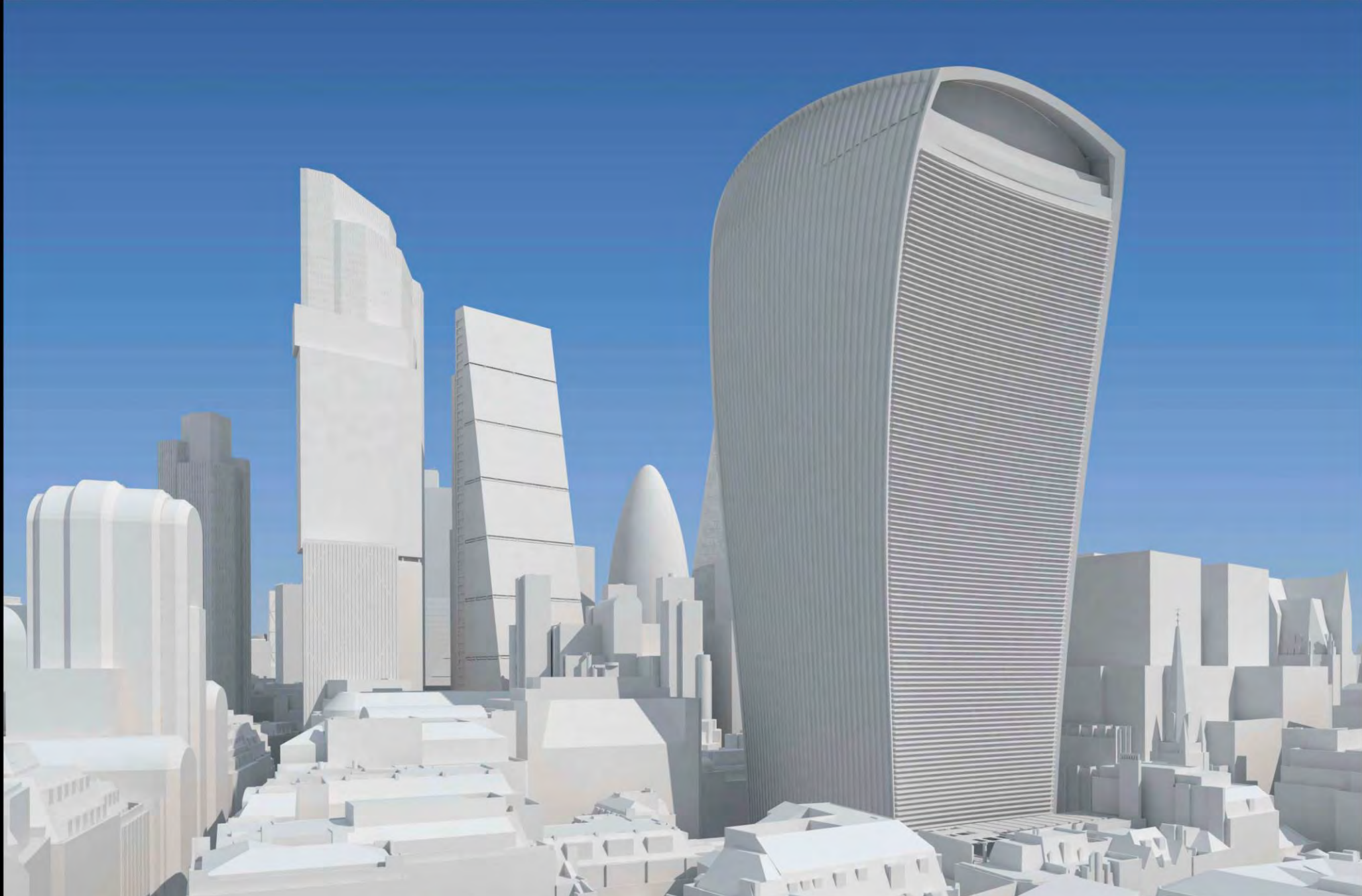
Existing: Supplementary View – A1 The Tate Modern Terrace





Cumulative: Supplementary View – A1 The Tate Modern Terrace





Existing: Supplementary View – A2 The Monument Viewing Platform





Cumulative: Supplementary View – A2 The Monument Viewing Platform





Existing: Supplementary View – A3 St Paul's Cathedral, Stone Gallery





Cumulative: Supplementary View – A3 St Paul's Cathedral, Stone Gallery





Existing: Supplementary View – A4 St Paul's Cathedral, Golden Gallery





Cumulative: Supplementary View – A4 St Paul's Cathedral, Golden Gallery



# 4 SCENARIOS OF VARYING LEVELS OF REFURBISHMENT AND NEW CONSTRUCTION



SCENARIO 1

Deep refurbishment of the existing building and vertical extension with four additional floors



SCENARIO 2

New construction on the north wing of the site, retention of the substructure of the east wing of the site with new frame and slabs above grade in the east wing, and a deep refurbishment of the south wing of the existing building with a vertical extension of four additional floors



SCENARIO 3

New construction on the north and east wing of the site a deep refurbishment of the south wing of the existing building with a vertical extension of four additional floors



SCENARIO 4

Demolition of all the existing building and construction of new building retaining the existing basement walls

Diagram: Scenarios studied with varying degrees of refurbishment and new construction



SCENARIO 4 HAS THE LOWEST WHOLE  
LIFE CARBON PERFORMANCE



SCENARIO 1

2,733  
kgCO2eq/m2



SCENARIO 2

2,186  
kgCO2eq/m2



SCENARIO 3

2,228  
kgCO2eq/m2



SCENARIO 4

2,164  
kgCO2eq/m2

Diagram: Analysis of whole life carbon performance for the 4 scenarios



An aerial photograph of a city model made of light-colored wood. The model shows a dense urban layout with various building shapes and heights. In the center, a taller, white building with a stepped profile and green rooftop gardens stands out. The surrounding buildings are in shades of brown and tan. The lighting is warm, creating long shadows and highlighting the textures of the wood.

20%

BY MASS

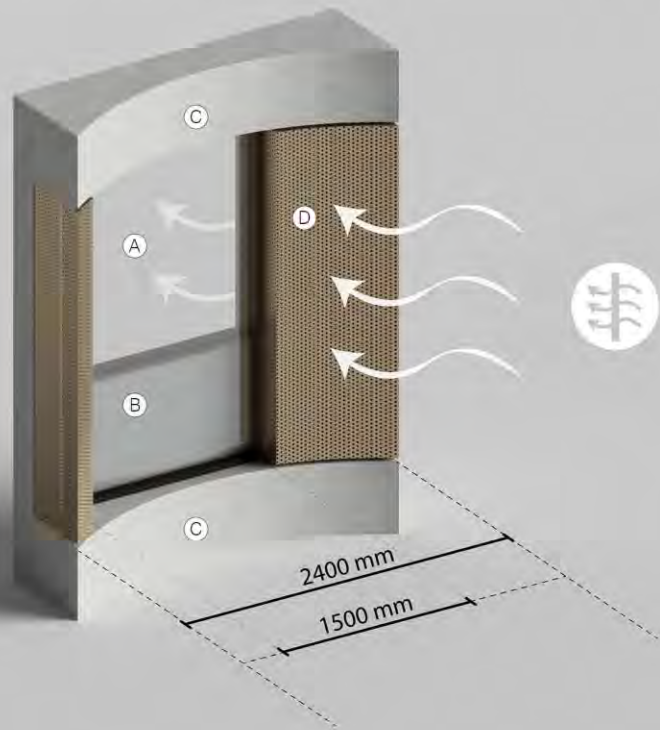
**OF THE EXISTING  
SUBSTRUCTURE IS  
RETAINED**

Diagram: Scenario 04 – retention of the existing substructure



TARGETING

BREEAM  
OUTSTANDING



- A Window
- B Insulated solid panel
- C Horizontal cladding element
- D Perforated natural ventilation panel

Table 4 BREEAM credits that set out best practice in response to circular economy principles.

Credit		Credit Targeted
Man 03	Responsible Construction Practices	Targeted
Ene 01	Reduction of Energy Use and Carbon Emissions	Targeted
Ene 02	Energy Monitoring	Targeted
Wat 01	Water Consumption	Targeted
Wat 02	Water Monitoring	Targeted
Mat 01	Life Cycle Impacts	Targeted
Mat 02	Environmental Product Declarations	Targeted
Mat 03	Responsible Sourcing of Materials	Targeted
Mat 05	Designing for Durability and Resilience	Targeted
Mat 06	Material Efficiency	Targeted
Wst 01	Construction Waste Management	Targeted
Wst 02	Sustainably Sourced Aggregates	Not targeted
Wst 03	Operational Waste	Targeted
Wst 05	Adaptation to Climate Change	Targeted
Wst 06	Design for Disassembly and Adaptability	Targeted
LE 01	Site Selection	Targeted

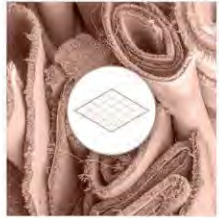
TABLE OF BREEAM CREDITS TARGETED

Diagram: Scenario 04 – overview of BREEAM credits targeted





FURNITURE



CARPET TILES



RAISED ACCESS FLOORING



CEILING TILES



PLASTERBOARD



CONCRETE



GLASS



GRANITE



TIMBER



METALS

Table 3: Reuse and recycling opportunities for KDPs identified

Material/product	EWC	Description	Quantity tonnes	Quantity m3	Reuse opportunity	Optimal recycling opportunity	Issues to consider
Concrete	17 01 01	Structural elements, precast walls, stairs, mortar, blockwork	10,386.38	4,546.57	limited - could consider some external features	(Upcycle) Higher value recycled aggregates for road sub-base or concrete	separation from potential contaminants, follow Quality protocol
Steel	17 04 05	Reinforcement, raised access flooring, ceiling tiles/grid, wall frame, studwork	687	90	High reuse potential for raised access flooring, ceiling tiles (est. 77 tonnes = 11%)	(Upcycle) All steel not reused will go for closed loop recycling	Reuse requires careful removal and end user located
Glass	17 02 02	Internal glass panels; external glazing and windows	42.71	17.36	Reuse potential for internal glass (24 tonnes = 56% by weight)	(Upcycle) remaining glass for closed loop recycling	Deconstruction/handling of internal glass; good segregation of external glass
Aluminium	17 04 05	Aluminium window frames, door frames	6.00	2.00	limited potential for reuse	(Upcycle) anything not reused will go for closed loop recycling	Separation from other metals to maximise recycling grade
Copper	17 04 05	pipework	2.70	-	limited potential for reuse	(Upcycle) anything not reused will go for closed loop recycling	Separation from other metals to maximise recycling grade
Lead	17 04 05	cladding	60.00	5.00	Difficult to reuse	(Upcycle) anything not reused will go for closed loop recycling	Reuse complicated by hazardous nature
Gypsum	17 08 02	Plasterboard, plaster	136.21	177.94	Difficult to reuse	(Downcycle) limited closed loop recycling, soil conditioner application more likely	Manufacturers generally do not accept post consumer waste
Carpet tiles	17 02 03	Carpet tiles	34.30	42.88	Reuse potential for less worn carpeting (est. 50%)	(Downcycle) low recycling potential, could use as energy feedstock	Requires careful removal and end user located
Timber based	17 02 01	Studwork, window frames, doors, raised access flooring (MDF), plywood partitions etc.	279.53	450.70	Reuse potential high for RAF, plywood, some studwork (est. 250 tonnes = 89%)	(Downcycle) high recycling potential, should avoid energy feedstock route	Reuse requires careful removal and end user located
Ceramic	17 01 03	tiles; sanitaryware	9.09	3.79	medium potential for sanitaryware	(Downcycle) limited closed loop recycling, mixed inert fill more likely	Reuse requires careful removal and end user located
Bitumen	17 02 01	Asphalt roofing	61.20	30.60	limited	(Upcycle) Recycling of asphalt back to bitumen is possible	See if recycling option possible in UK. Separate for recycling into fresh bitumen
Insulation	17 06 04	PU, mineral wool insulation	26.74	534.76	limited	(Downcycle) limited unless carefully segregated and takeback organised	Explore options for supplier takeback, otherwise likely to be landfilled
plastics	17 02 03	vinyl flooring	2.29	2.25	Could be reuse potential in some flooring (similar to Karndean)	(Upcycle) Could be recycled through PVC takeback schemes - recoviny!	Contact relevant scheme provider for recycling
Stone	17 01 01	façade granite cladding	-	-	Reuse potential linked to ability to remove intact	(Upcycle) Higher value recycled aggregates for road sub-base or concrete	Reuse requires careful removal and end user located
Other items		Appliances, furniture, lighting, other M&E equipment			Reuse potential for specific items such as appliances, furniture and lighting, as detailed in report	(Downcycle) metal items removed for recycling and other materials downcycled/used for energy or landfilled	Reuse requires careful removal and end user located
Total potential (tonnes)			See table 14			368.00	11972.00
Total potential (%)						3.06	99.42

TABLE OF REUSE AND RECYCLING OPPORTUNITIES FOR KEY REUSABLE PRODUCTS



An aerial view of a city model made of wooden blocks. A central white building with green roofs stands out from the surrounding brown wooden buildings.

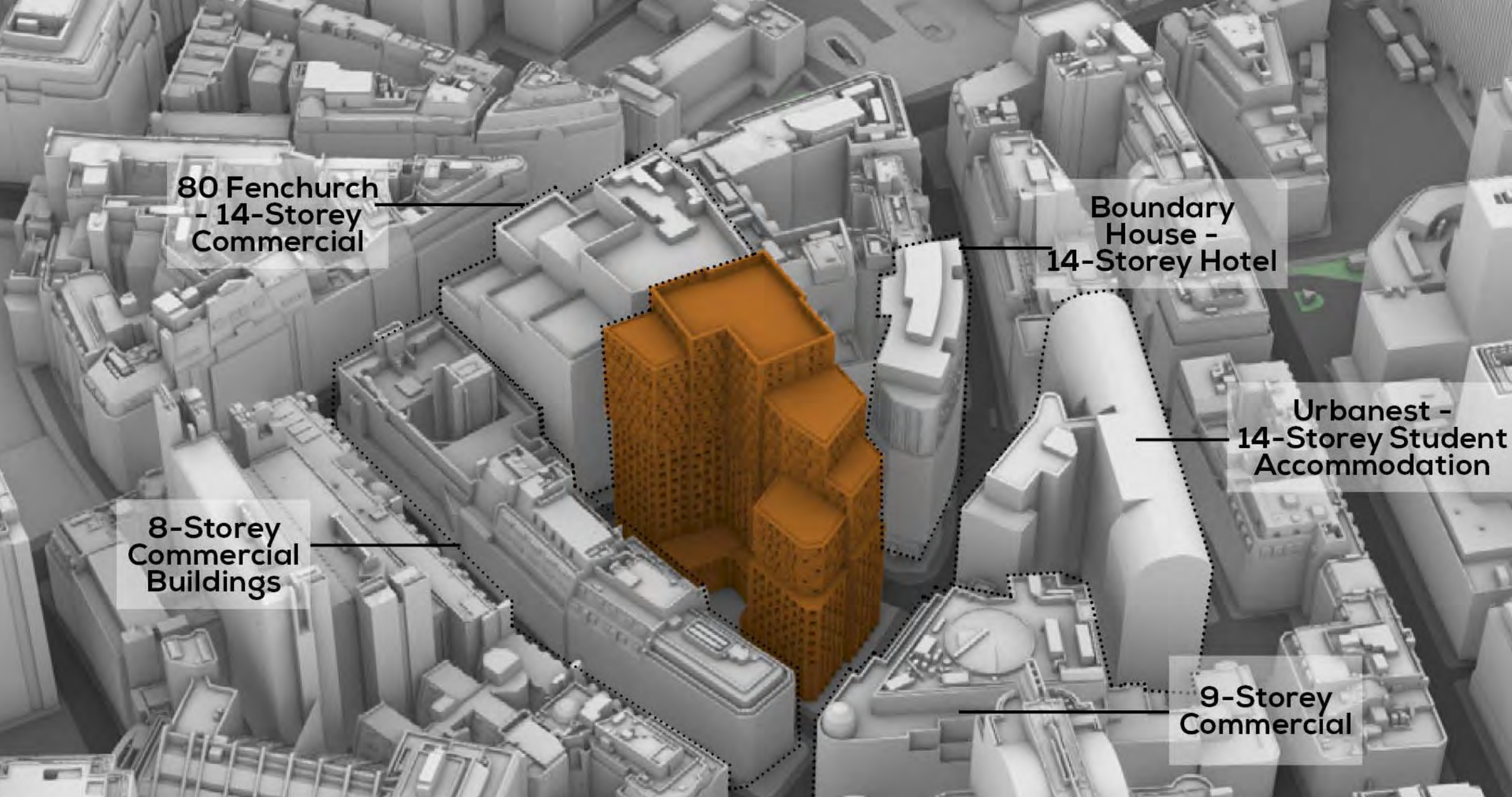
70%

**IMPROVEMENT ON  
OPERATIONAL CARBON  
EMISSIONS**

IMPROVEMENT AGAINST PART L 2021  
USING SAP 10.2 CARBON FACTORS  
(POLICY TARGET 35%)

Diagram: Scenario 04 – improvement of operational carbon emissions





**80 Fenchurch  
- 14-Storey  
Commercial**

**Boundary  
House -  
14-Storey Hotel**

**Urbanest -  
14-Storey Student  
Accommodation**

**9-Storey  
Commercial**

**8-Storey  
Commercial  
Buildings**

Context and Emerging Context impacting Daylight and Sunlight



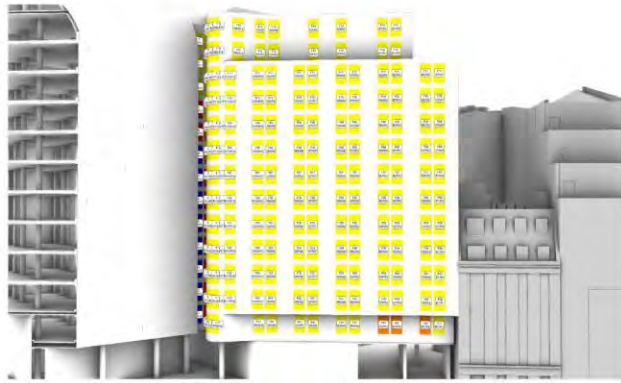


Figure 14: Existing ADF levels (Crutched Friars frontage)



Figure 15: Proposed ADF levels (Crutched Friars frontage)

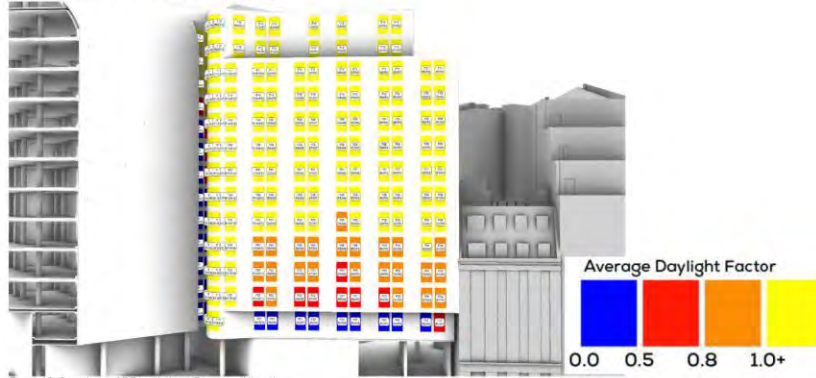


Figure 16: Cumulative ADF levels (with Boundary House)

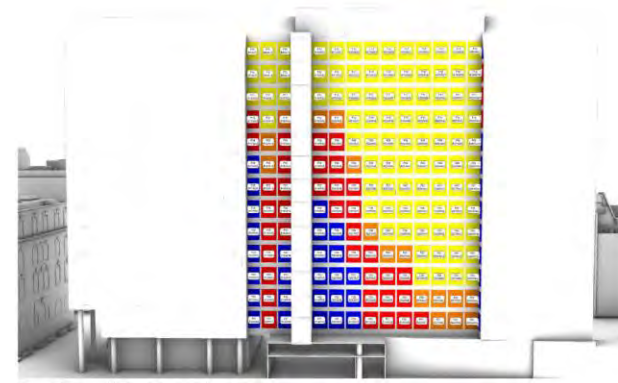


Figure 17: Existing ADF levels (set back frontage)

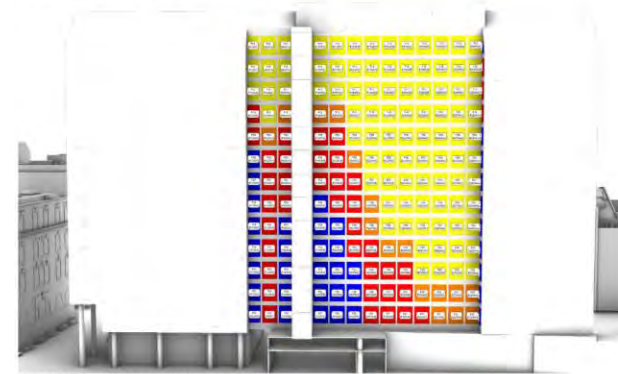


Figure 18: Proposed ADF levels (set back frontage)

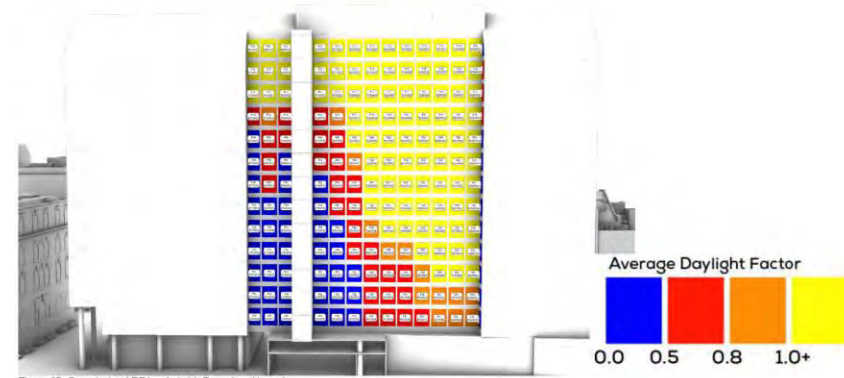


Figure 19: Cumulative ADF levels (with Boundary House)

ADF Daylight Impacts on Urbanest building – Existing (top) Proposed (middle) Cumulative (bottom)



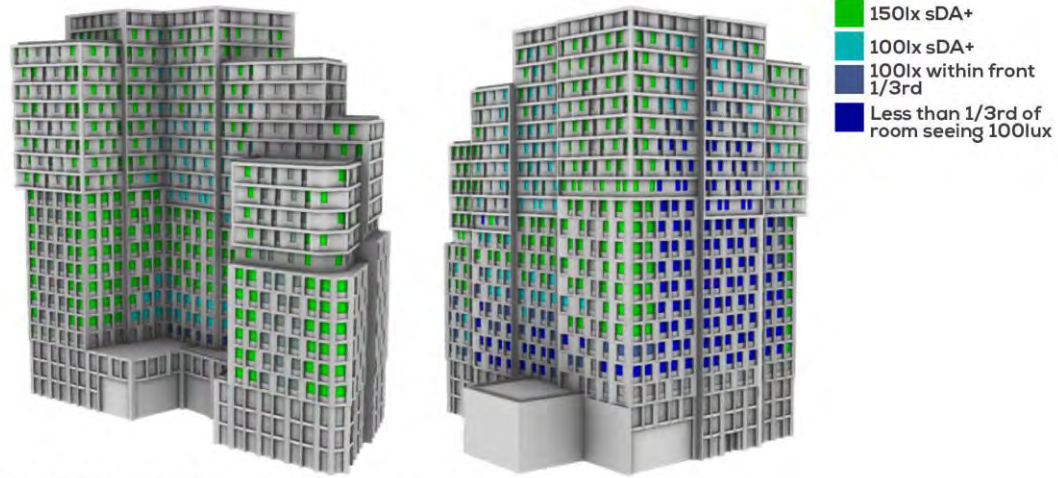


Fig. 03: 65 Crutched Friars sDA Window Maps

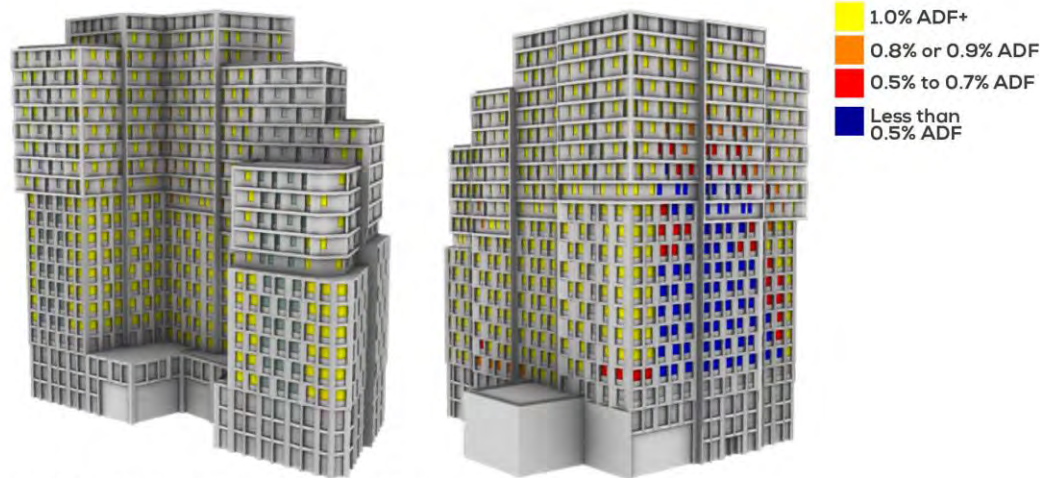


Fig. 04: 65 Crutched Friars ADF Window Maps

Internal Daylight of 65 Crutched Friars with Existing Context – sDA (top) ADF (bottom)



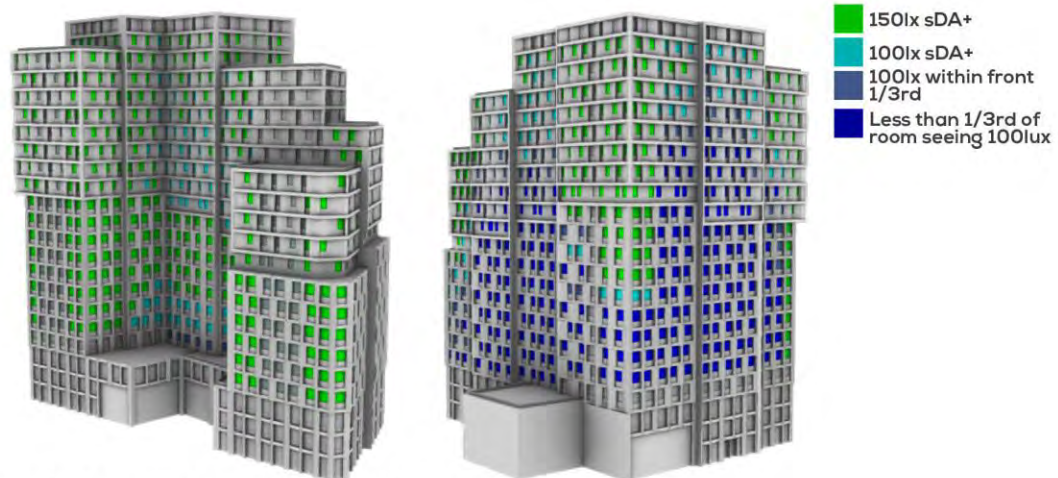


Fig. 06: 65 Crutched Friars sDA Window Maps

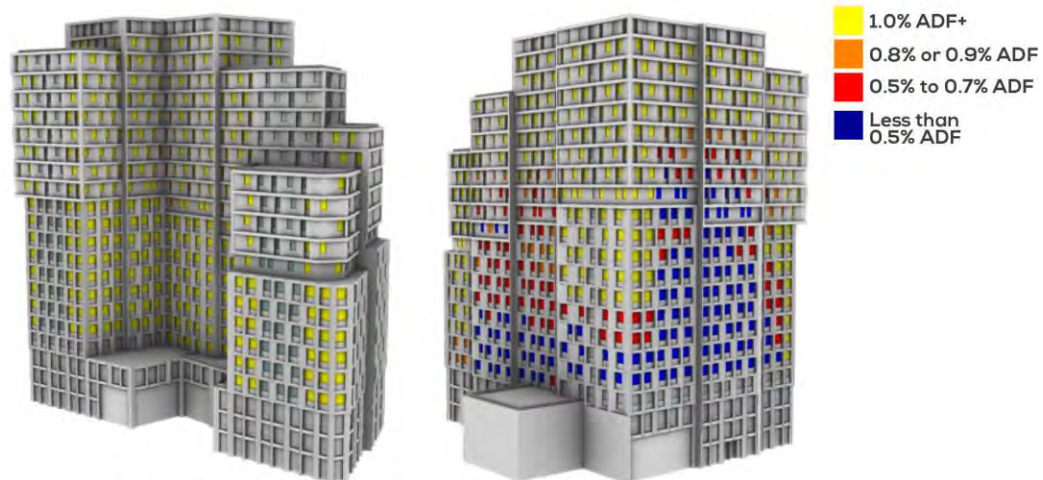


Fig. 07: 65 Crutched Friars ADF Window Maps

Internal Daylight of 65 Crutched Friars including Boundary House Scheme– sDA (top) ADF (bottom)



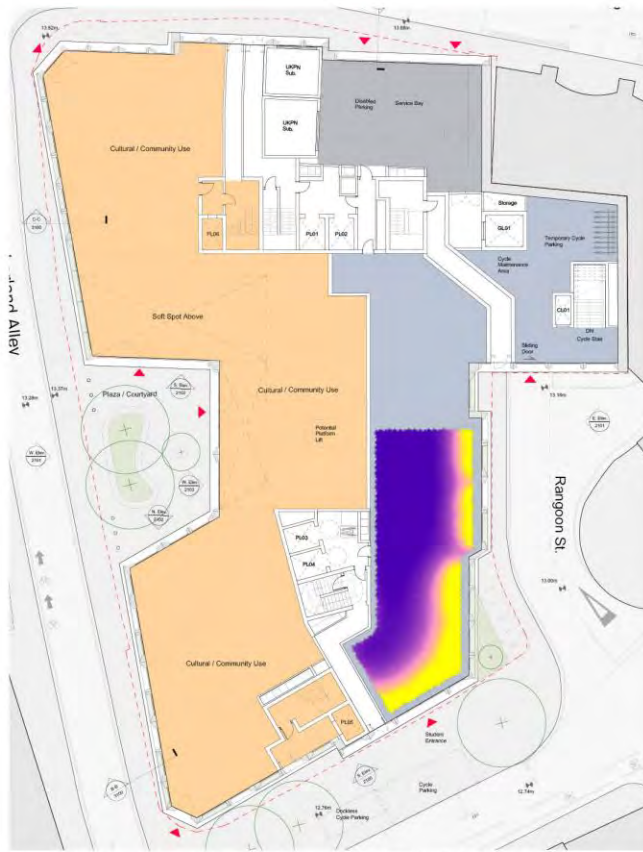


Figure 3: Ground Floor Student Amenity Space Daylight Performance



Figure 4: Second Floor Student Amenity Space Daylight Performance



Figure 5: Third Floor Student Amenity Space Daylight Performance

These daylight distribution overlays show the percentage of annual daylight hours 150lux is achieved across the room.



Student Amenity Space Daylight Performance (sDA) – Ground Floor (left), Level 02 (middle), Level 03 (right)



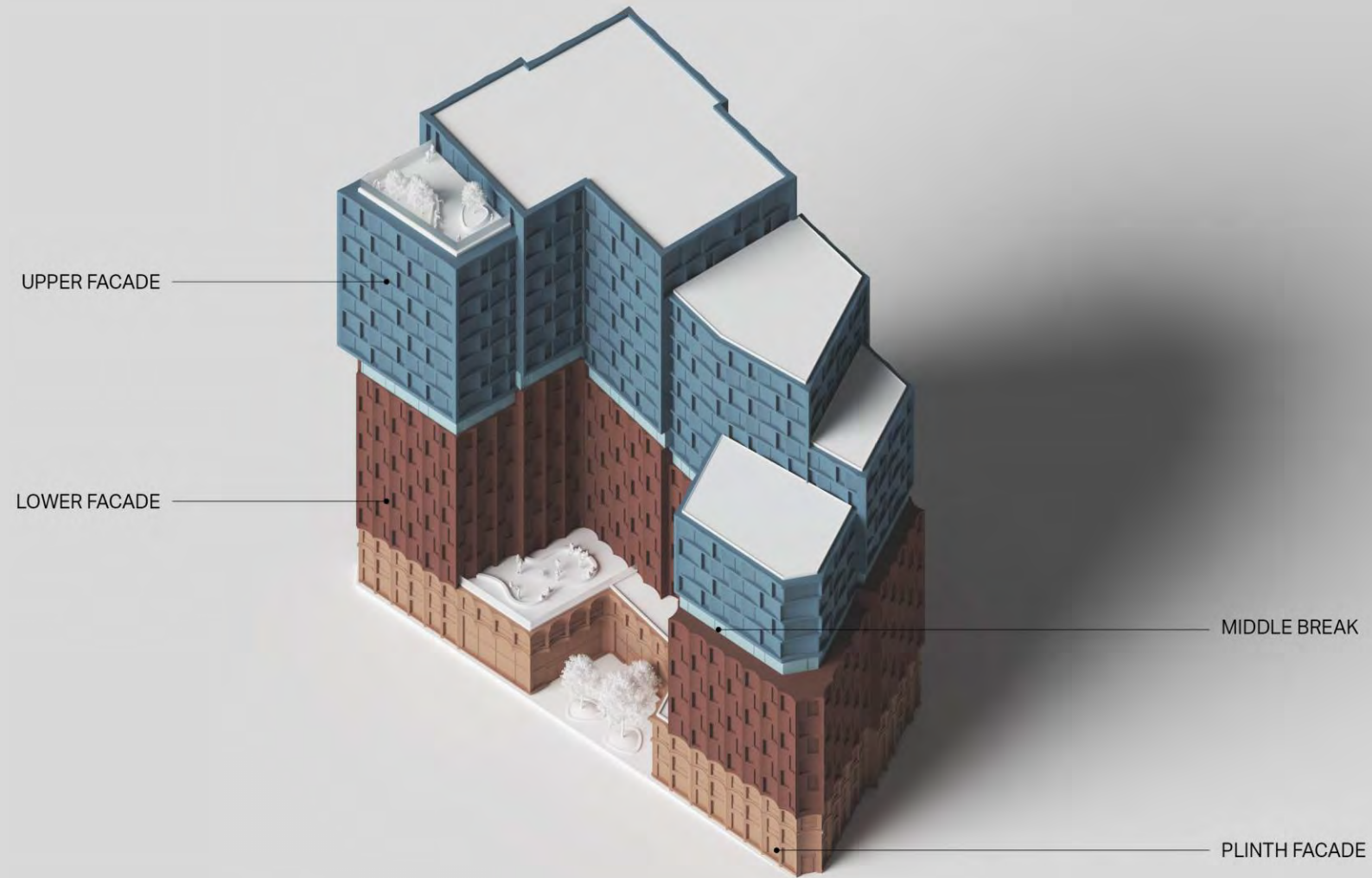


Diagram: Key façade types





Diagram: Lower façade type





Unifying horizontal cornices



Curvilinear geometry



Vertical rhythm with depth and variation

Diagram: Lower façade type characteristics





Diagram: Upper façade type





Unifying single-height cornice line



Curvilinear geometry



Vertical rhythm with depth and variation

Diagram: Upper façade type characteristics





Diagram: Plinth façade type





Mix of double-height & single height expression



Corbelling detail



Integrated planters & benches activate the facade

Diagram: Plinth façade type characteristics





Comparison: Façade proposal in relation to historical context





Comparison: Façade proposal in relation to historical context





View of Retention of existing statues





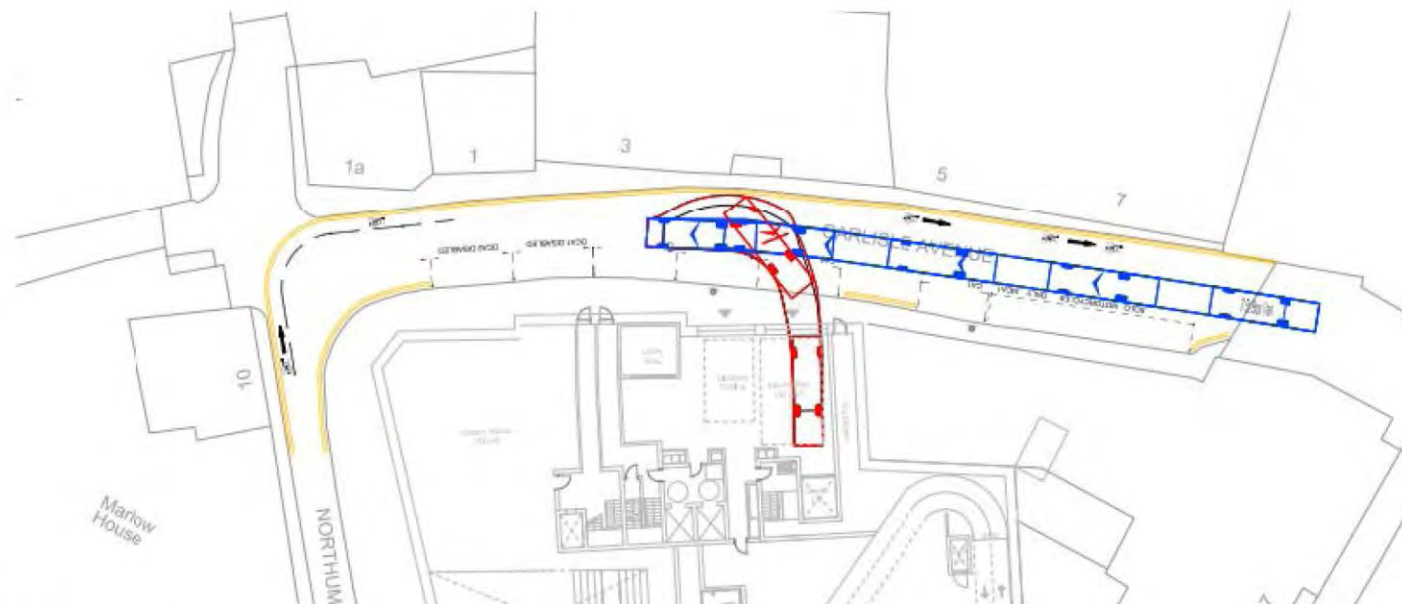
View of service bay on Carlisle Avenue while closed (note all artwork shown is indicative)



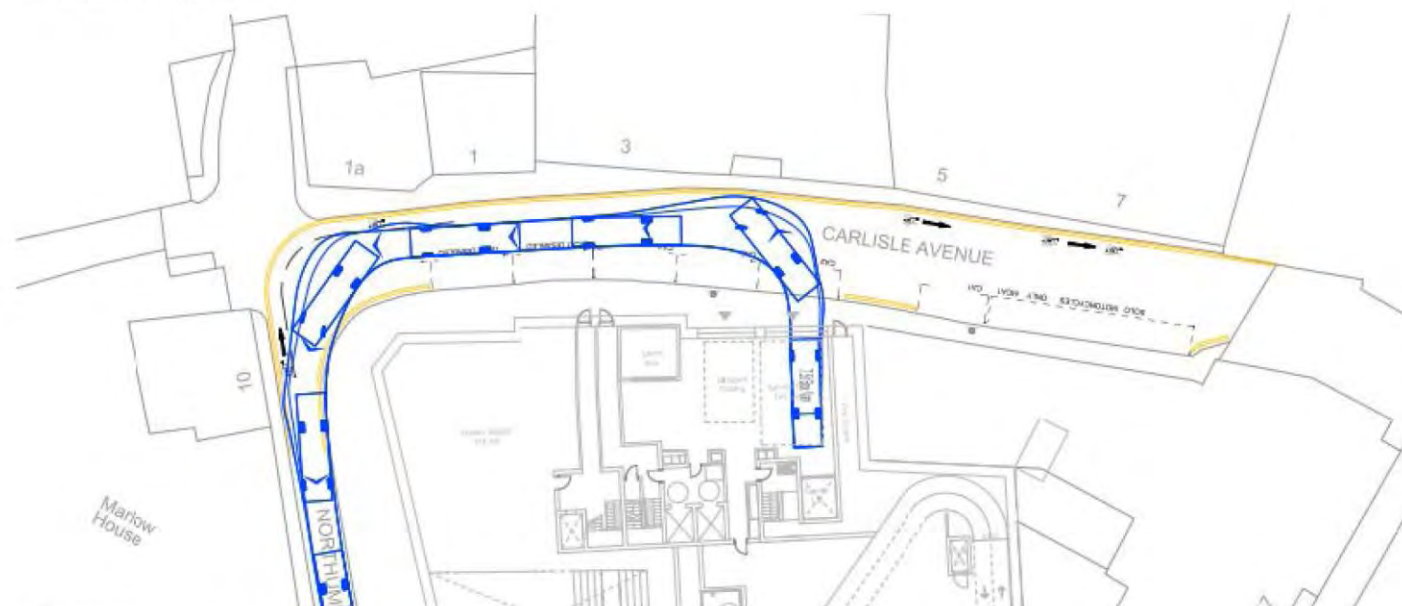
View of service bay on Carlisle Avenue while open (note all artwork shown is indicative)

Visualizations of service bay on Carlisle Avenue in closed and open conditions





Plan diagram showing entry manoeuvre



Plan diagram showing exit manoeuvre

Diagram: Entry and exit manoeuvre of service vehicles



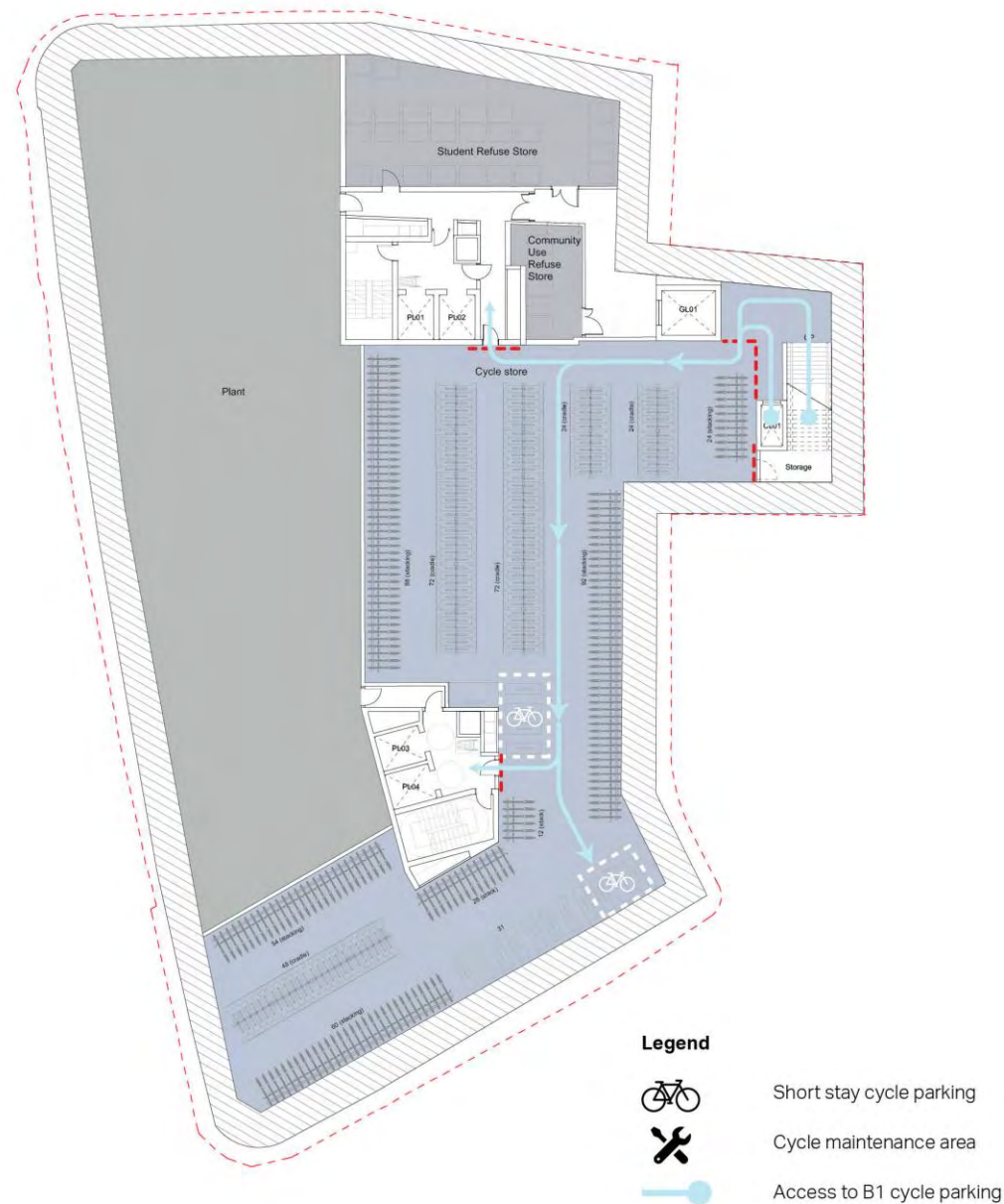


Diagram: Access and layout of cycle parking





Ground floor student amenity plan diagram

**Reception & Office c. 300m<sup>2</sup>**

- Reception
- Waiting / Lounge area
- Office
- Parcel Storage
- Security Gates
- Post Boxes
- WC



Second floor student amenity plan diagram

**Study Activities c. 400m<sup>2</sup>**

- Classic Study
- Individual Study
- Breakout/ Collaboration/ Workspace Areas
- Counselling Room
- Cafe
- Storage
- WC



Third floor student amenity plan diagram

**Play Activities & Terrace c. 420m<sup>2</sup>**

- Cinema
- Private Kitchen / Events Space
- Cafe Bar
- Video Games
- Games Area
- Gym
- Amenity Lounge
- Laundry
- WCs
- Storage





Diagram: New Public Green Spaces





Diagram & View: Courtyard along Northumberland Alley





Diagram & View: Pocket park on Rangoon Street





View of Migration Museum corner Entrance





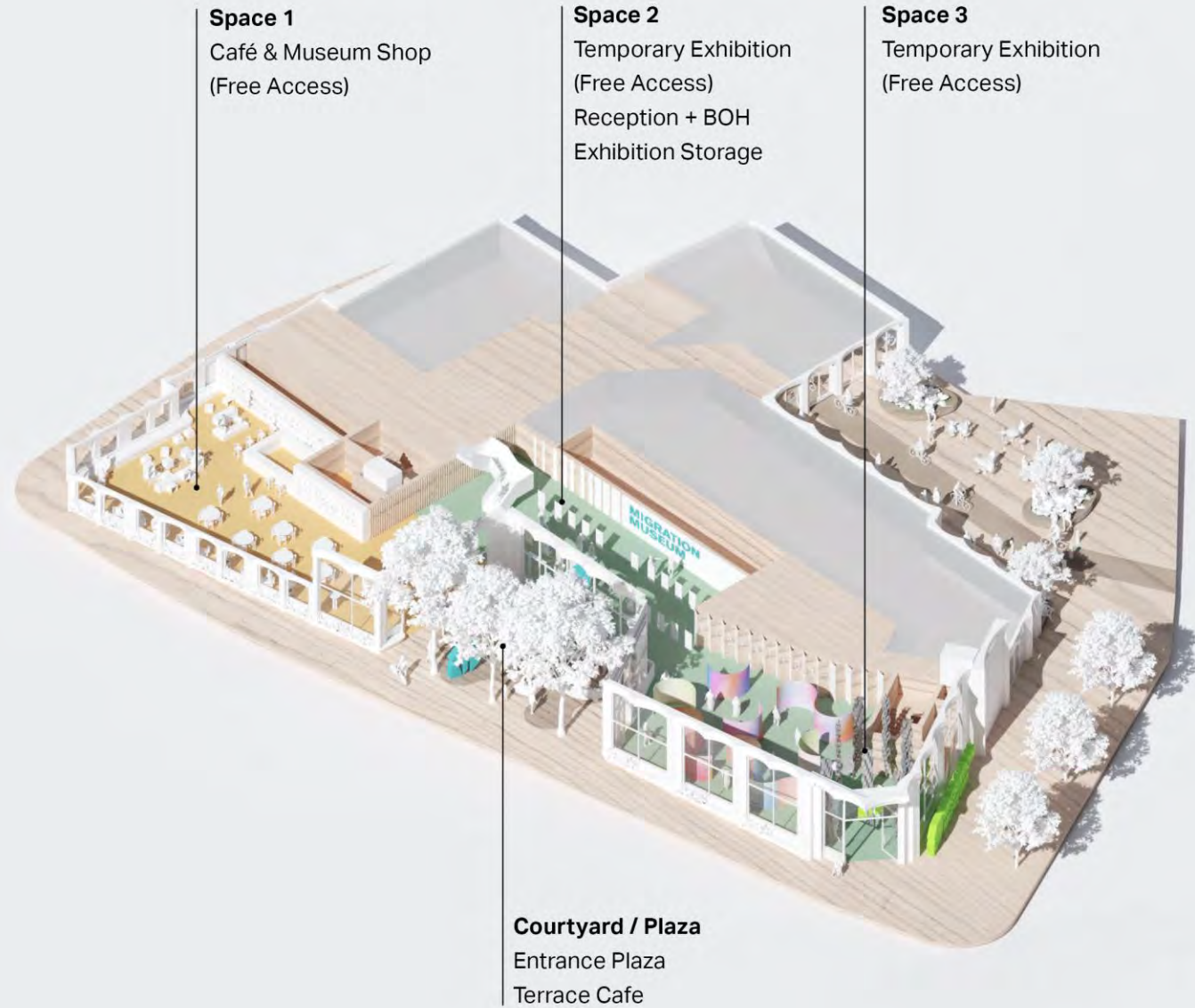
View of proposal from Crutched Friars facing west towards Rangoon Street





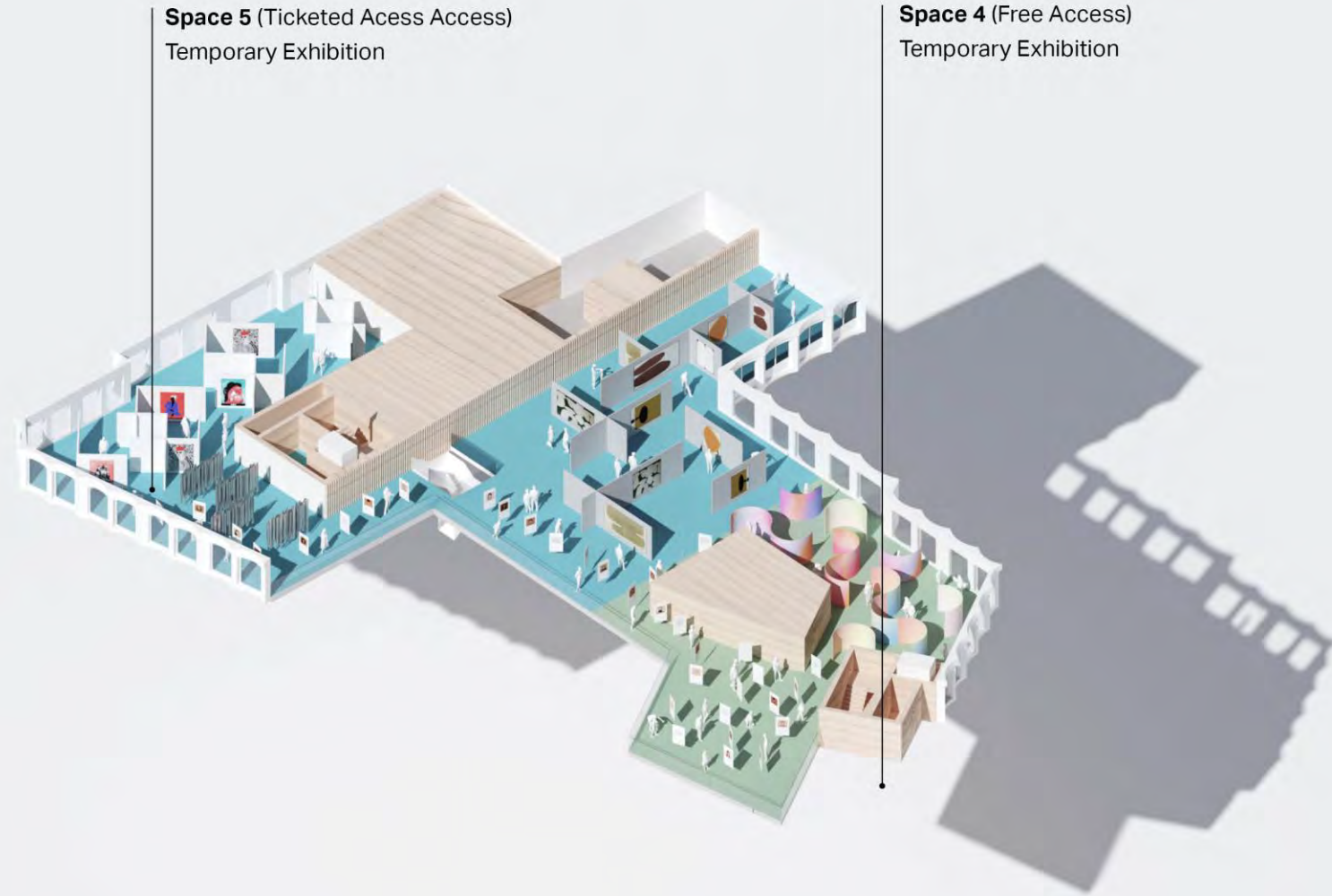
Exploded Axonometric Diagram of Migration Museum





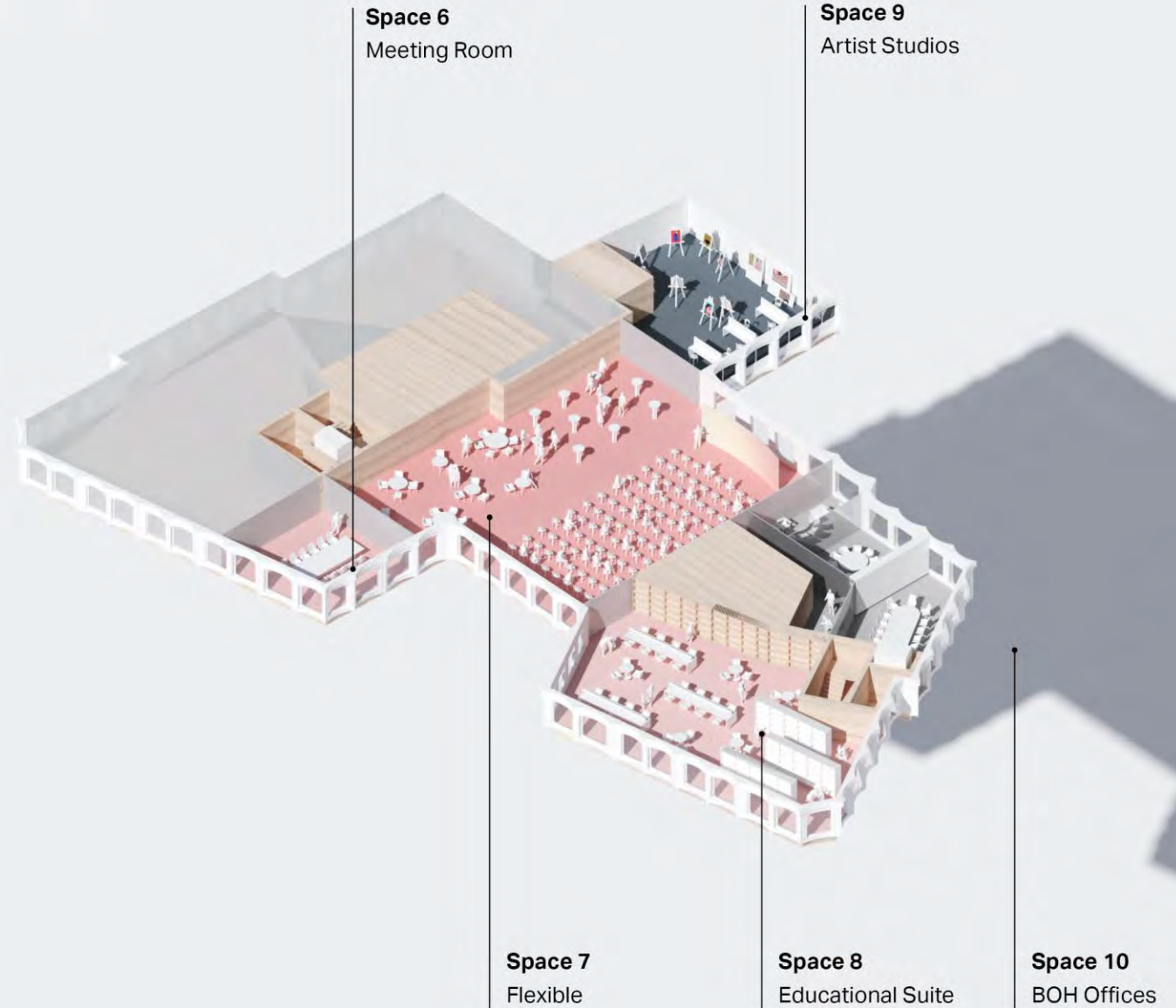
Plan & Axonometric Diagram of Migration Museum Ground Floor





Plan & Axonometric Diagram of Migration Museum Level 01





Plan & Axonometric Diagram of Migration Museum Level 02



PERIMETER PLANTING

MUSEUM SIGNAGE

3 MEDIUM TREES

INCREASED  
GLAZING

ADDITIONAL  
ENTRANCES

FACADE BENCH

DOUBLE-HEIGHT  
SPACES AND FACADE

ENTRANCE  
ALCOVE



Perspective Elevation showing activation of the streetscape





Diagram & Views: Tile Materiality with potential for further engagement





## **Next Planning Applications Sub-Committee**