

4.0 Architectural Design

4.9 Office Provision

Typical Office Floor

- Optimised 7x8m grid
- Expressed hybrid structure
- Lightweight frame and facade reducing loads on existing foundations
- In-floor services
- Exposed sprinklers & lighting
- Maximized daylight



Levels 01-04



Typical Office Floor: Steel & CLT hybrid. View looking West

4.0 Architectural Design

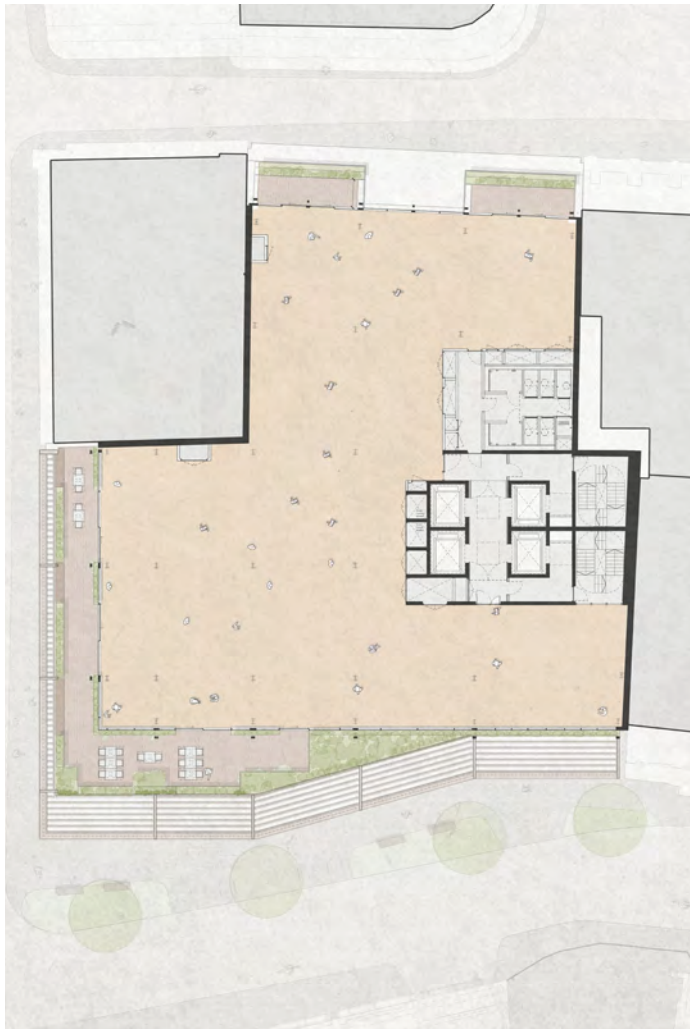
4.9 Office Provision

Upper Office Floors

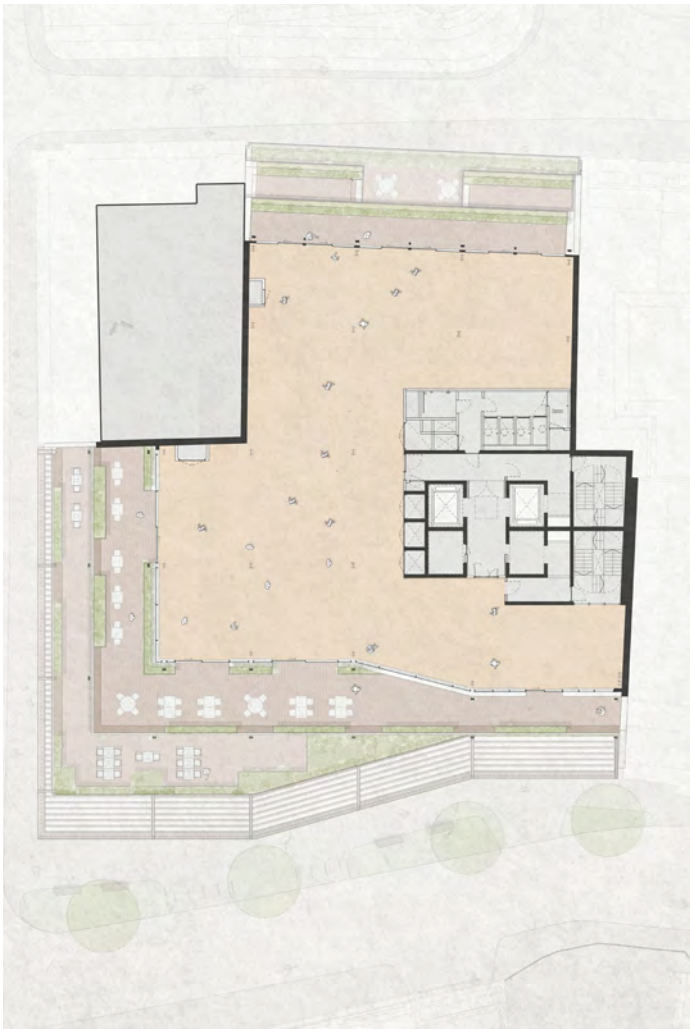
Each upper level is designed to step back, informed by neighbouring buildings' setbacks. These spaces not only enhance biodiversity but also contribute to urban greening efforts.



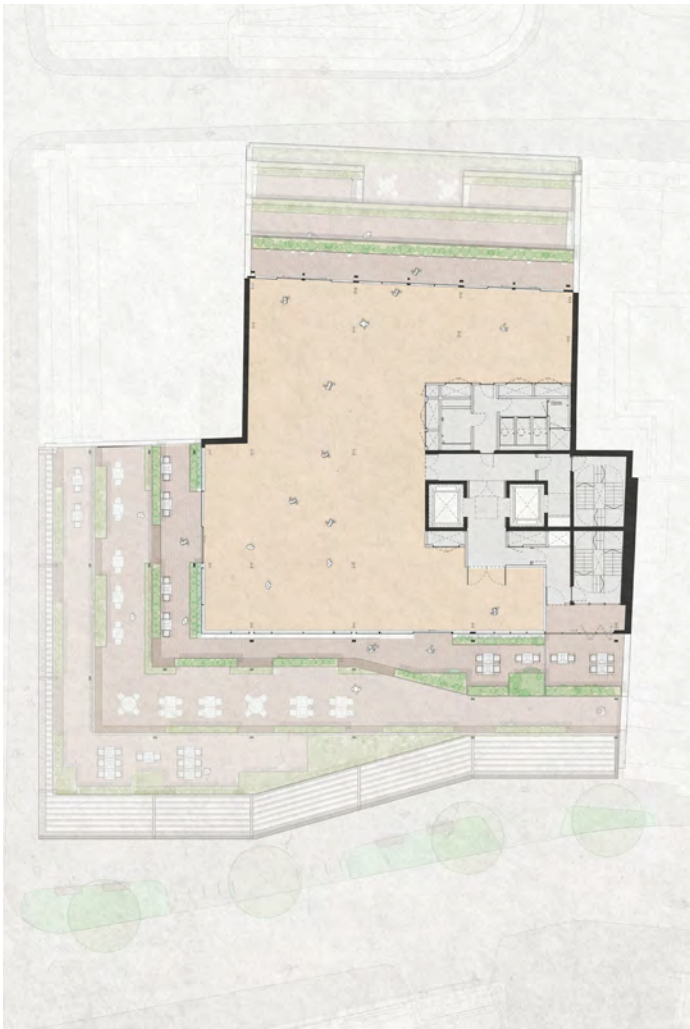
Level 05



Level 06



Level 07



Level 08

4.0 Architectural Design

4.9 Office Provision

Upper Office Floors

- Optimised 7x8m grid
- Expressed hybrid structure
- Lightweight frame and facade reducing loads on existing foundations
- In-floor services
- Exposed sprinklers & lighting
- Maximized daylight
- Integrated Planting from level 05-08 to mitigate overlooking and provide privacy for neighbouring buildings



Upper Office Floors: Steel & CLT hybrid. View looking North

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4.9 Office Provision

Roof Plan

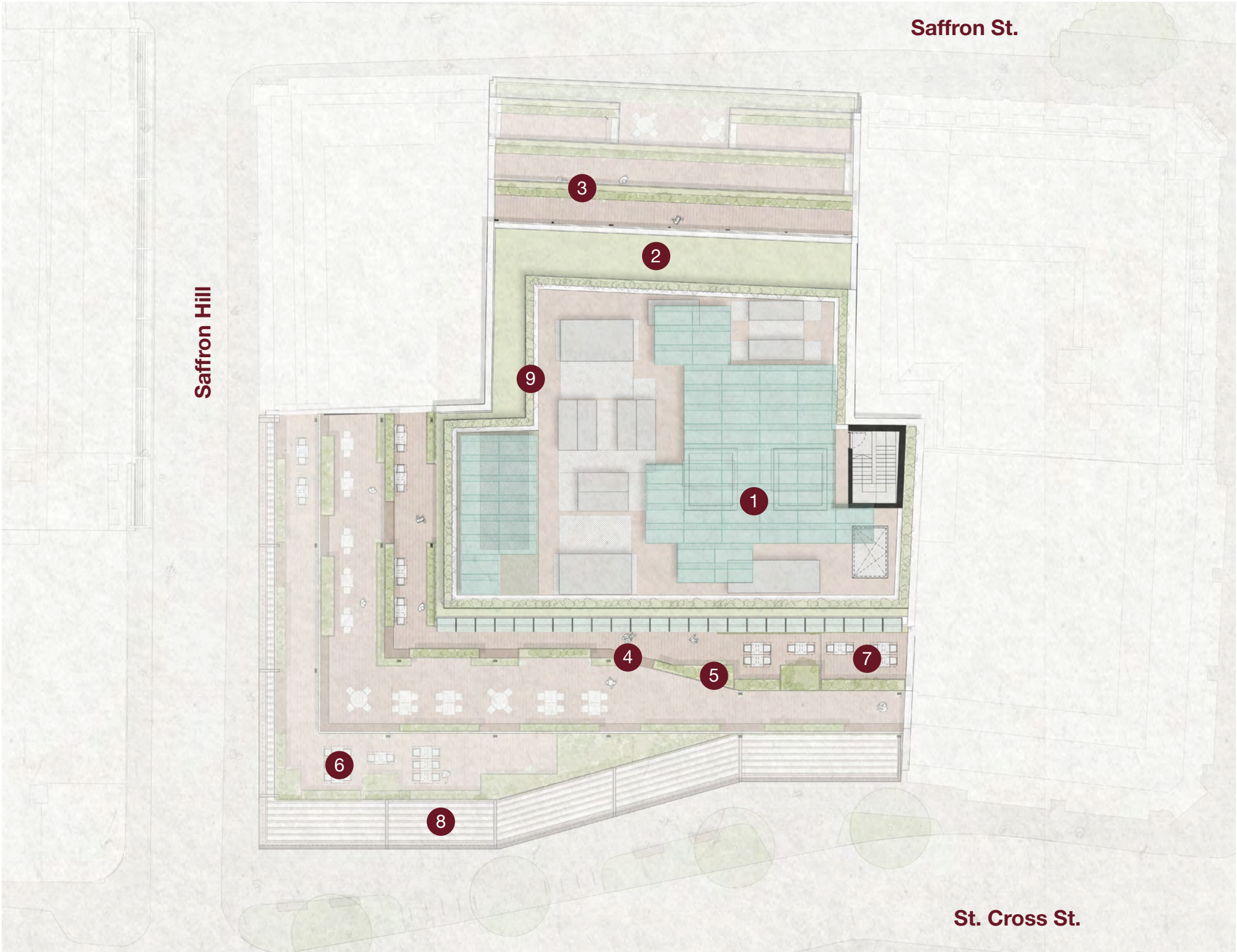
The roof plan consists of plant equipment which includes air source heat pumps and air handling units. The footprint of the enclosure has been proposed to offer the minimum possible extent, whilst accommodating the required plant.

Vertical planting is proposed along the louvred plant enclosure to maximize urban greening. The remainder of the level 09 slab is proposed as a biodiverse roof.

PVs are maximized above low level plant equipment, on an elevated deck, as per the schematic below.



- 1 PV array over plant space
- 2 Biodiverse roof (not amenity)
- 3 Perimeter planters offering screening and biodiversity enhancement
- 4 Integrated perimeter benches
- 5 Large planters for larger specimen shrubs/trees
- 6 Social office amenity spaces along levels 05-08
- 7 Communal terrace for office levels G-08
- 8 Brise soleil to balcony below
- 9 Vertical Planting along plant enclosure



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4.9 Office Provision

Upper Office Floors



Key

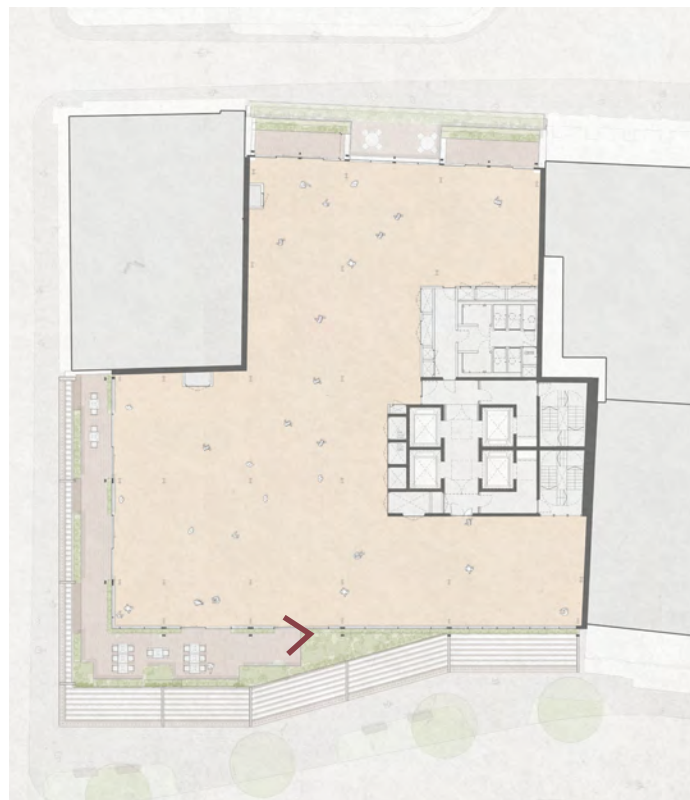


Concept CGI, level 05 south facing terrace

4.0 Architectural Design

4.9 Office Provision

Upper Office Floors



Key



Concept CGI, level 06 south facing terrace

4.0 Architectural Design

4.10 Sustainability

Energy Strategy

This Section provides a design summary for the sustainability design proposals for the development. Please refer to the Sustainability Statement, Energy Statement, Circular Economy Statement & Whole Life Carbon Assessment by Carbon Plan which have been submitted separately for further details. The client brief for the design is to provide a best in class environmentally sustainable and resilient design which reduces operational energy, introduces green space for the users of the buildings and makes a positive contribution to local ecology.

The proposals follow the four principals of the Energy Hierarchy:

Be Lean

- Reduce energy demand through high performance U-values and low air permeability
- Where possible design to passive ventilation of internal spaces and where mechanical ventilation is needed, utilise those with heat recovery
- Reduce the extent of overheating through design of façades to limit energy requirement to provide cooling

Be Clean

- There is no existing heating network close to the development site to provide feasible connection
- The development will utilise air source heat pumps and heat recovery between all uses

Be Green

- A feasibility study is being carried out for the development to identify the opportunities for renewable technology (incl photovoltaics)

Be Seen

- We are undertaking a Design for Performance process and this will include 3 years of reporting utilising the NABERS process which aligns with the 2022 GLA Be Seen energy guidance

The proposed development will be compliant with the London Plan CO₂ savings target of 35% overall, following the GLA Energy Assessment Guidance.



Active Design

- All-electric development
- Centralised low temperature hot water (LTHW) and domestic hot water (DHW) system
- Waste-water heat recovery (WWHR)
- Highly energy efficient air handling units (AHUs) with heat recovery
- Regenerative lifts



Passive Design

- Compact building form
- Highly insulated and airtight building fabric
- Reduced thermal bridging
- Optimised window-to-wall ratio
- Solar control glazing



Renewables

- Air source heat pumps (ASHPs)
- Roof mounted photovoltaic (PV)



Health and Wellbeing

- Excellent daylight levels and quality
- Zonal thermal control
- Enhanced air quality



Water Efficiency

- Low-flow water fixture, fittings and appliances
- Drought proof planting
- Stormwater attenuation
- Water metering

4.0 Architectural Design

4.10 Sustainability

Key Targets

General
BREEAM Excellent

Energy
a minimum 15% reduction in CO2 emissions through energy efficiency measures over Part L1 2021 Target Emissions Rate (TER)
an overall 35% improvement in CO2 emissions over Part L1 2021 Target Emissions Rate (TER)
a 20% reduction in carbon emissions from on-site renewable energy technologies

Ecology
An Urban Greening Factor of > 0.30
10% biodiversity net gain is achieved

Waste
a maximum of 7.5m3 or 6.5 Tonnes of waste generated from construction activities
95% of all non-hazardous demolition and construction waste will be diverted from landfill

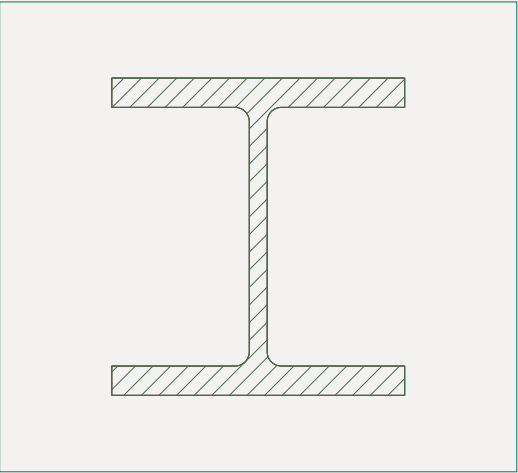
Pollution
Air Quality Neutral development
No increase in external noise from plant

Water
A minimum of 3 credits will be achieved in the BREEAM 2018 methodology which equates to a 40% reduction over the benchmark.

Materials
Maximum 950 kgCO2/m2 GIA from embodied carbon A1 to A5
Maximum 450 kgCO2/m2 GIA from embodied carbon B to C excluding B6 and B7
Maximum 1,400 kgCO2/m2 GIA from embodied carbon A to C excluding B6 and B7 and including sequestered carbon

01

Recycled Content in Steel



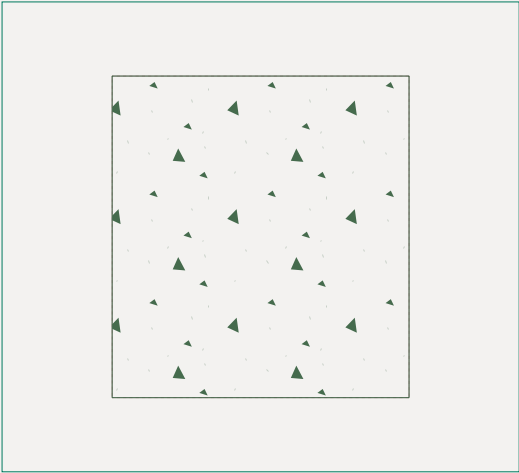
02

Low Embodied Materials & Use of CLT



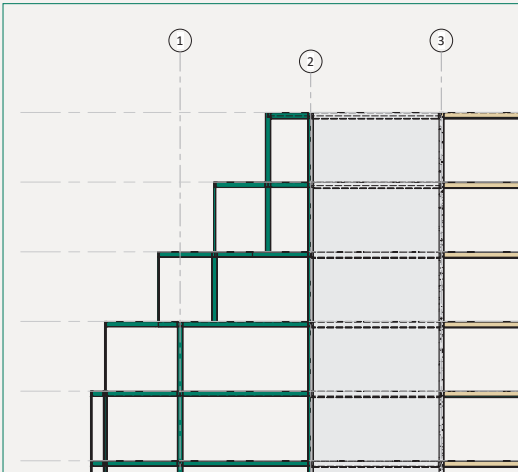
03

Cement Replacement



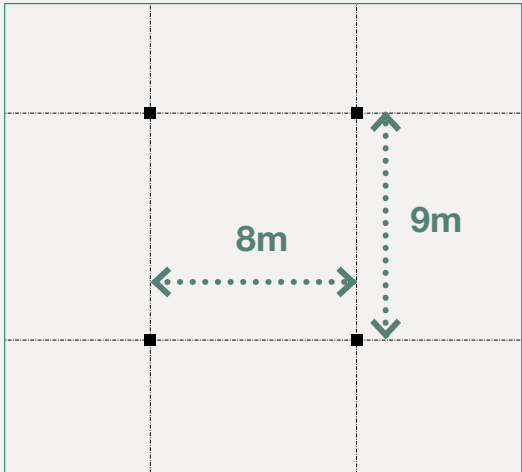
04

Lightweight Hybrid Structure



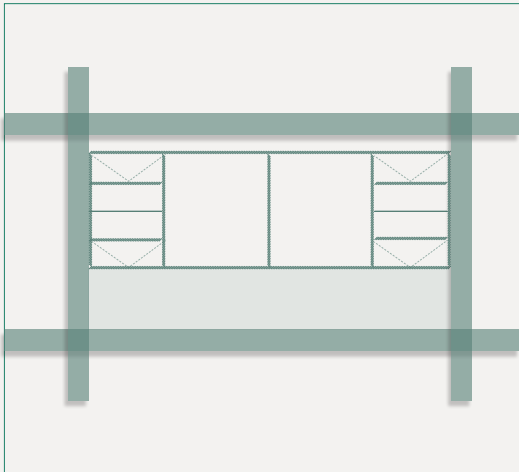
05

Efficient Grid



06

Facade Optimization

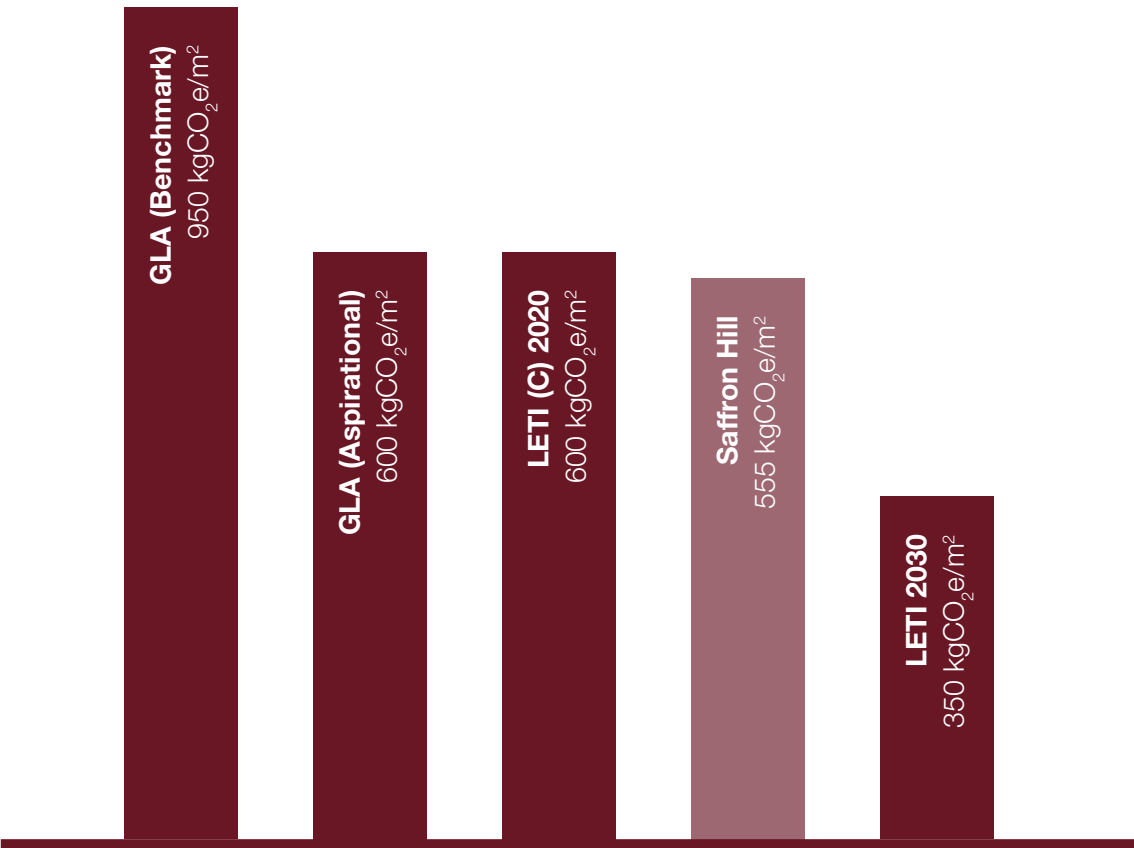


4.0 Architectural Design

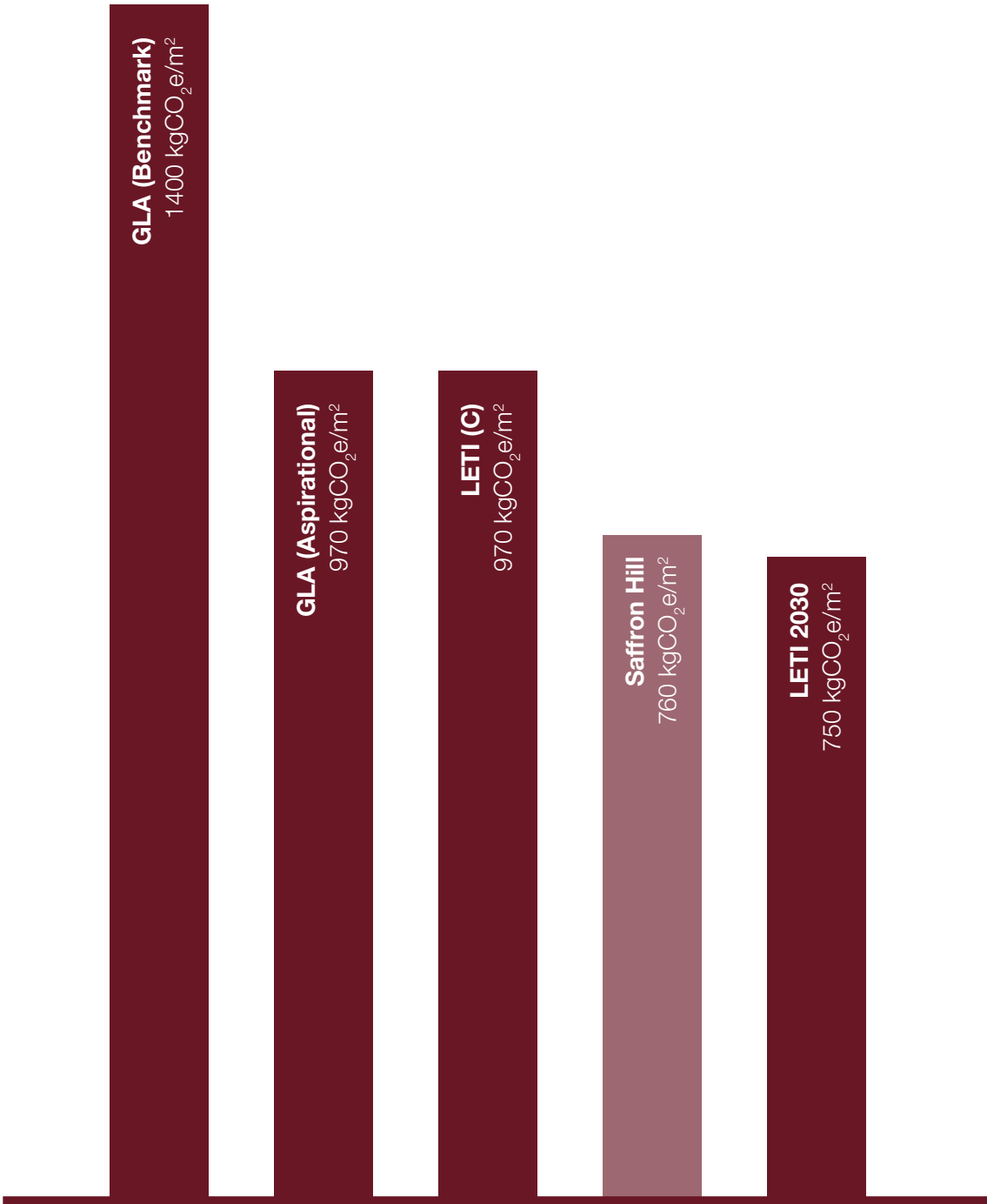
4.10 Sustainability

Upfront vs. Lifecycle Embodied Carbon

The below figures provide a snapshot of the Whole Life Carbon Analysis for embodied carbon. Efforts to reduce the figures to below 600kgCO₂e/m² have been consistent throughout the design process. Please refer to Carbon Plan information for more detail and most up-to-date figures.



Upfront Embodied Carbon
(Module A1-A5)
Benchmarks exclude carbon sequestration



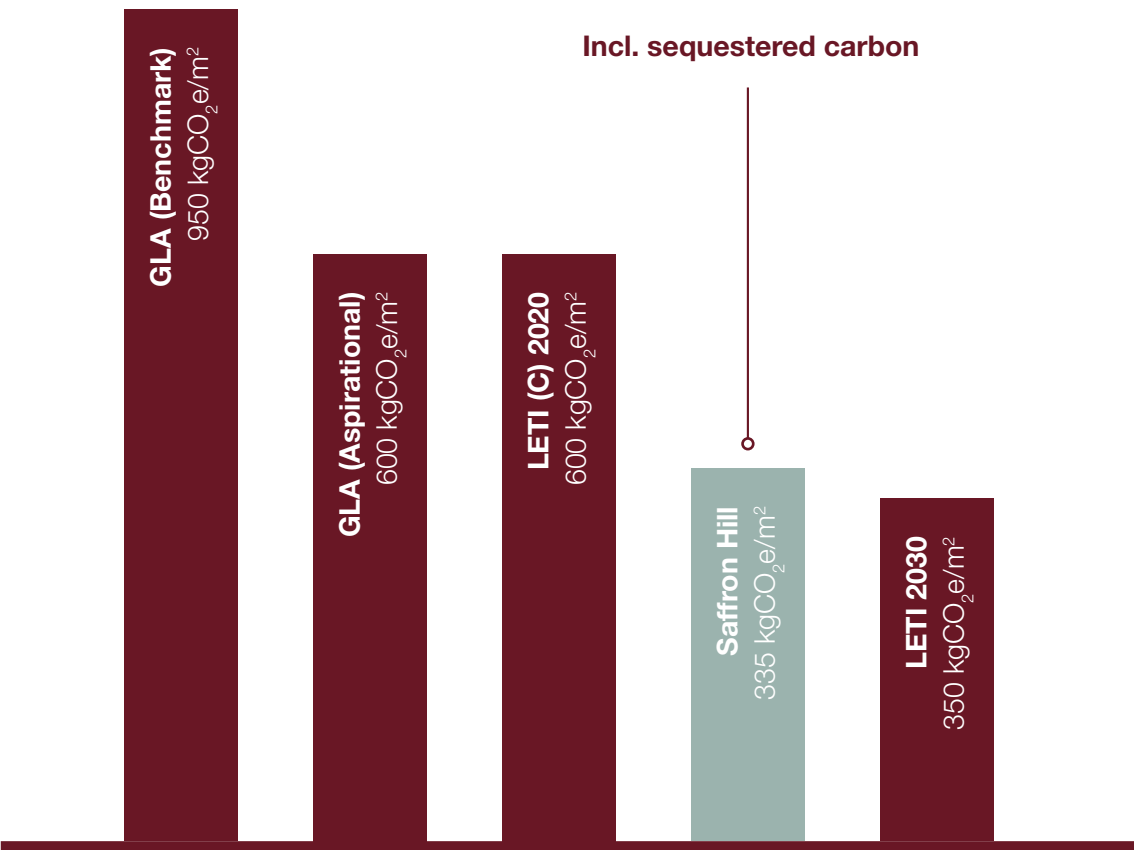
Lifecycle Embodied Carbon
(Module A1-A5, B1-5, C1-4)
Benchmarks include carbon sequestration

4.0 Architectural Design

4.10 Sustainability

Although the benchmarks below do not consider carbon sequestration, it is important to highlight the A1-A5 impact of the proposal when sequestered carbon is included. Cross-laminated timber (CLT) utilization in construction significantly reduces embodied carbon emissions compared to traditional materials like concrete and steel. However, what sets CLT apart is its capacity to sequester carbon. Trees used in CLT production absorb CO2 throughout their lifecycle,

locking it within the wood fibers. By incorporating sequestered carbon, CLT effectively offsets its own carbon footprint, mitigating environmental impact. This dual benefit of reducing emissions and sequestering carbon underscores the importance of CLT in sustainable building practices. Emphasizing carbon sequestration highlights the pivotal role of construction materials in emission reduction.



Upfront Embodied Carbon
(Module A1-A5)
Benchmarks exclude carbon sequestration



CLT Precedent
242 Marylebone Road, AHMM

4.0 Architectural Design

4.11 Structural Design

Preliminary Embodied Carbon figures for substructure & superstructure, as conducted at the earlier stages of the design process.

Figures as per pre-app 03, dated 22 June 2023.



RC Frame
with Ribbed Slab



PT Frame
with CLT Infill



Precast Delta Beams
with CLT Infills

12x9m
Grid

402 kgCO₂e/m²

332 kgCO₂e/m²

340 kgCO₂e/m²

11.5x7m
Grid

372 kgCO₂e/m²

282 kgCO₂e/m²

283 kgCO₂e/m²

9x7m
Grid

340 kgCO₂e/m²

266 kgCO₂e/m²

264 kgCO₂e/m²



4.0 Architectural Design

4.11 Structural Design



4.4 Proposed Structure

The proposed superstructure will be formed with steel beams acting non-compositely with cross-laminated timber (CLT) slabs spanning onto steel columns and the reinforced concrete core walls. Where the building line steps in at levels 5, 6, 7 and 8 a deeper transfer beam is utilised to support the column line over. The threshold detail for the terraces is to be developed to set the slab level, with the slab either dropping to maintain a level threshold or the level being made up in the finishes zone.

Typically beams are double UB sections with plates welded to the underside to support the incoming CLT slabs. This construction was chosen to keep the structural depth down to maintain a flat soffit whilst staying clear of the service zone above using the lightest steel tonnage. The closed geometry of the fabricated double UB section also provides benefits in torsion during the asymmetric loading of the beams during construction.

4.4.1 Structural Appraisal

As part of the feasibility study and with consideration for the embodied carbon, the structural depth, the self-weight, and the look and feel, the below options were sized and appraised:

- + RC frame: RC flat slabs with RC columns
- + Mass timber frame
- + RC frame with RC bandbeams and CLT panels
- + RC frame with RC bandbeams and precast panels
- + Steel frame with CLT slabs
- + Steel frame with concrete on metal deck slabs
- + Steel frame with precast slabs

From the beginning the team was determined to present reuse of existing structure where possible to save on materials and embodied carbon. With the reuse of the superstructure being unfeasible due to the constraints of turning an uninhabitable carpark into a marketable office, attention was turned to utilising the existing piled foundations. This was an opportunity to reduce or eliminate the number of new piles which would be a massive programme saving whilst also improving the performance of our new stepped raft. To achieve this a light superstructure was required which made timber and steel more favourable than concrete. Attempts were made to reduce the weight of a concrete frame option by looking at bandbeams with CLT infill slabs, but a concrete frame was eventually eliminated from the study due to the high self-weight and it not matching with the client's vision.

A steel frame with various slab options and a mass timber frame were the remaining options to consider with a steel frame being preferred for the balancing of reduced structural depth and reduced risk in fire with the self-weight of the structure. The small structural zone was a key driver of the look and feel of the project with the goal of having no downstand beams for a completely flat soffit. With the soffit being such a prominent visual element of the building and due to its light weight and low embodied carbon, CLT slabs were chosen over precast or comflor slabs. Comflor slabs had the added detriment of requiring secondary steels to support the spans, whereas a fully spanning CLT panel helped to reduce the steel beam tonnage. An additional benefit of CLT is the biogenic carbon that is sequestered during the growing of the tree which offsets the embodied carbon during the lifetime of the building.

Multiple beam options were considered for the frame such as Deltabeams and ultra shallow floor beams (USFB) with double UB sections chosen for having the lowest steel tonnage. These double sections have been designed to include the structural benefit from the steel plate welded to the bottom flange to receive the CLT slabs.

The double UB section, whilst being deeper than the alternative steel options to increase the efficiency, has been coordinated to with the services running above the beam and slab within the floor zone.

The above options were considered for multiple grids: an optimised grid that prioritised the use of the floorplates, and the consistent and efficient span of beams and slabs; a 'matched' grid which aligned proposed columns with the existing pile locations; and an 'adjusted' grid which combined the two options. The adjusted and matched options resulted in inconsistent bay sizes and span lengths with some spans reaching into inefficient lengths of >10m and other columns being too close. To provide the most efficient structure and optimal use of space the grid was set independently of the existing piles. This is facilitated by the proposed raft slab which allows for columns to be set out freely with the raft spreading the load into the existing piles and the ground.

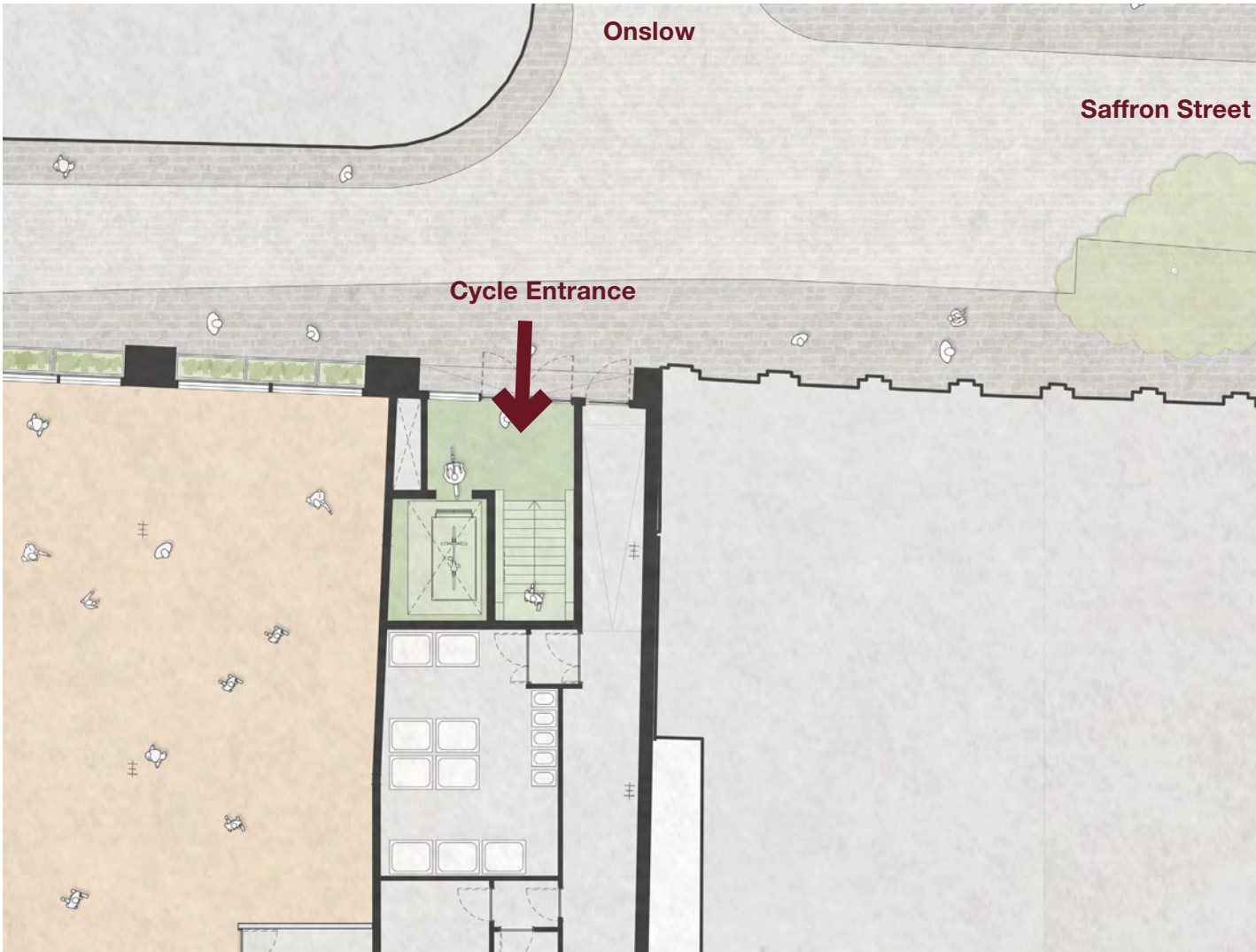
4.0 Architectural Design

4.12 Cycle Facilities

Cycle Entrance

A Transport Assessment has been prepared by Caneparo Associated and is submitted in support of this application. A summary of key influences related to the architectural design are summarised here, but the specialist consultant’s accompanying report should be read in conjunction, and for additional detail.

The proposals seek to celebrate and promote sustainable means of transport. With that in mind, the cycle entrance should be part of the front of house journey. A dedicated entrance with double doors, dedicated straight stair and lift are accessed directly from Saffron Street.



Ground Floor Plan



KXP2 Building in King's Cross



The Post Building, New Oxford Street



White Collar Factory Building Old Street

4.0 Architectural Design

4.12 Cycle Facilities

Cycle Provision

Office Long-stay – 205 spaces provided at Lower Ground:

- 87 two-tier racks (174 cycle spaces)
- 21 Folding cycle lockers (21 spaces)
- 7 Sheffield stands (10 accessible cycle spaces)

Café Long-stay – 6 spaces provided at Ground:

- 3 two-tier racks (6 cycle spaces)

Short-stay – 18 spaces provided externally on-street:

- 9 Sheffield stands (18 cycle spaces)

Lockers - 208 total (equal male/female split)

Showers - 20 Showers provided:

- 10 male
- 10 female
- (featuring two DDA compliant shower facilities)

WCs - 4 total

- 2 male
- 2 female
- (featuring two accessible toilets)

Drying Rooms - 2 total (equal male/female split)



Ground Floor Plan



Lower Ground Floor Plan

4.0 Architectural Design

4.13 Servicing Strategy

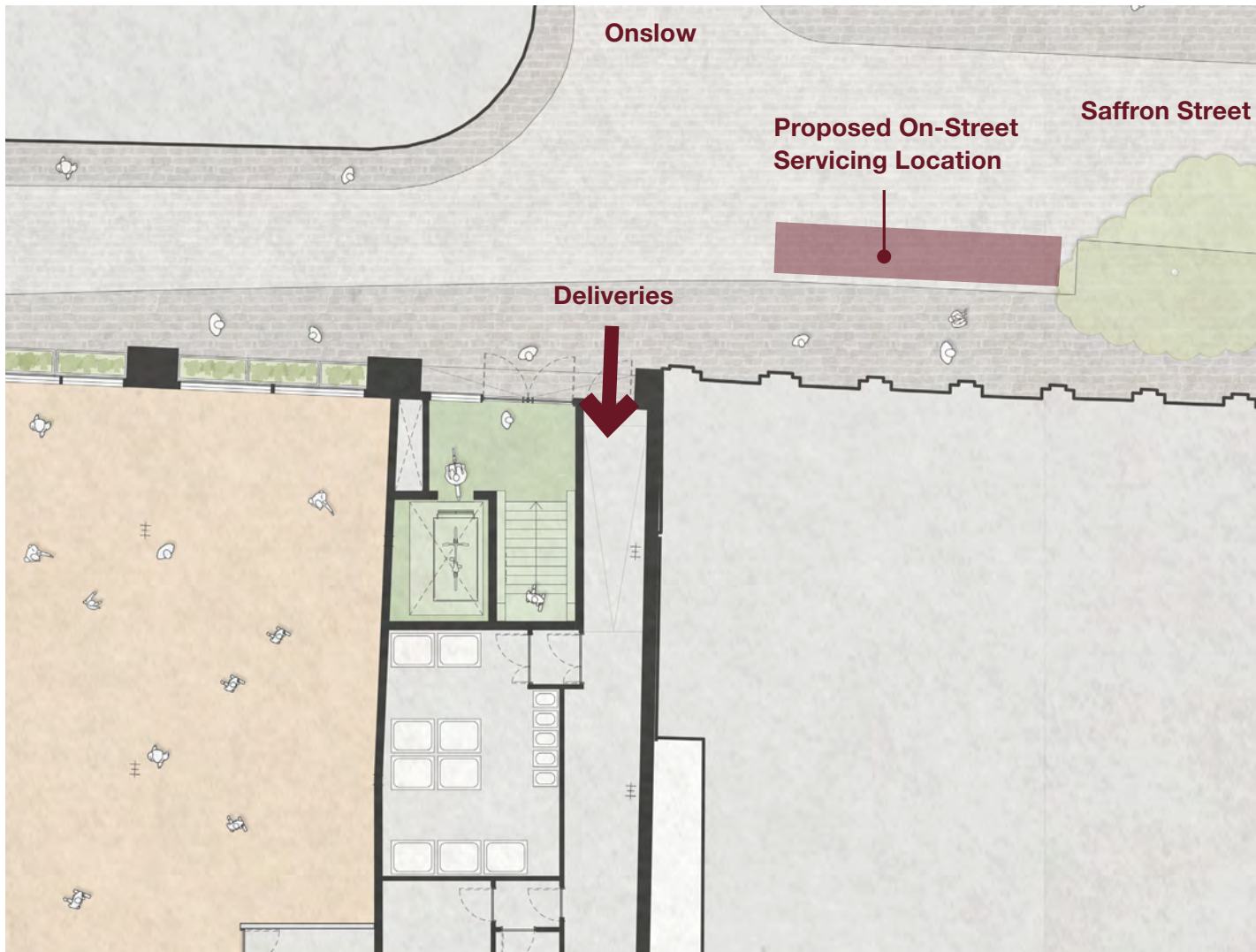
Deliveries

The existing Site utilised on-street sections of single yellow line kerbside to facilitate deliveries. The Proposed Development will, in a similar manner, utilise existing on-street kerbside locations for the undertaking of deliveries, as agreed during pre-application discussions with LBC

- 1. Deliveries will be planned and undertaken from the agreed location on Saffron Street.
- 2. Where possible, deliveries will be undertaken by small to medium sized vehicles (e.g. bicycles, motorbikes, and vans) and electric or hybrid vehicles.

- 3. Vehicles will load / unload for the minimum time necessary, in order to ensure that the loading facilities are available for other incoming vehicles whenever possible.
- 4. Reduce the number of deliveries, where possible, through consolidation, shared suppliers and using locally based suppliers.
- 5. Maximise the amount of recycled waste in line with the waste hierarchy.

For further information, please refer to the Delivery, Servicing & Waste Management Plan prepared by Caneparo.



Ground Floor Plan



Extract from Caneparo Assessment

4.0 Architectural Design

4.13 Servicing Strategy

Refuse

The office waste store will be located internally to the north of the Site at ground floor level, accessible from Saffron Street via a service entrance. The office waste store will be lockable and not visible from Saffron Street, with access provided via a ramp to street level.

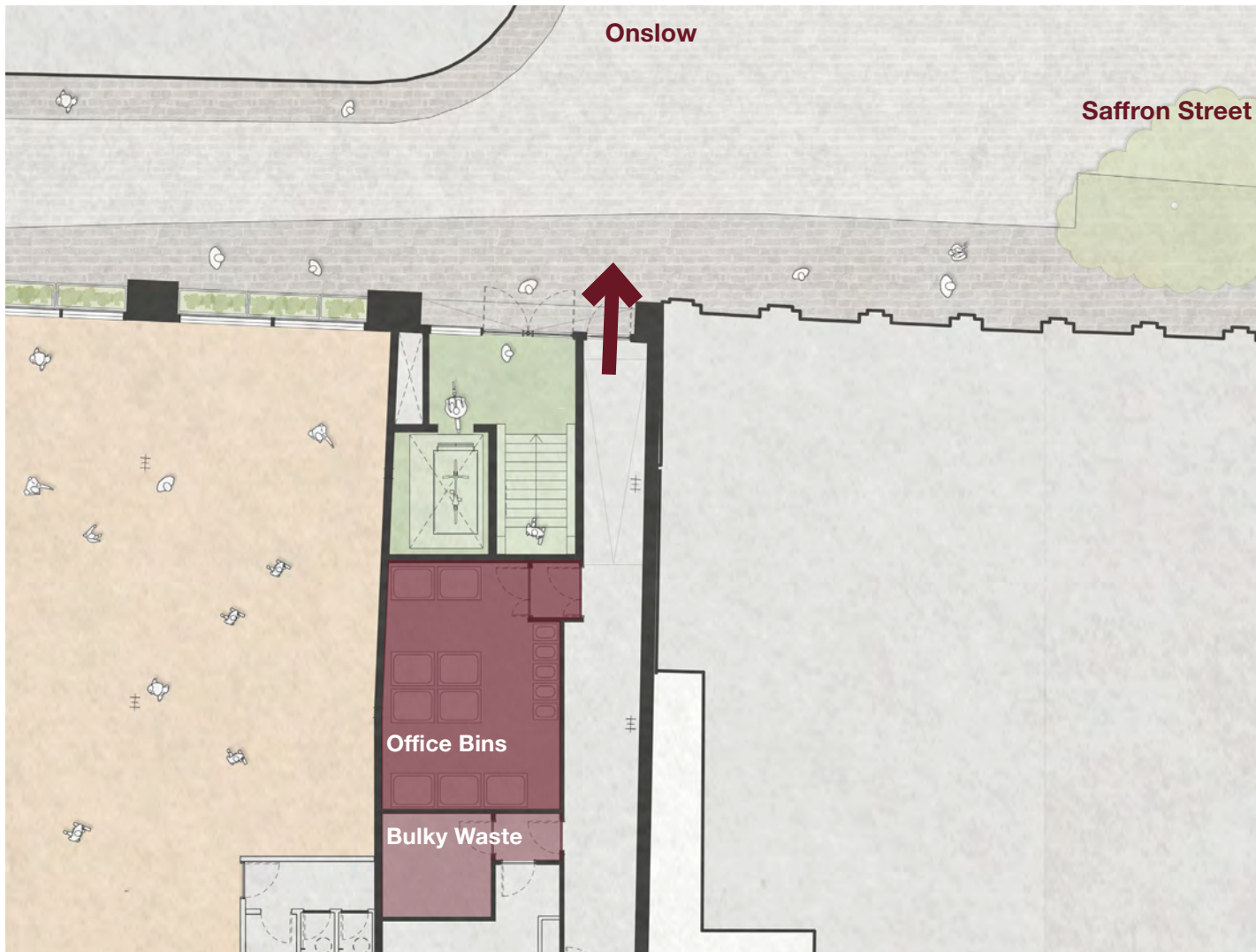
The café waste store will be located within the café floorspace in a back of house area, accessible via the main entrance to the café which is located on the St. Cross Street frontage in the southwest corner of the Site.

All waste collection will occur on-street using the

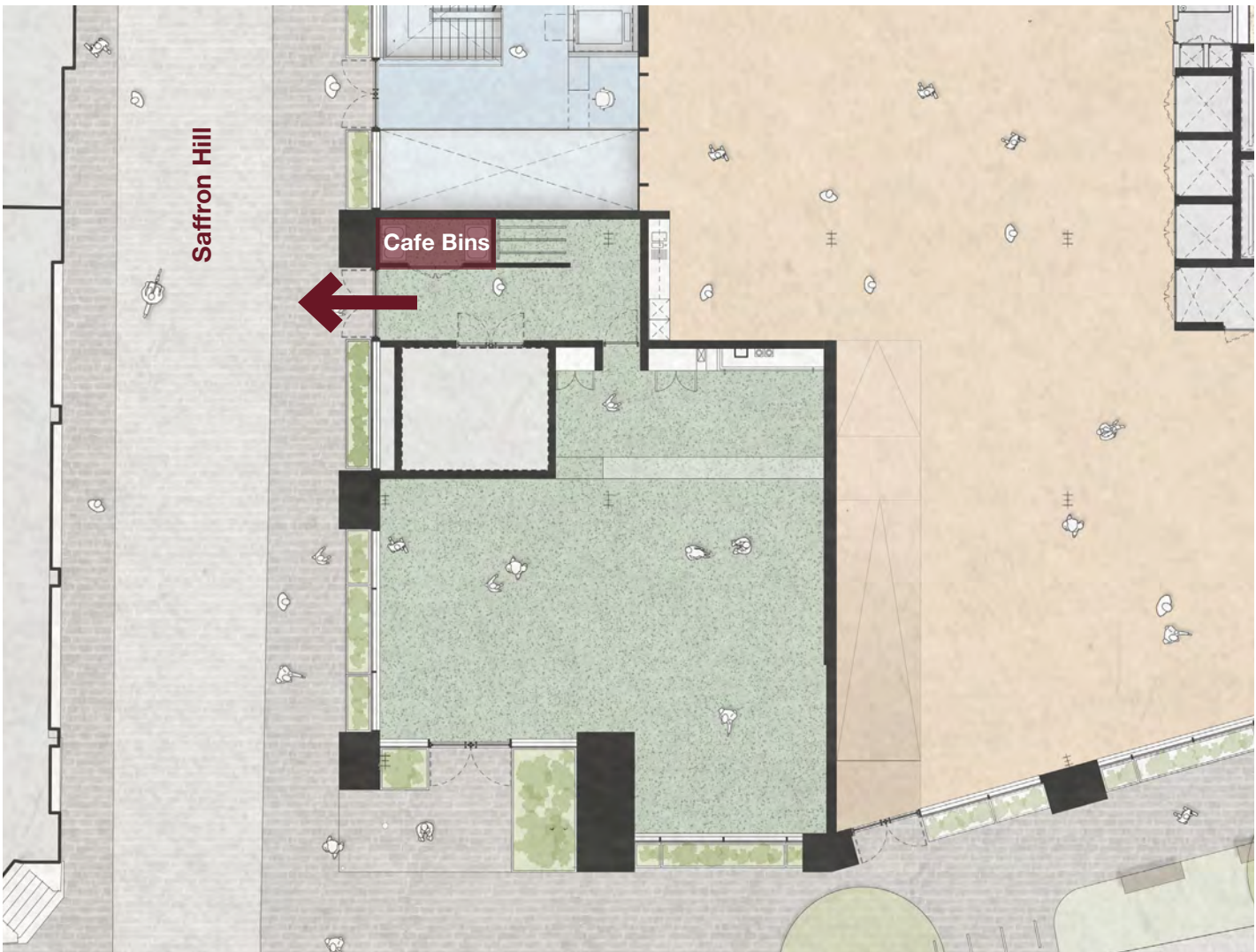
appropriate on-street facilities (single yellow line kerbside on Saffron Street and double yellow line kerbside with single blips on Saffron Hill for the cafe/restaurant) during the controlled hours. Waste collection vehicles can stop within 10m of the building entrances to ensure that drag distances are minimised.

Adjacent to the waste store for the office use, a separate storage facility has been provided for the storage of bulky goods, such as office furniture. This bulky store has been provided in line with guidance provided by LBC during pre-application discussions.

For further information, please refer to the Delivery, Servicing & Waste Management Plan prepared by



Ground Floor Plan, Office Waste



Ground Floor Plan, Cafe Waste

4.0 Architectural Design

4.14 Sustainable Urban Drainage

Proposed Drainage Arrangements

Where possible it is intended to re-use the existing foul water and surface water outfalls to the public sewers. This will be confirmed by the CCTV survey in the following design stage. Separate foul and surface water networks will be provided to serve the units and will be designed in accordance with Building Regulations Approved Documents Part H.

A combination of brown/biodiverse roofs and rain gardens are proposed throughout the development to further attenuate rainwater.

Policy Context

In accordance with the London Plan policy, the surface water drainage network has been designed in coordination with the Project Team to incorporate SuDS into the fabric of the building in order to reduce and manage surface water flood risk.

A SuDS drainage hierarchy assessment has been carried out and is presented within the table shown overleaf.

The aim for this development is to use the attenuation techniques to reduce the peak run-off for the 1 in 100-year rainfall event (+40% climate change) as close as possible to greenfield run-off rates. Greenfield run-off rates have been calculated using the calculation tool available on www.uksuds.com. This established that the greenfield run-off for the site is 0.23 l/s for QBAR and 0.74 l/s for the 1 in 100-year rainfall event. The discharge rate has been restricted to 2l/s to avoid blockage risk.

SuDS Technique		Feasible	Explanation
1	Rainwater use as a resource (for example rainwater harvesting, blue roofs for irrigation)	✗	Blue roof and blue green roofs were explored with the design team. The proposed structure is cross-laminated timber (CLT) and a blue roof atop the timber structure is not considered appropriate. It is not compatible due to the risk of seepage on the timber roof structure which would not be visible until structural damage had occurred. Rainwater harvesting (RWH) has not been included in the scheme due to the space constraints in the lower ground floor unable to accommodate the equipment. Should the circumstance change during the development of the design, RWH should be considered further.
2	Rainwater infiltration to ground at or close to source	✗	The majority of building footprint extends to the site boundary and the public realm is within 5m of the building structure. There is no potential to infiltrate into the ground.
3	Rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens)	✓	There is an area of brown / biodiverse roof proposed.
4	Rainwater discharge direct to a watercourse (unless not appropriate)	✗	There is no watercourse in the vicinity of the site.
5	Controlled rainwater discharge to a surface water sewer or drain	✗	There are no public surface water sewers within the vicinity of the site.
6	Controlled rainwater discharge to a combined sewer	✓	It is proposed to discharge surface water from the redevelopment site to the combined public sewers at an attenuated rate in accordance with LLFA policy.

Extract from ‘Flood Risk Assesment’ prepared by HTS, and submitted as part of this application.

4.0 Architectural Design

4.15 Security

Designing Out Crime

A Specialist Security Consultant, SGW, have been consulted throughout the design process to evaluate risk areas, identify threat types and seek to implement, where possible, the principles of Secure By Design.

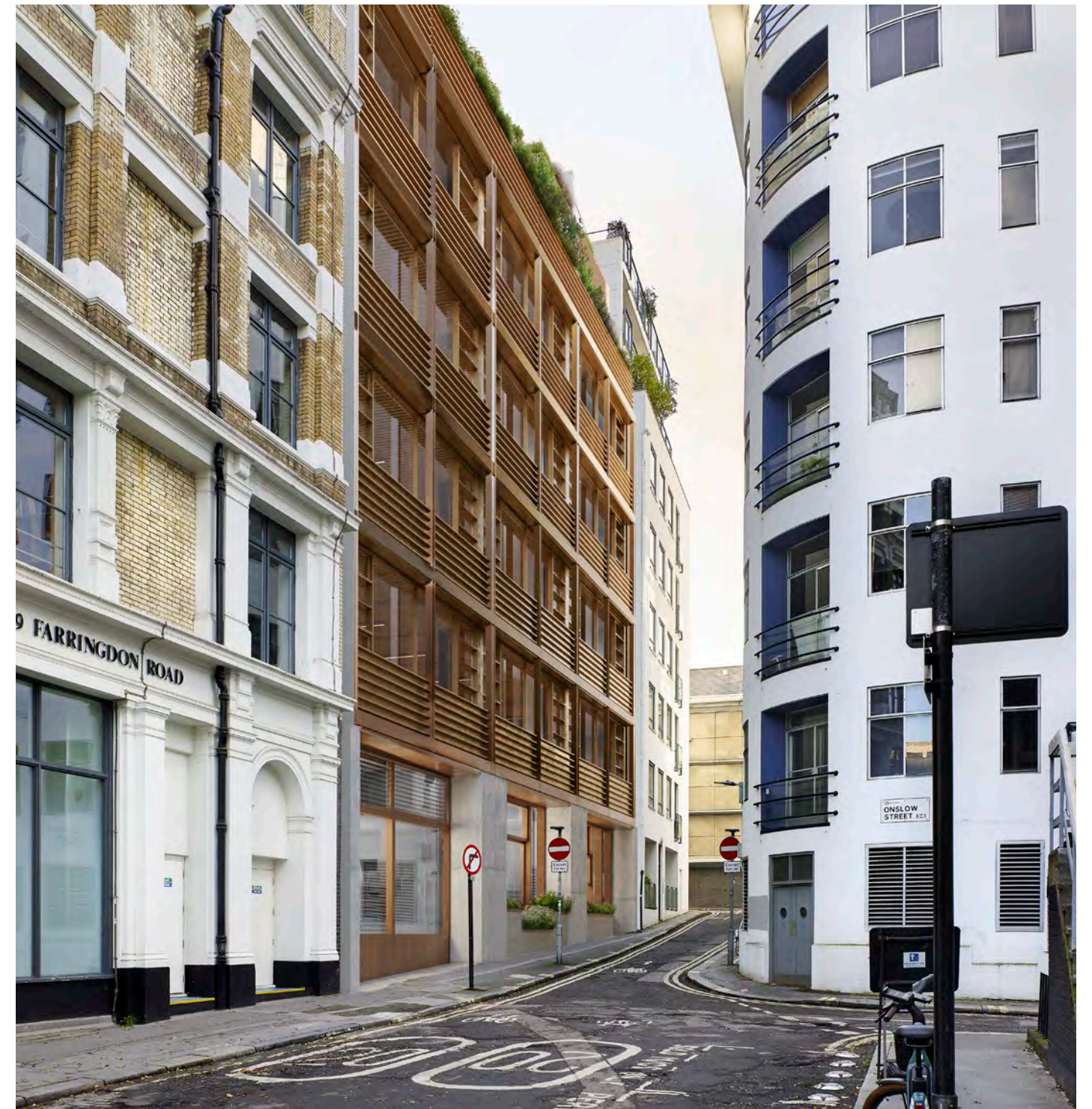
A meeting was held with a Designing Out Crime Officer (DOCO) on 06.11.23, who made the following observations, regarding the scheme:

- The area does record a high level of acquisitive crime including burglary, robbery and theft from the person.
- Burglary can be an issue on Saffron Hill due to it being considerably quieter than Farringdon Road and other streets in the vicinity.
- The quieter streets do mean that Natural Surveillance is not as high as it is on Farringdon Road.
- The recessed areas adjacent to entrance points that could provide shelter for the transient homeless community and associated vagrancy issues. Consideration should be given to how these entrance points would be managed operationally and how potential vagrancy issues would be dealt with.
- Compartmentalisation was deemed a major factor and areas proposed to have different uses or occupied by separate tenants should have no means of cross- access. The DOCO noted the cycle store entrance should be LPS 1175 standard for the external door and then PAS 24 for any internal doors leading into the cycle store itself.
- Consideration to signage should be paid to the entrance to the cycle store so as to avoid drawing attention as to where bicycles are kept.
- Consideration is given to a higher rated doorset for the external entrance points due to the risk of burglary in the area.

Security Strategy

Following the meeting with the DOCO, a Security Needs Assessment has been prepared by SGW. The integration of security recommendations by the Security Consultant is being considered, including but not limited to:

- Active frontages are incorporated to elevations at Ground Floor level.
- Arrangement of Reception spaces onto Public Realm to provide natural Surveillance
- Integration of CCTV, both internally and externally
- Design of planters and street furniture to discourage rough sleeping
- Integration of security access doors where required. (Doorsets to an externally-accessible bicycle storage area should meet LPS 1175:SR2 standards with internal doorsets meeting PAS 24).
- Access Control to be designed in such a manner so as to prevent individuals from moving between separate units.
- The building's secure lines, including location of turnstiles in the main lobby and access to the building's cycle store.
- Further development of the building's external lighting strategy to positively contribute to security, in and around the proposed building.
- Implementation of Crime Prevention Through Environmental Design (CPTED) principles.



Proposed Cycle Entrance
View From Farringdon Road towards Saffron Street

01

Daylight & Sunlight Overview

Point 2 have been part of the design team from the outset of the project and have been intrinsically involved in the design development of the proposed scheme.

Through a process of extensive iterative technical assessments and design workshops with AHMM, both the northern and southern elements of the building has been heavily articulated to reduce the amenity effects to the two residential blocks; Ziggurat Building and Da Vinci House.

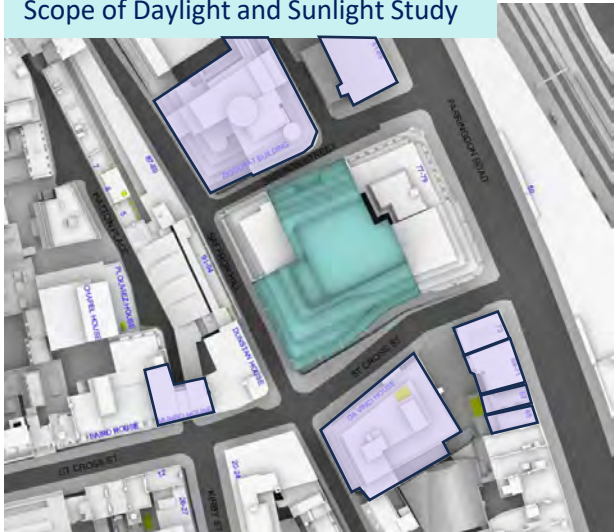
Wide-area retained daylight contextual studies have also been carried out across the Farringdon area to identify commensurate levels of daylight presently being experienced by existing residents. This has informed the design and any amenity effects identified have been measured against those contextual benchmarks.

Research has been undertaken to establish the uses and internal layouts of the neighbouring properties via publicly available records and incorporated into the detailed measured survey-based analysis model.

The scope of assessment is shown on the right, with all residential properties in the vicinity of the site being assessed for daylight, and any southerly orientated rooms also analysed for sunlight in accordance with the advice and methodologies set out in the BRE Guidelines (2022).

An assessment of the extent of direct sunlight reaching any adjoining amenity spaces and roof terraces has also been undertaken.

Scope of Daylight and Sunlight Study



- Proposed Development
- Surrounding Residential Properties

Daylight Analysis Summary:

VSC	No. of Windows Tested	No. of windows meeting BRE (Negligible Effect)	20-30% relative reduction	30-40% relative reduction	>40% relative reduction
	348	288 (83%)	33	18	9

NSL	No. of Rooms Tested	No. of rooms meeting BRE (Negligible Effect)	20-30% relative reduction	30-40% relative reduction	>40% relative reduction
	131	119 (91%)	6	3	3

Sunlight Analysis Summary:

ANNUAL APSH	No. of Rooms Tested	No. of rooms meeting BRE (Negligible)	20-30% relative reduction	30-40% relative reduction	>40% relative reduction
	81	80 (96%)	1	0	0

WINTER APSH	No. of Rooms Tested	No. of rooms meeting BRE (Negligible)	20-30% relative reduction	30-40% relative reduction	>40% relative reduction
	81	79 (98%)	0	1	1



02

Da Vinci House

This is a predominantly residential block located to the south of the application site, with a series of habitable rooms facing north towards the current car park.

We have managed to obtain partial floor plans for the building and a review of the building’s title information indicates a total of 17 residential flats with some aspect facing towards the site.

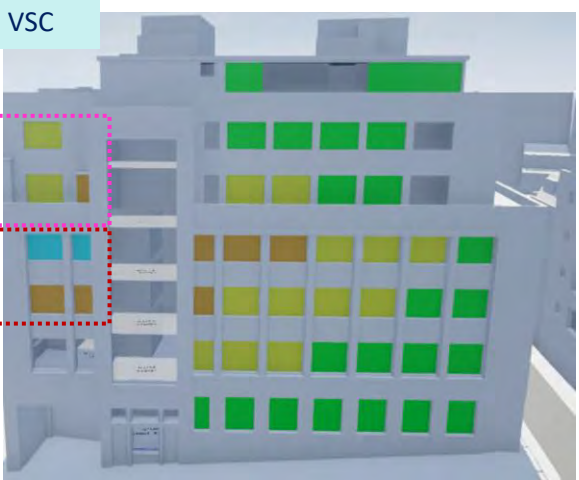
76% of windows meet VSC criteria, with 81% of rooms meeting the NSL targets. There is no sunlight requirement due to the northerly orientation of site-facing windows.

Window Map Key:

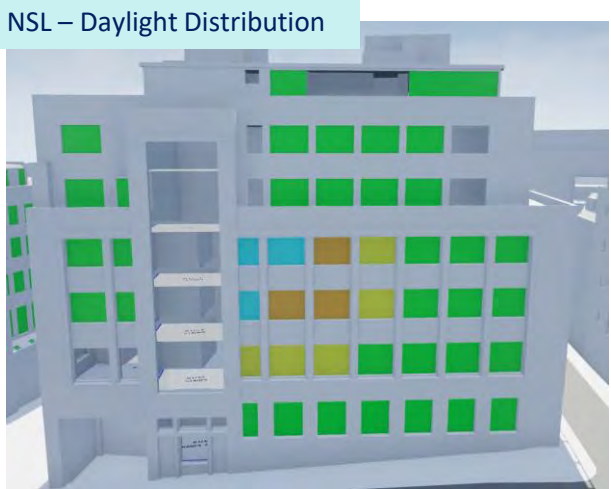
- BRE compliant
- 20-30% difference
- 30 - 40% difference
- >40% difference



Flat Location Plan



- Dual aspect Living/Dining rooms with large, non-site facing window unaffected.
- Dual aspect bedrooms, with the other non-site facing window unaffected
- Remaining windows generally retain VSC levels commensurate with an urban location (15-24%) and minor adverse reductions, with the exception of one bedroom.



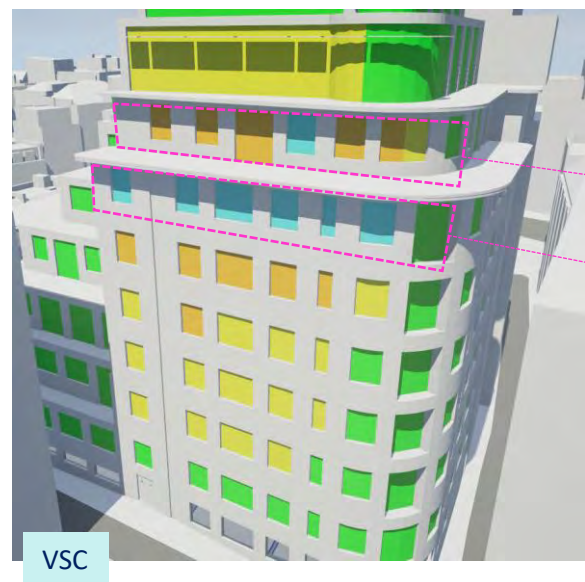
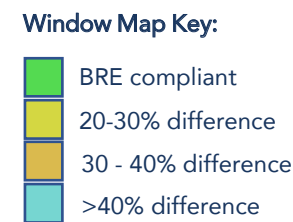
- 30/37 rooms meet BRE for NSL daylight distribution
- Just two flats experience NSL transgressions.
- All flats will continue retain good levels of daylight distribution for an urban location



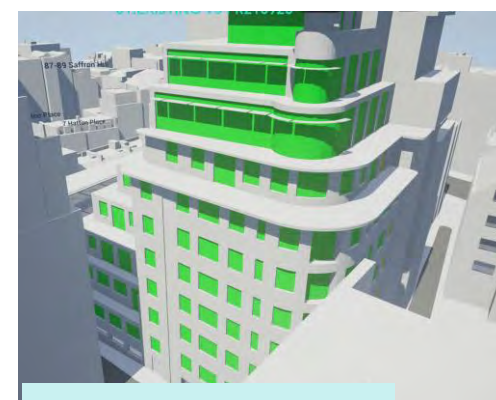
03

Ziggurat Building

This is the residential apartment building located to the north of the application site, on the opposite side of the narrow Saffron Street. Due to the existing narrow street and relationship with the car park, most windows have low existing VSC levels such that even small changes in skylight can present themselves as disproportionately larger percentage reductions.



- Majority of windows meet BRE numerical targets (79%) or experience relative alterations of no greater than 30% which is commonly accepted as minor adverse within urban locations.
- The only windows experiencing greater relative VSC reductions are those located under projections above which have a similar effect to balconies. Without these projections the effects are no greater than minor adverse.
- Retained levels are all commensurate with existing VSC levels elsewhere in the building, as well as comparable to a mirror-massing form of development on the site, demonstrating that the Proposed Development is of a scale and massing that is consistent with its immediate context and satisfactory living conditions will be maintained.



- All rooms tested will meet the BRE NSL daylight distribution targets demonstrating that there will be no noticeable alteration in how light is distributed within the rooms.

APSH – Sunlight

- 23 of the 24 southerly orientated rooms will continue to exceed the BRE annual sunlight targets. The remaining room will experience a minor adverse relative reduction with no alteration in winter sunlight.
- There are only 2 rooms falling short of the BRE winter targets, however, in both cases the windows in question retain annual sunlight levels far in excess of the BRE guideline targets (49% and 52%).
- There will be no impact on the direct sunlight reaching any of the roof terrace amenity areas.



04

Daylight and Sunlight Conclusions

Through considered iterative design development, the current proposals respond well to the neighbouring context, having limited impacts on existing daylight and sunlight amenity of nearby residents. This is demonstrated by the very good rate of compliance against the BRE assessment criteria.

The submitted massing proposals represent the culmination of numerous iterative daylight and sunlight studies which have helped to inform the overall design process.

Key design considerations included:

1. Reducing the overall height of the building and ensuring that the top floor is sufficiently set back so that it is not visible from the key residential windows adjacent the site.
2. Introducing terracing along the northern and southern elevations at upper levels to maintain access to sky visibility.

Whilst there are naturally some transgressions identified, the majority are considered minor adverse in that they only marginally deviate from the default target criteria and should be considered acceptable in the context of an urban location.

In addition, the retained VSC values to the unencumbered windows that are not self-obstructed by overhanging projections (Ziggurat Building) remain good for an urban location and commensurate with daylight levels presently experienced in the Farringdon locality.

With regards to NSL, whilst the majority of rooms tested meet the BRE criteria, where they do not, these are isolated to just two flats within Da Vinci House. Whilst the scheme has been developed to limit impacts on daylight, it is important to remember the BRE's advice on NSL which states:

'The guidelines need to be applied flexibly and sensibly. There is little point in designing tiny gaps in the roof lines of new development in order to safeguard no sky lines in existing buildings.' (2.2.12)

For sunlight, virtually all rooms surrounding the site will continue to have access to sunlight levels in excess of the BRE guideline recommendations. Furthermore, there will be no impact on the direct sunlight availability reaching the neighbouring amenity spaces and roof terraces.

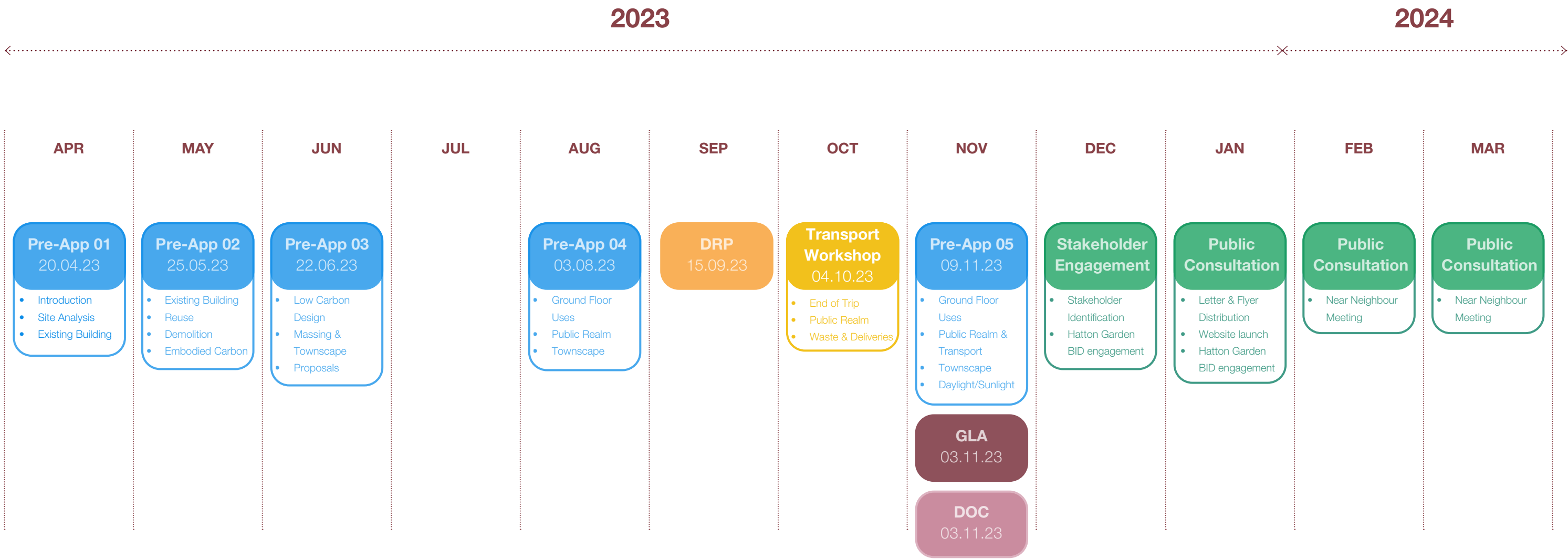
The current proposals perform well against the BRE guideline criteria with a high rate of compliance for a central London location. In the relatively few instances where there are some transgressions, the levels of retained daylight and sunlight are commensurate with an urban environment and accord with levels presently experienced by residents in many other locations within the Farringdon area.

4.0 Architectural Design

4.17 Consultation Process

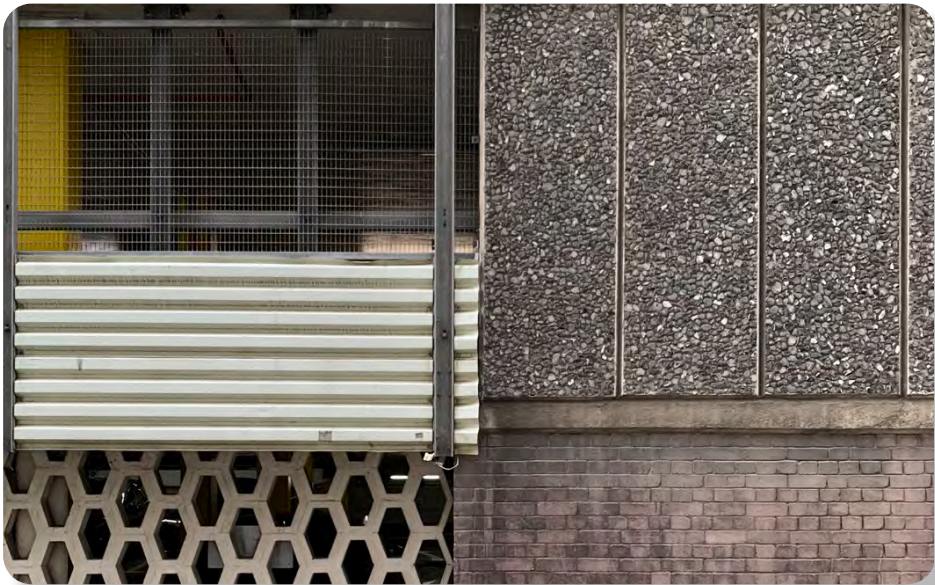
Introduction

Consultation has been an integral part of the design process throughout this project. Throughout the design development of the proposals, the client and design team has engaged regularly with with officers at LB Camden (LB Camden), Camden's Design Review Panel and the Greater London Authority, and local stake holders. The pre-application process has included formal meetings with officers, alongside a series of informal design workshops - both have been a key part of the design process.



4.0 Architectural Design

4.17 Consultation Process



Camden Pre-App 01
Introduction
April 2023

Key points
Introduction to the site and project aspirations.

- Outcome
- The removal of car parking space is supported and aligned with Camden policy seeking a car-free borough.
 - A further pre-app to be arranged to review the structural options that have been considered to explore principles of retention vs. demolition.
 - The principle of development was supported.

4. Summary

Camden Planning Guidance
Energy Efficiency and Adaptation
Summary

1. Refit

Option not applicable.
The building would need a significant amount of interventions to be made compliant with current building regulations.
Therefore, a 'minor works' refit approach is not applicable due to the existing building condition.

2. Refurbish

Option not commercially viable as the existing structure is not appropriate to commercial buildings.
The retention of the frame would limit the opportunity to retrofit the building to reduce carbon emissions and include sustainable adaptation measures.

3. Substantial Refurbishment & Extension

Even with significant intervention, the resulting building would remain compromised and offers little scope for future flexibility.
Embodied Carbon of Building Frame (GF-L06, excl. foundations):
c. 196 kgCO2e/m²
Max. 32% of the building structure retained.
Percentage likely to be reduced once foundations are considered.

4. Reclaim & Recycle

A new-build, low-carbon structure offers a better quality space with greater potential for future change.
Embodied Carbon of Building Frame (GF-L06, excl. foundations):
c. 225 kgCO2e/m²
The operational energy is expected to be lower compared to that of the substantial refurbishment.
Detailed whole life carbon analysis will be undertaken.

Camden Pre-App 02
Principle of Demolition
May 2023

Key points
Analysis of the potential for re-use vs. demolition, using Camden's Energy, Efficiency and Adaptation guidance.

- Outcome
- The justification for demolition was accepted in principle, following demonstration of consideration of alternative options, as per hierarchy established in Camden Energy SPG.
 - It was accepted by Officers that refit and refurbishment options were impractical, and substantial refurbishment would require significant intervention and only result in minor difference in embodied carbon emissions than reclaim and recycle option.
 - Officers encouraged a review of public benefits to balance the principle of demolition, with land use being an important part of the public benefits.
 - The design team agreed to undertake a review of how the use of materials impact on sustainability and emissions.

The Proposed Building

5. External Timber Deck to form Setbacks for Solar Shading

Housing in Basel, Lukas Ræber

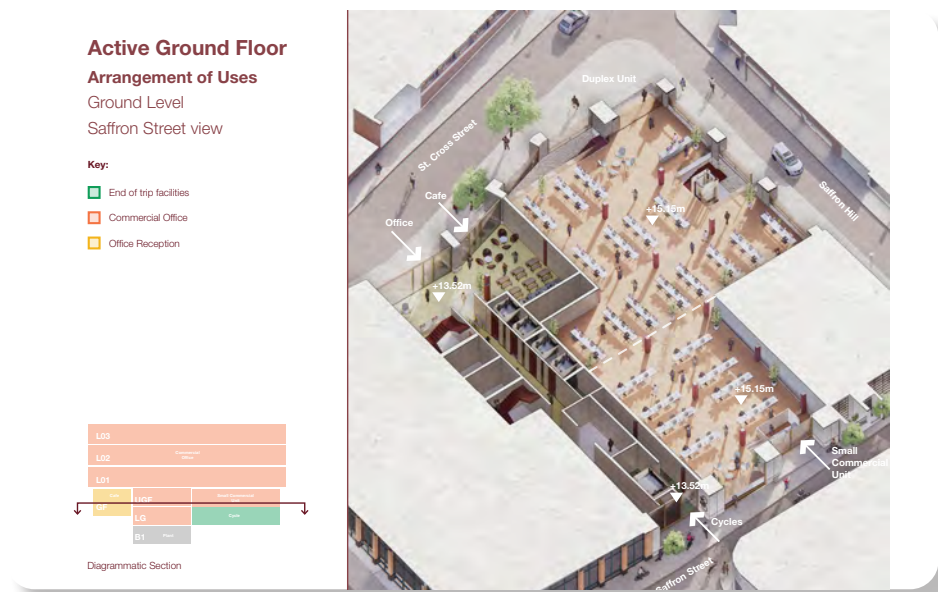
Camden Pre-App 03
Land Use and Design
June 2023

Key points
The journey to reach design options, using reduction of embodied carbon emissions as the key consideration throughout.
Initial Ground Floor and building use arrangements presented.

- Outcome
- Low carbon design was approach supported by Officers.
 - Officers requested for the ground floor interaction to be reviewed in greater detail, with focus on level entrances and how they interact with the street.
 - Officers encouraged further review of ground floor use, to be established in the next pre-application meeting.
 - The proposed end-of-trip facilities provision was cited as an important public benefit.
 - DRP Review to be scheduled for September 2023.
 - Officers noted their support for the scheme and agreement with the logic of the design evolution.

4.0 Architectural Design

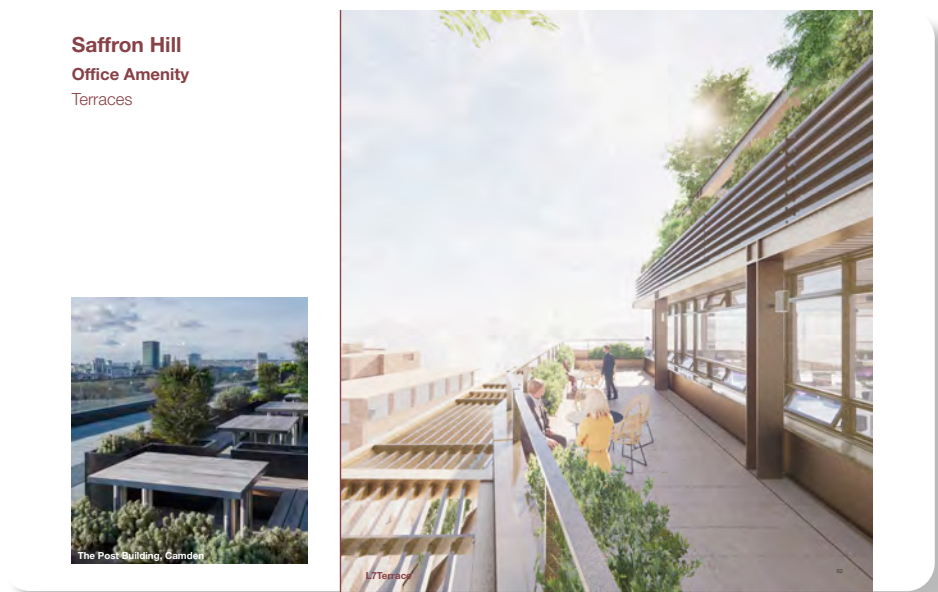
4.17 Consultation Process



Camden Pre-App 04
Land Use and Design
August 2023

Key points
Development of design, using reduction of embodied carbon emissions as the key consideration throughout.
Revised Ground Floor and building use arrangements presented.

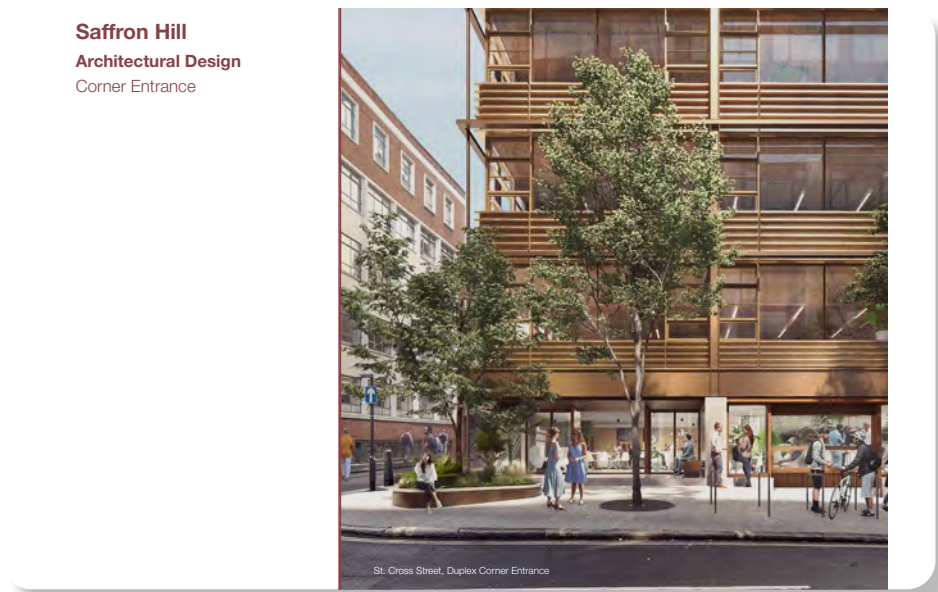
- Outcome.**
- Officers recommended a review of cafe location, with separate entrance dedicated to the public, to ensure that the cafe feels inviting.
 - Cycle access & End of Trip Facilities provision were supported. Disabled parking provision agreed.
 - Officers recommended a finer grain approach sought at ground floor level. Further investigation of the material palette.
 - Height and massing supported, along with townscape views and initial daylight/sunlight analysis.
 - Officers supported the different facade approaches on each elevation to respond to each streetscape.



Camden Design Review Panel
September 2023

Key points
Proposals presented covering demolition, land use, architectural design, landscape strategy, and environmental considerations.

- Outcome**
- The Panel voiced general support for the scheme, but made the following recommendations:
 - Opportunities were noted for public realm and landscape improvements on St Cross Street.
 - Landscape improvements, including at Ground Level.
 - Greater ambition sought on sustainability.
 - Flexibility/adaptability of office space encouraged.



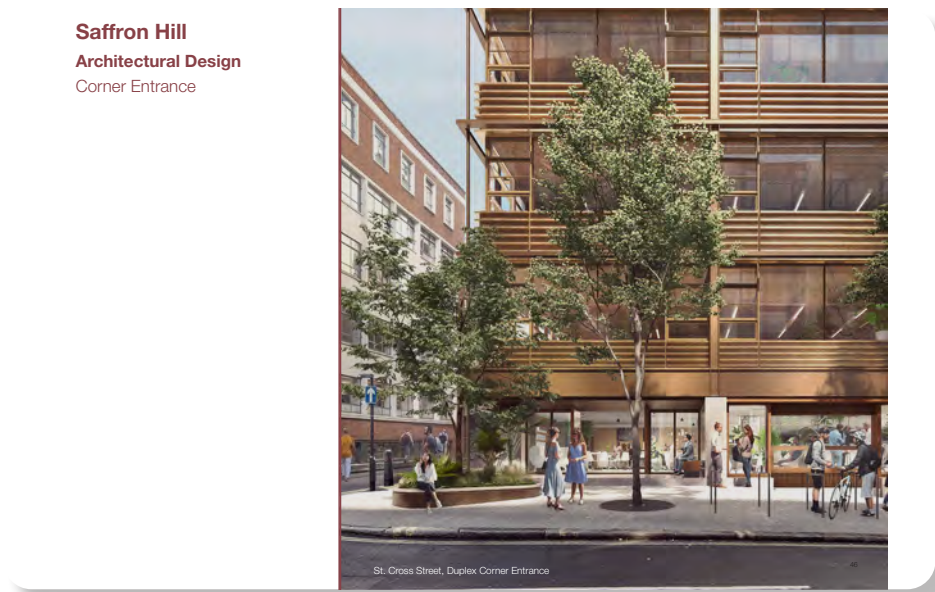
Camden Transport Workshop
October 2023

Key points
Public Realm Improvements
Transport & Waste Strategy

- Outcome**
- Proposals well received and commended.
 - Agreed approach on public realm improvements.
 - Agreed approach on cycle store facilities and cycle entrance.
 - Agreed approach on waste & deliveries.

4.0 Architectural Design

4.17 Consultation Process



Greater London Authority Pre-App November 2023

Key points
Proposals presented summarizing principles of demolition, land use, architectural design, landscape strategy, and environmental design.

Outcome

- Positive discussions with Camden Officers and the DRP were highlighted.
- Aspirations for sustainability and high-quality floorspace were commended.
- Efforts to optimize Whole Life Carbon and consider retaining elements of the existing building were appreciated.
- Reduced carbon emissions and sequestration were praised in the design process.
- Support for the principle of design and response to feedback in the pre-application process was expressed. Landscaping proposals received support.
- The justification for demolition was acknowledged, with a request for supported material within the Whole Life Carbon Assessment at application stage.
- The inclusion of pre-redevelopment and pre-demolition audits was encouraged.
- Support for the redevelopment of an office building in an accessible location was mentioned.
- Request for more detail on the building's relationship with its neighbors at the application stage.

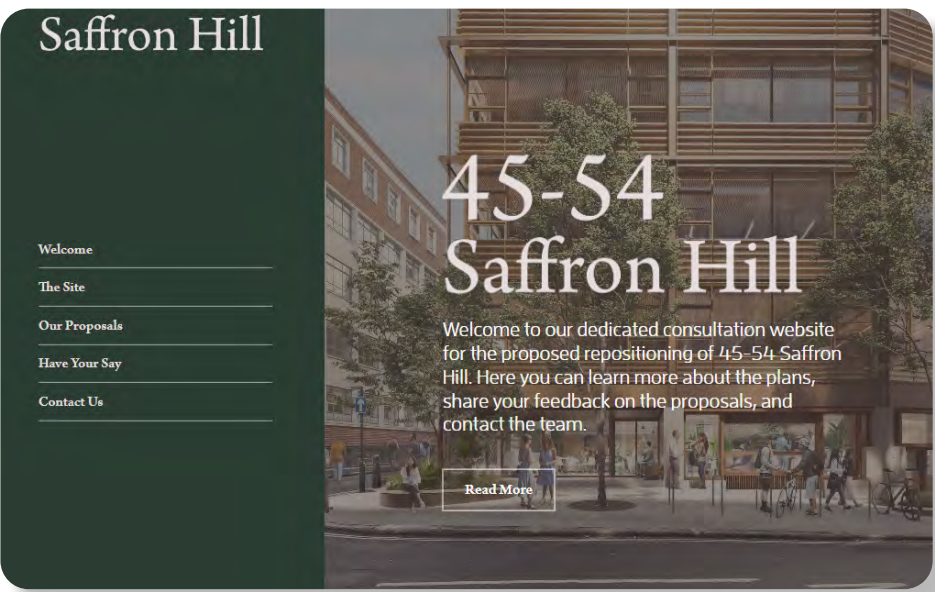


Camden Pre-App 05 November 2023

Key points
Development on key design items, including landscape and public realm improvements, end-of-trip facilities improvements, developed base design, and provision of affordable workspace.

Outcome

- Affordable workspace and level access discussed and agreed in principle. Broad satisfaction with ground floor layouts was voiced by LBC Officers, with a request for the introduction of a DDA ramp in the main office lobby.
- Support for the cycle parking layout.
- Overall support for the landscaping and public realm strategy.
- Encouragement for the reduction in the overall embodied carbon.
- Positive assessment of D/S impacts, with mostly near-full compliance with NSL. D/S impacts mostly in compliance with NSL; full D/S to be submitted at planning submission stage.
- Timber framing was praised for breaking up the Ground Floor elevations. Positive feedback on the design changes for the base of the building.



Public Consultations January-February 2024

Key points
A Public Consultation has been conducted to inform local residents and businesses of the proposals and engage with them to address any concerns or suggestions.

Outcome

- Meetings with residents held in February and March 2024.
- Mitigation measures proposed for privacy and overlooking, light pollution, waste management, rooftop plant noise.
- Data and explanations provided over daylight and sunlight assessments.
- Construction Management mitigation measures regarding traffic, noise, and dust.
- A Statement of Community Involvement (SCI) issued as part of the Planning Submission.
- Construction Working Groups to be set up.

4.0 Architectural Design

4.18 Stakeholder Engagement

Overview

A Public Consultation has been conducted to inform local residents and businesses of the proposals and engage with them to address any concerns or suggestions.

Two meetings were held with the residents:

- 18 February 2024
- 7 March 2024

The following sections address concerns raised by both meetings.

5. Resident Engagement and Near Neighbour Meetings

Near neighbour meeting – 19th February 2024

- 5.1 On the 19th February 2024, Kanda Consulting hosted a resident engagement meeting for Residents to meet with the Development team. 13 residents attended and 10 members of the project team were also in attendance. Residents from Ziggurat, Da Vinci House and Alan House attended the meeting.
- 5.2 The objective of the meeting was to make a presentation tailored to near neighbour's concerns and also to host a Question-and-Answer session.
- 5.3 AHM presented detailed information surrounding concerns on Daylight/Sunlight, Privacy Overlooking and the roof plant. The residents then presented slides on how they felt the development would affect their flats. A Question-and-Answer session was then held.
- 5.4 Discussions were had around overlooking, privacy, construction, noise and the impact of the plant on the roof. Management of the building was discussed including bin storage and collection and light management.
- 5.5 Residents' concerns were discussed and addressed where possible, with the Applicant proposing a number of measures to be included in the planning application to ensure that the concerns raised by residents were addressed. The Applicant and residents also discussed a site visit to the homes that could be arranged.
- 5.6 The Applicant remains committed to communication with near neighbours of the site through the planning process.

Resident Concerns	Applicant Response
Concerns surrounding the height of the proposals	Information on height was presented with further explanation
Concerns regarding how the height of the proposals could lead to a sense of enclosure	Review of enclosure and the relationship the building has with neighbours
Concerns over roof plant height and noise	It was explained that there are limitations to the plan and mitigating aspects such as an acoustic panel.
Concerns for light pollution from the office space	This will be mitigated with automatic lighting, blinds and building management.

It was asked how waste will be removed from the site	Waste will be removed by a private company using smaller vehicles and some electric vehicles to mitigate disruption.
Concerns with Daylight/Sunlight	It was explained that the plans meet the national requirements
Construction management was requested	The Construction management information was provided.
The programme for the project was requested	It was discussed that the programme cannot be confirmed until Planning determination.

Alan House Resident meeting – 7th March 2024

- 5.7 As part of the pre-app consultation with local residents a meeting was arranged with residents of the adjoining Alan House.
- 5.8 The meeting was held virtually at the request of residents, from 5.30-7pm on Thursday 7th March. In total 8 local residents attended the meeting. All of whom were residents of Alan House.
- 5.9 A presentation of the scheme was given to residents, with the following topics covered:
- Timelines
- Overview of timelines around planning and construction
 - Construction hours
 - Dust, asbestos
- Party Wall
- Build impacts on party walls
- Loss of Light
- Assessments on impacts on our building
- Plant Room / Noise
- How will noise be managed
 - Levels, timings, etc
- Terraces, Noise, Conditions
- Design for the upper floors
 - Size of terraces and nature of use
 - Appropriate conditioning on use of terraces
- Privacy & Overlooking
- Steps taken to protect existing privacy for Alan House
- Entrances / Bins

- Locations, noise concerns etc

- Cafe
- Planned operating hours
 - Type of operator

- Responses were provided, confirming that:
- there are no adverse Daylight / Sunlight impacts on the building
 - plant would be positioned at the furthest point from the residents at Alan House in order to preserve amenity
 - the café would not be a late night or bar venue, and could be conditioned as Class E use.
 - the party wall surveyor would be paid for by the applicant
 - asbestos and other surveys would be carried out when vacant possession is achieved
 - terraces would be conditioned appropriately so as not to cause nuisance to residents
 - Acoustic screening and monitoring will be undertaken to ensure that operational plant noise remains below policy compliant levels.

- 5.10 It was agreed at the meeting to provide more information regarding the interaction of the proposed office terraces and the existing residential balconies, along with the respective heights of the buildings at the top of the buildings.

- 5.11 The Applicant remains committed to communication with near neighbours including this further information and throughout the planning process.

4.0 Architectural Design

4.18 Stakeholder Engagement

Residents Meeting 01 18 February 2024

The first meeting included residents from the Ziggurat Building, Da Vinci House and Alan House.

The main concerns raised are summarised in this page. The following pages include information produced following the meeting, as outlined below.

Resident Concerns

- 1. Height: unclear/misleading information
- 2. Concerns over height and sense of enclosure
- 3. Privacy & overlooking
- 4. Concerns over roof plant height and noise
- 5. Light pollution
- 6. Waste strategy
- 7. Daylight Sunlight
- 8. Construction management
- 9. Programme

Applicant Response

- 1. Existing vs. Proposed height explanation
- 2. Review of enclosure and relationship with neighbours
- 3. Privacy & overlooking mitigation
- 4. Limitations of plant move explanation & noise mitigation
- 5. Light pollution mitigation
- 6. Waste strategy mitigation
- 7. Daylight Sunlight compliance
- 8. Construction management information provided
- 9. Programme clarification

4.0 Architectural Design

4.18 Stakeholder Engagement

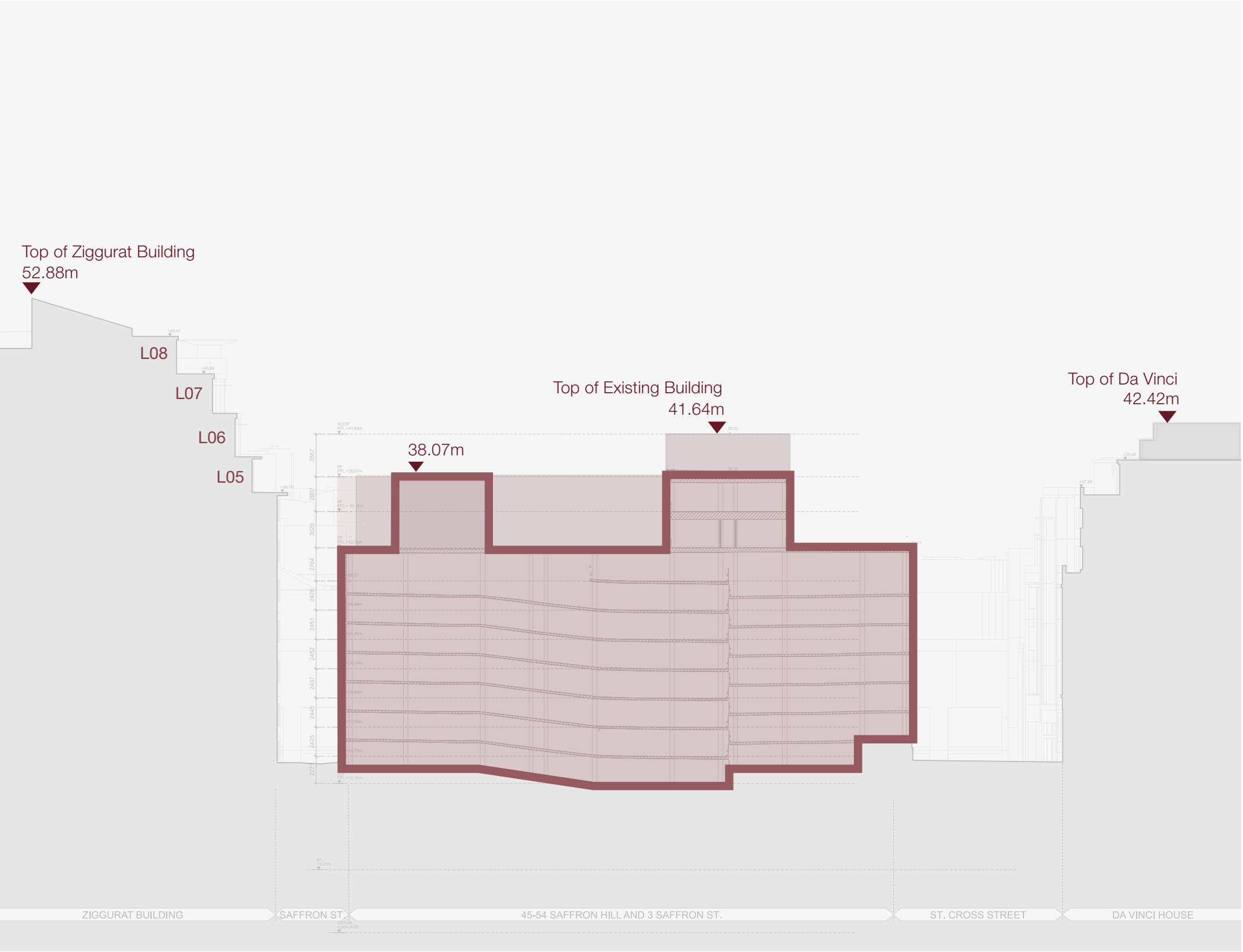
1. Existing vs. Proposed height explanation

Diagrammatic section of the existing building, marking the highest point as 41.64m AOD.

Key:

section cut

elevation



Diagrammatic North-South Site Section

4.0 Architectural Design

4.18 Stakeholder Engagement

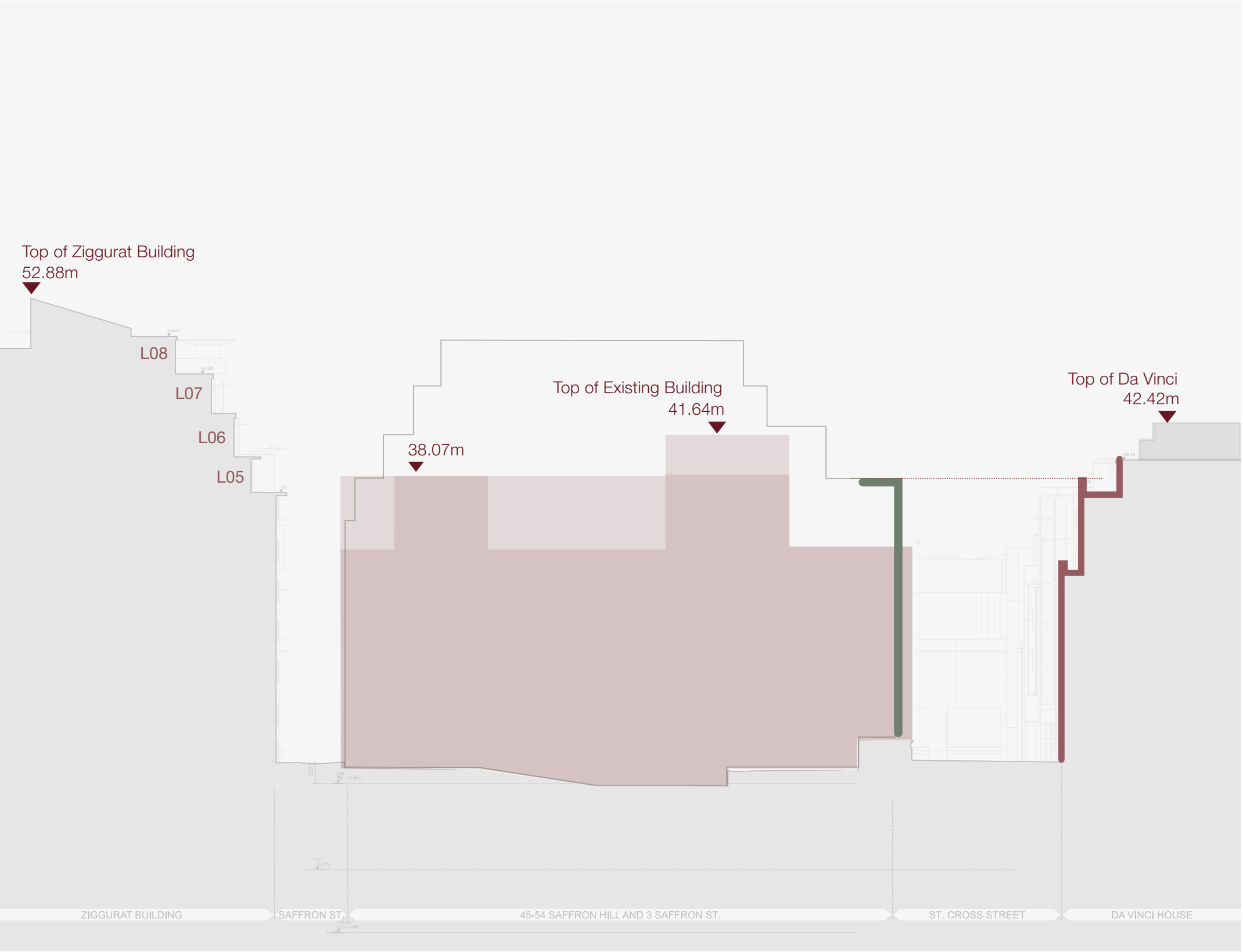
1. Existing vs. Proposed height explanation

Step 1: Set back St. Cross Street frontage to increase public realm and maximise distance to Da Vinci & match shoulder heights to neighbouring buildings

Key:

existing conditions

proposed moves



Diagrammatic North-South Site Section

4.0 Architectural Design

4.18 Stakeholder Engagement

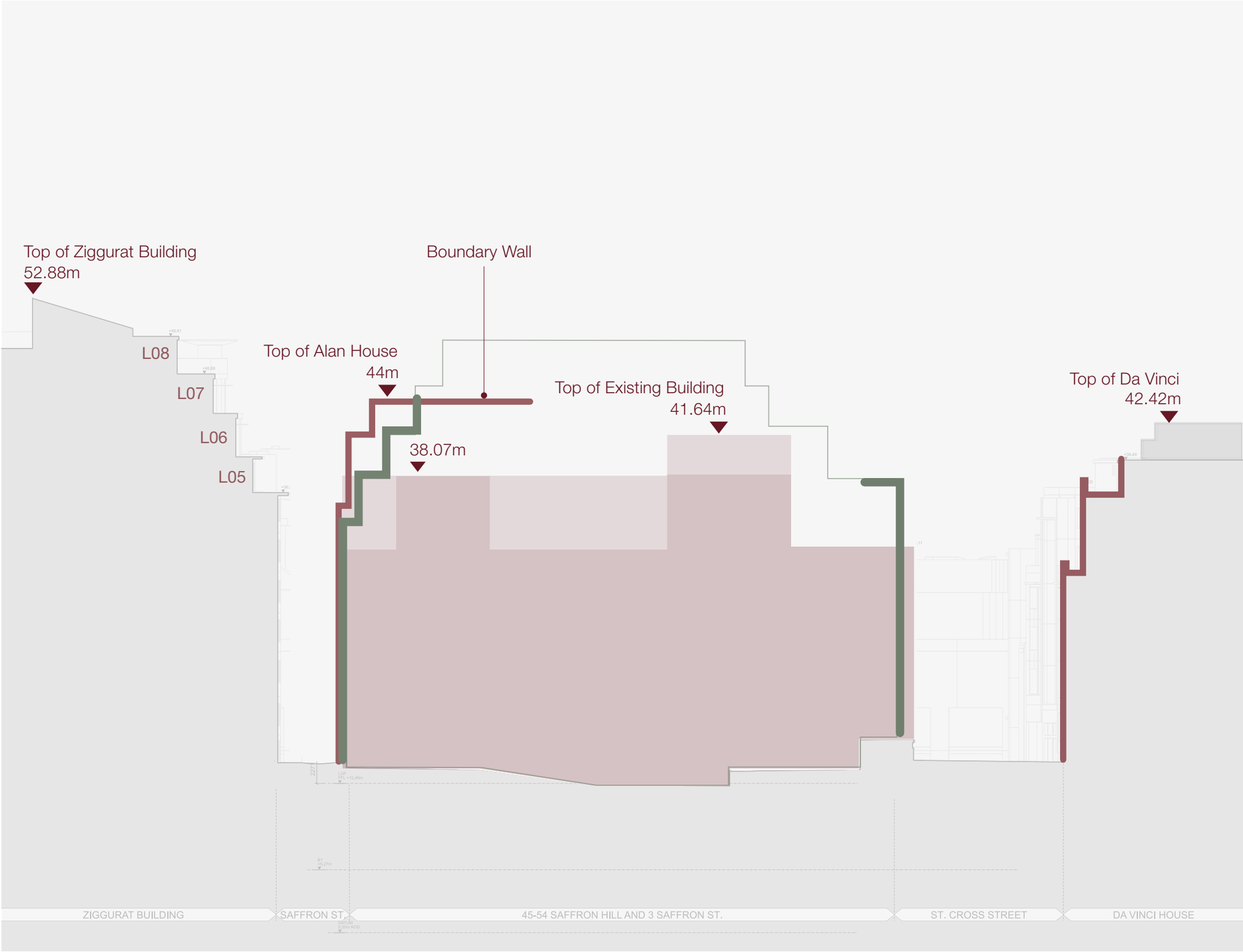
1. Existing vs. Proposed height explanation

Step 2: Improve condition set by the neighbouring Boundary Walls by further setting in.

Key:

existing conditions

proposed moves



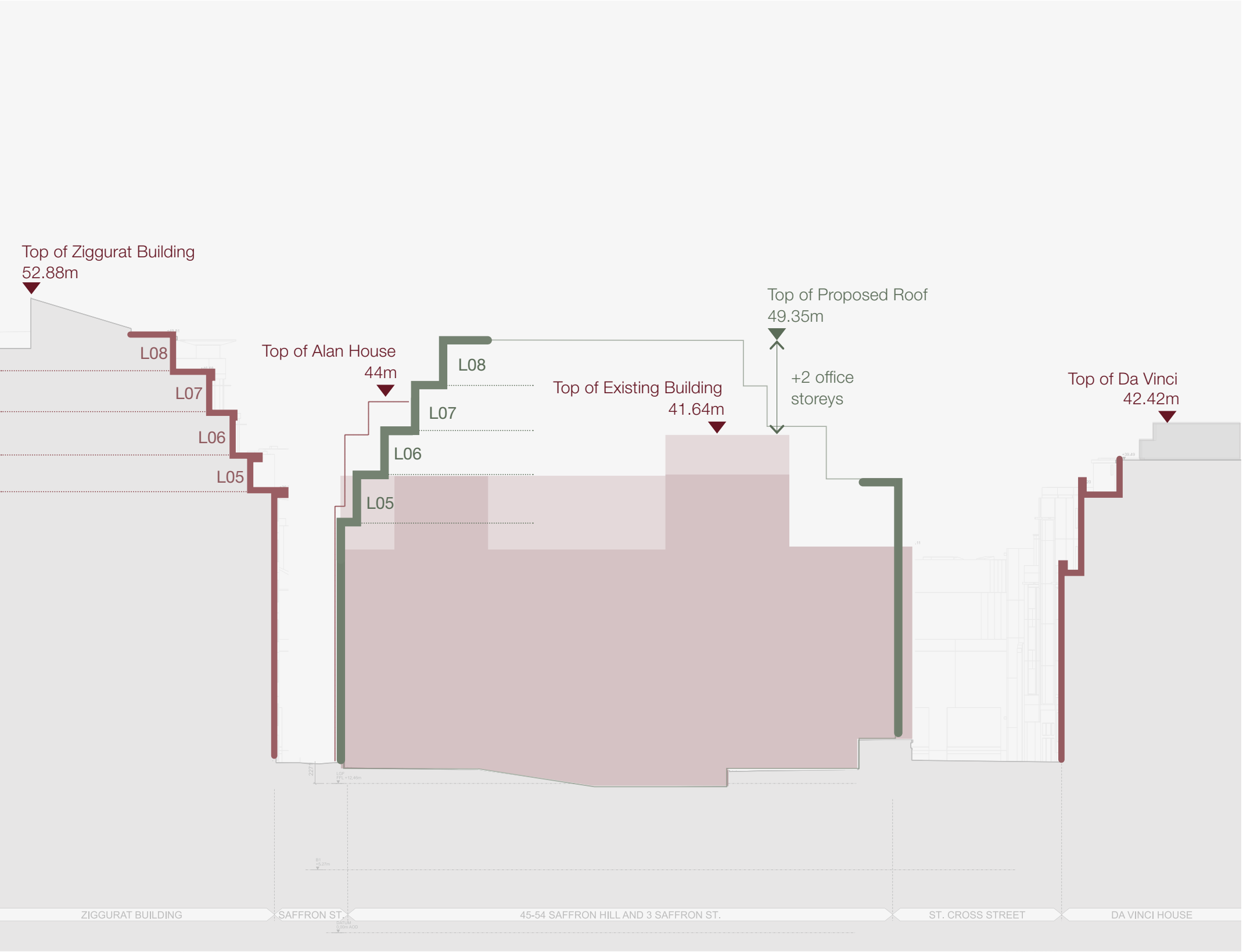
Diagrammatic North-South Site Section

4.0 Architectural Design

4.18 Stakeholder Engagement

1. Existing vs. Proposed height explanation

Step 3: Mirror Ziggurat massing and keep floors staggered/lowered from those of Ziggurat by c. half a storey to prevent overlooking.



Diagrammatic North-South Site Section