

Attachment C2

**Planning Proposal: Proponent's Urban
Design Report**

4-22 Wentworth Avenue, Surry Hills Urban Design Report



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1. Introduction

The purpose of this submission is to obtain Council's support of the proposed rezoning of the land at 4-22 Wentworth Avenue, Surry Hills. The opportunity exists to establish an appropriate building form on this land without impacting upon the amenity of adjacent neighbours and to extend hotel use right across this peripheral CBD fringe site. To achieve this vision, amendments to the development controls under the SLEP2012 are proposed.

The site has been under investigation since early 2011 when a submission was lodged with City of Sydney commenting on the then Draft LEP 2011. Subsequently, concept plans were submitted to the City of Sydney and further detailed investigations have been carried out with particular reference to shadow impacts of existing and proposed new building forms.

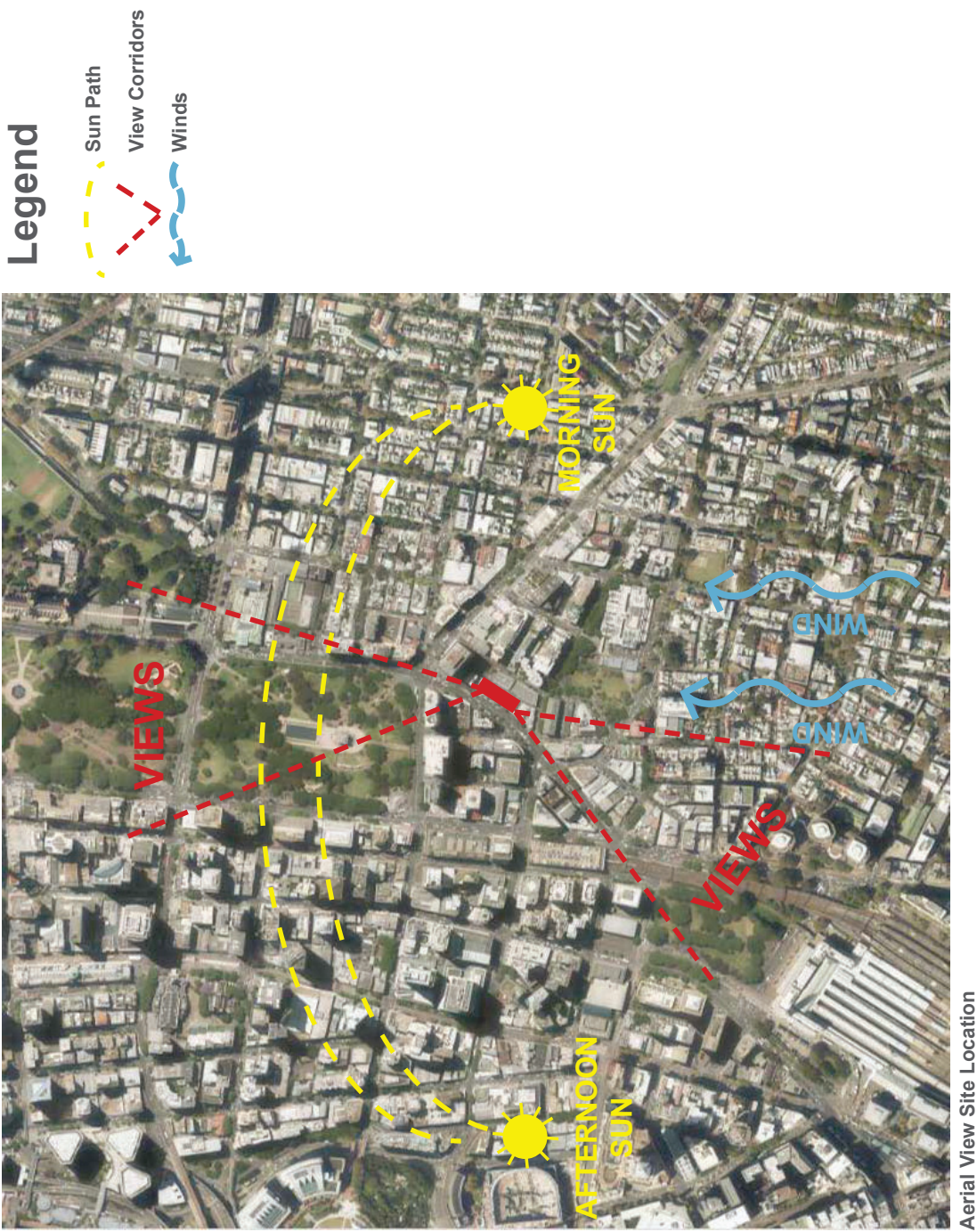
This proposal has been prepared on behalf of the land owner Pongrass Properties and represents the synthesis of all previous work carried out as well as input from City of Sydney planning staff and hotel operators.

2.1 Existing Context and Planning Controls

The site is situated on Wentworth Avenue on a 20 metre wide strip of land bounded by Wentworth Avenue and Wemyss Lane and occupies approximately half the block to Goulburn Street to the south. It is approximately 50 metres from Whitlam Square, Oxford Street and Liverpool Street and the south eastern corner of Hyde Park. It is within walking distance of the central business district.

Land uses in the area vary from commercial office, retail, multi-unit residential, hotel and educational premises. The site is surrounded by taller buildings to the north, west, south and east. These buildings have an imposing presence in the precinct and cast significant shadows across the existing and neighbouring sites. In contrast to these surrounding buildings, the existing built form on the subject site is significantly smaller.

The proposal seeks to achieve an increase in the existing height and floor space ratio controls whilst achieving a contextual fit with surrounding buildings in accordance with heritage principles and neighbours' entitlements for solar access.



2.2 Neighbourhood Transportation and Land Use

The site is located within 200 metres of Museum heavy rail station and close to bus routes along Oxford Street. Bicycle paths and pedestrian walking routes are also nearby and converge in close proximity to the site.

There is a variety of land uses evident in the precinct making this a vibrant neighbourhood by day and night. The uses include commercial, retail, restaurant/entertainment, residential, hotel, educational and institutional.



Aerial View Site Location

Legend

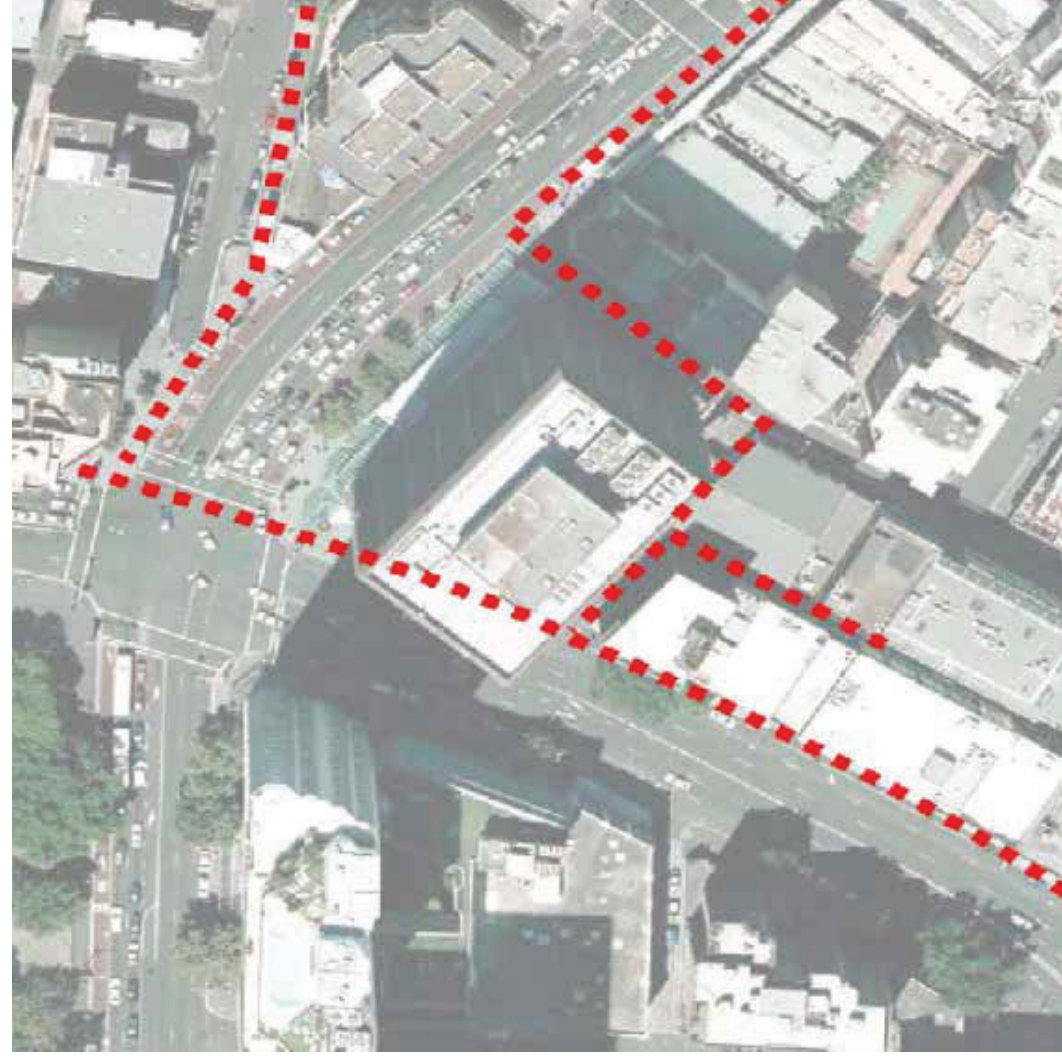
- Rail Station
- Bus Routes
- Bicycle Routes
- Commercial / Retail Uses
- Restaurant / Entertainment Precinct
- Residential Uses
- Hotels

2.3 Pedestrian Connectivity

The site is located less than 100 metres from Hyde Park and Oxford Street to the north.

From Hyde Park and Oxford Street, there is a natural and consistent trail of pedestrian movement along Wentworth Avenue to the south and eventually to Central Station. There are also opportunities to activate Wemyss Lane which runs along the rear eastern edge of the site.

This rear lane is accessible from Oxford Street via Brisbane Street and also from Wentworth Avenue itself. Consistent with Council's public art policy and lane activation program, the Wemyss Lane corridor warrants a through site connection.



Aerial View Site Location

Legend

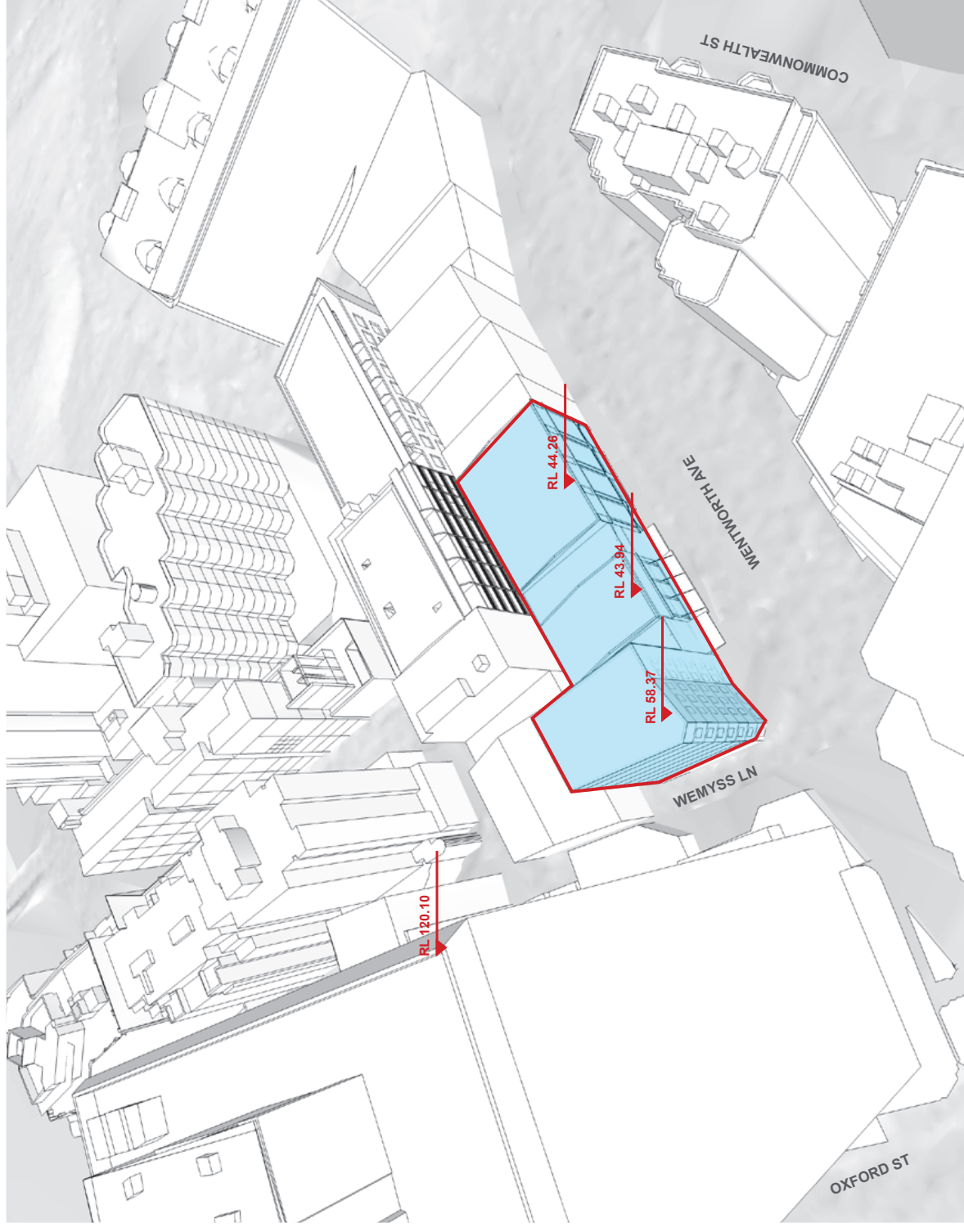
— Major pedestrian routes to the site

2.4 Physical Context

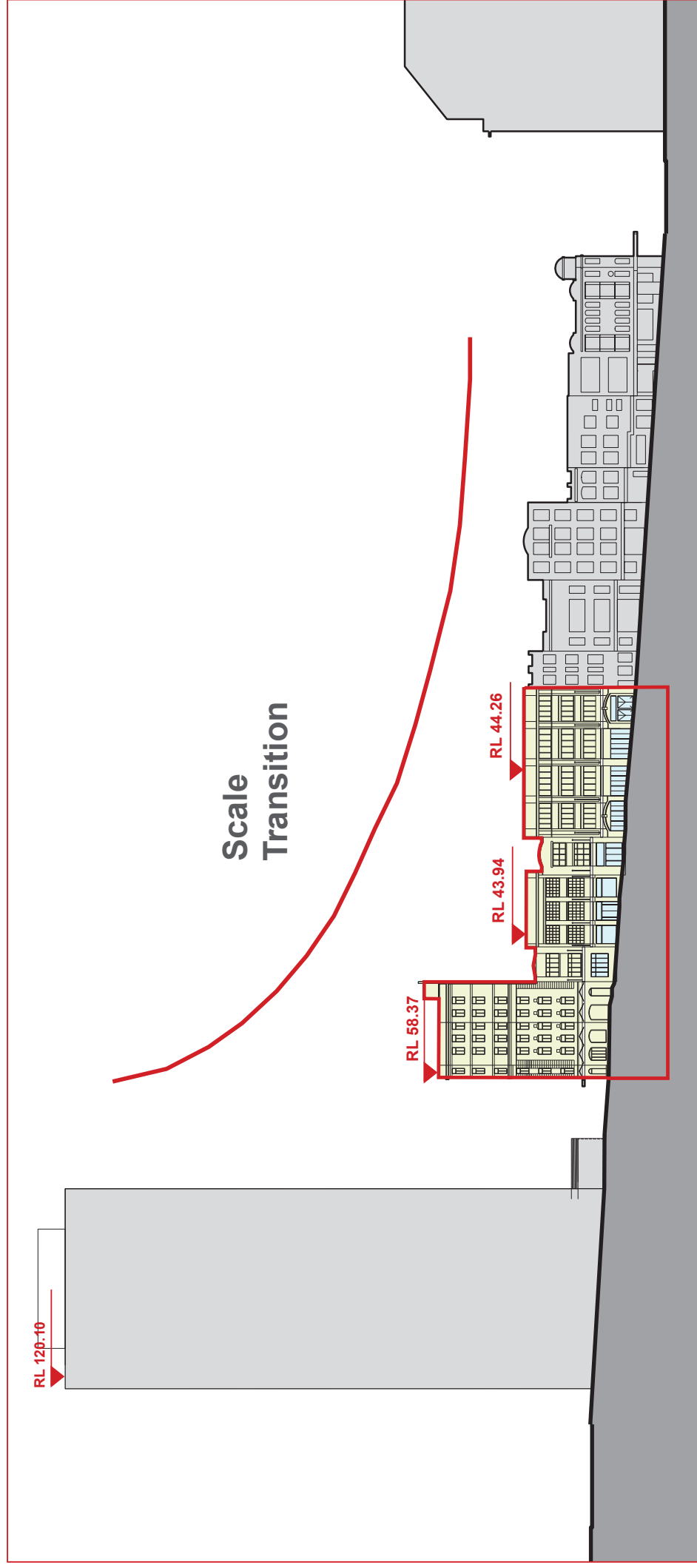
The site is surrounded by much larger residential and commercial high rise towers. By contrast to these towers, the buildings in the block 4-44 Wentworth Avenue are generally 3-4 storeys in height with few exceptions, Stellar Hotel at 4-6 being one, but only 7 storeys in height.

The dissimilarity in scale of the buildings on the subject site compared with the precinct is illustrated on this aerial view which shows a difference in height of some 80 metres between 1 Oxford Street, a commercial tower to the north and the subject site. The Connaught residential tower on the adjacent south western corner of Wentworth and Oxford Street is a similar height.

The relevance of transitional buildings between these tall vertical towers down to the 3-4 storey streetscape suggests additional height across the site with the greatest increase occurring over the existing Stellar Hotel at 4-6 Wentworth Avenue and tapering down from there.



3D View - Existing Site Levels



Wentworth Street Elevation

2.5 Current LEP Controls

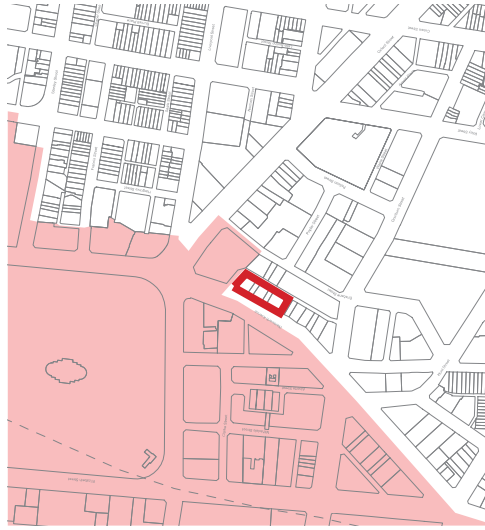
The subject sites are located on the fringe of Central Sydney and are zoned for mixed uses.

Existing floor space ratio controls are 6:1 on 4-6 Wentworth Avenue and 5:1 on the remaining sites at 8-22 Wentworth Avenue

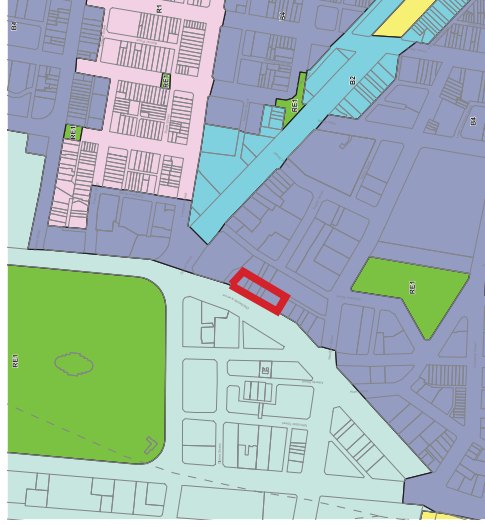
Existing height controls for the subject site are 22 metres on 4-6 Wentworth Avenue and 18 metres on the remaining sites at 8-22 Wentworth Avenue

The subject sites are shown on Council's Heritage Map and are noted as examples of twentieth century industrial heritage buildings.

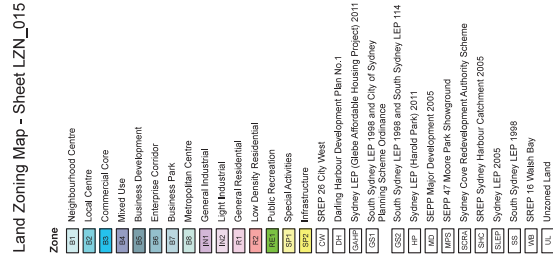
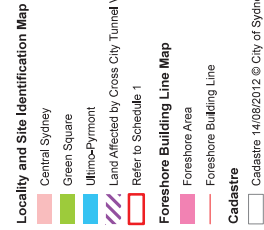
Locality



Land Zoning



FSR

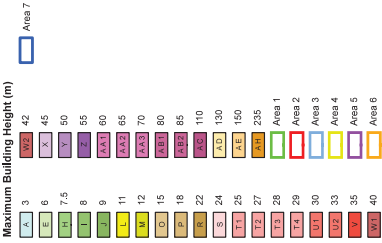


Building Heights

Heritage



Height of Buildings Map
- Sheet HOB_015



Heritage Map - Sheet HER_015



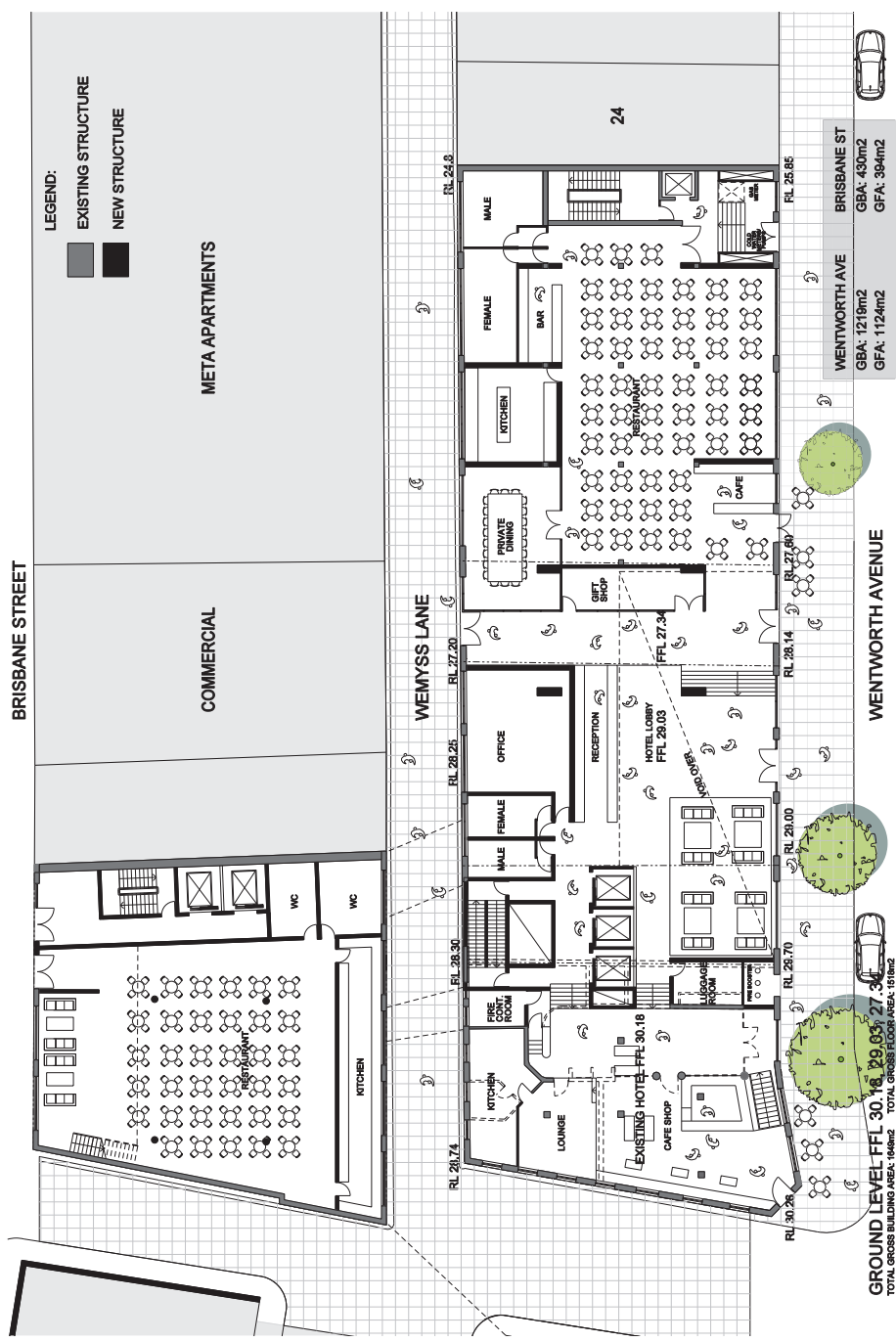
3.1 Preliminary Proposal Submitted to CoS April 2016

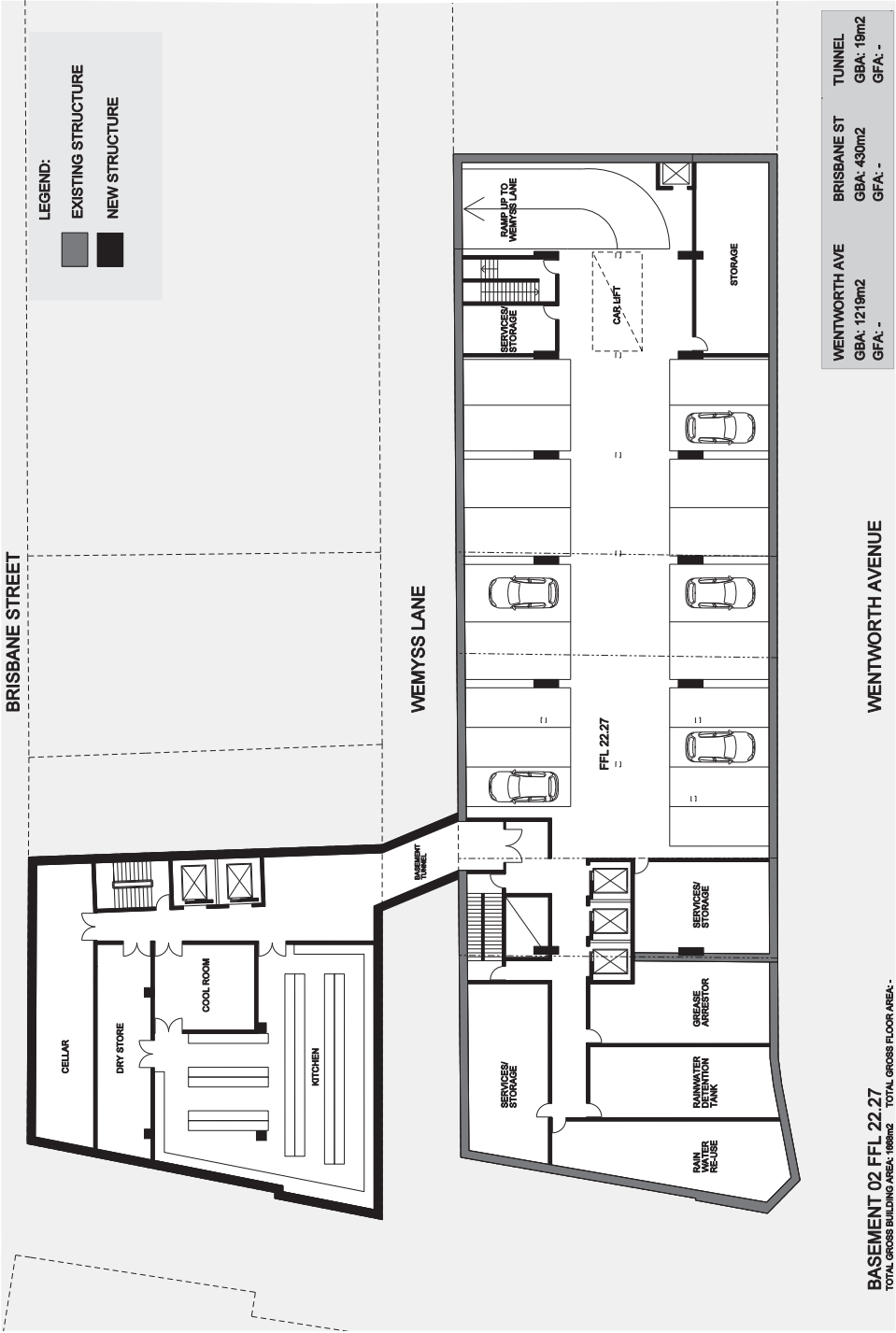
SUPERSEDED

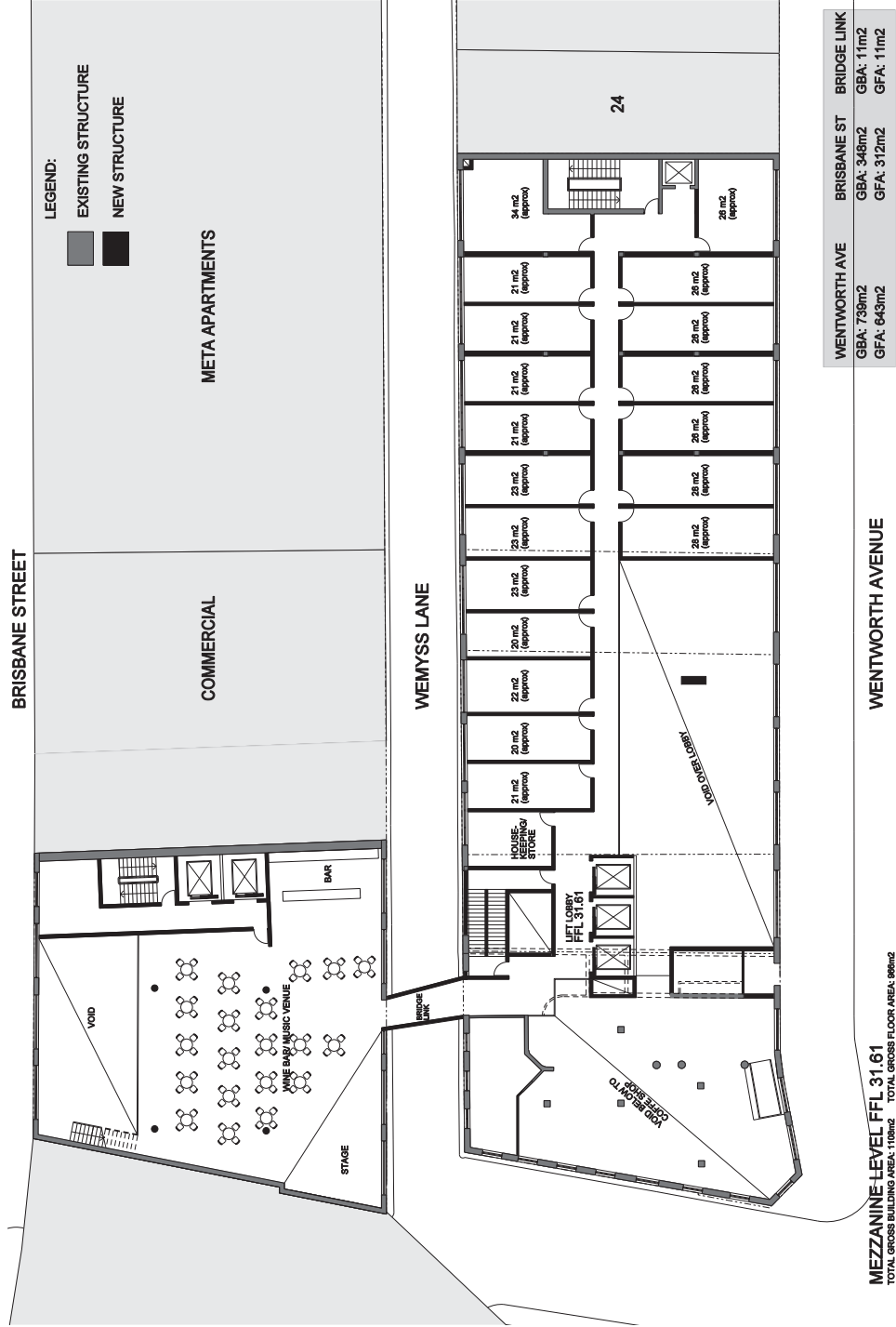
A preliminary concept plan was submitted to Council in April 2016 for review. This scheme included two parcels of land 4-22 Wentworth Avenue and 9-13 Brisbane Street belonging to different land owners. This scheme sought an increase of the maximum building height to approximately 70 metres and increase in the floor space ratio to enable a new three to four star hotel with approximately 200 rooms, ground level restaurant and basement car parking.

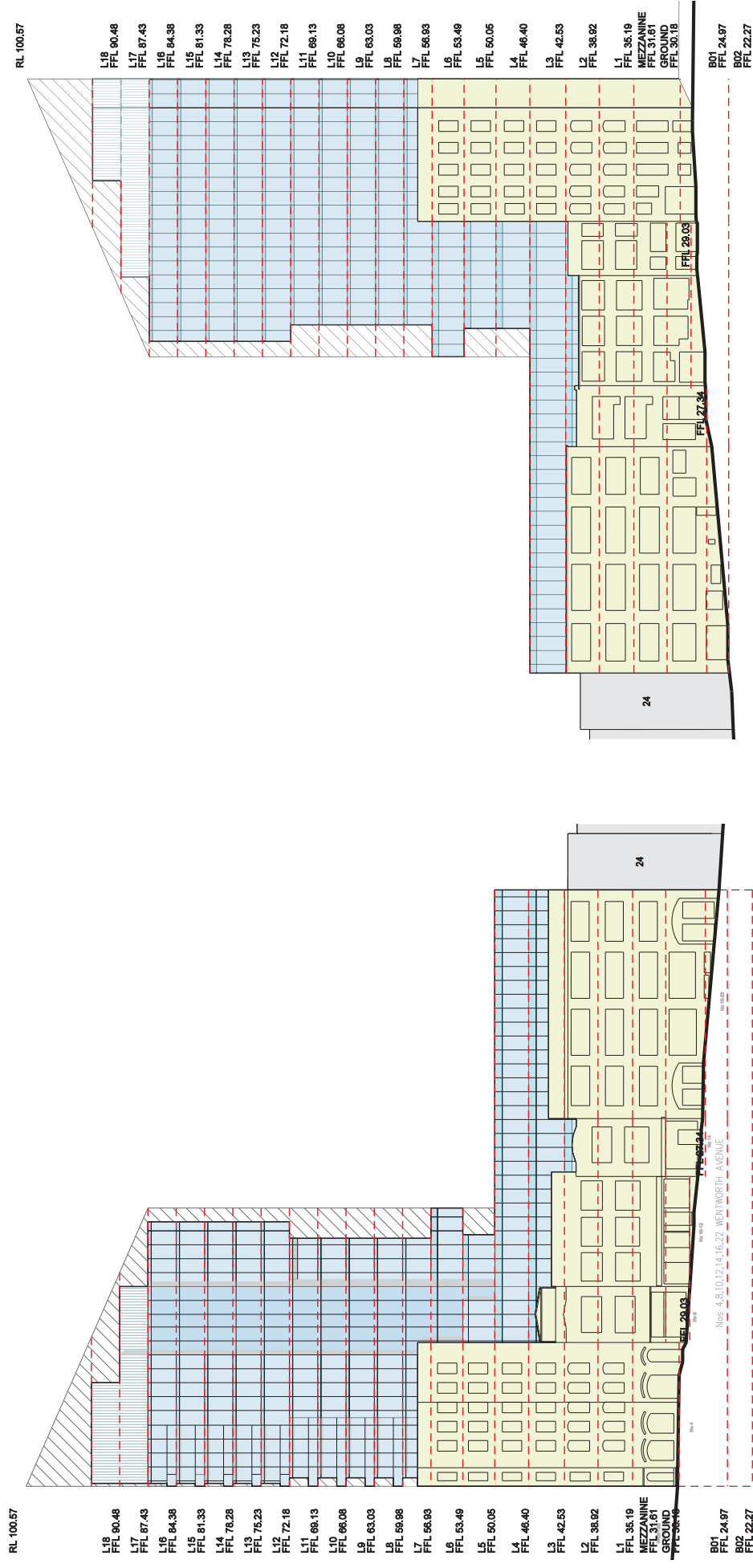
A new podium and played tower was proposed over the existing buildings consisting of two new levels above the four existing buildings at 8, 10-12, 14 and 16-22 Wentworth Avenue. The tower consists of approximately 12 new levels above the existing buildings at 4-6, 8 and part of 10-12 Wentworth Avenue. The existing building facades and internal structure of 4-6 and 16-22 Wentworth Avenue were proposed to be retained.

A new three level addition was proposed above 9-13 Brisbane Street for use as an interconnecting facility a new tunnel underneath Wemyss Lane or sky bridge over the laneway as a potential alternative.









EAST ELEVATION

WEST ELEVATION

4.1 Feedback from City of Sydney June 2016

In response to the scheme submitted to City of Sydney, Council advised in writing on 17 June 2016 that there were three key issues which needed to be addressed before support for a formal Planning Proposal could be achieved. These were:

1. Overshadowing

Less than 70% of apartments in neighbouring buildings Belvedere, Meta and Poplar receive a minimum of 2 hours sunlight therefore, in accordance with the ADG, apartments that receive more than 2 hours of sunlight in midwinter were only to have sunlight reduced to 2 hours, no less.

The maximum number of apartments that can lose 20% of their sunlight is the difference between the percentage of apartments that receive more than 2 hours of sunlight and 70% of all apartments.

Remaining apartments can have reduced sunlight providing no more than 15% receive no sunlight in mid winter based on 15 minutes of sun to 1 sq. m. of habitable space 1 metre above floor level.

2. Heritage

Wholesale removal of interiors at 4-6, 10-12, 16-22 and structure in 10-12 Wentworth Avenue was not supported although there was an opportunity to remove internal structure at 8 and 14 Wentworth Avenue as long as windows were not affected.

Greater consideration of additions was required to all heritage listed buildings with particular regard to their Chicago style bottom, middle and top, vertical rhythm and differentiation when viewed from the street.

Consideration of a setback of at least 3 metres from the western frontage was requested.

3. Tunnel and Skybridge

These elements were not supported

5. Response to Council Feedback

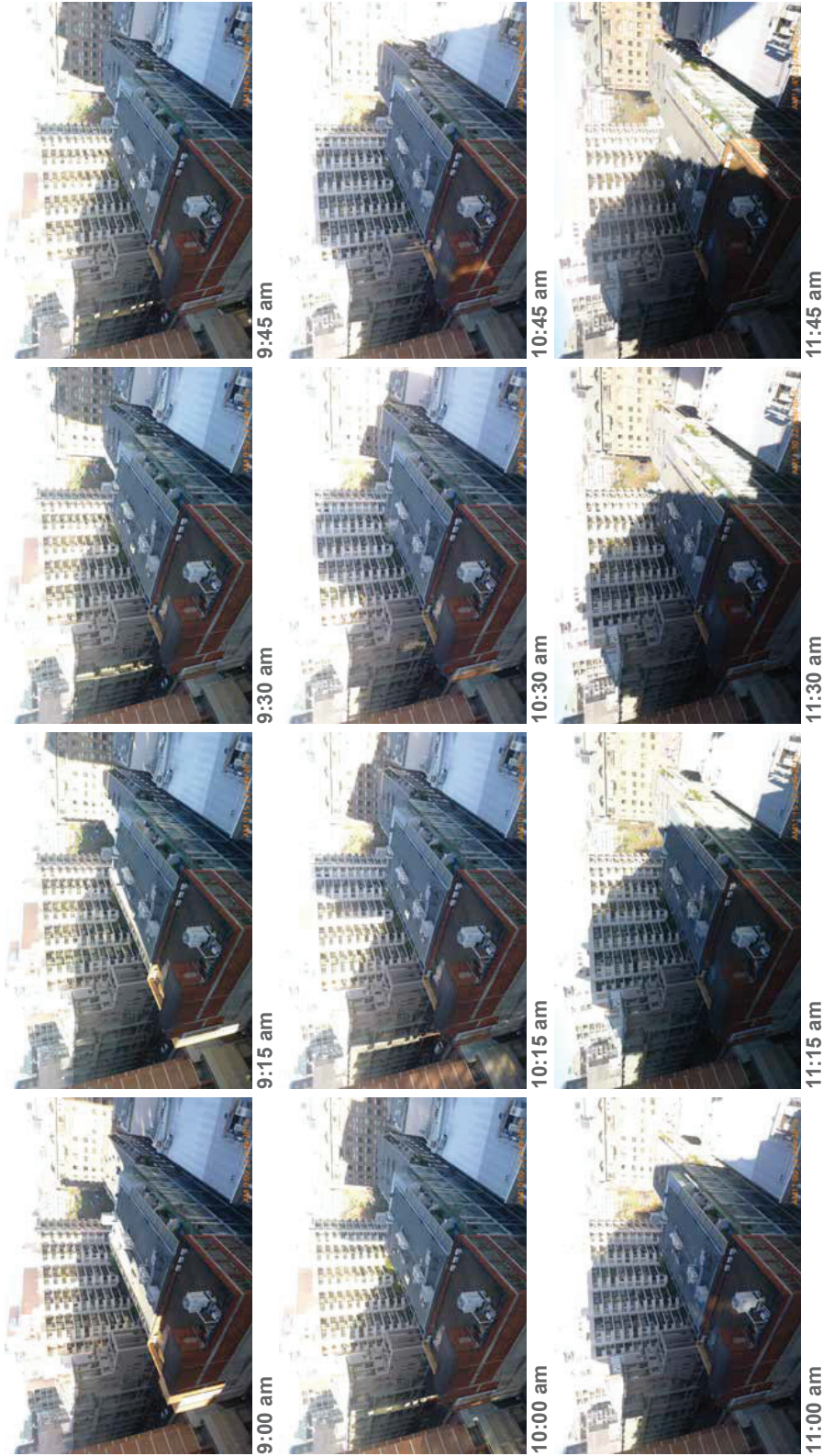
5.1.1 Existing Shadows



View Key Plan

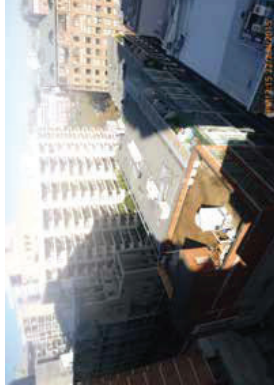
Based on the letter from City of Sydney, re-appraisal of overshadowing was undertaken. Existing shadow impacts affecting all apartments during midwinter were recorded by photography at 5 minute intervals from an elevated camera on the side of the Stellar Hotel. From this vantage point, the Belvedere, META and Poplar buildings are all visible. Detailed shadow studies of the proposed envelope were then carried out. As a result of this study, the proposed built form was modified and reduced in order to comply with the ADG.

The relevant photos at 15 minute intervals are provided below and on the following page. These on site photographic recordings were later verified by digital solar model consultants.

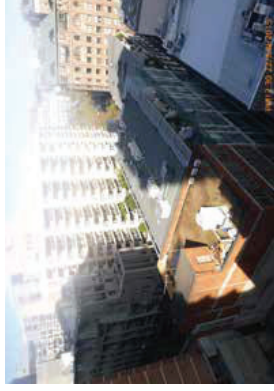




12:00 noon



12:15 pm



12:30 pm



12:45 pm



1:00 pm



1:15 pm



1:30 pm



1:45 pm



2:00 pm



2:15 pm



2:30 pm



2:45 pm

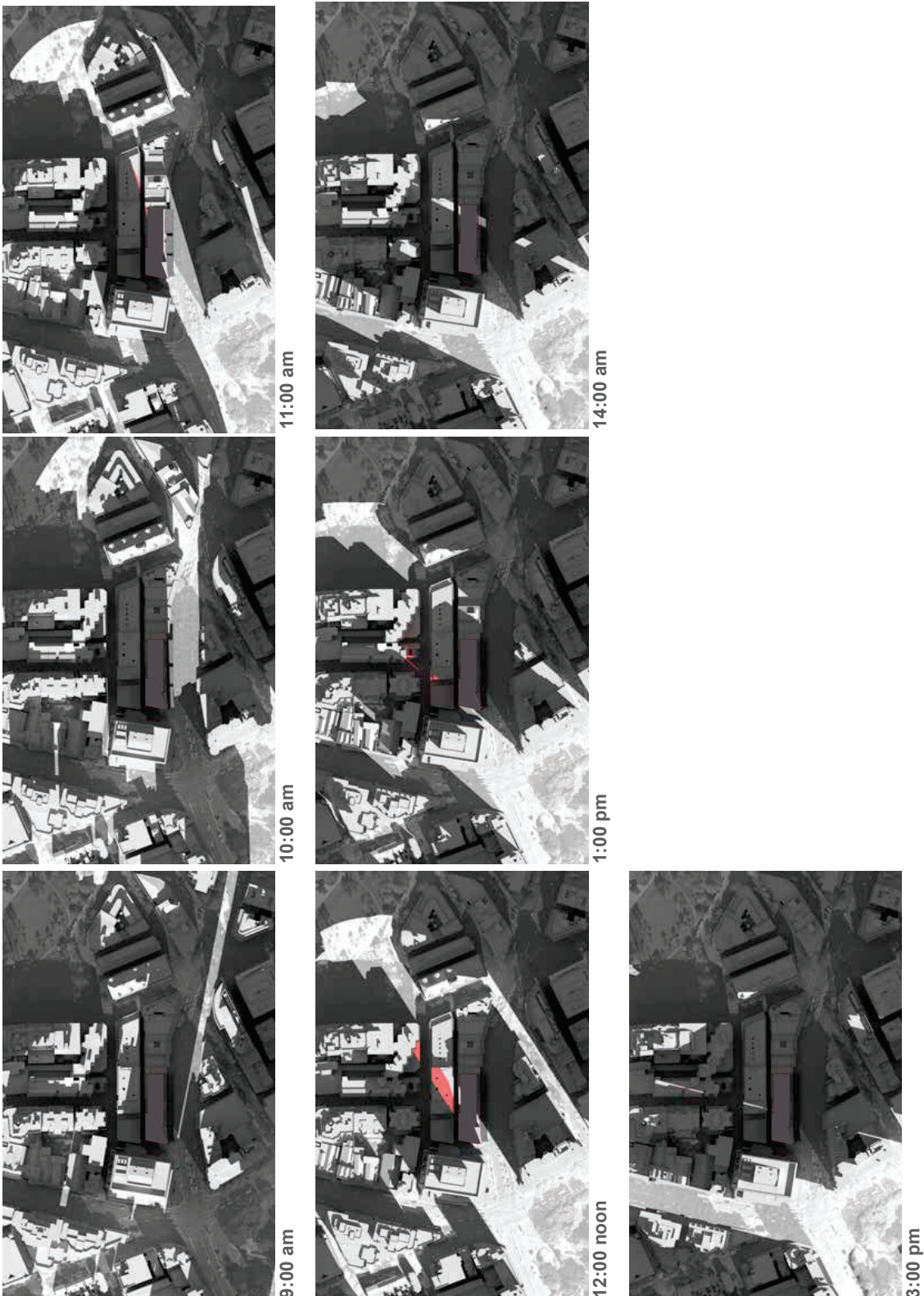


3:00 pm

5.1.2

June 21 Plan View

Additional Shadow cast by Proposed Envelope

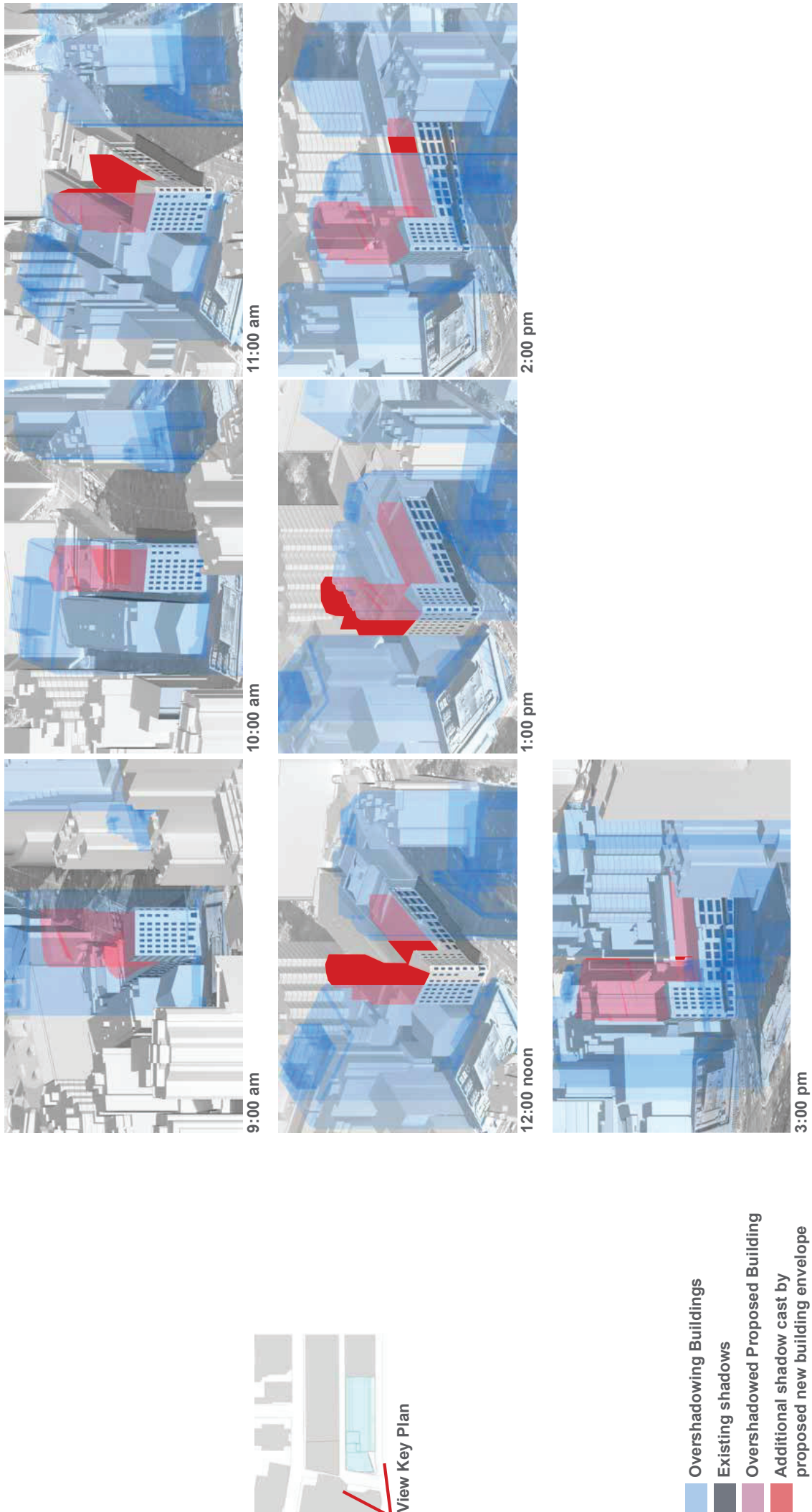


Shadow diagrams were prepared to comply with allowable shadows cast on neighbouring multi-unit residential buildings - Belvedere, Poplar and Meta Apartments.

Sun eye views were generated at 15 minute intervals. Existing shadows are shown in grey and the additional new shadows compliant with the ADG are shown in pink.

- Existing shadows
- Additional shadow cast by proposed new building envelope

June 21 SunRay View



5.1.3

Overshadowing of Proposed Envelope on Belvedere Apartments



- Existing shadows
- Additional shadow cast by proposed new building envelope

June 21 West Elevation

The Belvedere Apartment building has 110 apartments, 22 of these apartments (20%) are on the south side of the building and receive no sun at all.

On June 21 88 of these apartments (80%) face west and are illustrated here:

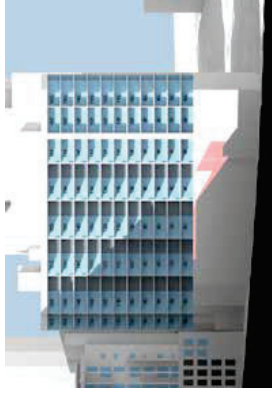
1. 50 apartments receive 2 hours minimum sun and will continue to do so as a result of the proposal.

2. 32 apartments receive less than 2 hours of sun but only 29 lose any sun at all.

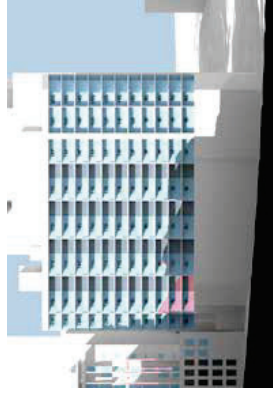
3. The remaining 3 apartments lose only 15 minutes of sun.

Whilst there is some loss of sun to some of the 88% of apartments which currently receive sun, the loss is minimal and within the ADG and Council's DCP guidelines.





12:00 noon



1:00 pm



2:00 pm



3:00 pm



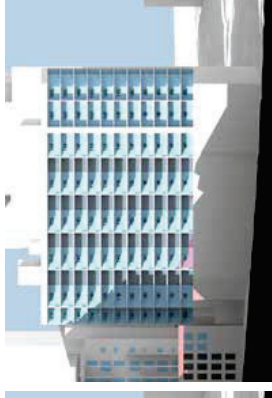
12:15 pm



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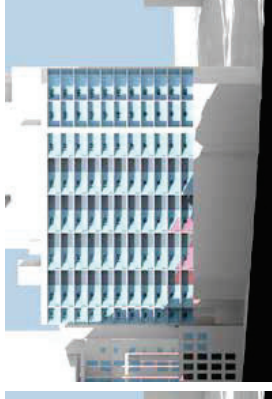
12:30 pm



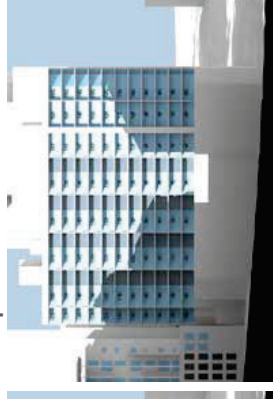
1:30 pm



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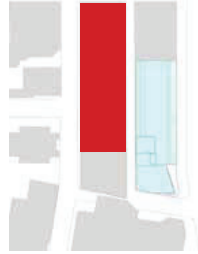


2:45 pm

-  Existing shadows
-  Additional shadow cast by proposed new building envelope

5.1.4

Overshadowing of Proposed Envelope on META Apartments



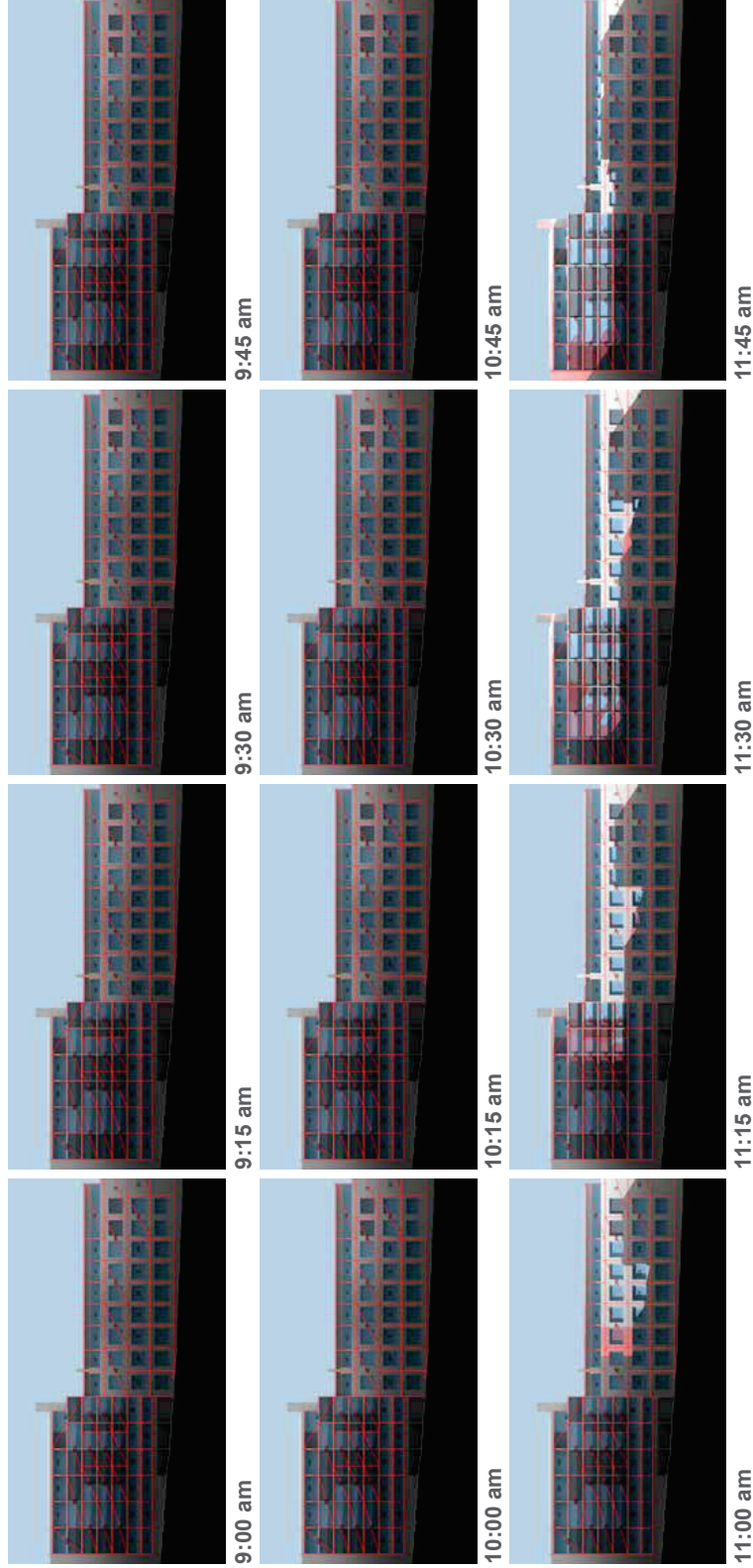
- Existing shadows
- Additional shadow cast by proposed new building envelope

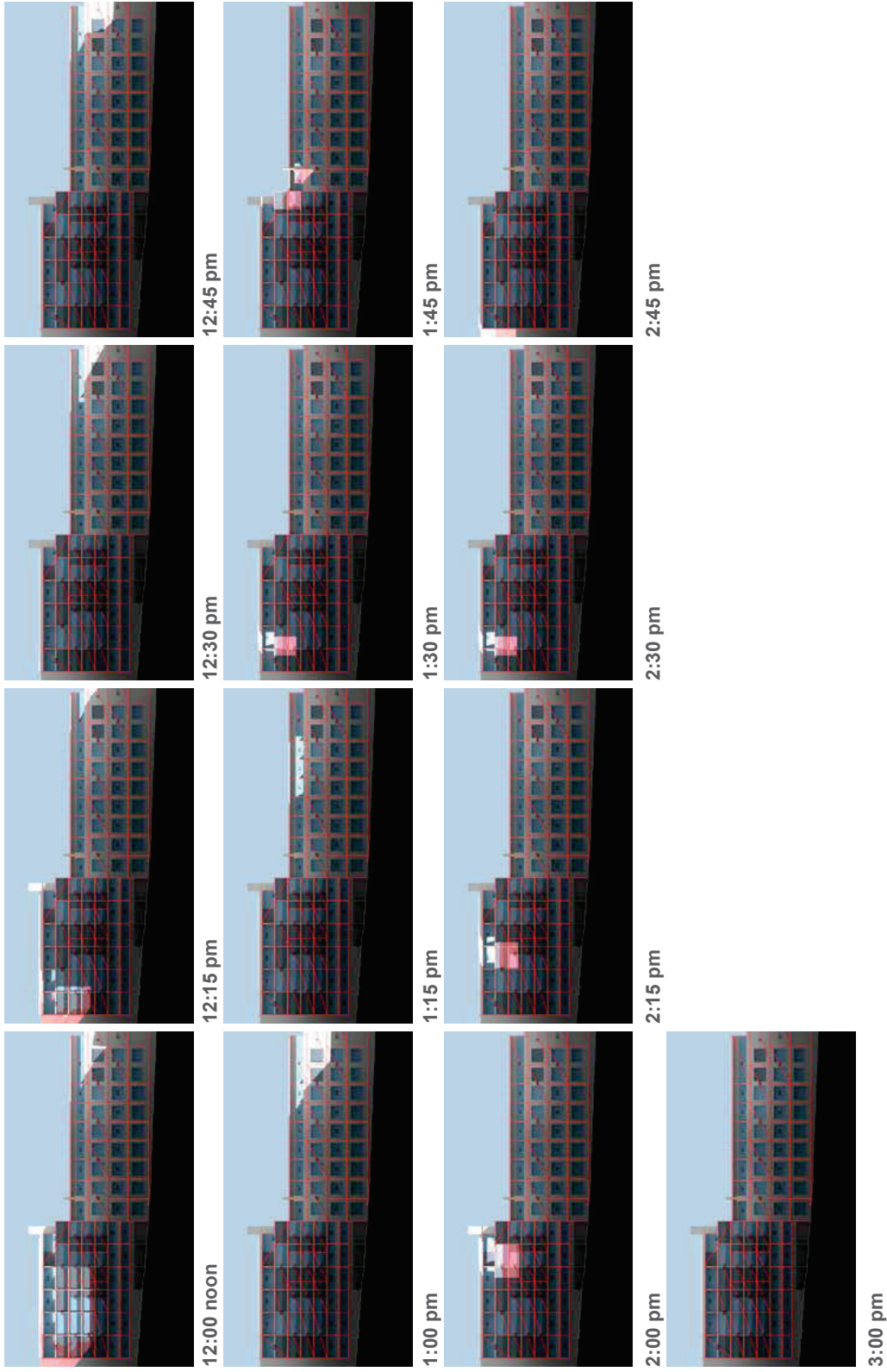
June 21 West Elevation

The META Apartment building has 83 apartments

- No apartments currently receive more than 2 hours of sun. This doesn't change as a result of shadows cast by the proposed new envelope.
- The Apartment Design Guide permits 35% or 29 apartments to have sun reduced by 20% but only 15 apartments will lose sun as a result of shadows cast by the new envelope.
- 36 apartments currently receive no sun and this number does not increase as a result of shadows cast by the new envelope.

Proposed additional shadows comply with the ADG and Council DCP guidelines.





Existing shadows
 Additional shadow cast by
 proposed new building envelope

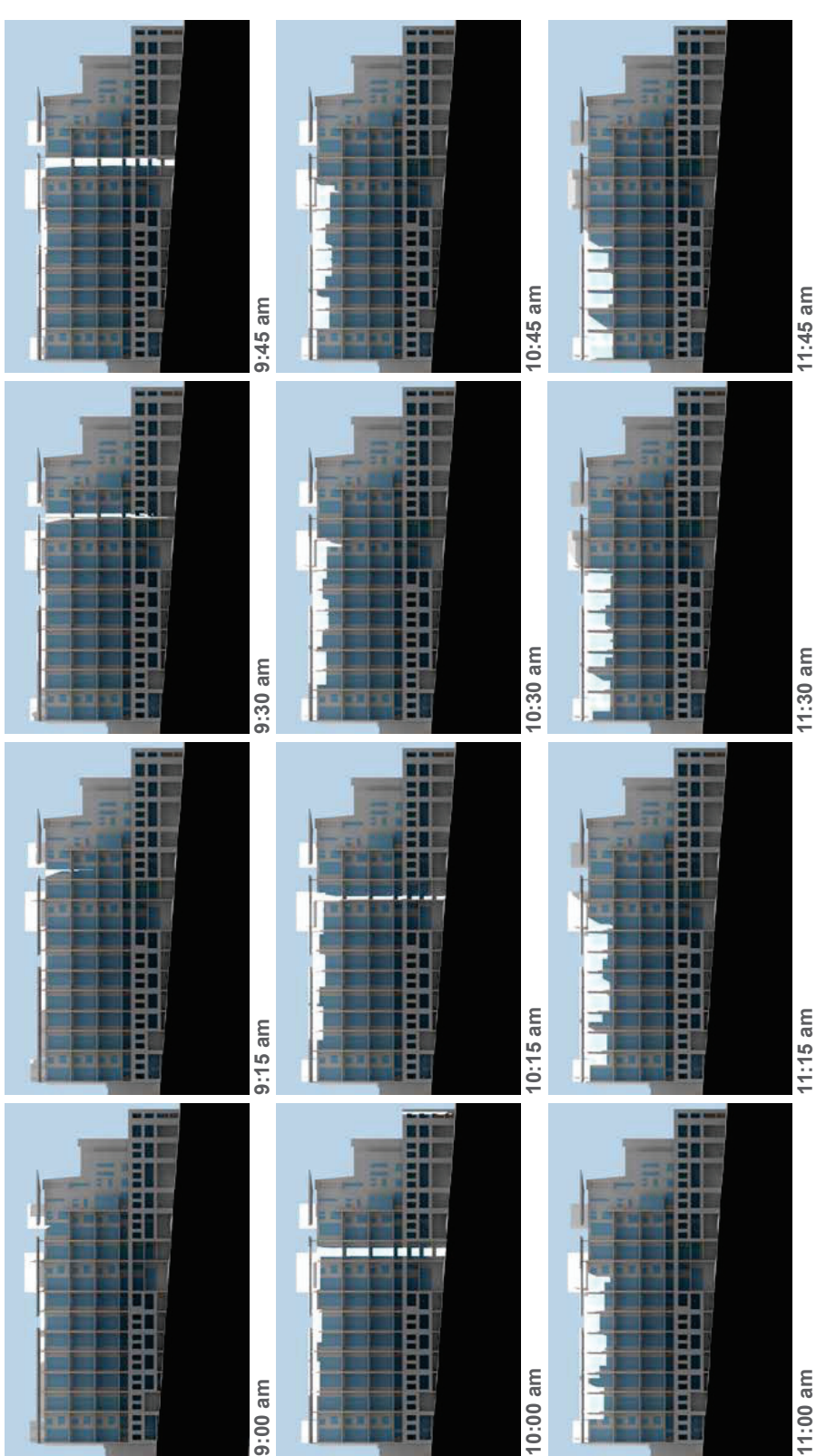
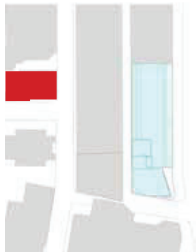
5.1.5

June 21 North Elevation

Shadows cast by the proposed envelope do not reduce solar access to any apartment in the Poplar building to the extent that they all receive at least 1 square metre of sun in living rooms during any 15 minute period of the day that they currently do on June 21

Proposed shadow impacts cast by the new envelope comply with the Apartment Design Guide.

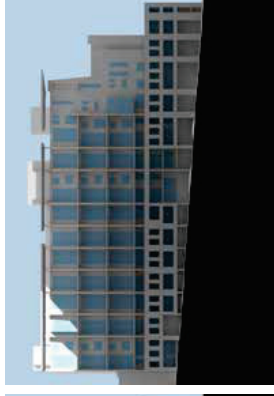
Overshadowing of Proposed Envelope on Poplar Apartments



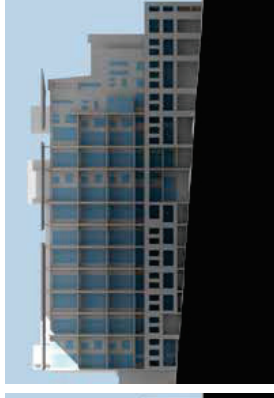
- Existing shadows
- Additional shadow cast by proposed new building envelope



12:00 noon



12:15 pm



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3:00 pm

-  Existing shadows
-  Additional shadow cast by proposed new building envelope

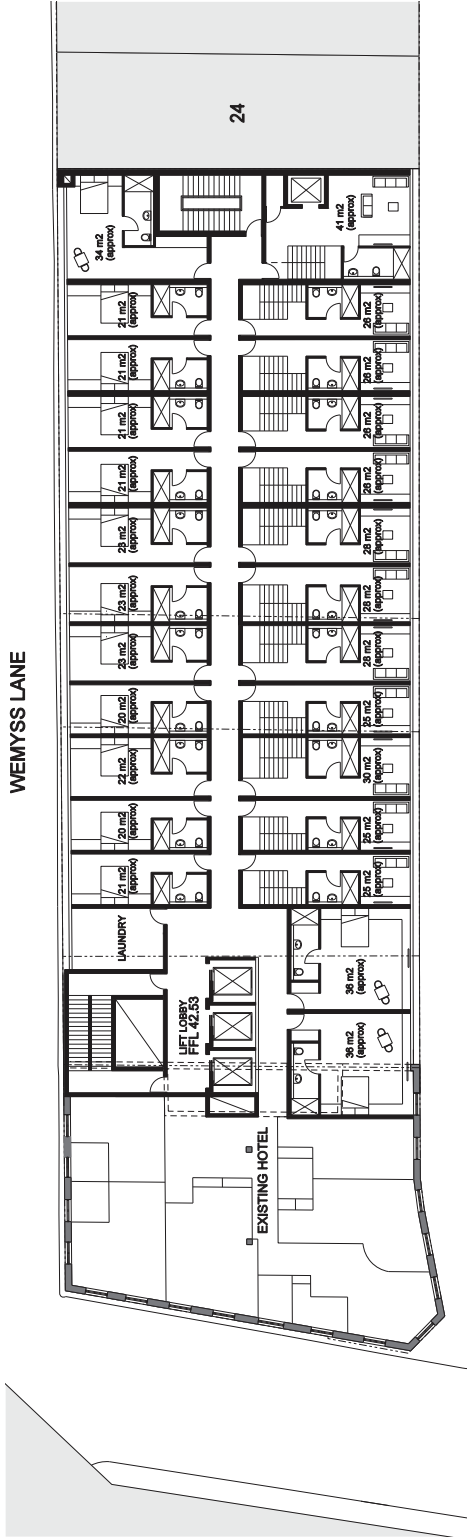
5.2 Response to Council Feedback

Heritage

In response to Council feedback, interiors and structure at 4-6, 10-12 and 16-22 Wentworth Avenue were proposed to be preserved.

Floors at 8 and 14 Wentworth Avenue were proposed to be adjusted so as to connect floor levels with adjacent buildings and provide contiguous floor plates. New floor levels were proposed to replace existing without impacting the facades and fenestration to Wentworth Avenue.

Voids behind the western facades of 8 and 14 were introduced to avoid walls and slab edges running past existing windows in the west facade.



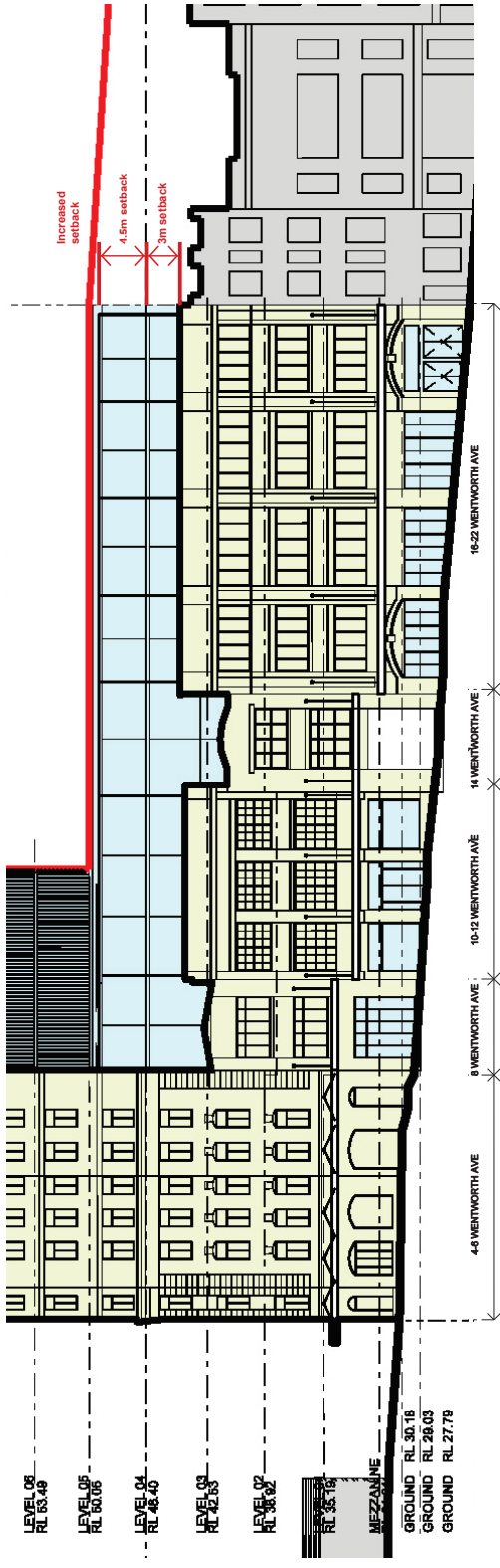
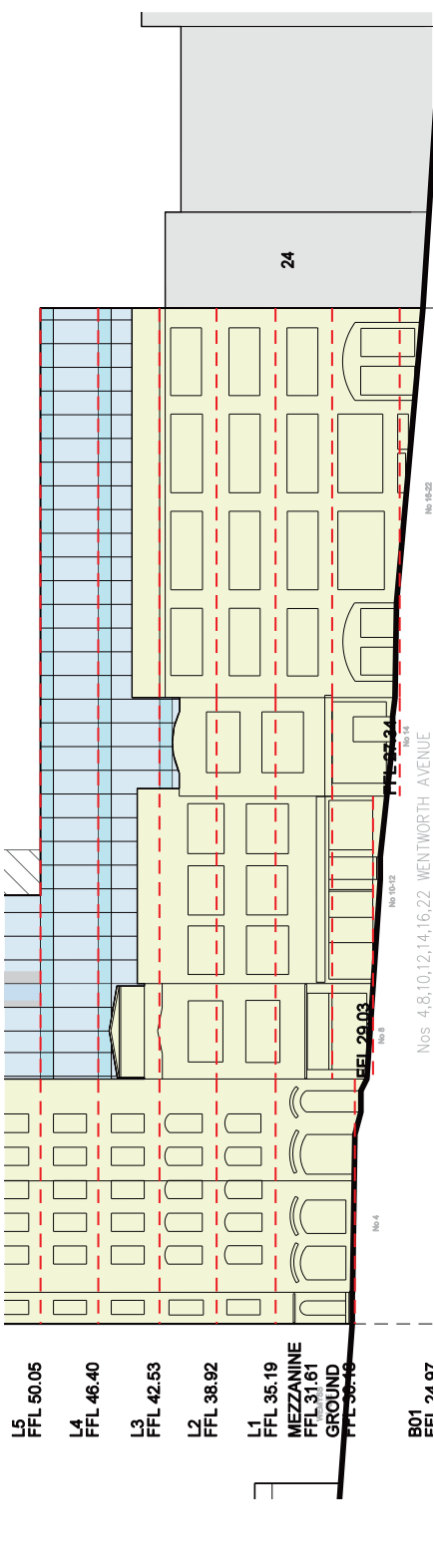
2016 Podium Proposal



Amended Podium Proposal

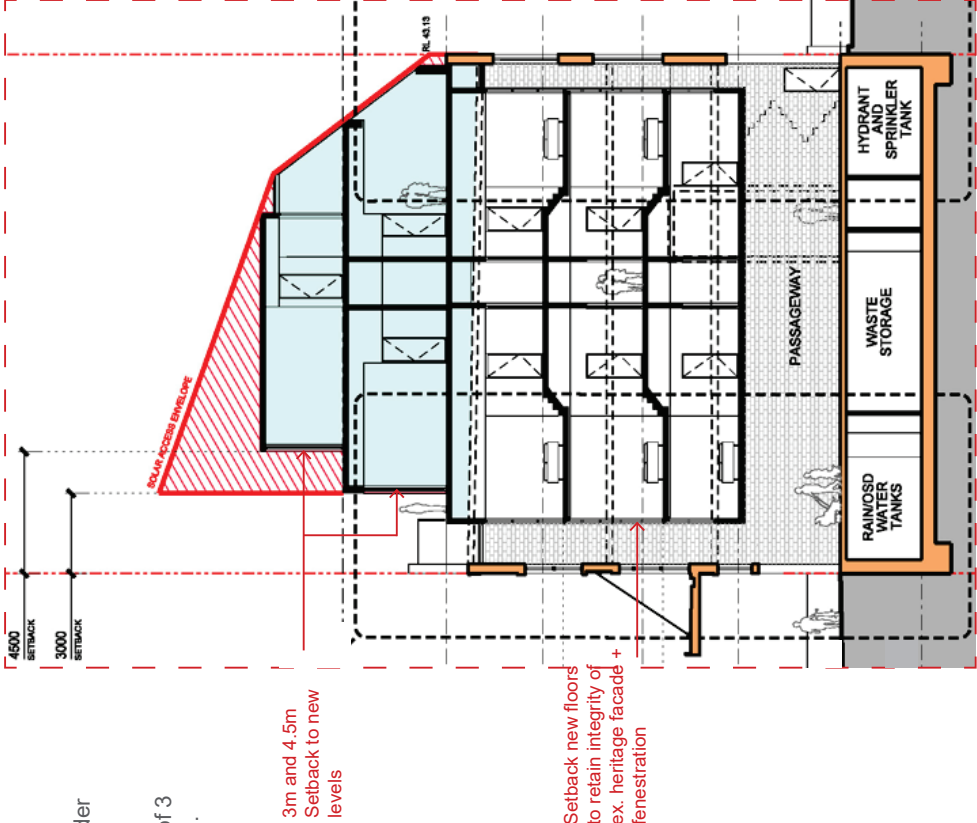
The proposed 2016 elevation above the existing heritage podium was a blank neutral backdrop to the existing heritage facades. This was superseded by a revised 2 story podium addition which is articulated to reflect the rhythm of the existing 19th century industrial heritage facades pm Wentworth Avenue.

The lower level of the podium is proposed to be setback 3 metres from the existing facades and the upper floor a further 1.5 metres so as to be recessive.

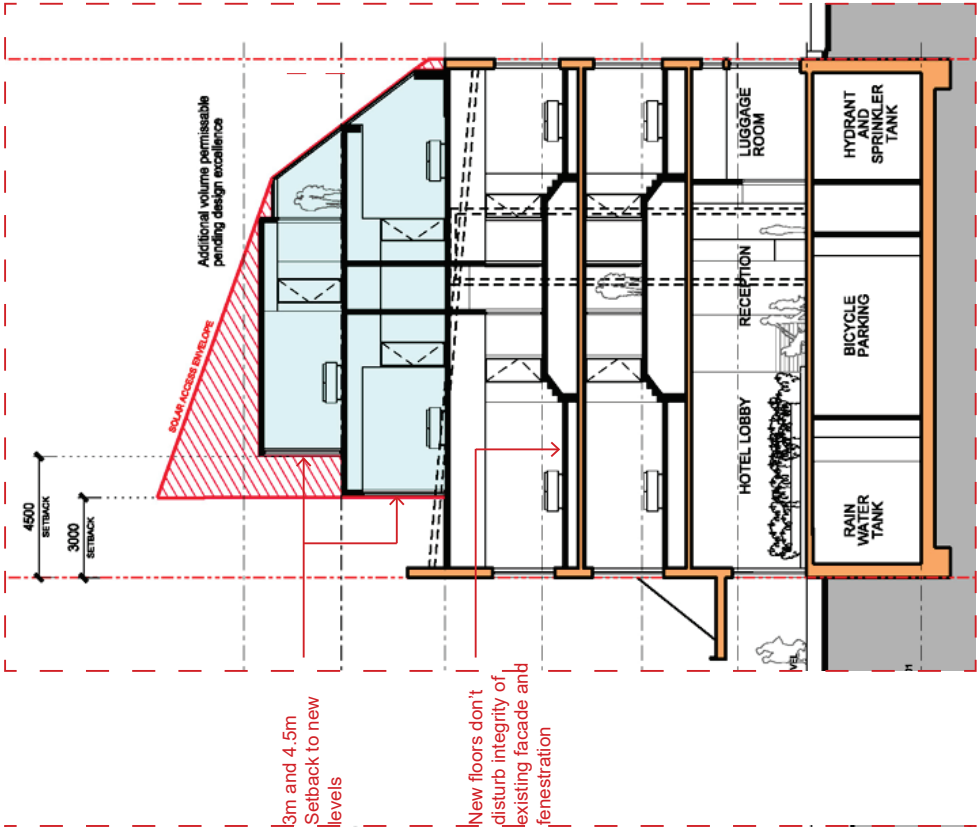


The proposed envelope shown in red was determined by acceptable solar impacts upon neighbouring residential buildings. Further modulation of the envelope was explored in order to:

1. achieve a setback from Wentworth Avenue of 3 metres at the lower level and 4.5 metres above.
2. retain all existing fenestration to Wentworth Avenue and Wemys Lane.



Amended Podium Proposal Section
through 14 Wentworth Ave.

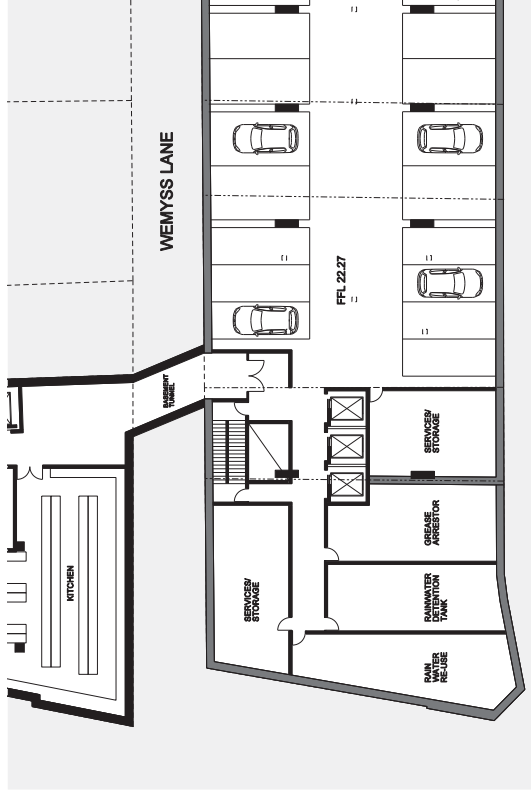


Amended Podium Proposal Section
through 10-12 Wentworth Ave.

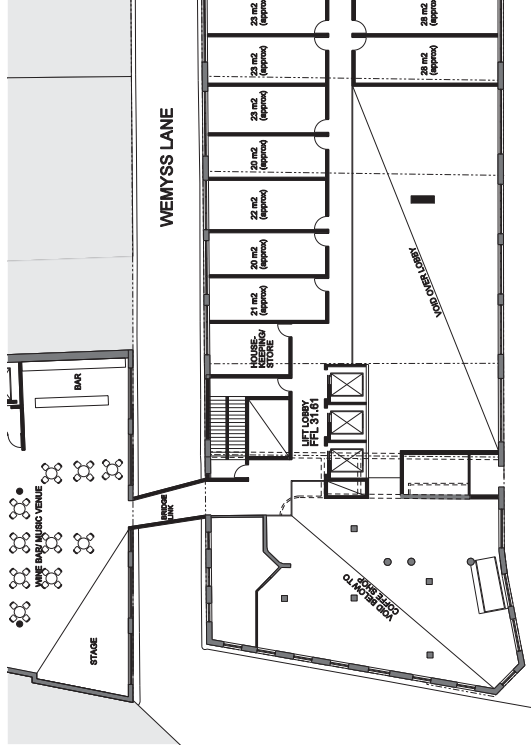
5.3 Response to Council Feedback

Tunnel and Skybridge

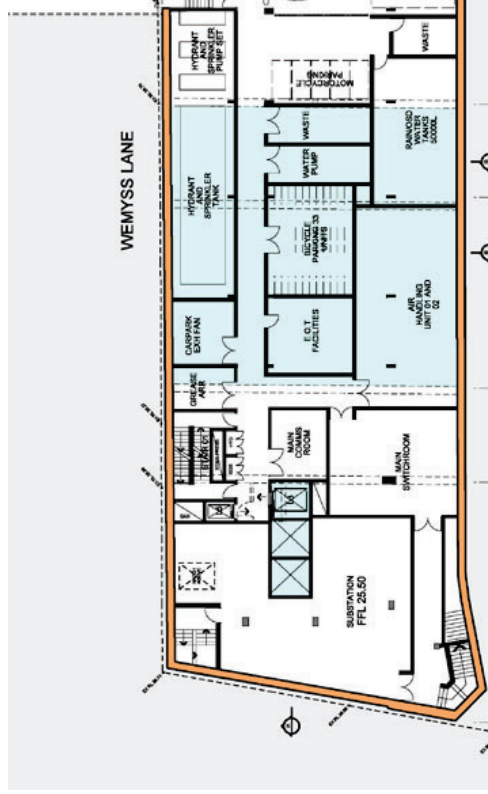
In response to Council feedback, the tunnel and skybridge were deleted from the proposal.



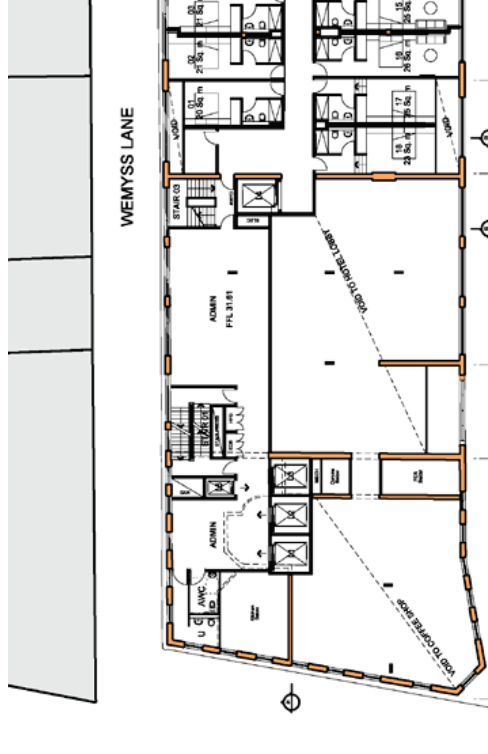
2016 Tunnel Proposed



2016 Skybridge Proposed



Amended Proposal



Amended Proposal

5.4 Response to Council Feedback

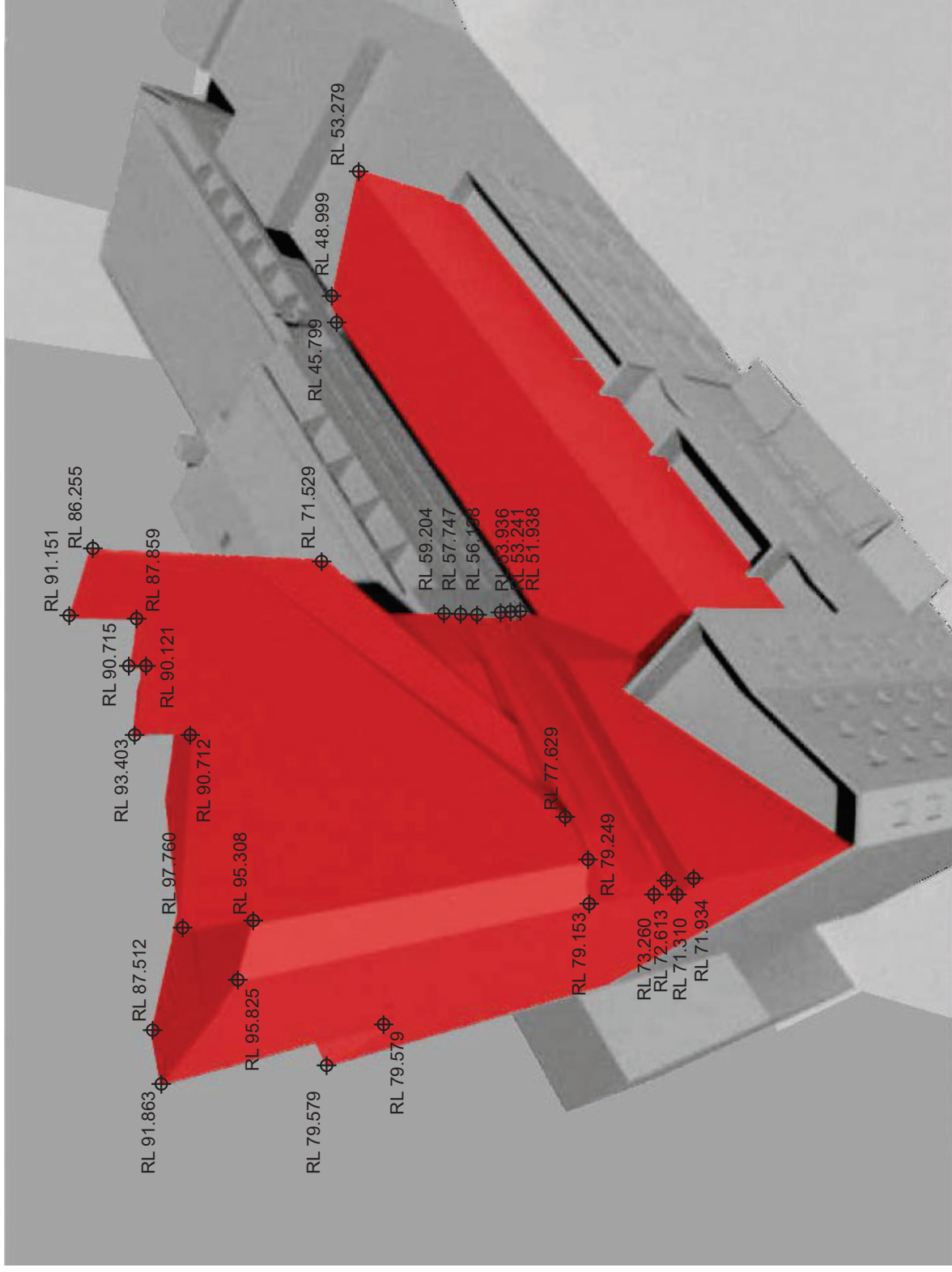
Resultant Compliant Envelope



View Key Plan

Proposed RL's

Based on the solar study and envelope analysis, the critical heights of the resultant envelope where established as illustrated.



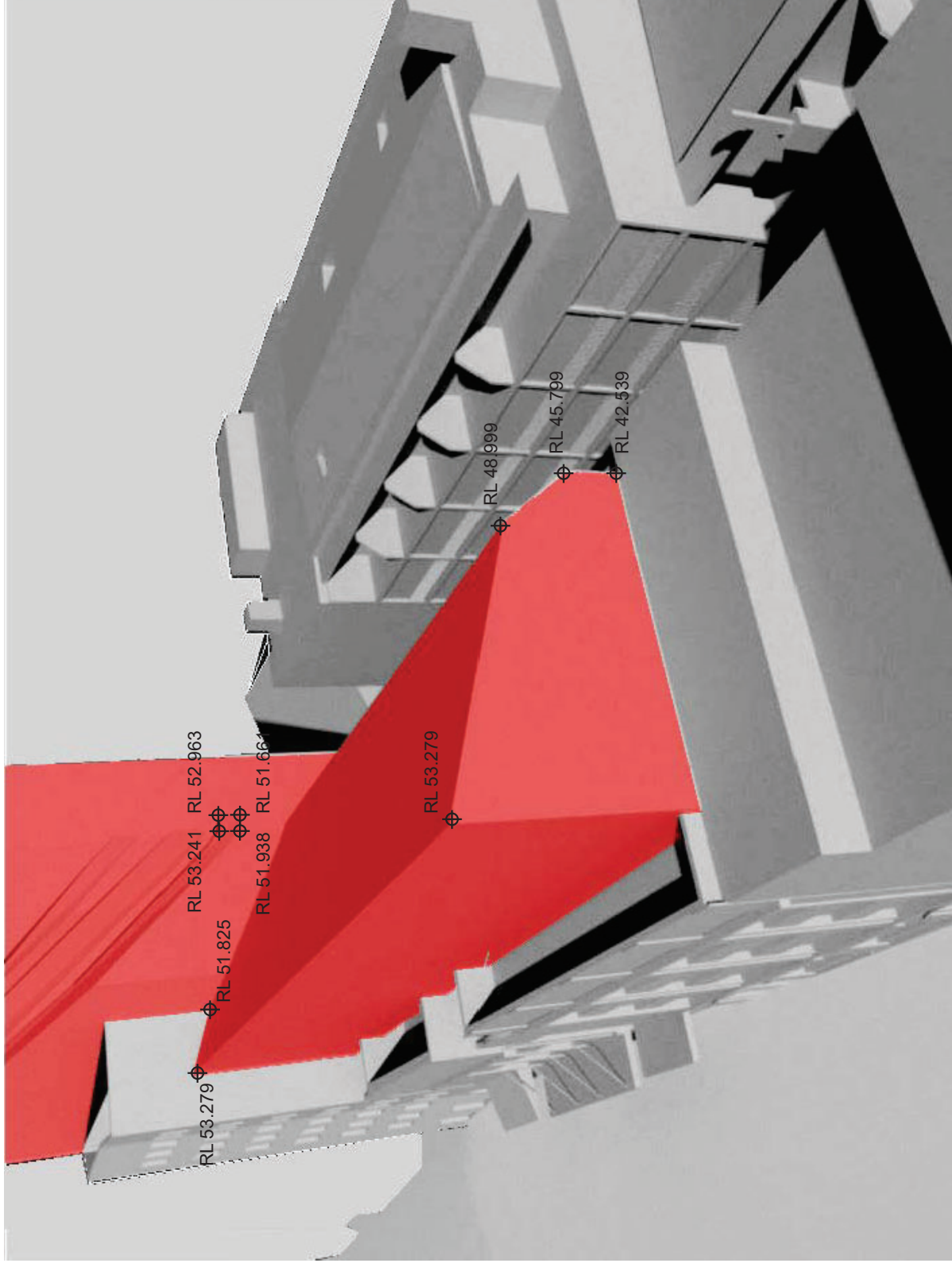


View Key Plan

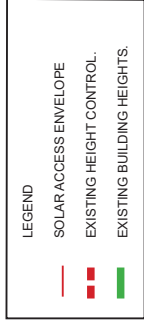




View Key Plan



A diagram of a door with a red dashed line indicating the height of the door handle. The door is shown in a slightly open position, revealing the handle area. The red dashed line is positioned at the height of the handle, which is approximately 1.10m from the floor.



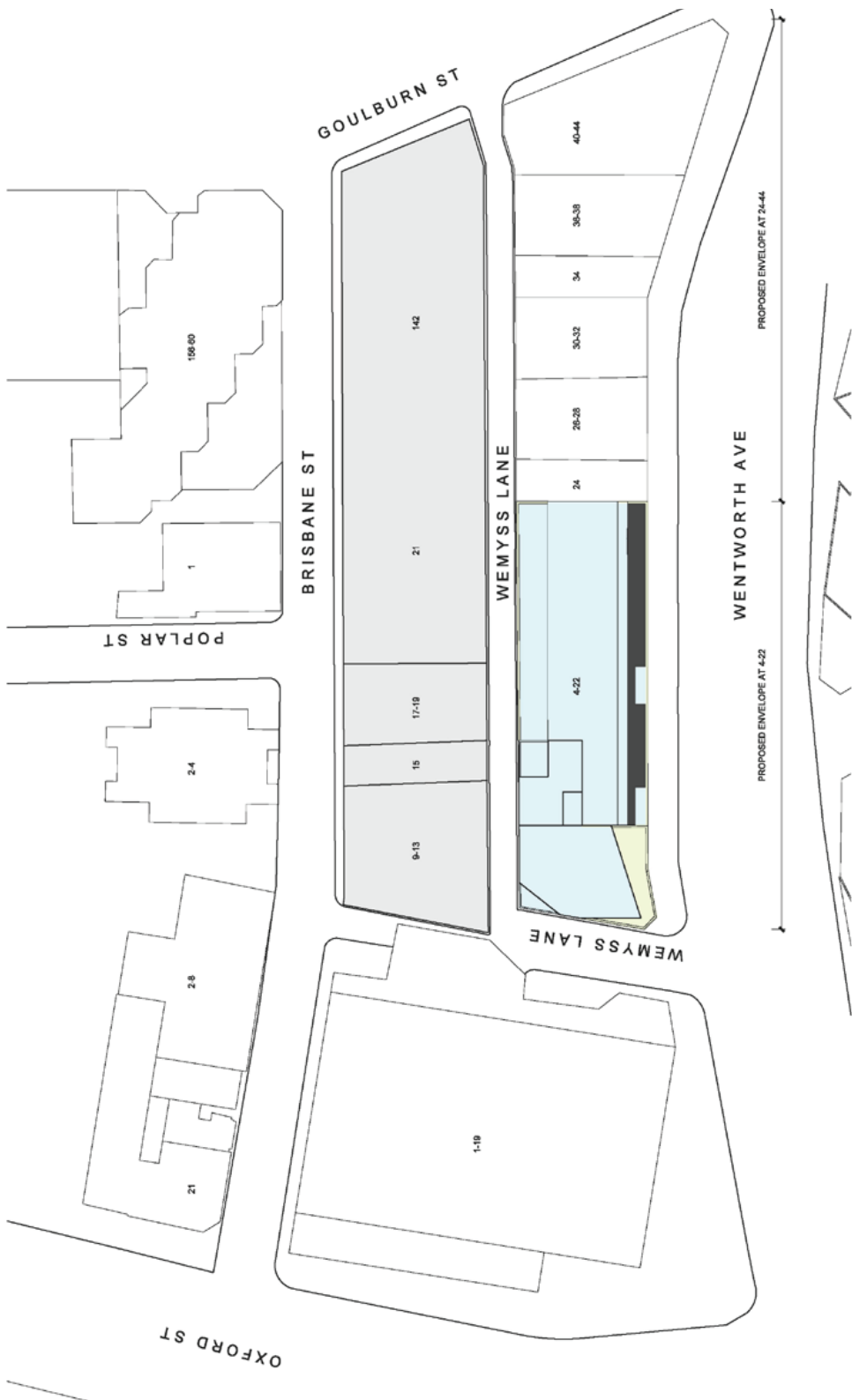
6.1

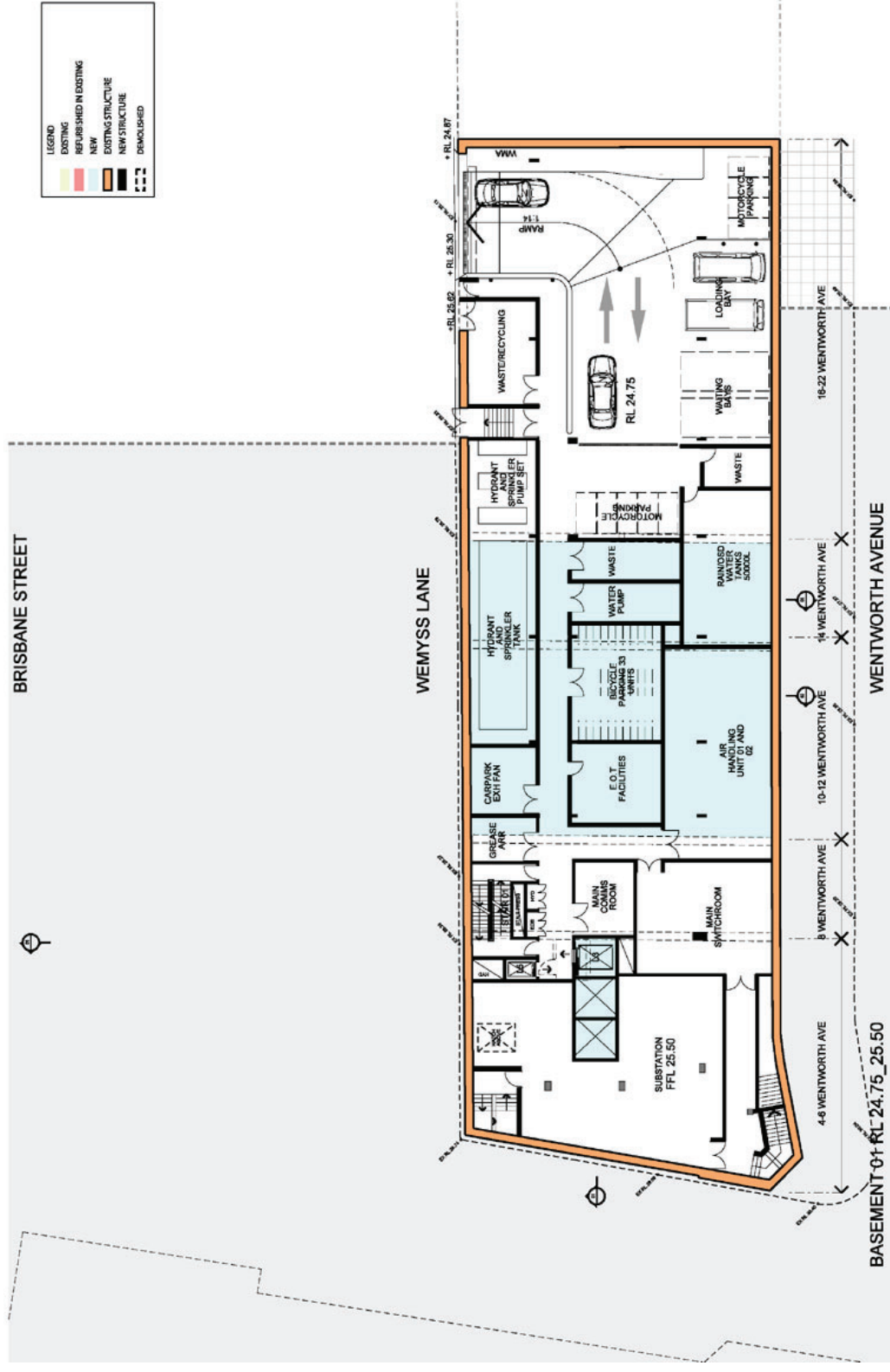
Indicative Schematic Design

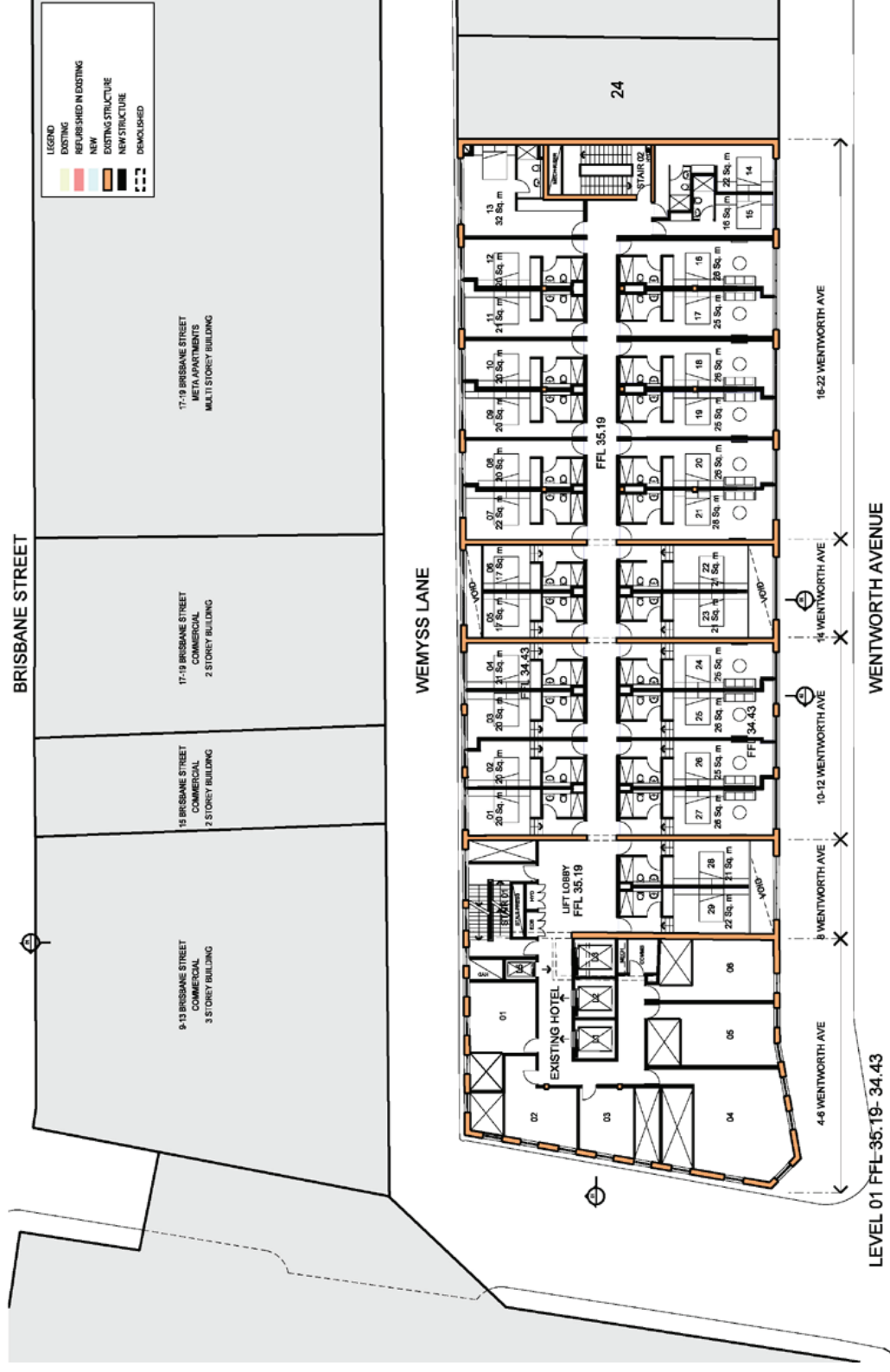
An architectural schematic design for a 202 room hotel was developed to test the viability of developing hotel uses on the site compliant with solar access requirements to neighbouring multi-unit residential buildings, heritage and urban design principles.

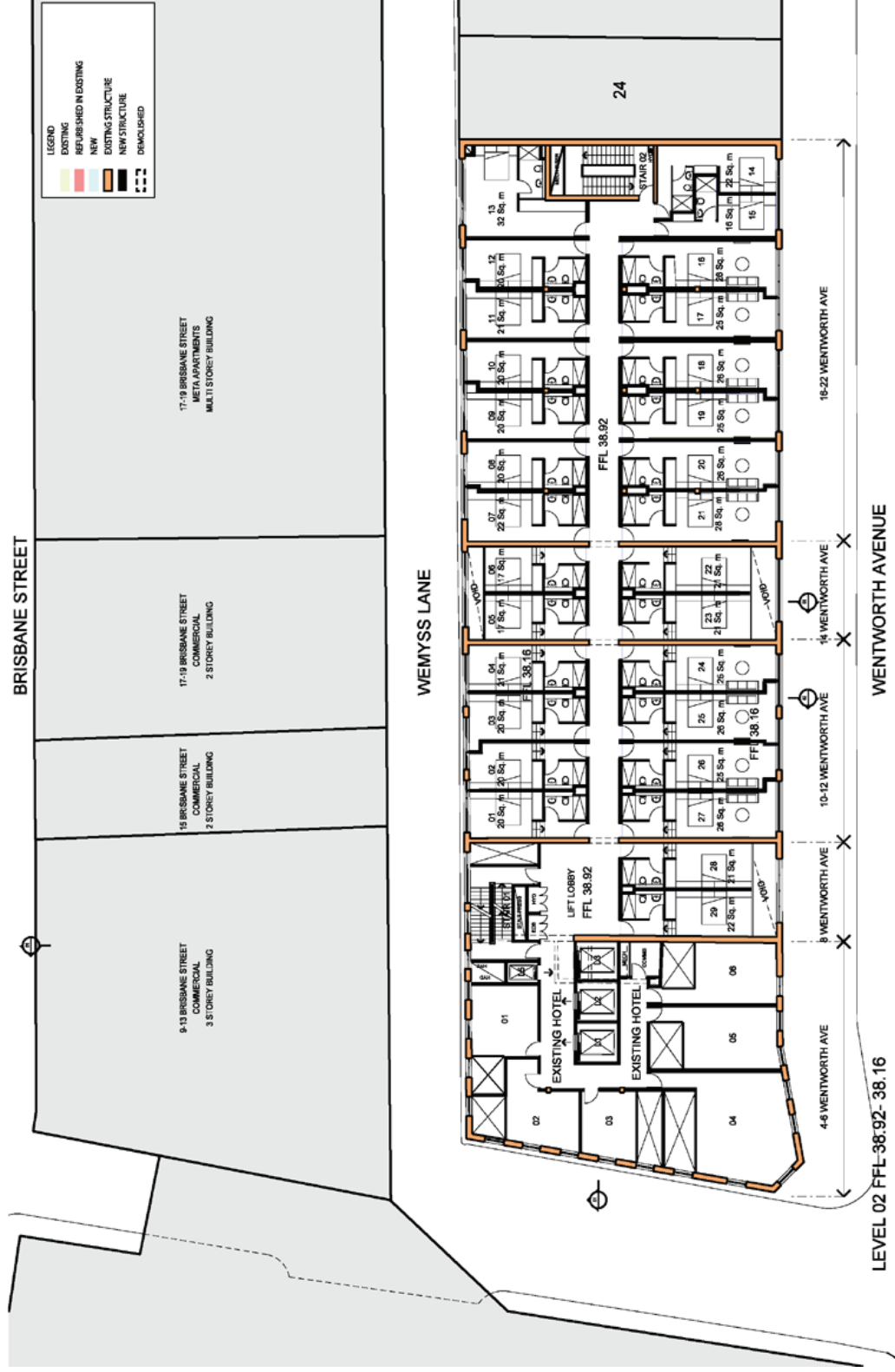
The schematic plans have been developed in conjunction with ARUP who have provided schematic layouts and technical reports to address:

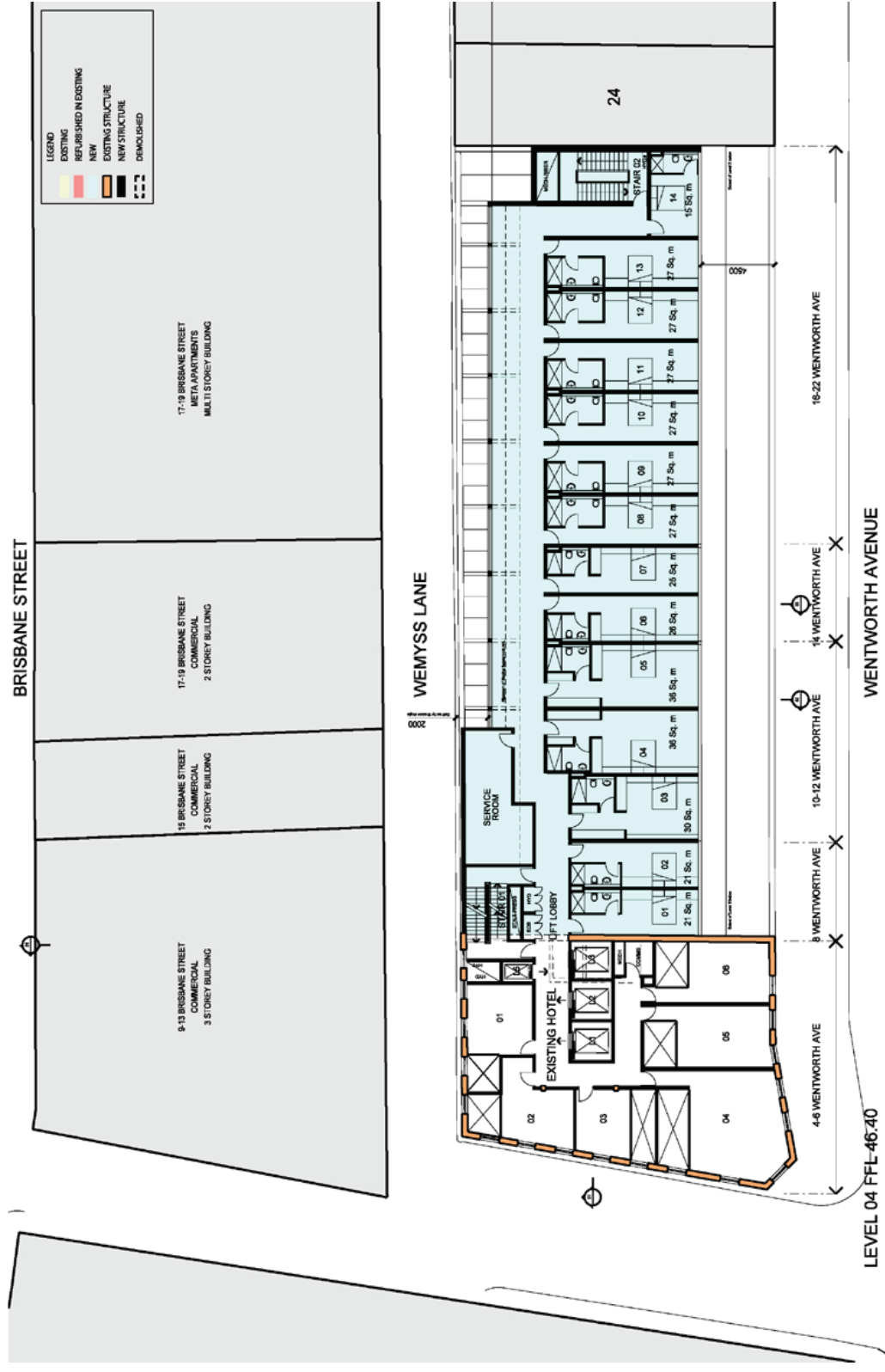
- Structural design
- Services design
- Lift design
- Wind impacts
- Traffic impacts

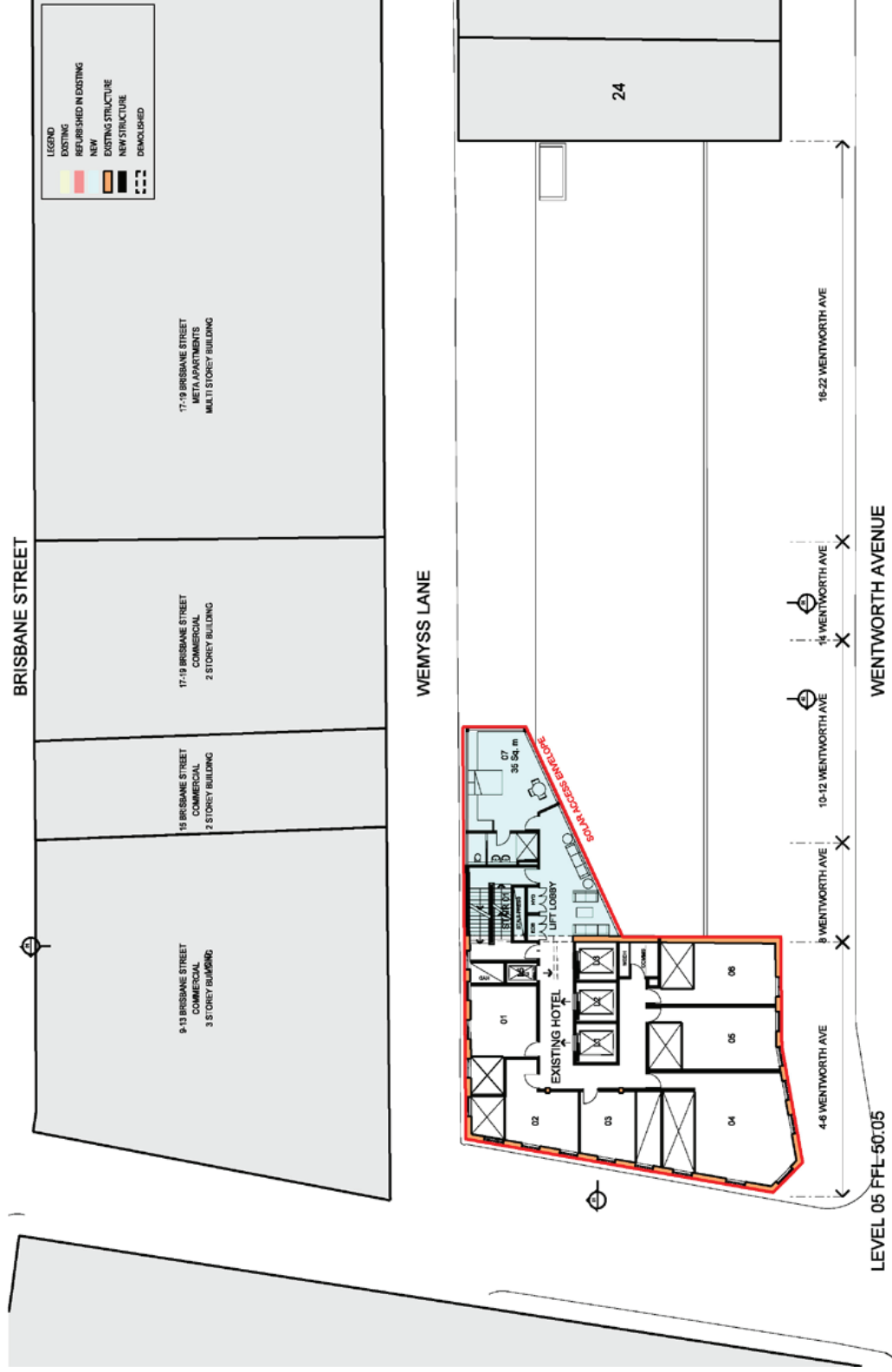


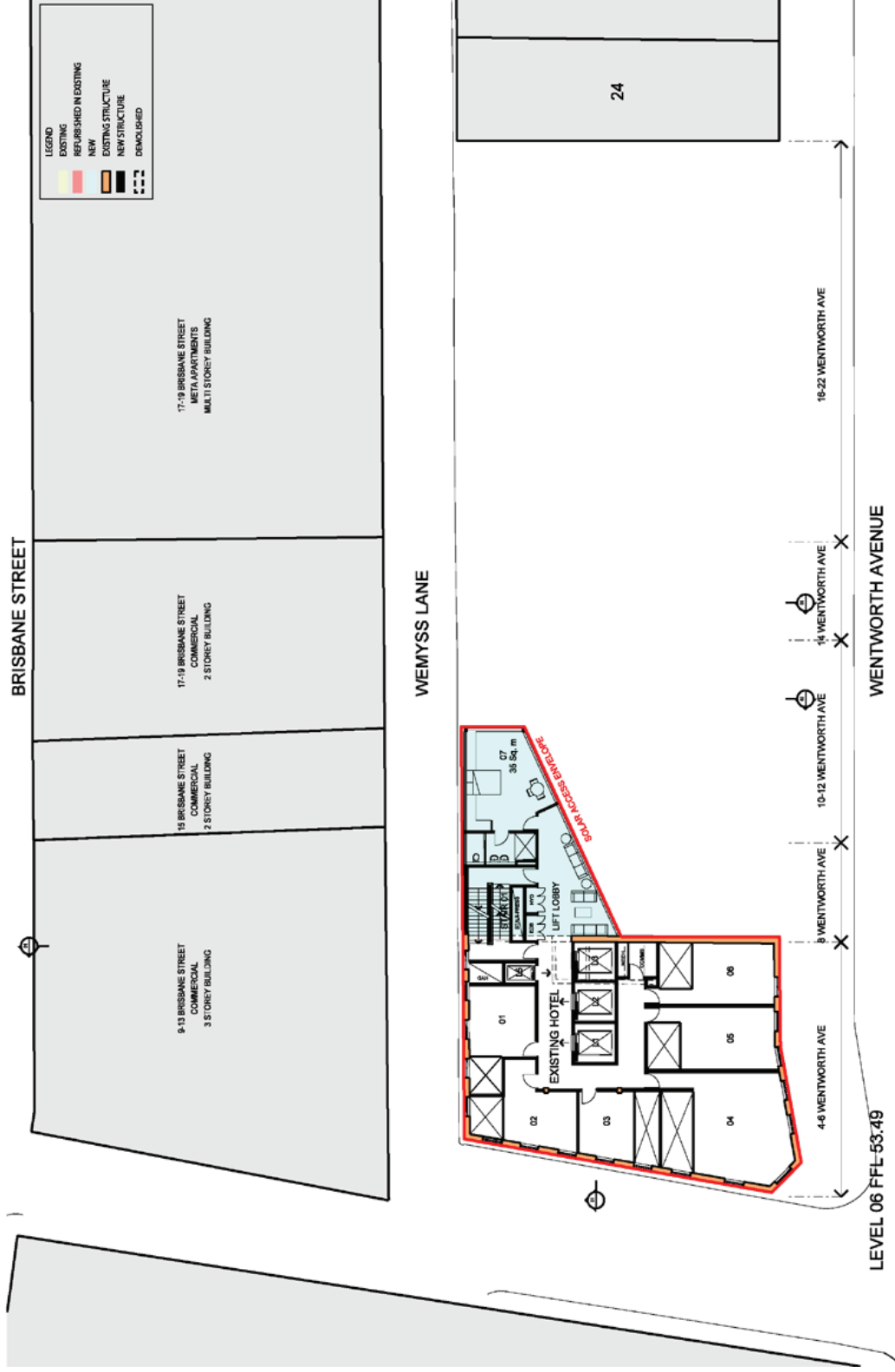


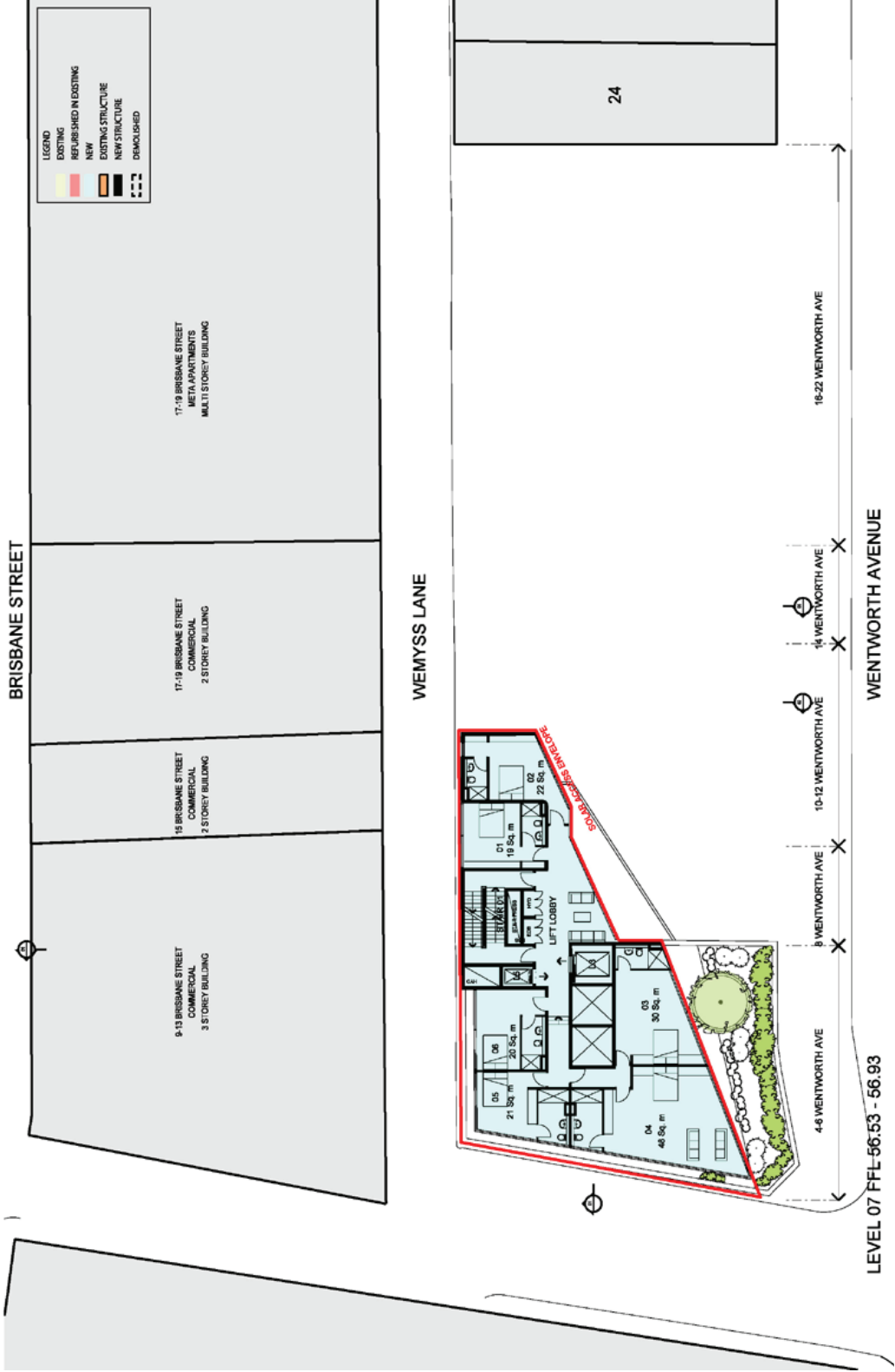


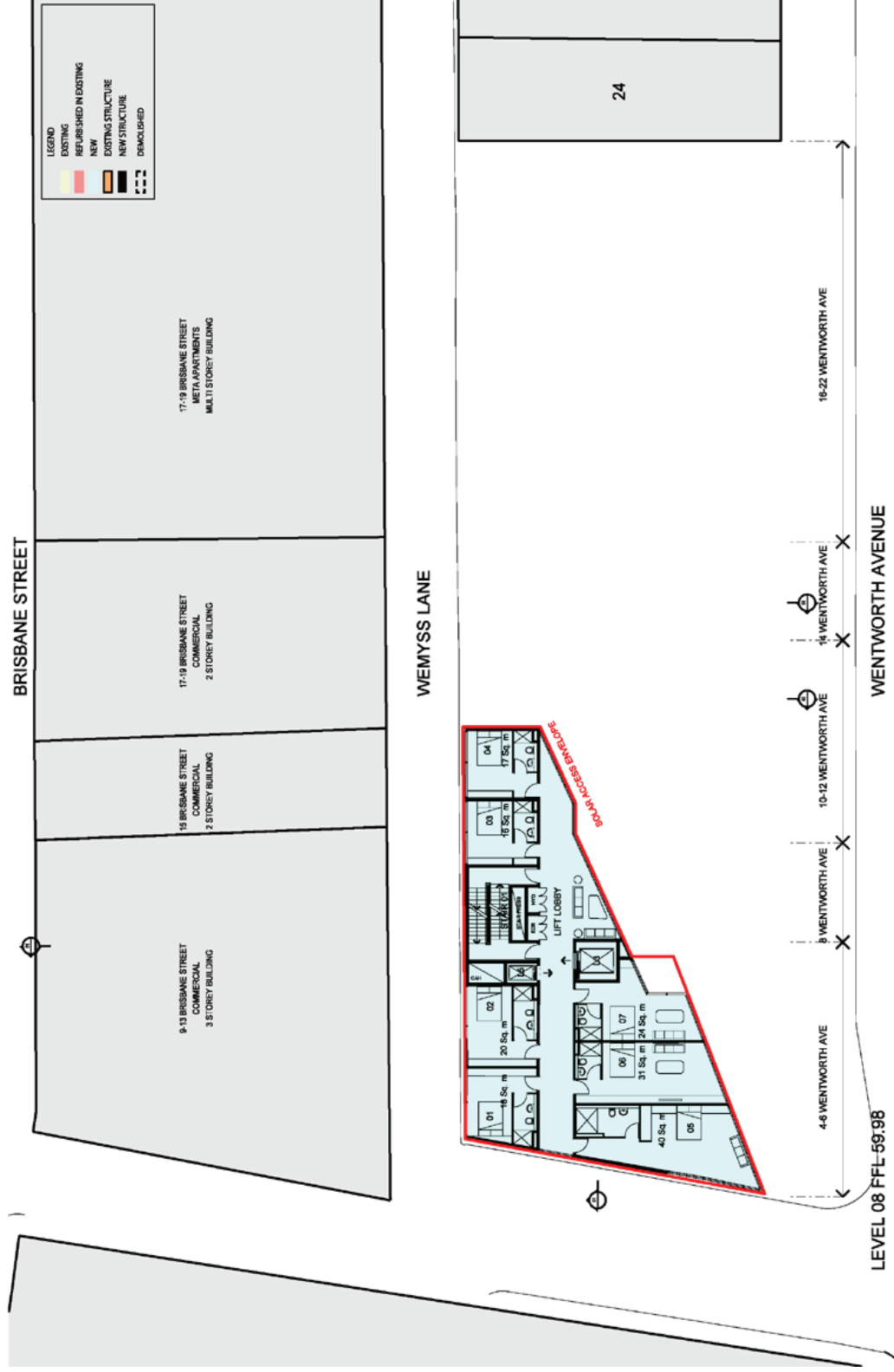


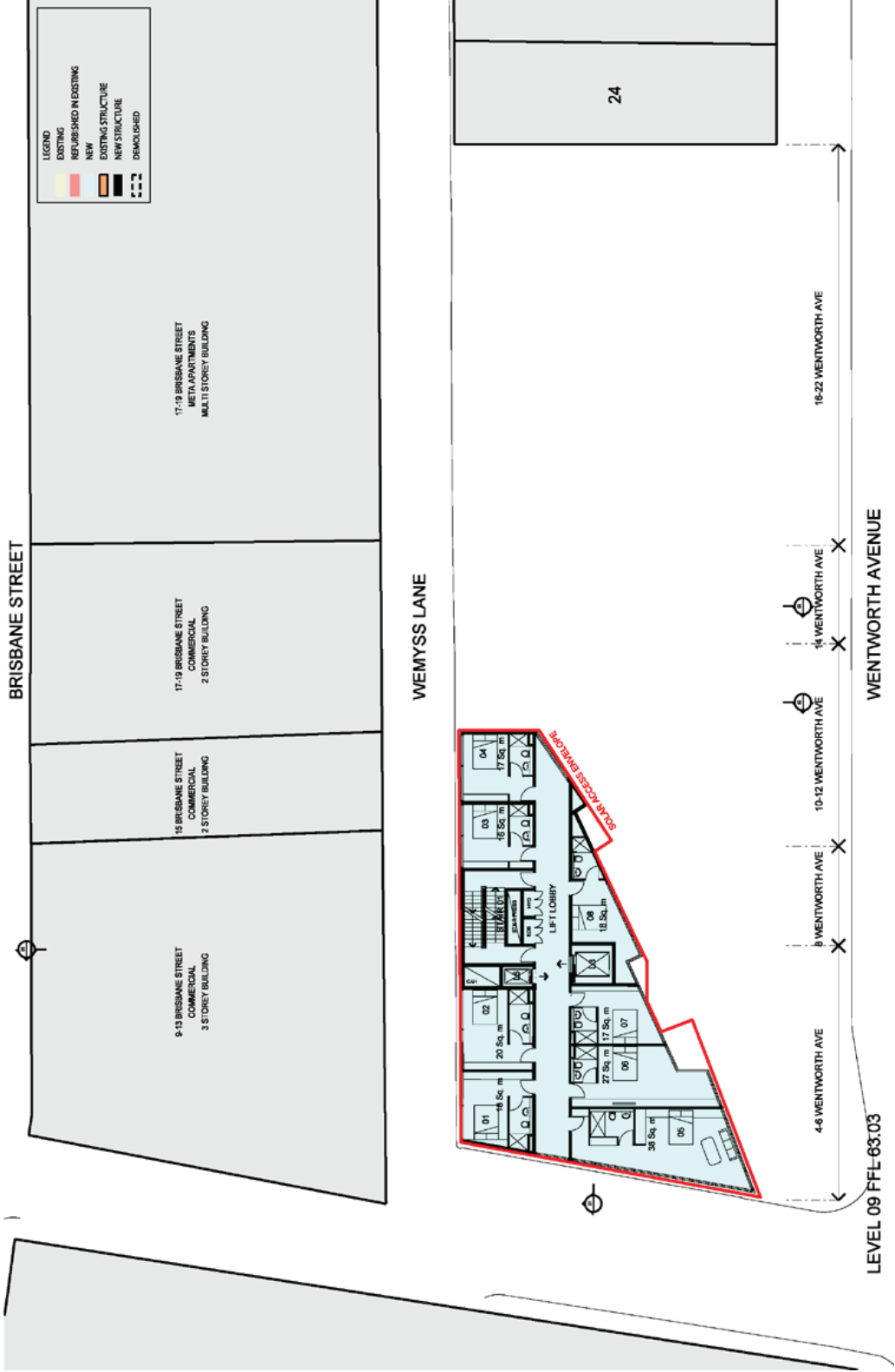


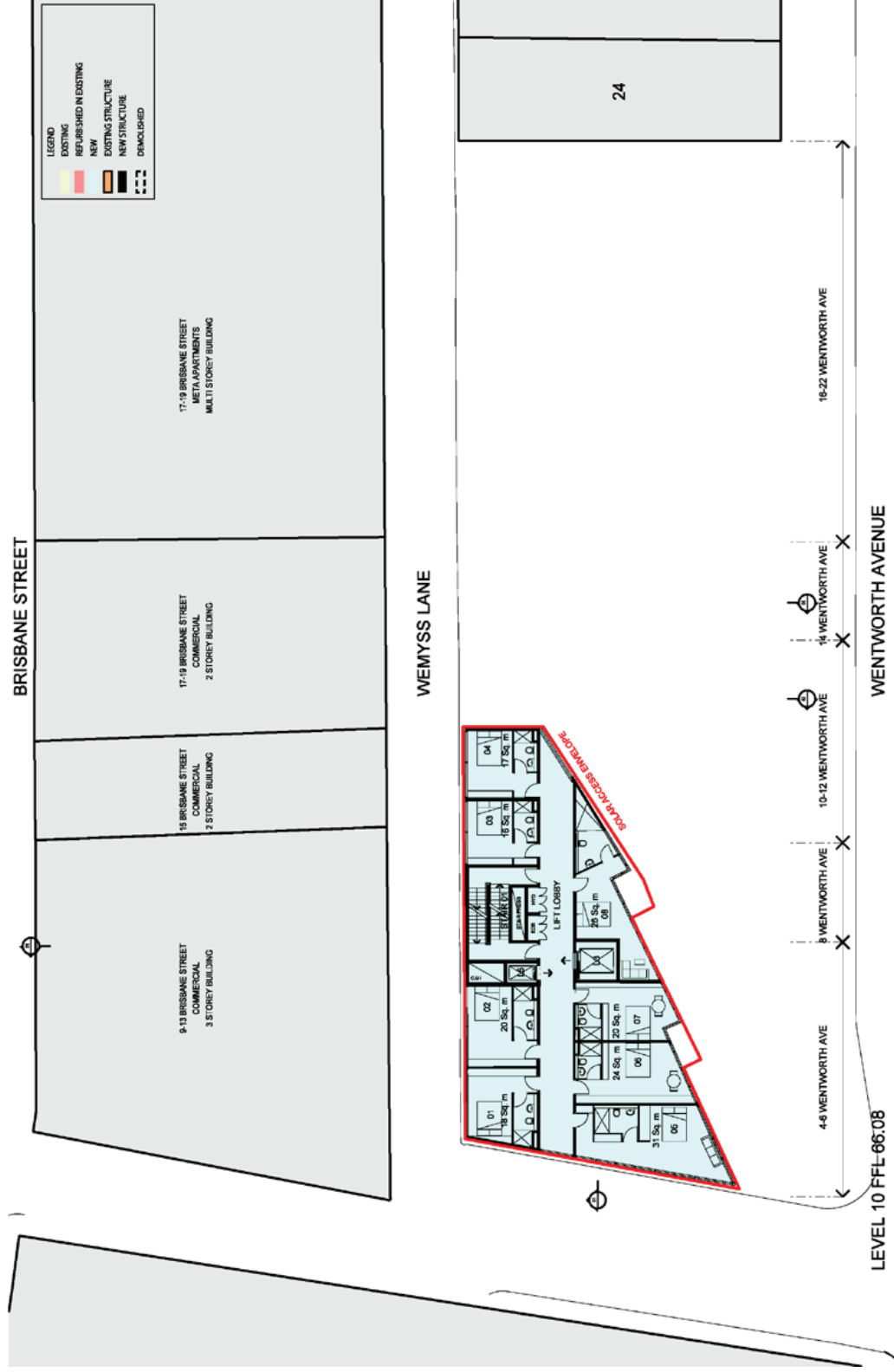


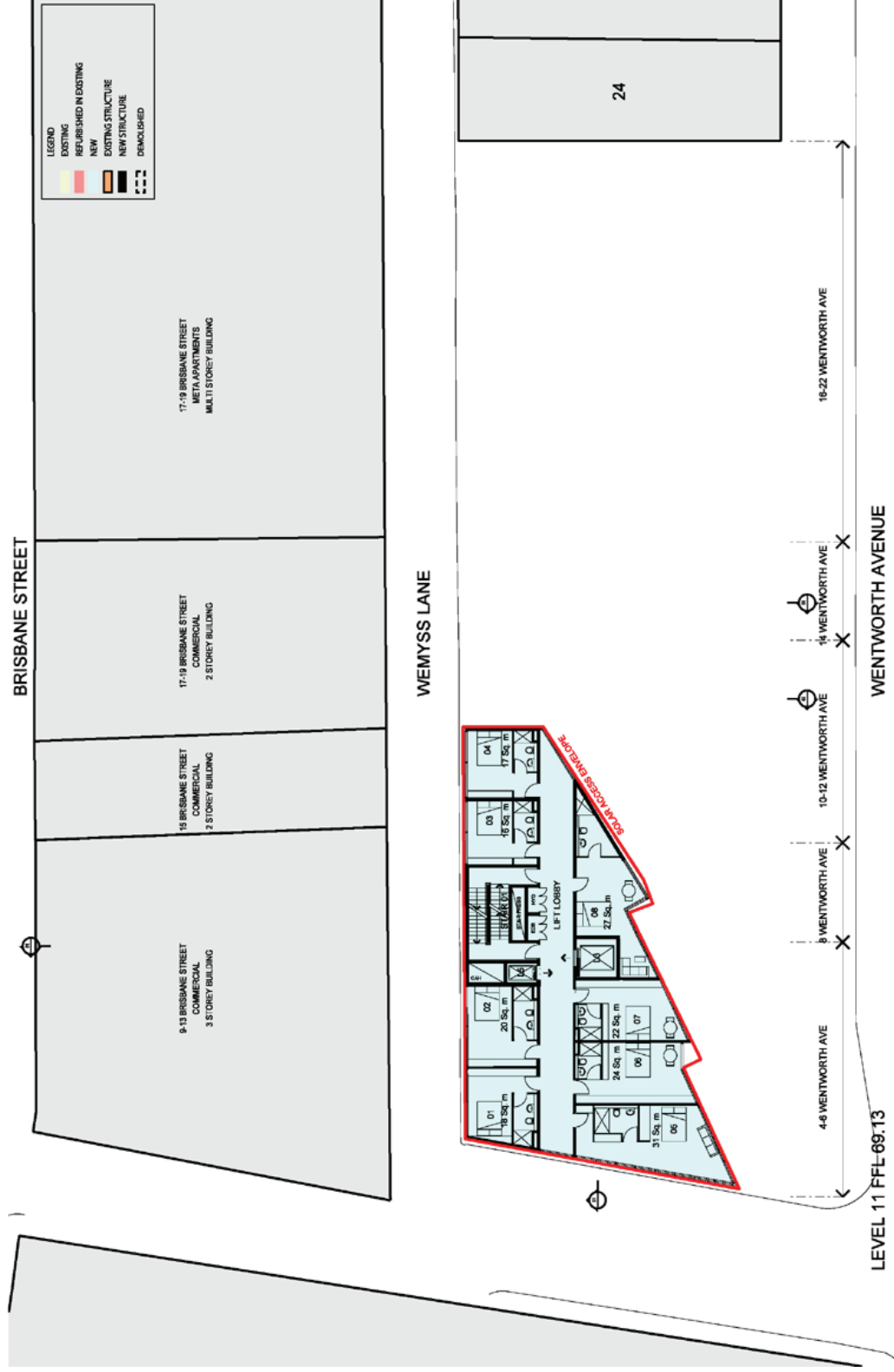


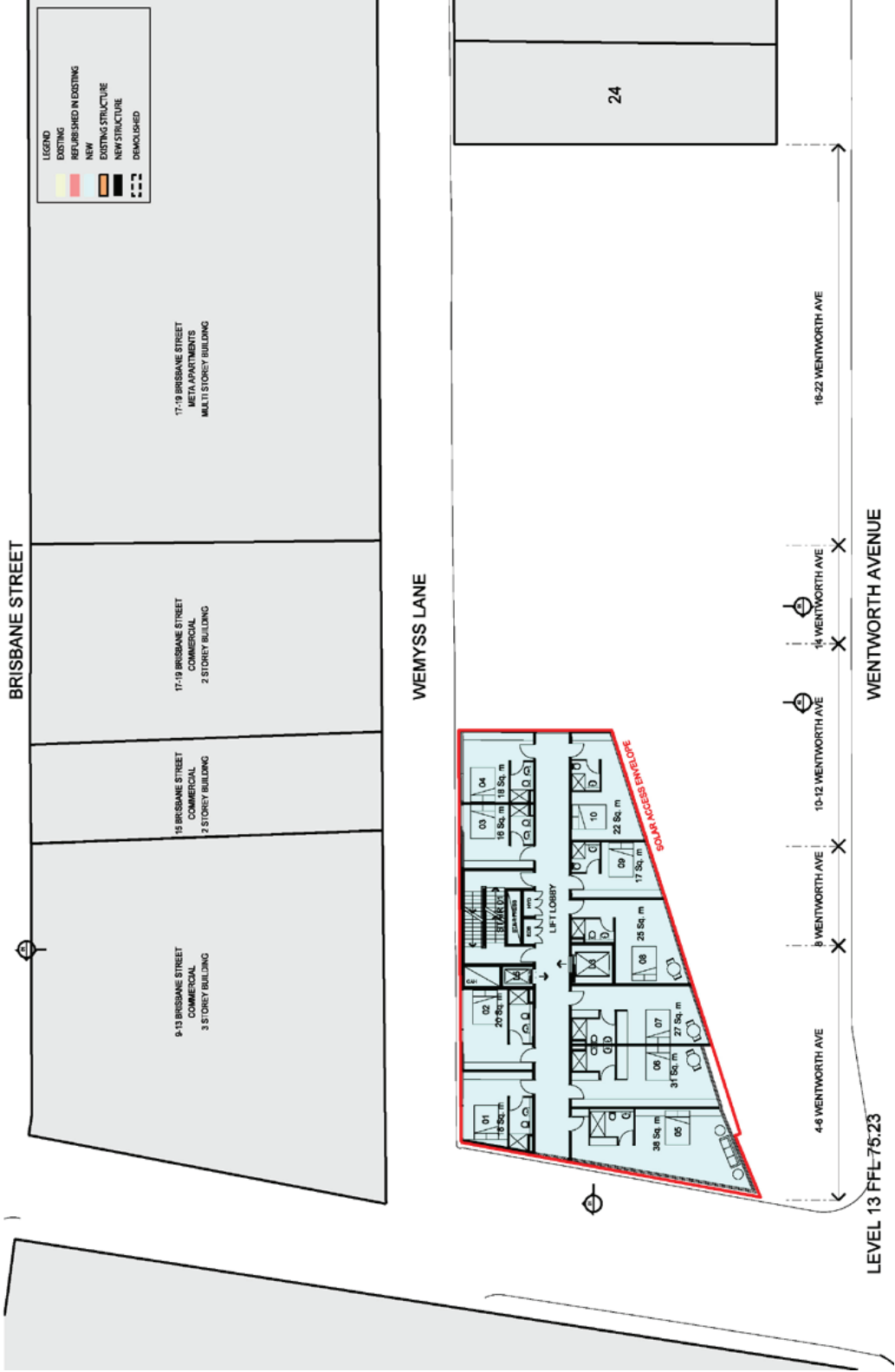


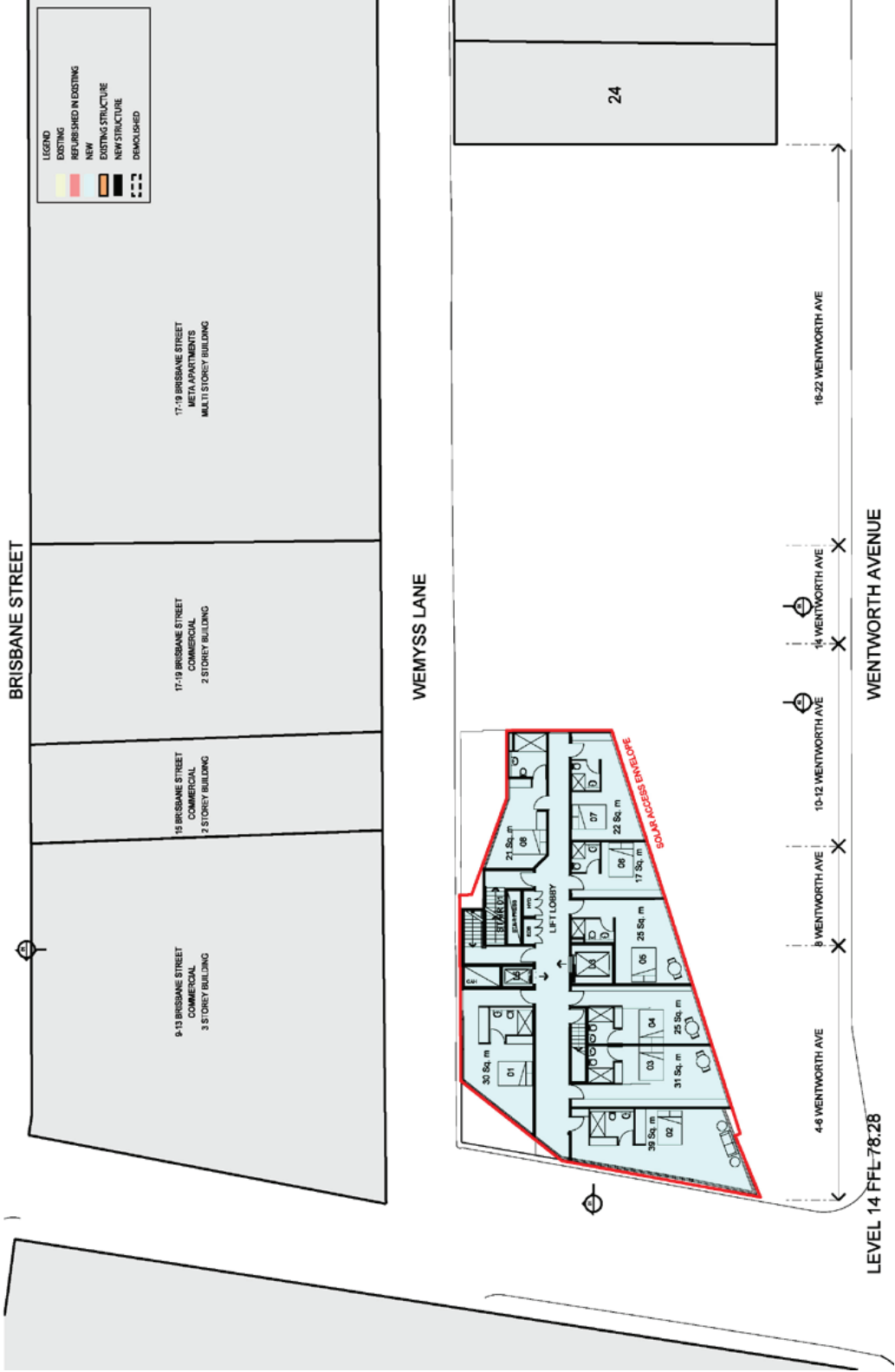


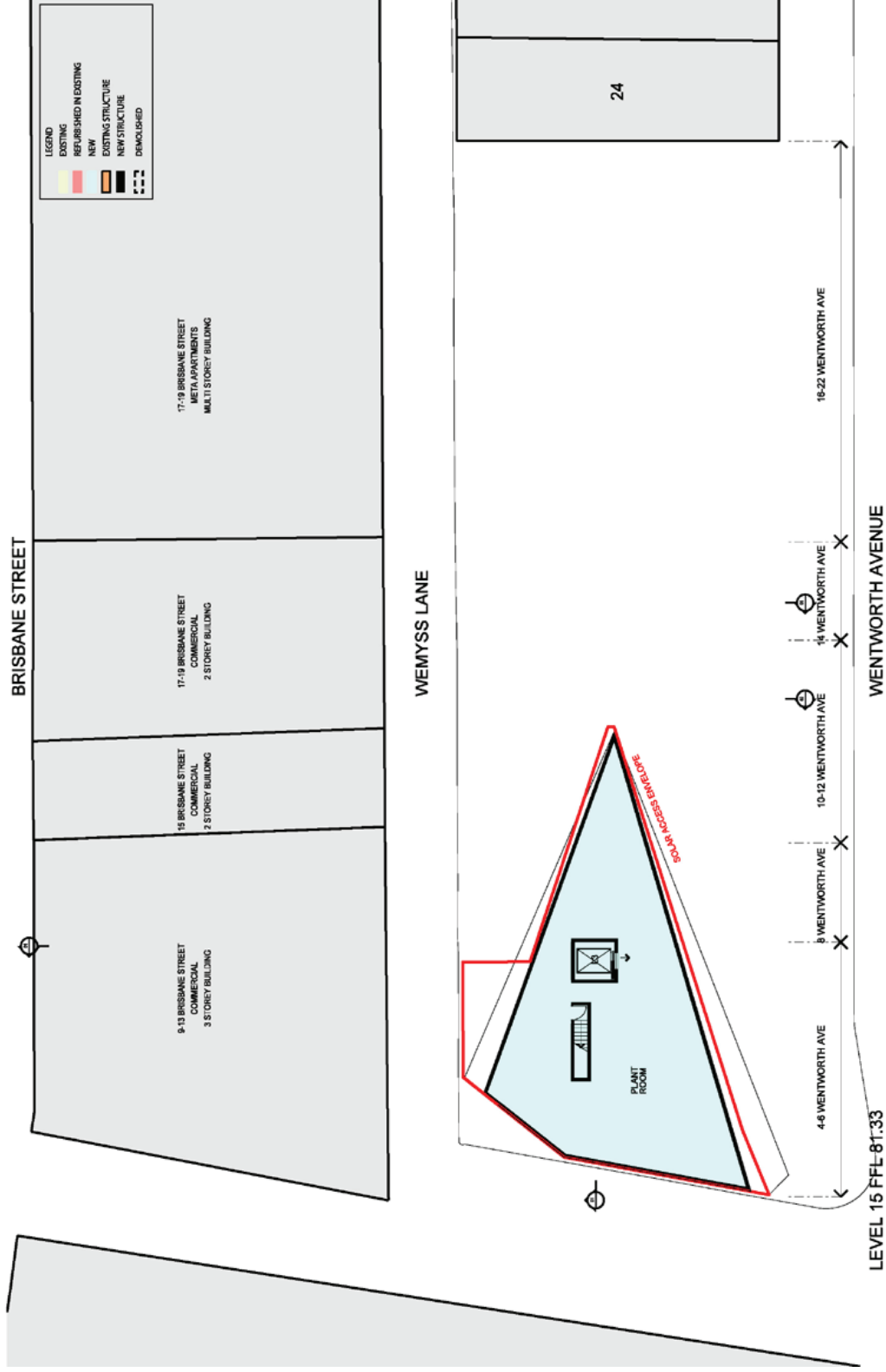


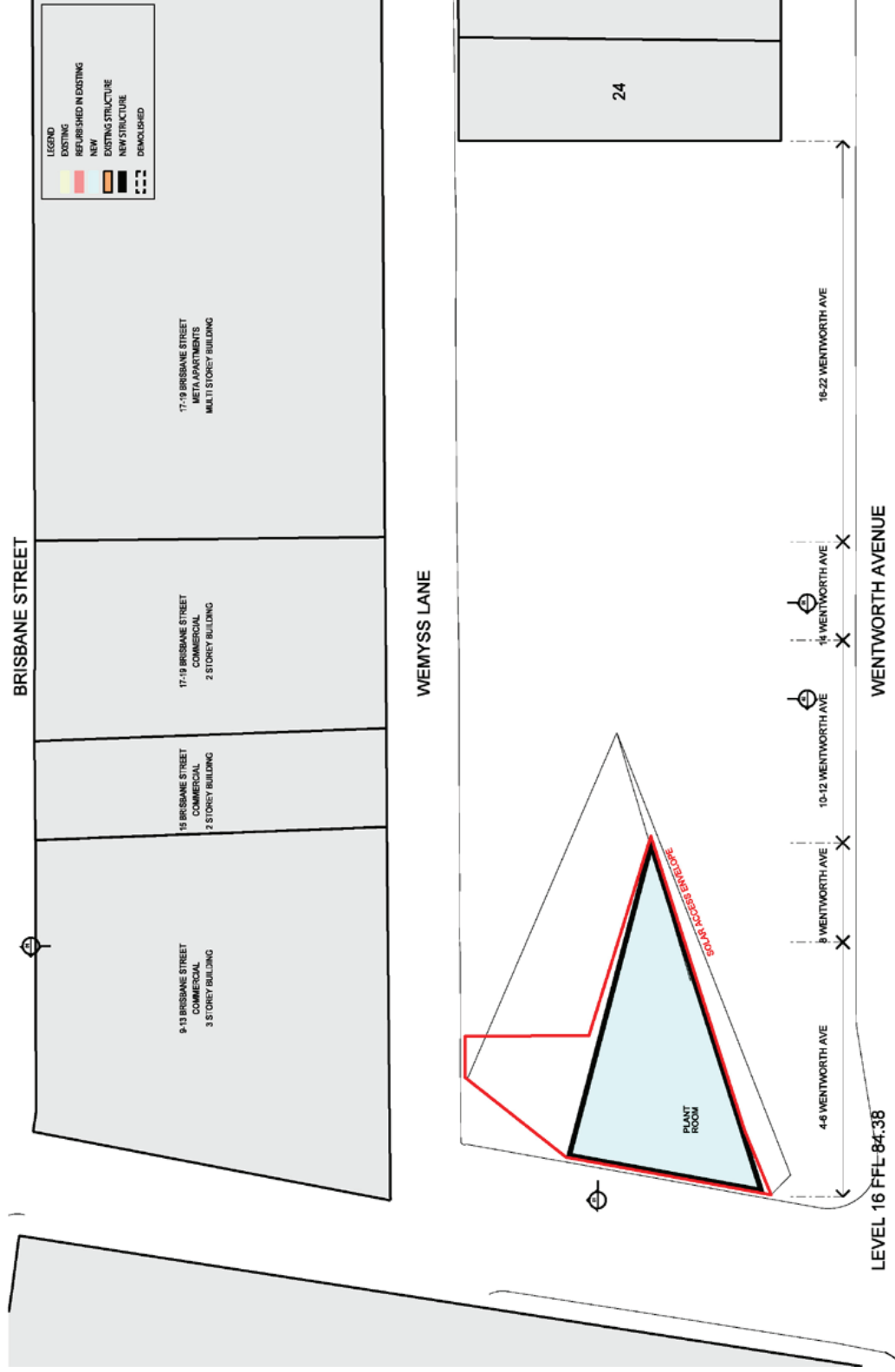


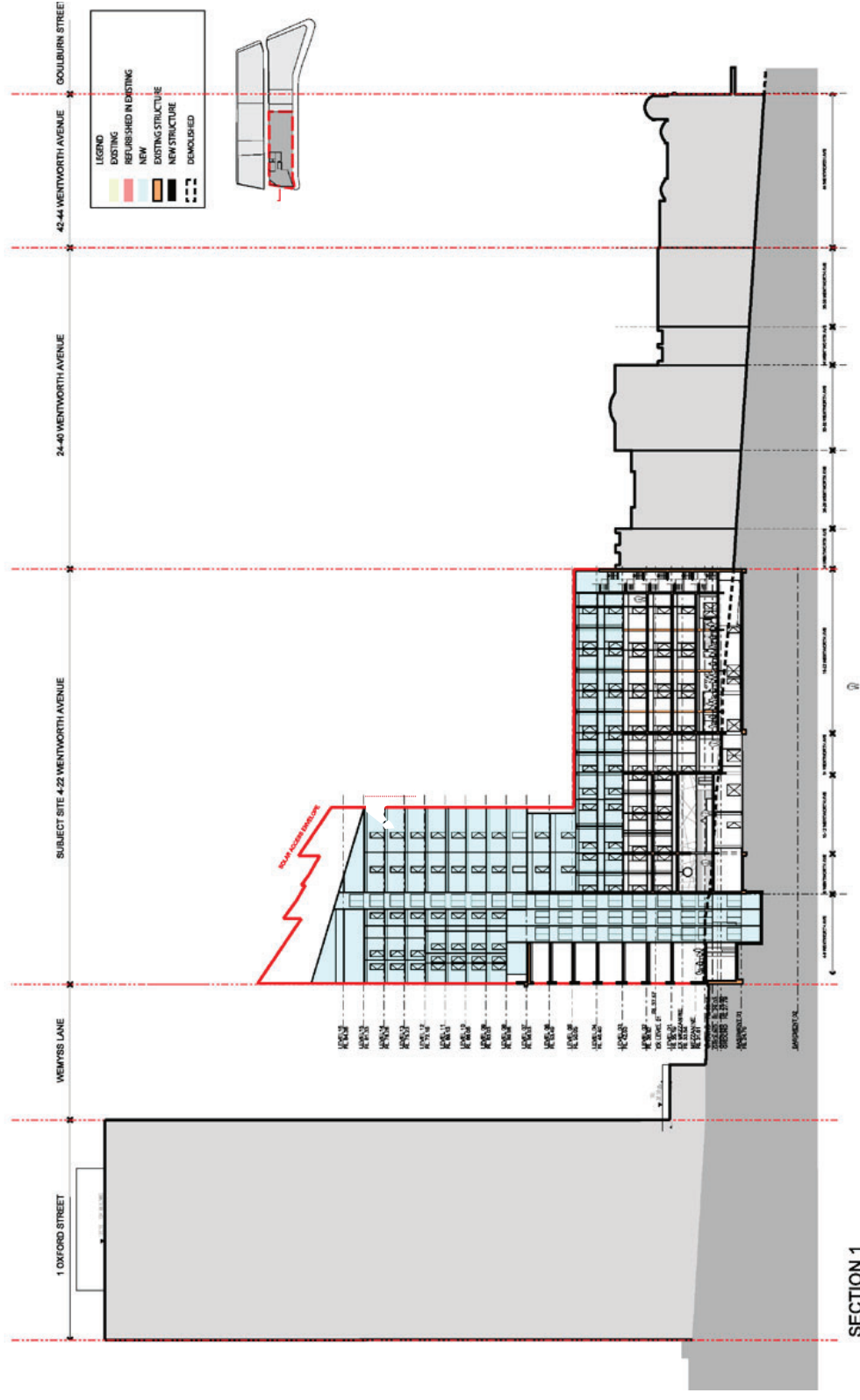


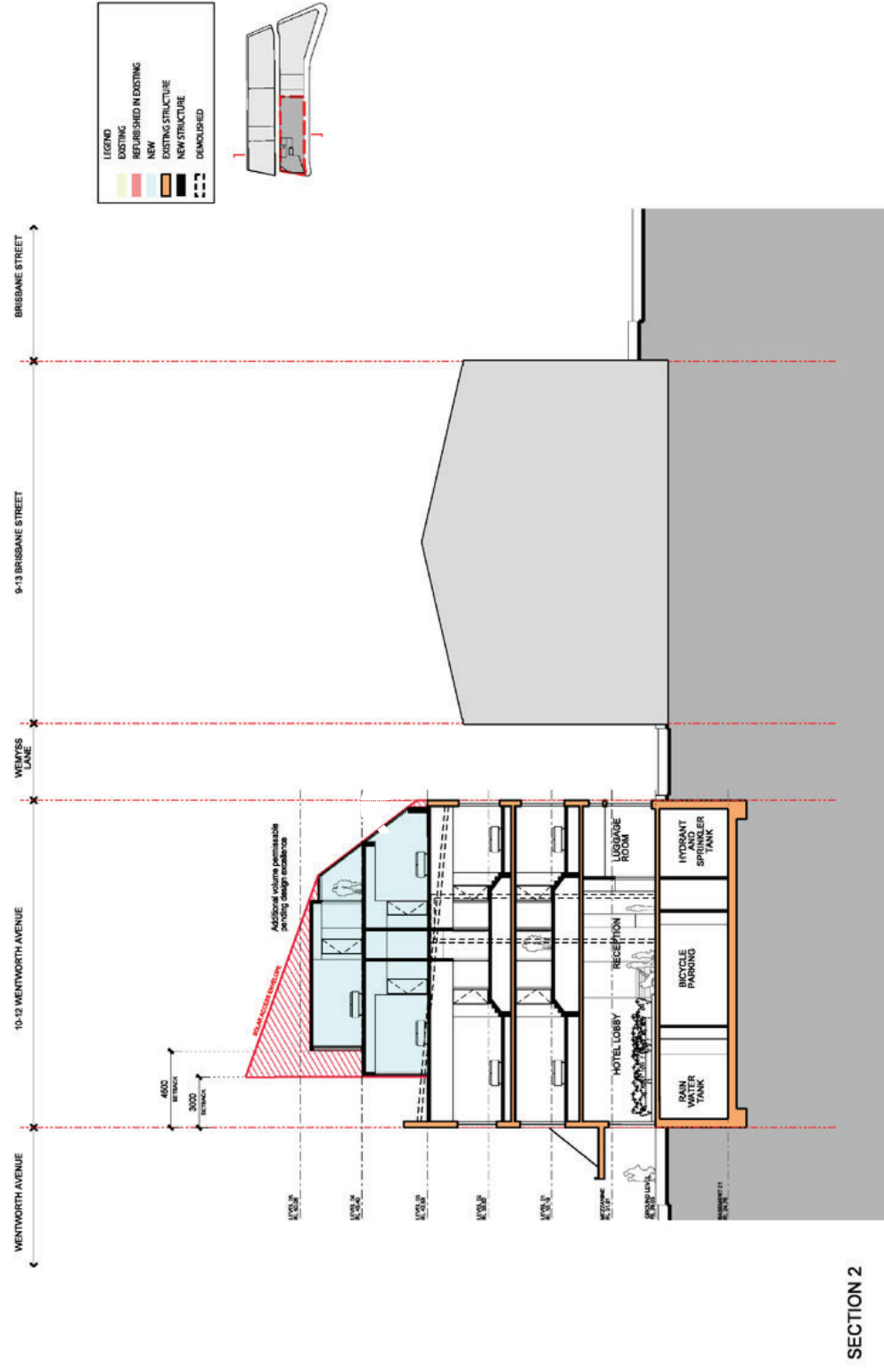




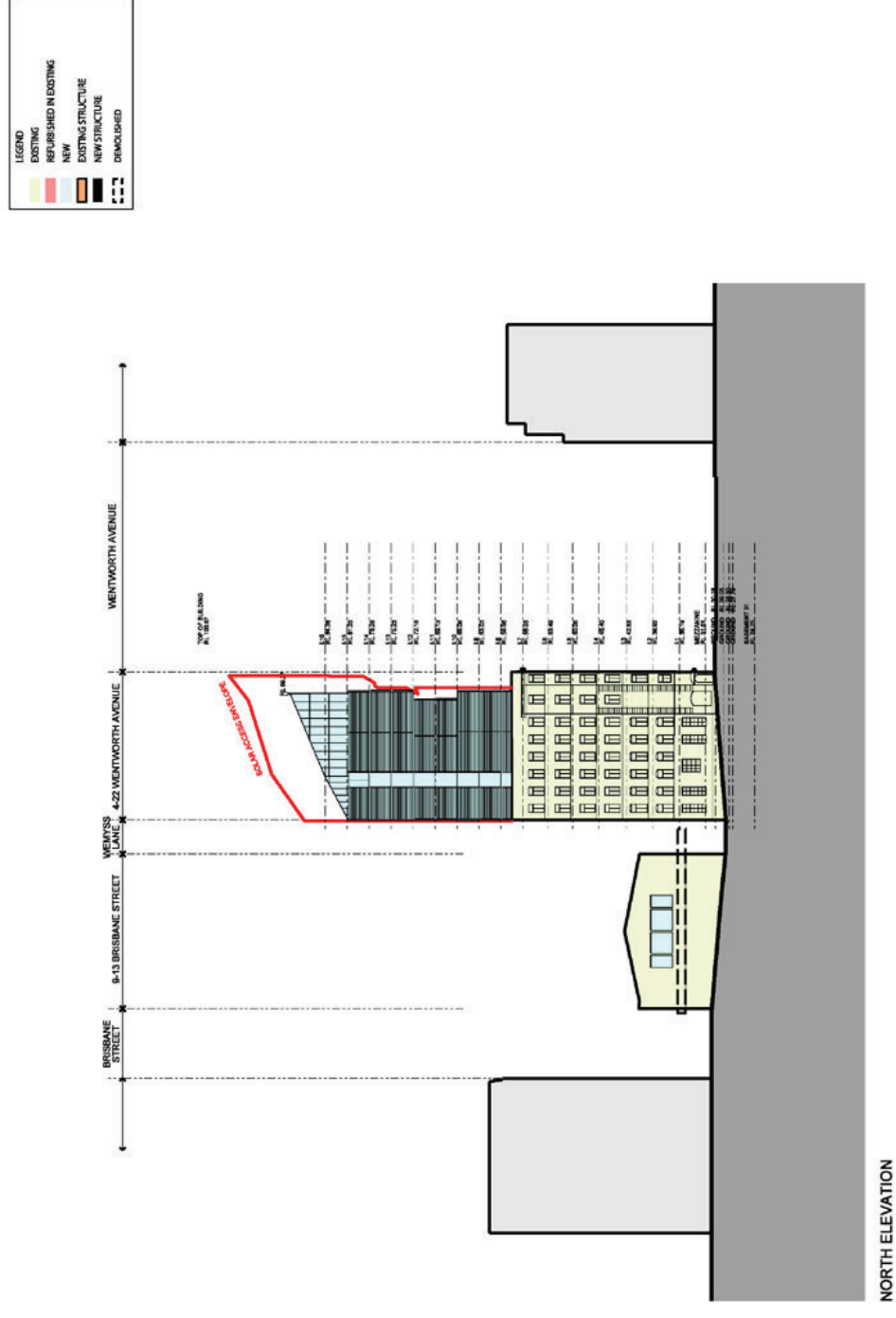


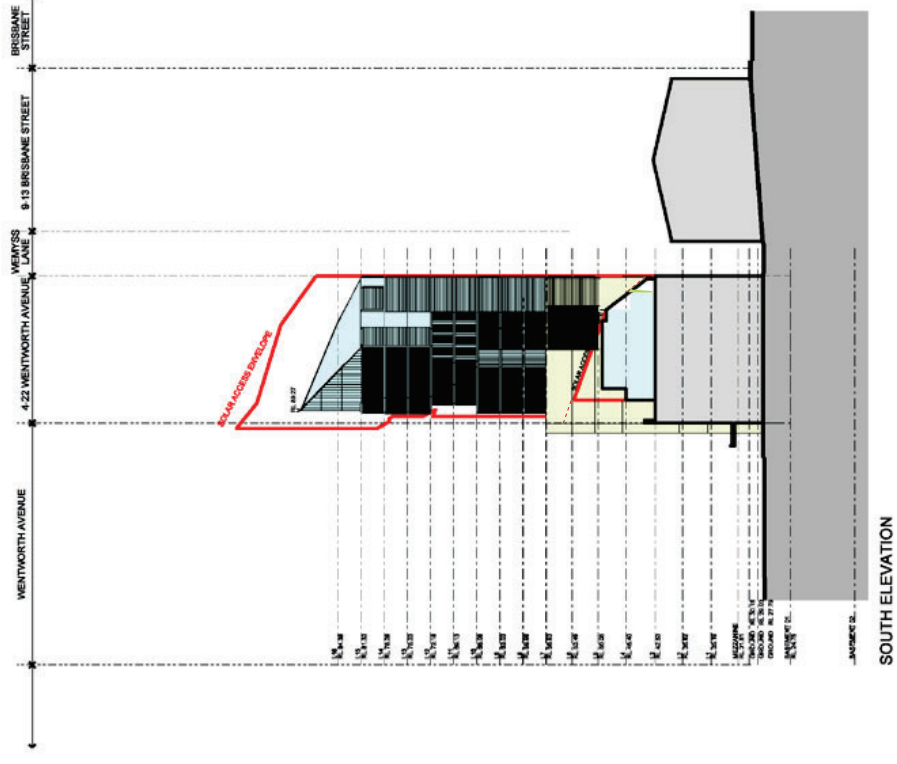


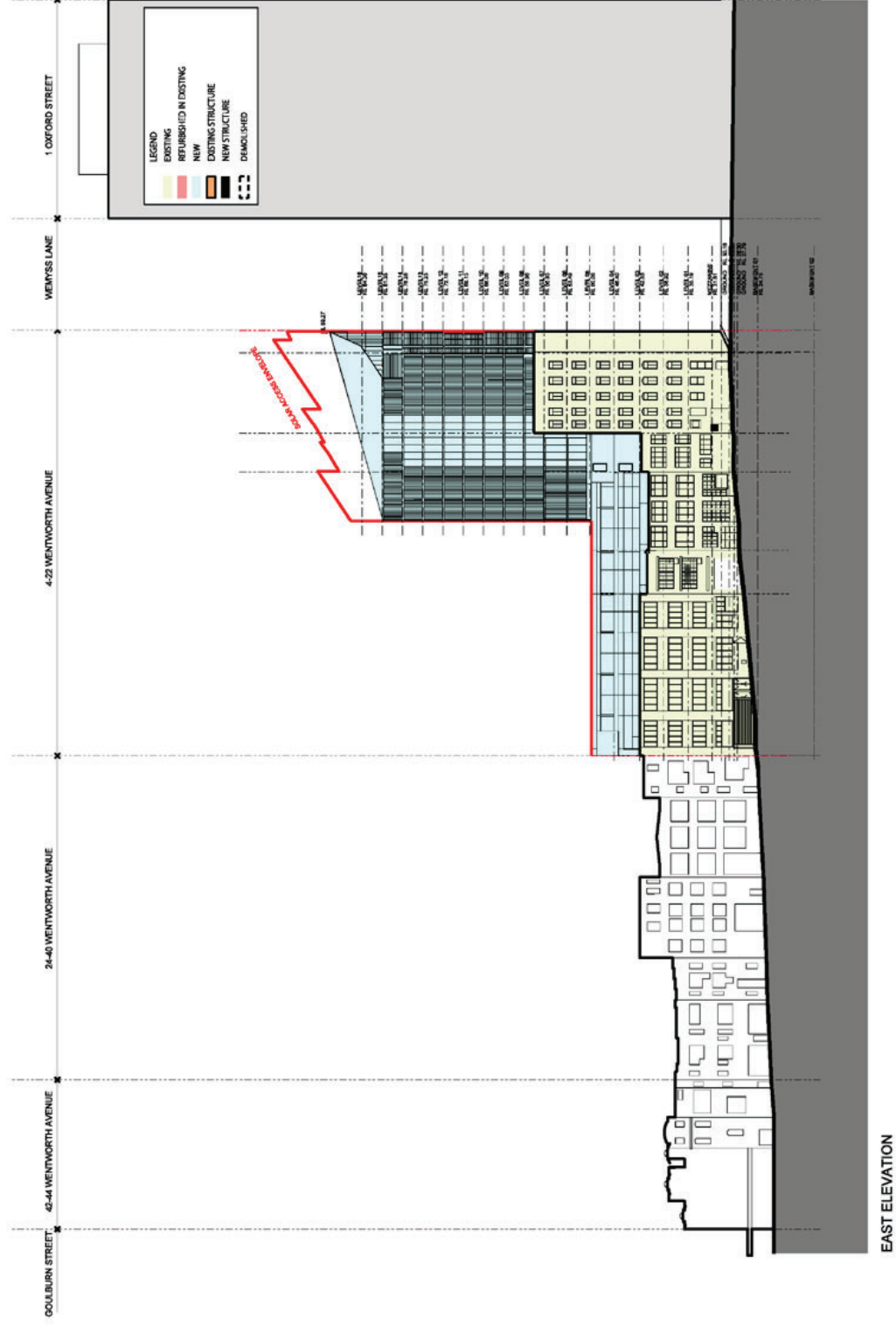


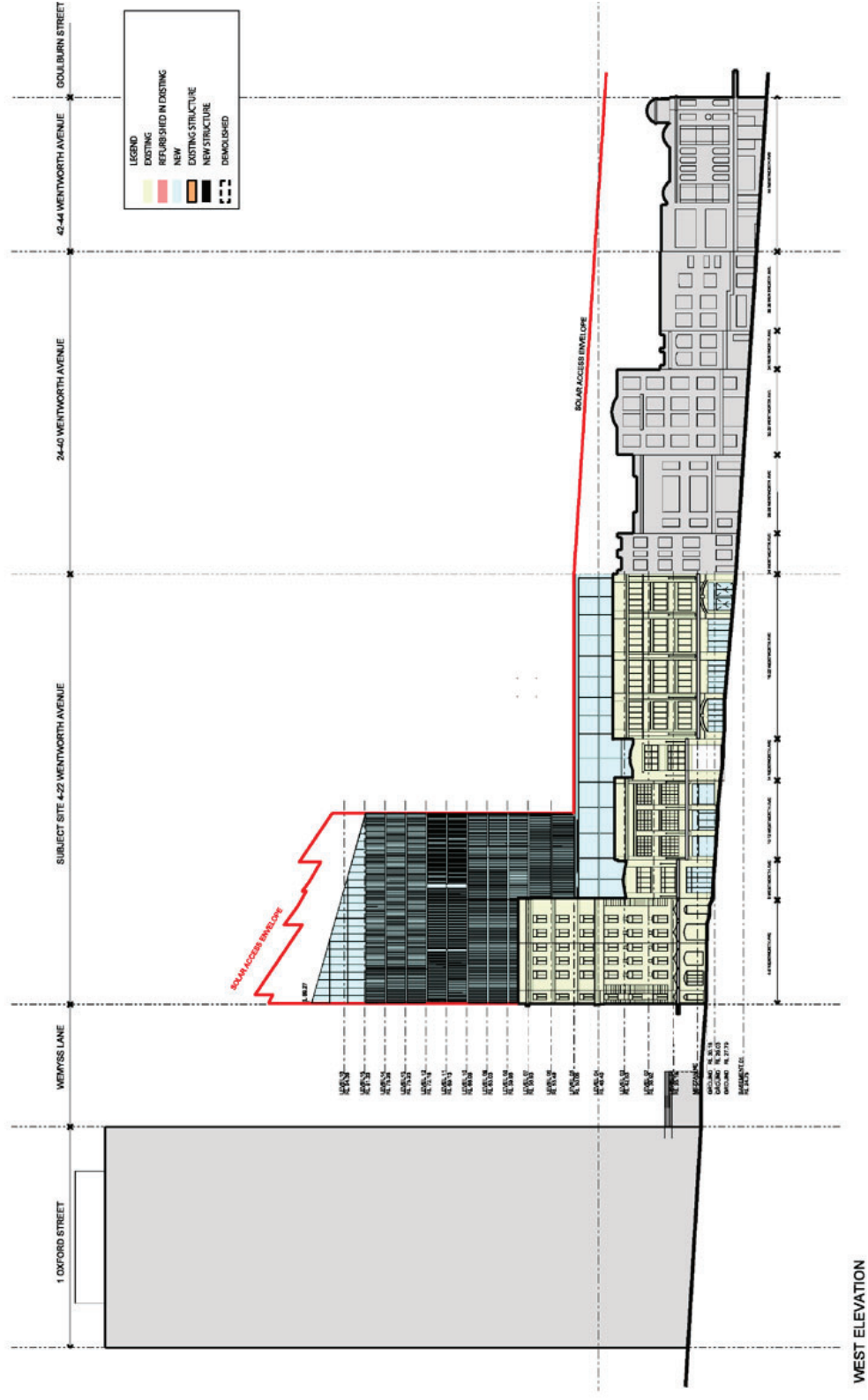












6.2

Computer Generated Images



View from Hyde Park



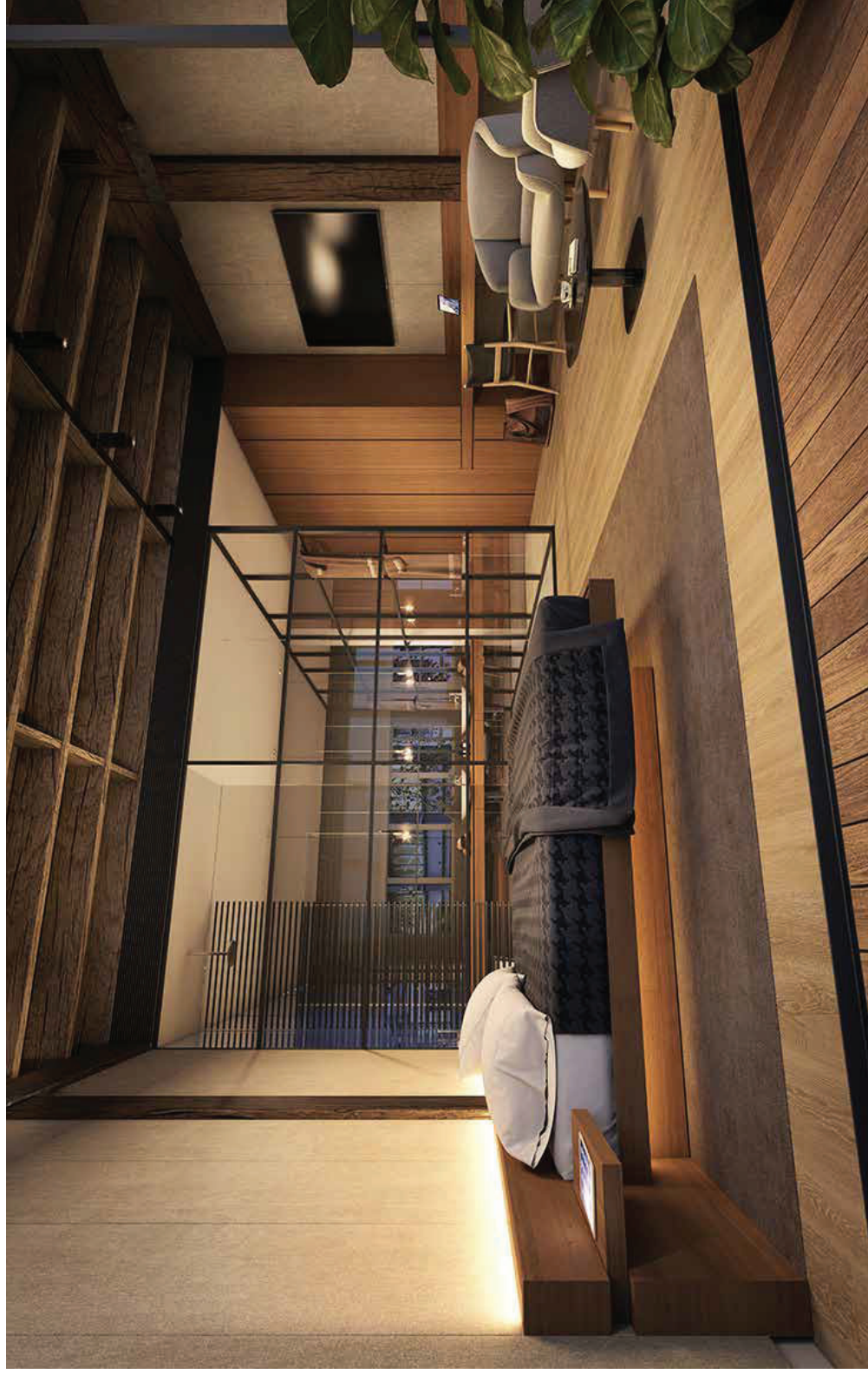
View from south up Wentworth Ave



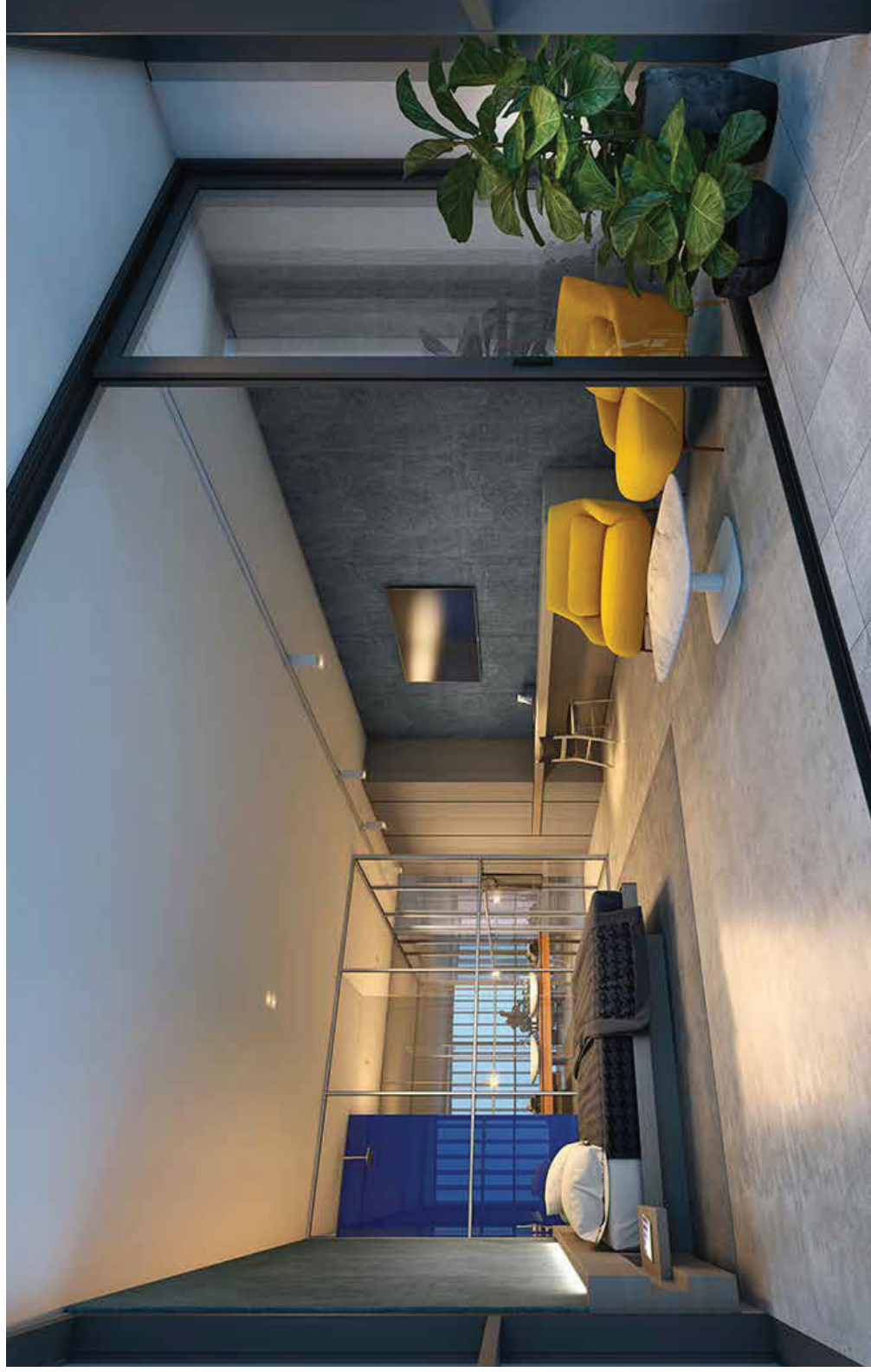
Wentworth Avenue Lobby View



Wentworth Avenue Restaurant View



Typical Heritage Podium bedroom view



Typical Tower Bedroom View

6.3

Sustainability/SEPP 65 Compliances

Sustainability

Through the Design Excellence briefing and Competition Process, a 4.5 star Nabers rating will be sought in accordance with City of Sydney Policy.

The achievement of this rating will be embedded in the brief and achievable through the extensive consideration of several aspects of Environmentally Sustainable Design. This includes the use of recyclable demolition materials and sustainable building materials during fitout, operating procedures, traffic and transportation usage, energy consumption and other means as specified by the Nabers star rating system.

Integrating passive design strategies to minimise solar exposure directly to north westerly facing glass through the use of solar shading and cross ventilated corridors will be a critical design consideration in minimising reliance on mechanical air conditioning.

SEPP65 Compliance

The impact of overshadowing on the adjacent residential towers has been analysed and considered. Apart from the photographic study initially undertaken on site, an independent shadow modeller was engaged to generate the shadows cast by the proposed building envelope. The 3d model has been verified by the City of Sydney's CAD modellers.

Less than 70% of apartments in neighbouring buildings Belvedere, Meta and Poplar receive a minimum of 2 hours sunlight but in accordance with the Apartment Design Guide, apartments in such buildings that receive more than 2 hours of sunlight in midwinter are permitted to have sunlight reduced to 2 hours, no less. This is achieved.

The maximum number of apartments that can lose 20% of their sunlight is the difference between the percentage of apartments that receive more than 2 hours of sunlight and 70% of all apartments. The number of these units that lose some sun is less than the prescribed maximum.

The number of units which receive no sun, which is currently more than the 15% maximum prescribed by the ADG will not be increased as a result of shadows cast by the proposed envelope.

Area Analysis

Figure 1

Gross Plan Area -15% reduction for Services and Vertical Transport and Facade System