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.

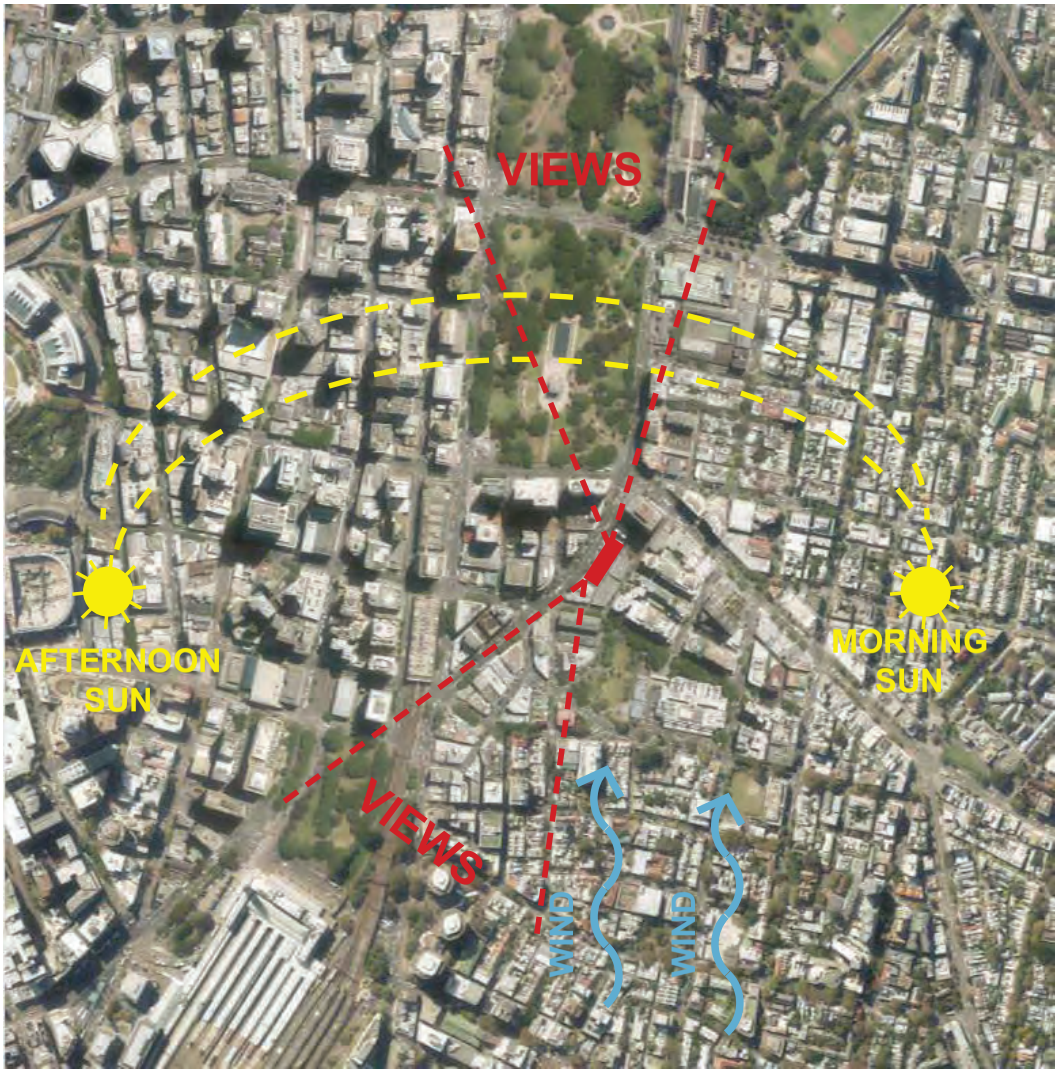
This proposal has been prepared on behalf of the land owner Pongrass Properties and represents the synthesis of all previous work carried out as well as input from City of Sydney planning staff and hotel operators.

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.



Aerial View Site Location

Legend

Sun Path

View Corridors

Winds

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.

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Aerial View Site Location

Legend

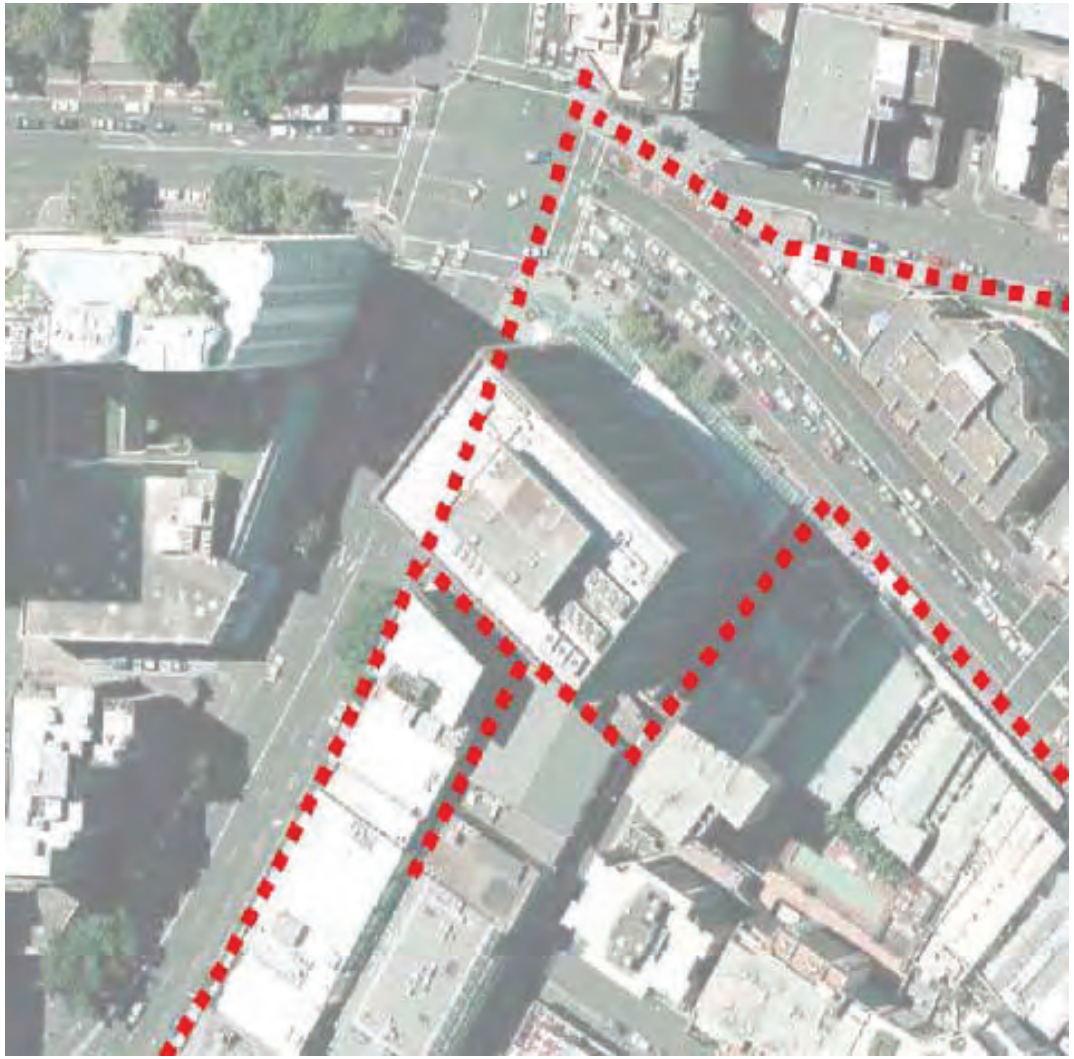
- Rail Station
- Bus Routes
- Bicycle Routes
- Commercial / Retail Uses
- Restaurant / Entertainment Precinct
- Residential Uses
- Hotels

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 Coucil's public art policy and lane activation program, the Wemyss Lane corridor warrants a through site connection.



Aerial View Site Location

Legend

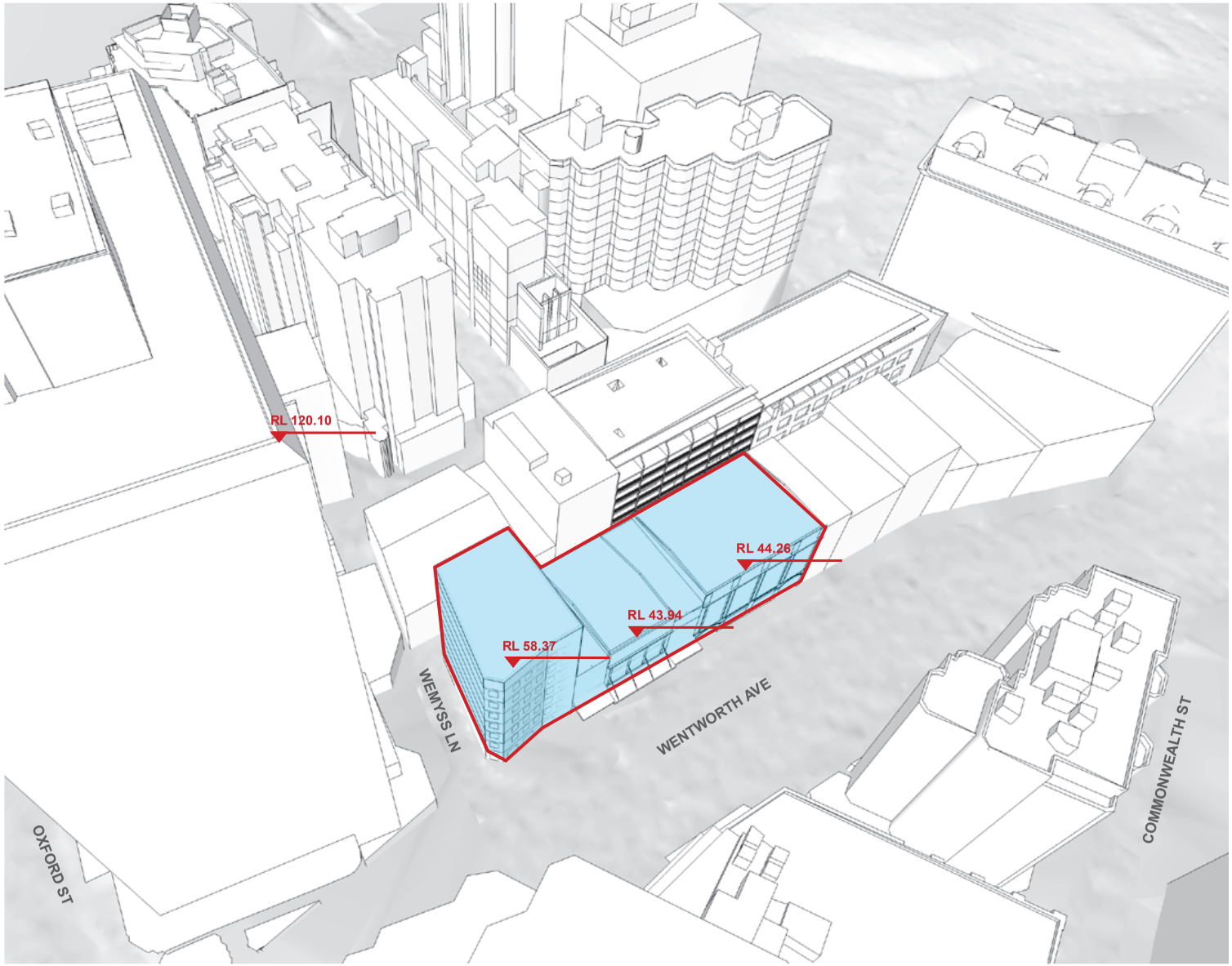
Major pedestrian routes to the site

2.4
Physical Context

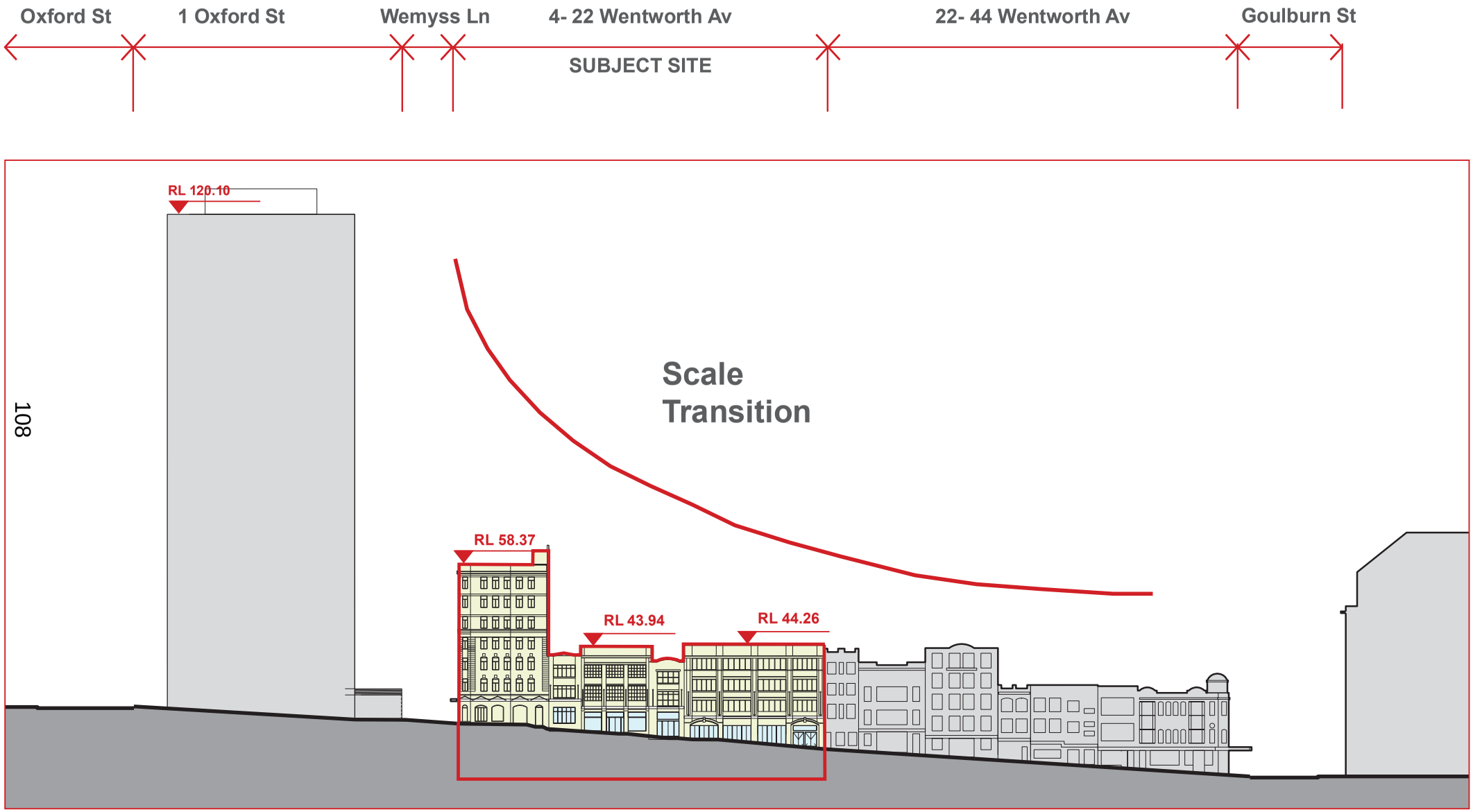
The site is surrounded by much larger residential and commercial high rise towers. By contrast to these towers, the buildings in the block 4-44 Wentworth Avenue are generally 3-4 storeys in height with few exceptions, Stellar Hotel at 4-6 being one, but only 7 storeys in height.

The dissimilarity in scale of the buildings on the subject site compared with the precint 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.

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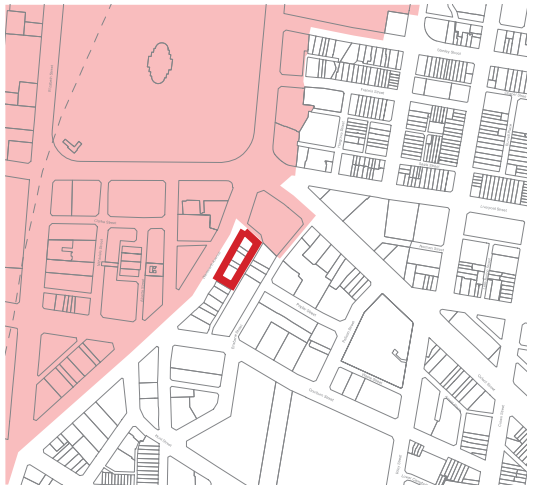
Locality



Locality and Site Identification Map

- Central Sydney
- Green Square
- Ultimo-Pyrmont
- Land Affected by Cross City Tunnel Ventilation Stack
- Refer to Schedule 1

Foreshore Building Line Map

- Foreshore Area
- Foreshore Building Line

Cadastre

- Cadastre 14/08/2012 © City of Sydney

Land Zoning

Land Zoning Map - Sheet LZN_015

Zone

- B1 Neighbourhood Centre
- B2 Local Centre
- B3 Commercial Core
- B4 Mixed Use
- B5 Business Development
- B6 Enterprise Corridor
- B7 Business Park
- B8 Metropolitan Centre
- IN1 General Industrial
- IN2 Light Industrial
- R1 General Residential
- R2 Low Density Residential
- RE1 Public Recreation
- SP1 Special Activities
- SP2 Infrastructure
- CW SREP 26 City West
- DH Darling Harbour Development Plan No.1
- GAHP Sydney LEP (Glebe Affordable Housing Project) 2011
- GS1 South Sydney LEP 1998 and City of Sydney Planning Scheme Ordinance
- GS2 South Sydney LEP 1998 and South Sydney LEP 114
- HP Sydney LEP (Harold Park) 2011
- MD SEPP Major Development 2005
- MPS SEPP 47 Moore Park Showground
- SCRA Sydney Cove Redevelopment Authority Scheme
- SHC SREP Sydney Harbour Catchment 2005
- SLEP Sydney LEP 2005
- SS South Sydney LEP 1998
- WB SREP 16 Walsh Bay
- UL Unzoned Land

FSR

Floor Space Ratio Map - Sheet FSR_015

Maximum Floor Space Ratio (n:1)

F	0.6	X	4
H	0.7	Y	4.5
J	0.8	Z	5
L	0.9	AA1	6
N	1	AA2	6.5
P	1.25	AB1	7
S1	1.5	AB2	7.5
S2	1.75	AC	8
T	2	AD	9
U1	2.5	AE	10
U2	2.75	AF	11
V	3		Refer to clause 6.14
W1	3.5		Refer to clause 6.4
W2	3.75		

Cadastre

- Cadastre 02/10/2012 © City of Sydney

Sydney Local Environmental Plan 2012

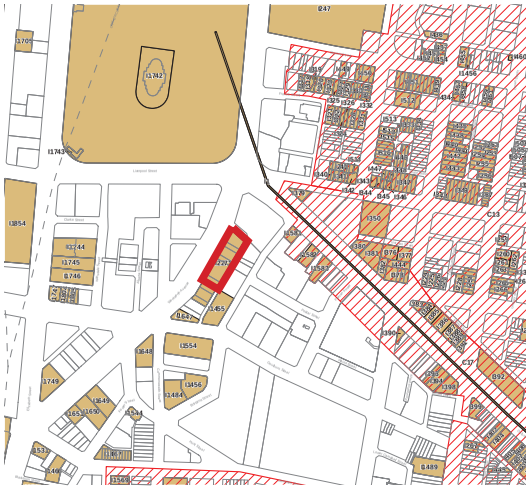
Building Heights

Height of Buildings Map
- Sheet HOB_015

Maximum Building Height (m)

A	3	W2	42	Area 7
E	6	X	45	
H	7.5	Y	50	
I	8	Z	55	
J	9	AA1	60	
L	11	AA2	65	
M	12	AA3	70	
O	15	AB1	80	
P	18	AB2	85	
R	22	AC	110	
S	24	AD	130	
T1	25	AE	150	
T2	27	AH	235	
T3	28	Area 1		
T4	29	Area 2		
U1	30	Area 3		
U2	33	Area 4		
V	35	Area 5		
W1	40	Area 6		

Heritage



Heritage Map - Sheet HER_015

Heritage

Conservation Area - General

Item - General

Cadastre

Cadastre 26/09/2012 © City of Sydney

Sydney Local Environmental Plan 2012

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3.1 Preliminary Proposal Submitted to CoS April 2016

SUPERSEDED

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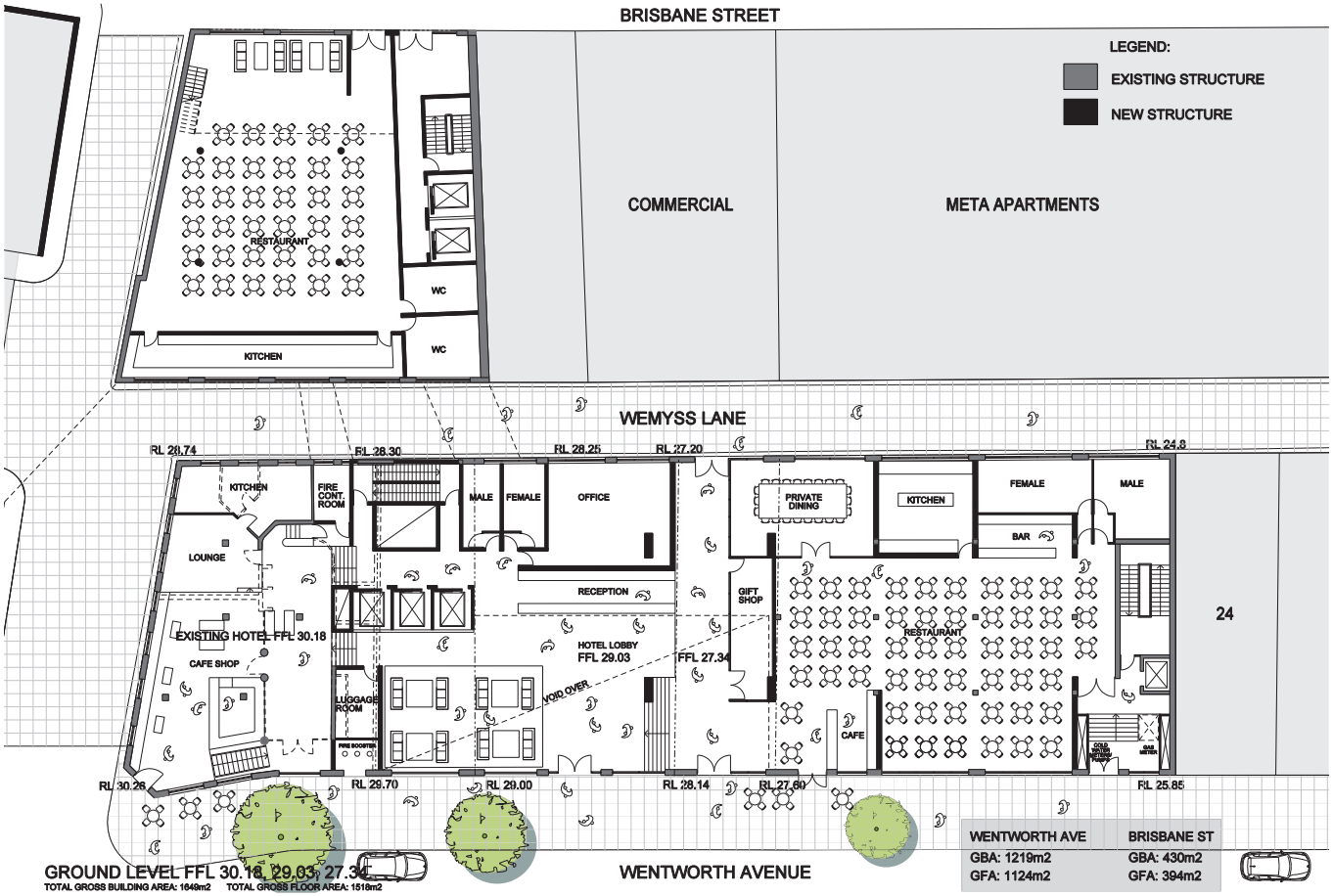
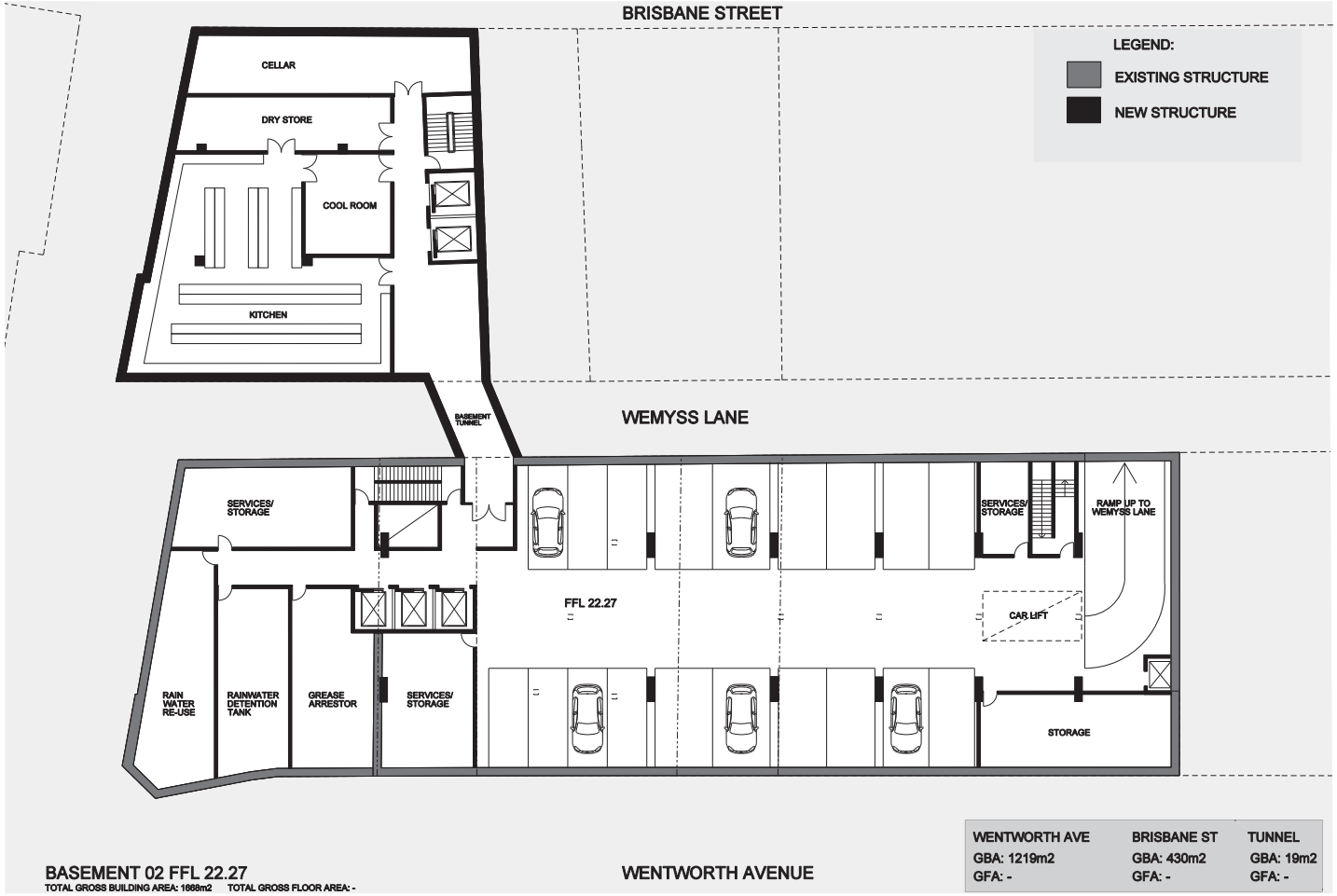
A preliminary concept plan was submitted to Council in April 2016 for review. This scheme included two parcels of land 4-22 Wentworth Avenue and 9-13 Brisbane Street belonging to different land owners. This scheme sought an increase of the maximum building height to approximately 70 metres and increase 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 splayed 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.




BRISBANE STREET
LEGEND:
EXISTING STRUCTURE
NEW STRUCTURE
CELLAR
DRY STORE
COOL ROOM
KITCHEN
BASEMENT TUNNEL
WEMYSS LANE
SERVICES/ STORAGE
SERVICES/ STORAGE
RAMP UP TO WEMYSS LANE
FFL 22.27
CAR LIFT
RAIN WATER RE-USE
RAINWATER DETENTION TANK
GREASE ARRESTOR
SERVICES/ STORAGE
STORAGE
WENTWORTH AVE
GBA: 1219m2
GFA: -
BRISBANE ST
GBA: 430m2
GFA: -
TUNNEL
GBA: 19m2
GFA: -
BASEMENT 02 FFL 22.27
TOTAL GROSS BUILDING AREA: 1668m2 TOTAL GROSS FLOOR AREA: -
WENTWORTH AVENUE

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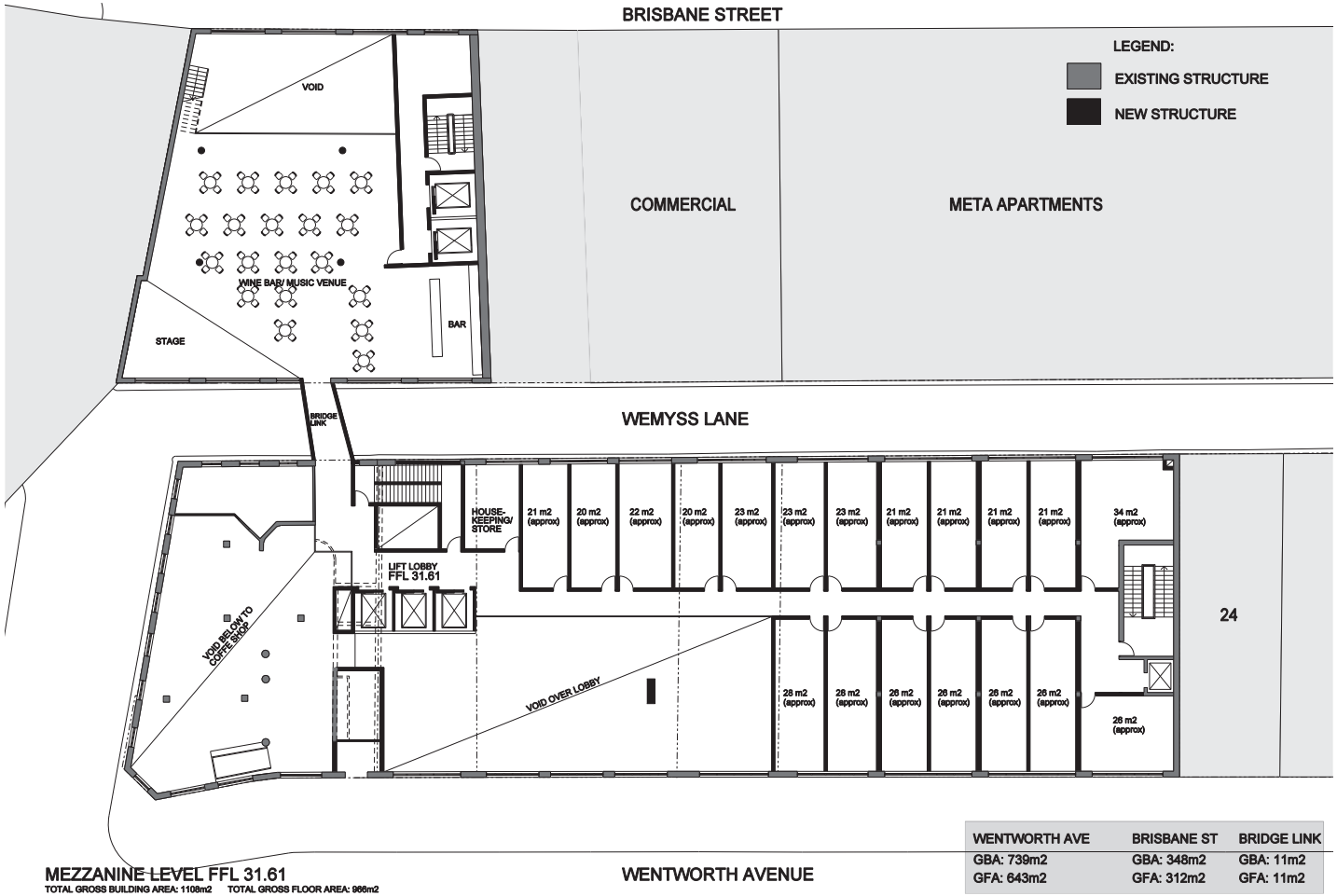

WENTWORTH AVE	BRISBANE ST	BRIDGE LINK
GBA: 739m2	GBA: 348m2	GBA: 11m2
GFA: 643m2	GFA: 312m2	GFA: 11m2

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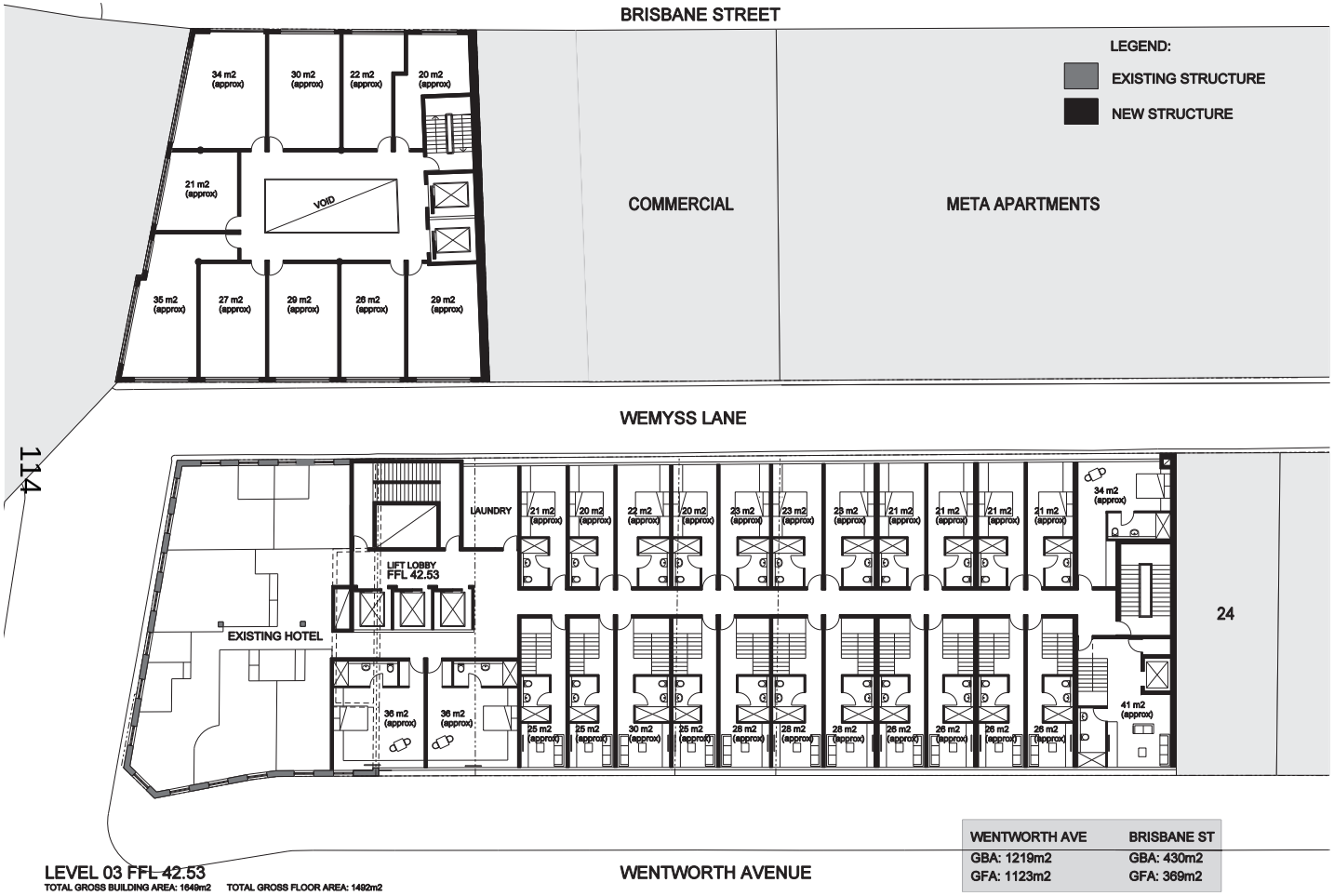
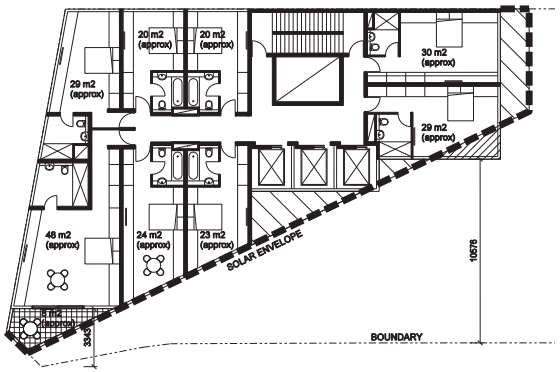


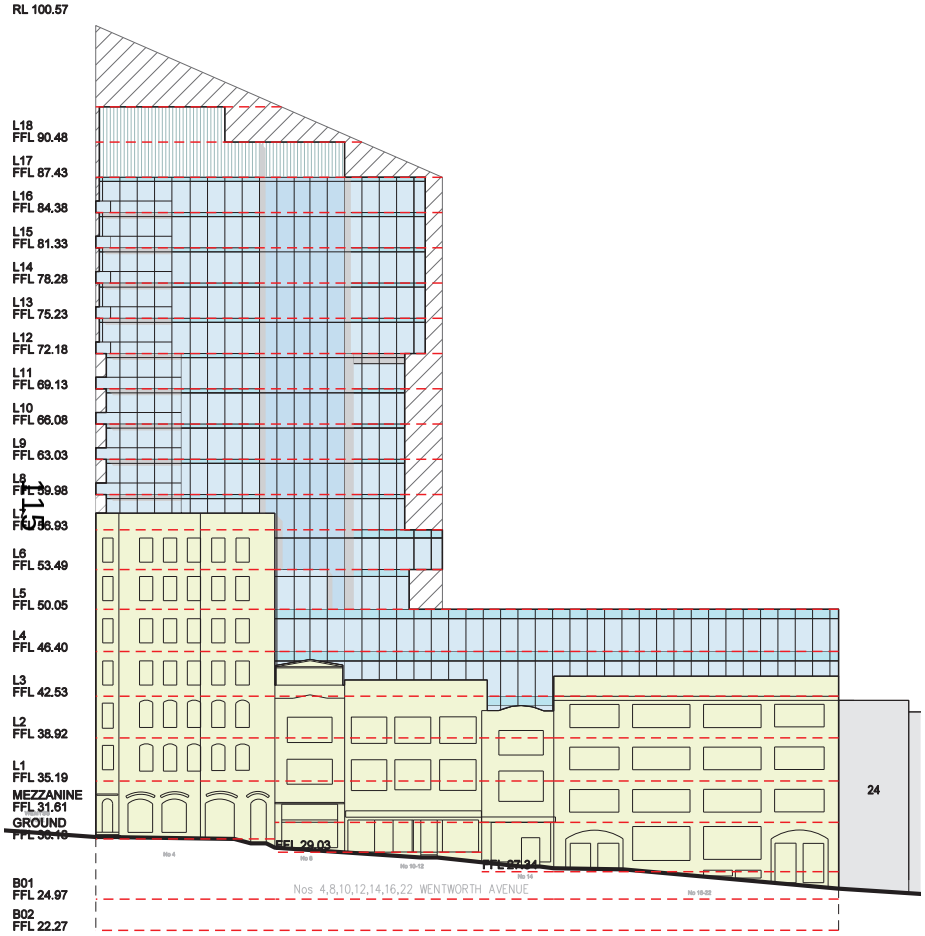
WENTWORTH AVE	BRISBANE ST
GBA: 1219m2	GBA: 430m2
GFA: 1123m2	GFA: 369m2

LEVEL 03 FFL 42.53
TOTAL GROSS BUILDING AREA: 1649m2 TOTAL GROSS FLOOR AREA: 1492m2

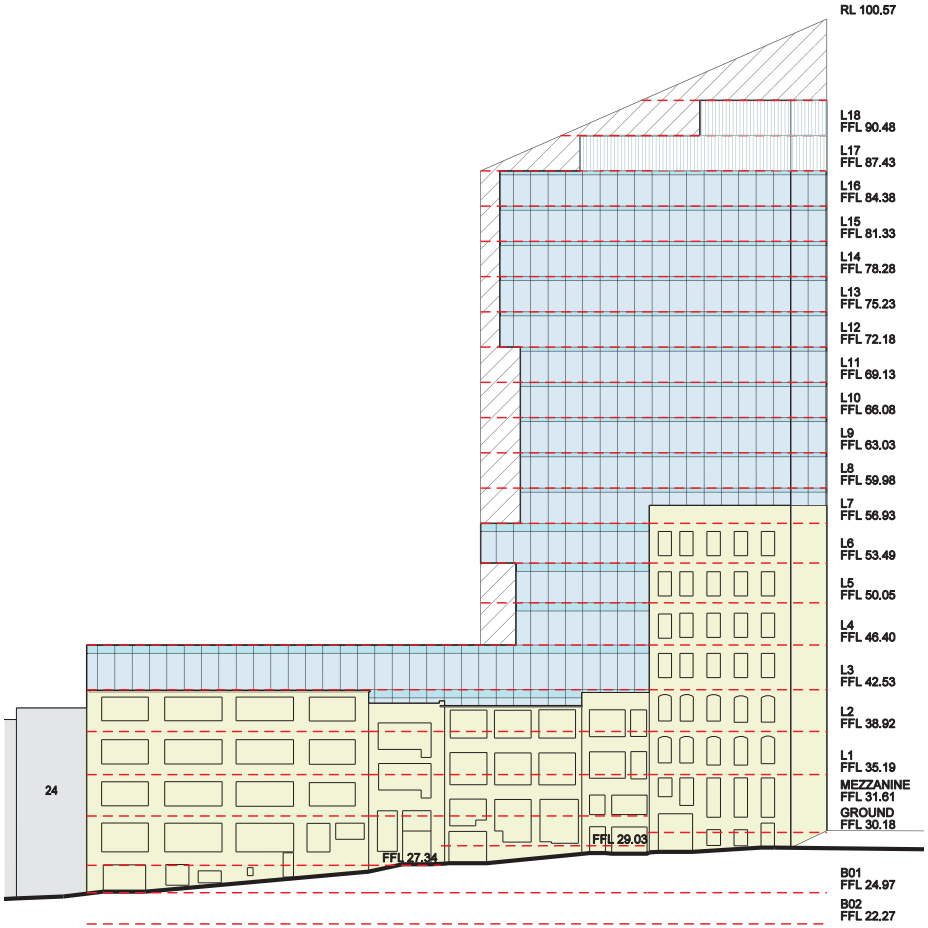
LEVEL 07-11 OPTION 2 FFL 56.93, 59.98, 63.03, 66.08, 69.13
TOTAL GROSS BUILDING AREA: 287m2 TOTAL GROSS FLOOR AREA: 214m2



LEVEL 12-16 FFL 72.18, 75.23, 78.28, 81.33, 84.38
TOTAL GROSS BUILDING AREA: 342m2 TOTAL GROSS FLOOR AREA: 289m2



WEST ELEVATION



EAST 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.

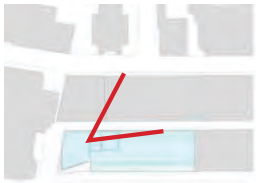
Consideration of a setback of at least 3 metres from the western frontage was requested.

3. Tunnel and Skybridge

These elements were not supported

5.
Response to Council Feedback

5.1.1
Existing Shadows



View Key Plan

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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 reco rdings were later verified by digital solar model consultants.

9:00 am

9:15 am

9:30 am

9:45 am

10:00 am

10:15 am

10:30 am

10:45 am

11:00 am

11:15 am

11:30 am

11:45 am

118

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

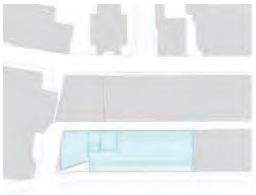
2:30 pm

2:45 pm

3:00 pm

5.1.2

Additional Shadow cast by Proposed Envelope



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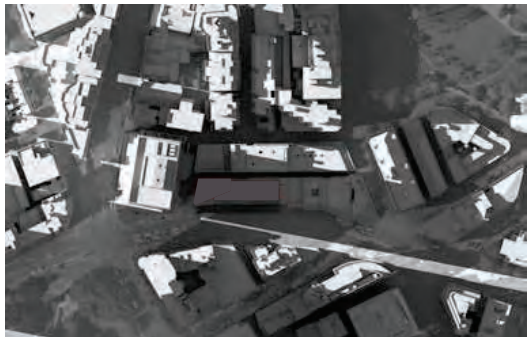
Shadow diagrams were prepared to comply with allowable shadows cast on neighbouring multi-unit residential buildings - Belvedere, Poplar and Meta Apartments.

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.

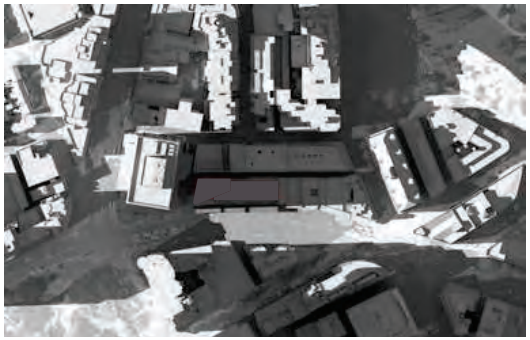
Existing shadows

Additional shadow cast by proposed new building envelope

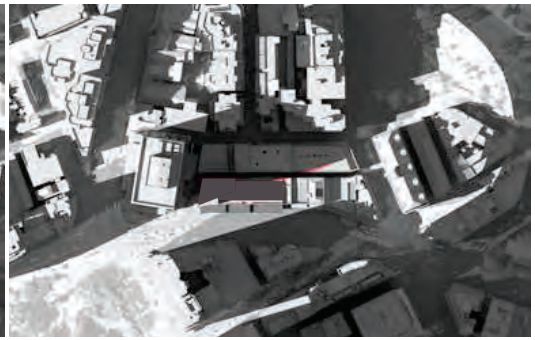
June 21 Plan View



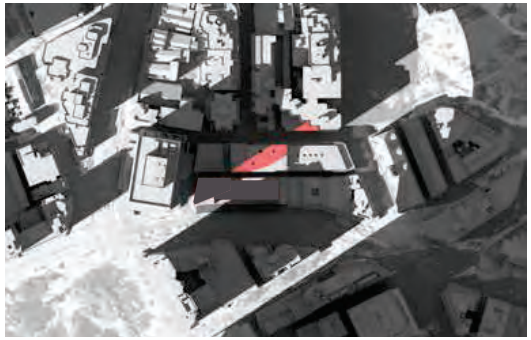
9:00 am



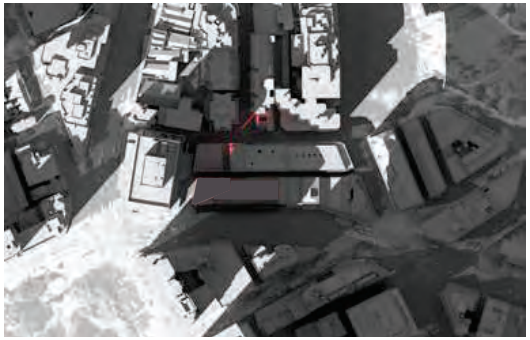
10:00 am



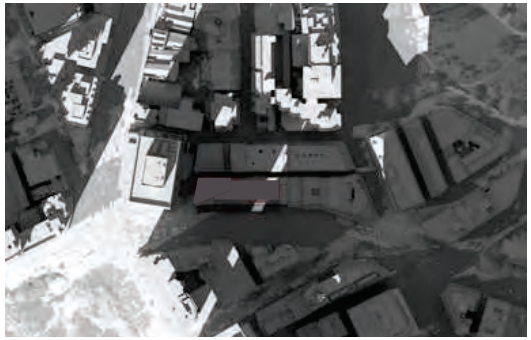
11:00 am



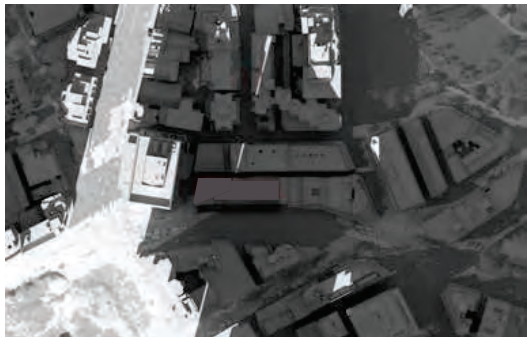
12:00 noon



1:00 pm



14:00 am

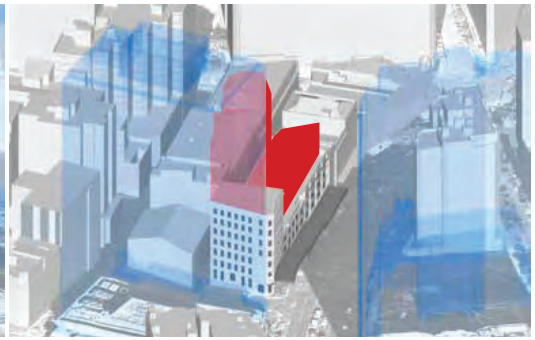


3:00 pm

June 21 SunRay View

9:00 am

10:00 am



11:00 am

12:00 noon

1:00 pm

2:00 pm

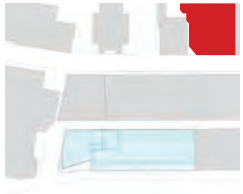
3:00 pm

View Key Plan

- Overshadowing Buildings
- Existing shadows
- Overshadowed Proposed Building
- Additional shadow cast by proposed new building envelope

5.1.3

Overshadowing of Proposed Envelope on Belvedere Apartments



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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 propsal.

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.

9:00 am

9:15 am

9:30 am

9:45 am

10:00 am

10:15 am

10:30 am

10:45 am

11:00 am

11:15 am

11:30 am

11:45 am

Existing shadows

Additional shadow cast by proposed new building envelope

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

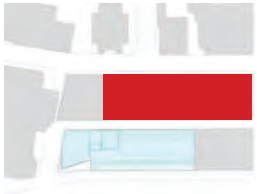
122

Existing shadows

Additional shadow cast by proposed new building envelope

5.1.4

Overshadowing of Proposed Envelope on META Apartments



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June 21 West Elevation

The META Apartment building has 83 apartments

1. 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.
2. 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.
3. 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.

9:00 am

9:15 am

9:30 am

9:45 am

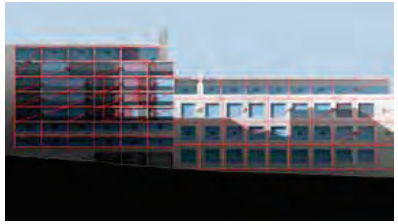
10:00 am

10:15 am

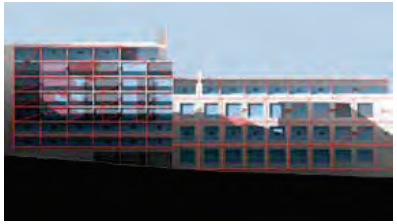
10:30 am

10:45 am

11:00 am



11:15 am



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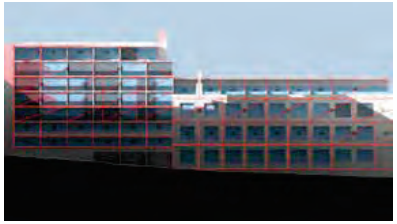


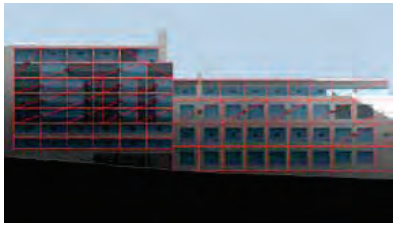
11:45 am

Existing shadows

Additional shadow cast by proposed new building envelope

12:00 noon

12:15 pm



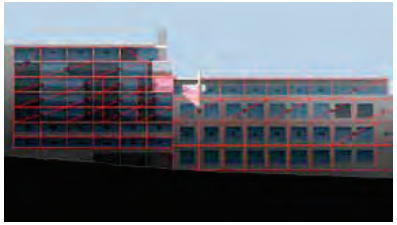
12:30 pm

12:45 pm

1:00 pm

1:15 pm

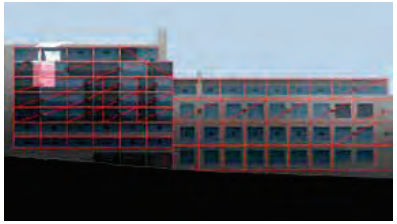
1:30 pm



1:45 pm

2:00 pm

2:15 pm



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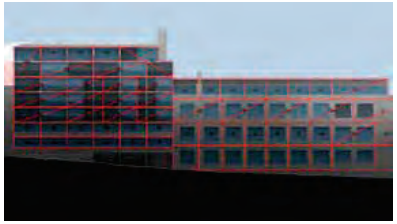

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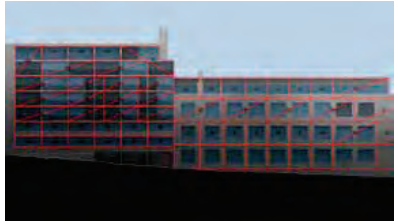


3:00 pm

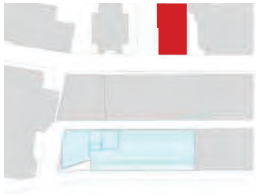
124

Existing shadows

Additional shadow cast by proposed new building envelope

5.1.5

Overshadowing of Proposed Envelope on Poplar Apartments



125

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.

9:00 am 9:15 am 9:30 am 9:45 am

10:00 am 10:15 am 10:30 am 10:45 am

11:00 am 11:15 am 11:30 am 11:45 am

Existing shadows

Additional shadow cast by proposed new building envelope

126

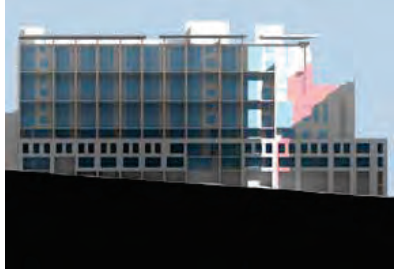
12:00 noon

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

Existing shadows

Additional shadow cast by proposed new building envelope

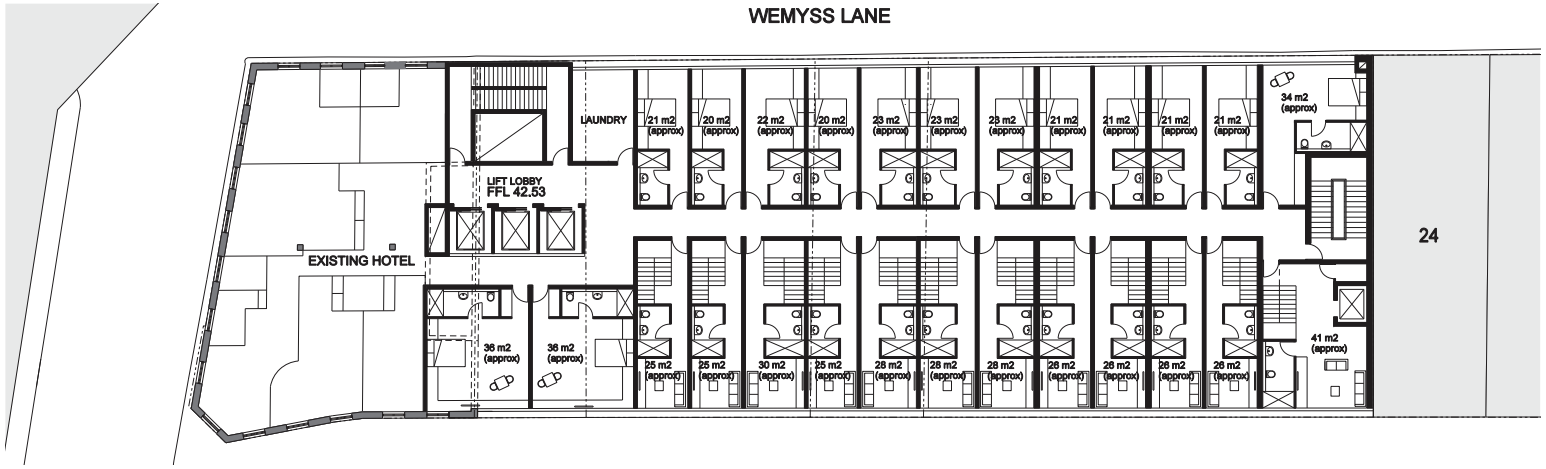
5.2
Response to Council Feedback

Heritage

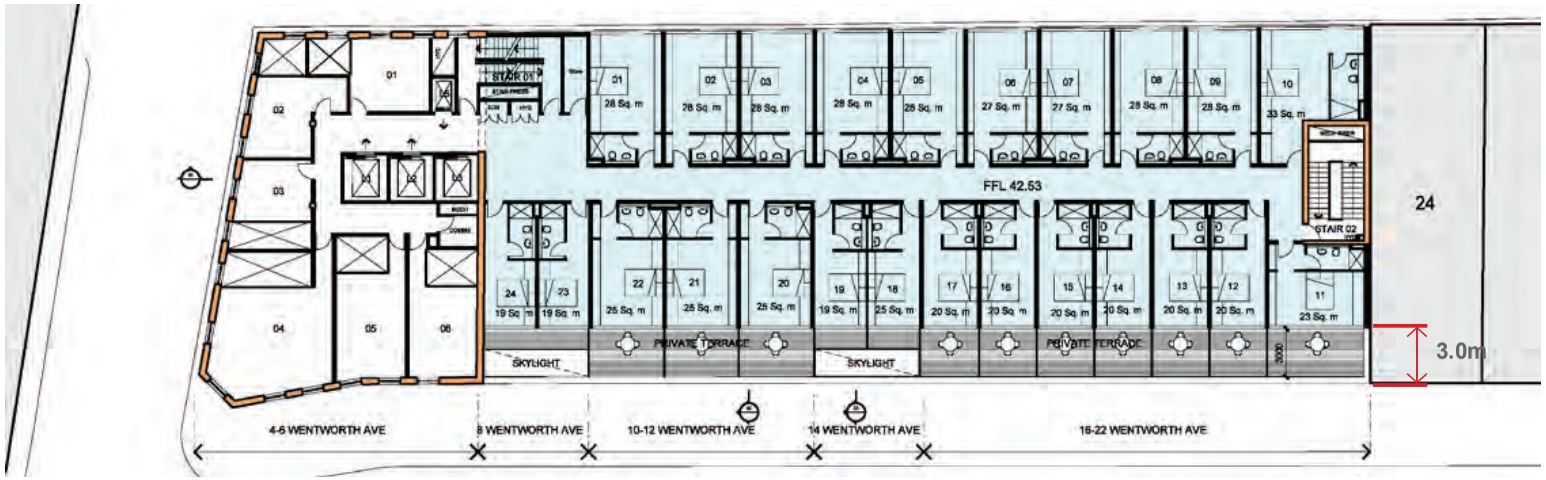
In response to Council feedback, interiors and structure at 4-6, 10-12 and 16-22 Wentworth Avenue were proposed to be preserved.

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.



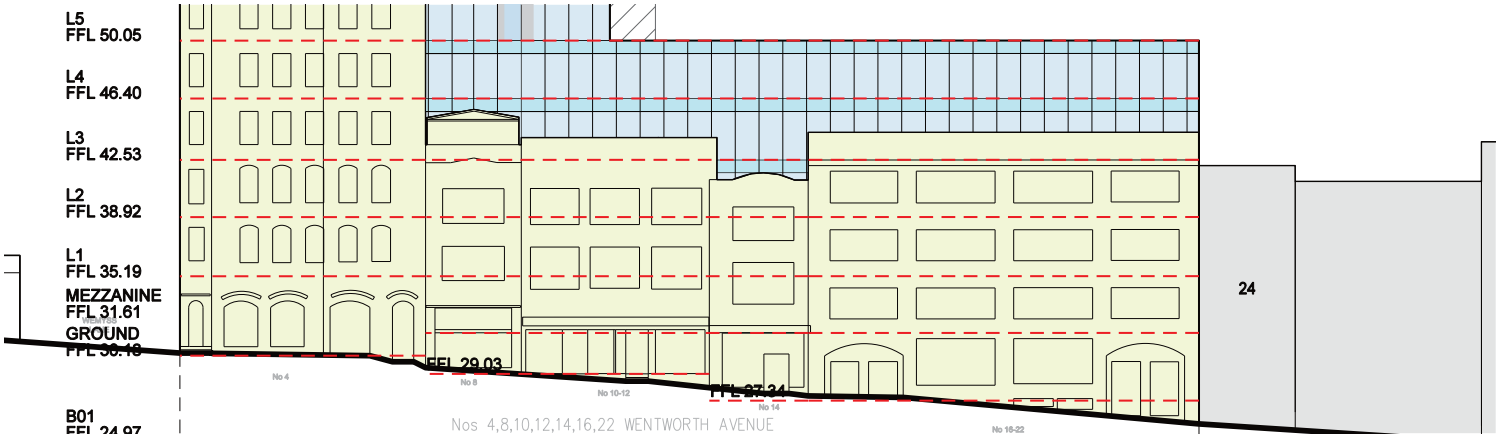
2016 Podium Proposal



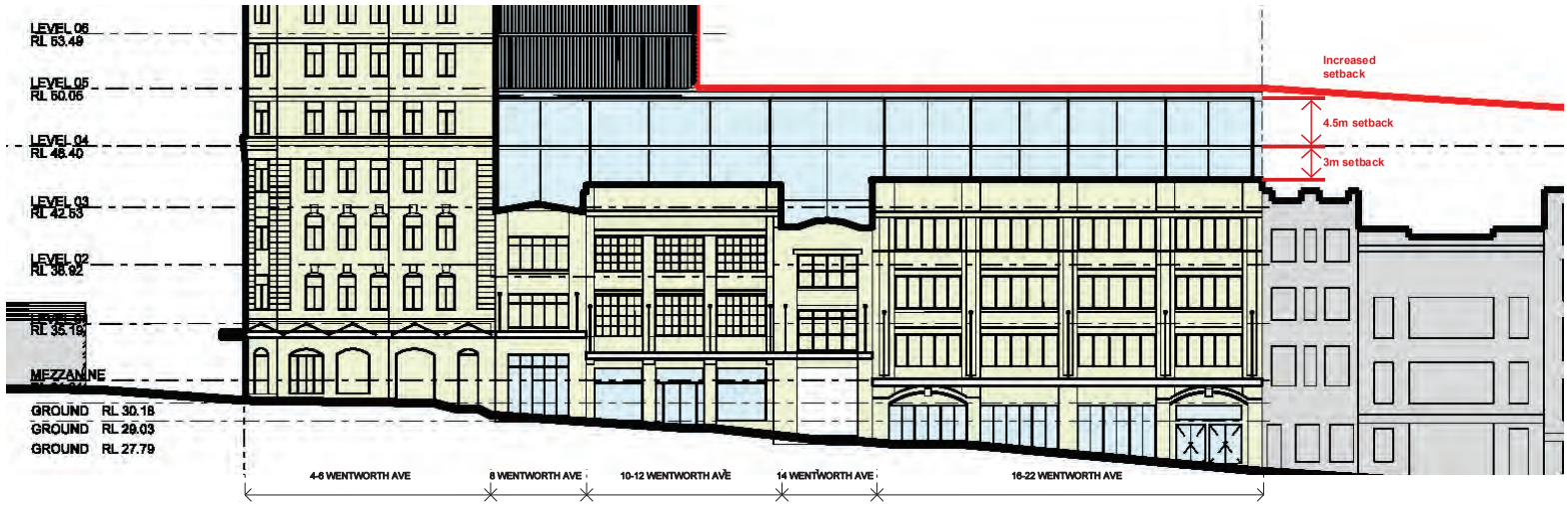
Amended Podium Proposal

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.



2016 Podium Proposal Western Elevation - SUPERSEDED

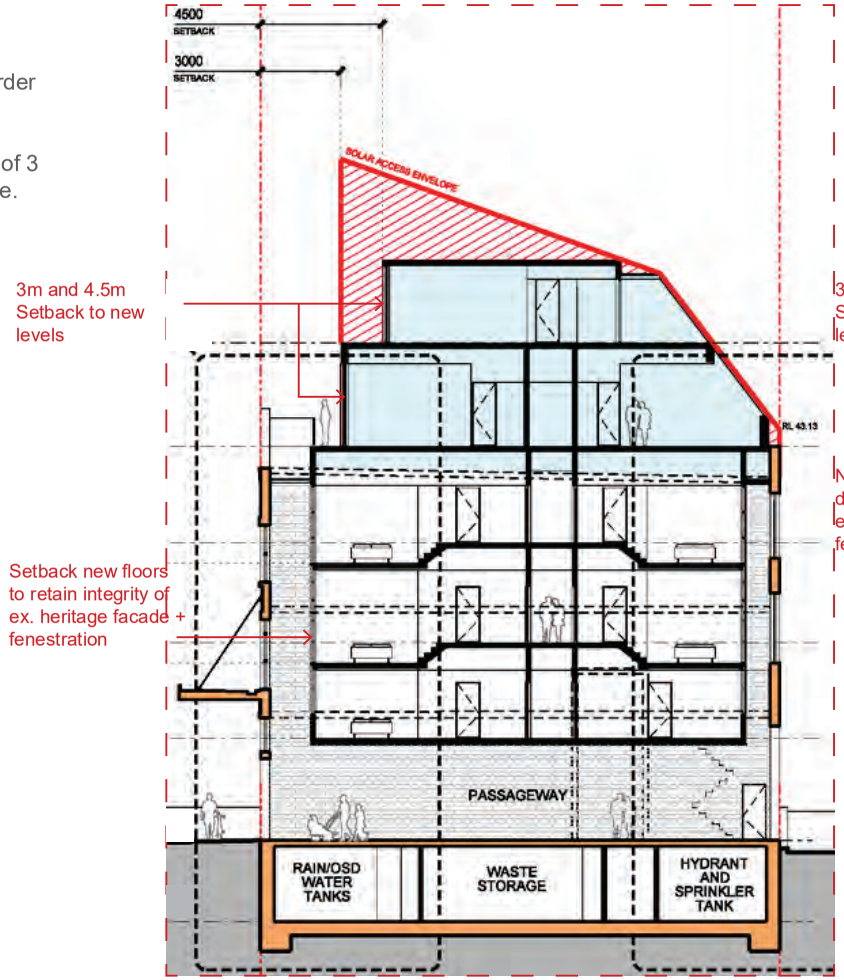


2018 Revised Podium Proposal Western Elevation

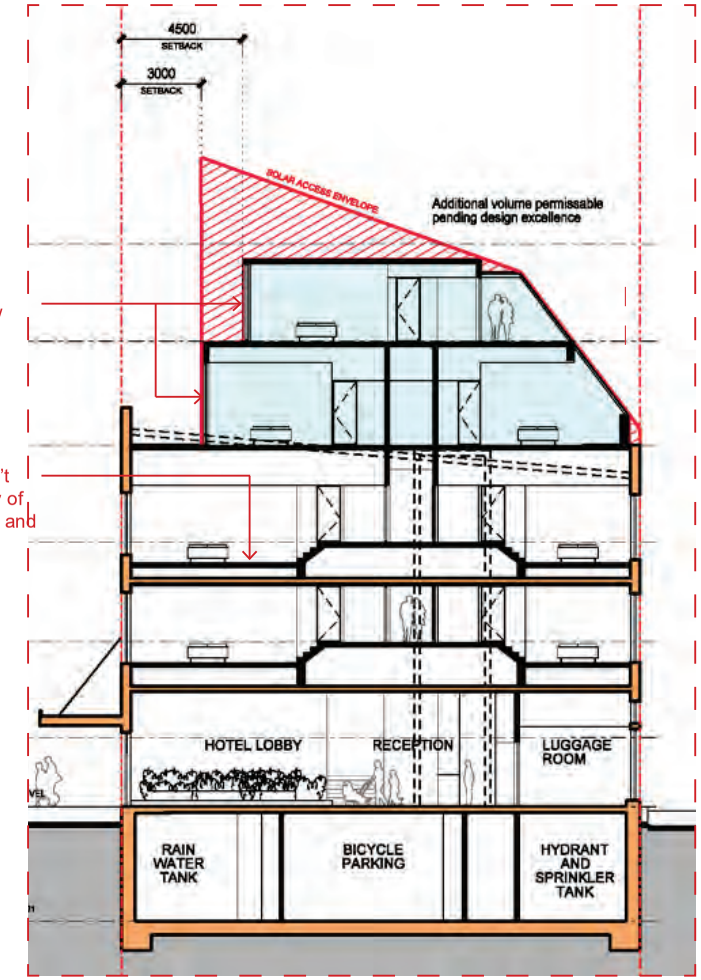
The proposed envelope shown in red was determined by acceptable solar impacts upon neighbouring residential buildings. Further modulation of the envelope was explored in order to:

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 Wentowrth Avenue and Wemys Lane.



Amended Podium Proposal Section through 14 Wentworth Ave.



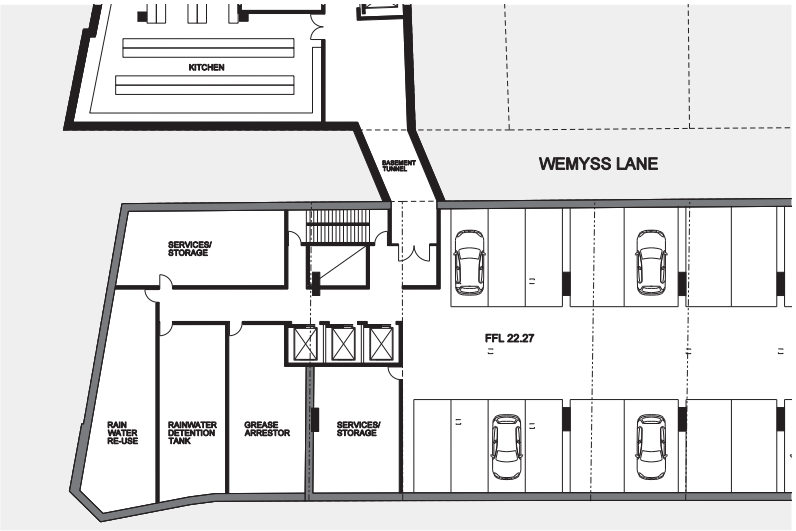
Amended Podium Proposal Section through 10-12 Wentworth Ave.

5.3
Response to Council Feedback

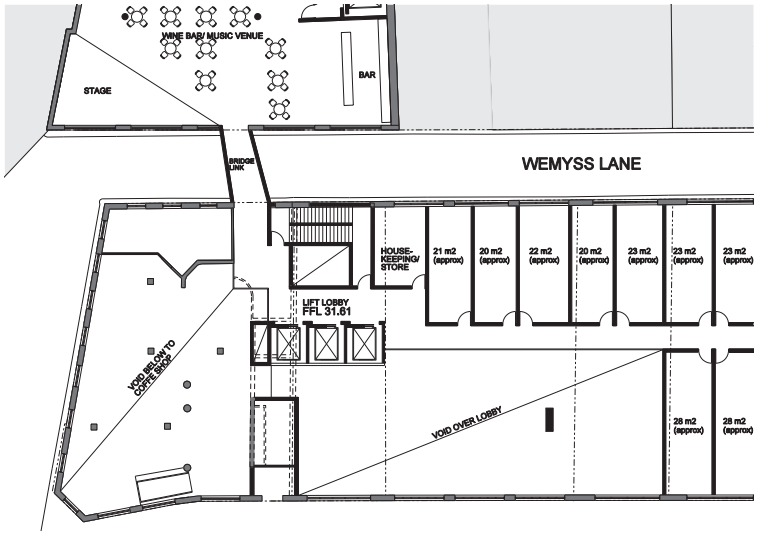
Tunnel and Skybridge

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

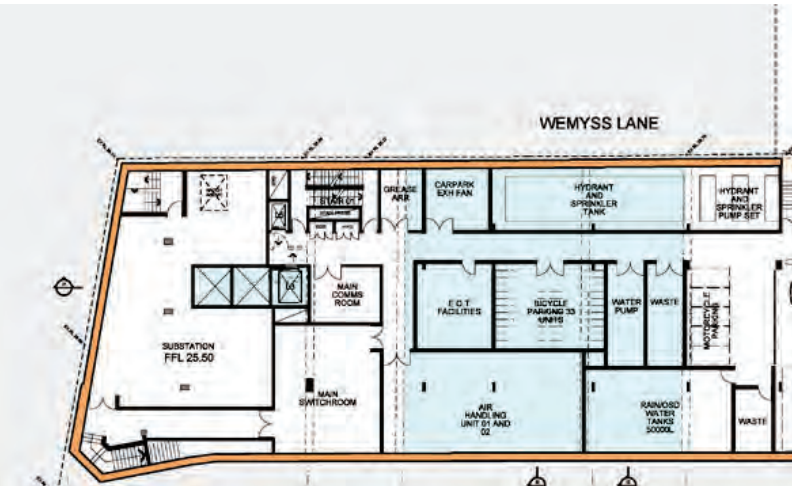
130



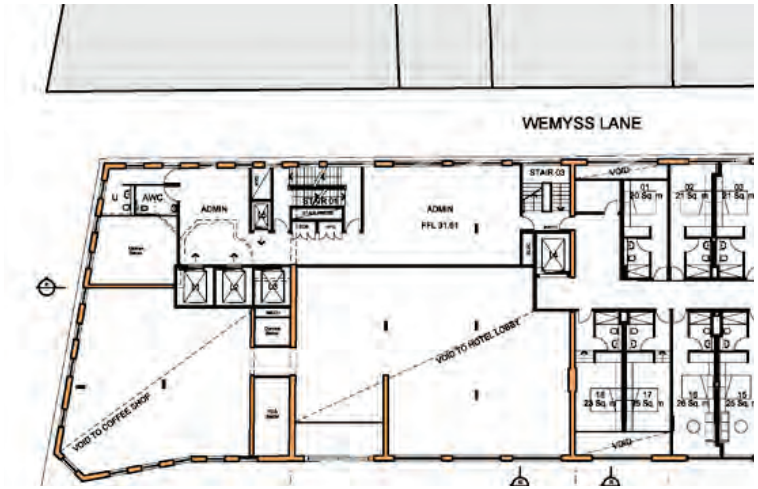
2016 Tunnel Proposed



2016 Skybridge Proposed



Amended Proposal



Amended Proposal

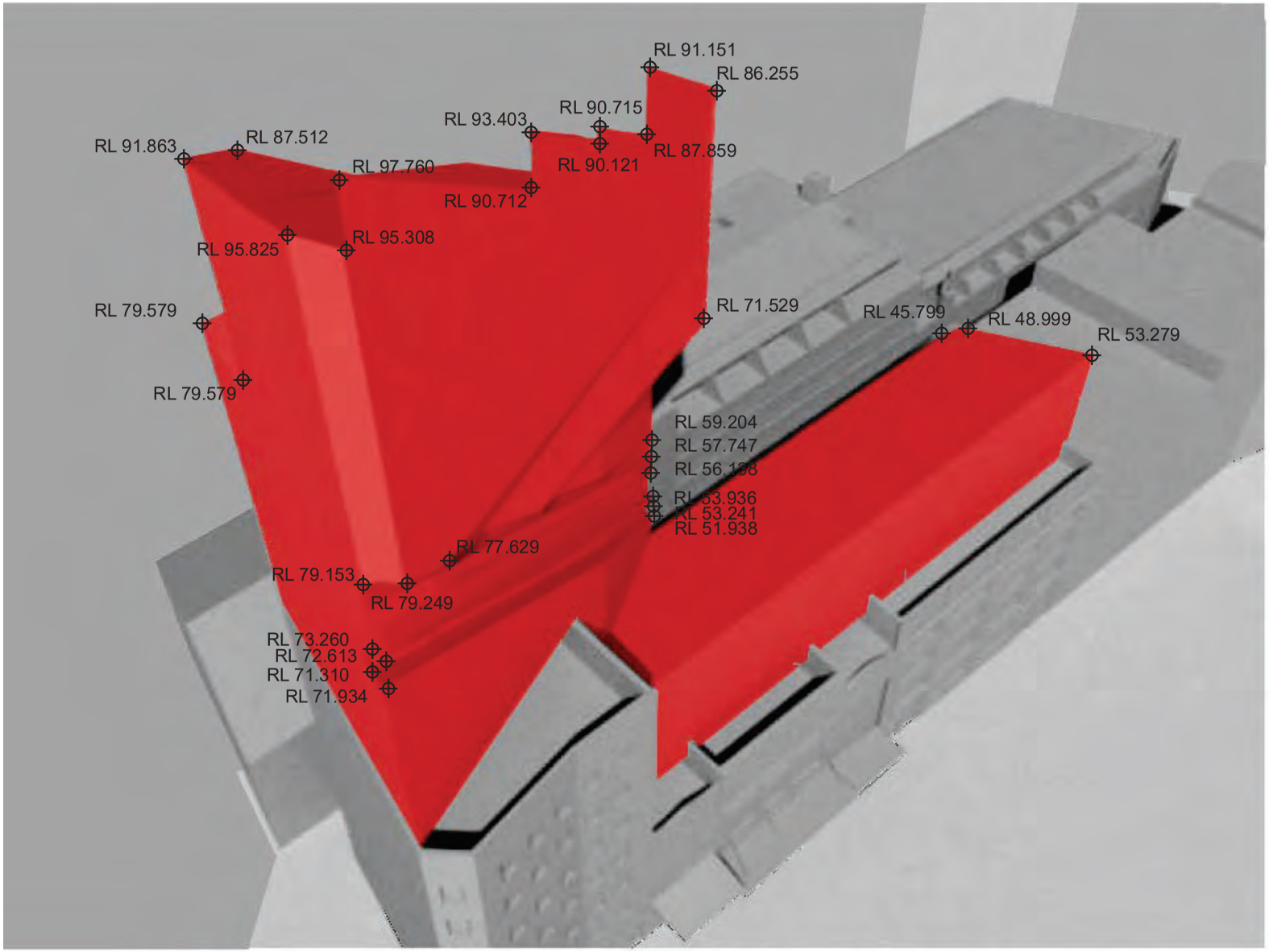
5.4
Response to Council Feedback

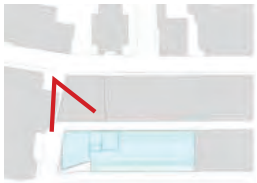
Resultant Compliant Envelope

View Key Plan

Proposed RL's

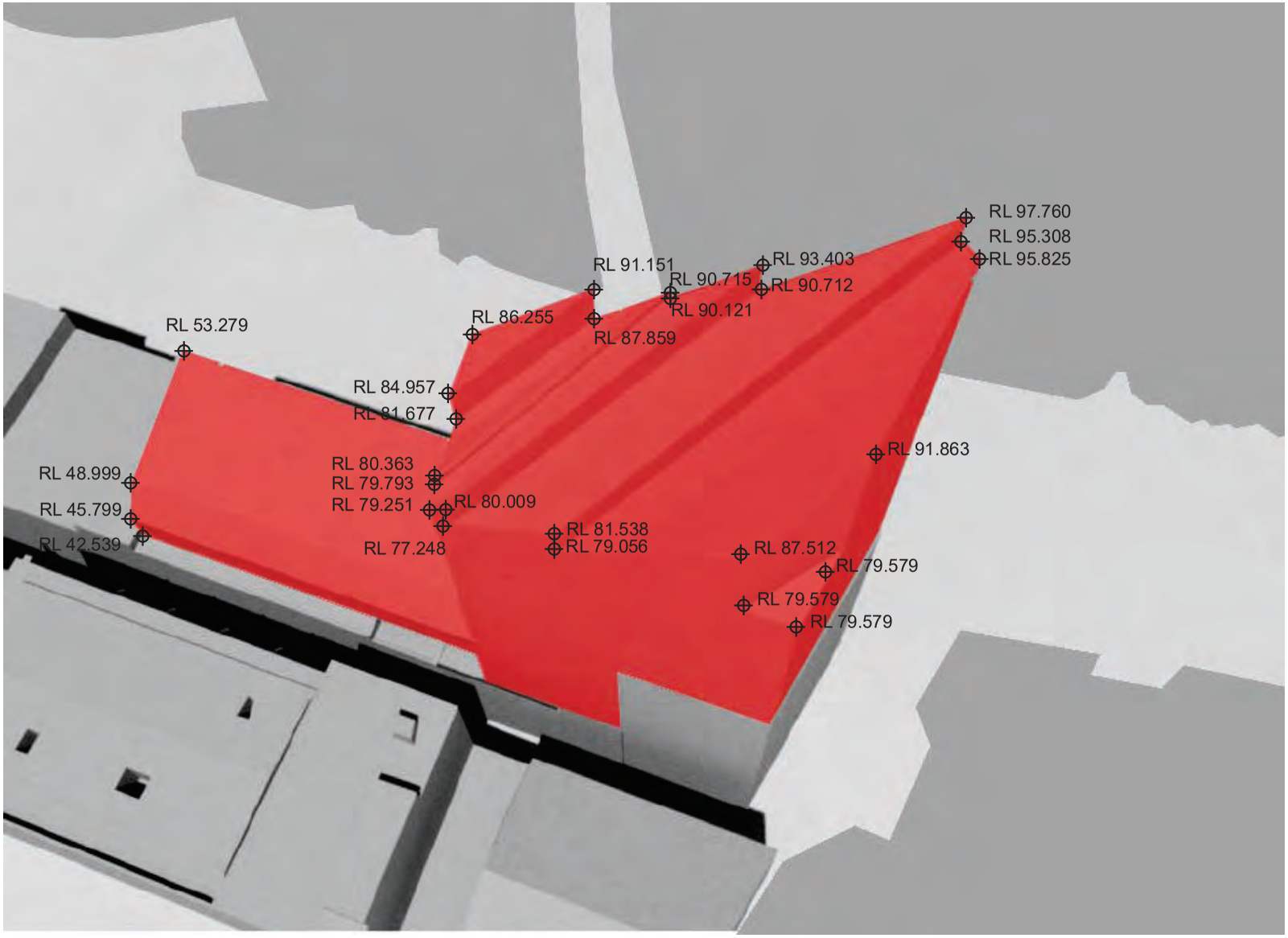
Based on the solar study and envelope analysis, the critical heights of the resultant envelope where established as illustrated.

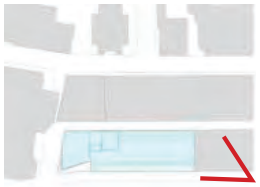




View Key Plan

132





View Key Plan

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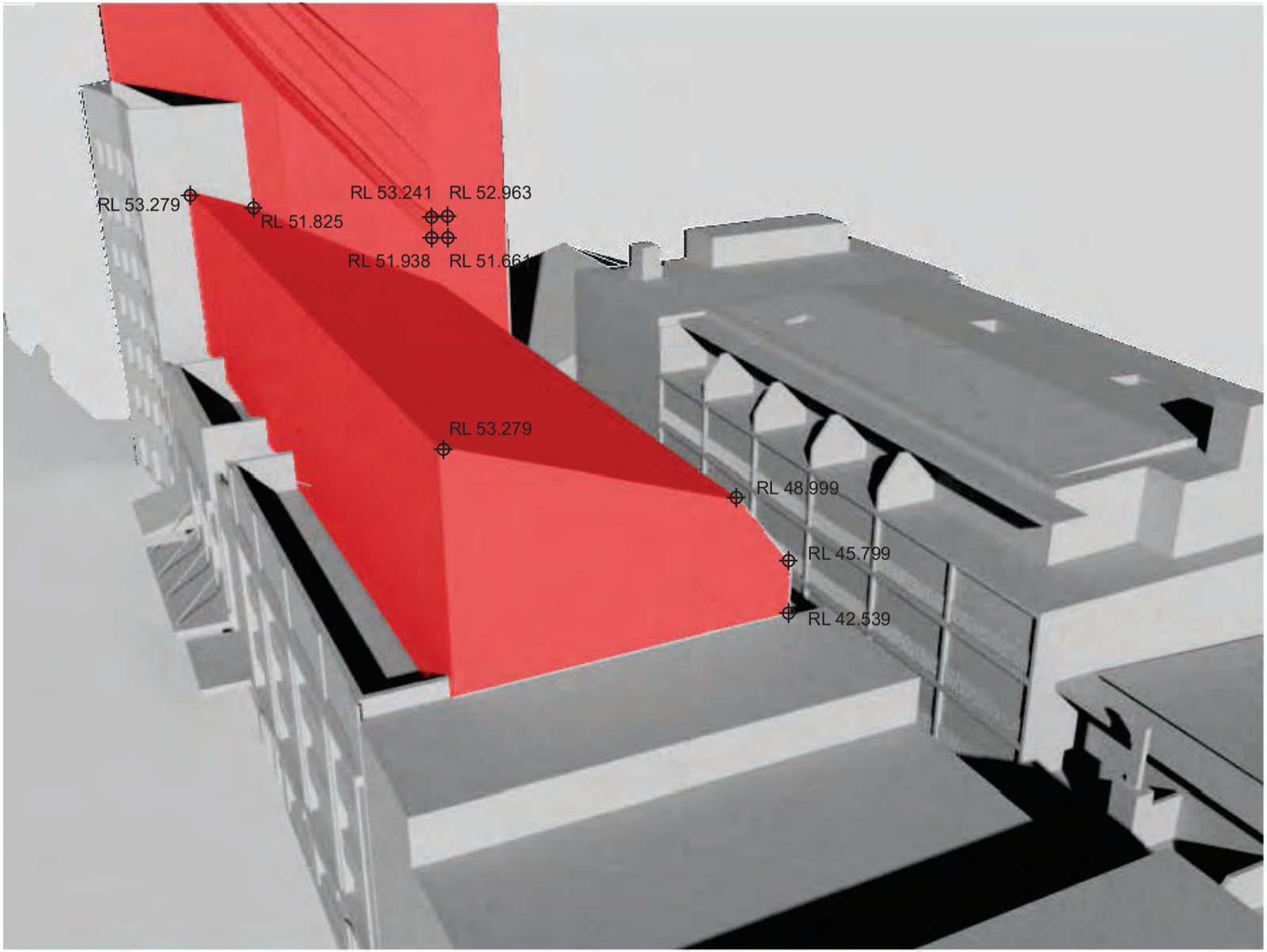
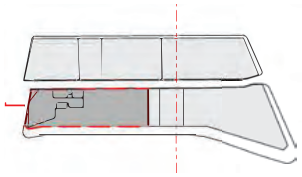


ENVELOPE SECTION



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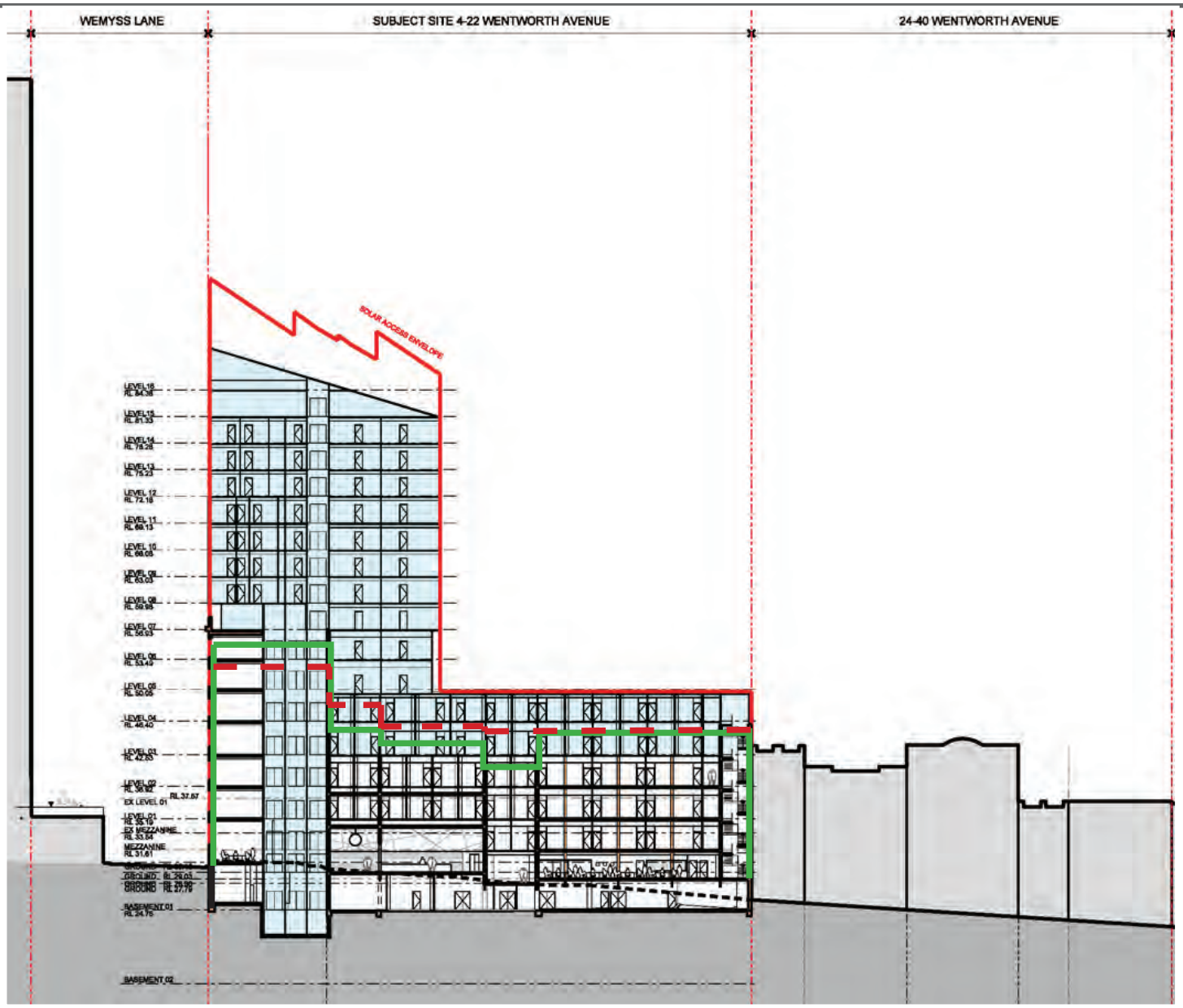


LEGEND

- SOLAR ACCESS ENVELOPE
- EXISTING HEIGHT CONTROL.
- EXISTING BUILDING HEIGHTS.

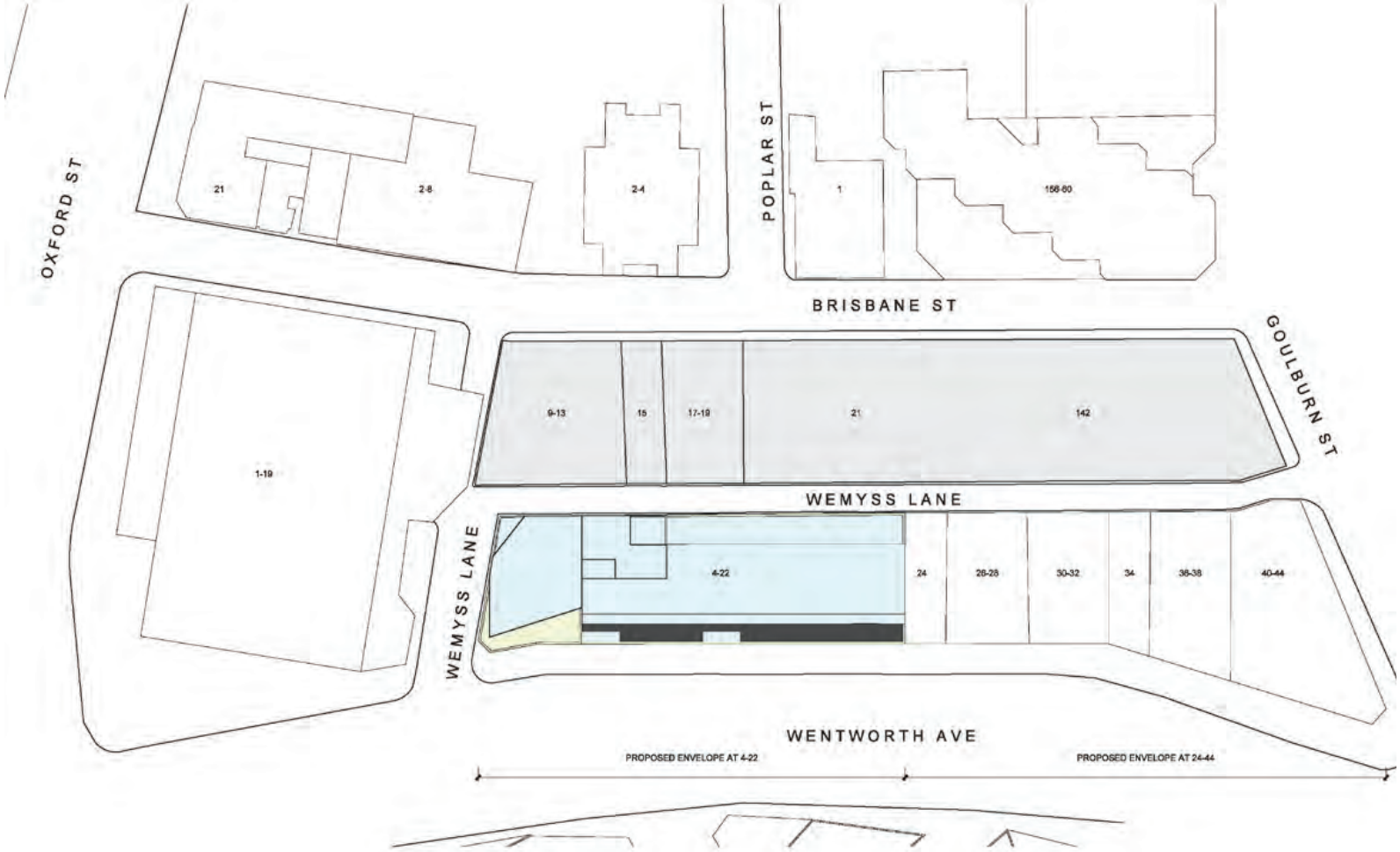
6.1

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



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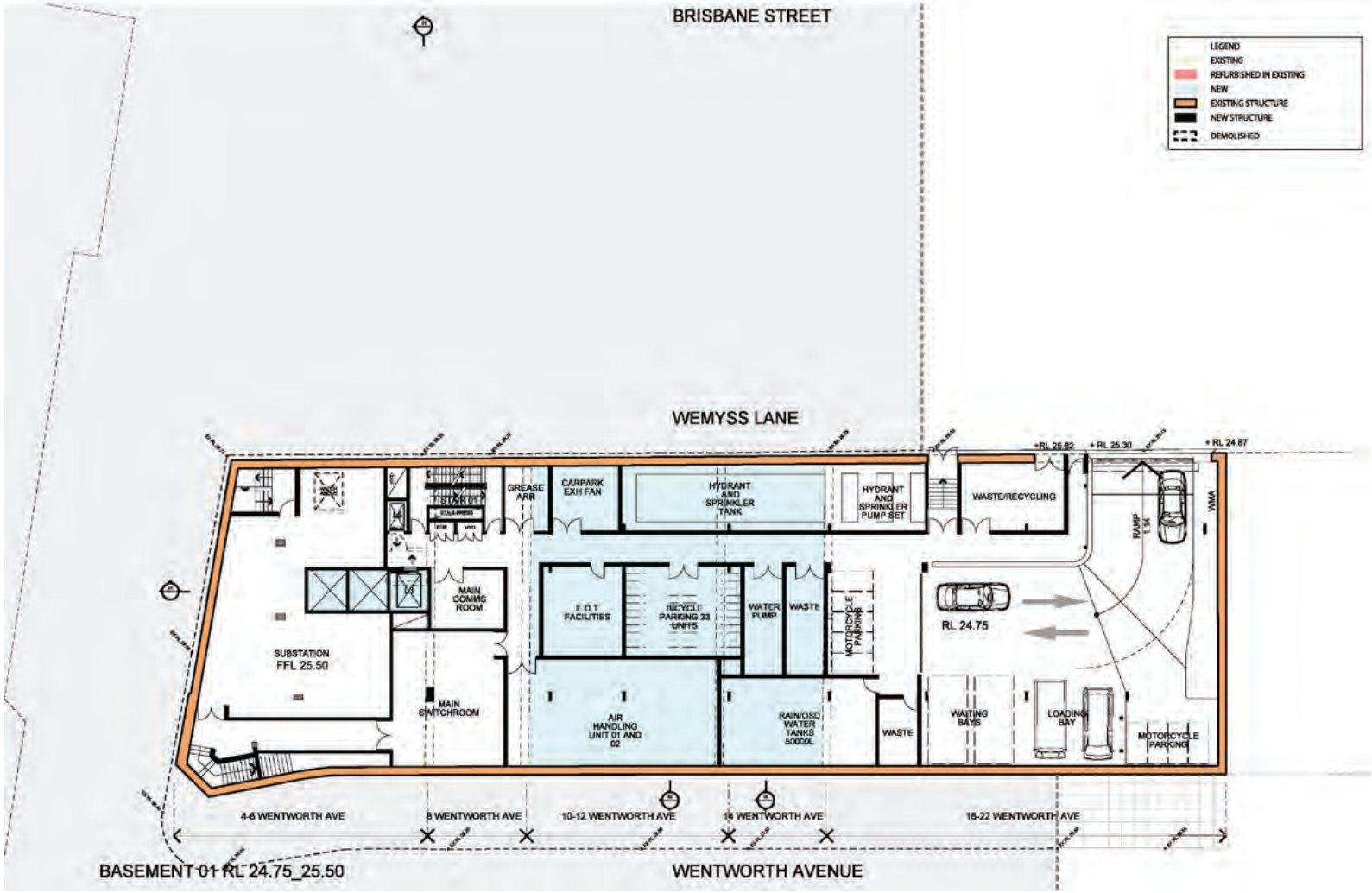
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NEW STRUCTURE
DEMOLISHED
WEMYSS LANE
+RL 25.62
+ RL 25.30
+ RL 24.87
GREASE ARR
CARPARK EXH FAN
HYDRANT AND SPRINKLER TANK
HYDRANT AND SPRINKLER PUMP SET
WASTE/RECYCLING
RAMP 1:14
WMA
MAIN COMMS ROOM
E.O.T FACILITIES
BICYCLE PARKING 33 UNITS
WATER PUMP
WASTE
MOTORCYCLE PARKING
RL 24.75
SUBSTATION FFL 25.50
MAIN SWITCHROOM
AIR HANDLING UNIT 01 AND 02
RAIN/OSD WATER TANKS ≤0000L
WASTE
WAITING BAYS
LOADING BAY
MOTORCYCLE PARKING
4-6 WENTWORTH AVE
8 WENTWORTH AVE
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14 WENTWORTH AVE
16-22 WENTWORTH AVE
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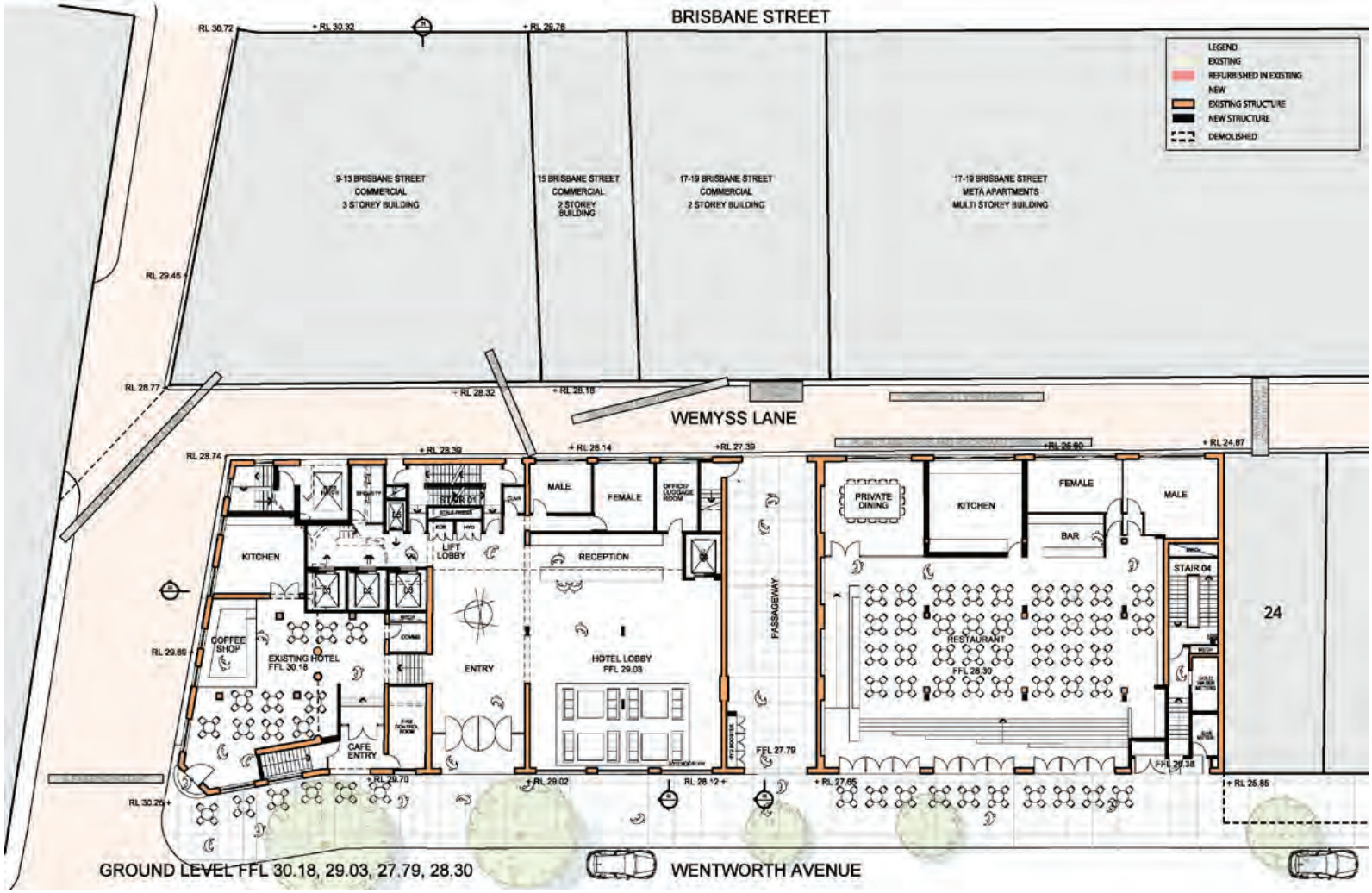
WENTWORTH AVENUE

137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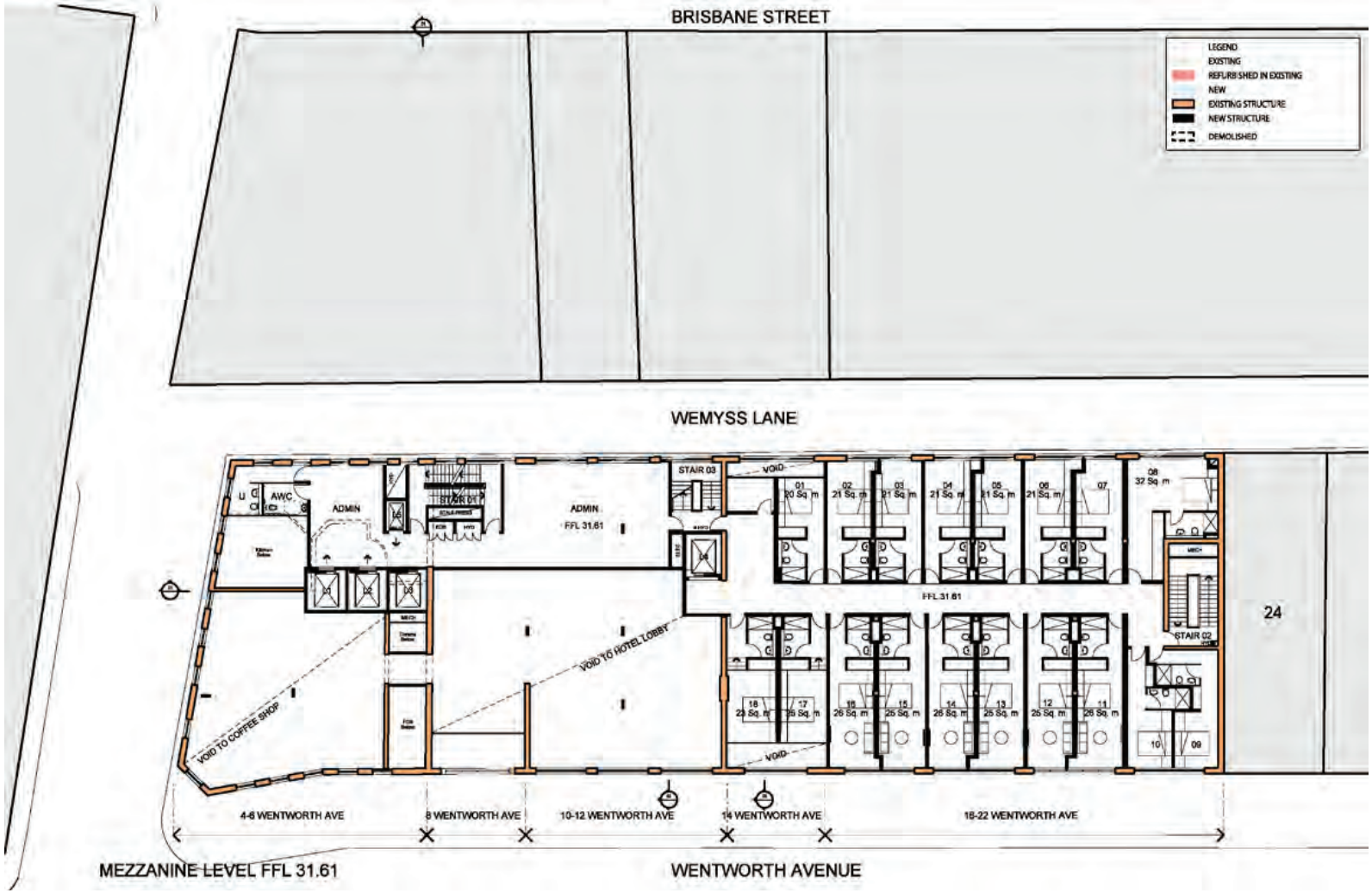
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
KITCHEN
COFFEE SHOP
EXISTING HOTEL
FFL 30.18
CAFE ENTRY
LIFT LOBBY
ENTRY
RECEPTION
HOTEL LOBBY
FFL 29.03
MALE
FEMALE
PASSAGEWAY
PRIVATE DINING
KITCHEN
BAR
RESTAURANT
FFL 28.30
STAIR 04
24
GROUND LEVEL FFL 30.18, 29.03, 27.79, 28.30
WENTWORTH AVENUE

138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ADMIN
AWC
ADMIN
FFL 31.61
STAIR 03
VOID
FFL 31.61
STAIR 02
24
VOID TO HOTEL LOBBY
VOID TO COFFEE SHOP
VOID
4-6 WENTWORTH AVE
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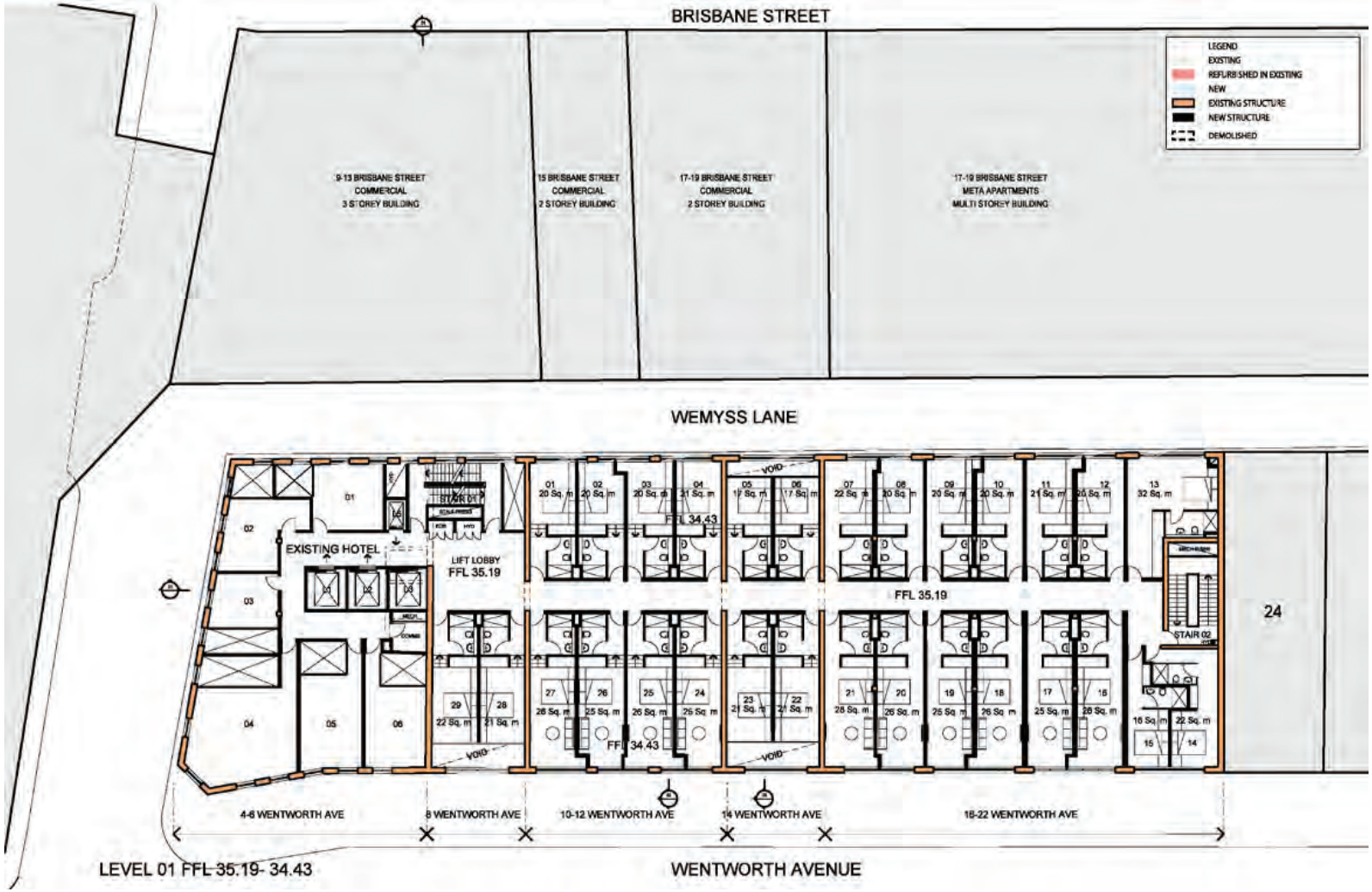
WENTWORTH AVENUE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2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
EXISTING HOTEL
LIFT LOBBY
FFL 35.19
FFL 34.43
FFL 35.19
FFL 34.43
VOID
STAIR 02
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
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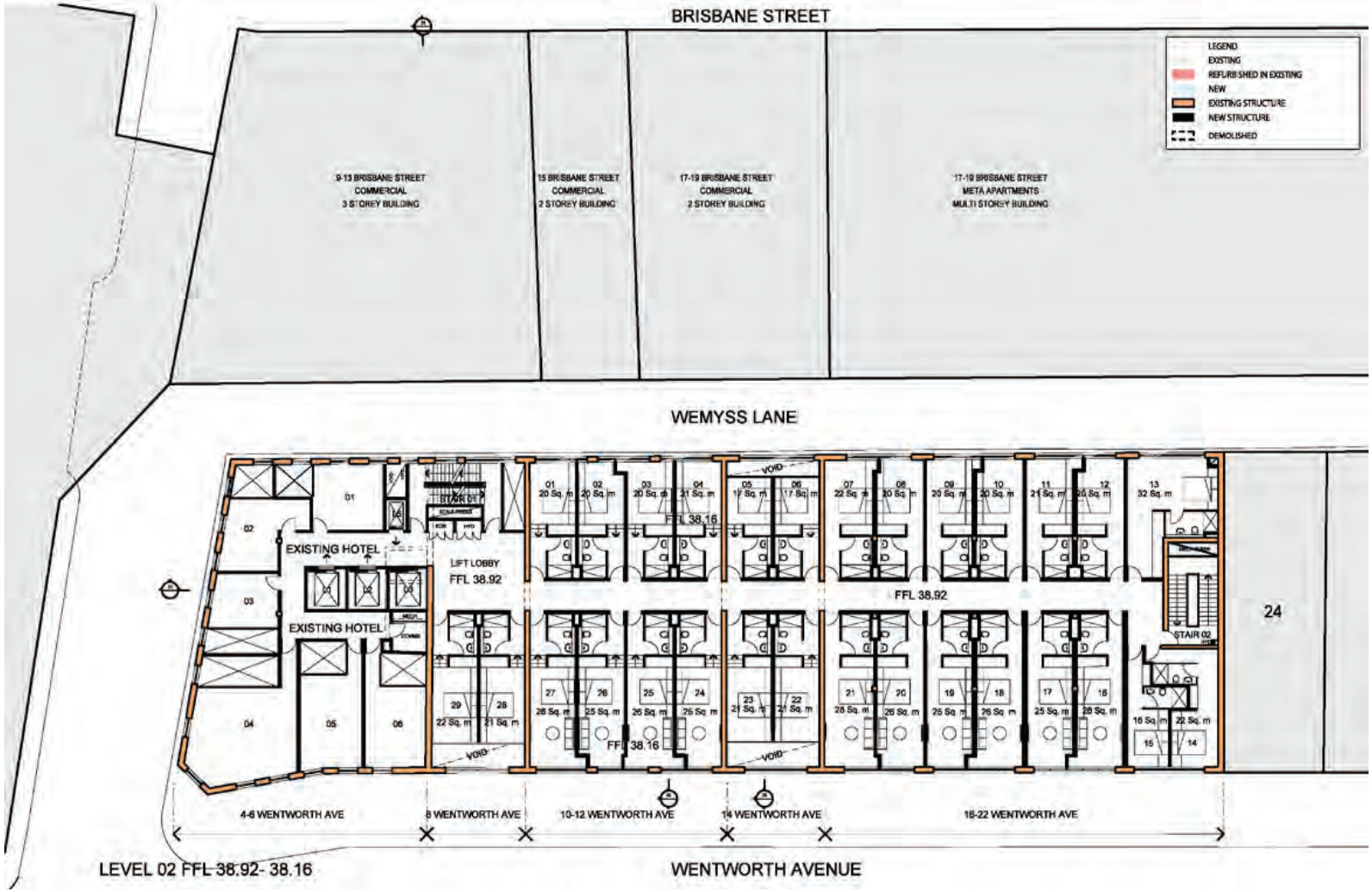
18-22 WENTWORTH AVE
LEVEL 01 FFL 35.19- 34.43
WENTWORTH AVENUE

140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3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
EXISTING HOTEL
EXISTING HOTEL
LIFT LOBBY
FFL 38.92
FFL 38.16
FFL 38.92
FFL 38.16
VOID
STAIR 02
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
18-22 WENTWORTH AVE
LEVEL 02 FFL 38.92- 38.16
WENTWORTH AVENUE

BRISBANE STREET
LEGEND
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9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
FFL 42.53
STAIR 02
24
SKYLIGHT
PRIVATE TERRACE
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 03 FFL 42.53
WENTWORTH AVENUE

141

BRISBANE STREET
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
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15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
SERVICE ROOM
EXISTING HOTEL
LIFT LOBBY
STAIR 02
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
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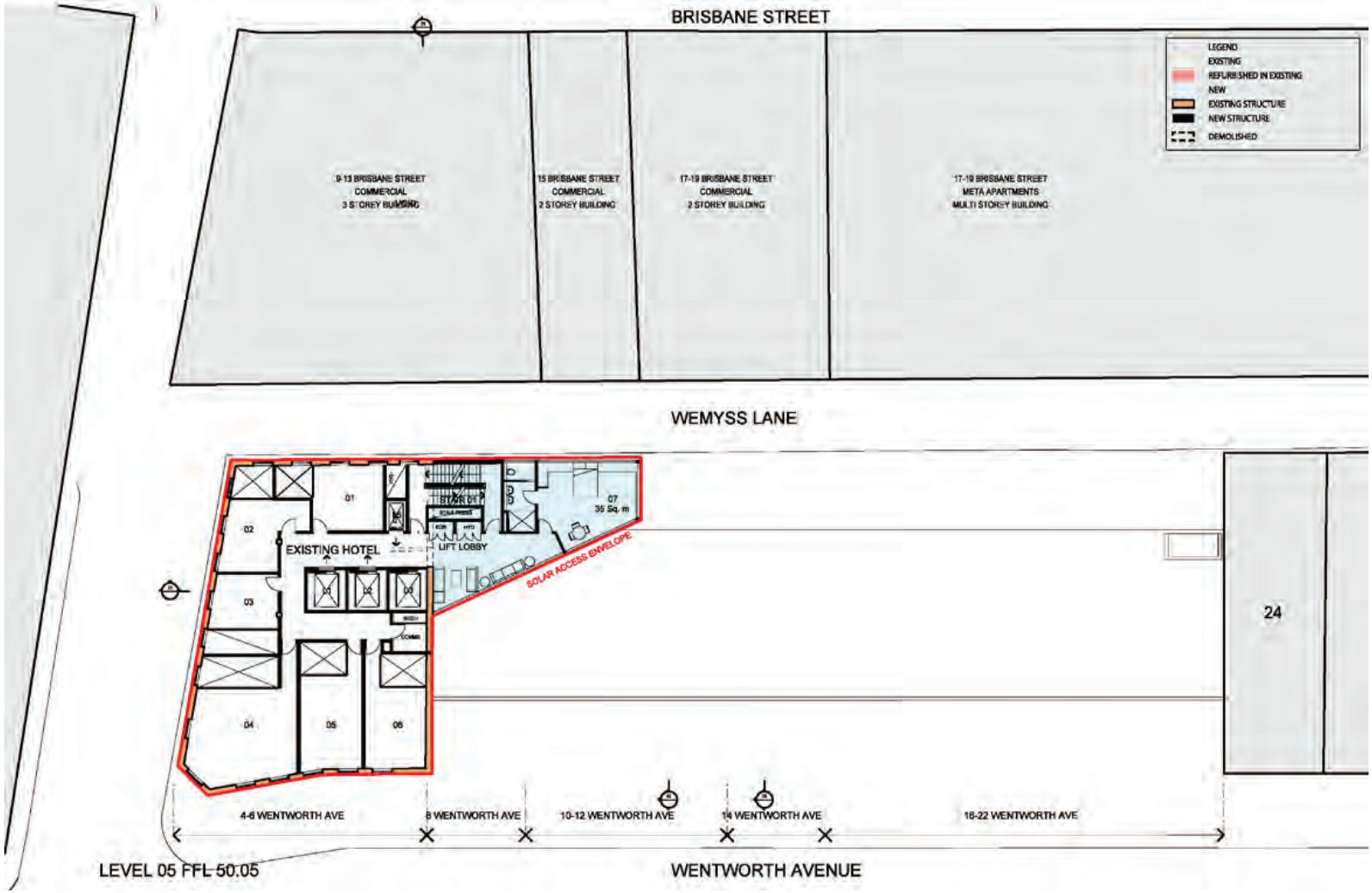
LEVEL 04 FFL 46.40
WENTWORTH AVENUE

142

143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COMMERCIAL
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COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
01
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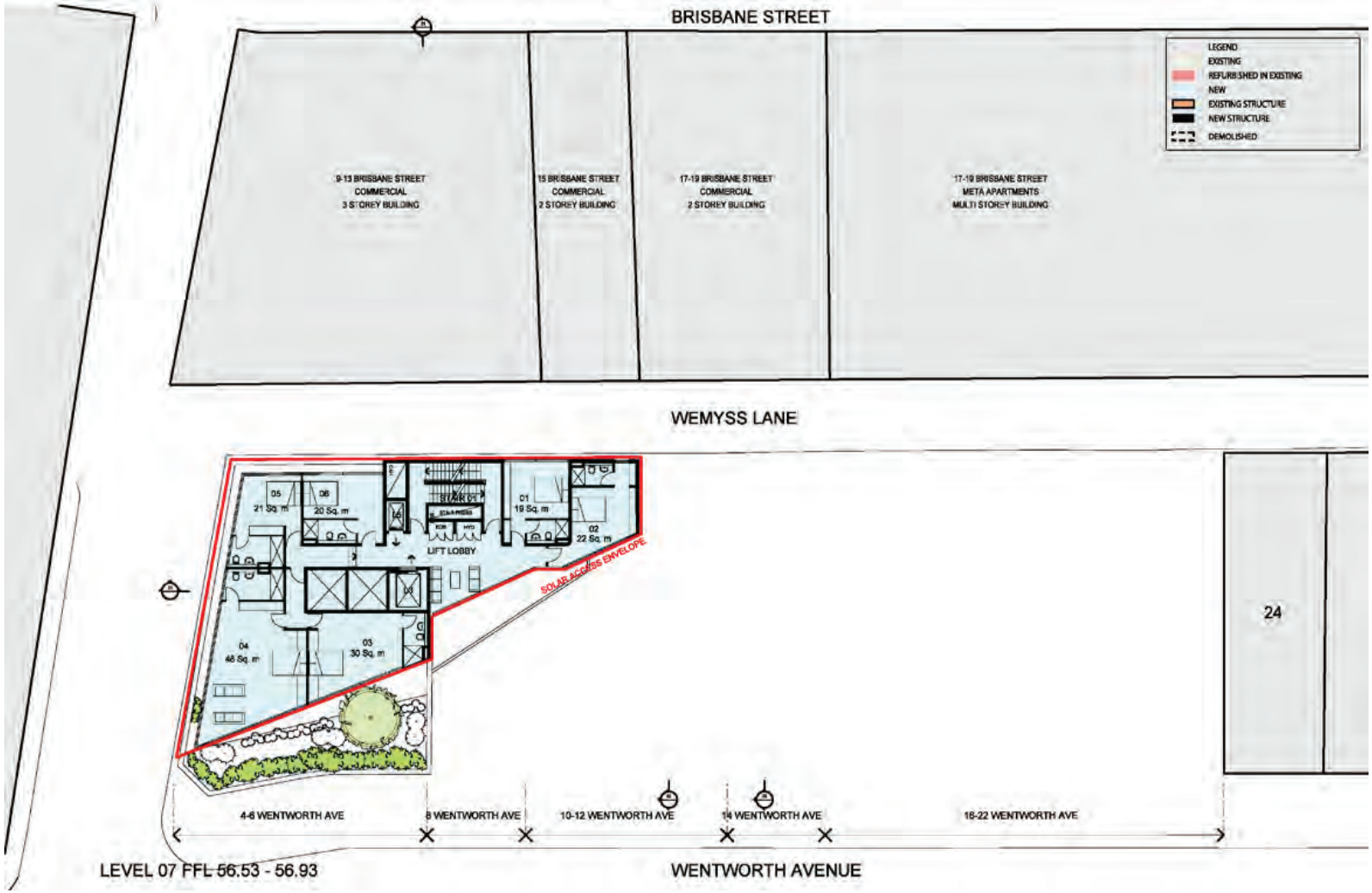
35 Sq. m
EXISTING HOTEL
LIFT LOBBY
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 05 FFL 50.05
WENTWORTH AVENUE

BRISBANE STREET
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
01
02
03
04
05
06
07
35 Sq. m
EXISTING HOTEL
LIFT LOBBY
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 06 FFL 53.49
WENTWORTH AVENUE

144

145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EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
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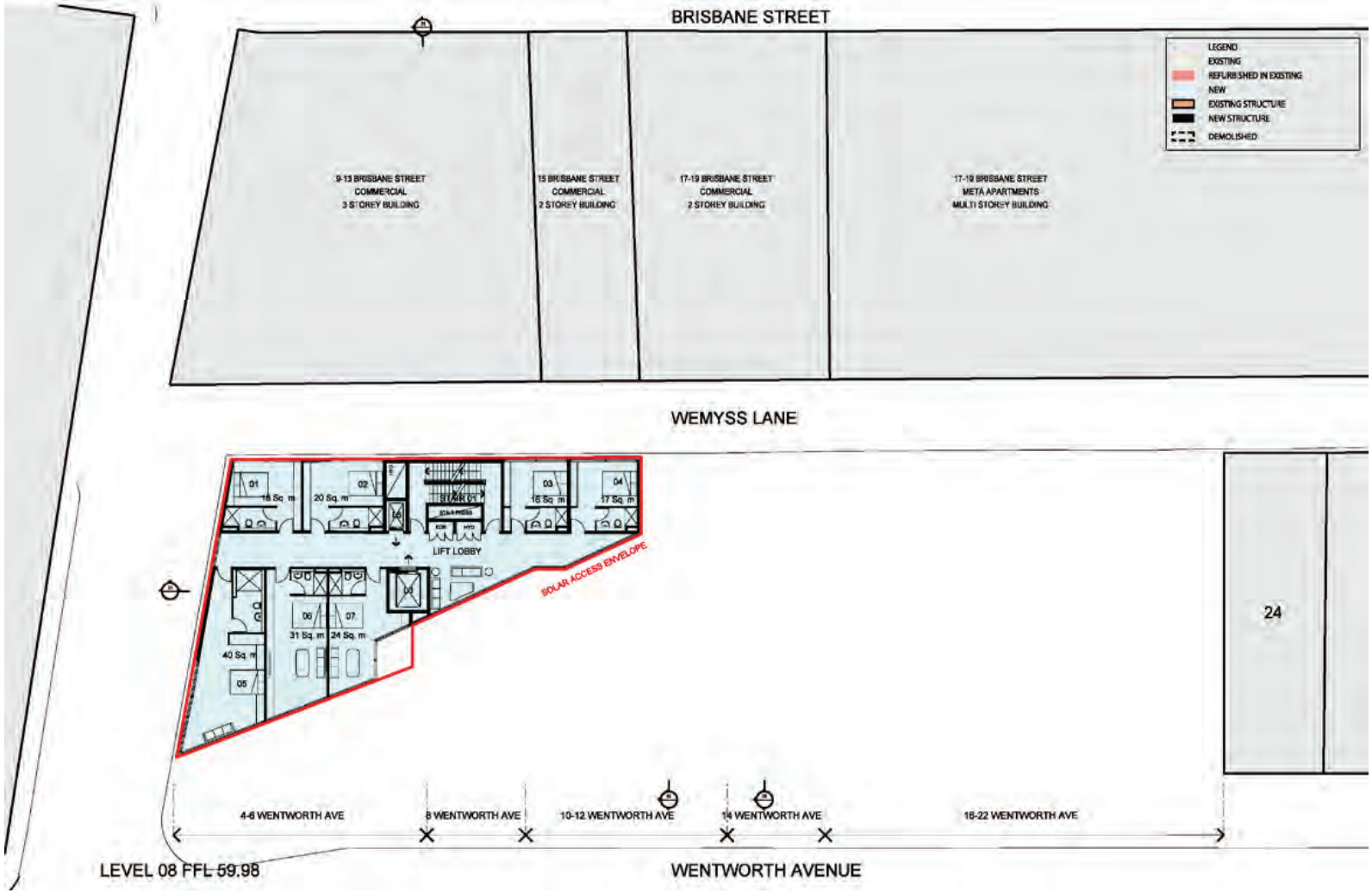
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
05
21 Sq. m
06
20 Sq. m
STAIRS
01
19 Sq. m
02
22 Sq. m
LIFT LOBBY
SOLAR ACCESS ENVELOPE
04
48 Sq. m
03
30 Sq. m
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 07 FFL 56.53 - 56.93
WENTWORTH AVENUE

146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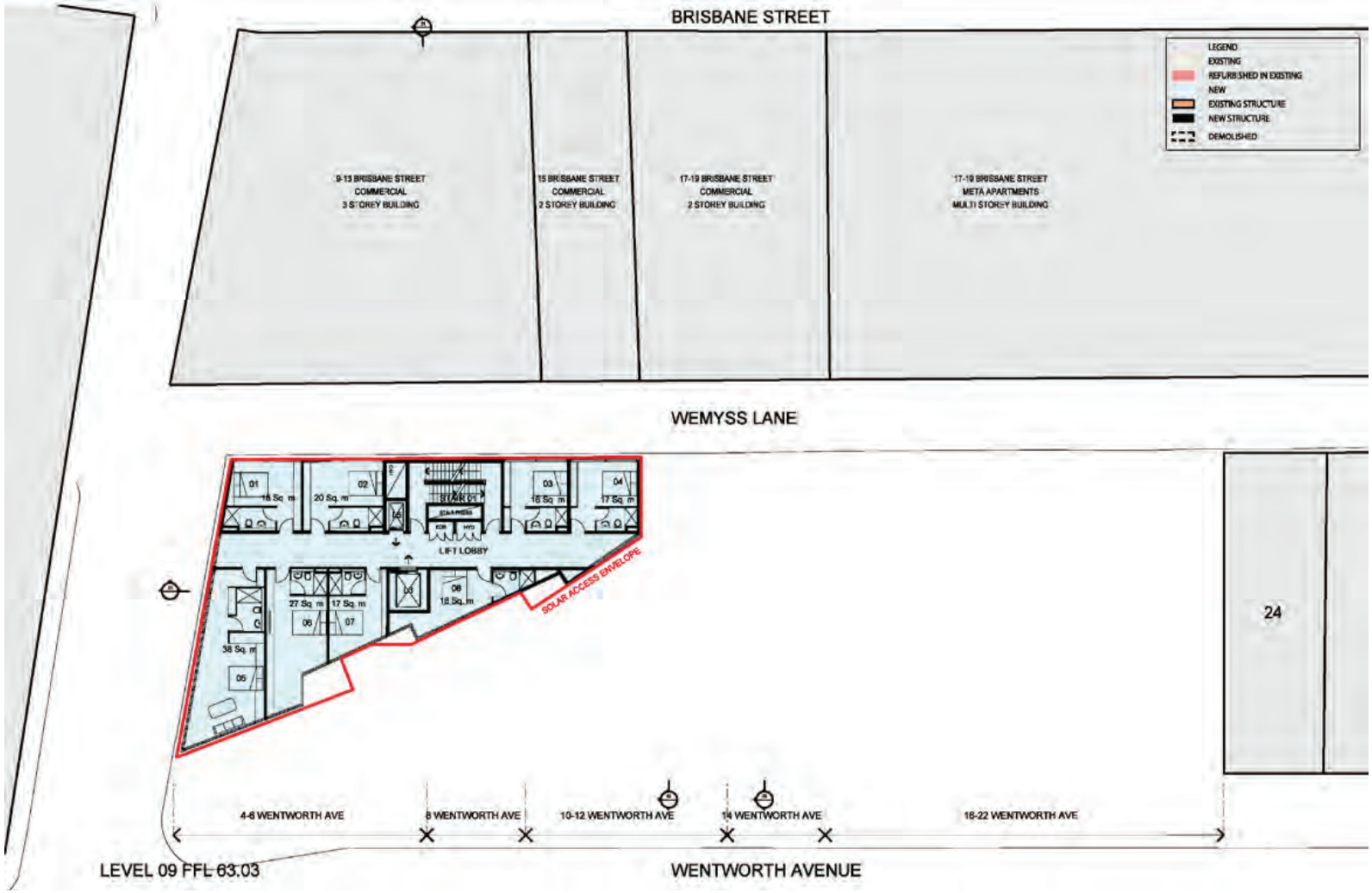
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
01
18 Sq. m
20 Sq. m
02
03
18 Sq. m
04
17 Sq. m
STAIRS
LIFT LOBBY
SOLAR ACCESS ENVELOPE
06
07
31 Sq. m
24 Sq. m
40 Sq. m
05
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 08 FFL 59.98
WENTWORTH AVENUE

147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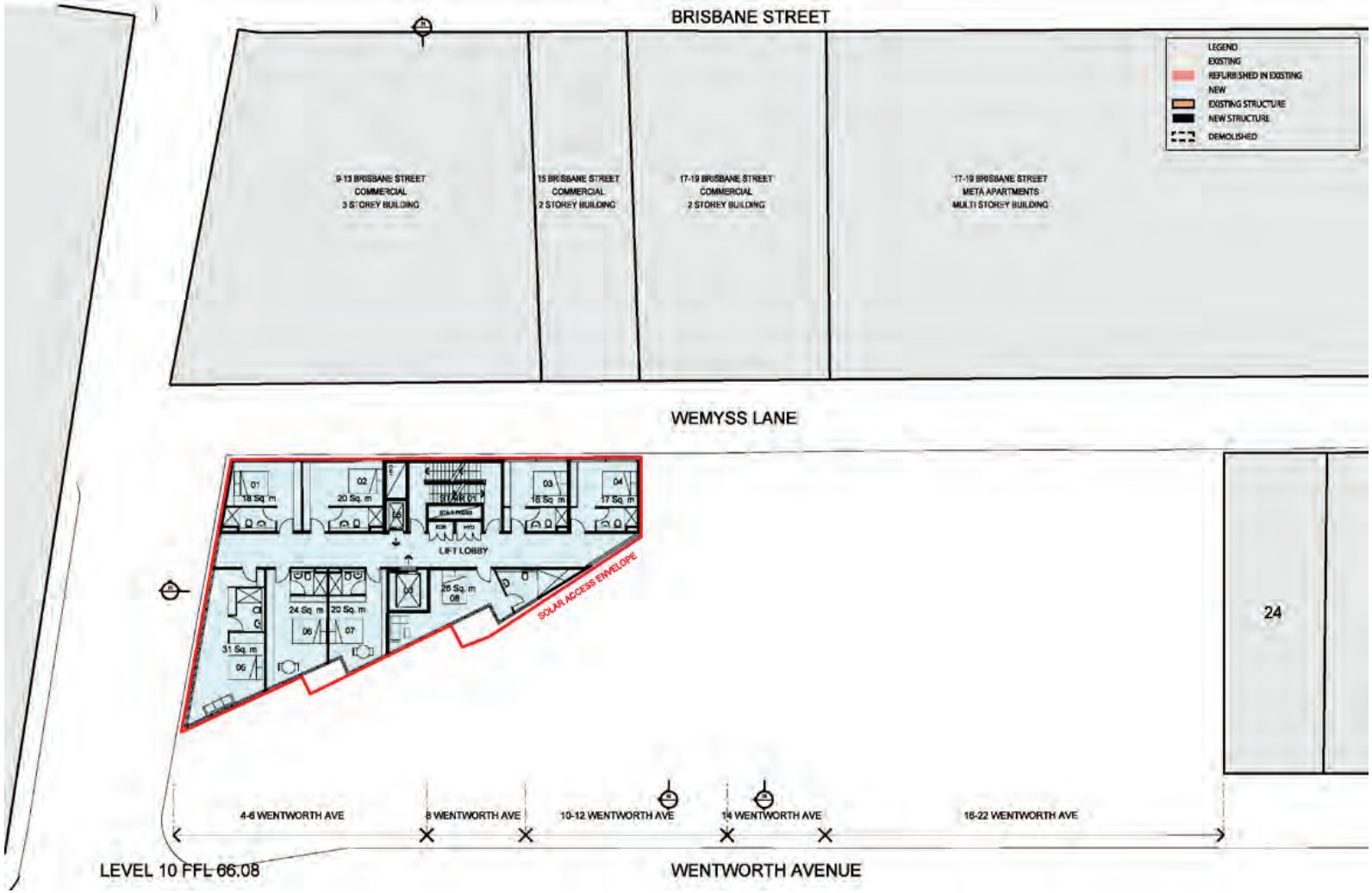
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
01
18 Sq. m
20 Sq. m
02
14
STAIRS
03
18 Sq. m
04
17 Sq. m
LIFT LOBBY
SOLAR ACCESS ENVELOPE
27 Sq. m
17 Sq. m
06
07
08
18 Sq. m
38 Sq. m
05
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 09 FFL 63.03
WENTWORTH AVENUE

148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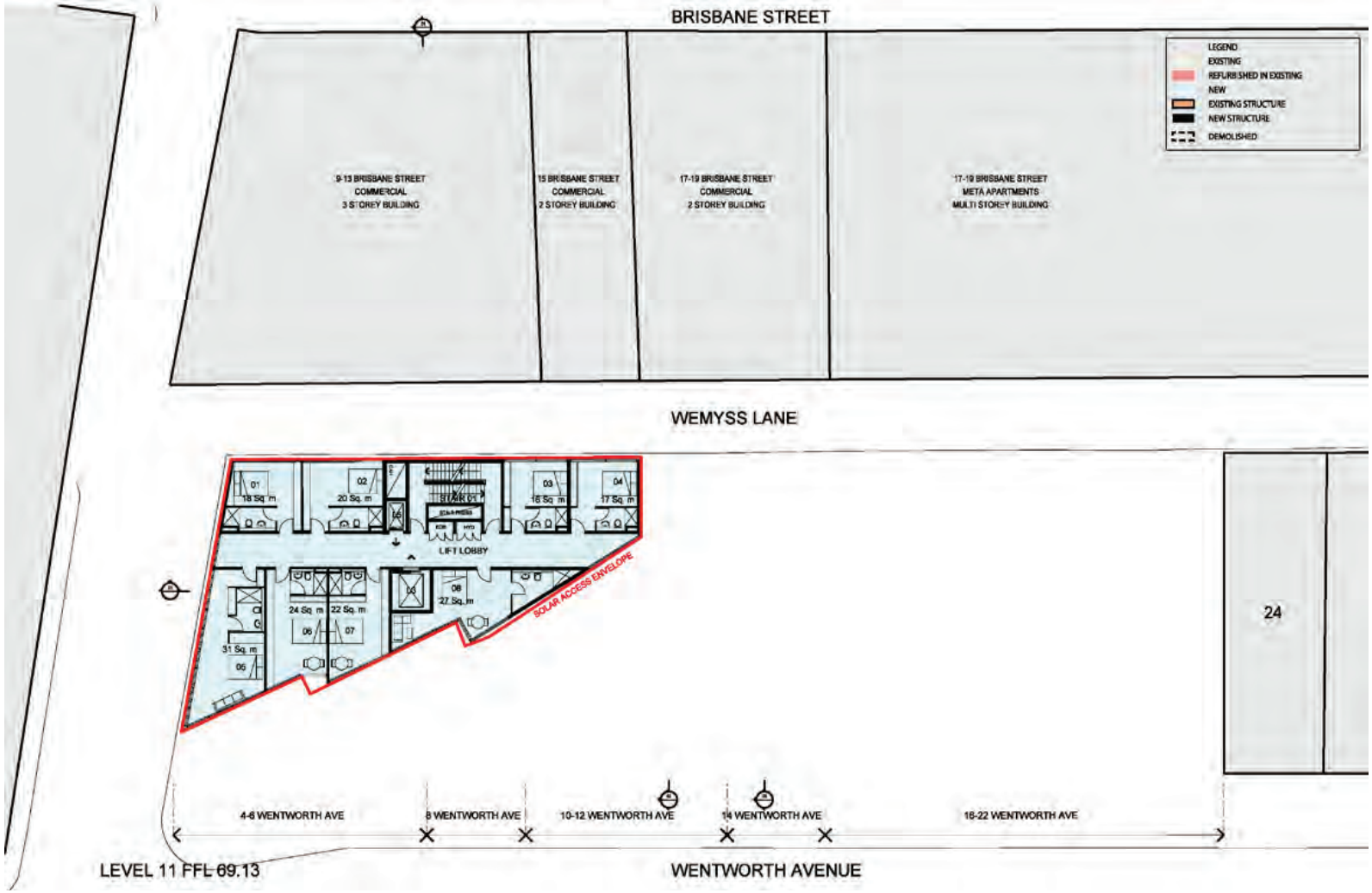
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
01
18 Sq. m
02
20 Sq. m
03
16 Sq. m
04
17 Sq. m
STAIRS
LIFT LOBBY
24 Sq. m
20 Sq. m
06
07
31 Sq. m
26 Sq. m
08
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 10 FFL 66.08
WENTWORTH AVENUE

149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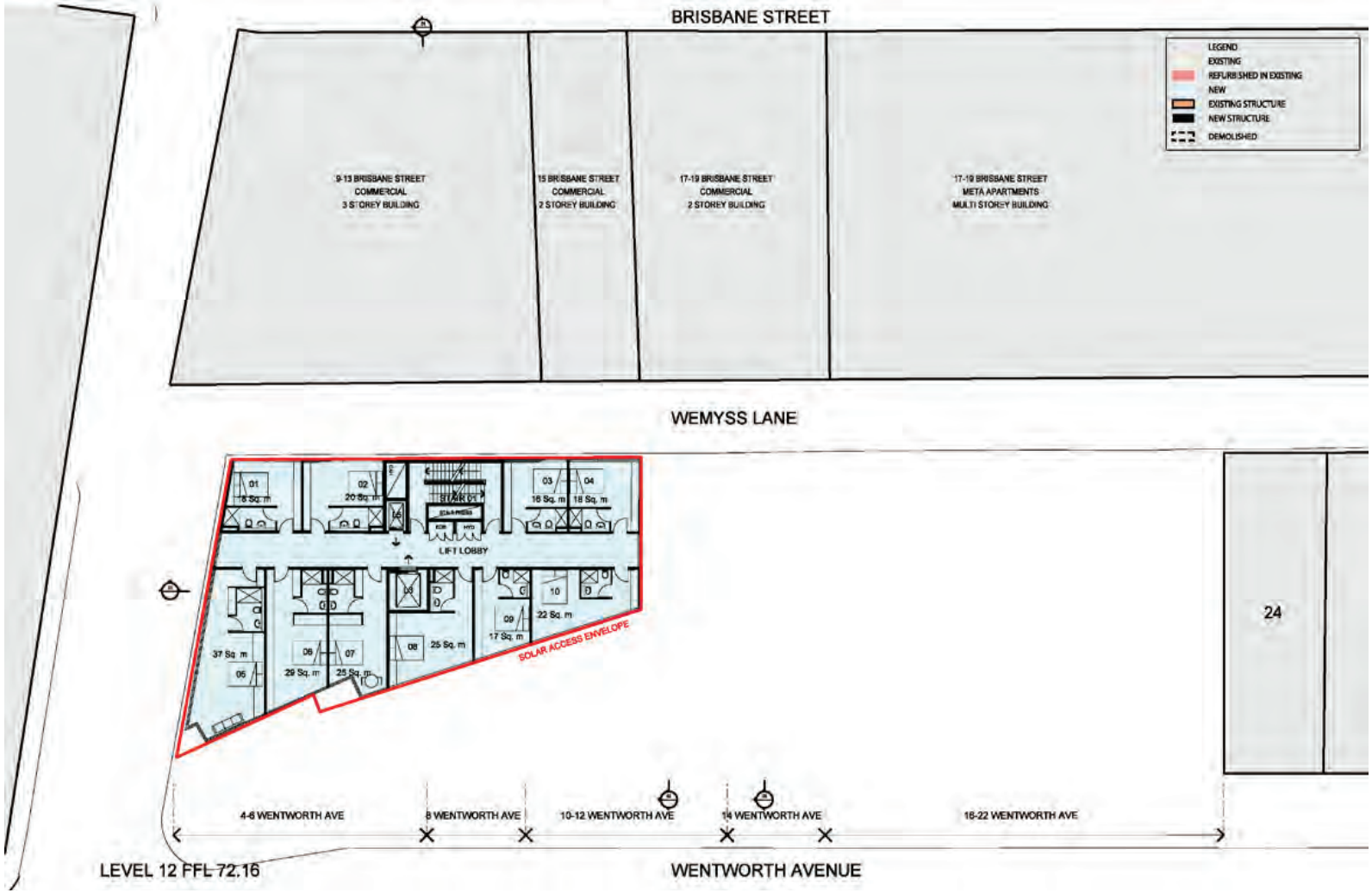
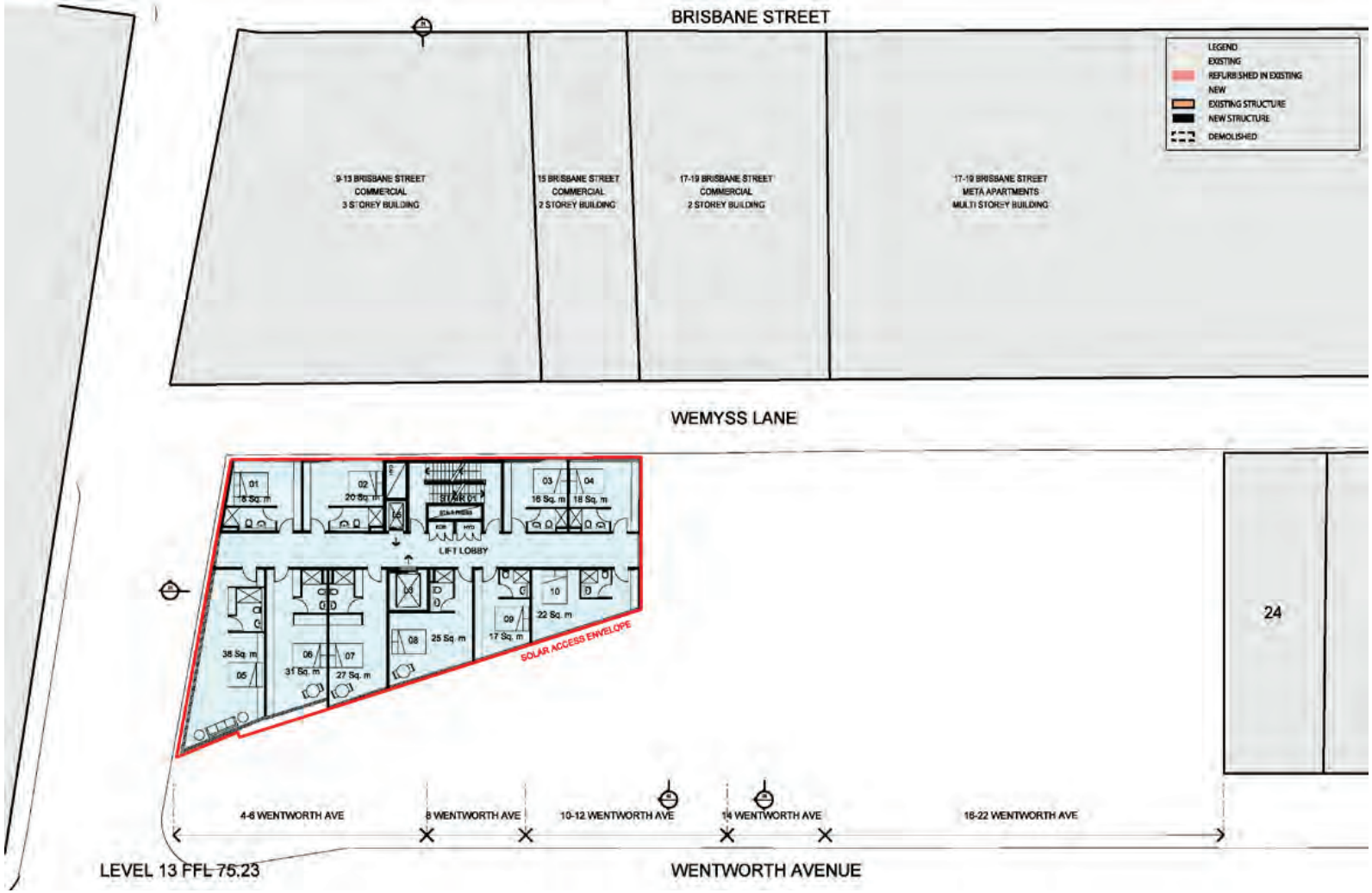
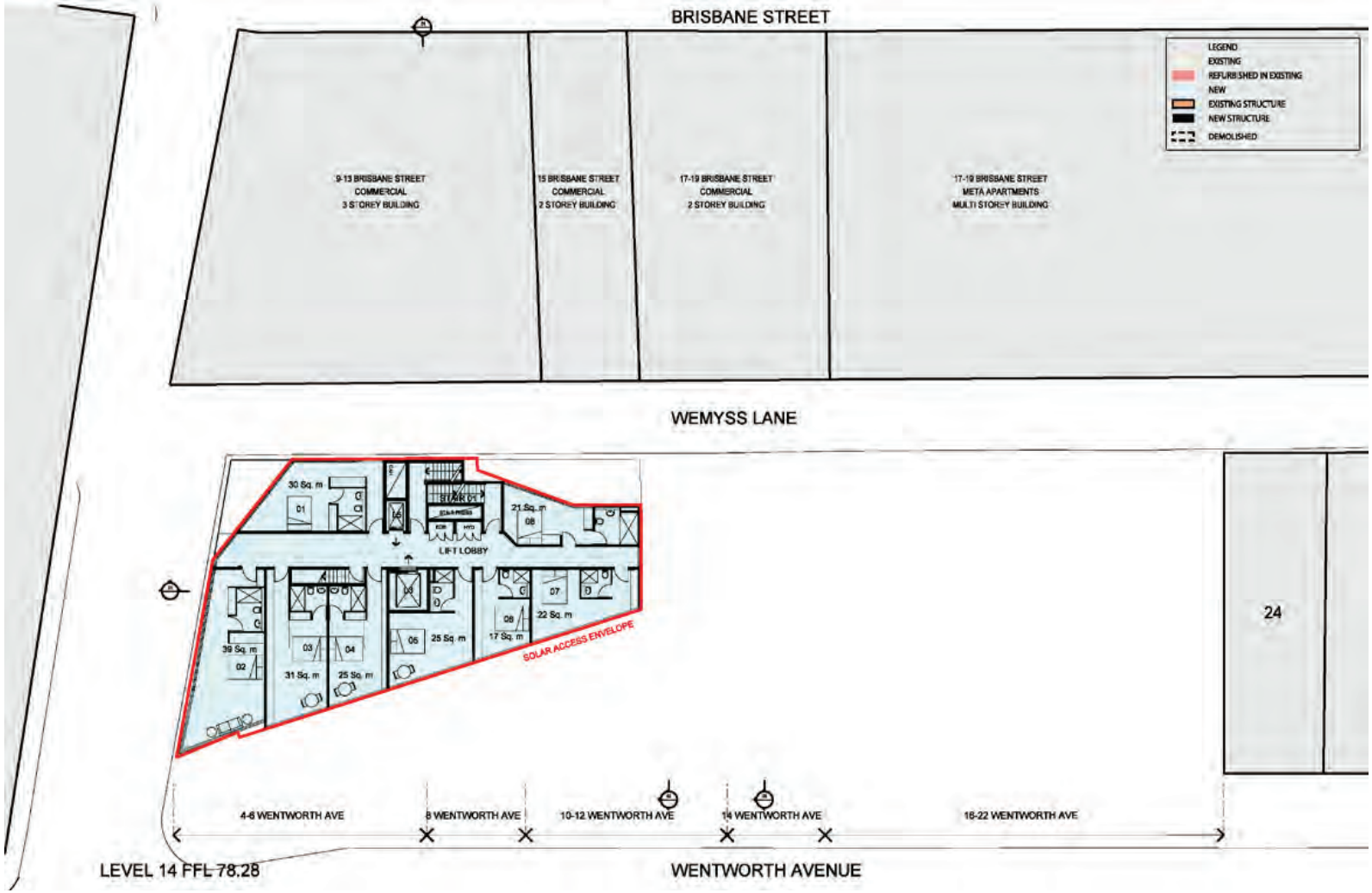
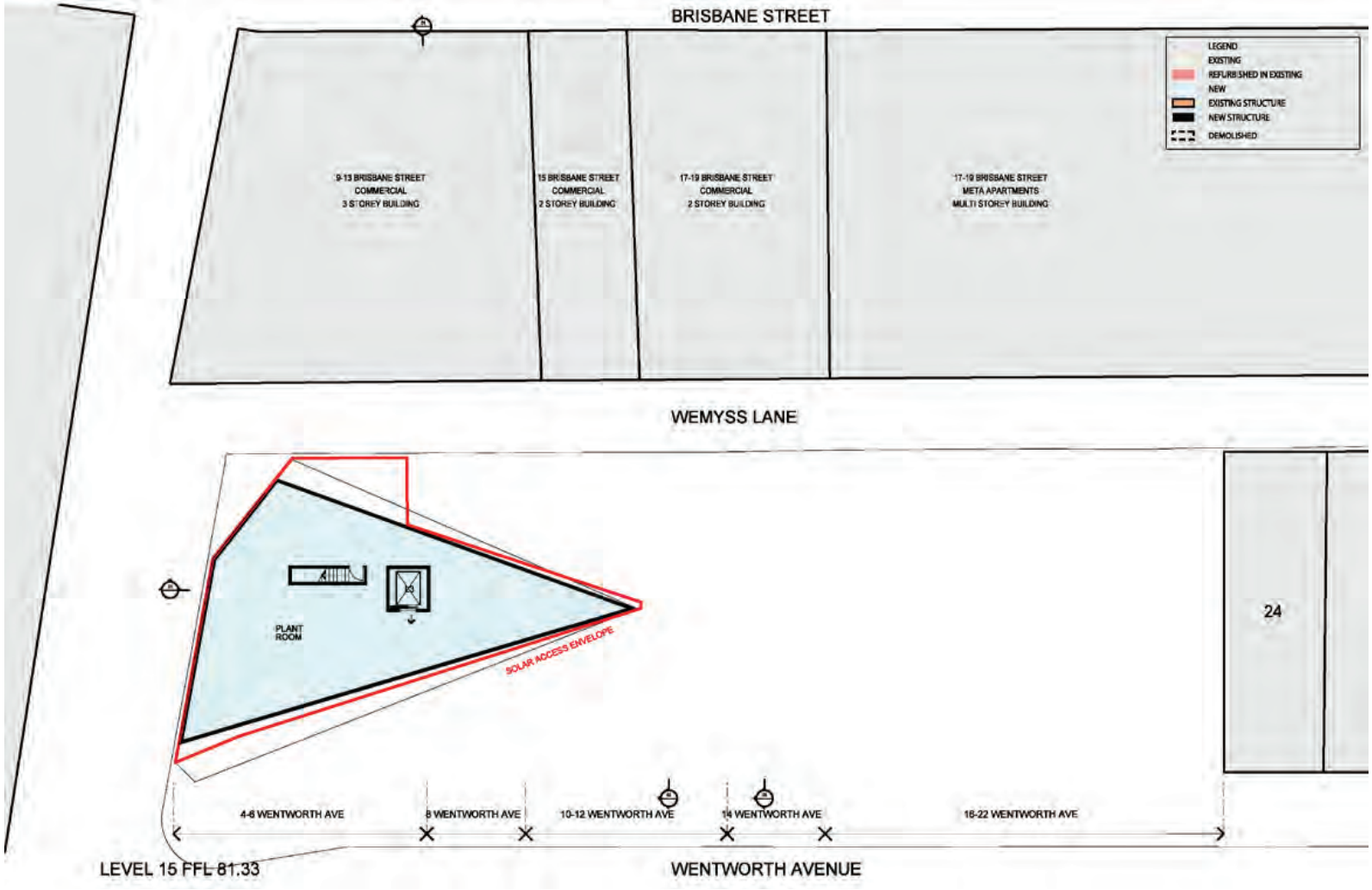
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
01
18 Sq. m
02
20 Sq. m
03
16 Sq. m
04
17 Sq. m
STAIRS
LIFT LOBBY
08
27 Sq. m
24 Sq. m
22 Sq. m
06
07
31 Sq. m
05
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 11 FFL 69.13
WENTWORTH AVENUE

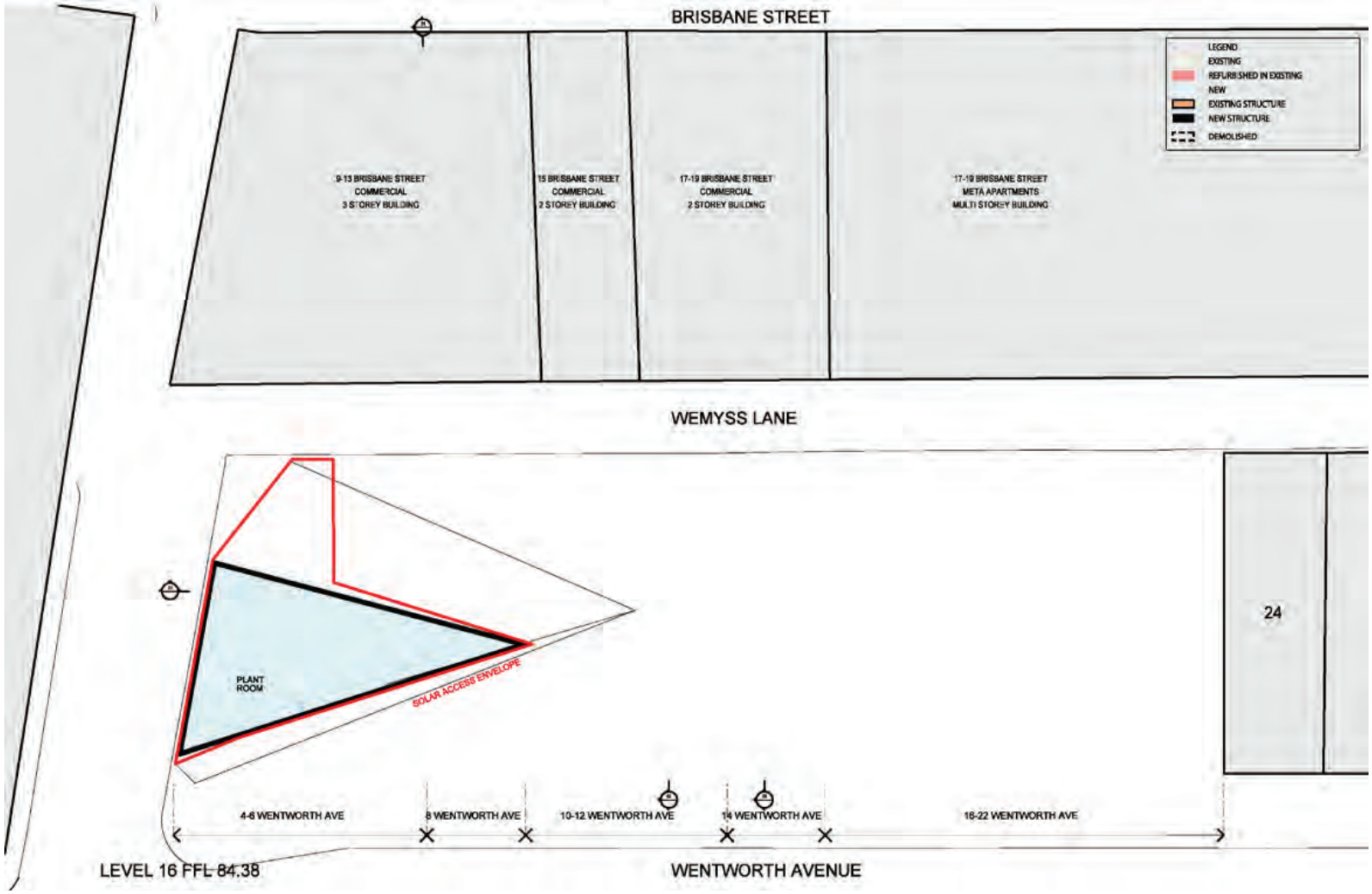
150


BRISBANE STREET
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
01
18 Sq. m
02
20 Sq. m
03
16 Sq. m
04
18 Sq. m
STAIRS
LIFT LOBBY
05
37 Sq. m
06
29 Sq. m
07
25 Sq. m
08
25 Sq. m
09
17 Sq. m
10
22 Sq. m
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 12 FFL 72.16
WENTWORTH AVENUE

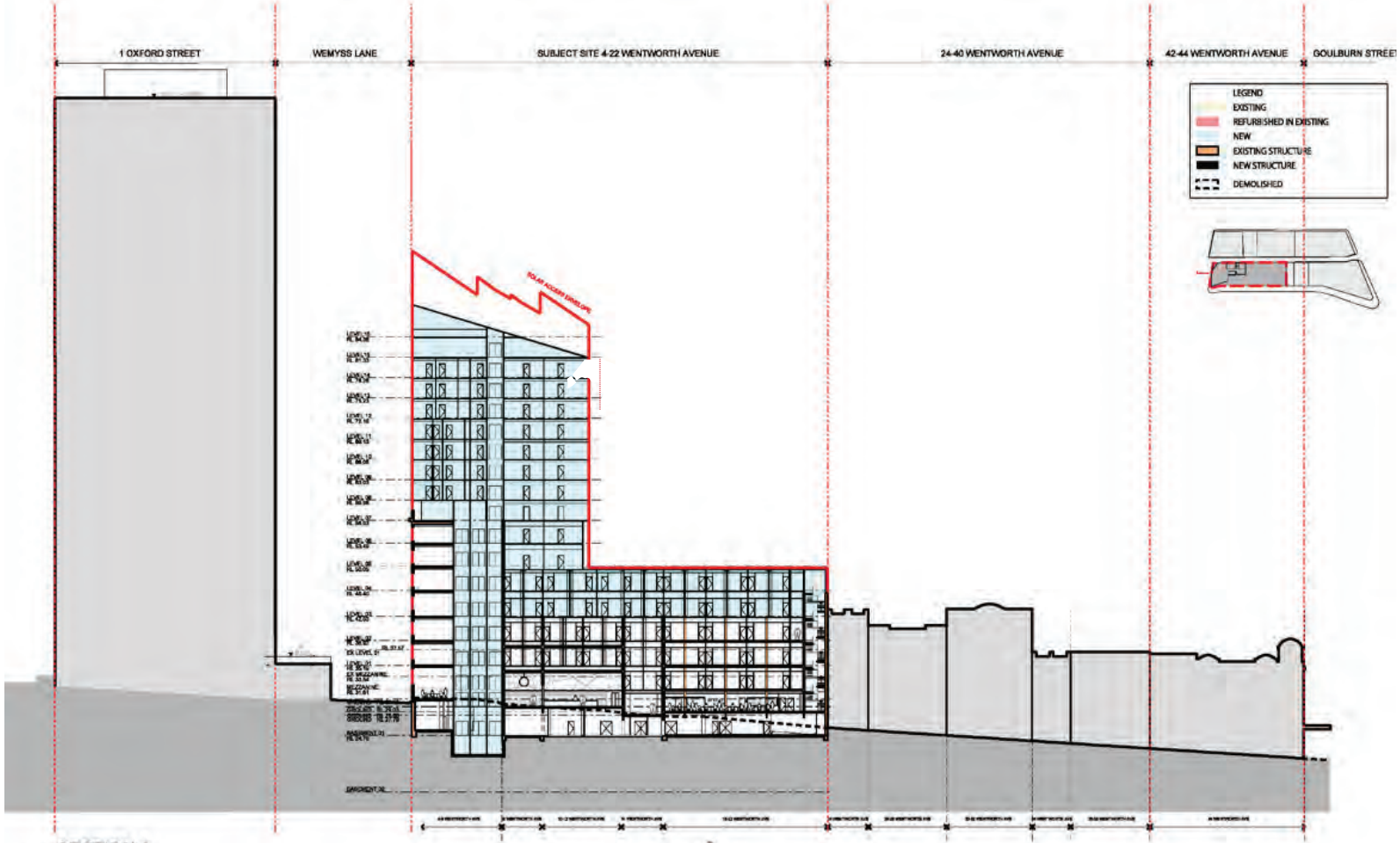

BRISBANE STREET
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
01
18 Sq. m
02
20 Sq. m
03
16 Sq. m
04
18 Sq. m
STAIRS
LIFT LOBBY
05
38 Sq. m
06
31 Sq. m
07
27 Sq. m
08
25 Sq. m
09
17 Sq. m
10
22 Sq. m
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 13 FFL 75.23
WENTWORTH AVENUE


BRISBANE STREET
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
30 Sq. m
01
21 Sq. m
08
LIFT LOBBY
07
22 Sq. m
08
17 Sq. m
05
25 Sq. m
39 Sq. m
02
03
04
31 Sq. m
25 Sq. m
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 14 FFL 78.28
WENTWORTH AVENUE

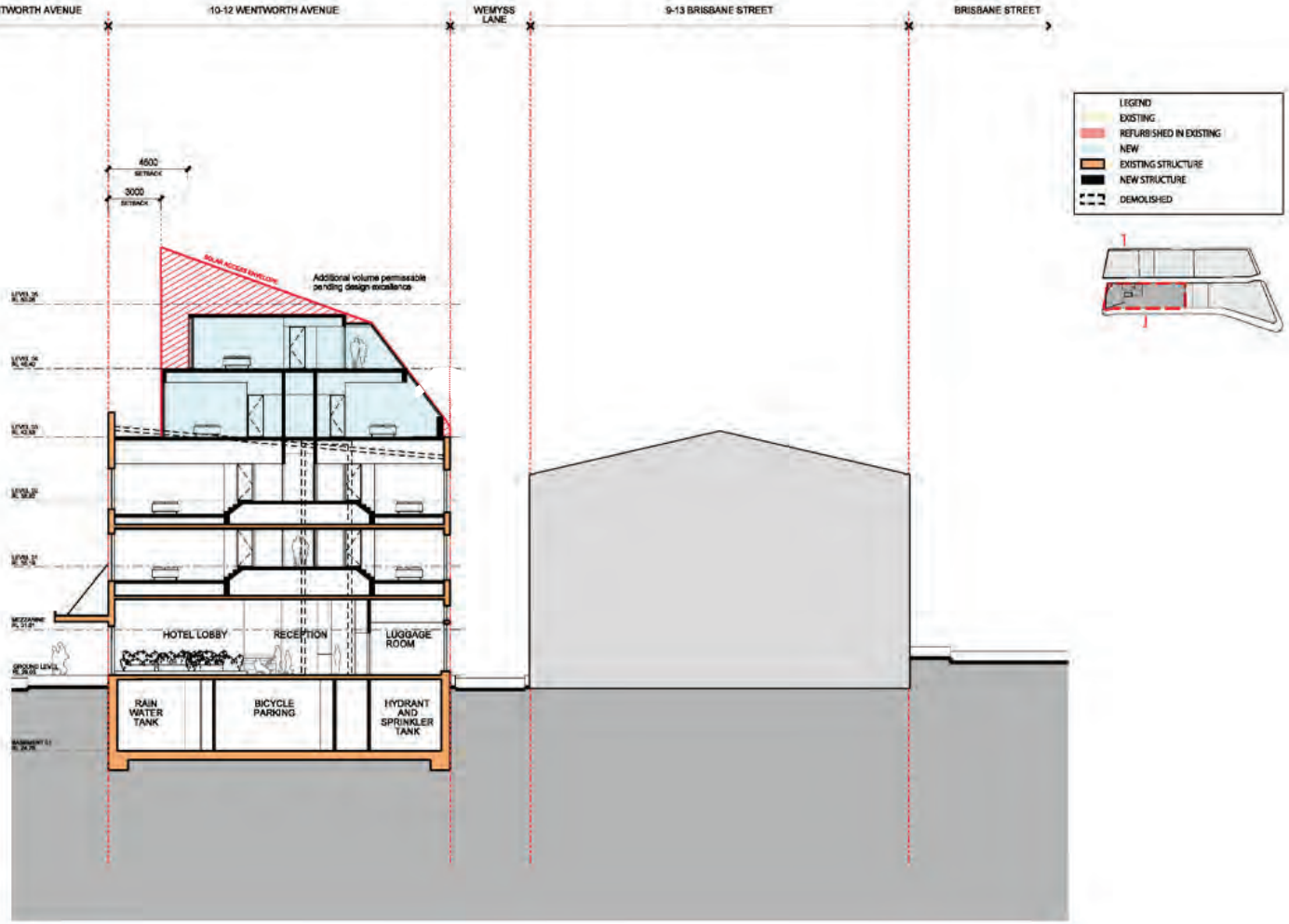

BRISBANE STREET
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
PLANT ROOM
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 15 FFL 81.33
WENTWORTH AVENUE


BRISBANE STREET
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED
9-13 BRISBANE STREET
COMMERCIAL
3 STOREY BUILDING
15 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
COMMERCIAL
2 STOREY BUILDING
17-19 BRISBANE STREET
META APARTMENTS
MULTI STOREY BUILDING
WEMYSS LANE
PLANT ROOM
SOLAR ACCESS ENVELOPE
24
4-6 WENTWORTH AVE
8 WENTWORTH AVE
10-12 WENTWORTH AVE
14 WENTWORTH AVE
16-22 WENTWORTH AVE
LEVEL 16 FFL 84.38
WENTWORTH AVENUE

155

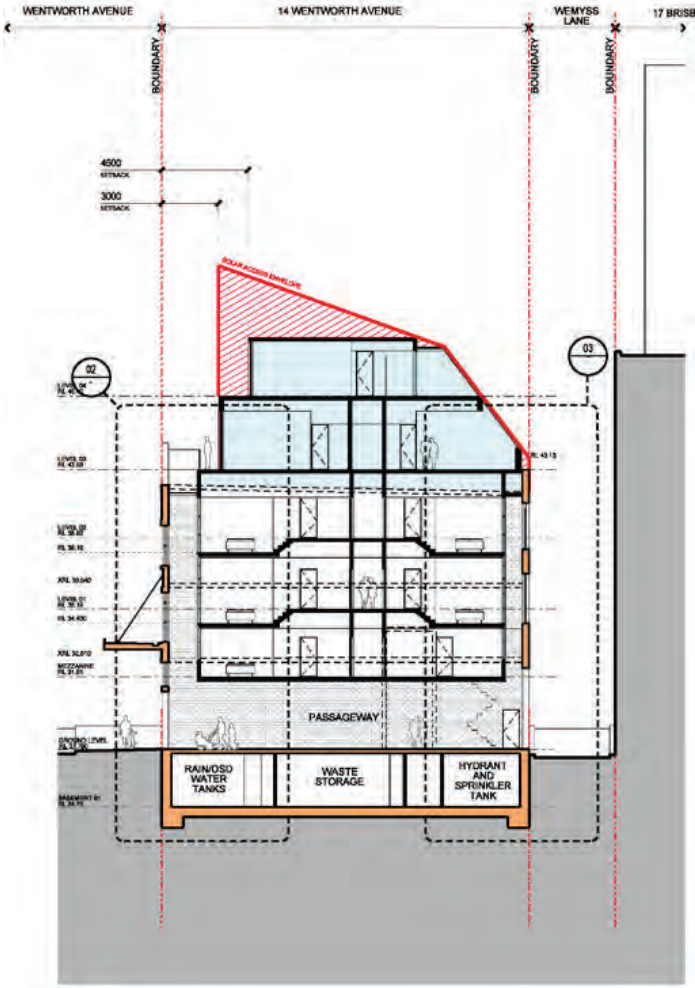


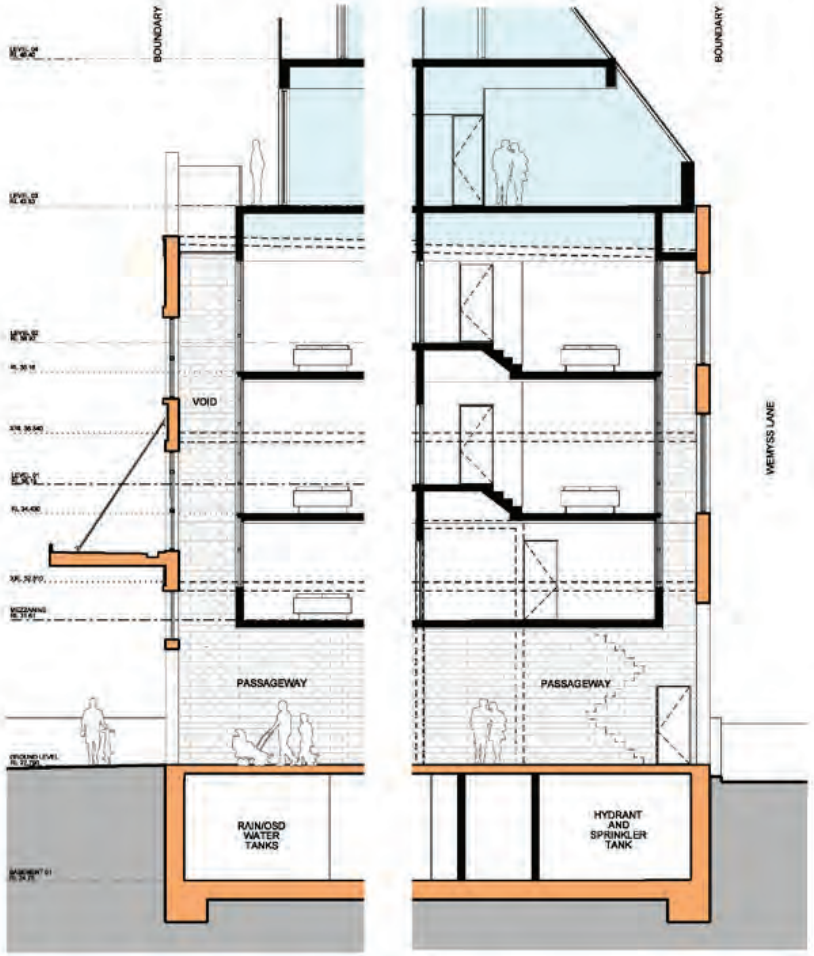
SECTION 1


WENTWORTH AVENUE
10-12 WENTWORTH AVENUE
WEMYSS LANE
9-13 BRISBANE STREET
BRISBANE STREET
4600
3000
Additional volume permissable pending design excellence
HOTEL LOBBY
RECEPTION
LUGGAGE ROOM
RAIN WATER TANK
BICYCLE PARKING
HYDRANT AND SPRINKLER TANK
LEGEND
EXISTING
REFURBISHED IN EXISTING
NEW
EXISTING STRUCTURE
NEW STRUCTURE
DEMOLISHED

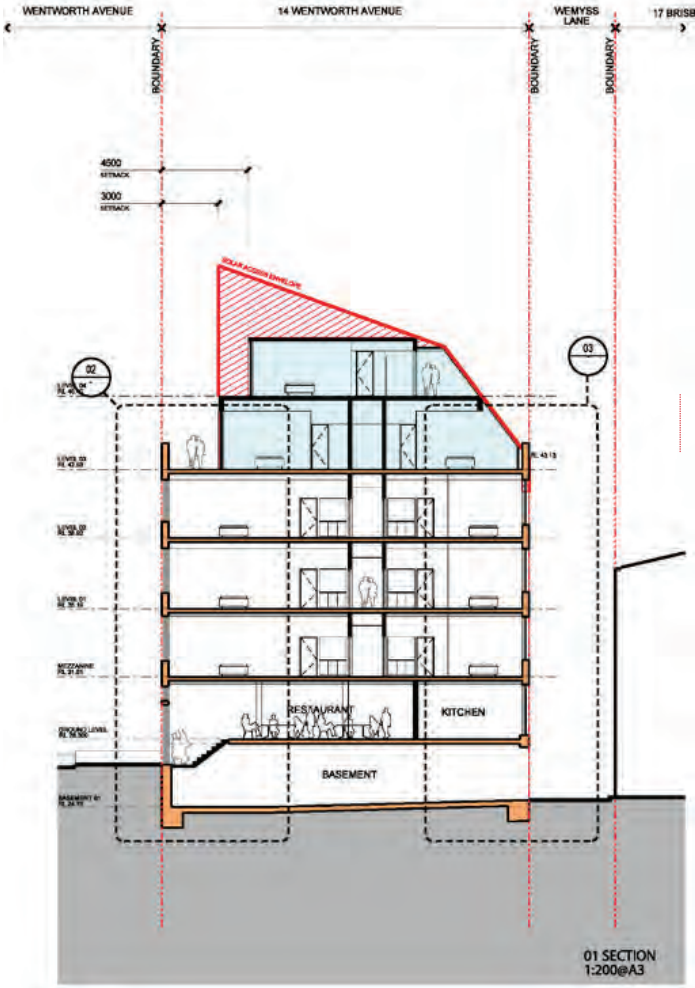
SECTION 2

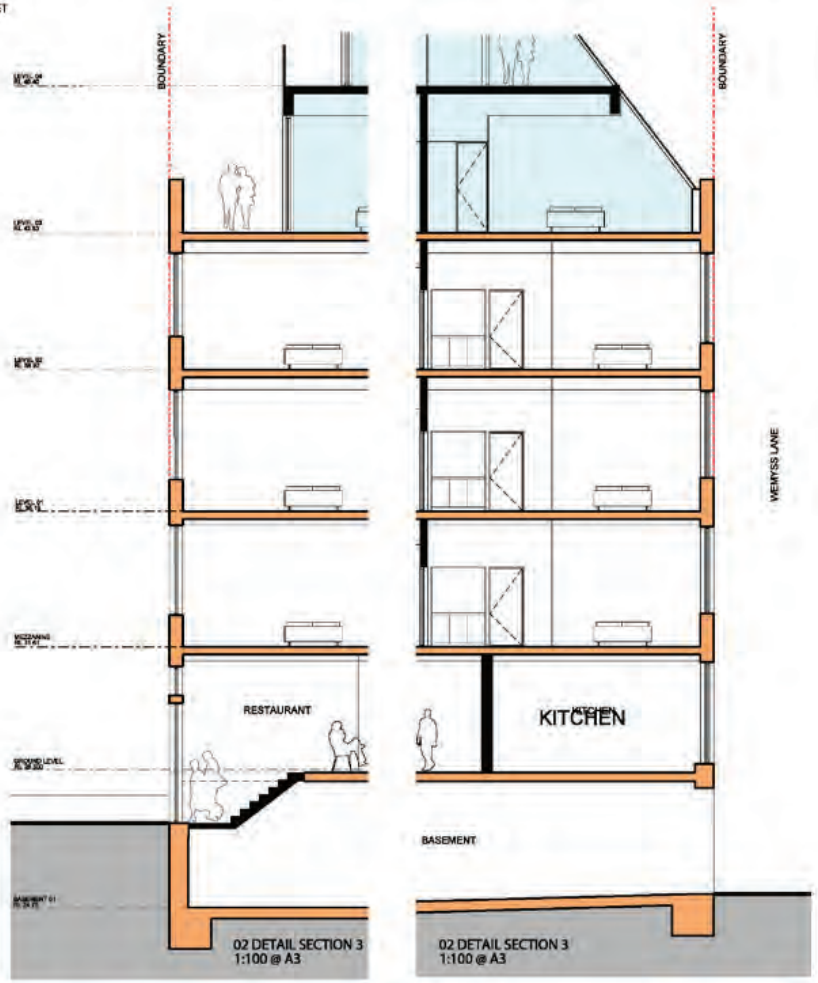
157

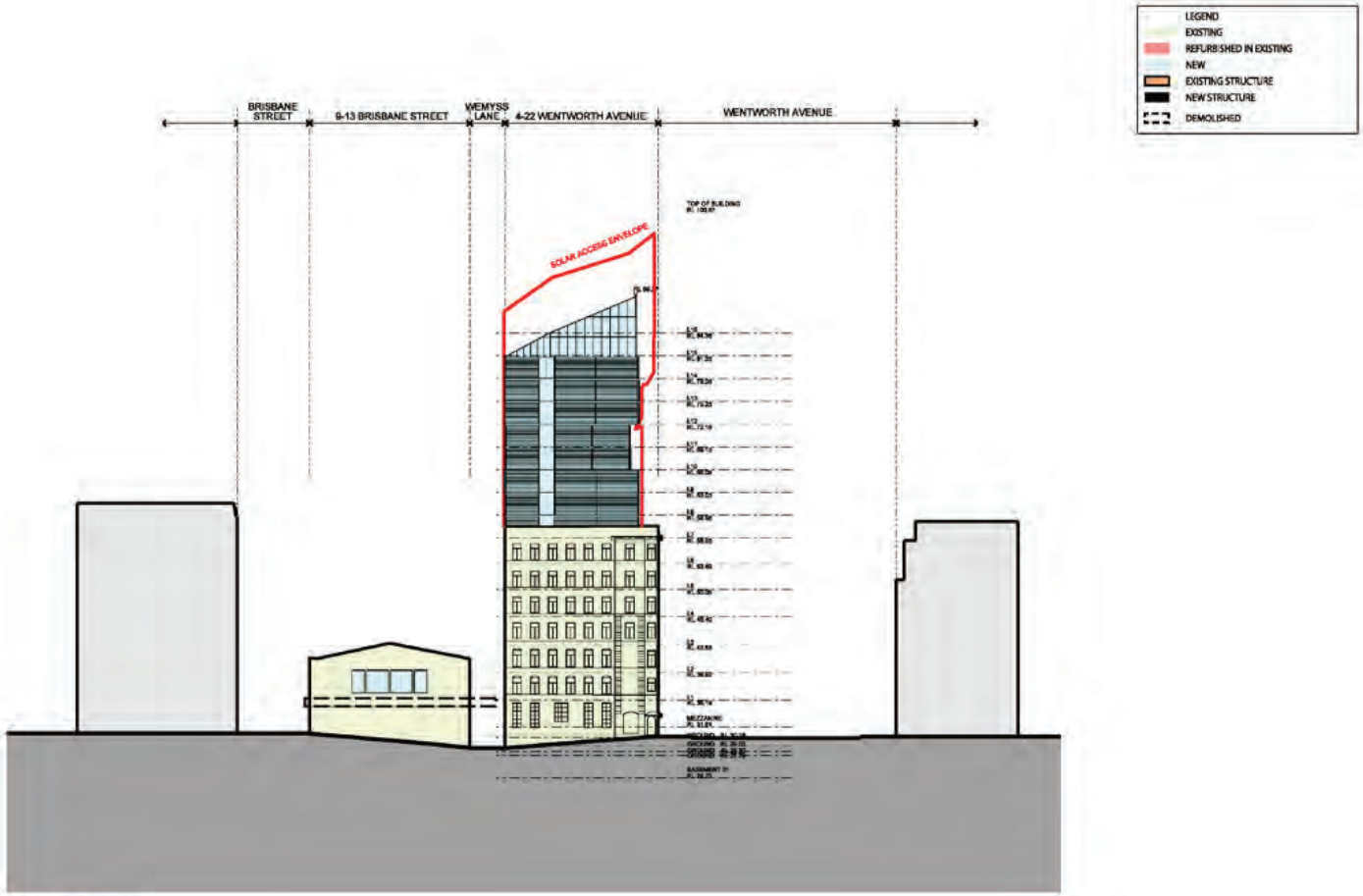

WENTWORTH AVENUE
14 WENTWORTH AVENUE
WEMYSS LANE
17 BRISBANE STREET
BOUNDARY
BOUNDARY
BOUNDARY
4500
SETBACK
3000
SETBACK
SOLAR ACCESS ENVELOPE
02
03
PASSAGEWAY
RAIN/OSD WATER TANKS
WASTE STORAGE
HYDRANT AND SPRINKLER TANK


BOUNDARY
BOUNDARY
VOID
PASSAGEWAY
PASSAGEWAY
RAIN/OSD WATER TANKS
HYDRANT AND SPRINKLER TANK
WEMYSS LANE

158

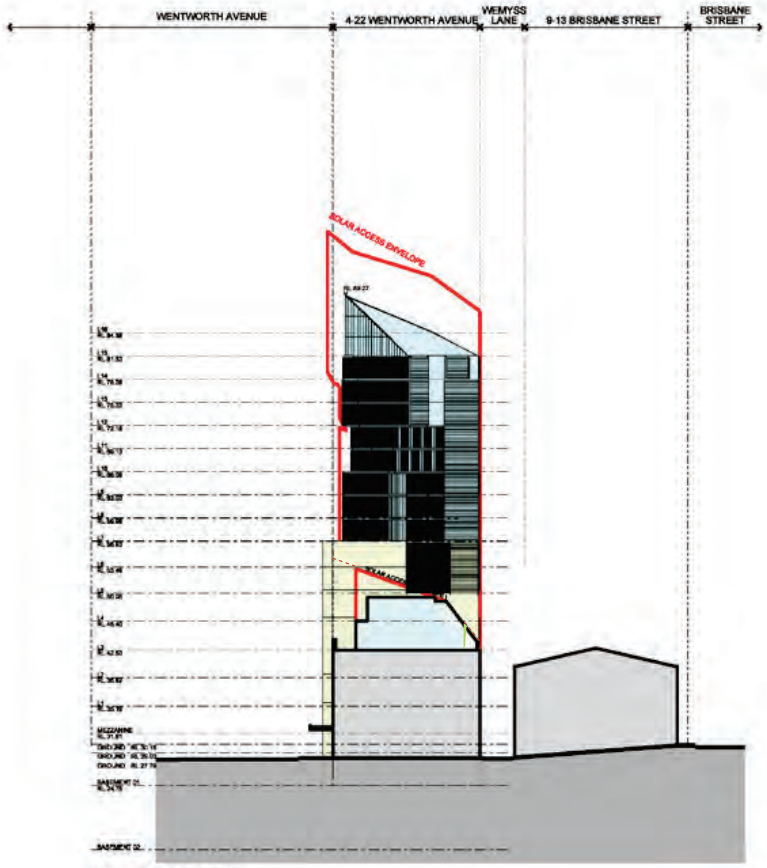

WENTWORTH AVENUE
14 WENTWORTH AVENUE
WEMYSS LANE
17 BRISBANE STREET
BOUNDARY
BOUNDARY
BOUNDARY
4500
SETBACK
3000
SETBACK
02
03
RESTAURANT
KITCHEN
BASEMENT
01 SECTION
1:200@A3


BOUNDARY
BOUNDARY
WEMYSS LANE
RESTAURANT
KITCHEN
BASEMENT
02 DETAIL SECTION 3
1:100 @ A3
02 DETAIL SECTION 3
1:100 @ A3



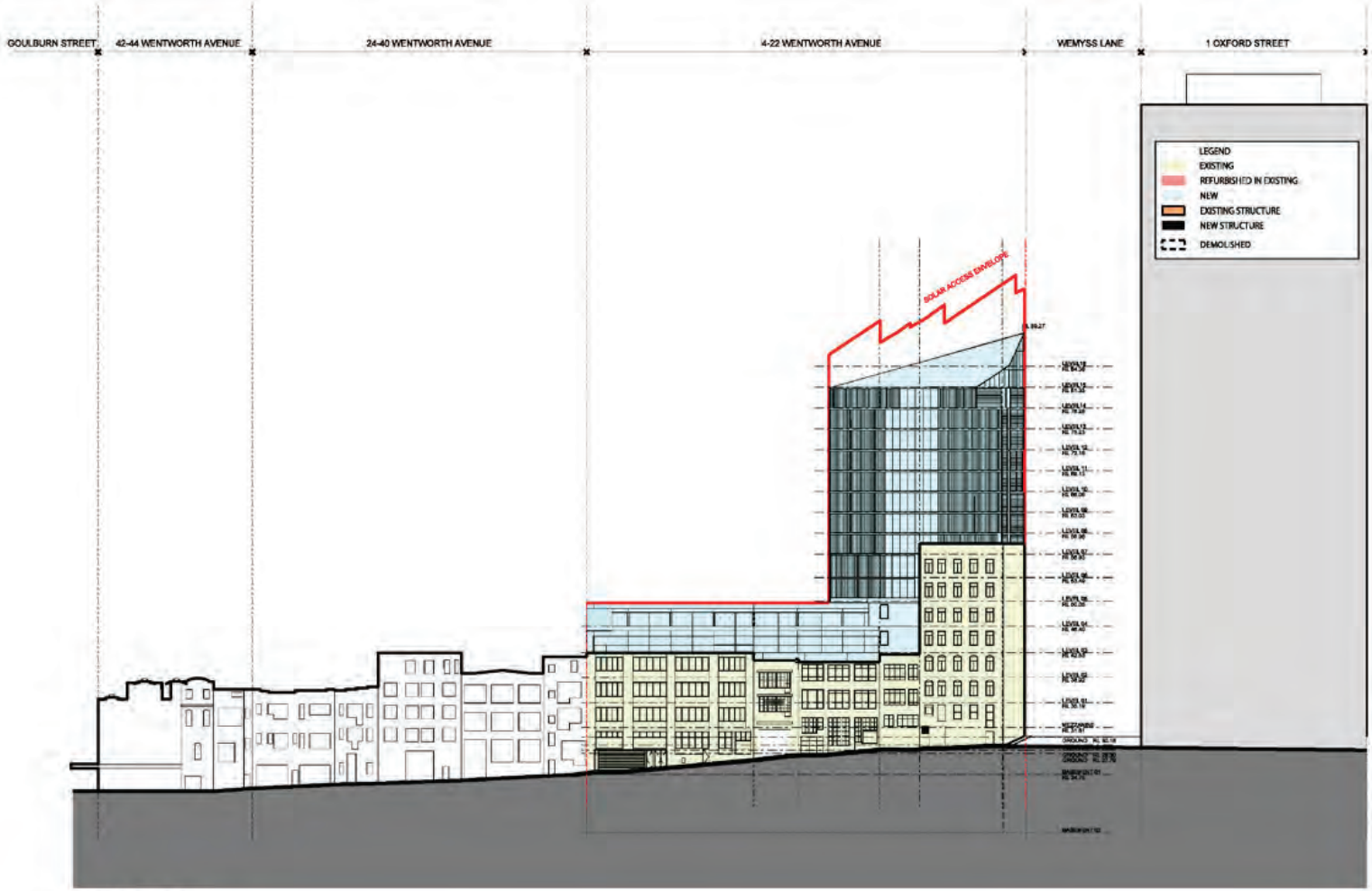
NORTH ELEVATION

159



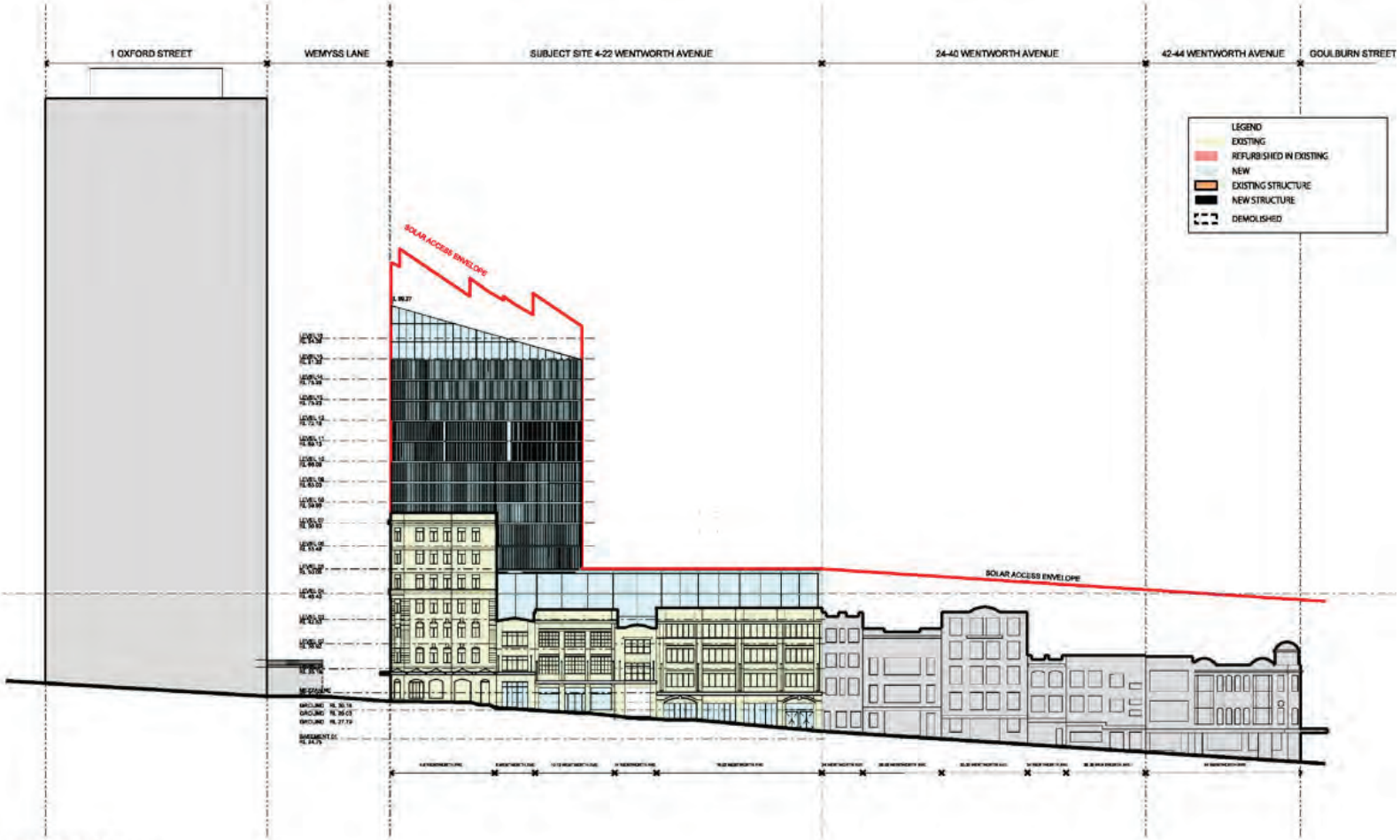
SOUTH ELEVATION

160



EAST ELEVATION

161



WEST ELEVATION

6.2

Computer Generated Images

163

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.

7.1

Area Analysis

The proposed fsr is based on the gross floor area measurements of the existing building and proposed new envelope. GFA has been measured in accordance with the LEP 2012 as follows:

Internal face of external wall or from internal face of walls separating the building from any other building, measured 1.4 metres above floor level including:
- mezzanines
- habitable rooms in basement or attic
- shops, auditoria, cinema in a basement or attic

but excluding:
- common vertical circulation - lifts and stairs
- basements
- storage areas
- vehicular access, loading, garbage and service areas
- car parking and areas for loading/unloading of goods
- plant rooms, lift towers, mechanical services and ducts
- terraces/balconies with outer walls less than 1.4 metres
- voids above floors at the level of a storey or storey above

4-22 WENTWORTH AVE - FSR CALCULATION ENVELOPE : Proposed Scheme Areas

Notes:
Gross Plan Area -15% reduction for Services and Vertical Transport and Façade System

	4-6 Wentworth Ave		8-Wentworth Ave		10-12 Wentworth Ave		14 Wentworth Ave		16-22 Wentworth Ave		Totals	
GFA (SQM)	Existing	New	Existing	New	Existing	New	Existing*	New	Existing	New	Existing	New
Site area	272.60	272.60	115.10	115.10	238.00	238.00	119.30	119.30	473.60	473.60	1219	1219
B1	191	0	0	0	0	0	0	0	0	0	191	
G	220	231	92	98	212	202	101	101	345	403	970	1035
MEZZ		77		33		75	101	101	383	403	484	689
L1	230	233	95	95	205	202	101	101	383	403	1014	1034
L2	230	233	95	95	205	202	101	101	383	403	1014	1034
L3	230	233	30	80	0	179	0	86	0	341	260	919
L4	230	233	0	72	0	147	0	69	0	275	230	796
L5	230	233	0	41	0	32					230	306
L6	230	233	0	41	0	32					230	306
L7	0	156	0	43	0	37					0	236
L8	0	170	0	43	0	37					0	250
L9	0	162	0	43	0	40					0	245
L10	0	154	0	50	0	42						246
L11	0	156	0	52	0	42						250
L12	0	173	0	63	0	62						298
L13	0	180	0	63	0	62						305
L14	0	171	0	60	0	46						277
L15	0	143	0	32	0	13						188
L16	0	95	0	10								105
L17	0	9										9
TOTAL GFA	**1791**	**3275**	**312**	**1014**	**622**	**1452**	**404**	**559**	**1494**	**2228**	**4623**	**8528**
FSR EXISTING	**6.57**		**2.71**		**2.61**		**3.39**		**3.15**			
FSR NEW		**12.01**		**8.81**		**6.10**		**4.69**		**4.70**		
TOTAL SITE AREA SQM	**1219**											
TOTAL EXISTING GFA	**4623**											
MAXIMUM AVAILABLE GFA	**8528**											
FSR	**7.00**											