Attachment A2

Urban Design Report - Part 4

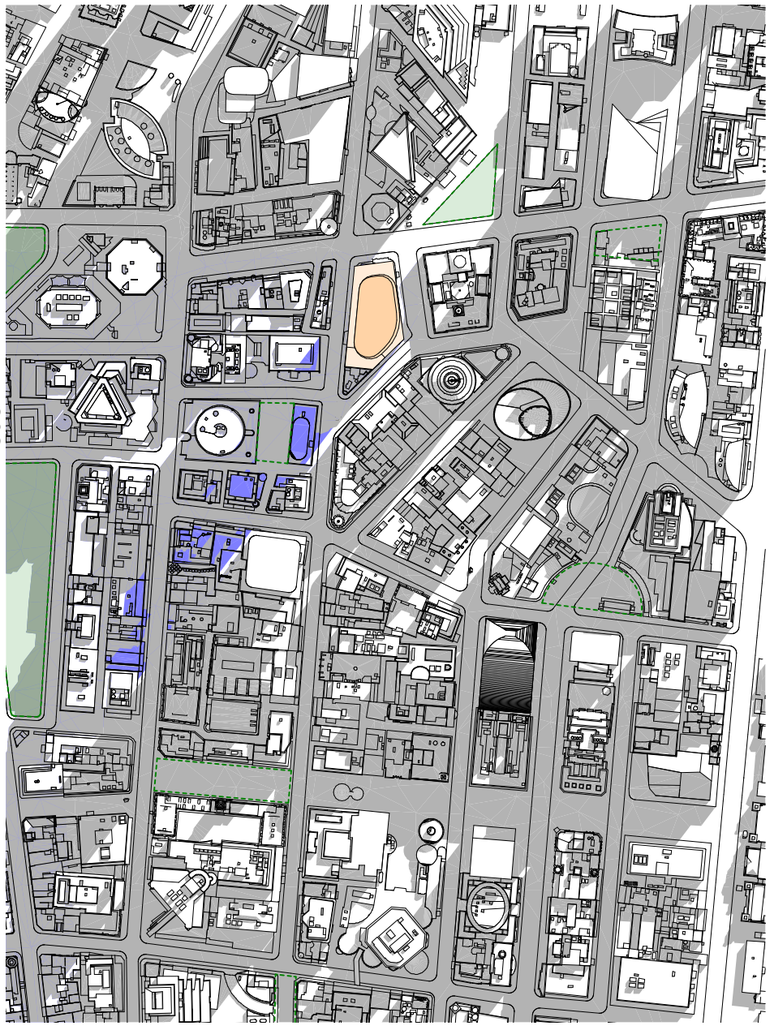
31 August 10am, 12pm and 2pm

Existing shadow

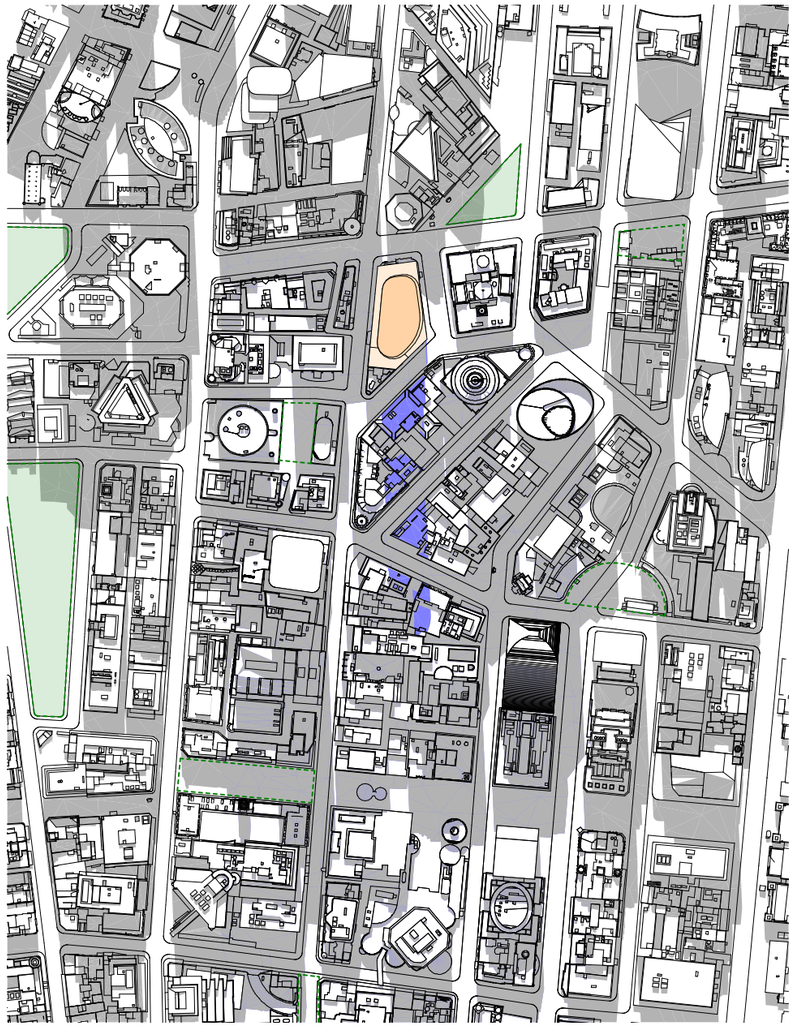
Additional shadow

Locations requiring no additional overshadowing as per the current and form LEP Controls (under CSPS)

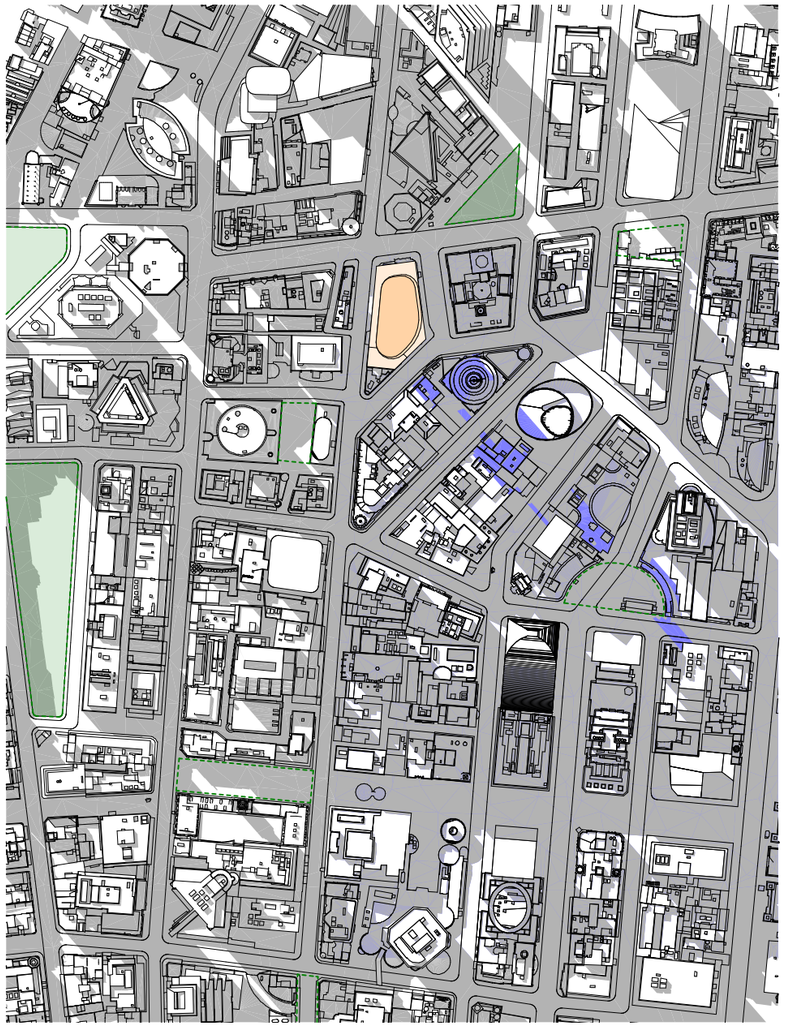
-Australia Square, Chifley Square, Martin Place West Pitt St Mall



August 31 10:00



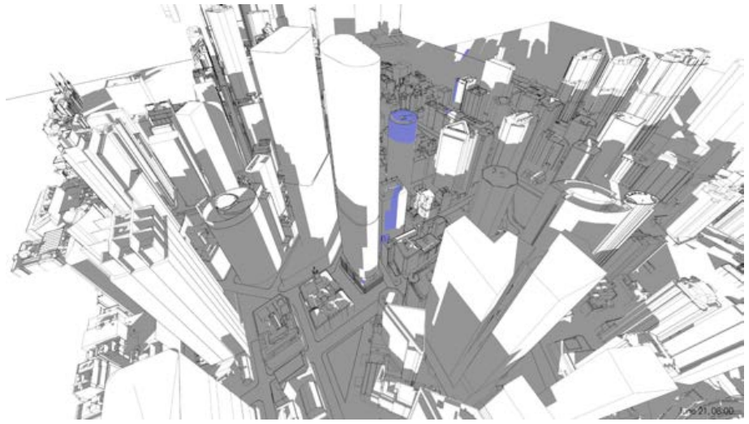
August 31 12:00



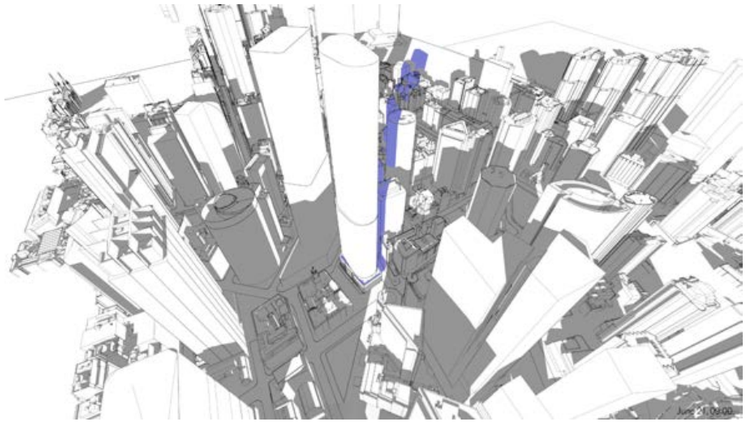
August 14 14:00

Solar access - Adjacent Heritage Façades

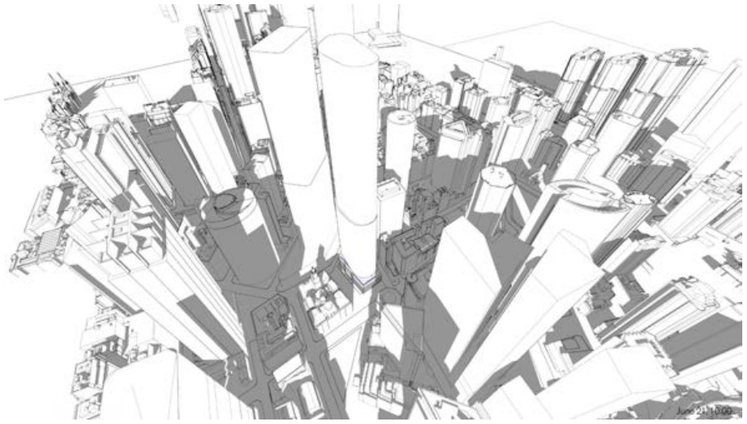
The DAP queried the shadow impact of Pitt and Bridge on adjacent heritage facades. The following study shows that there is no additional overshadowing of these adjacent heritage sandstone facades.



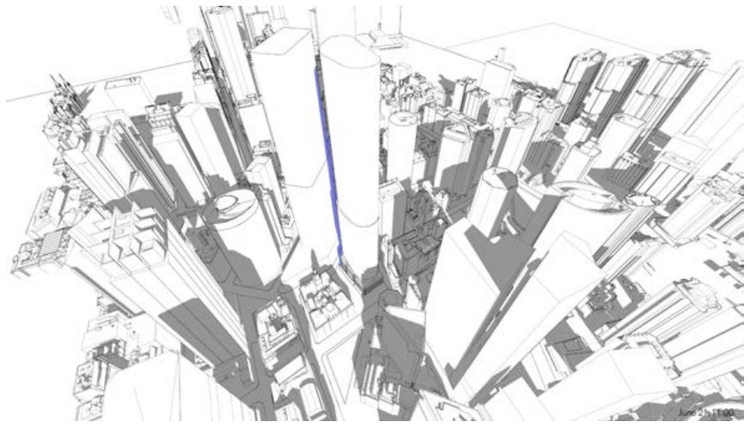
8 am



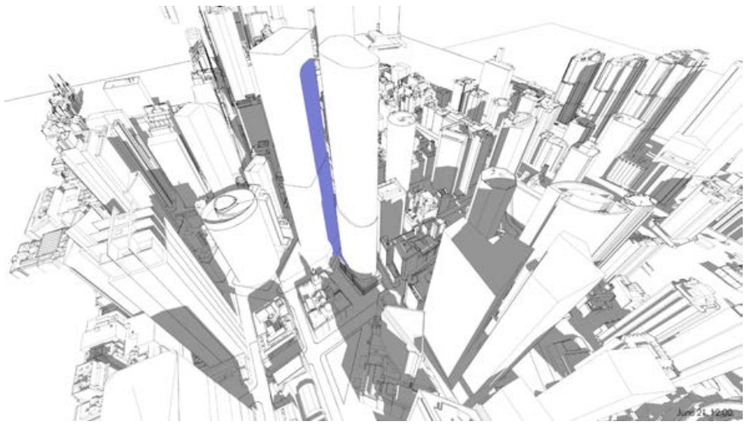
9 am



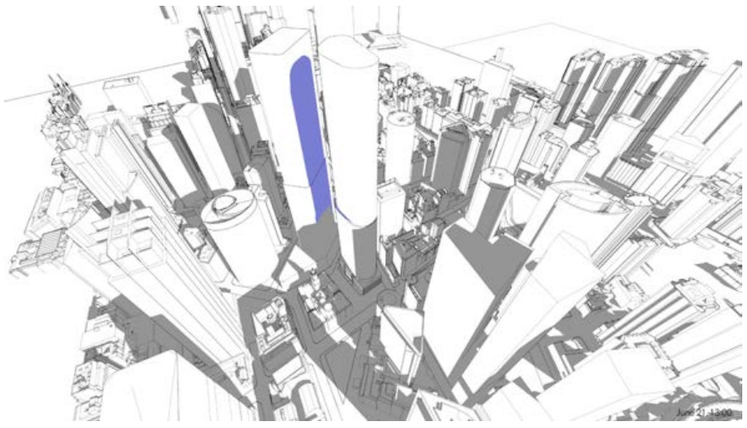
10 am



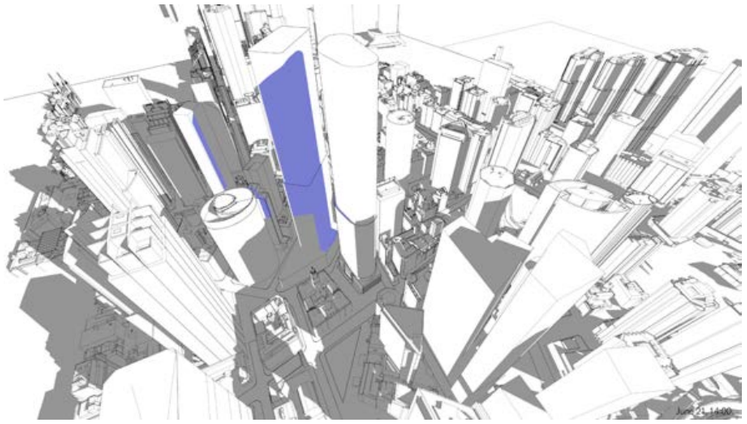
11 am



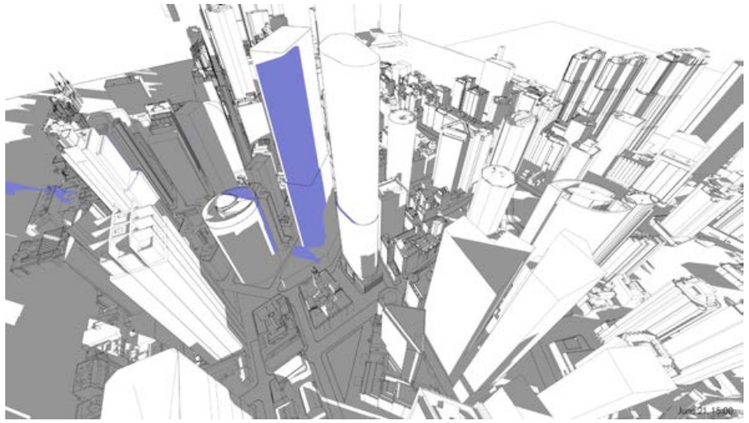
12 pm



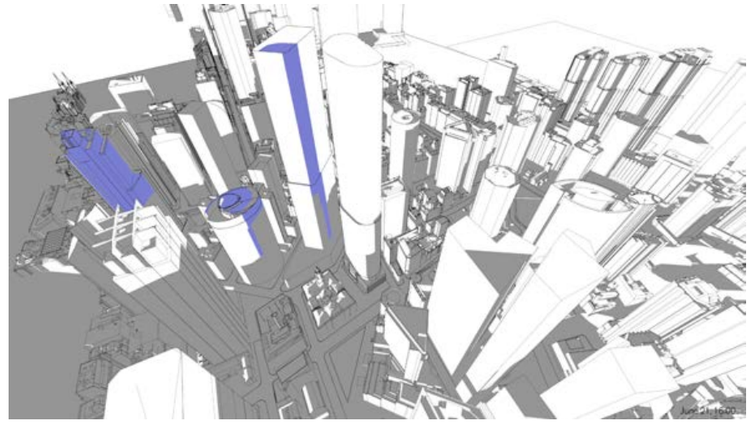
1 pm



2 pm



3 pm



4 pm

Solar access - Residential impact

Analysis

A sun-eye analysis was conducted to assess if the proposed envelope impacts solar access to surrounding residential receivers between 9:00am and 3:00pm on 21 June.

— The existing residential development north of the site will be unaffected by shadow cast by the proposed envelope at any time;
— The existing residential development west of the site is unaffected by shadow cast by the proposed envelope at 9:00am and throughout the remainder of the day;
— The existing residential development east of the site is unaffected by shadow cast by the proposed envelope at any time; and
— The proposed envelope does cast shadow on the existing residential development directly south of the site at 12:00pm.

Affected residential development to the south / south/west.

The following pages investigate key residential properties that would be affected by shadows cast by the proposed development south of the site. It was determined that the nature and orientation of specific residential properties meant that they were unlikely to be adversely affected by the proposed development of 56 Pitt St.

1 161 Clarence Street
2 57 York Street
3 1 Hosking Place
4 16 O'Connell Street
5 4 Bridge Street
6 254 George Street
7 2 York Street
8 5 York Street
9 104 Clarence St

1 161 Clarence Street

Arc by Crown development - residential with East and West facing apartments.

2 57 York Street

Residential building with East and West facing apartments

3 1 Hosking Place

Predominantly short-stay apartments managed by Adina. South and West facing apartments not impacted by proposed development

4 16 O'Connell Street

Two residential apartments have been created in an otherwise Commercial strata building

Living Spaces in the sub-penthouse and penthouse face South & East and would not be affected by development to the North-west..

N 1602/161 Clarence St

N 2805/161 Clarence St

N 1808/161 Clarence St

N 7/57 York St

N 32/57 York St

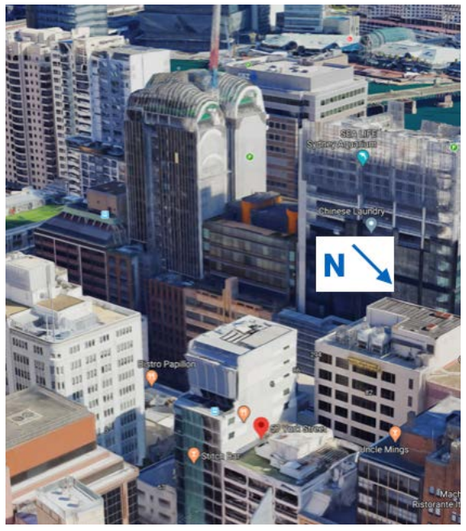
N 3/57 York St

N 2707/1-5 Hosking Place

N 806/1 Hosking Place

N 17/16 O'Connell St
Penthouse

N 16/16 O'Connell St
Sub-penthouse



161 Clarence Street typical floor plans

57 York Street typical floor plans

1 Hosking Place typical floor plans

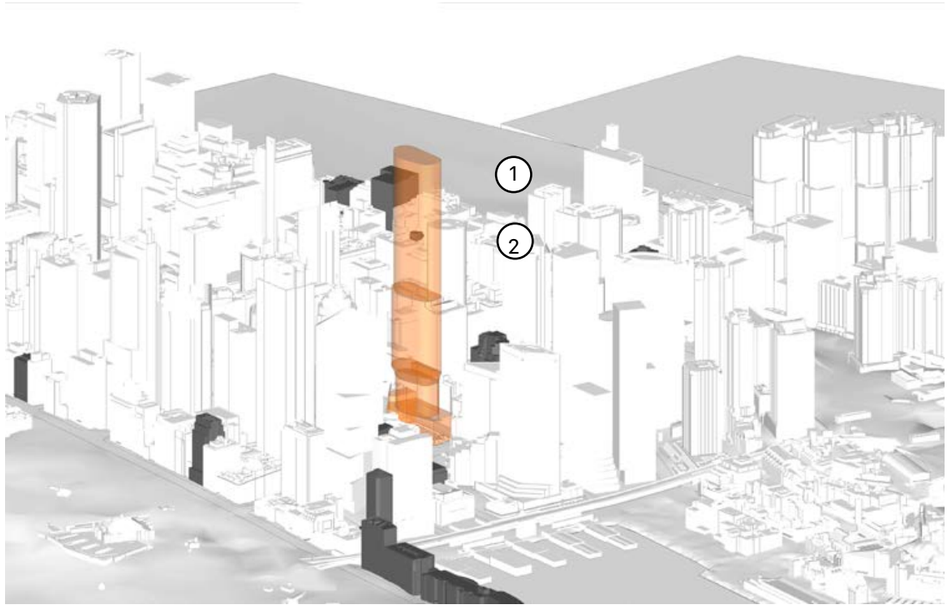
16 O'Connell Street typical floor plans

Solar access - (Sun Eye Diagrams)

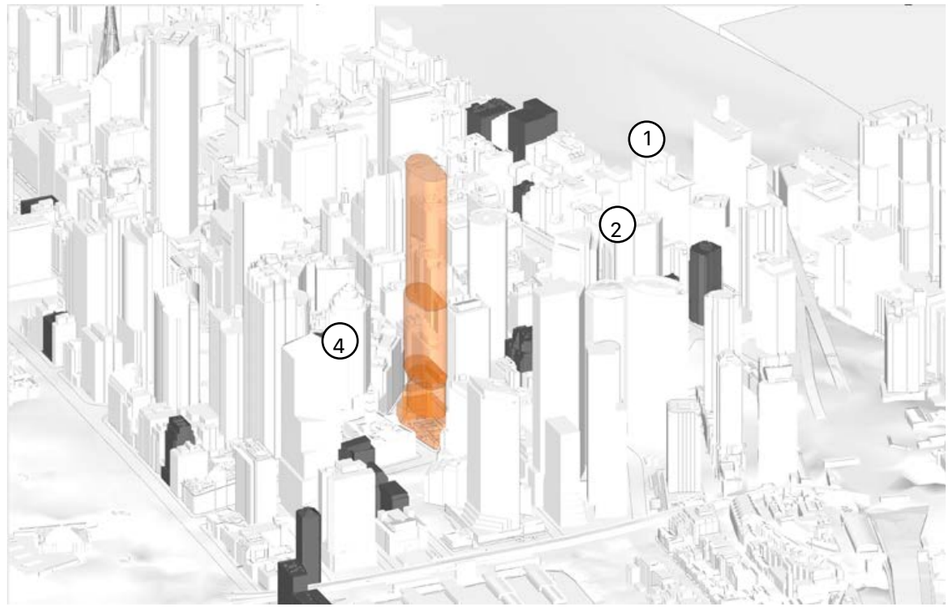
Existing building with residential use

Proposed Envelope

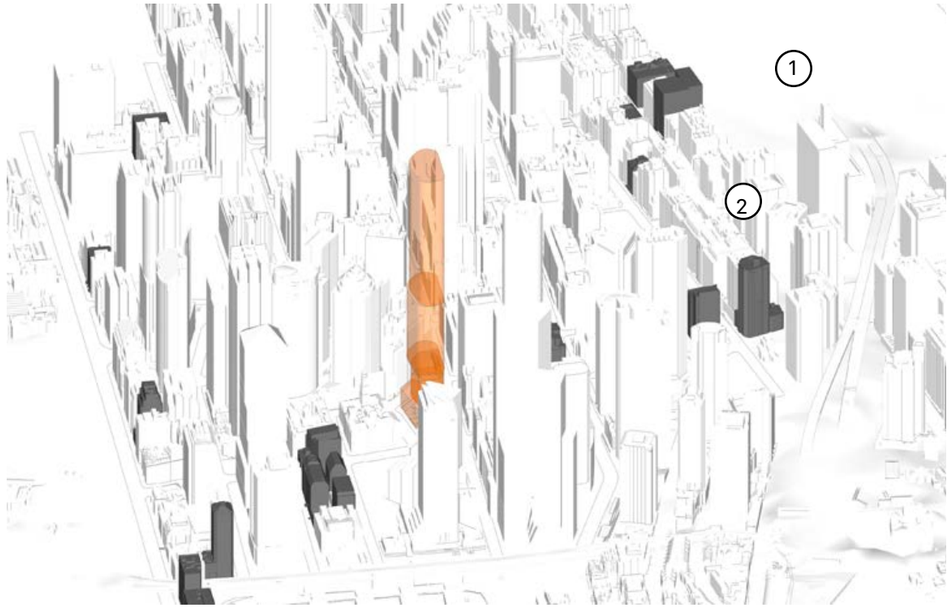
1. 161 Clarence Street
2. 57 York Street
3. 1 Hosking Place
4. 16 O'Connell Street



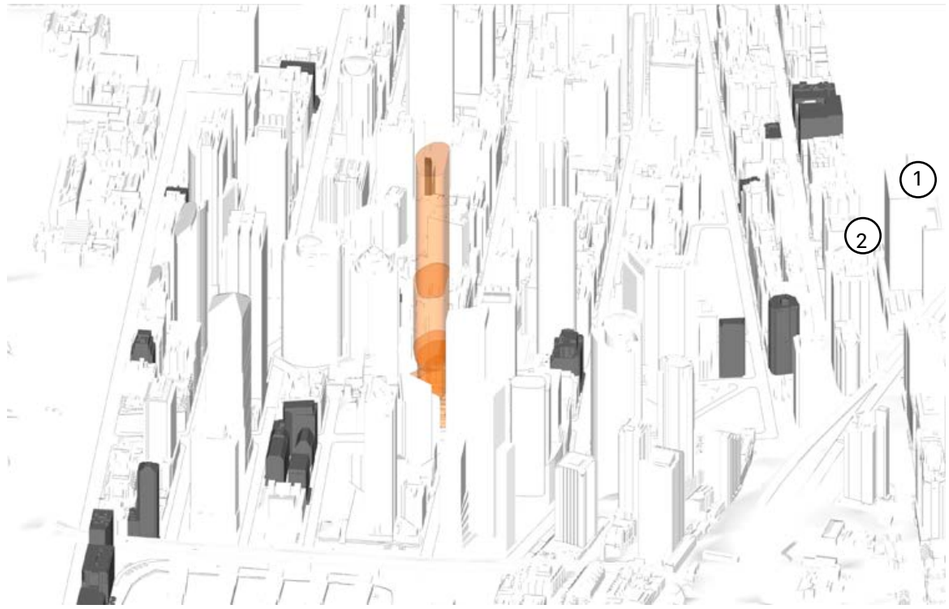
21 June 9am



21 June 10am



21 June 11am



21 June 12pm

Existing building with residential use

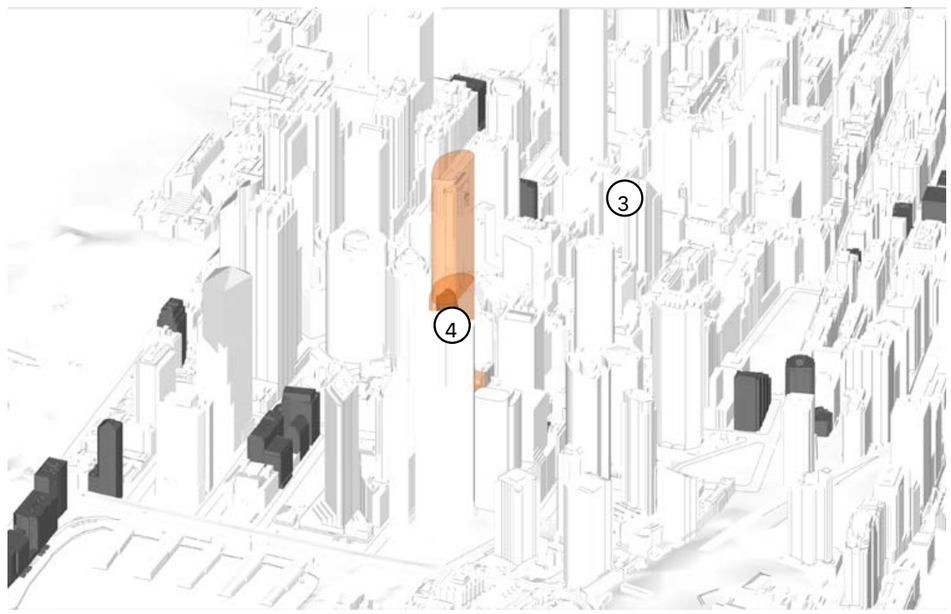
Proposed Envelope

1 161 Clarence Street

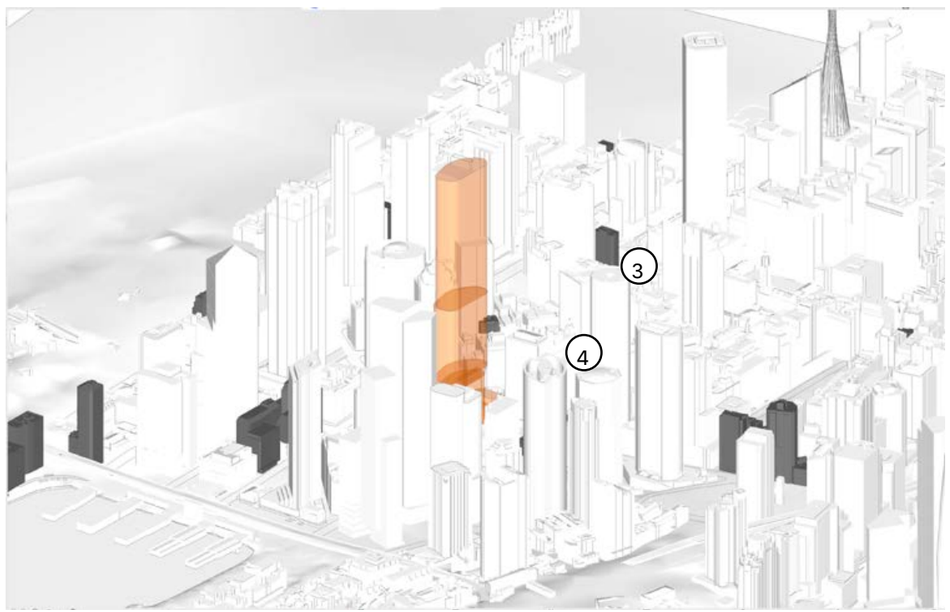
2 57 York Street

3 1 Hosking Place

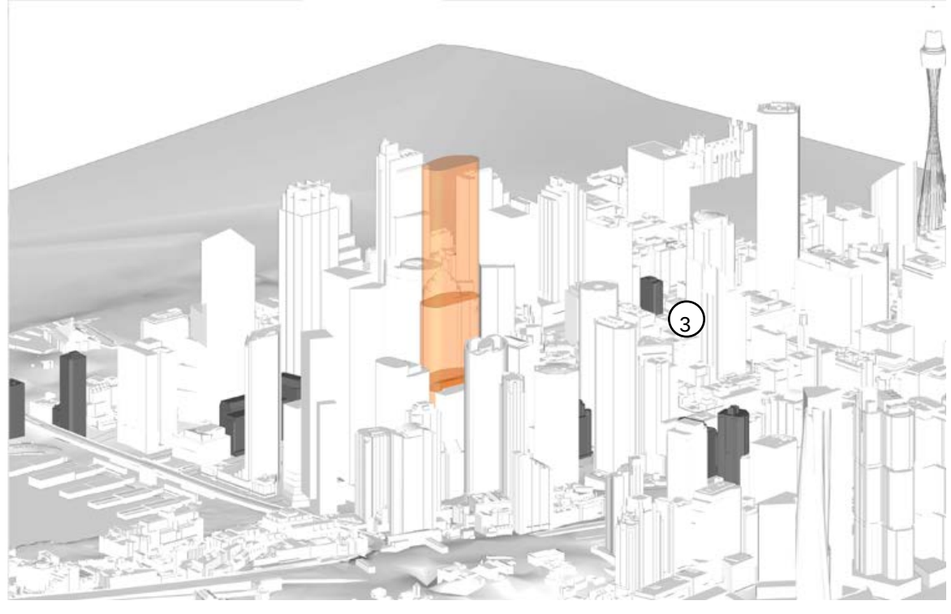
4 16 O'Connell Street



21 June 1pm



21 June 2pm



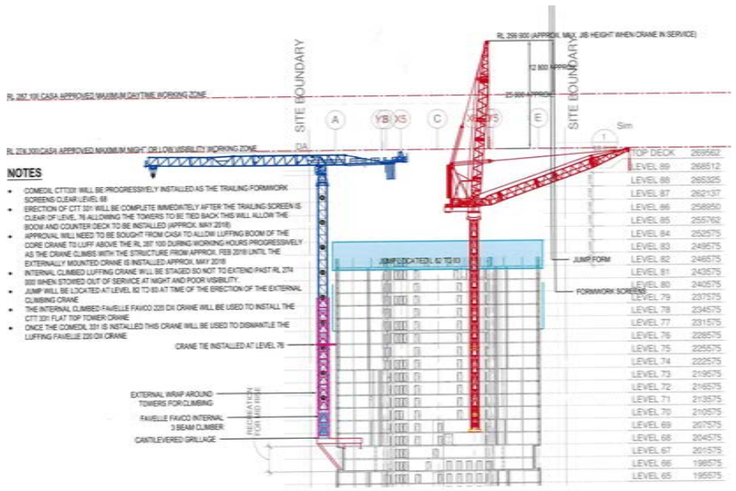
21 June 3pm

Tall tower construction methodology

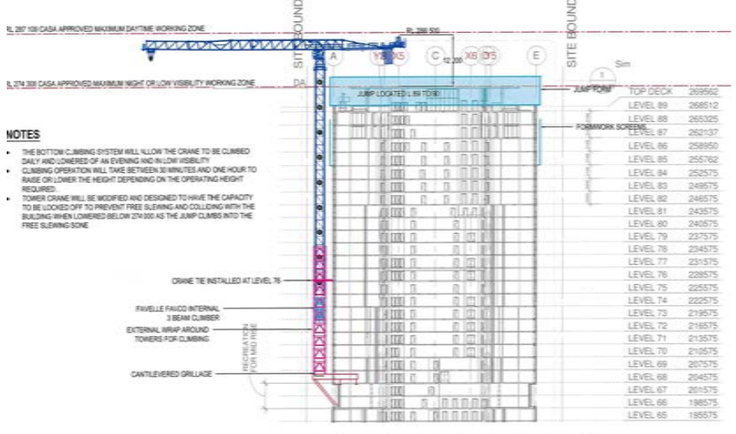
Construction advice from the industry has been that a 12m tolerance below PANSOPS can be managed with technology similar to the cranes used by Hutchison builders for Brisbane's 90 story Skyview Tower.

Skyview Tower, Brisbane developed a crane system that allowed the team to construct the top of the building up to maximum height (aircraft surfaces) with a higher limit allowed for managed daylight crane operation

The proposed envelope has a 25m construction zone below PANSOPS (RL 335m) allowing adequate construction space.



Brisbane Sky Tower: COMEDIL 331 Flat top crane installed externally of the tower with the ability to climb up and down and stowed below .... when required.



Brisbane Sky Tower: CTT 331 Flat top mounted on cantilevered grillage will complete the upper tower levels, climbed daily to work within the CASA guidelines

Brisbane Sky Tower 270m building height (pictured under construction)

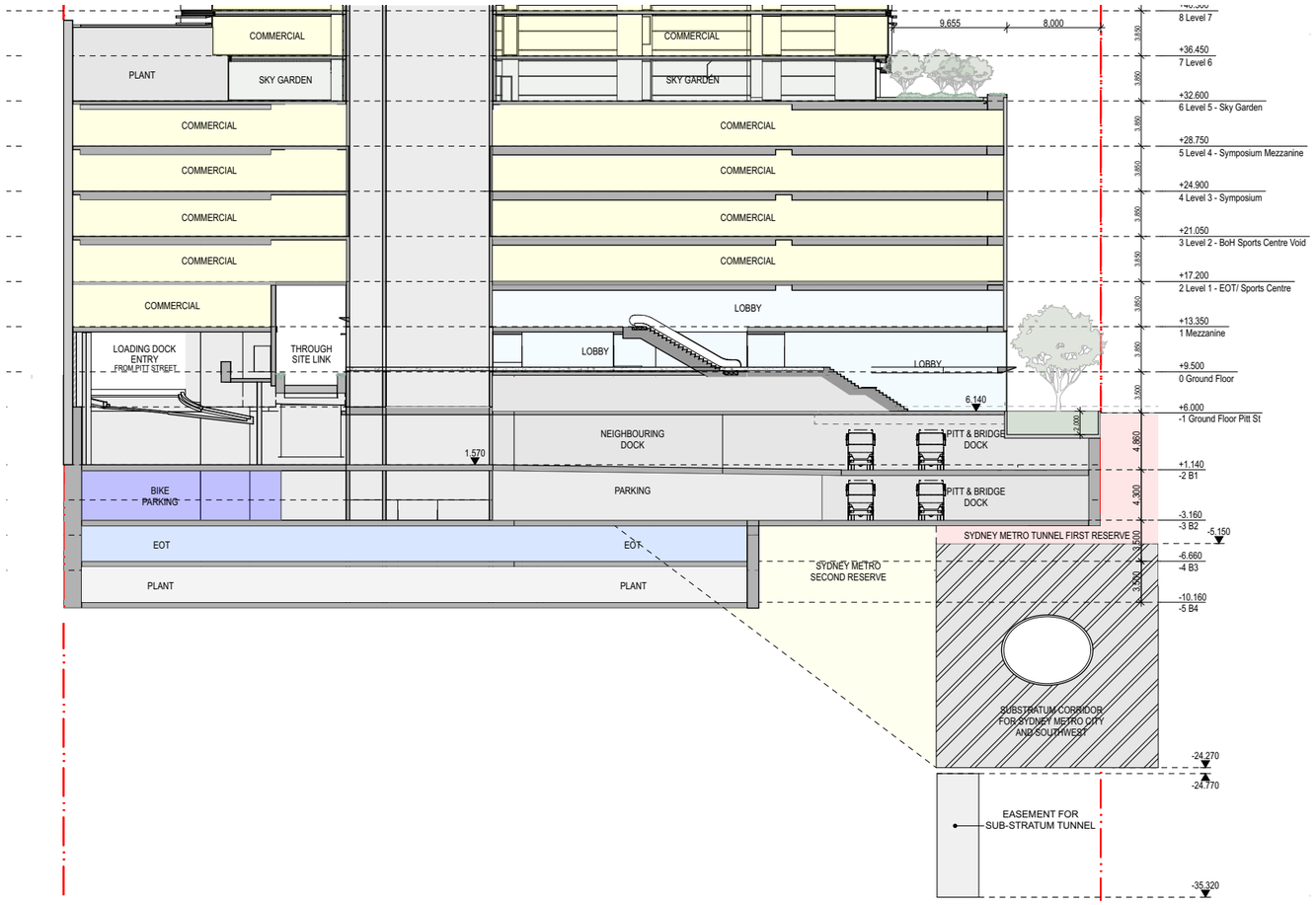
A 12m construction zone beneath the PANSOPS limits or RL335 may be considered reasonable.

Sydney Metro

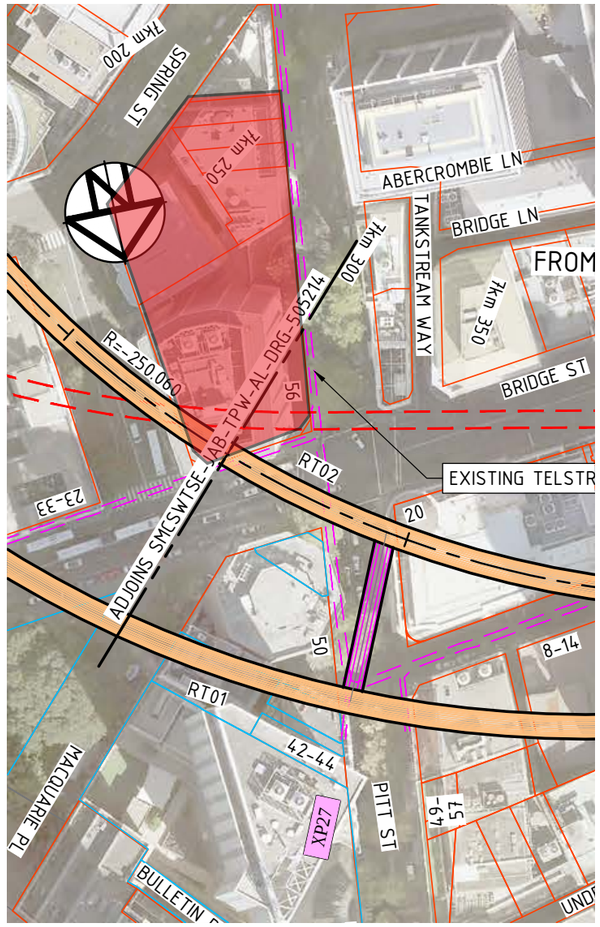
The planning proposal has considered the Sydney Metro tunnel (currently indicative and subject to design development).

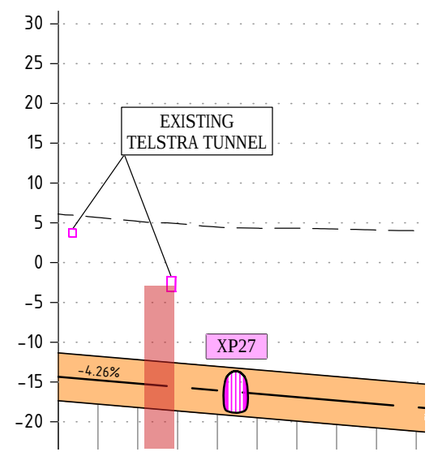
The concept metro tunnel and corridor zone passes underneath the North East corner of the subject site at approximately 19-20m below ground.

The detailed design (in particular structural) takes into account the alignment of the Sydney Metro. The structure will need to be designed to accommodate this restrictive zone of influence. Structural elements will be restricted within the 1st reserve of the tunnel which will be up to 15m within the site boundary. Detailed studies will need to be completed and approved by Sydney Metro and other relevant authorities.



Diagrammatic section showing relation of metro tunnel to site





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Aerial sketch view of North/South tower orientation from Botanic Gardens
Indicative tower design in context

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Envelope Drawings

Proposed Envelope

Street Frontages and Setbacks - Tower

Proposed envelope

Max. Height:	RL 310.00m
Approx FSR:	27.4 : 1

Podium Component

Max. Street frontage height	32.4m
Street frontage height	varies
Pitt St setback	0m
Bridge St footpath setback	3.5m
Bridge St podium setback	8m
Gresham and Spring St setback	0m
Rear commercial site setback	0m

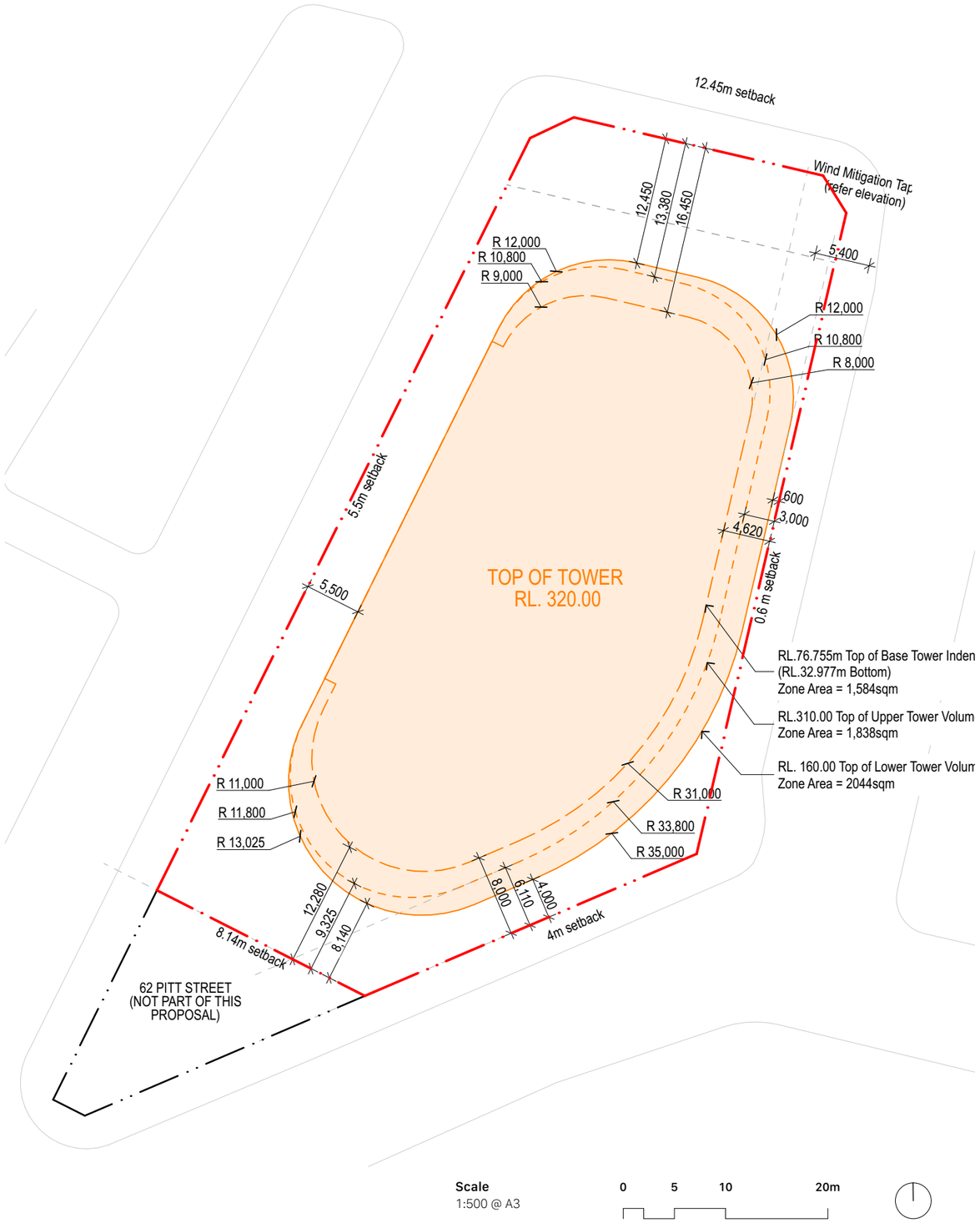
Tower Component

Height of Tower
304.35m

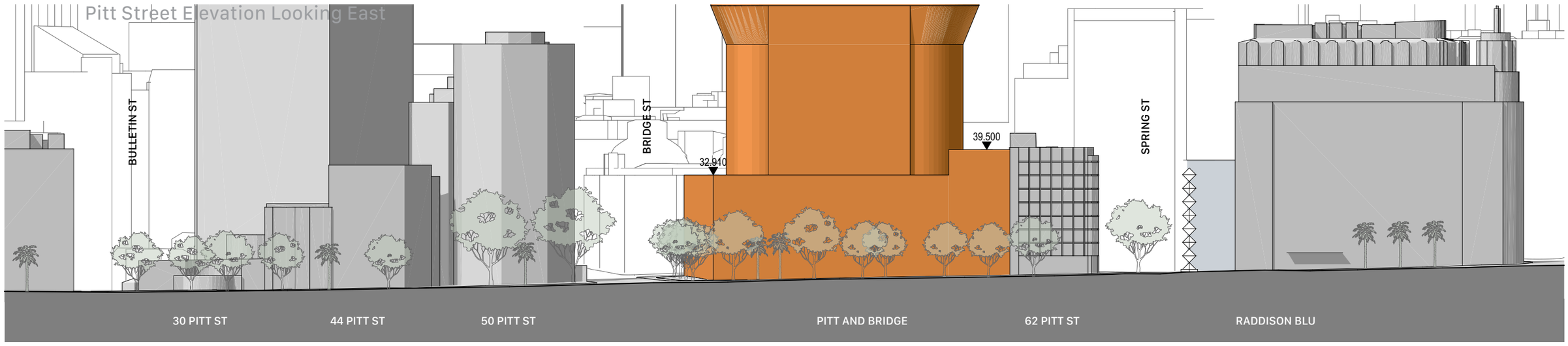
	(RL 310m)
Pitt St setback	5.5 m
Bridge St setback	12.45 m
Gresham St setback	0.6 m
Spring St setback	4 m
Rear commercial site setback	8.14 m

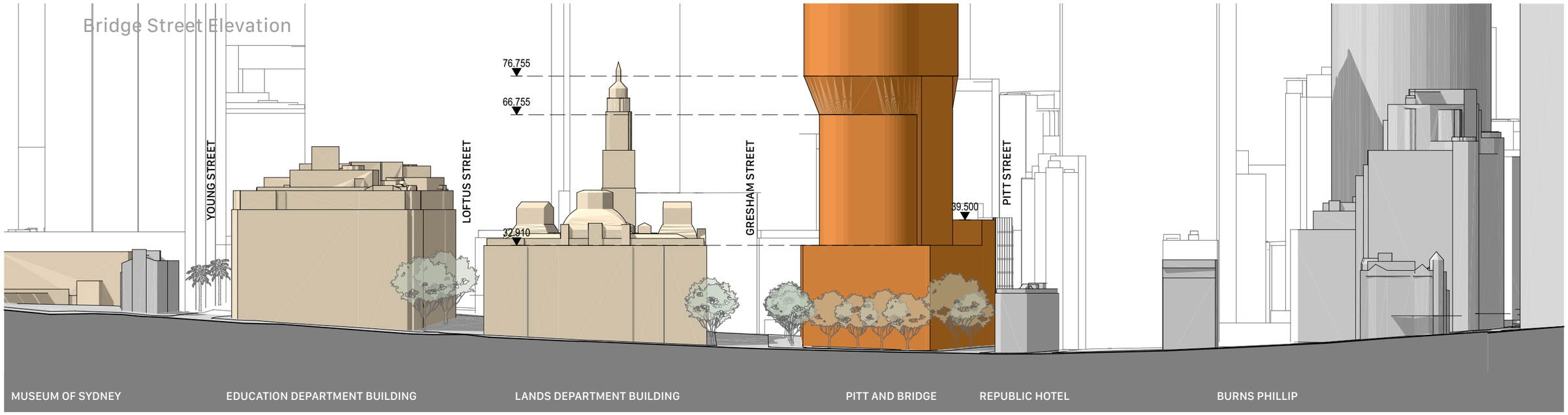
Tower Tapering

(refer to Envelope Tower Plan/Elevations for details)



Proposed Envelope - Podium





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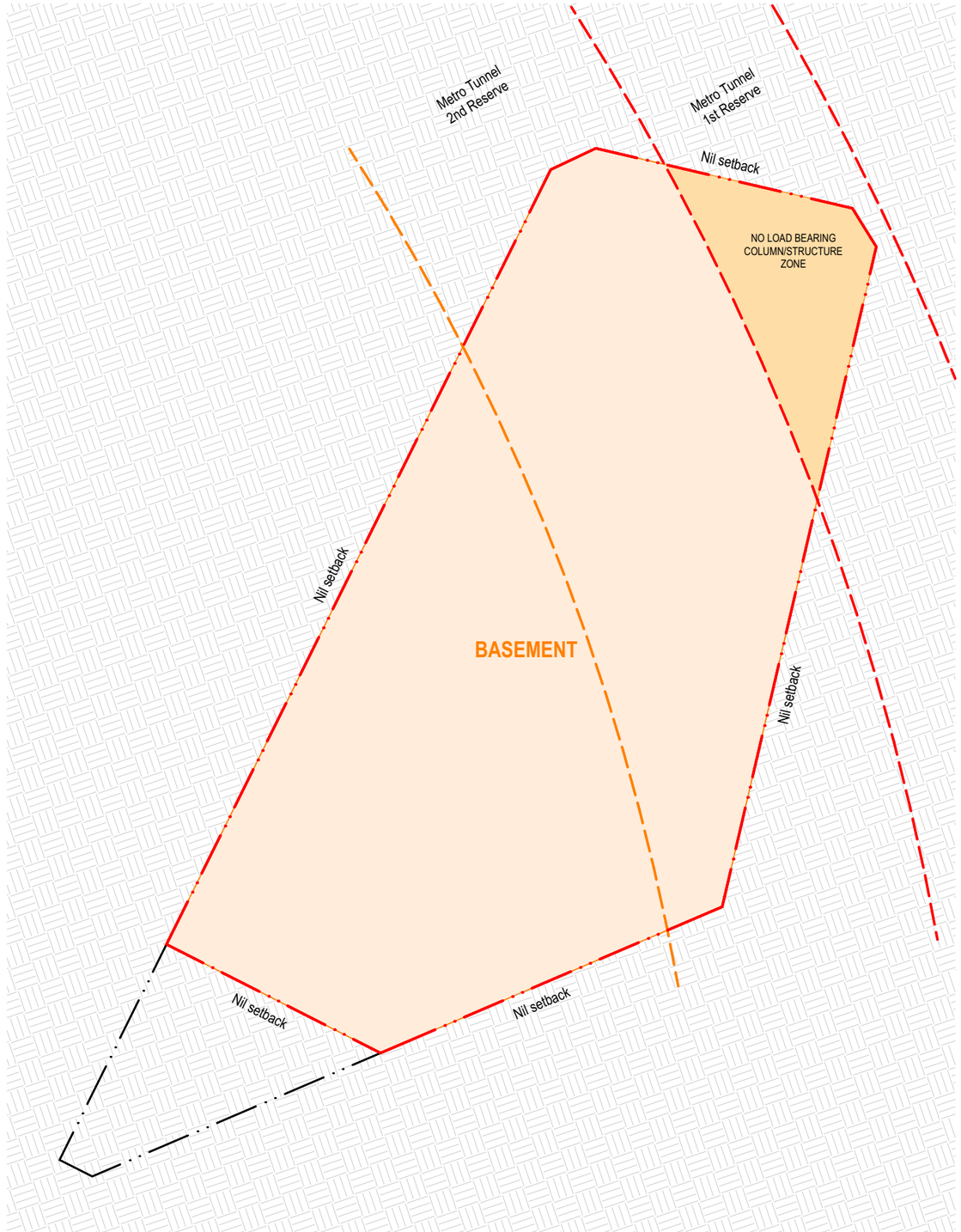
Envelope Plans

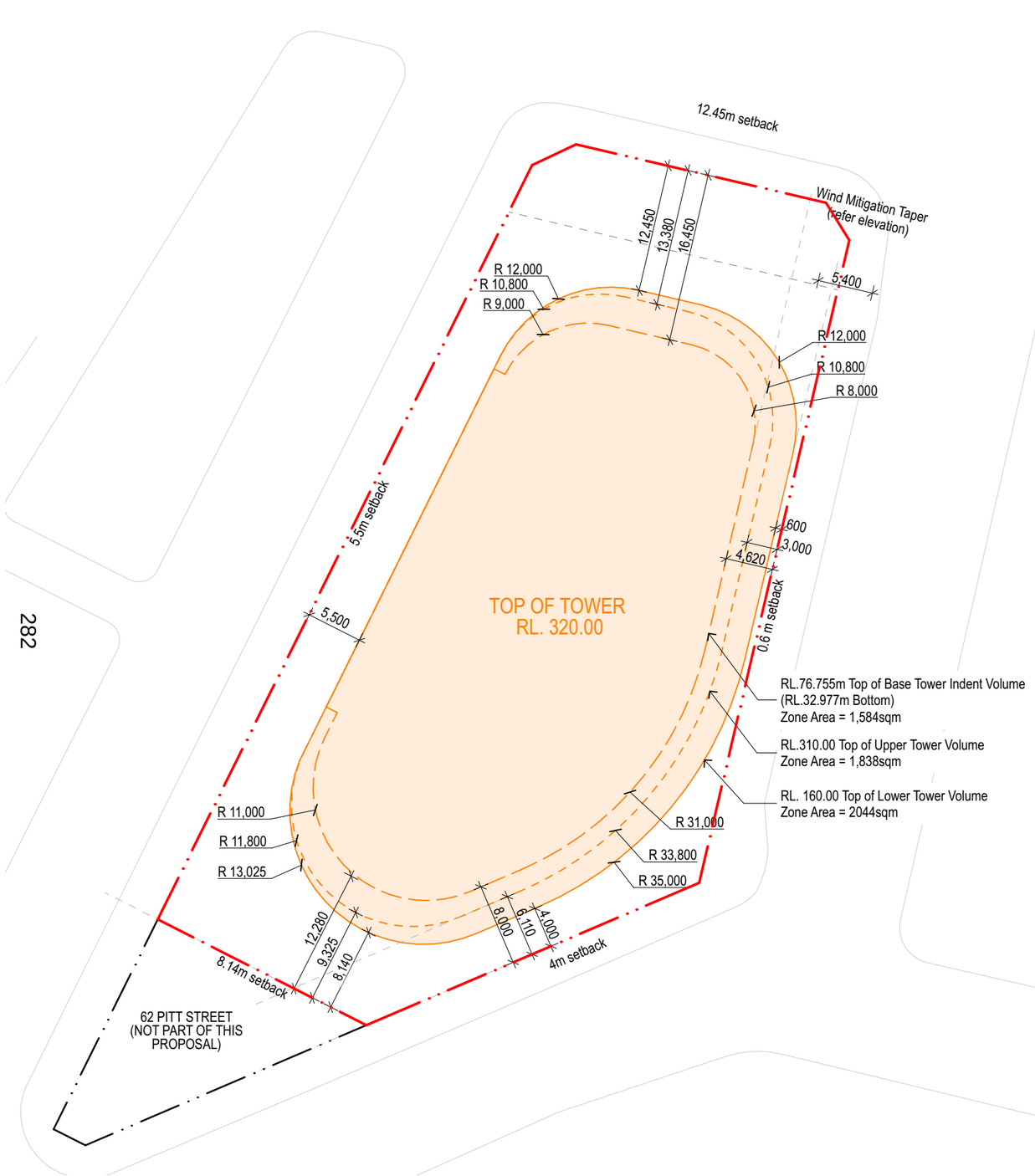


Basement Envelope Plan

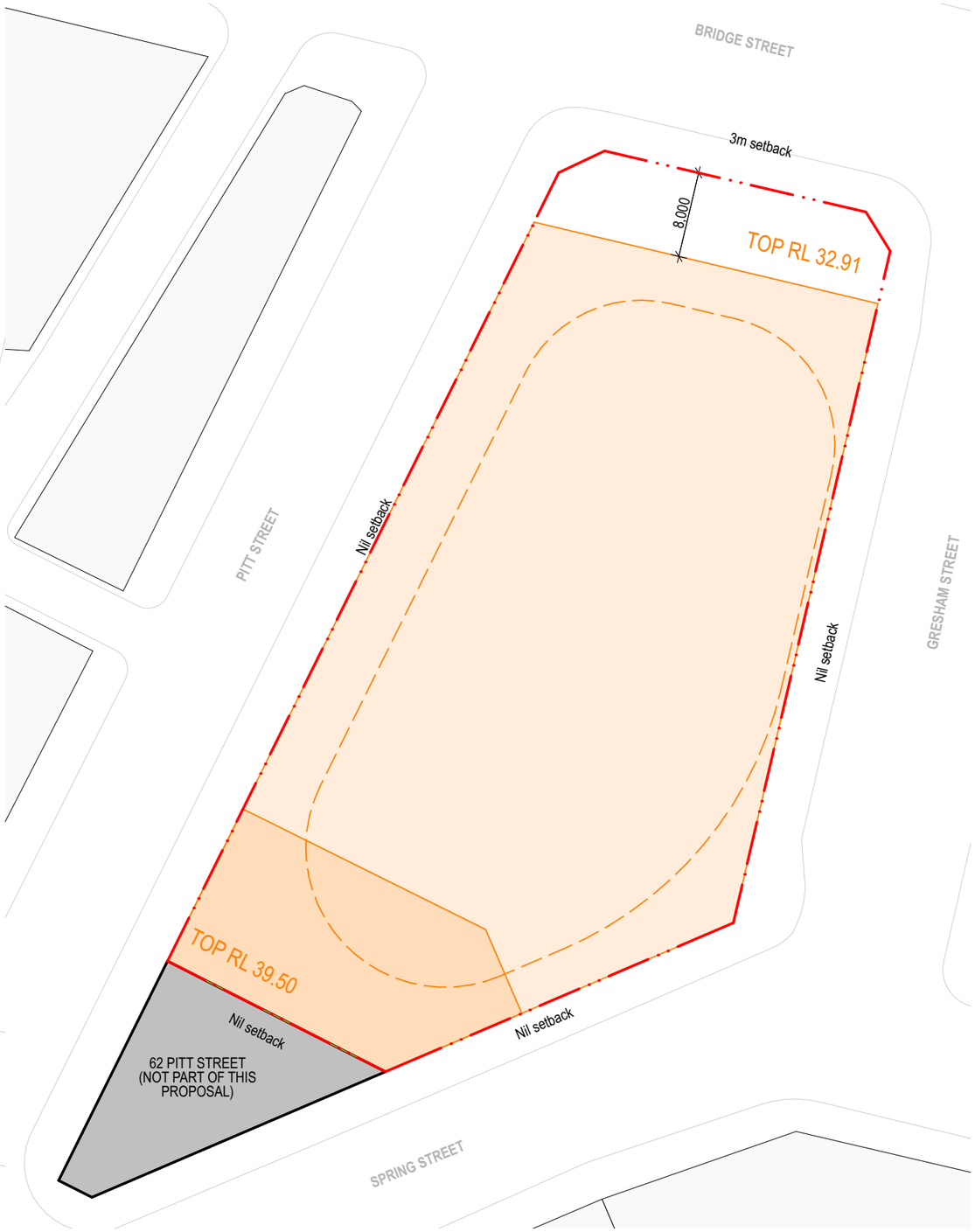
Ground Level Envelope Plan

Scale
1:500 @ A3

0 5 10 20m



Tower Envelope Plan



Podium Envelope Plan

Scale
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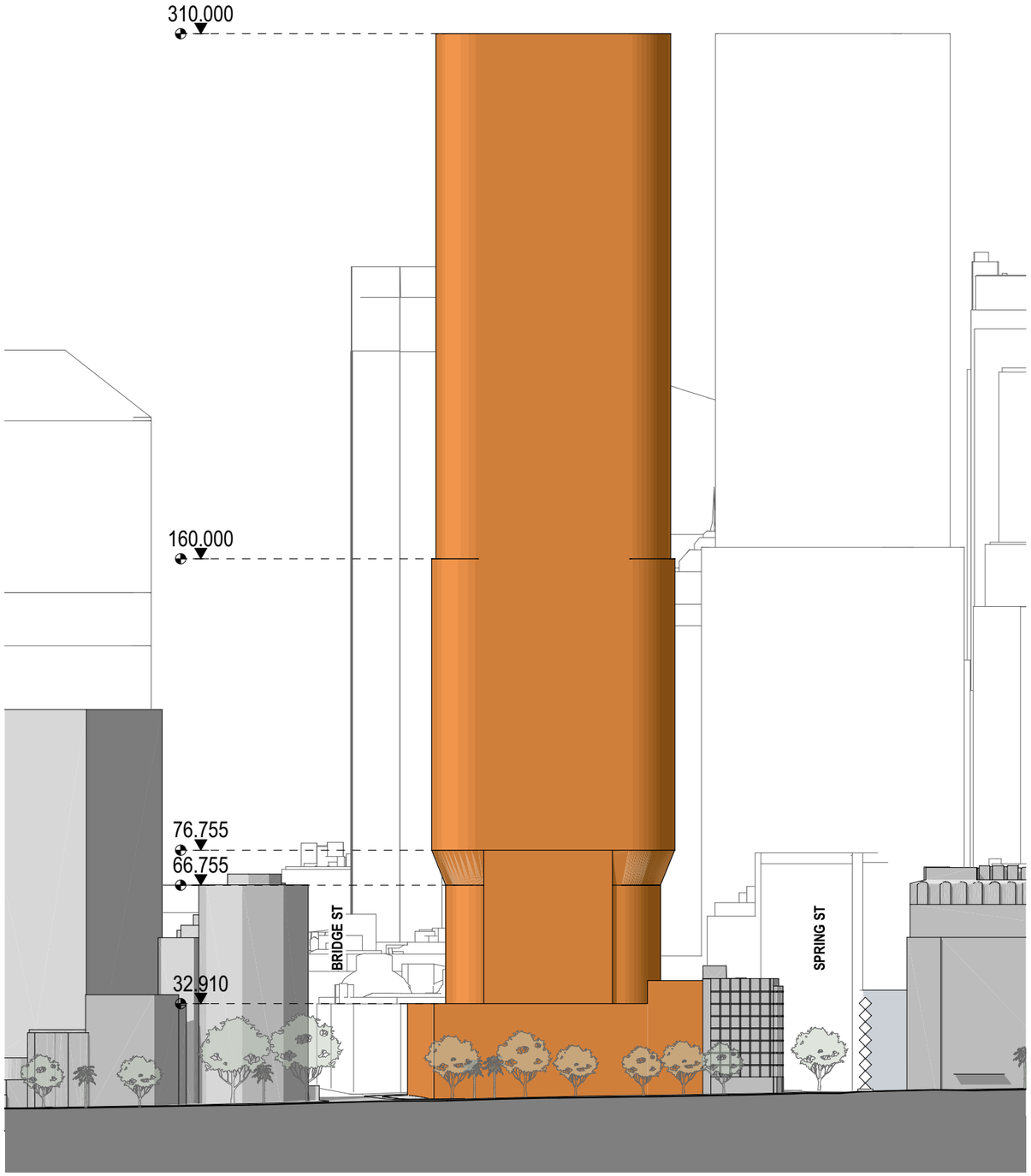
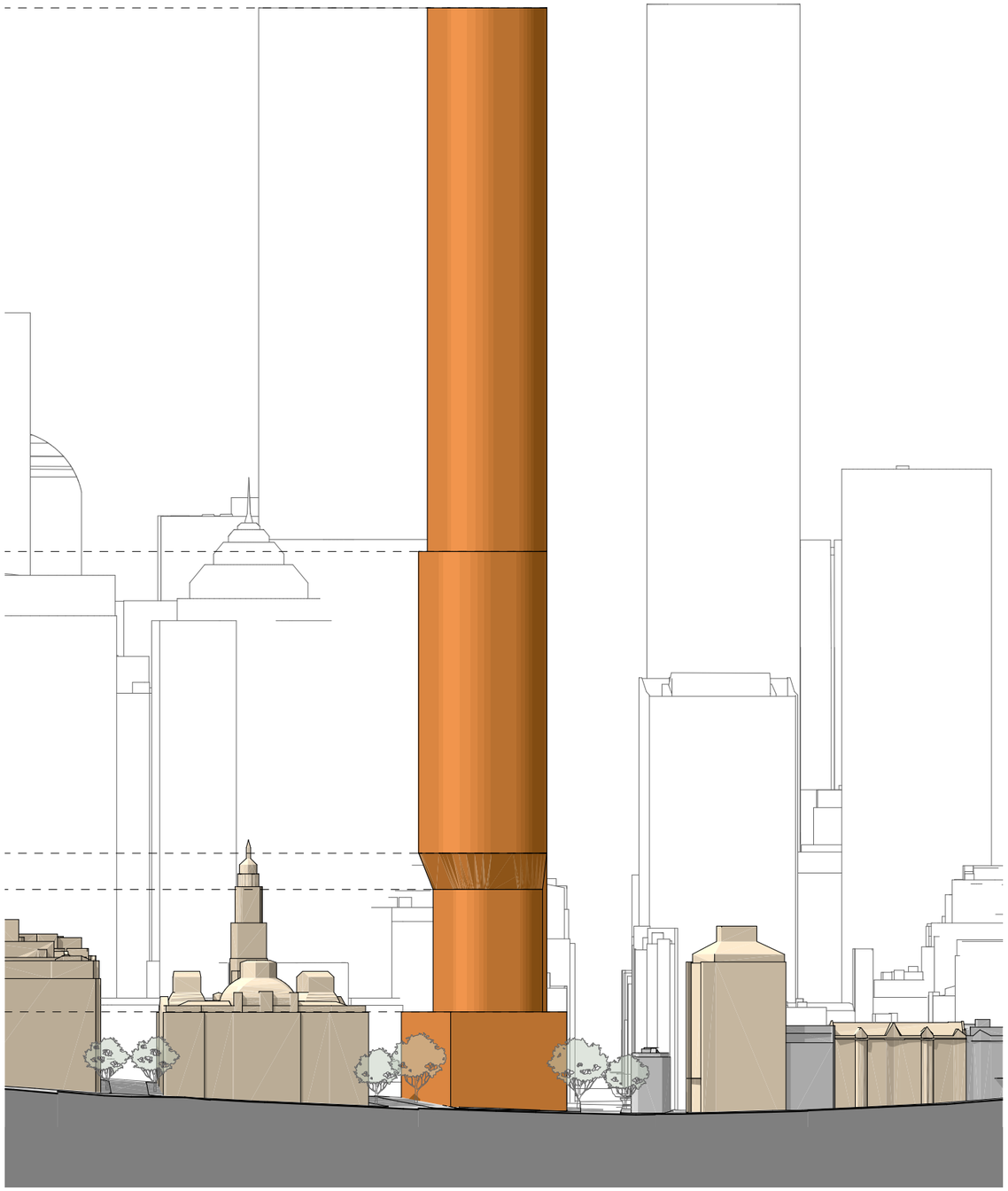
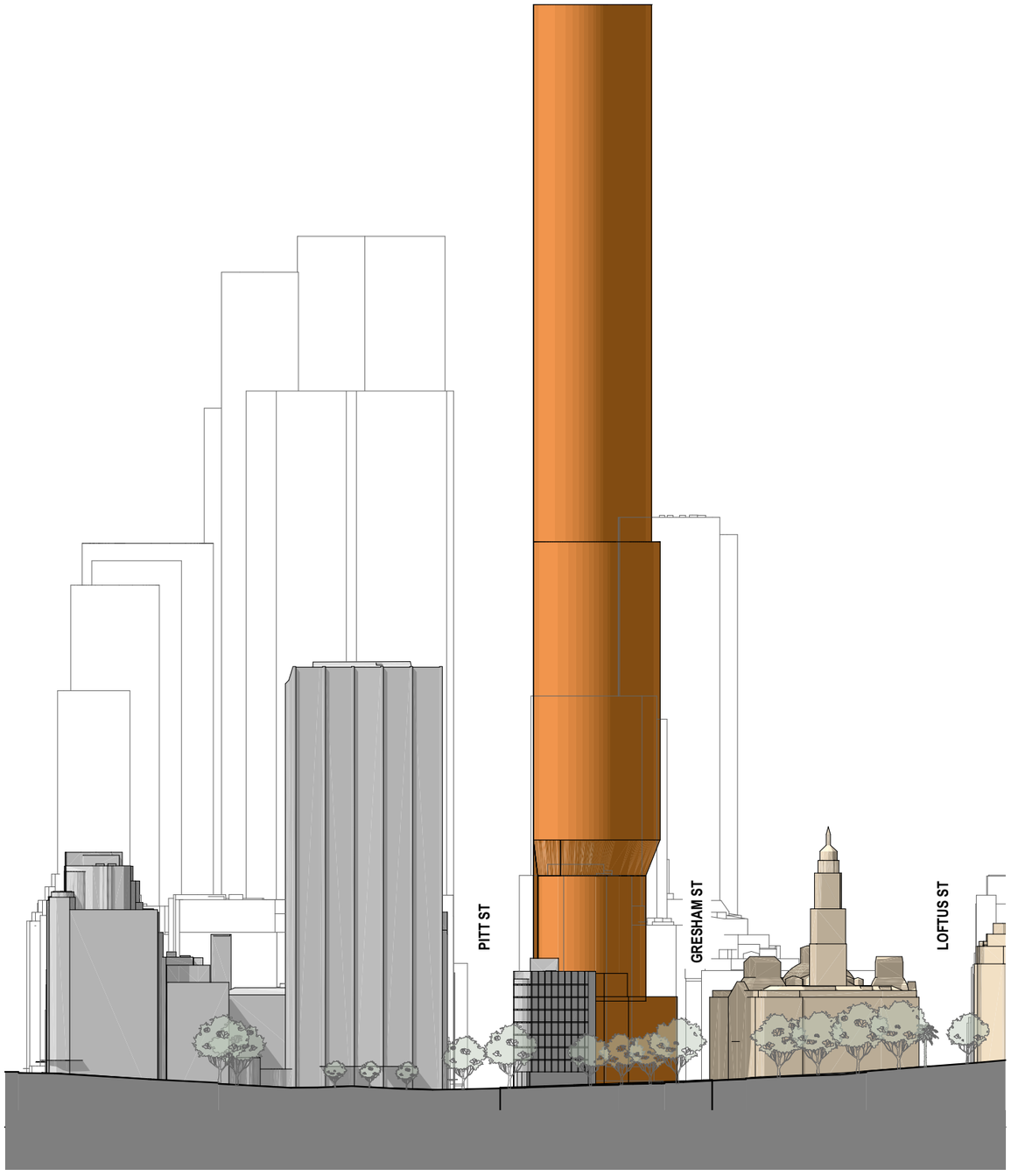


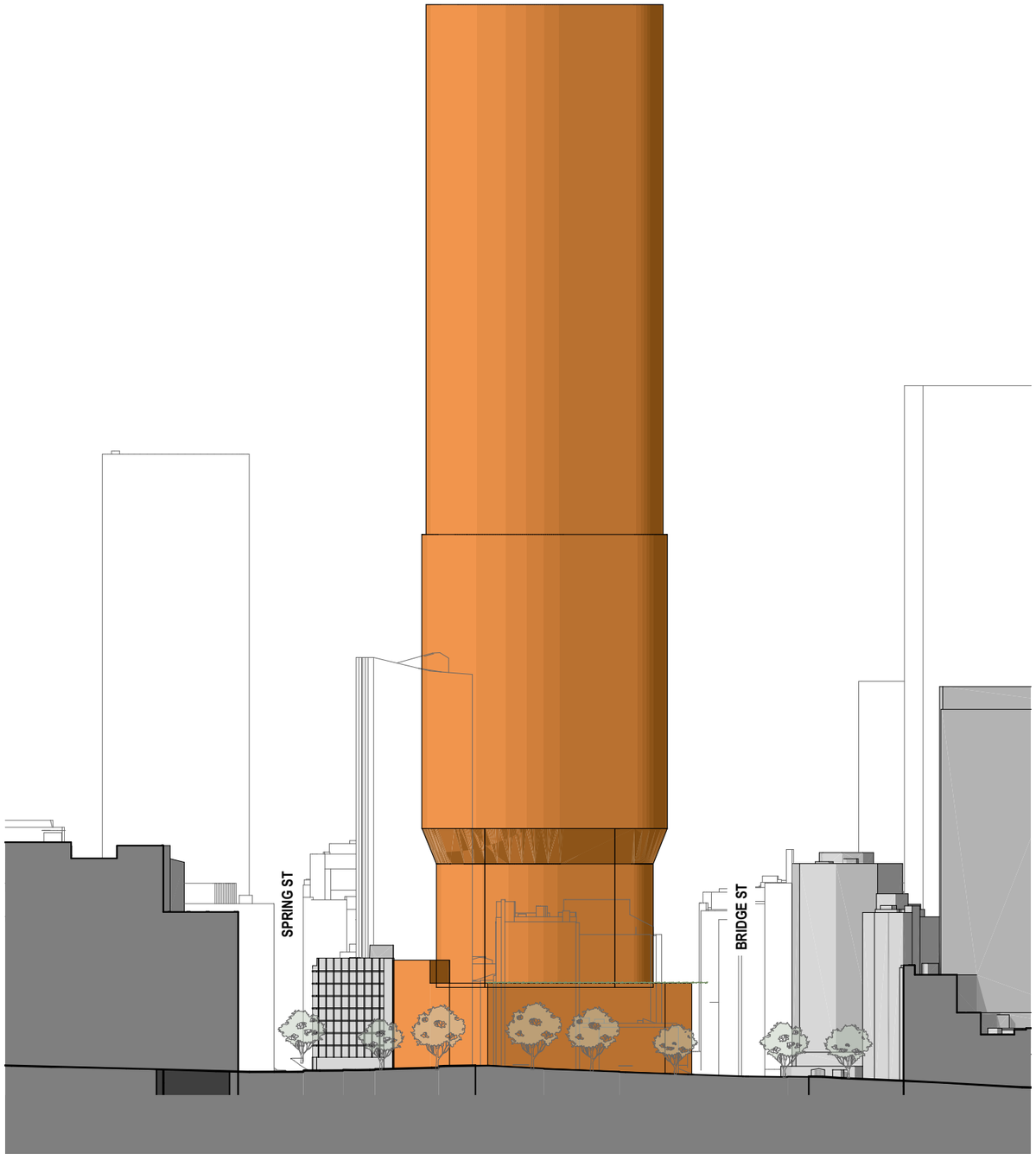
Envelope Elevation - West



Envelope Elevation - North



Envelope Elevation - South



Envelope Elevation - East

Reference design drawings

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Birds eye view Circular Quay

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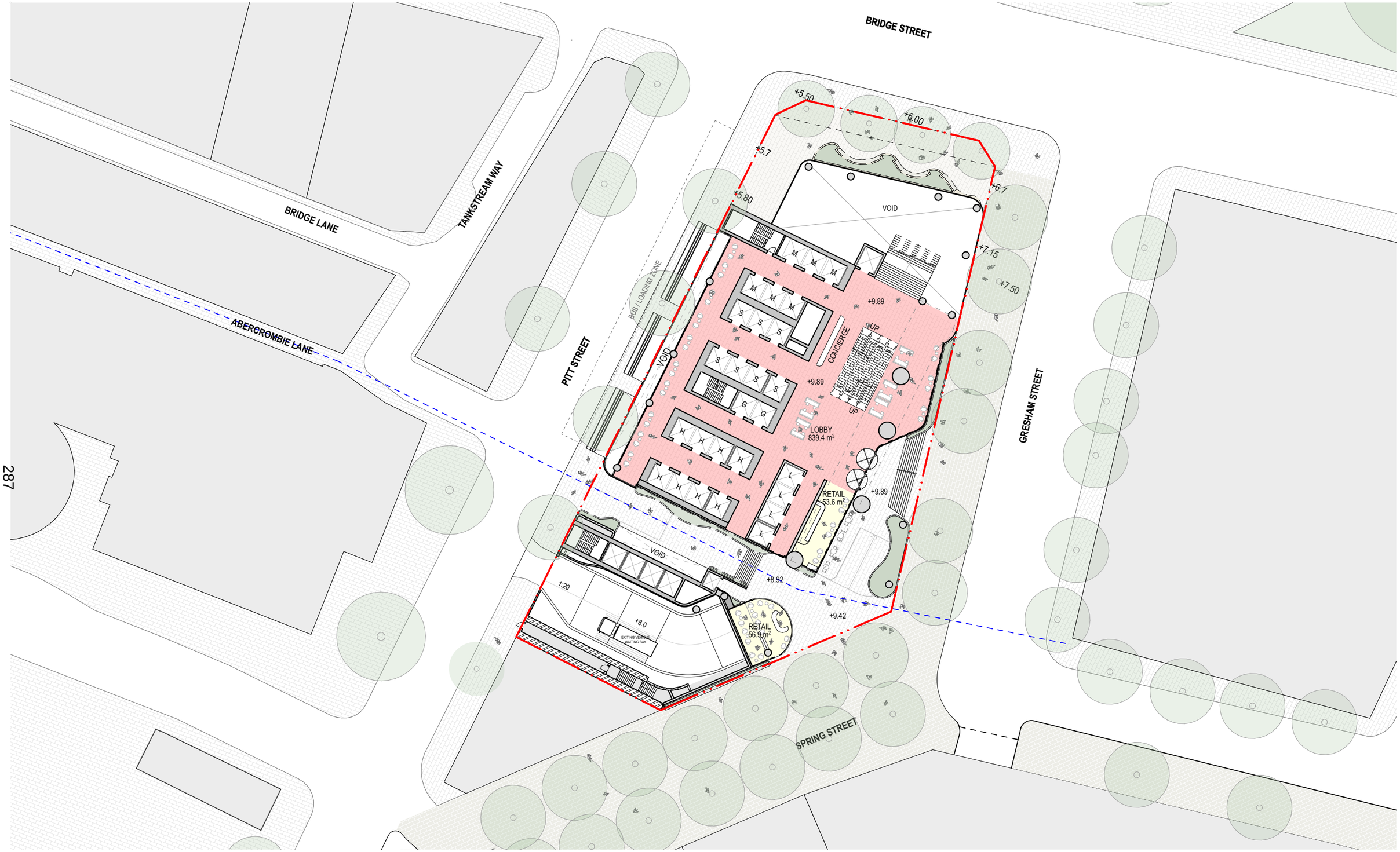
Lower Ground Level Floor Plan - Pitt Street

Scale
1:500 @ A3

0 5 10 20m



Upper Ground Level Floor Plan

Scale
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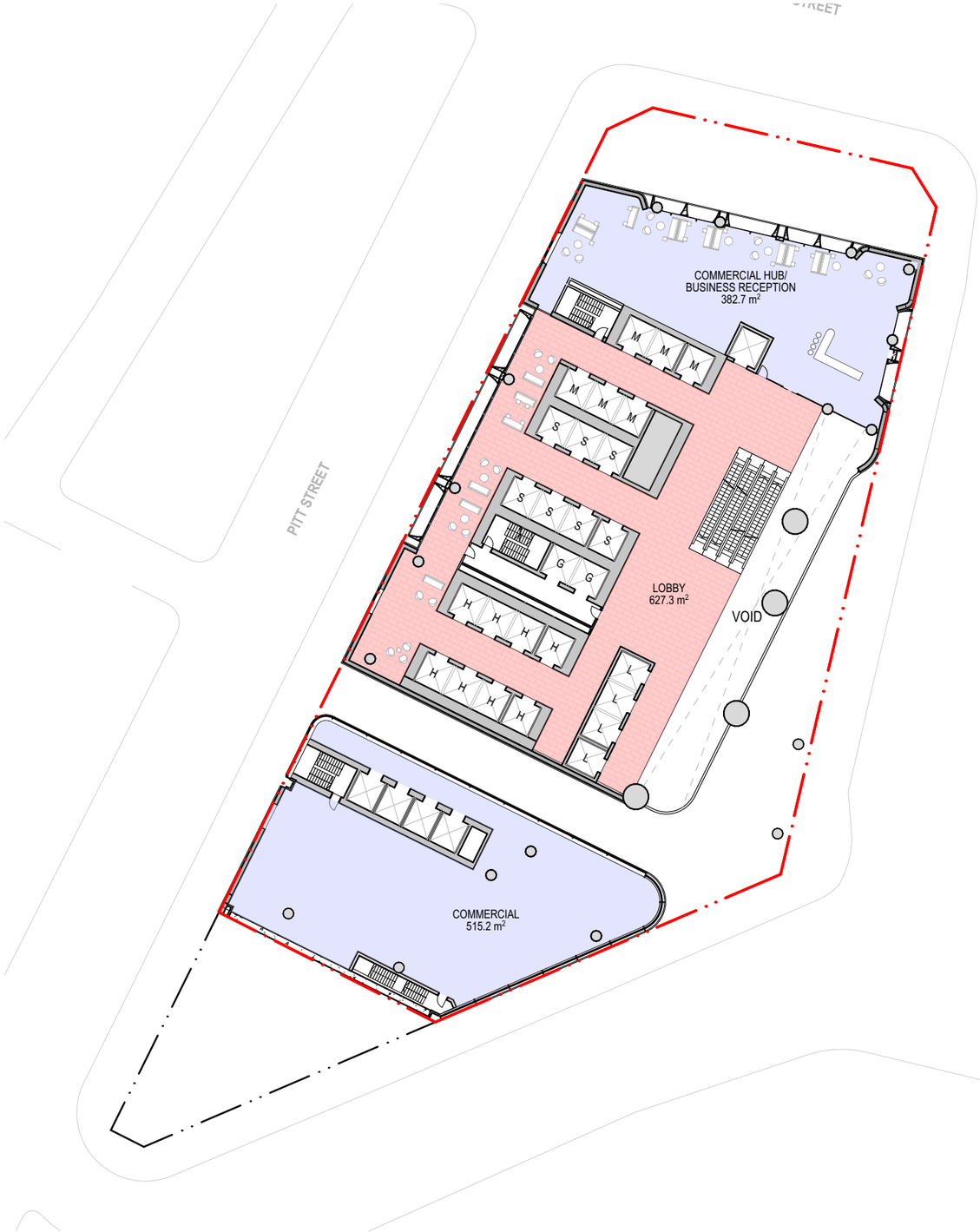


Podium Mezzanine

Level 1

Scale
1:500 @ A3

0 5 10 20m

Level 2

Level 3

Scale
1:500 @ A3

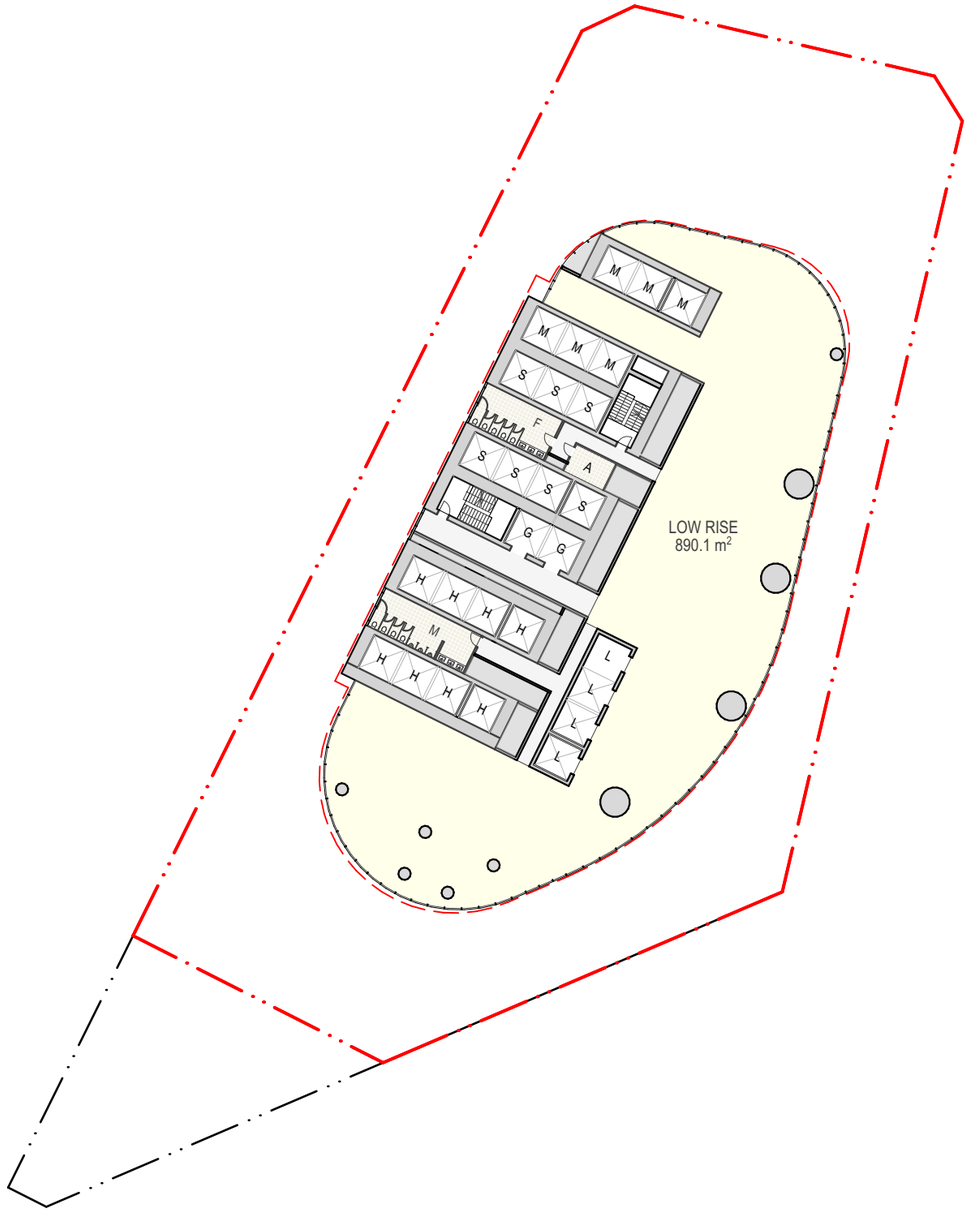
0 5 10 20m

Level 4

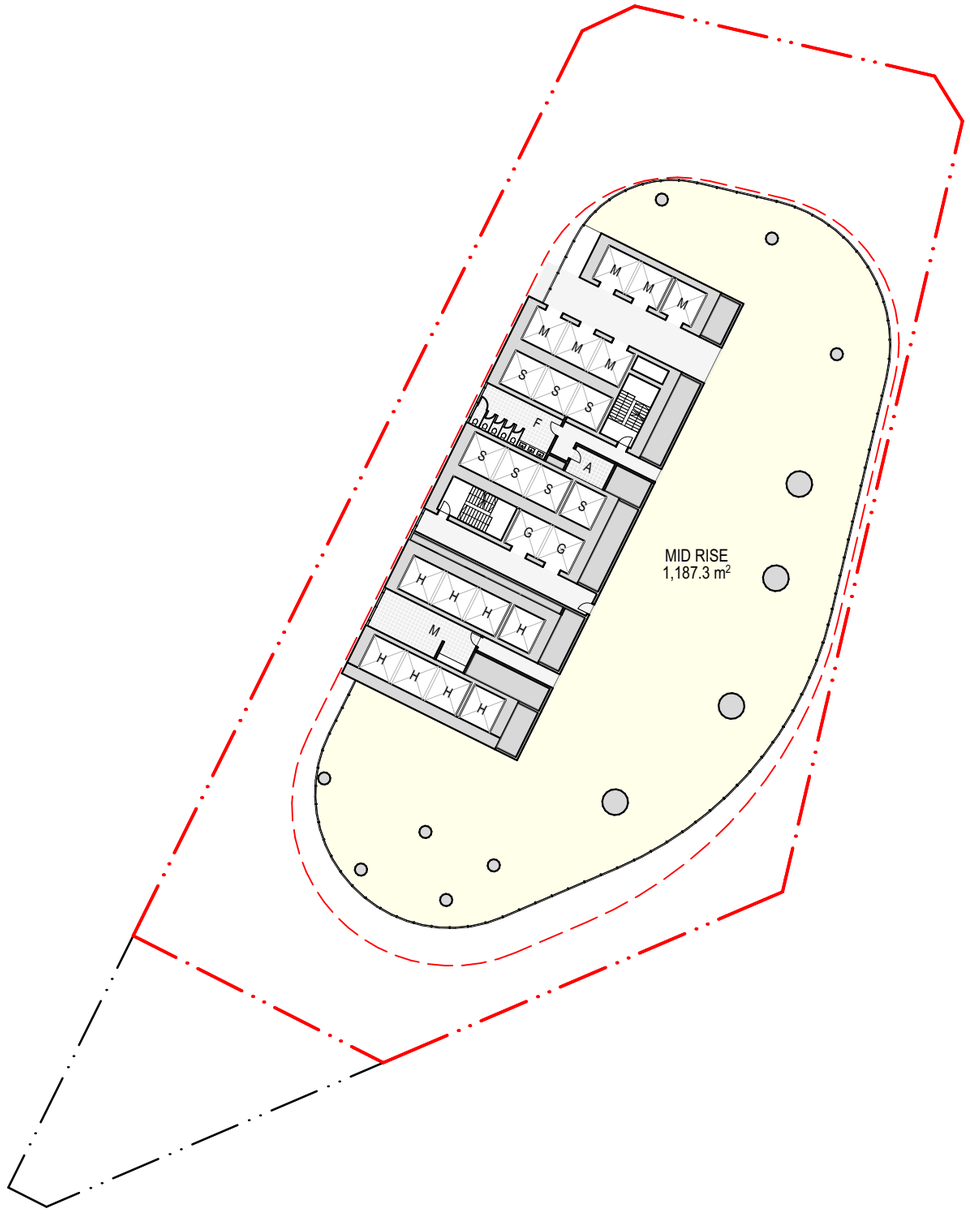
Level 5

Scale
1:500 @ A3

0 5 10 20m



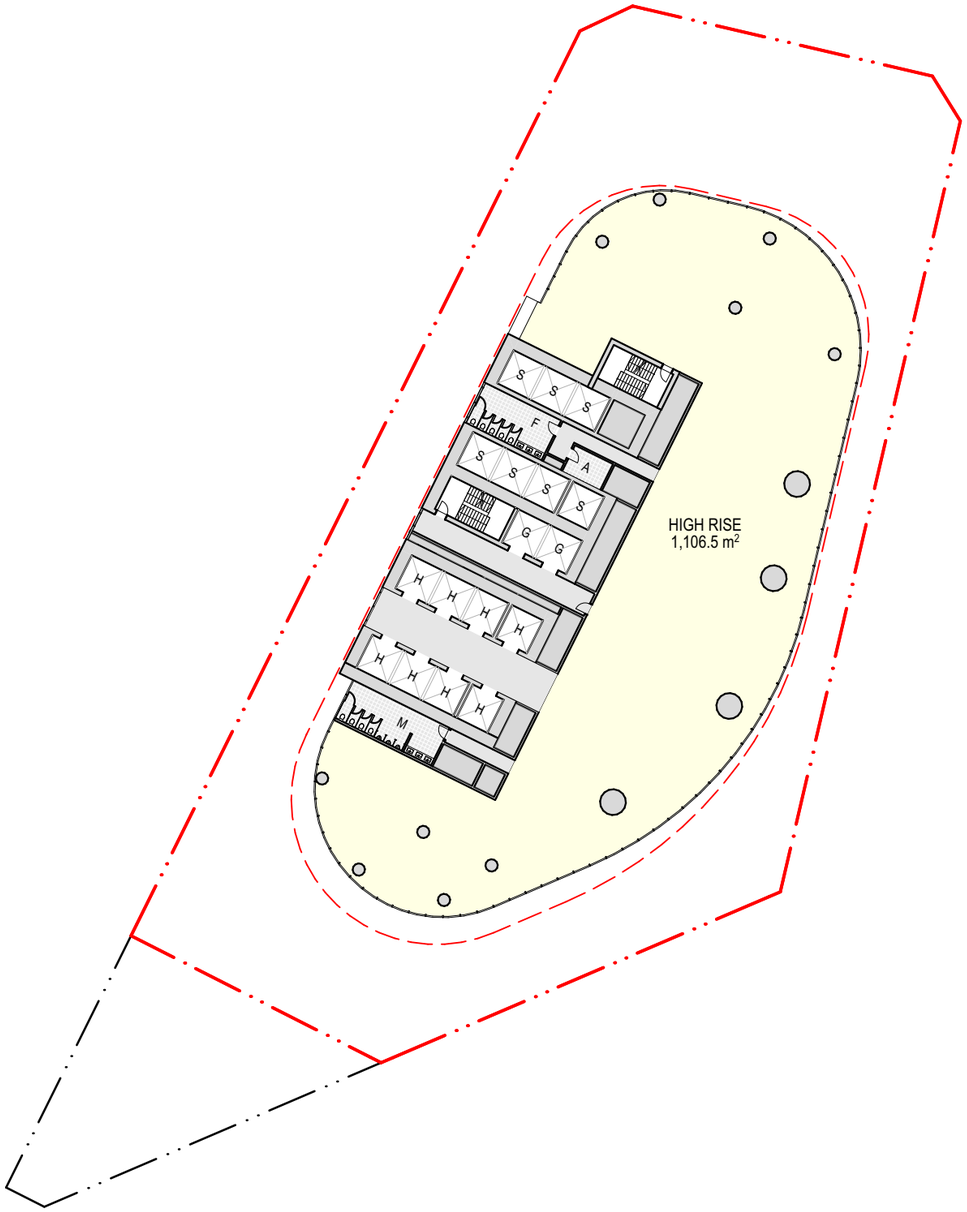
Typical Low Rise



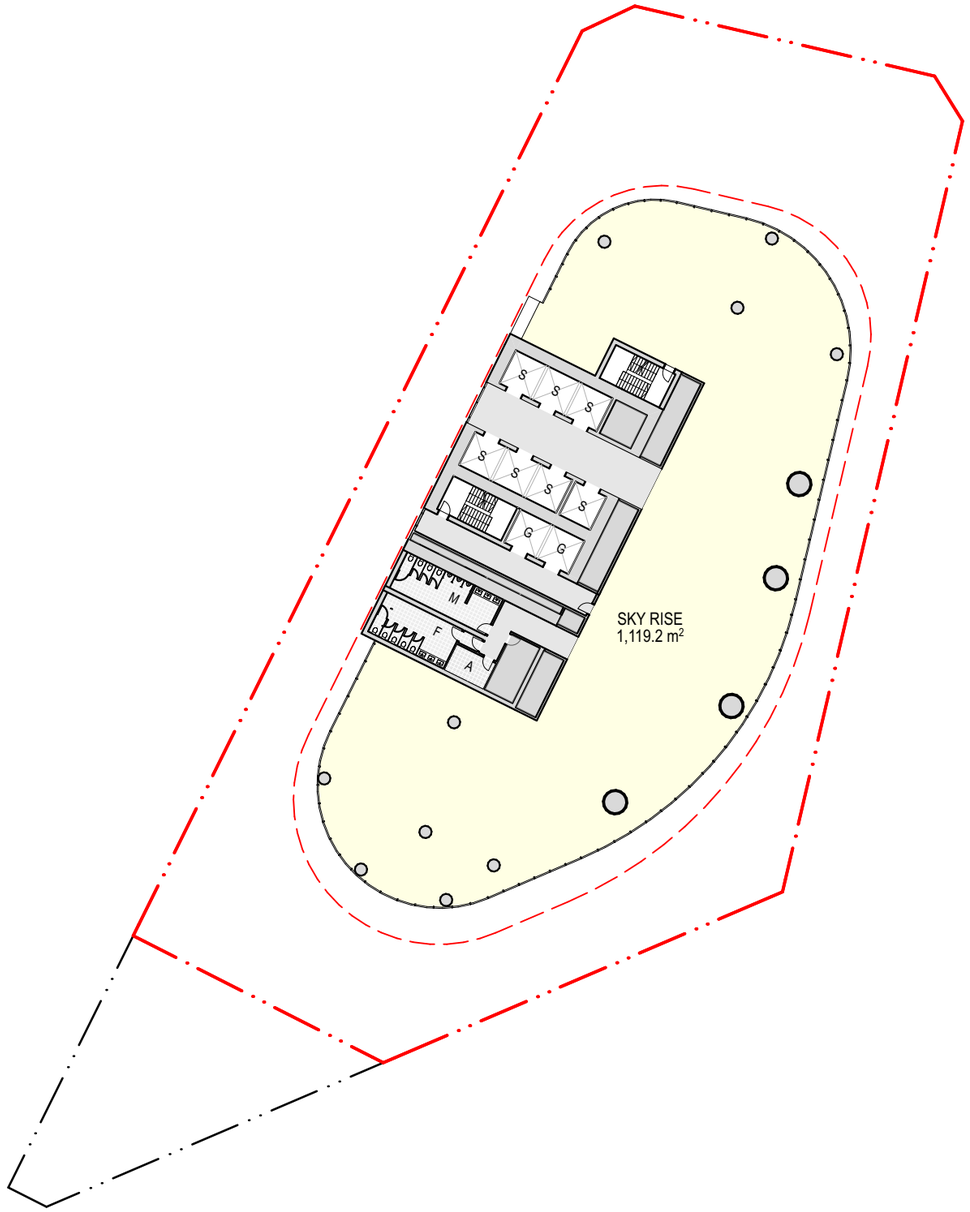
Typical Mid Rise

Scale
1:500 @ A3

0 5 10 20m



Typical High Rise



Typical Sky Rise

Scale
1:500 @ A3

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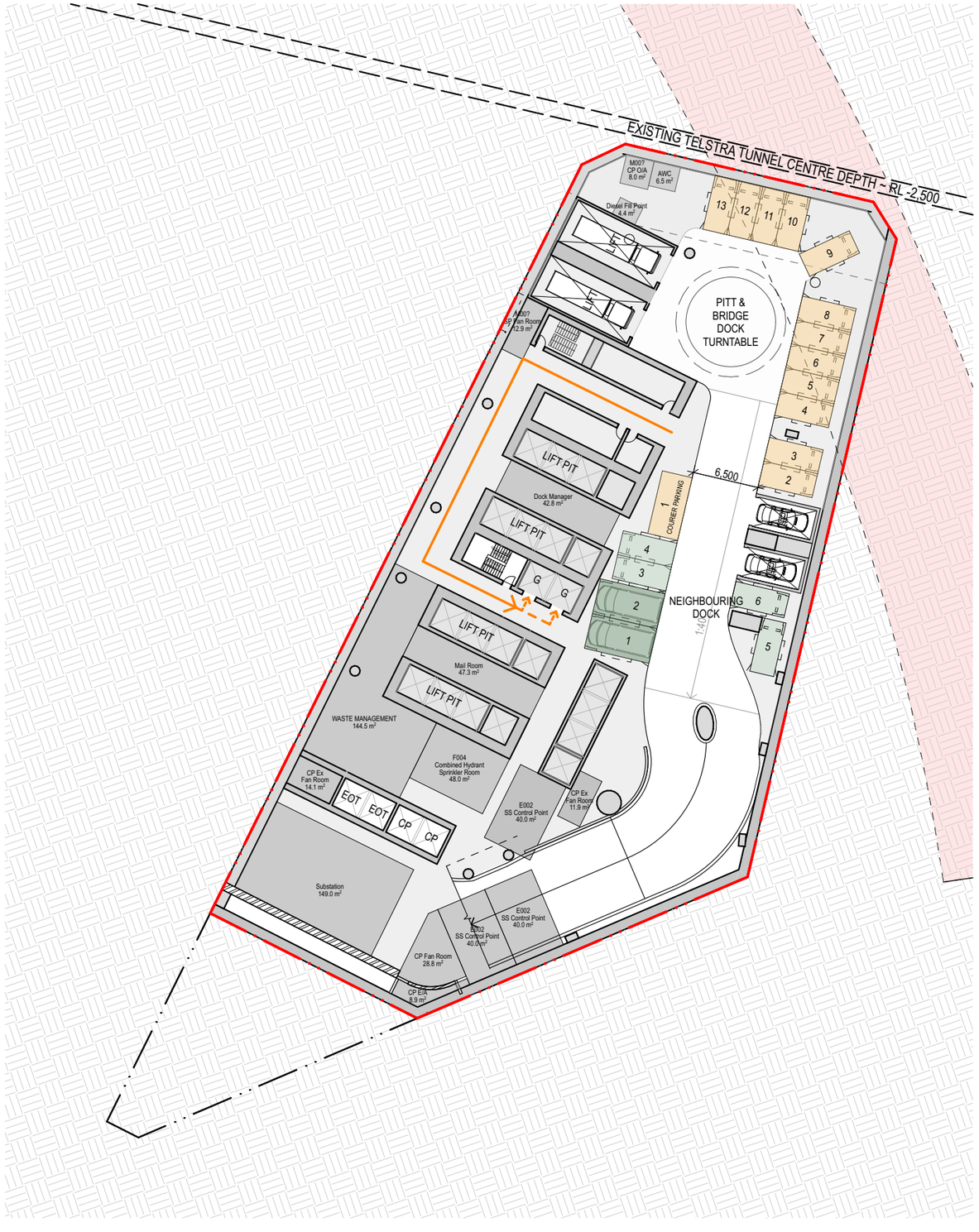
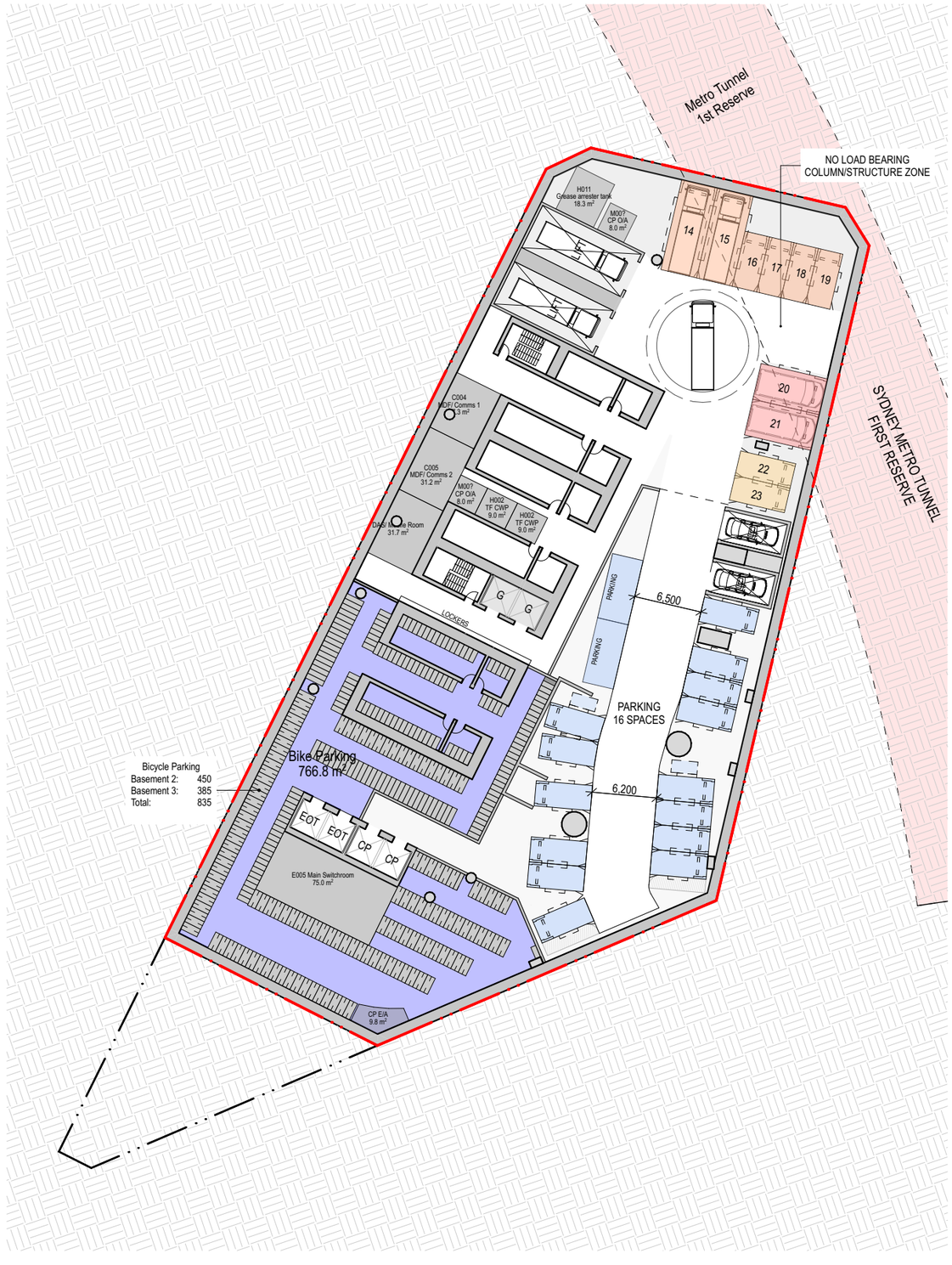


Basement 1



Basement 2

Scale
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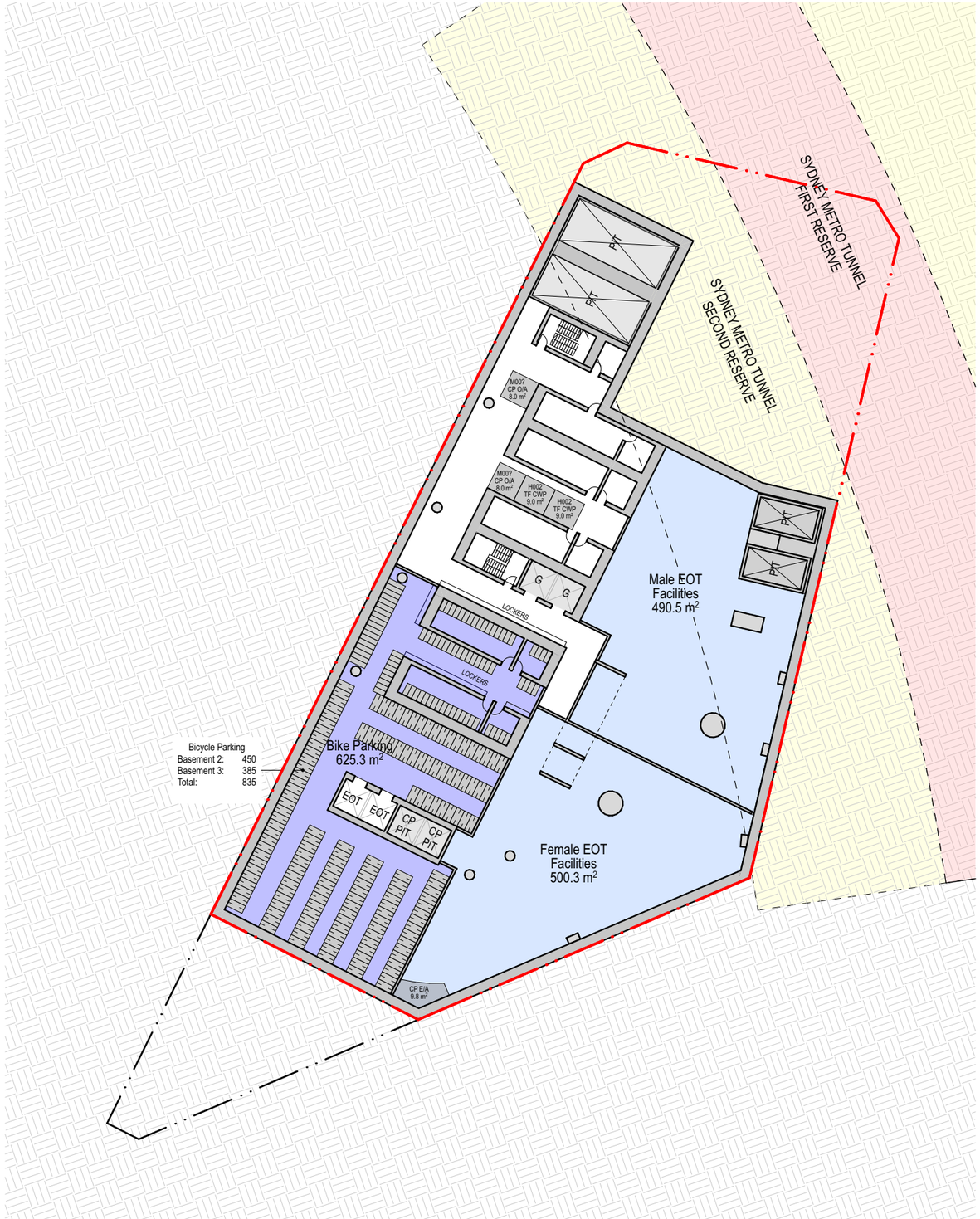
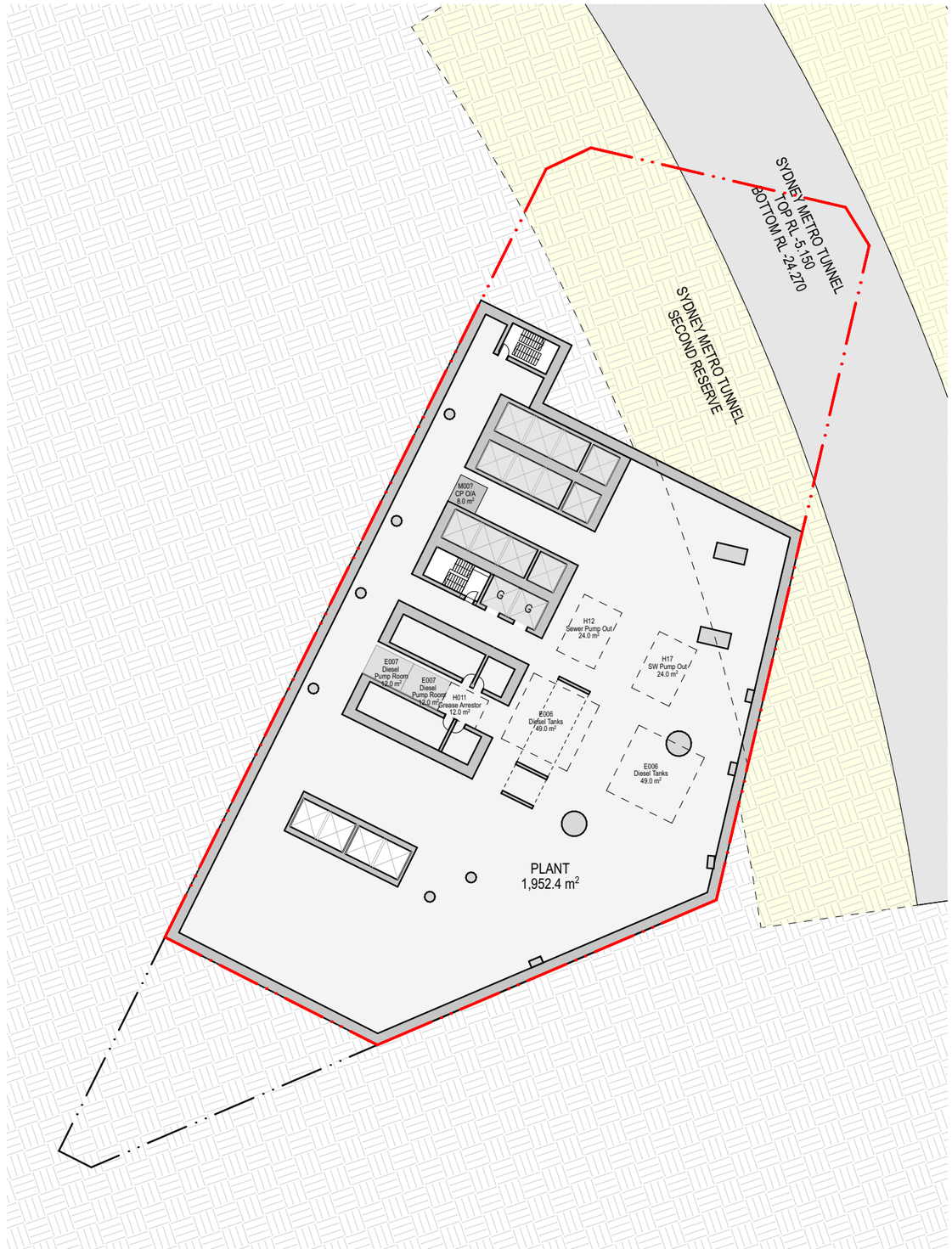


Basement 3



Basement 4

Scale
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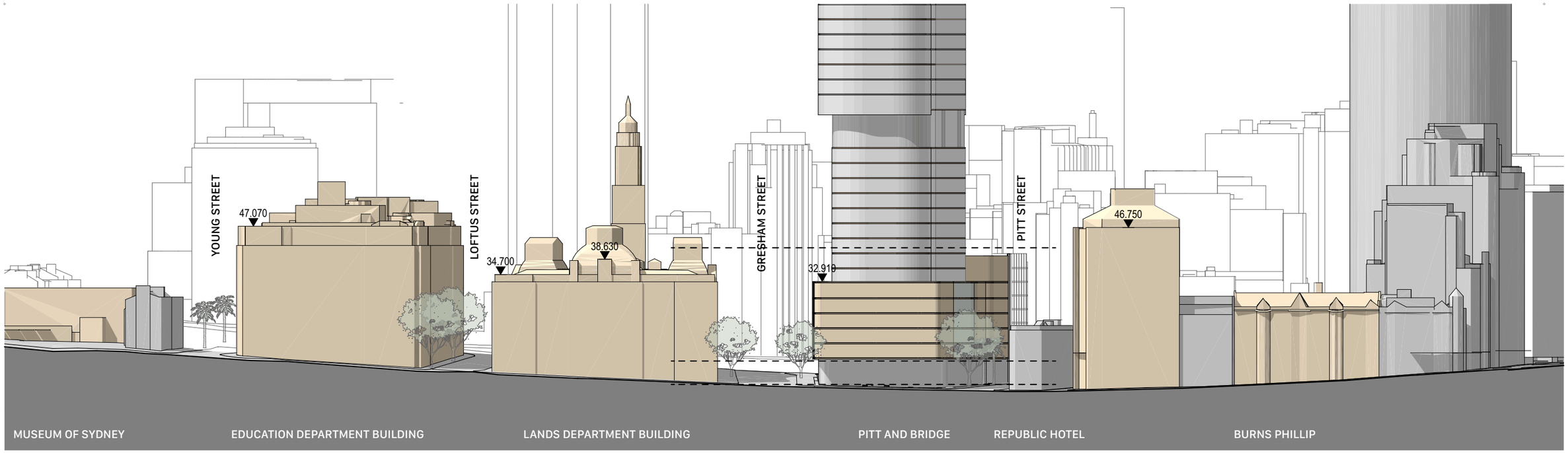
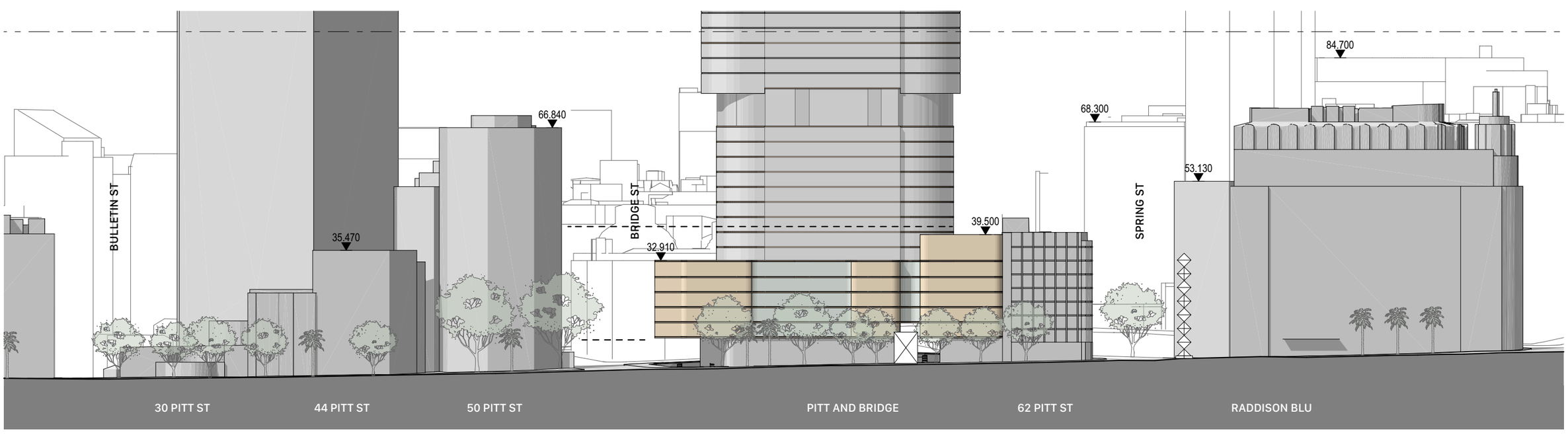


Bridge St Elevation
1:1000



Pitt St Elevation
1:1000

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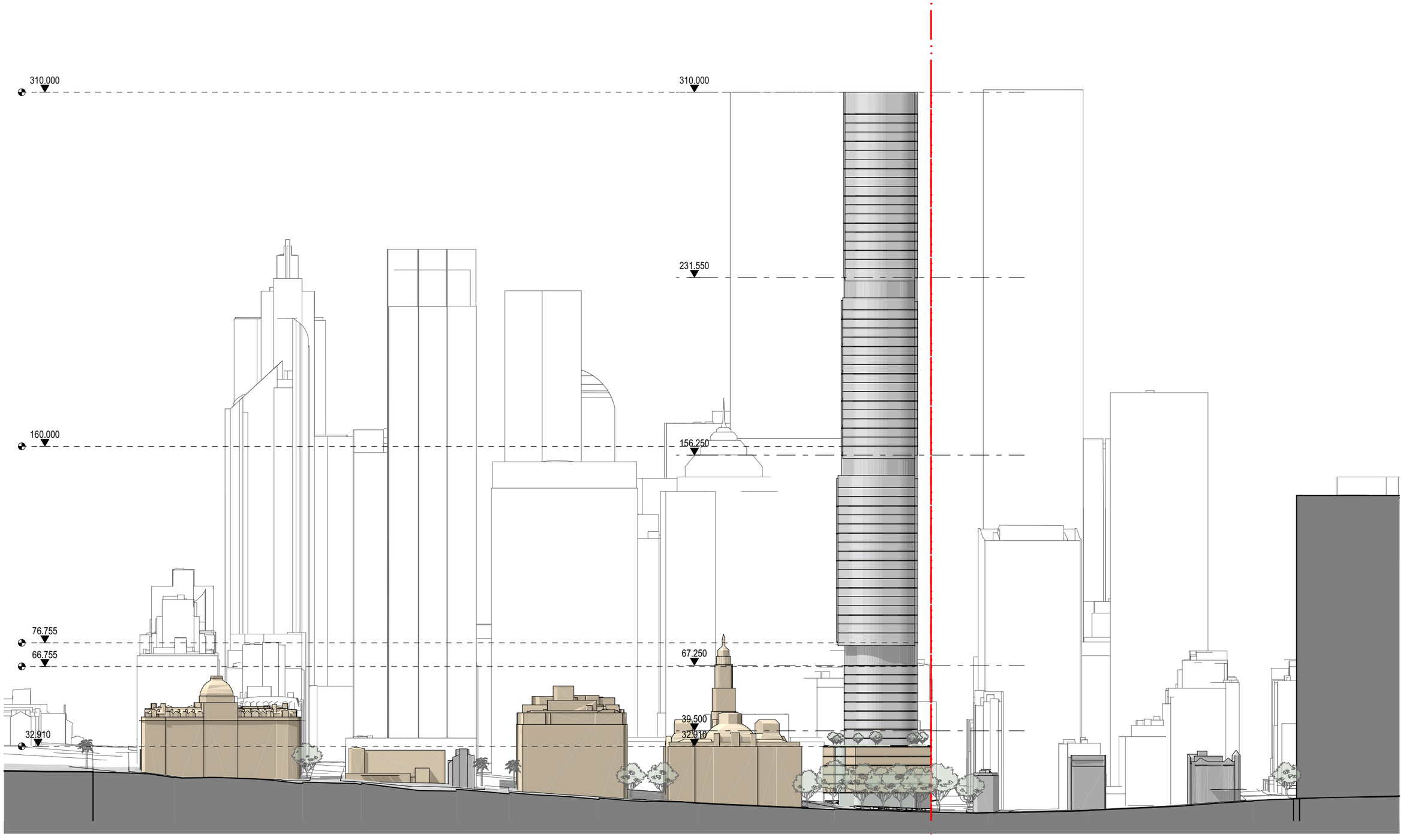
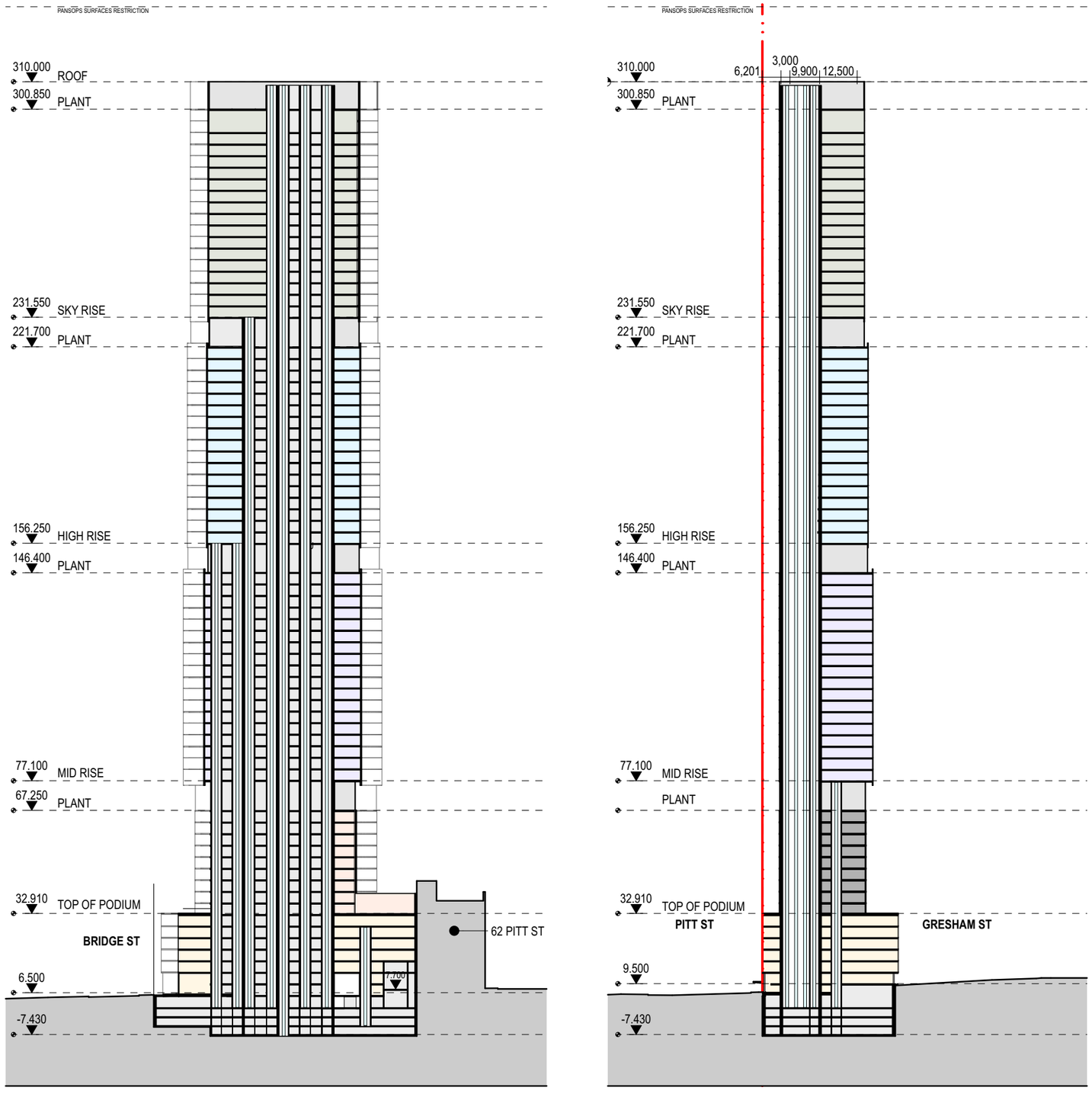
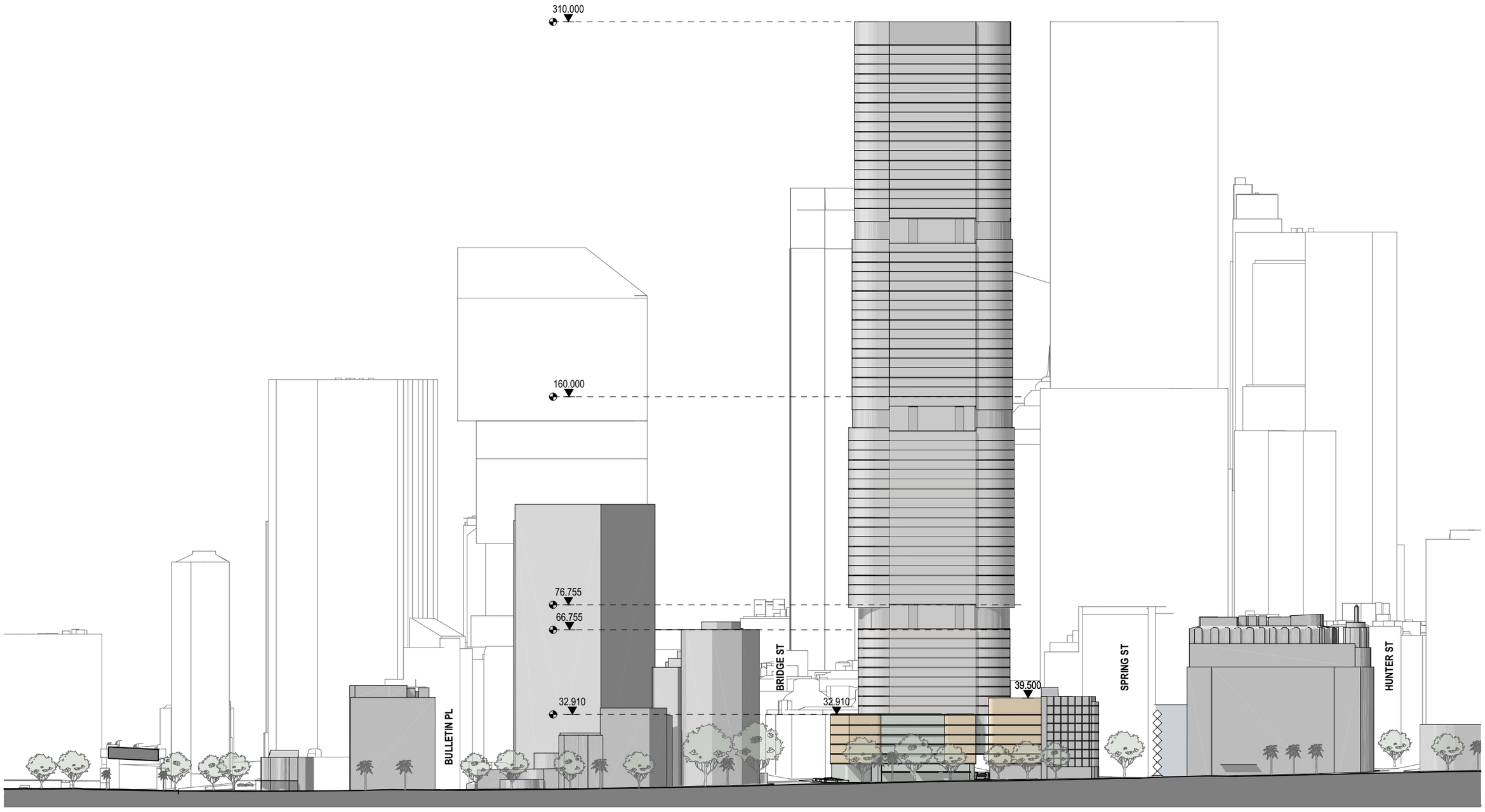


North Elevation



Tower Sections



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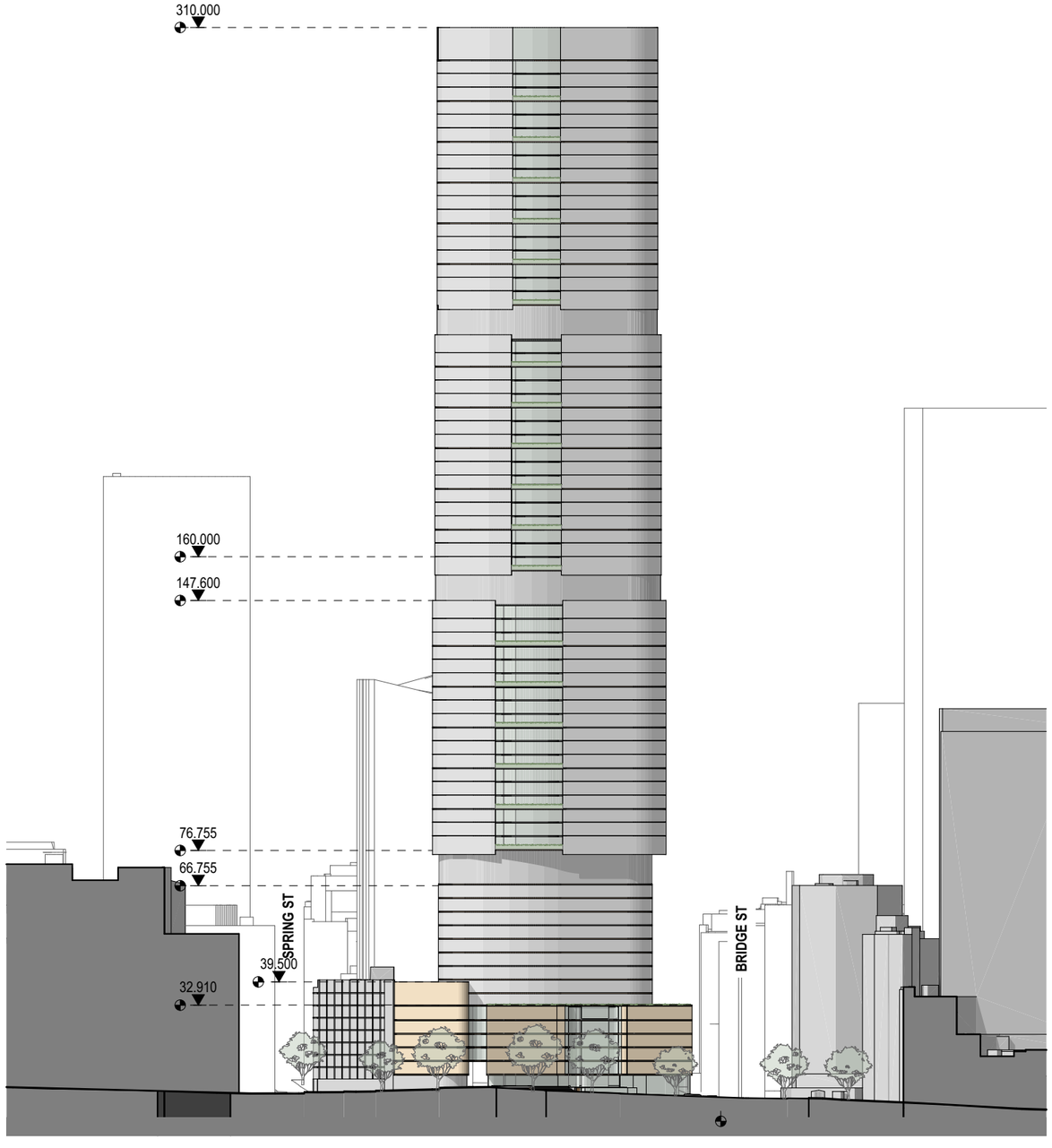
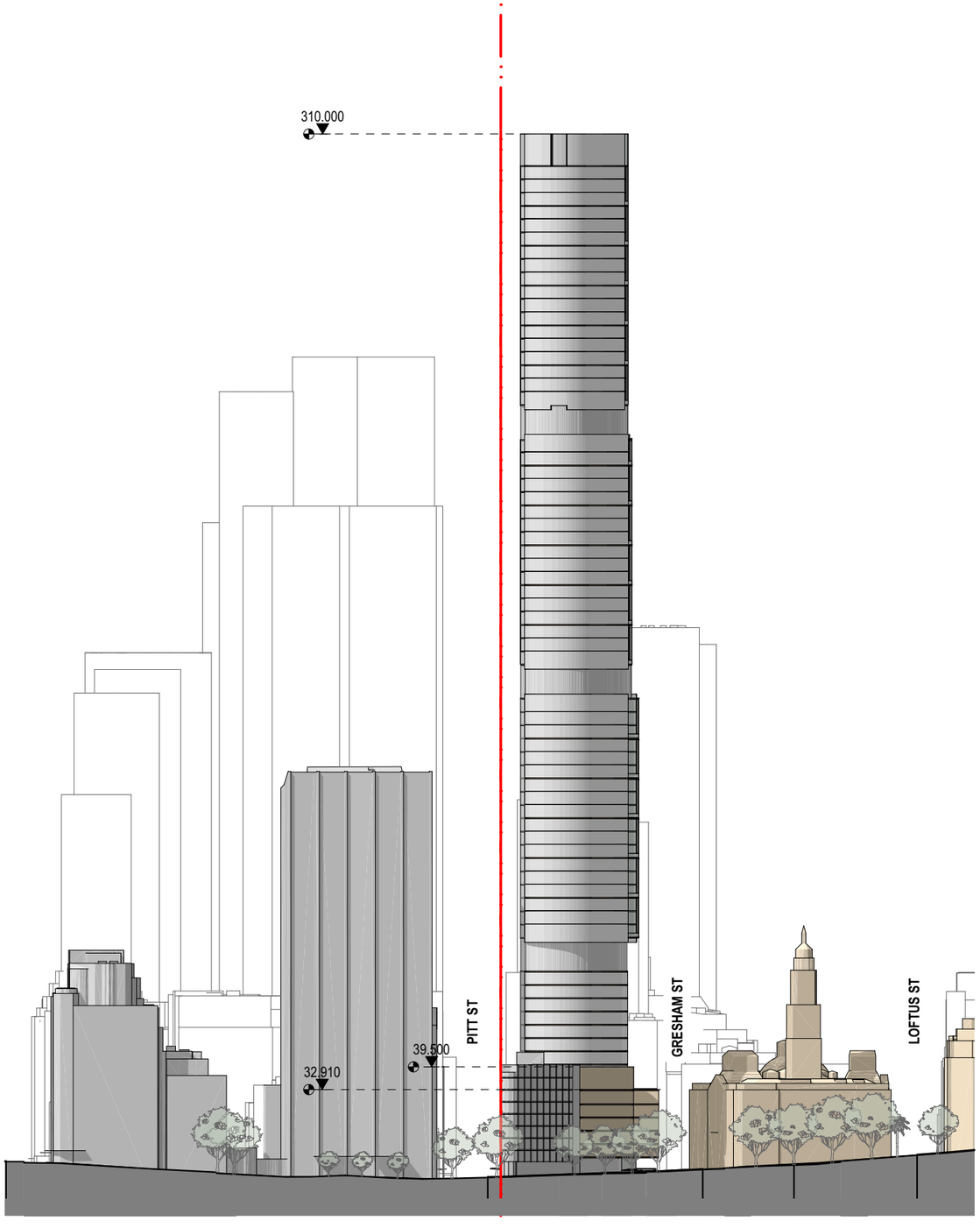
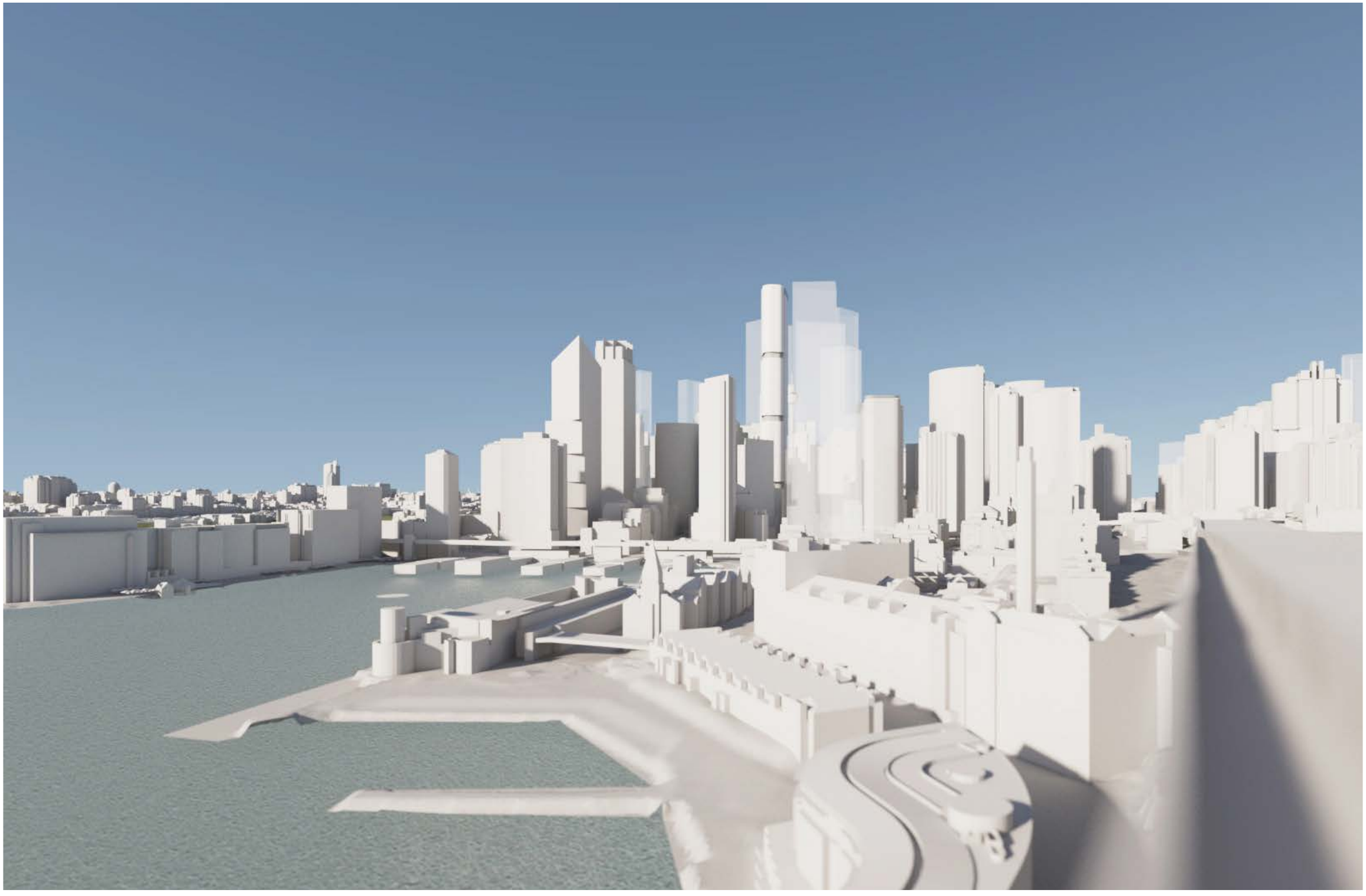
West Elevation



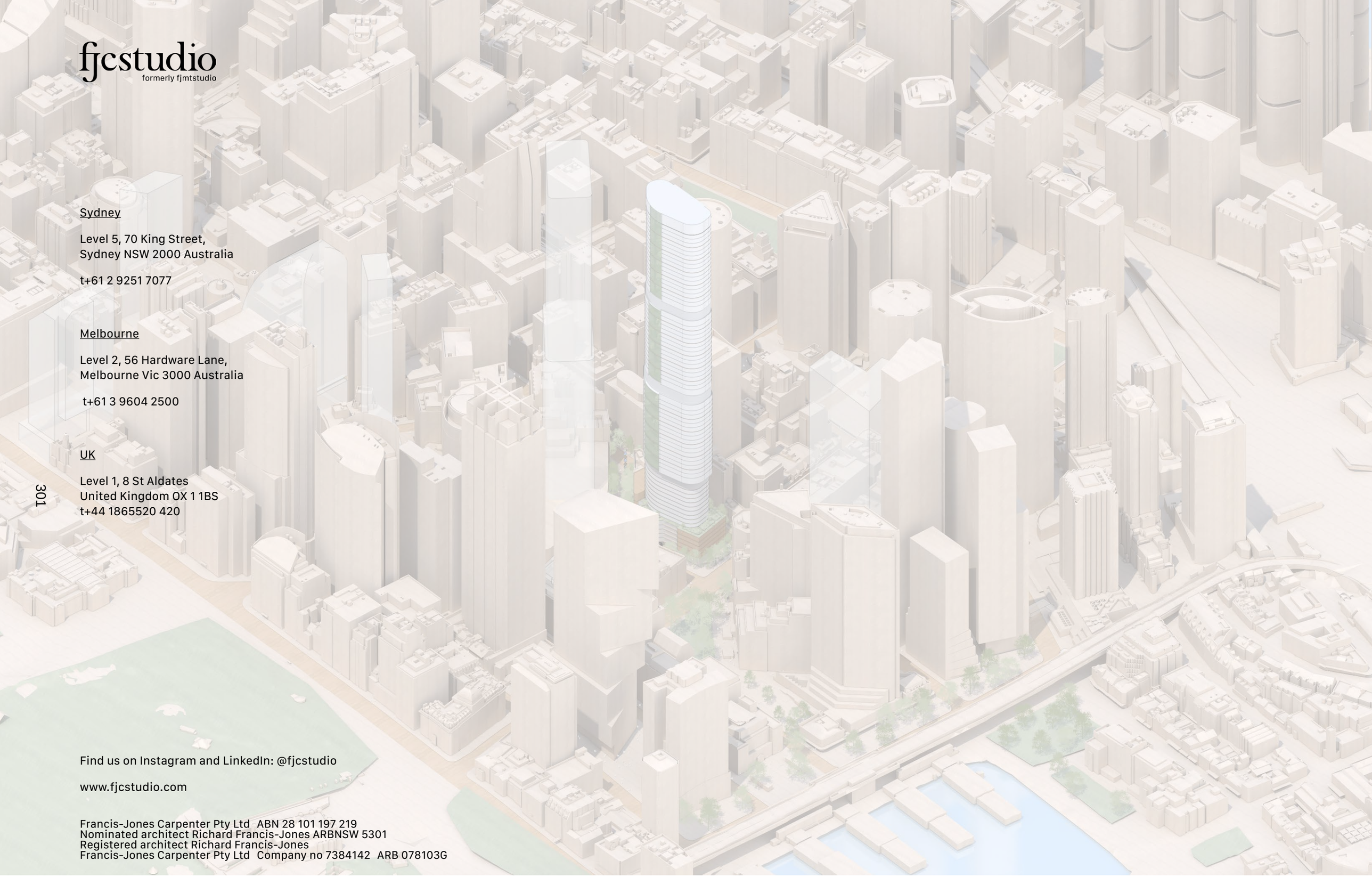
East Elevation



South Elevation



300



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