

Attachment A20

**Urban Design Report – April 2020 –
187 Thomas Street, Haymarket - pt2**

3.3 Environmental Performance Driven Setbacks

Tower setbacks have been determined by environmental performance as well as other urban design considerations.

In particular wind and daylight studies in the public domain have driven street wall and upper level setbacks to maintain amenity in the public domain.

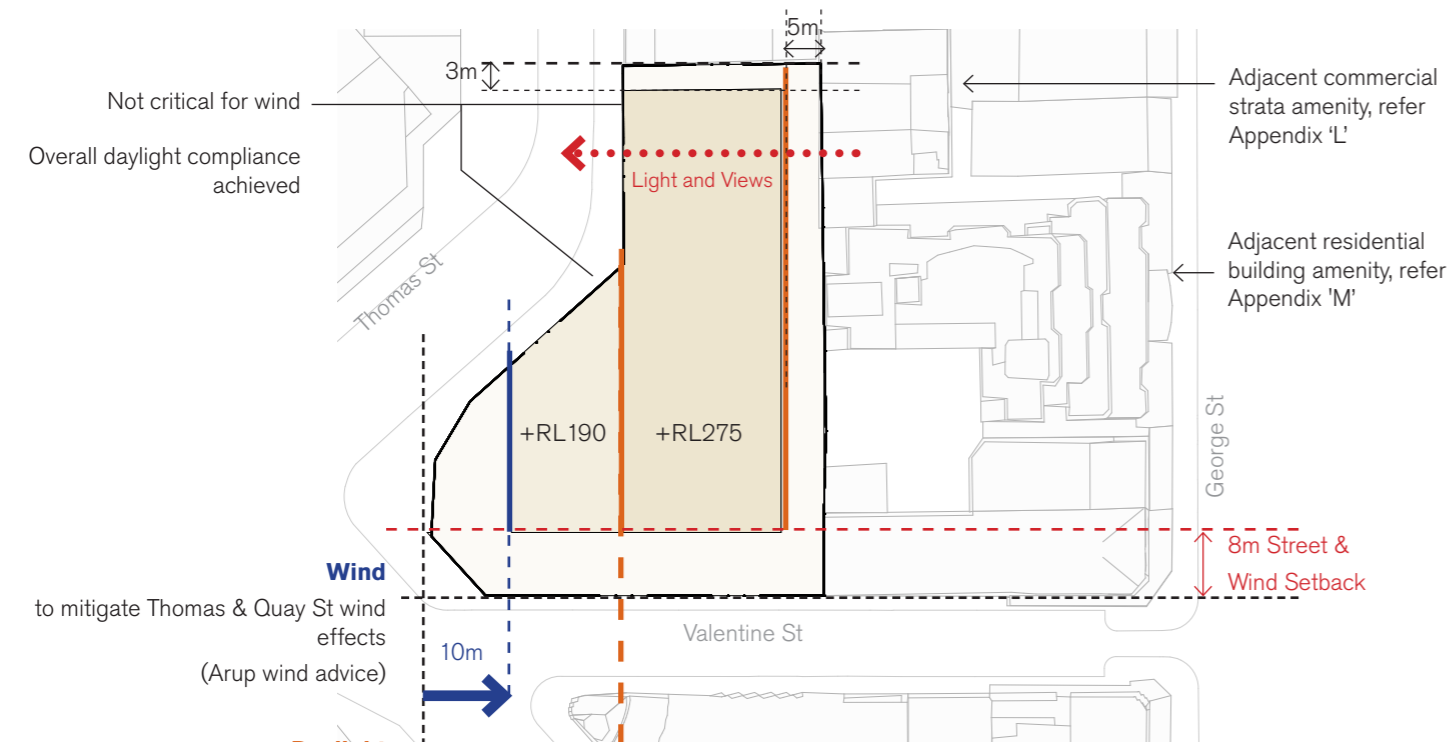
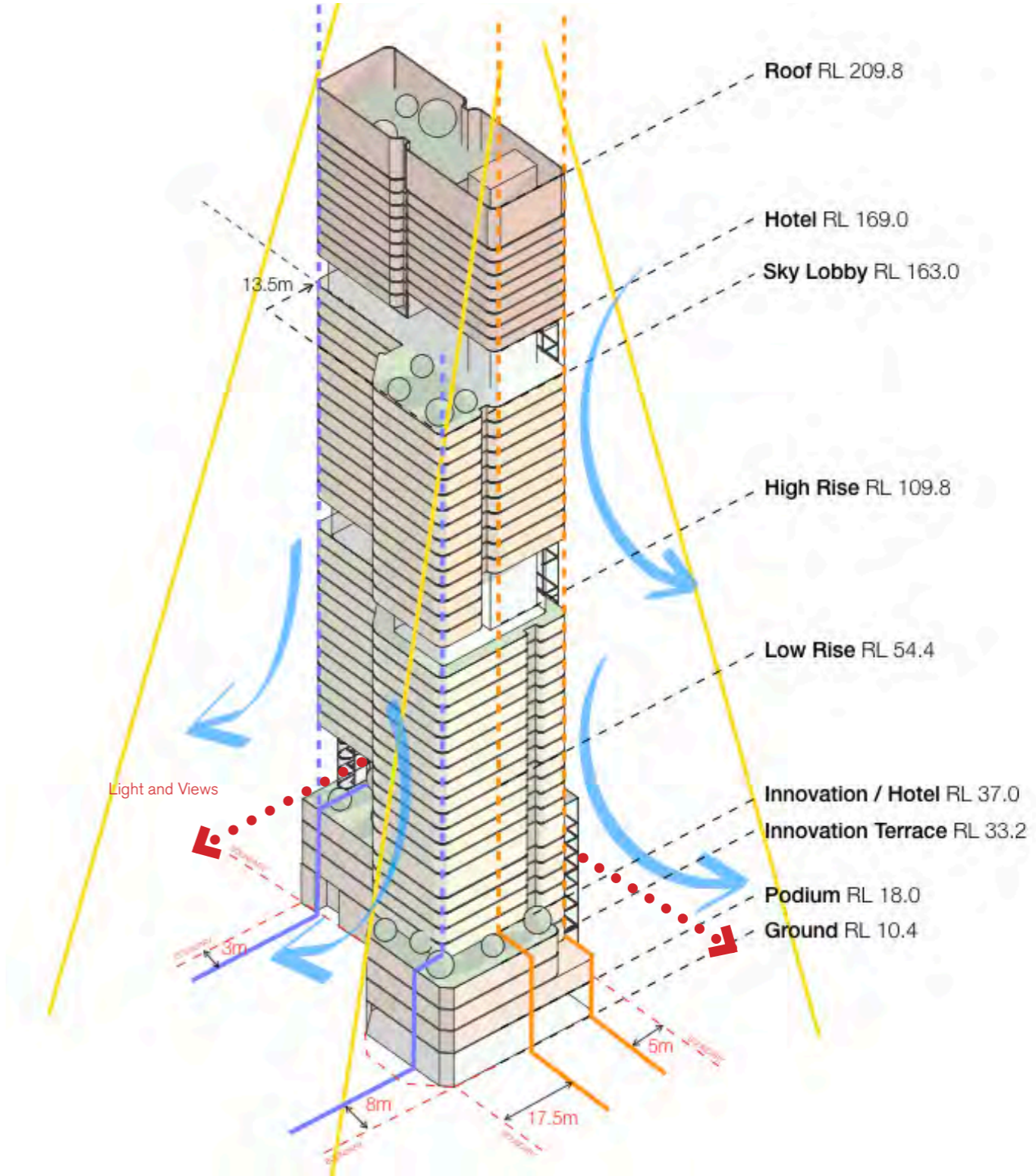
Additional setbacks to Valentine Street responds to the heritage context. The podium roof garden and elevated tower to the north improves residential amenity for the neighbouring strata building.

The draft CSPS - Schedule 11 provides a mechanism to vary setbacks from the draft controls.

This mechanism is based on daylight and wind analysis. A preliminary wind report has been undertaken by Arup which is summarized in Appendix 'I'. A detailed daylight analysis has been undertaken with further information available in appendix 'H'.



Daylight compliance as per draft CSPS Schedule 11, Further analysis and option studies are provided in Appendix I.



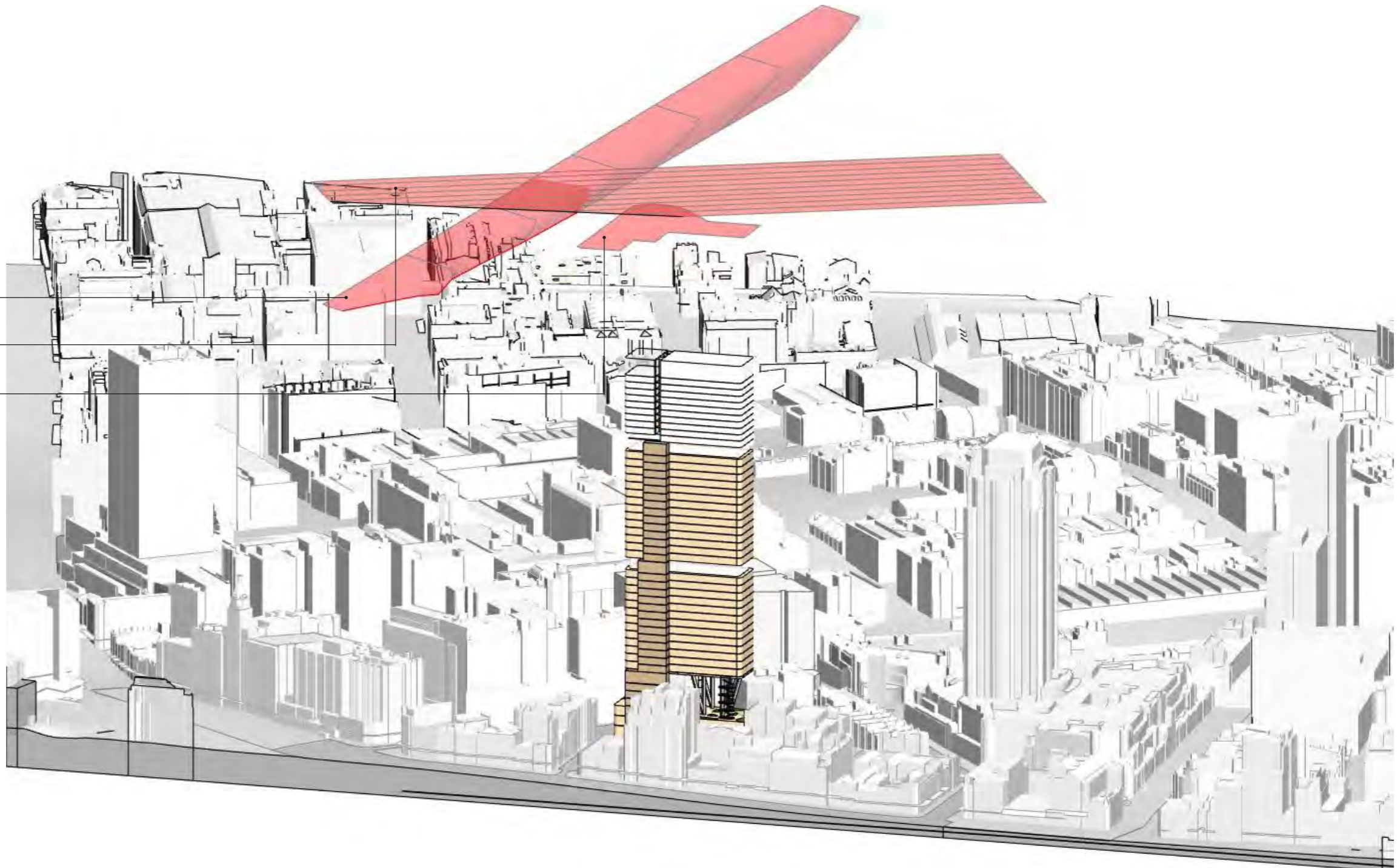
Wind compliance as per draft CSPS Schedule 11, Further analysis and option studies are provided in Appendix I.

3.4 Tower Height

Under the draft Central Sydney Planning Strategy the maximum building height for this site is limited by overshadowing controls for Prince Alfred Park (The proposed sun access plane for the new square at Central Station does not impact this site) and by airspace controls.

Airspace controls are lower in this case and a 15m crane zone must be provided below the airspace control to determine the maximum height.

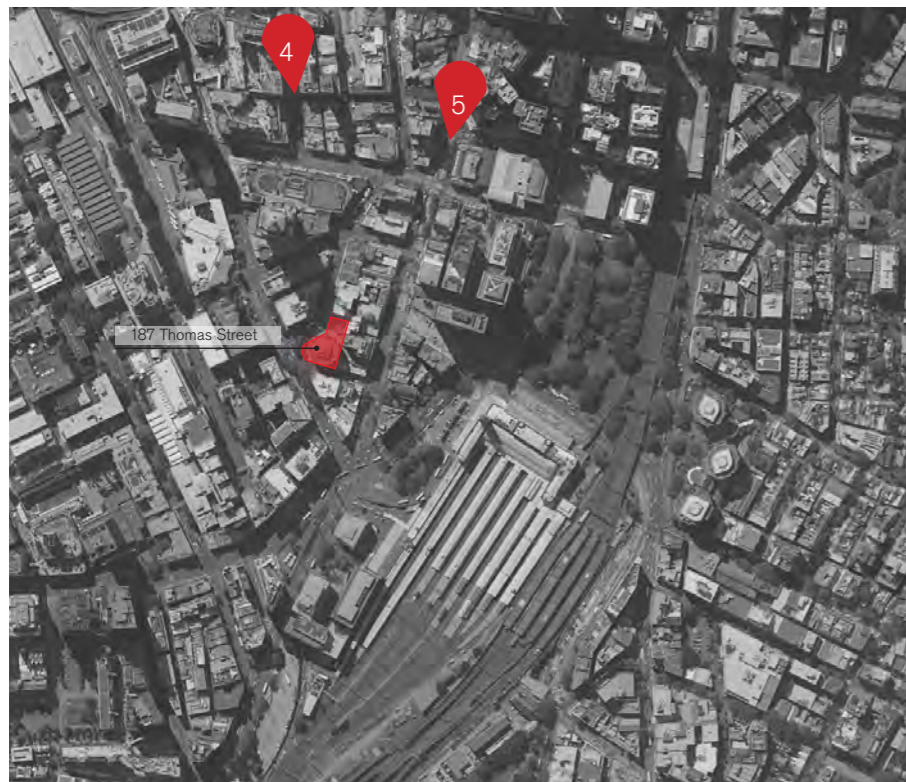
The top surface under these constraints is at RL290. The ground level around the perimeter of the site ranges from RL12 to RL8, resulting in a potential maximum building height of 278m.



Draft CSPPS Prince Alfred Park Sun Access Plane
RL335.2 - RL340m.

Sydney Airport draft 2018 PANS-OPS
RL290m - RL300m.

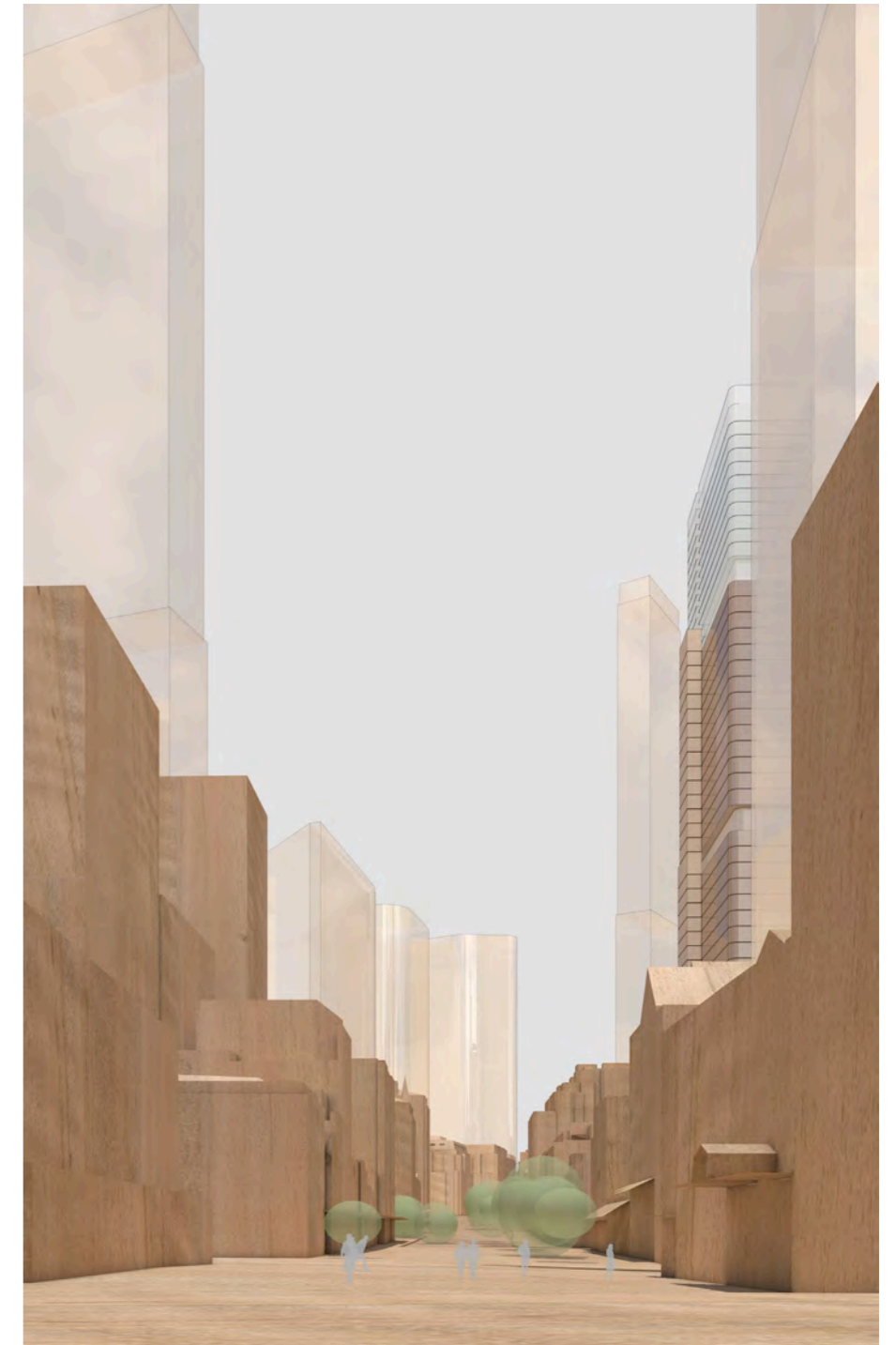
Crane Zone : 15m below PANS-OPS
RL275m - RL285m.



View Study Location Plan



View 4 Streetscape: Looking South Along Dixon Street



View 5: Streetscape: Looking South Along George Street

3.5 Urban Stratums

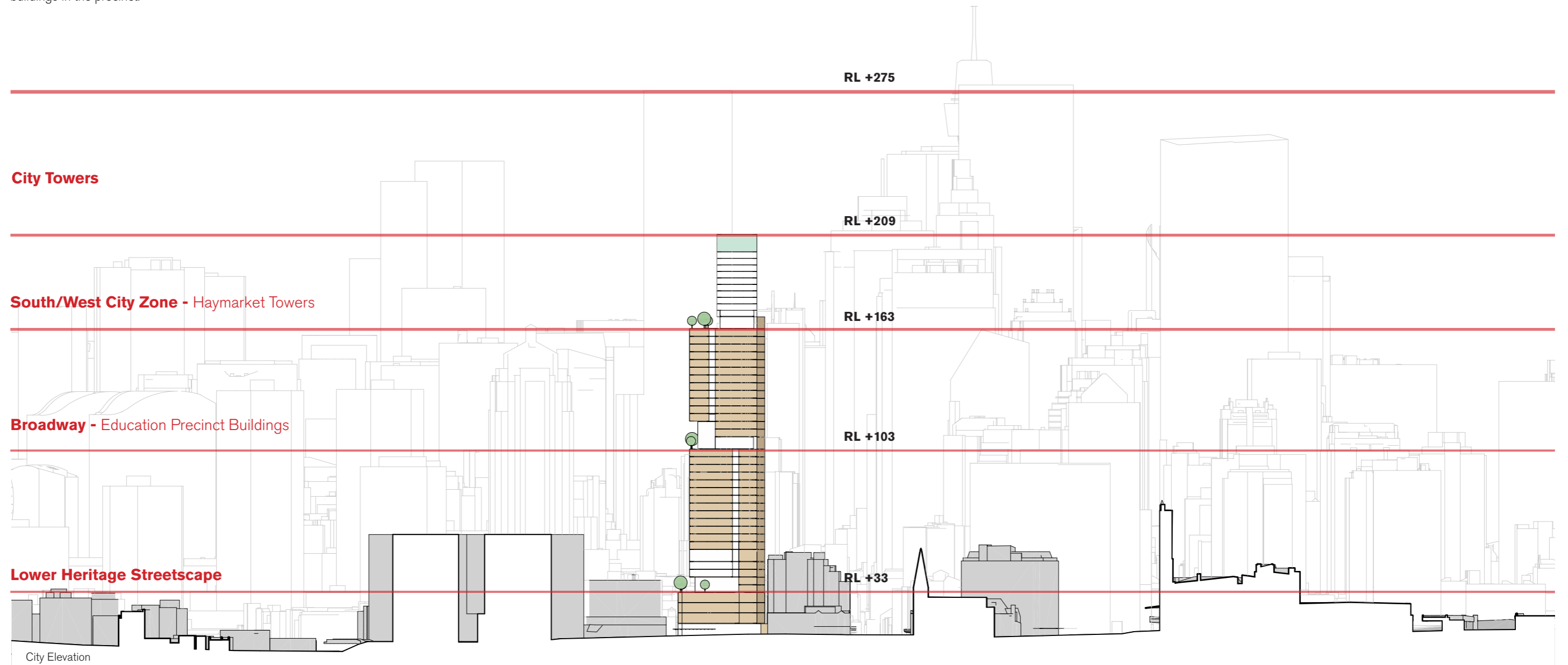
Tower development on the city over time has resulted in a series of steps or stratums as planning controls and technology have evolved.

A mixed use development can respond to these stratifications.

The proposed building envelope broken up into 4 key elements: podium, void tower, commercial tower and skyrise tower reflecting the existing stratification of buildings in the precinct.

The articulation at the interface levels of tower element can contain green spaces, which are sky lobbies, transfer lobbies or shared facilities and roof terraces.

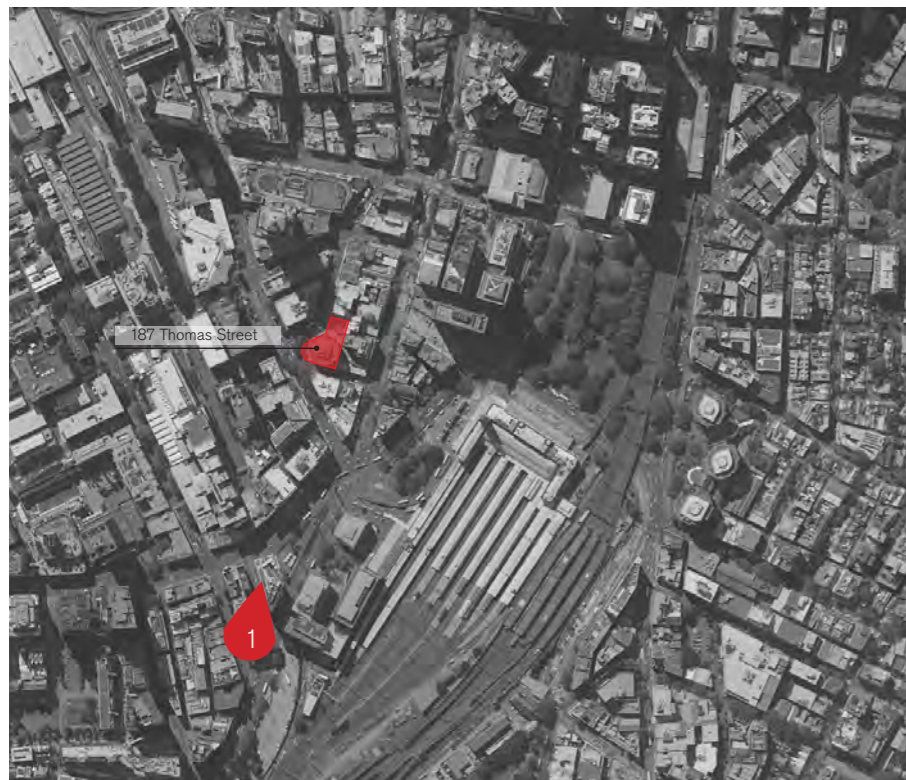
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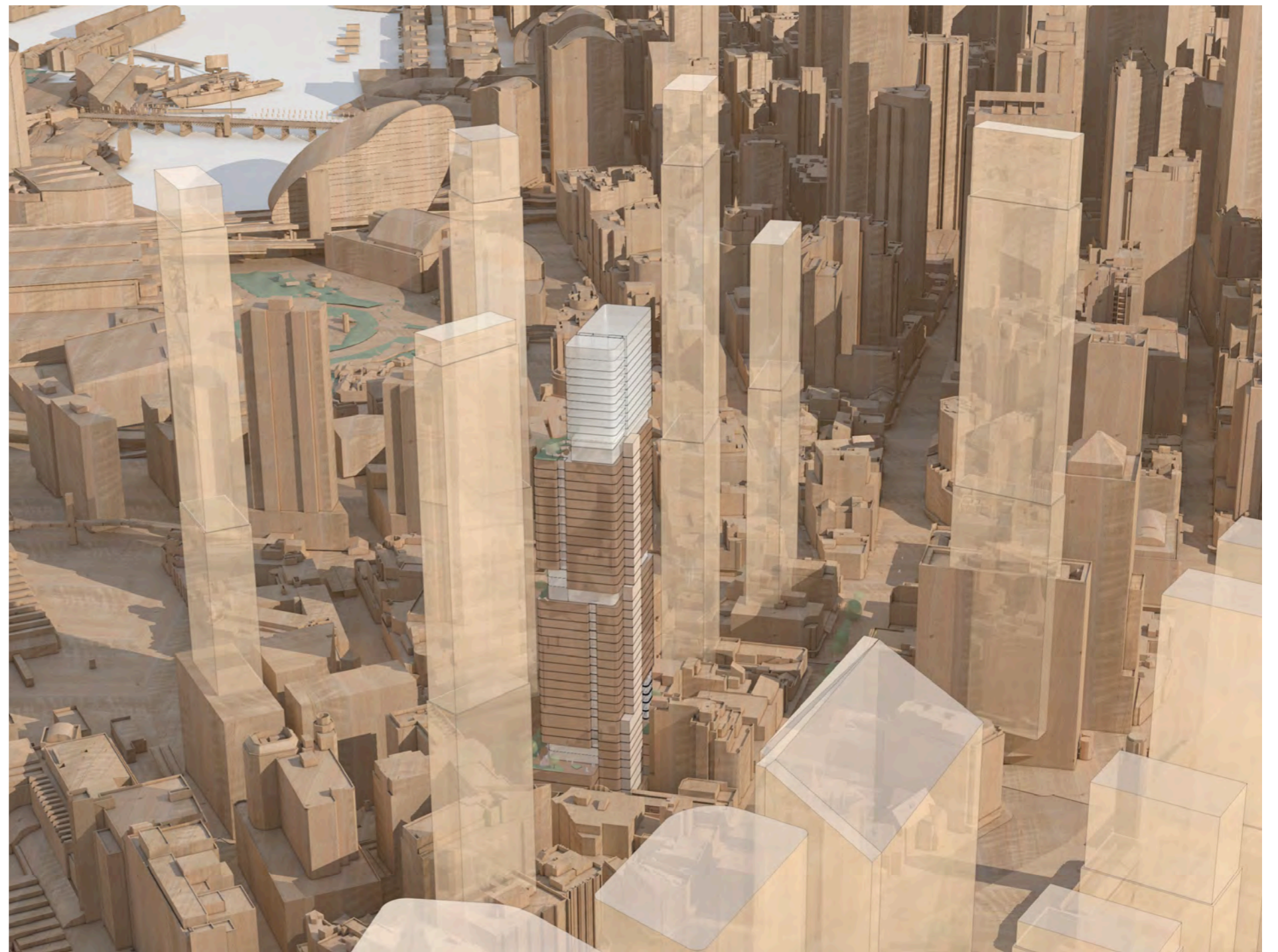
City Elevation

3.6 Views

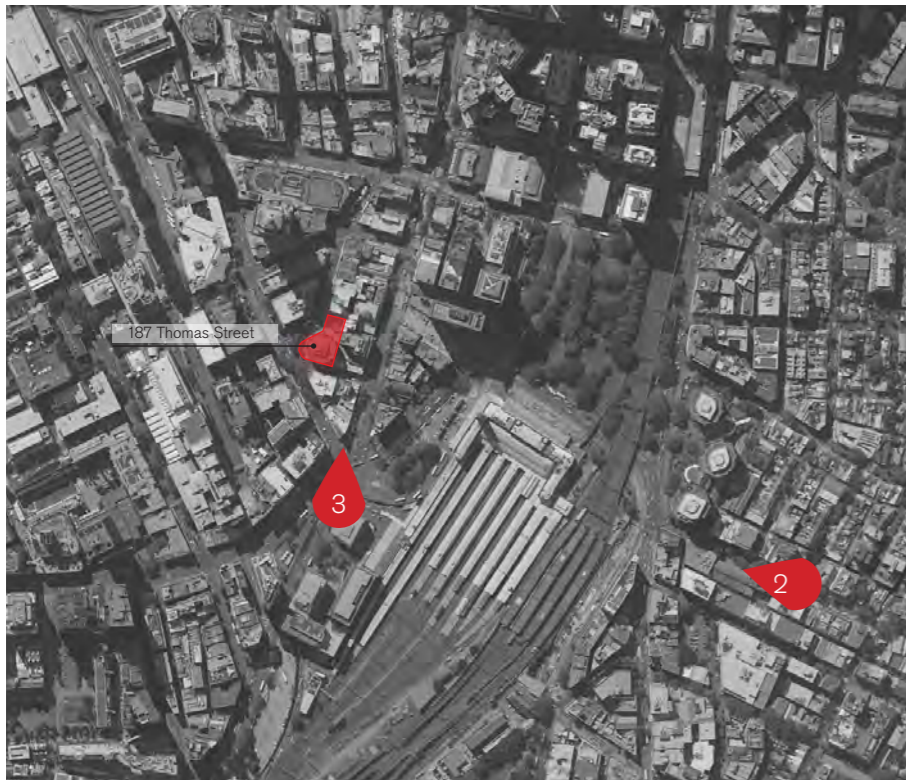
Concept model views have been taken from key city streets including estimated massing of other potential future towers as envisioned by the draft CSPS and the Central to Eveleigh initiative.



View Study Location Plan



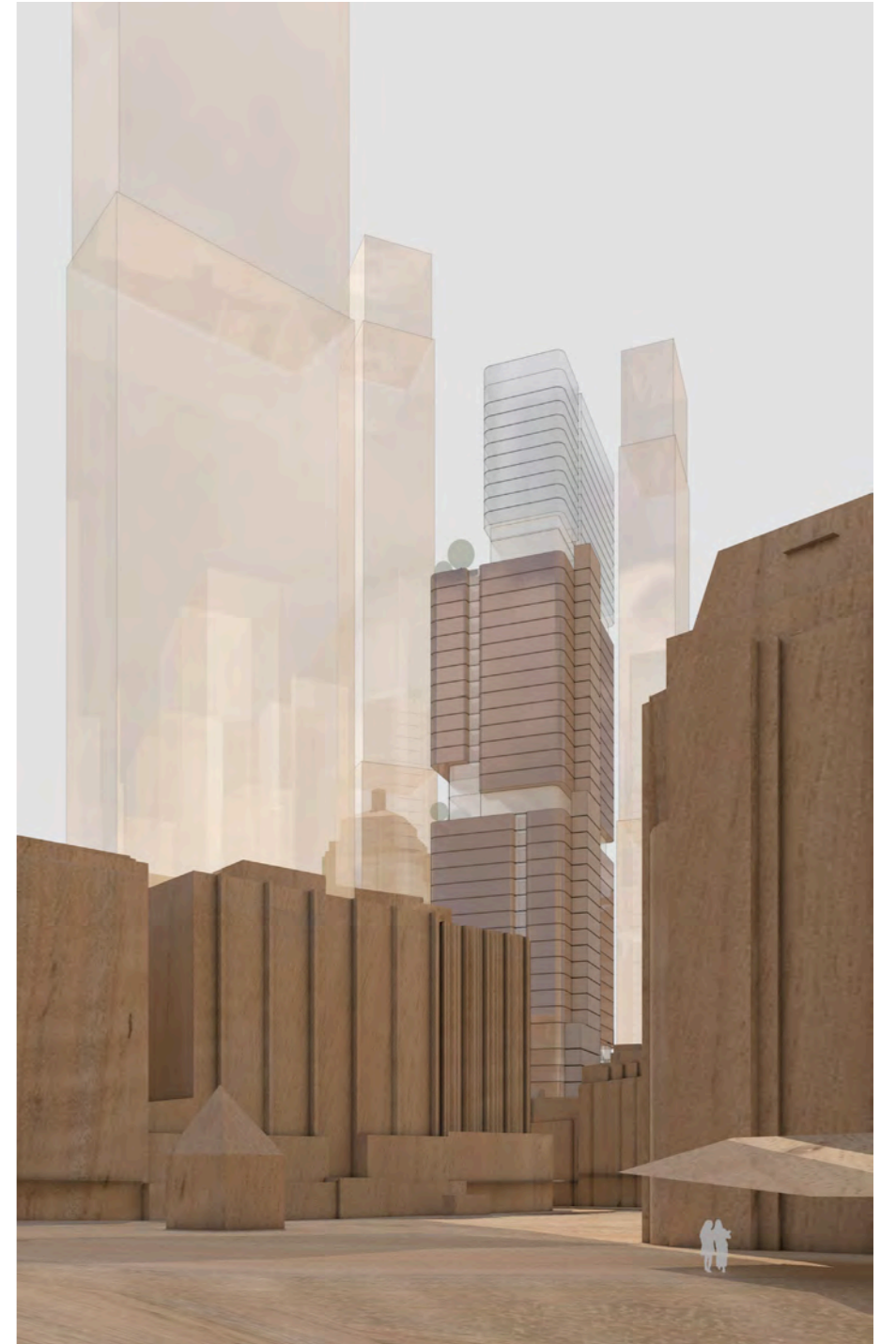
Aerial View 1: Tower And Future City Tower Cluster From The South



View Study Location Plan



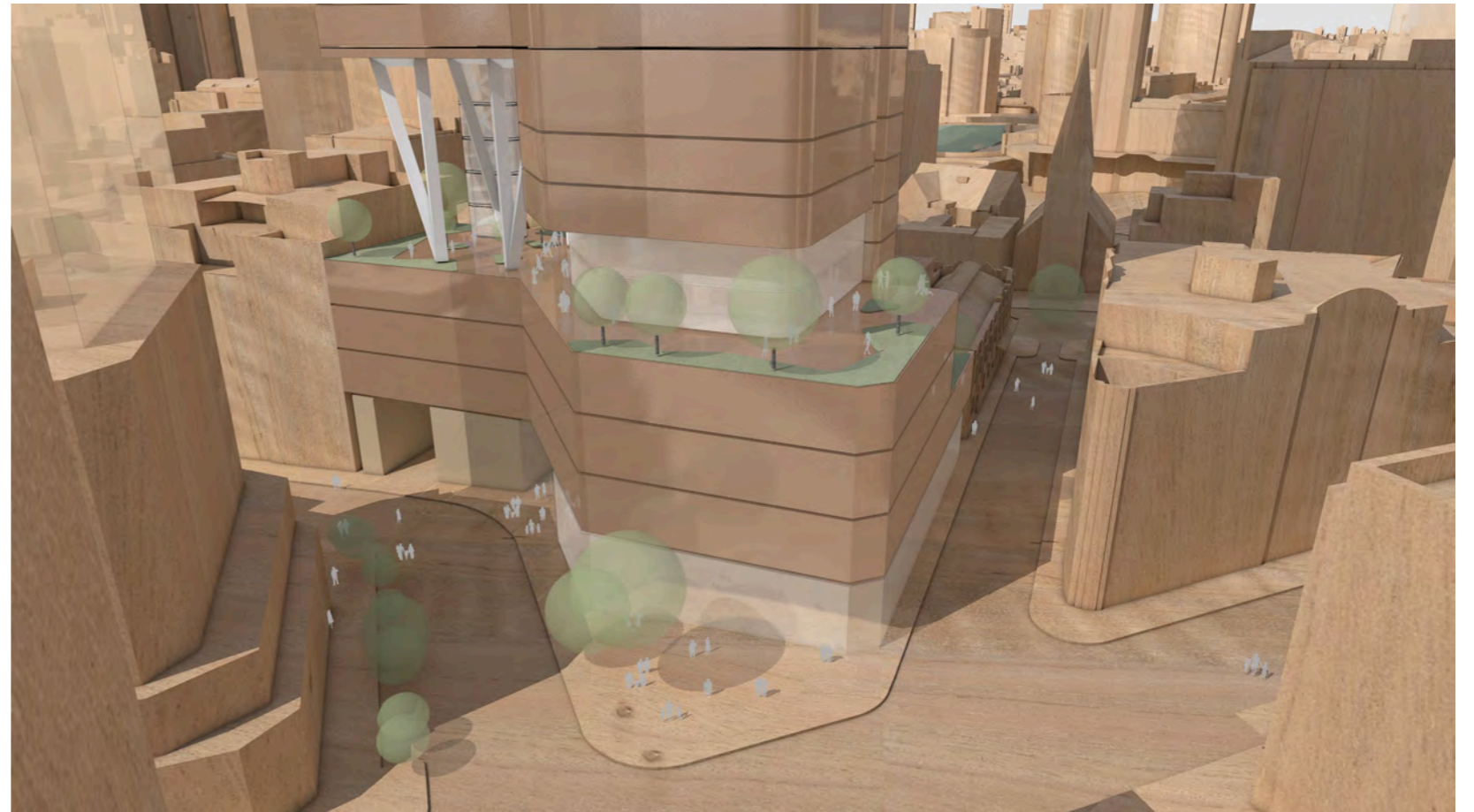
View 2 Streetscape: Looking West Along Foveaux Street



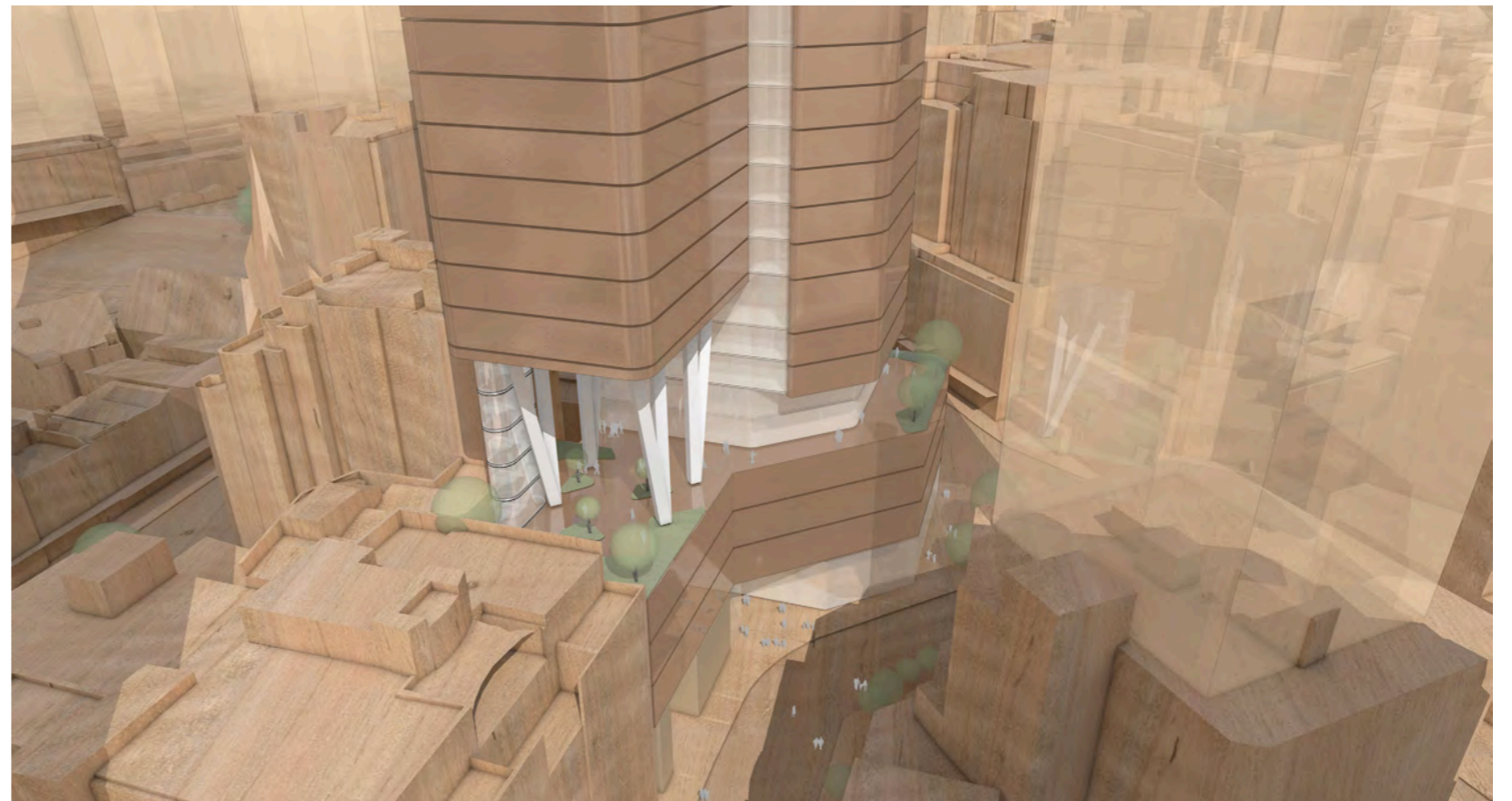
View 3 : Streetscape: Looking North From Railway Square

Detailed concept model views which show the interlocking of the streetscape, podium heritage building and tower setbacks.

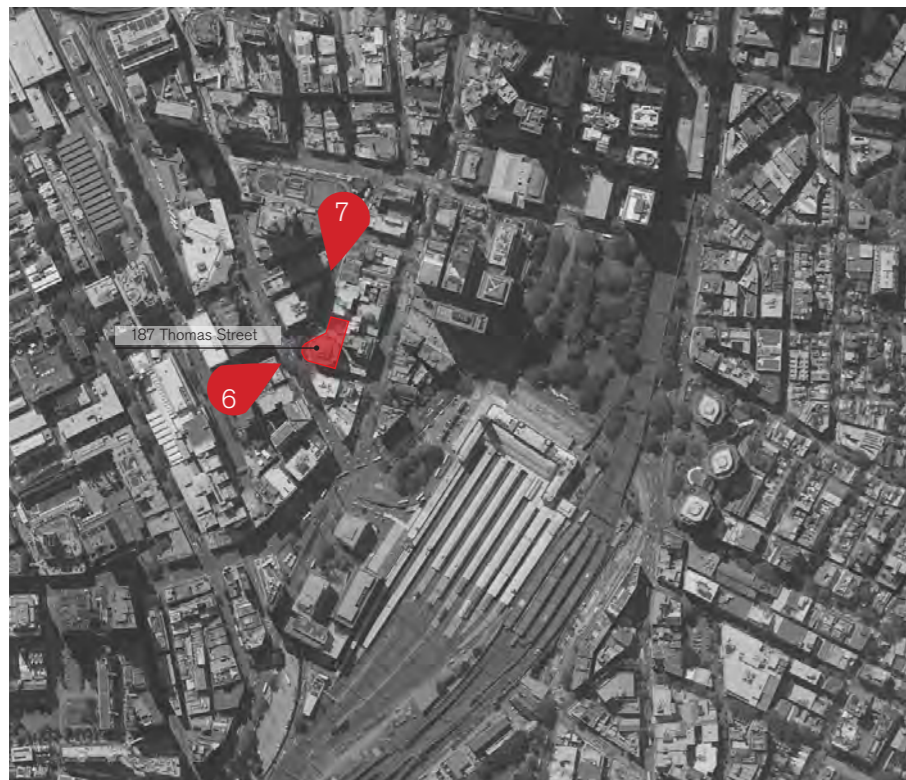
The north tower is elevated approximately 18m with a garden terrace to allow improved access to natural light and views for the neighbouring residential building.



View 6: Podium View From West



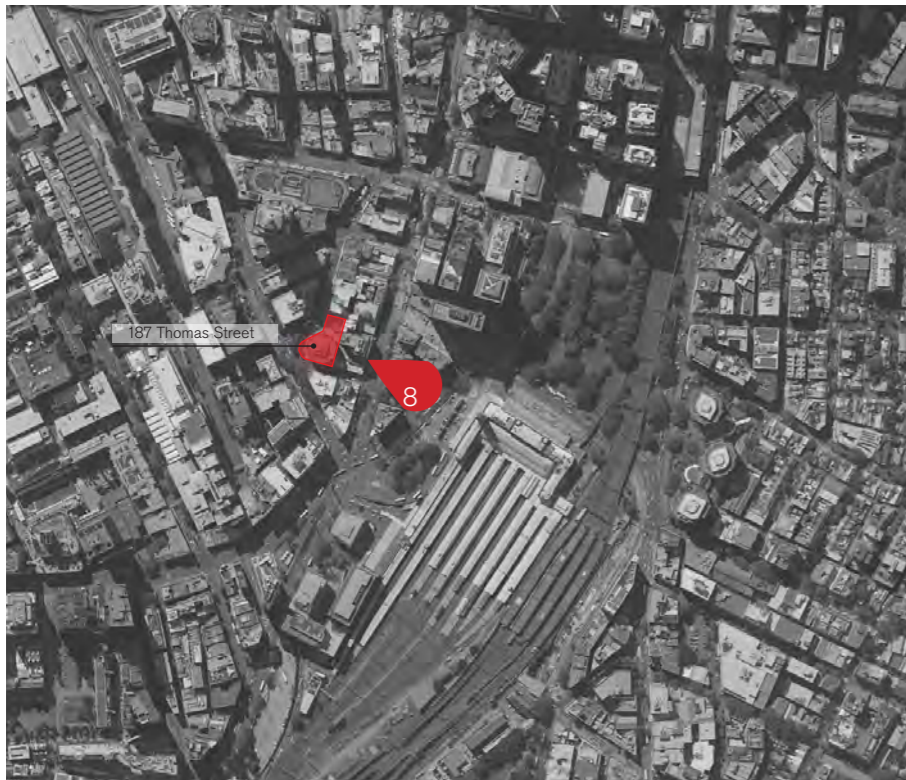
View 7: Podium View From North



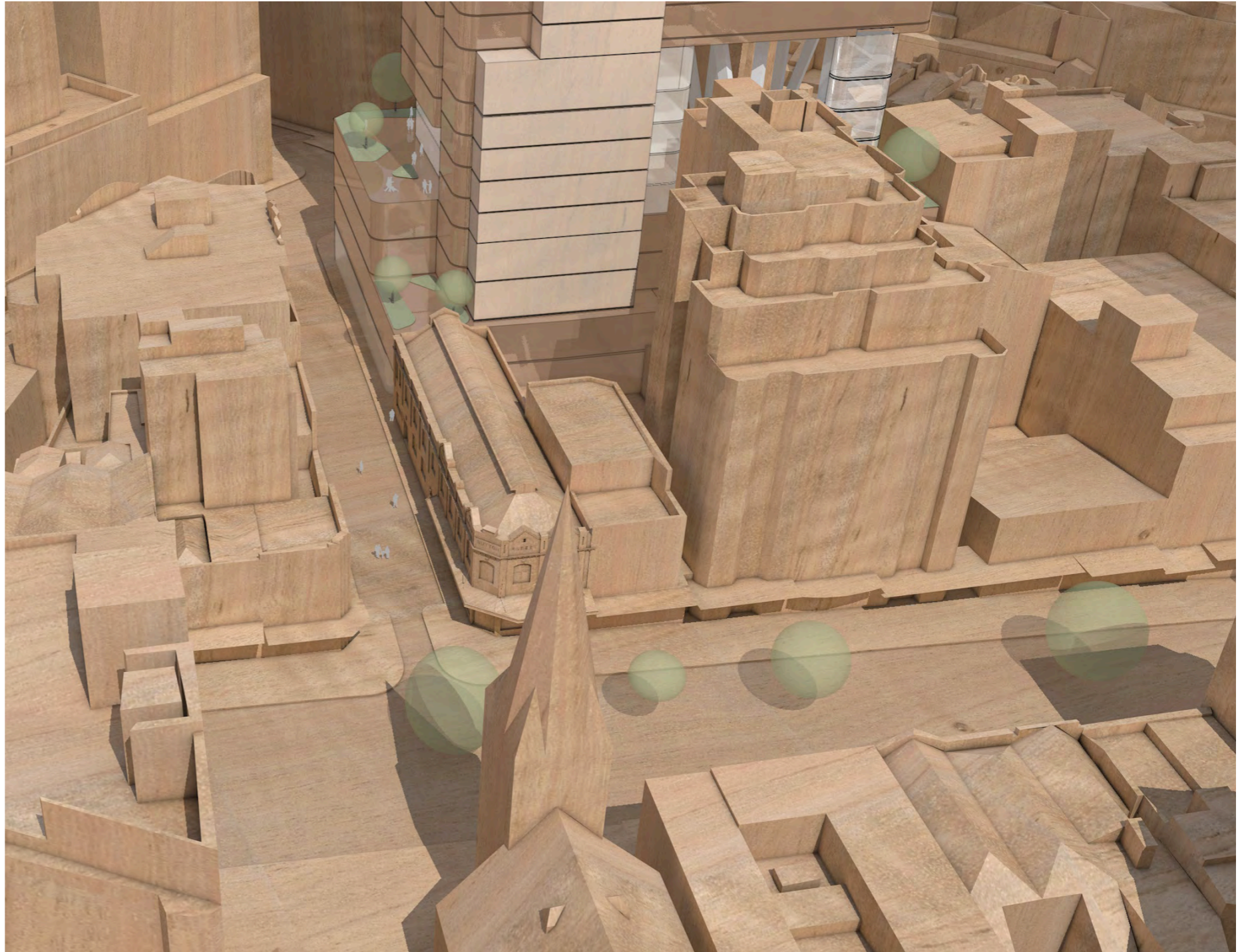
View Study Location Plan



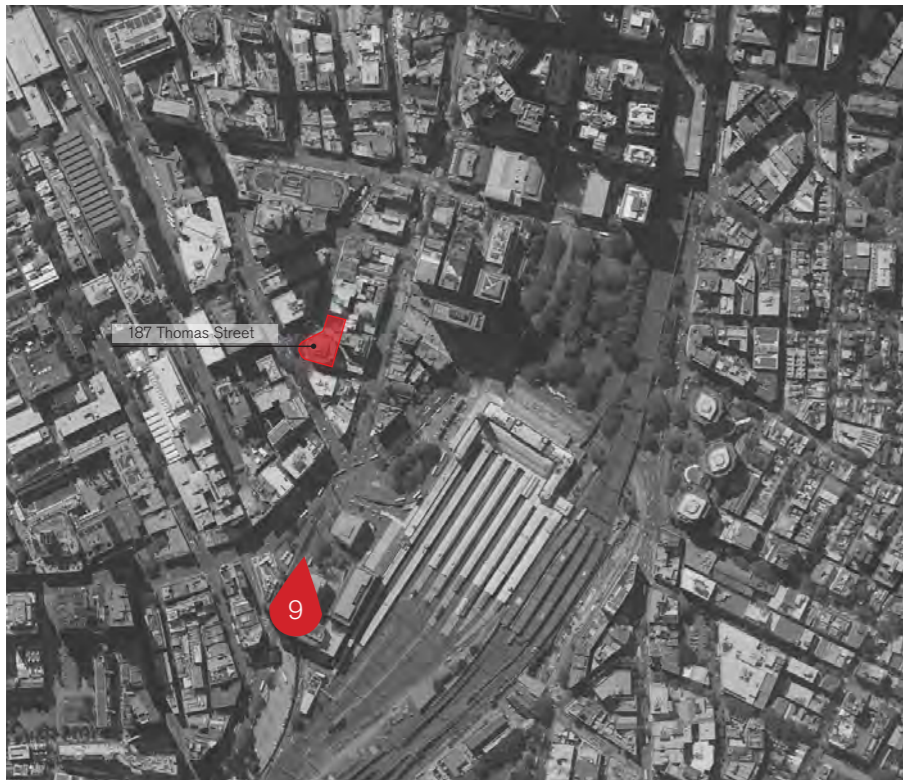
View 7: Podium View From North



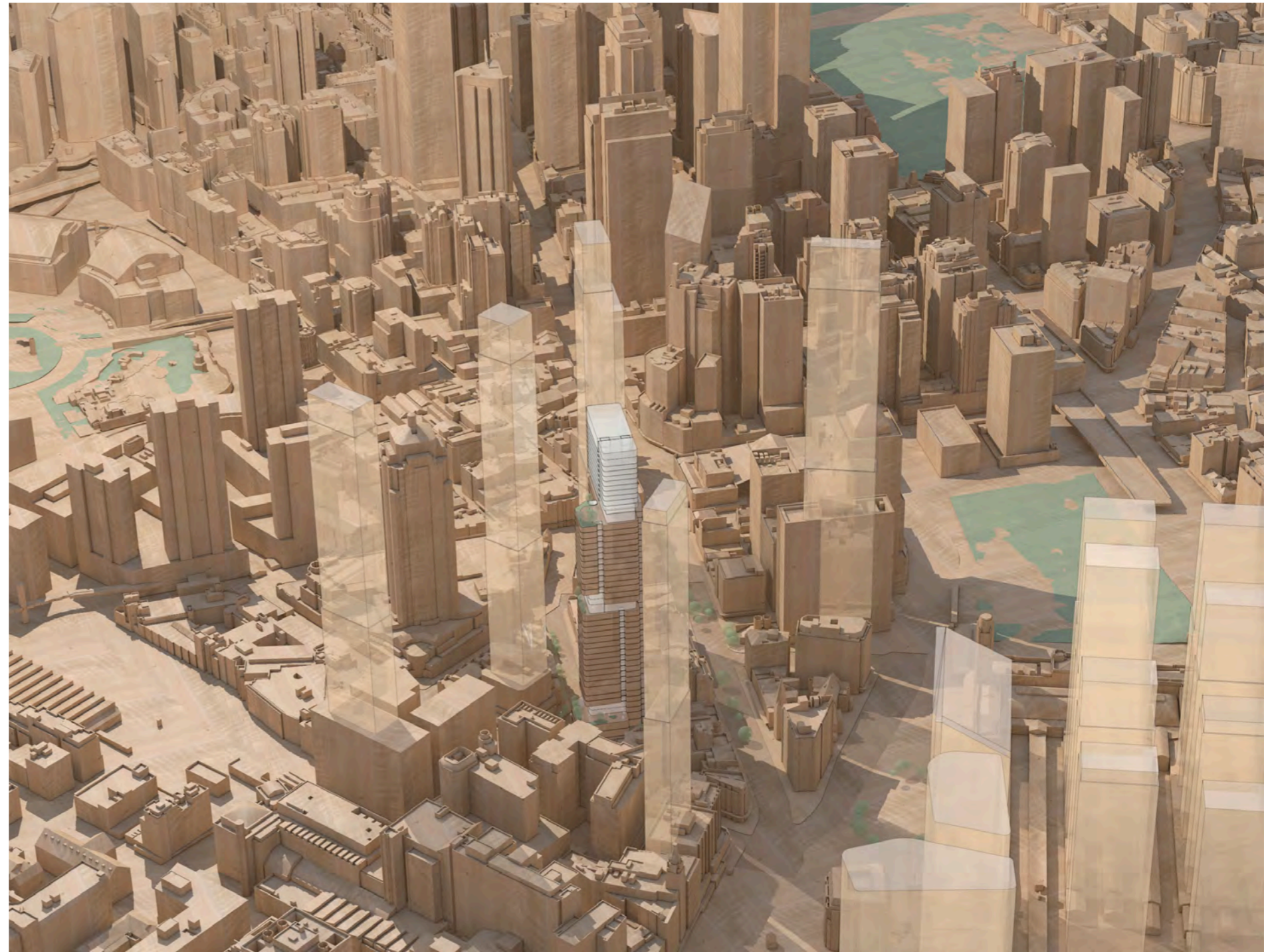
View Study Location Plan



View 8: Podium View From East



View Study Location Plan



Aerial View 9: Tower And Future City Tower Cluster From The South

3.7 Sustainability Initiatives

A sustainable work place, health and wellbeing are the core of this proposal. This is an interconnected hybrid tower with access to fresh, clean air, natural light and a vertical community of innovators and the organisations that support them.

The building will need to pass the ESD site test outlined in the draft Central Sydney Planning Strategy, which represents very high standards of sustainable design and energy performance.

The following initiatives will be implemented to deliver the objectives of the Sydney Development Control Plan (DCP) 2012 along with several other policies influencing development in the Sydney CBD.

- _Net zero carbon
- _Zero waste
- _NABERS Energy 5.5 and NABERS Water 4 in office areas
- _NABERS Energy 4.5. and NABERS Water 4 in the hotel areas

In addition, the entire development will implement a range of other sustainability initiatives including the following:

Energy

- _Passive design techniques
- _High efficiency mechanical / lighting
- _High performance glazing
- _Photovoltaics
- _Metering

Water

- _Efficient fixtures and fittings

Waste

- _Waste management & operations

Materials

- _Recycling / low VOC

Biodiversity and Landscape

- _Tree Canopy cover
- _Native species

Transport

- _Electric vehicle charging stations
- _End of trip facilities

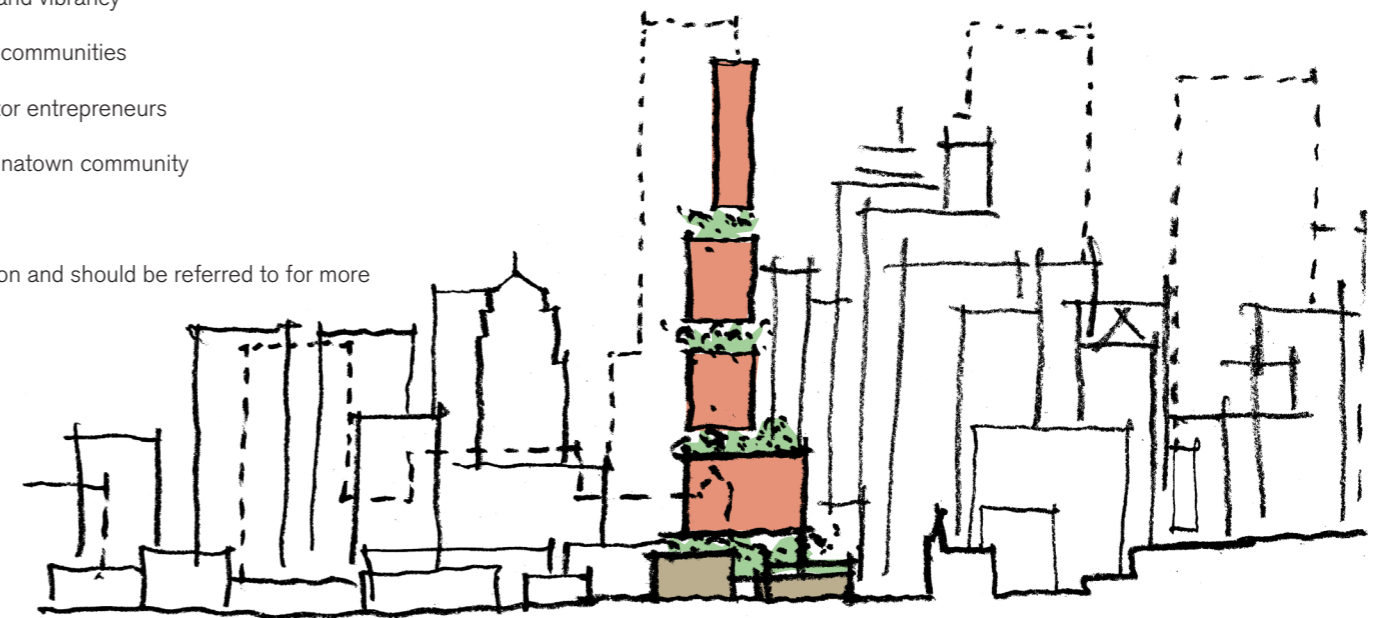
Climate Change

- _Assessment of risks and potential impacts

Social Sustainability / Community Benefits Initiatives

- _Social and cultural infrastructure to enhance the social and cultural life of the locality
- _Public domain enhancements to improve liveability and vibrancy
- _Infrastructure tailored to the needs of local student communities
- _Infrastructure opportunities for social/ creative sector entrepreneurs
- _Culturally-specific responses to the Haymarket/Chinatown community

A comprehensive ESD report is part of this submission and should be referred to for more detail.





4.0 The Vision - A Hybrid Tower

The following sections demonstrate the Preferred Indicative Scheme, with a series of diagrams within the Proposed DCP Envelope. The vision of the project aims to achieve high quality spaces for each use with shared common facilities, yet satisfies all requirements and purposes within a vertical arrangement.

Those visions are listed as below.

4.1 A Hybrid Tower

4.2 Work/Stay/Play/Learn/Rest/ Invent

4.3 Innovation Hub

4.4 Innovation Podium

4.5 Innovation Park

4.6 Innovation Void Tower

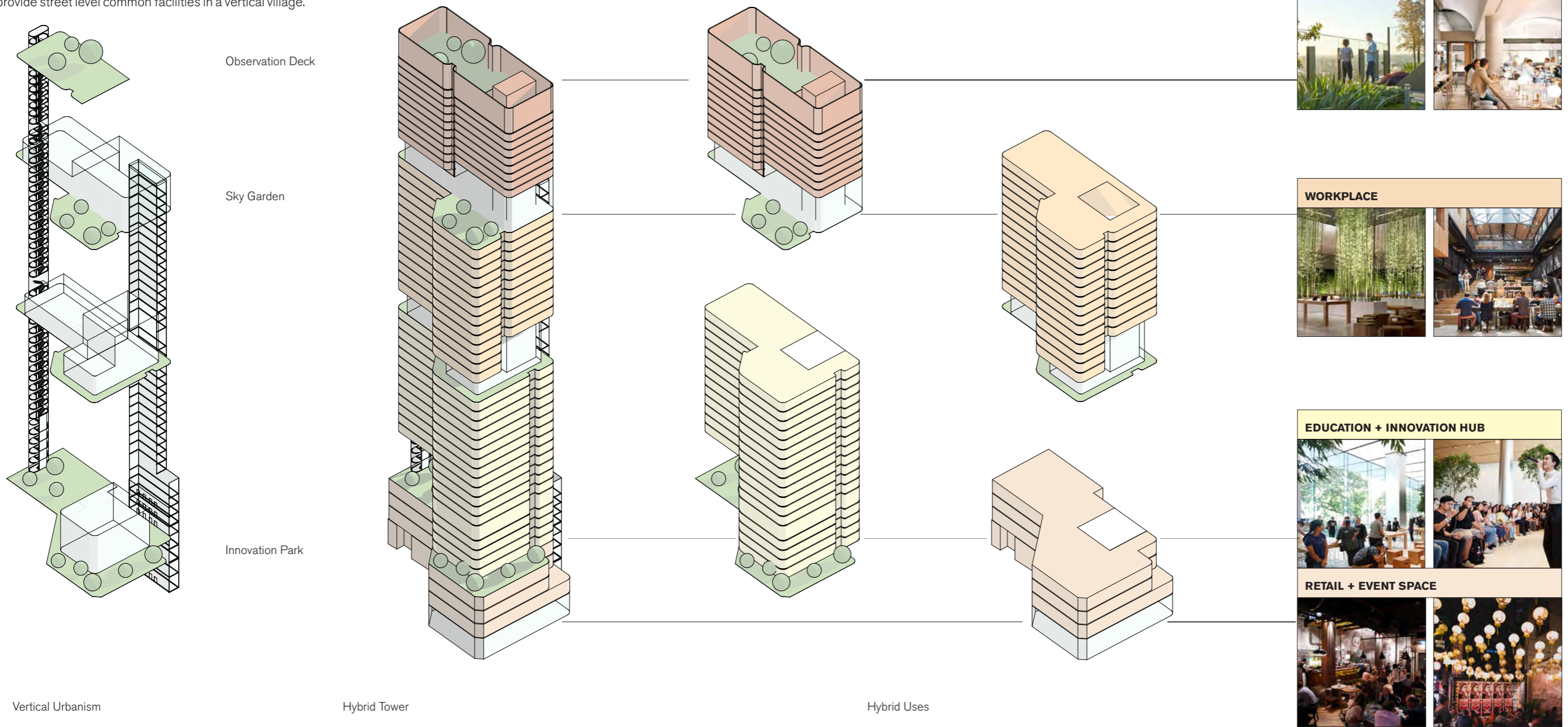
4.7 Lifting Diagram

4.8 Lift Lobby Interchange and Hotel Facilities

4.1 A Hybrid Tower

A hybrid tower combines multiple uses within a vertical arrangement, each with their own identity and requirements but sharing common facilities in the way that a horizontal series of buildings would share a city street. Structured around an innovation hub; related functions such as hotel accommodation for business visitors, work space to support startups through education and co-location and retail and event space provide street level common facilities in a vertical village.

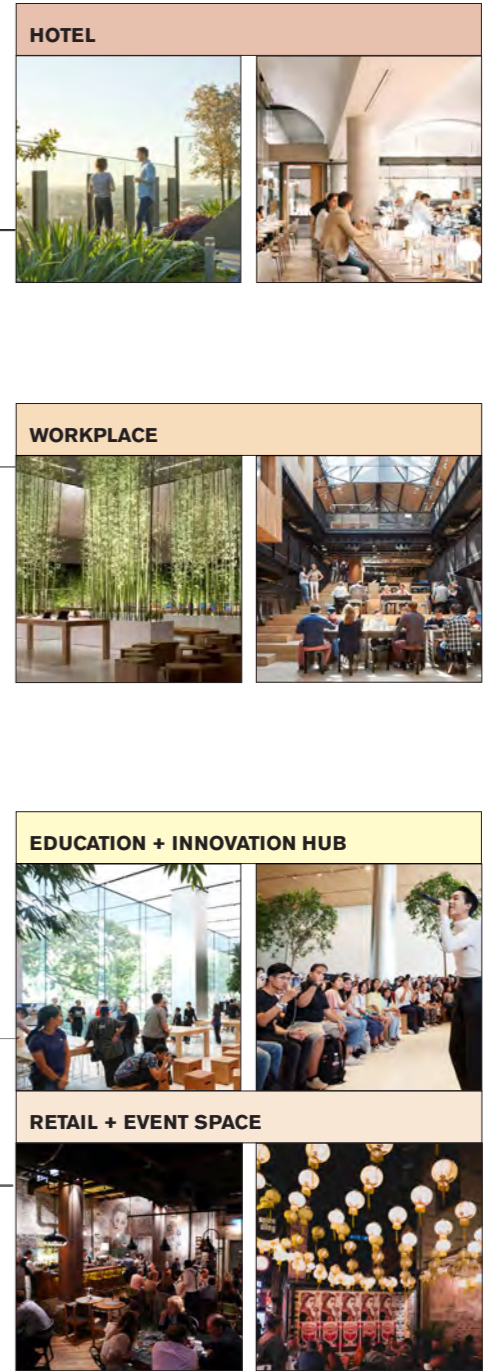
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Vertical Urbanism

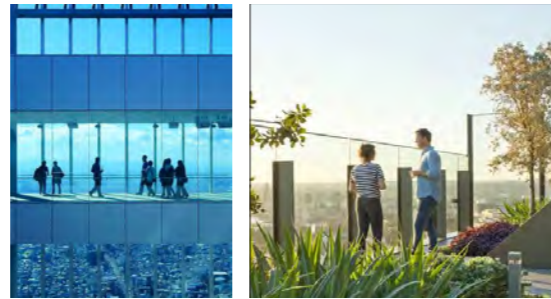
Hybrid Tower

Hybrid Uses

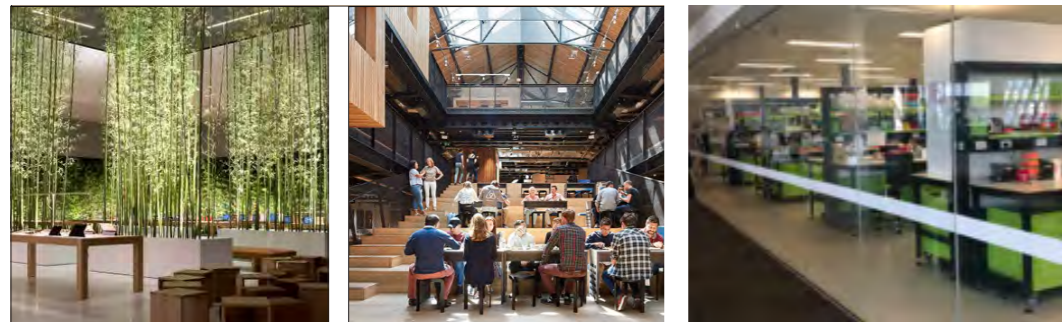


4.2 Work / Stay / Play / Learn / Rest / Invent

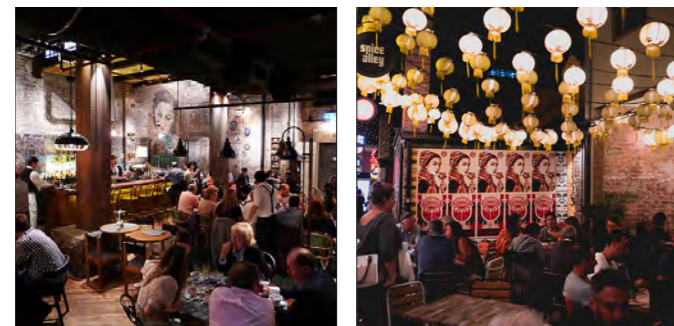
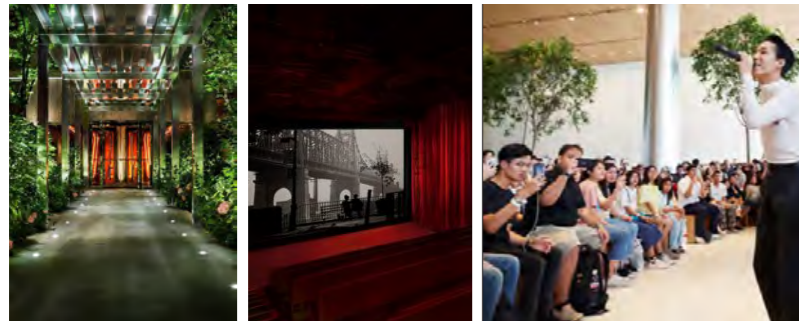
The hybrid tower approach combines synergistic spaces built around the daily needs and experiences of the innovator. The innovation hub will have close ties to business and education in the commercial tenancy floors, the hotel will provide short term accommodation for visiting collaborators, dual use event space will cater for both innovation hub and hotel needs, the sky lobby, rooftop terrace, innovation terrace and ground level retail will provide breakout and 3rd spaces for work, rest and networking.



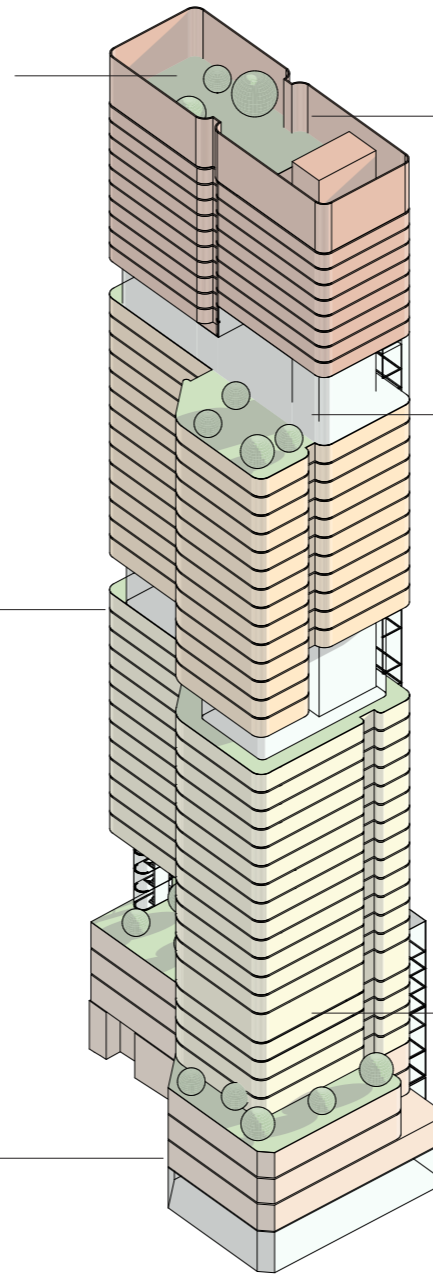
Observation Deck



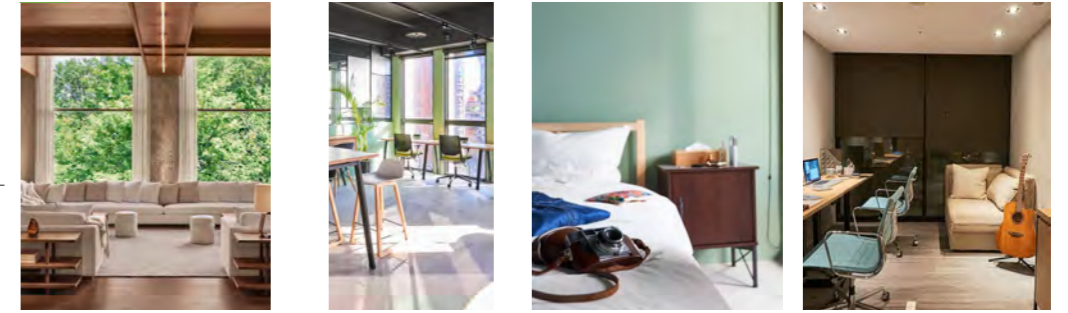
Commercial / Education / Research



Retail / Entertainment / Collaboration / Education



Hybrid Tower



Integrated Urban Hotel



Sky Garden



Education And Innovation Hub



4.3 Innovation Hub

The Innovation Tech Hub will be a shared facility that anchors the building, co-locating a range of facilities, services, equipment and tools to provide a space for technological experimentation, research, development, and collaboration. Tailored to individuals, micro and small businesses developing new products and services, as well as to interested members of the public, this facility should look, feel and perform as a centralised point within the Vertical Innovation Hub.

The core of innovation hub is the incubator space for small startups with shared space and facilities including workplace, lab and equipment. Larger flexible workspace floors are provided interconnected with the innovation centre and the event space on the lower podium levels. The landscaped Innovation Park provides both an external workspace and relaxation area for informal collaboration and networking.

