







## In collaboration with:



#### DISCLAIMER:

The information contained in this publication is believed to be correct, but is not guaranteed. Visual and descriptive representations should not be relied on as being accurate in relation to the final product. Prospective purchasers must rely on their own enquiries to satisfy themselves on all aspects of the development, as the vendor and/or its agents will not be responsible for any error or misinformation appearing herein. All renderings are Artist's impressions. Render times and levels are indicative only. Subject to Authorities and Owners approval.

## Introduction

This report responds to the design implications following the relocation of the the tower from the previous MOD 1 Exhibited Envelope Proposal to the west on the corner of Argyle Street and Marsden Street, positioned with a 6m meter setback from both Argyle Street and Marsden Street.

The tower has been repositioned to avoid incursion into the Church Street heritage view corridor, and to allow St John's Cathedral and its Spire to be prominent within the skyline. The proposed corner tower location will create a legible urban corner marker for the precinct, and will further reinforce the Parramatta city urban grid. The overshadowing impacts on the precinct will be improved to that previously exhibited. Activation at Argyle Street ground floor will be increased with a prominent corner ground floor commercial lobby.

# Response to 29.10.18. NSW Planning and Environment key issues

29.10.18. NSW Planning and Environoment key issues	Proposal response	UDR reference
Built Form		
The Secretary's Environmental Assessment Requirements (SEARS) issued 29 September 2017 included a requirement for identification and analysis of alternatives for the proposed commercial floorspace. The Department does not consider this requirement has been adequately addressed. Detailed analysis of alternatives for the tower location, and subsequent environmental effects, including impacts on townscape, views, heritage and neighbouring amenity, as well as constraints and opportunities for street level activation should be undertaken, clearly demonstrating the urban design rationale for the proposed tower location.	The current proposal has relocated the tower from the previous MOD 1 Exhibited Envelope Proposal. The tower has been repositioned to the corner of Argyle and Marsden Streets to avoid incursion into the Church Street heritage view corridor, and to allow St John's Cathedral and its Spire to be prominent in the skyline. The proposed corner tower location will create a legible urban corner marker for the precinct, and will further reinforce the Parramatta city urban grid. Activation at Argyle Street ground floor will be increased with a prominent corner ground floor commercial lobby. The overshadowing impacts on the precinct will be improved to that previously exhibited.	
Notwithstanding the above requirement, having regard to the advice of the Government Architect NSW and concerns of the Heritage Council of NSW and Parramatta City Council, the Department recommends the proposed tower location and scale be reconsidered. The Department is concerned that the proposed tower location, terminating the view south along Church Street would dominate the Church Street vista and demonstrably harm the protected view of St Johns Church. The Department also considers the proposed scale of the building envelope is questionable, noting it is far greater than surrounding buildings and the combination of the proposed height and floorplate results in an unrelieved bulk and massing, out of character with the scale and grain of the surrounding area.	The current proposal has relocated the tower from the previous MOD 1 Exhibited Envelope Proposal per above description. The proposed scale has been carefully considered to contextually contribute to the urban skyline build-up to towards Parramatta Square, which forms the epicentre, and comprises the tallest proposed building envelopes in the Precinct. The height of buildings in the urban framework of Parramatta gradually lowers towards the outer parts of the city, moving away from Parramatta Square. The existing site presents itself as a "gap" in the future urban skyline build-up of Parramatta. The scheme aims to positively contribute towards a legible future urban context, while simultaneously respecting heritage, the existing public domain and neighbouring buildings. The overshadowing impacts on the precinct will be improved to that previously exhibited.	
In light of this, the Department recommends the location of the tower, quantum of floor space and proposed building envelope be reviewed, in accordance with the advice provided by the Government Architect NSW. Any revised proposal should also be supported by draft design parameters showing how a future building could be sufficiently articulated to address the bulk of the proposed envelope.	The reference design's architectural expression been sculpted to be lighter towards the sky reducing the ground level perception of one, large singular tower mass. The proposal seeks to create an iconic building form which fits the city scale visually. A definitive podium has been proposed responding to the human-scale ground floor domain and provides a continuous Street colonnade and a continuous podium at the lower levels.	
Sustainability		
The supporting documents indicate that over 80% of the floor area is within 12m of a natural light source, however this should be reviewed and demonstrated with properly scaled and measured drawings.	A plan indicating that over 80% of the floor area will be located within 12m of a natural light source has been included which is a scaled and measured drawing.	Refer to Section 12 Appendix on page 100
Provide additional shadow diagrams an analysis which clearly demonstrate the available sunlight to 114 and 118 Church Street (before and after) and analysis of the impact to individual units with reference to the standards of the Apartment Design Guide and Parramatta DCP 2011-	Shadow diagrams and suns eye views have been provided which clearly demonstrate the available sunlight to 114 and 118 Church Street, showing that these sites receive 2 hours minimum daylight per the the standards of the Apartment Design Guide and Parramatta DCP 2011	Refer to Section 11 Appendix

## **00 Contents**

01	Vision			
02	Site and Context			
03	Analysis and Review			
04	Design Response - Site			
05	Design Response - Streetscape			
06	Design Response - Tower			
07	Design Response - Rooftop			
08	Design Response - Architectural Expression			
09	Envelope Design			
	Setbacks			
	Siteplan			
	Envelope Elevations			
	Envelope Plans			
10	Reference Design			
	Reference Design: 3D model			
	Reference Design: Sections			
	Reference Design: Concept Floor Plans			
11	Sun's Eye & Shadow Diagrams			
12	Appendix			

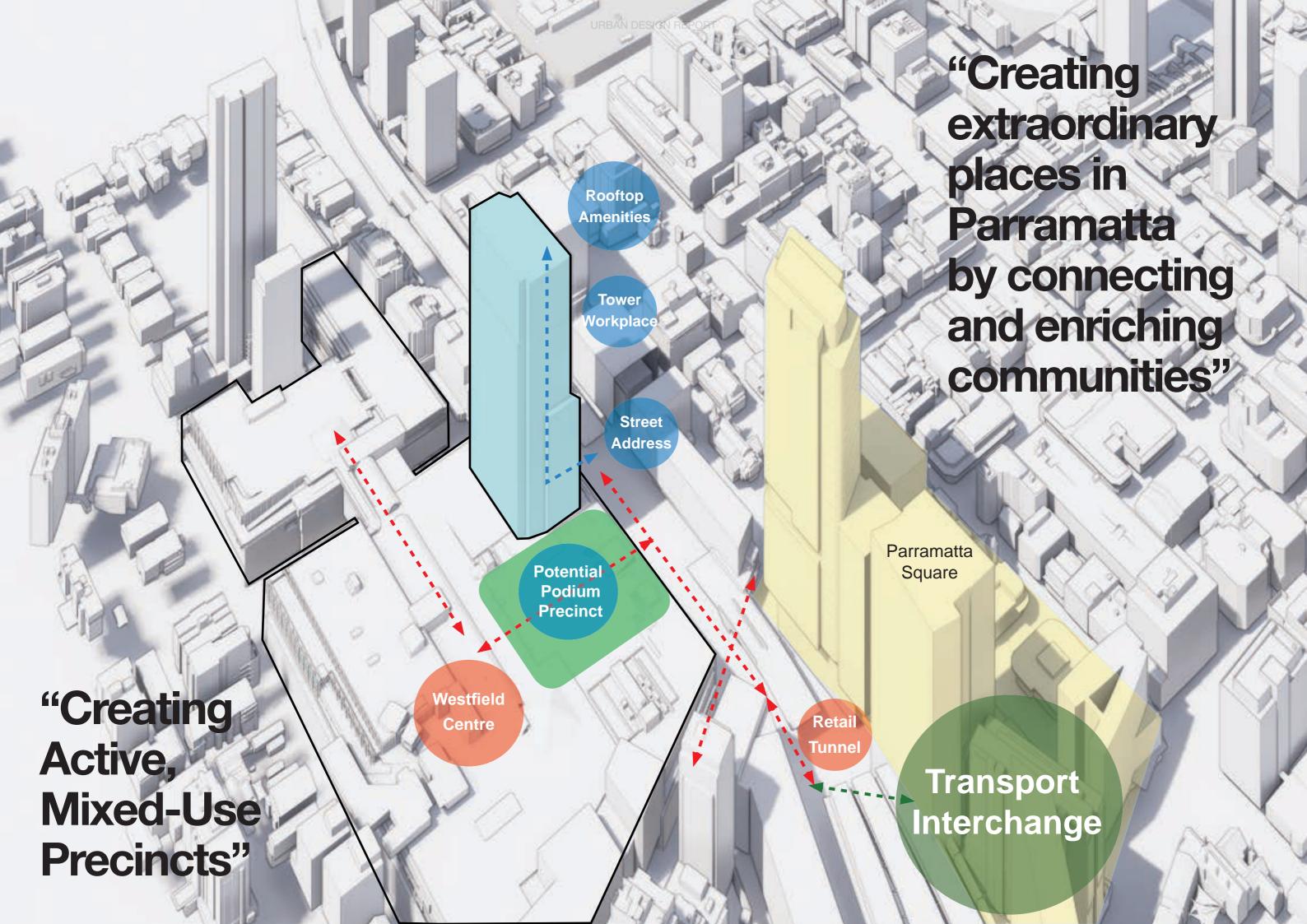
# **01** Vision

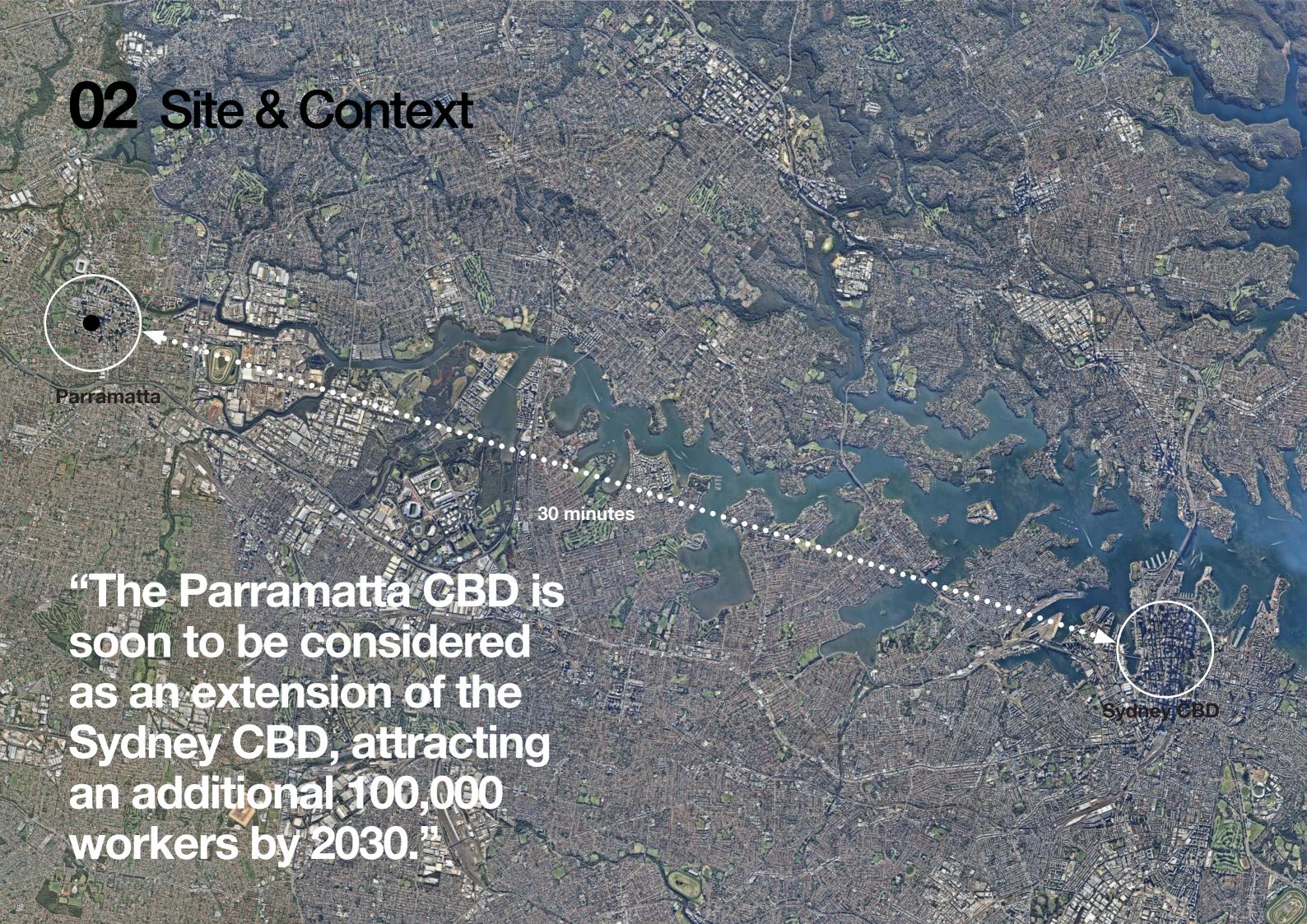
Our vision is founded on careful review of the Envelope Concept Plan Approval (2014) to develop the proposal further responding to feedback from review sessions with stakeholders and authorities. Our proposal embraces this feedback to increasingly understand and respond to the existing environment creating a destinational and commercially viable urban precinct.

Our key objectives are:

- Create a high quality, contemporary commercial tower augmenting and extending the purpose of the larger urban precinct
- Activate the Marsden and Argyle street corner with a relevant and redesigned commercial entry
- Create a key commercial destination entry on an inactive corner on Marsden Street and Argyle Street
- Create a unique market relevant workplace environment by developing a mix and variation of usages and human scaled environment upon which the tower is based, architecturally sculpted to anchor and extend the presence of the Parramatta CBD









The following report has been prepared by Woods Bagot on behalf of Scentre Group. It examines the commercial potential of the Argyle Tower proposal on the site over the existing Westfield Shopping Centre.

The study is prepared with regard to the Envelope Concept Plan Approval (2014) and ongoing review with Scentre Group. It is based on the concept of a circa 105,000m² (GSA) commercial office tower incorporating enhanced retail and lobby uses at both ground and rooftop levels that integrate into the greater amenity of the existing centre.

### The Site

The site is located on the southern side of railway lines, in the heart of Parramatta CBD. The site is bounded by Church Street to the east, Argyle to the north, Campbell to the south and Marsden to the west.

Situated in walking proximity to Parramatta Square, it is well serviced by the Transport interchange and Westfield Shopping Centre - one of the largest retail centres in the west. The site is highly connected within close proximity to multiple bus stops on Argyle Street and the new proposed Sydney metro station.

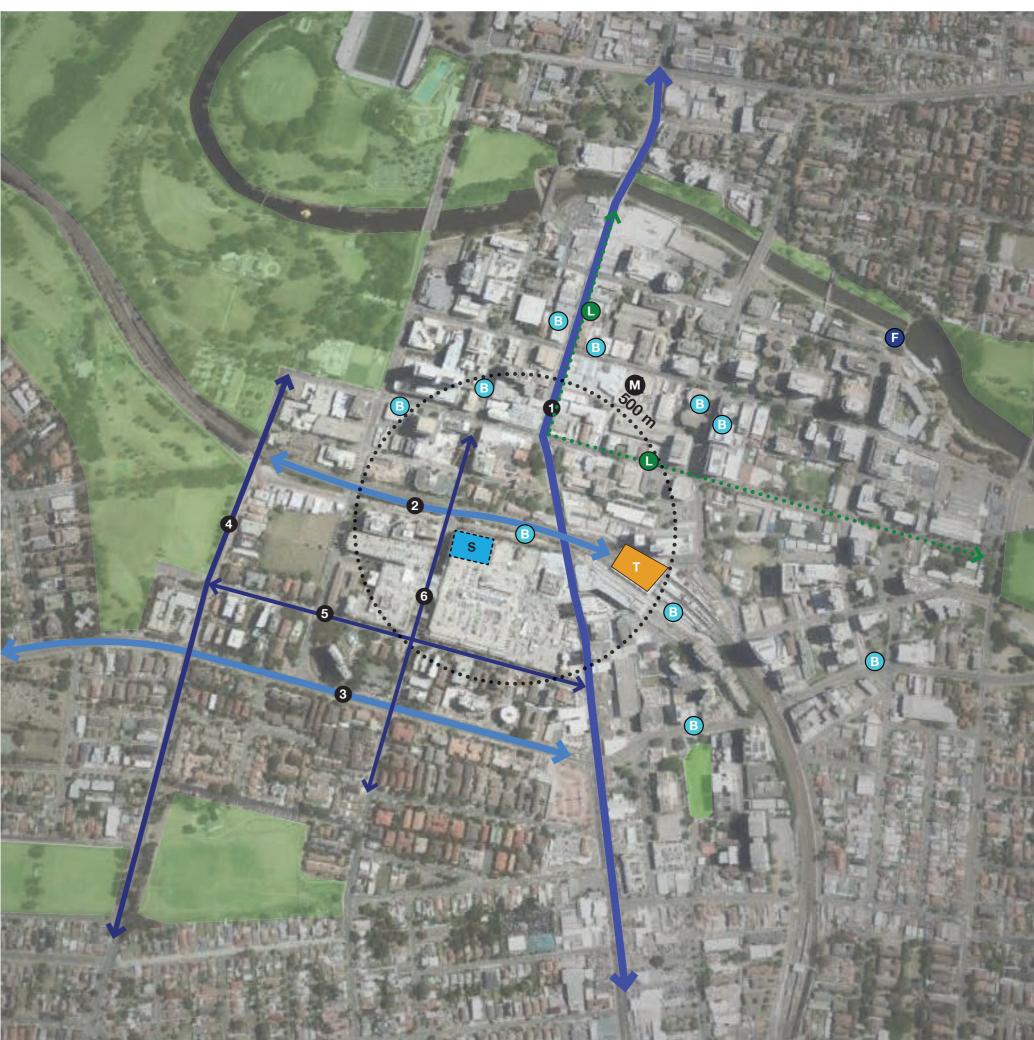
To the north west is Parramatta Park and the Old Government House site location which is required to be taken into consideration.





## **Contextual Connectivity**

- S. Site
- T. Transport Interchange Parramatta
- B. Bus Stops
- L. Light Rail Stops and Route
- F. Parramatta Wharf
- M. Future Metro
- 1. Church Street
- 2. Argyle Street
- 3. Great Western Highway
- 4. Pitt Street
- 5. Campbell Street



## **Urban amenities**

- S. Site
- 1. Parramatta Aquatic Centre Proposed
- 2. Bankwest Stadium
- 3. St John Anglican Church
- 4. Riverside Theatres
- 5. Parramatta Riverfront
- 6. City of Parramatta Library

#### Government Institution

- 7. Parliament Town Hall
- 8. Centrelink
- 9. Family Court of Australia
- 10. Brislington Medical and Nursing Museum
- 11. Parramatta District Court
- 12. Parramatta Justice Precinct
- 13. Parramatta Local Court
- 14. Sydney Water
- 15. Lancer Barracks
- 16. Department of Immigration
- 17. Old Government House

#### Educational Institution

- 18. Western Sydney University
- 19. Parramatta Public School
- 20. Arthur Philip High School
- 21. Parramatta High School

#### URBAN DESIGN REPORT



- 10 -

## **Parramatta Density**

S. Site

1. 2 O'Connell Street - 66 Stories

2. 7 Arid Street - 12 Stories

3. 11-13 Arid Street - 35 Stories

4. 55 Arid Street - 41 Stories

5. 140 Church Street - 25 Stories

6. 126 Church Street - 13 Stories

7. 118 Church Street - 28 Stories

8. 6 and 8 Parramatta Square - 56 Stories

9. 4 Parramatta Square - 40 Stories

10. 27/31 Argyle Street - 7 Stories

11. 7/33 Argyle Street - 7 Stories

12. 128 Marsden Street - 7 Stories

13. 29 Hunter Street - 26 Stories

Potential Future Development

14. 61B George Street

15. 220-222 Church Street

16. 197 Church Street - 255m

17. 328 Church Street

18. 184 George Street - 138m

19. 7 Charles Street - 50m

20. 142 Macquarie Street - 186m

21.11 Hassall Street

Commercial

22. 105 Philip Street - 65m

23. 89 George Street - 93.5m

24. 60 Station Street - 88m

25. 1 Parramatta Square - 65m

26. 3 Parramatta Square - 78.3m

27. 6 Parramatta Square - 135m

28. Argyle Tower - 210m

Residential

29. 111 George Street - 27m

30. Aspire - 305m

31. V by Crown - 103m

Mixed Use

32. 5 & 29 Hunter Street - 92m

33. 22A O'Connell Street

34. Riverside Tower - 152m

35. Meriton - 170m

36. Riverbank Precinct - 74 Stories

37. 189 Macquarie Street - 178m

38. Gateway South - 40 Stories



## 02 Site & Context Urban context Plan

## **Context Analysis**





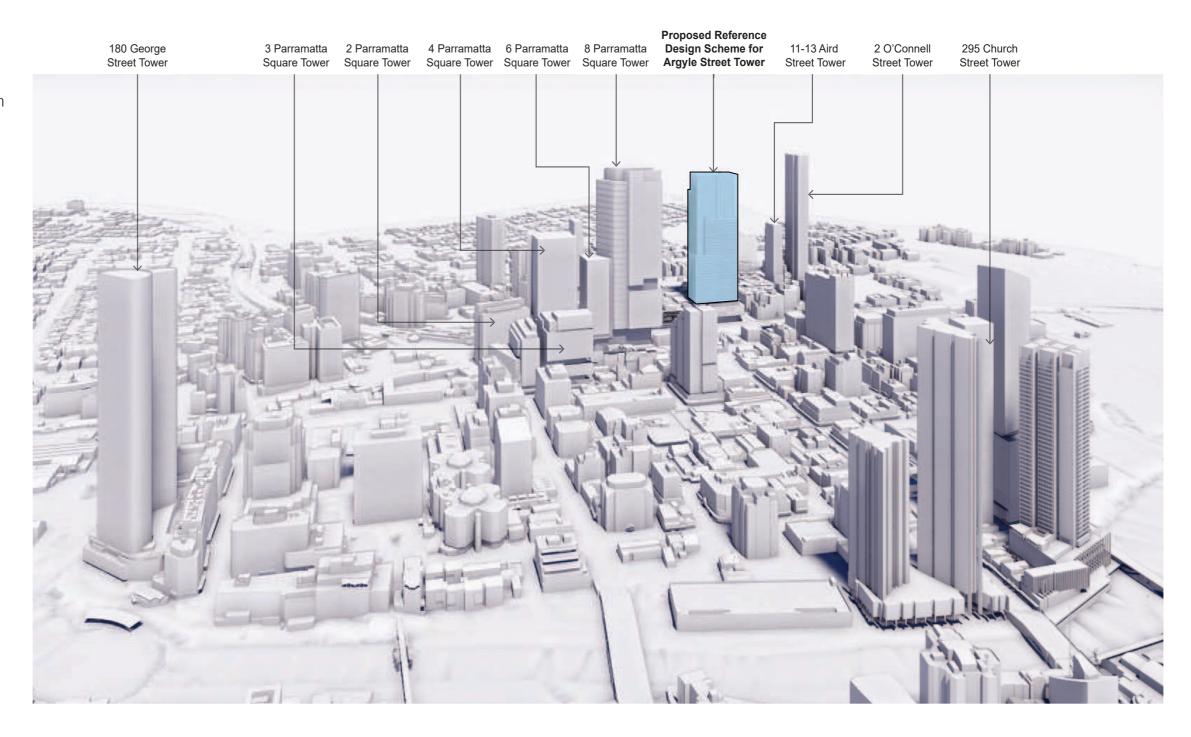
## **Lot Reference Analysis**



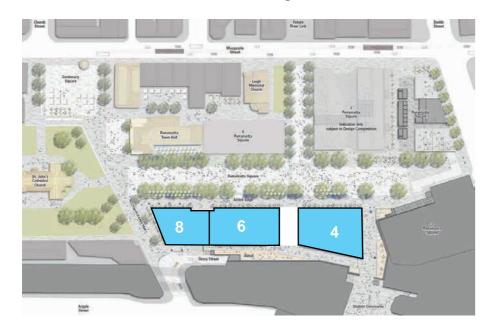


## **Parramatta Developments**

With Parramatta's quickly emerging CBD, commercial tenants are increasing and are demanding larger floor plates. Recent development approvals have sought typical commercial floors well in excess of 1700sqm to meet the demands of attracting key high profile tenants.



## 4, 6 & 8 Parramatta Square

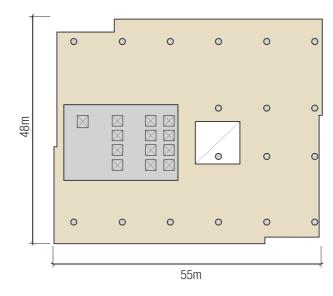


Scale & Use
34 Levels / 55 Levels
Commercial / Residential

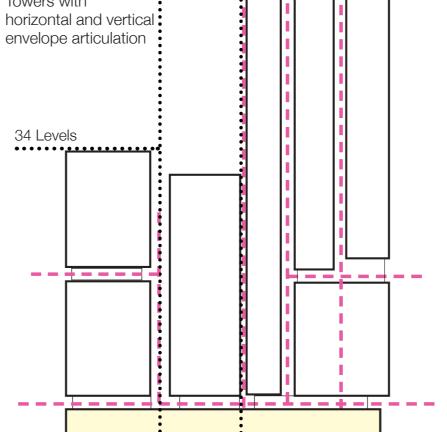


#### 6 Parramatta Square Typical floor plate

/ 45,000sqm NLA / 1,700sqm / floor plate

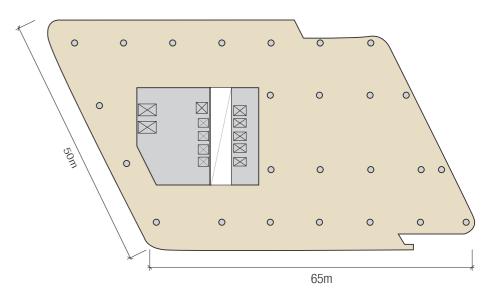


# Articulation Continuous lower podium / Towers with



### 8 Parramatta Square Typical floor plate

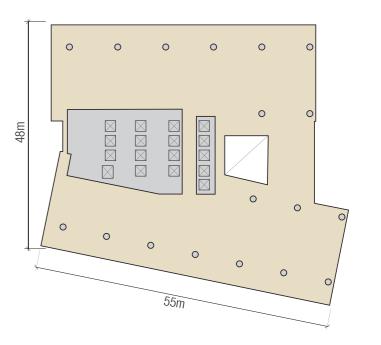
/ 79,000sqm NLA / 2,500sqm / floor plate



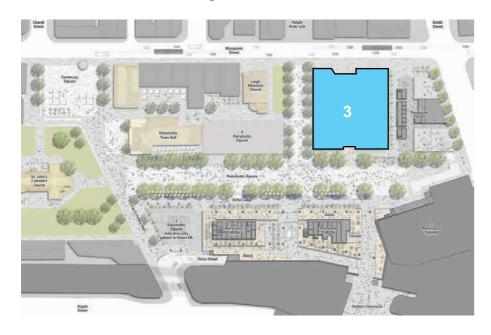
### 4 Parramatta Square Typical floor plate

/ 66,000sqm NLA / 3,200sqm / floor plate

55 Levels



## 3 Parramatta Square



### Scale & Use

17 Levels Commercial



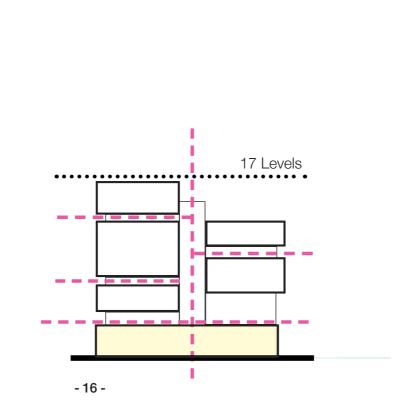
### **Articulation**

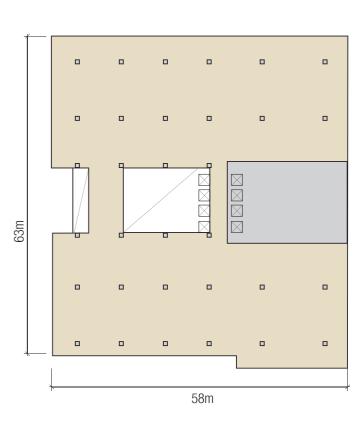
Continuous lower podium

Tower: horizontal and vertical envelope articulation

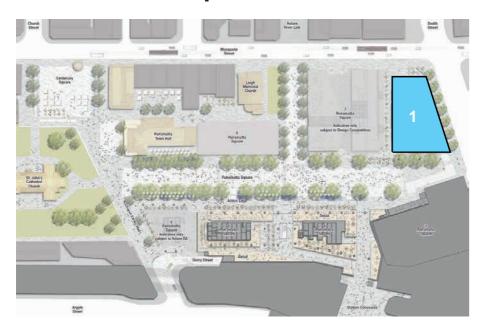
### 3 Parramatta Square

/ 2,700sqm - 3100sqm / floor plate



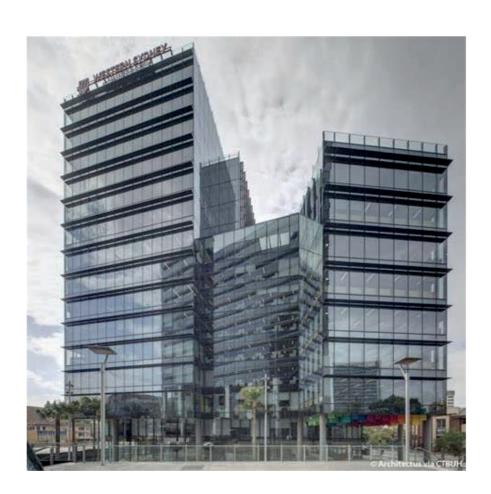


## 1 Parramatta Square



### Scale & Use

16 Levels Education / Commercial



### **Articulation**

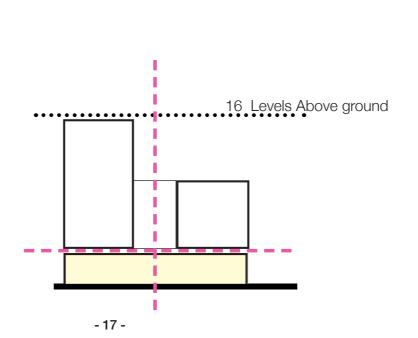
Continuous lower podium

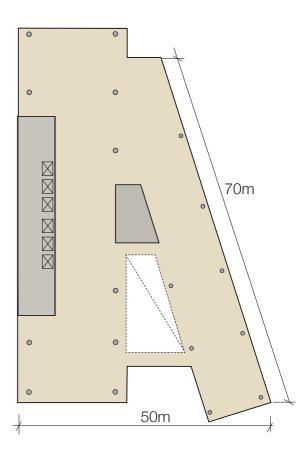
Tower: vertical envelope articulation

### 1 Parramatta Square Typical floor plate

/ 26,500sqm

/ 2,400sqm / floor plate

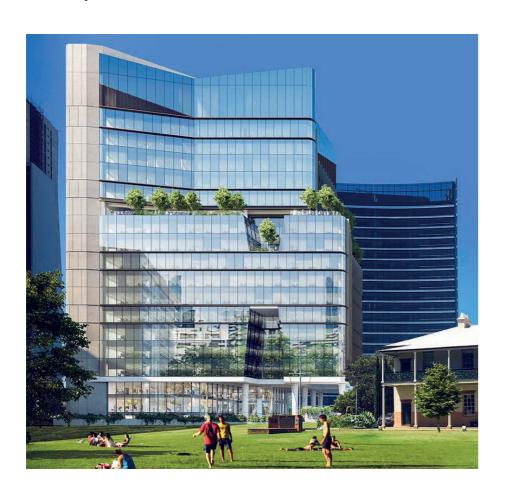




## 2-6 Hassall Street, Parramatta



Scale & Use
18 Levels
University / Commercial



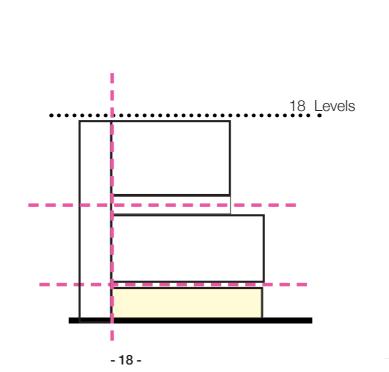
#### **Articulation**

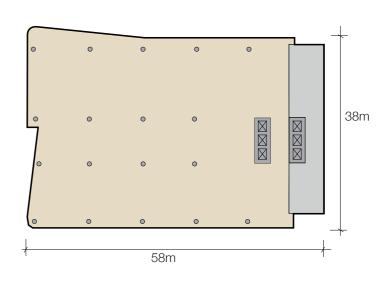
Continuous lower podium

Tower with horizontal and vertical envelope articulation

### 2-6 Hassall Street

/ 28,880sqm NLA / 1.940sqm / floor plate





## 32 Smith Street, Parramatta



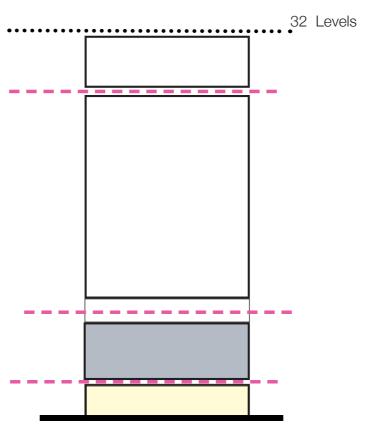
Scale & Use 29 Levels Commercial



#### **Articulation**

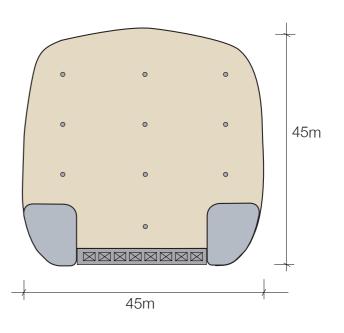
Continuous lower podium

Tower with horizontal envelope articulation



### 32 Smith Street

/ 26,500sqm NLA / 1,352sqm / floor plate



### **Existing Site Conditions**

The site is located at the corner of Argyle Street and Marsden Street, a prominent and well connected position in the heart of Parramatta CBD and within close proximity to Parramatta Square.

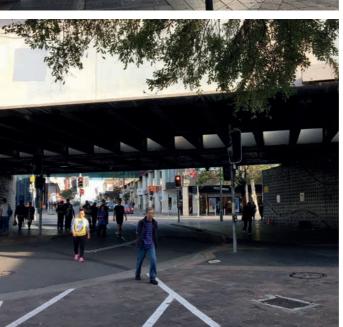
The proposed position is on a prominent and noticeable corner site, with a primary address sited on Argyle Street. The location is well appointed in terms of connectivity to multiple modes of access, including Parramatta rail station, multiple bus stops, as well as access to other planned transport options, all of which encourage increased users' accessibility to the precinct. There are also a number of residential possible connections within walking distance of the proposal enabling living within a walkable distance of employment.

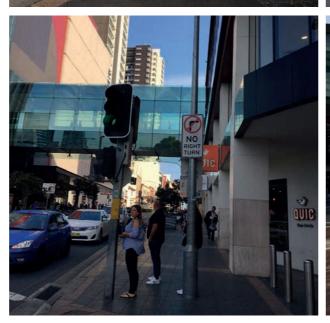
While Argyle Street and Marsden Street do not enjoy a highly activated and framed architectural environment, they are well used and form primary connectivity spines for the precinct. Argyle street is a busy nexus between public transport nodes and acts as a thoroughfare through to other established offices and mixed use destinations.

Church Street and Parramatta Square Precincts have highly pedestrian presence and scale. There are strong connections between the site and Parramatta Square via Church Street under the rail corridor and through the existing Westfield Centre. An opportunity exists to strengthen this connection by reinforcing and improving sight lines to Church and Argyle corner.







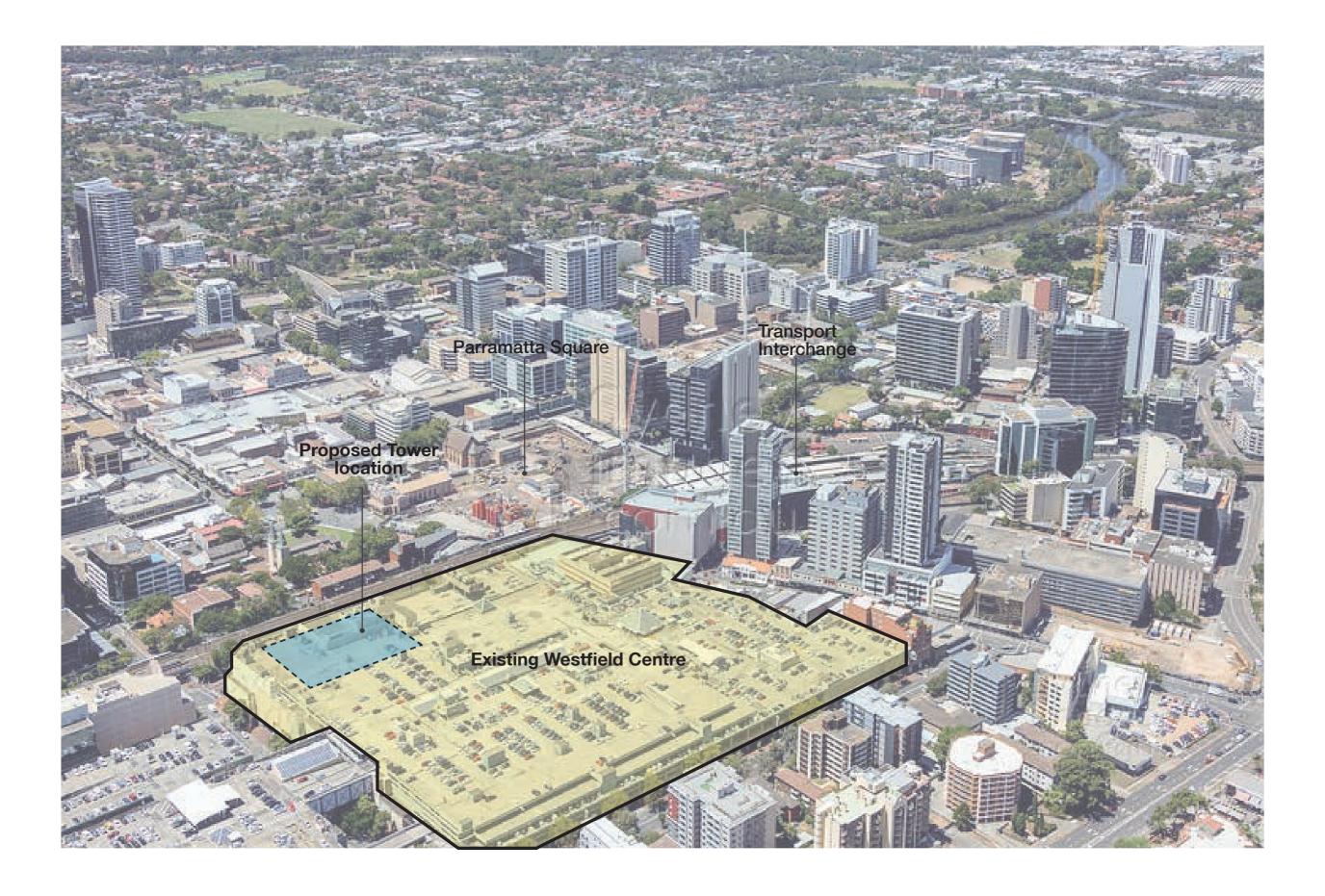












# 03 Analysis and Review

## **Approved DA Envelope**

The proposal is seeking to modify the approved Concept plan to provide for an increase in building height, floor space and tower floor plate for the commercial tower.

There is current approval for the following:

#### Concept Plan Approval (approved 2014) MP10\_0068

/ 35,000m<sup>2</sup> GFA

/ 25 storeys (20 office floors)

/ Max. 120m above ground

/ Tower building GFA per floor at 1,400m² maximum per floor

Since that time feedback from the marketplace indicates that major prospective tenants require larger floor plates, requiring total floor space well in excess of the 35,000m<sup>2</sup>

In September 2016, a proposal was put forward for the following and was addressed as '151 Church Street':

#### **SEARS (Initial MOD 1 to Tower Envelope)**

/ 100,000sqm GFA

/ 40 storeys (37 office floors)

/ Max. 175m above ground

/ Tower building GFA per floor at:

- 3,000m<sup>2</sup> for level 1-6
- 2.350m<sup>2</sup> for level above 6
- 1,450m<sup>2</sup> for roof top level

Concerns were raised by council regarding the tower's impact on public amenity, namely overshadowing and interruption of the southern view corridor from Church Street.

## Updated Envelope Proposal (MOD 1 Exhibited Envelope Proposal)

/ 112,000sqm GFA

/ 42 commercial storeys (40 office or lifestyle floors with 2x plant floors) above parking and retail levels

/ RL 220 (approx.)

/ Tower building GFA per floor at:

- approx 2,030m<sup>2</sup> to 2,535m<sup>2</sup> for typical levels

In response to the SEARS exhibited scheme, a design assessment was undertaken with input from prospective major tenants.

The tower proposal was relocated and the form redesigned to offer a much improved amenity along Argyle and Church Street with a less impactful tower envelope.

## Updated Envelope Proposal (MOD 1 Revised Envelope Proposal)

The current proposal seeks to respond to maintaining the view vista looking south down Church Street. The tower has been relocated to the corner of Argyle and Marsden Streets to avoid incursion into the Church Street view corridor, and to allow St John's Cathedral and its Spire to be prominent in the skyline. The proposed corner tower location will create a legible urban corner marker for the precinct.

/ 105,000sqm GFA (approx.)

/ 47 commercial storeys (46 office or lifestyle floors plus plant floors and podium) above parking and retail levels / RL 220 (approx.)

/ Tower building GFA per floor at:

- approx. 2,865m<sup>2</sup> for typical level

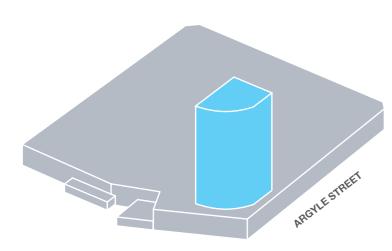
The proposed commercial tower is intended to be a prestigious landmark 5 Star Green Star Office, capable of attracting major private or government agencies to

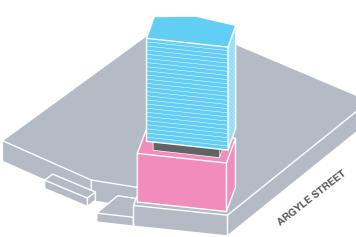
### Parramatta Council's Design Excellence

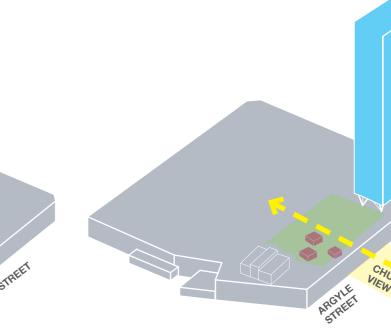
Parramatta Council has indicated that its preference is to adopt the Council's Design Excellence framework currently in place for major developments in Parramatta CBA

This urban design report has been developed with regard to responding to the Council's Design Excellence guidelines and requirements.

## **Analysis and Review Site Proposal Evolution**







### **Concept Plan Approval** (approved 2014) MP10\_0068



LARGE IMPACT ON RETAIL BELOW

**ECONOMICAL IMPACT UNVIABLE DUE TO RETAIL** 

LOADING ACCESS FROM CHURCH ST & INDIRECT GOODS ACCESS TO **TOWER** 

## **SEARS Initial Envelope Proposal**

(MOD 1 to Tower Envelope)

FLOOR PLATE TO ACCOMMODATE LARGE TENANT

**IMPACT ON RETAIL BELOW** 

SIGNIFICANT OVER SHADOWING

NOT ECONOMICALLY VIABLE DUE TO COMMERCIAL IMPACT

## **Updated Envelope Proposal**

(MOD 1 Exhibited Envelope Proposal)

LARGER FLOOR PLATE TO **ACCOMMODATE MAJOR TENANT** 

FEASIBLE IMPACT ON RETAIL

INCREASED ARGYLE ST. **ACTIVATION** 

INTEGRATED WITHIN THE **PRECINCT** 

LOADING DOCK ACCESS FROM MARSDEN ST

INCORPORATE LANDSCAPE **ROOFTOP PODIUM** 

IMPACTED VIEW CORRIDOR SOUTH FROM CHURCH STREET

## **Updated Envelope Proposal**

(MOD 1 Revised Envelope Proposal)

LARGER FLOOR PLATE TO ACCOMMODATE **MAJOR TENANT** 

FEASIBLE IMPACT ON RETAIL

FURTHER INCREASED ARGYLE ST. **ACTIVATION** 

INTEGRATED WITHIN THE PRECINCT

LOADING DOCK ACCESS FROM MARSDEN ST

**INCREASED LANDSCAPE ROOFTOP PODIUM** 

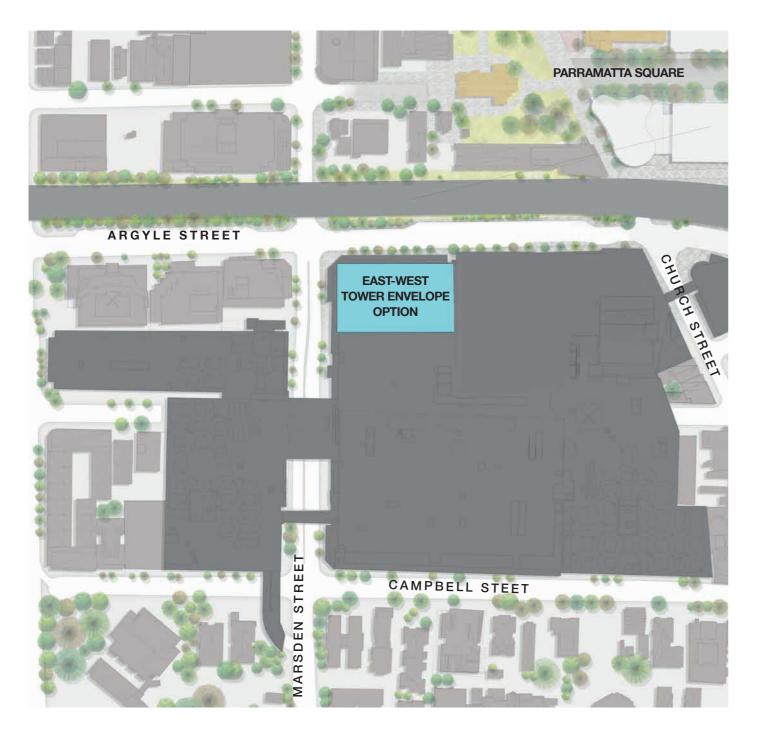
IMPROVES OVERSHADOWING IMPACTS -REFER TO DETAILED SHADOW STUDIES IN **APPENDIX** 

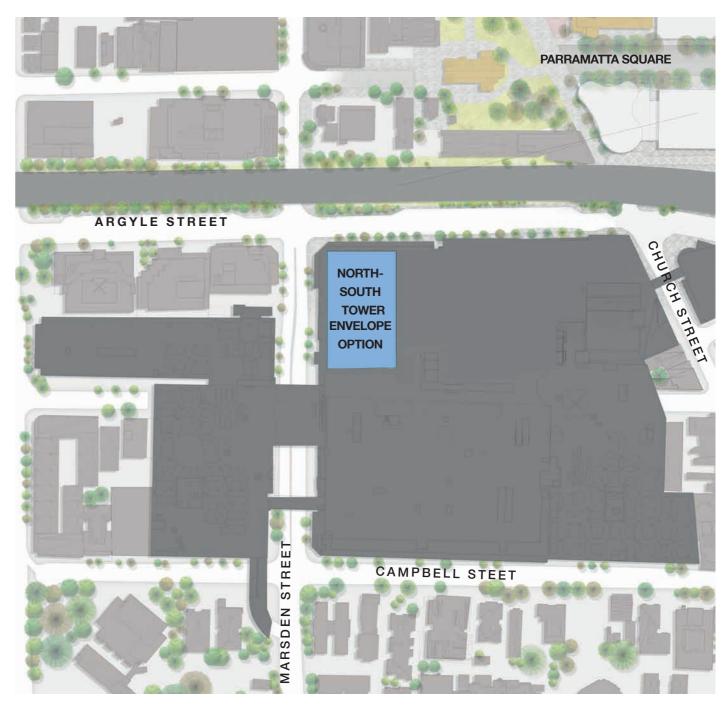
**CLEAR HERITAGE VIEW CORRIDOR SOUTH** FROM CHURCH STREET

## Comparison of "North south" and "East West" Orientation Tower Analysis

#### **Tower Orientation**

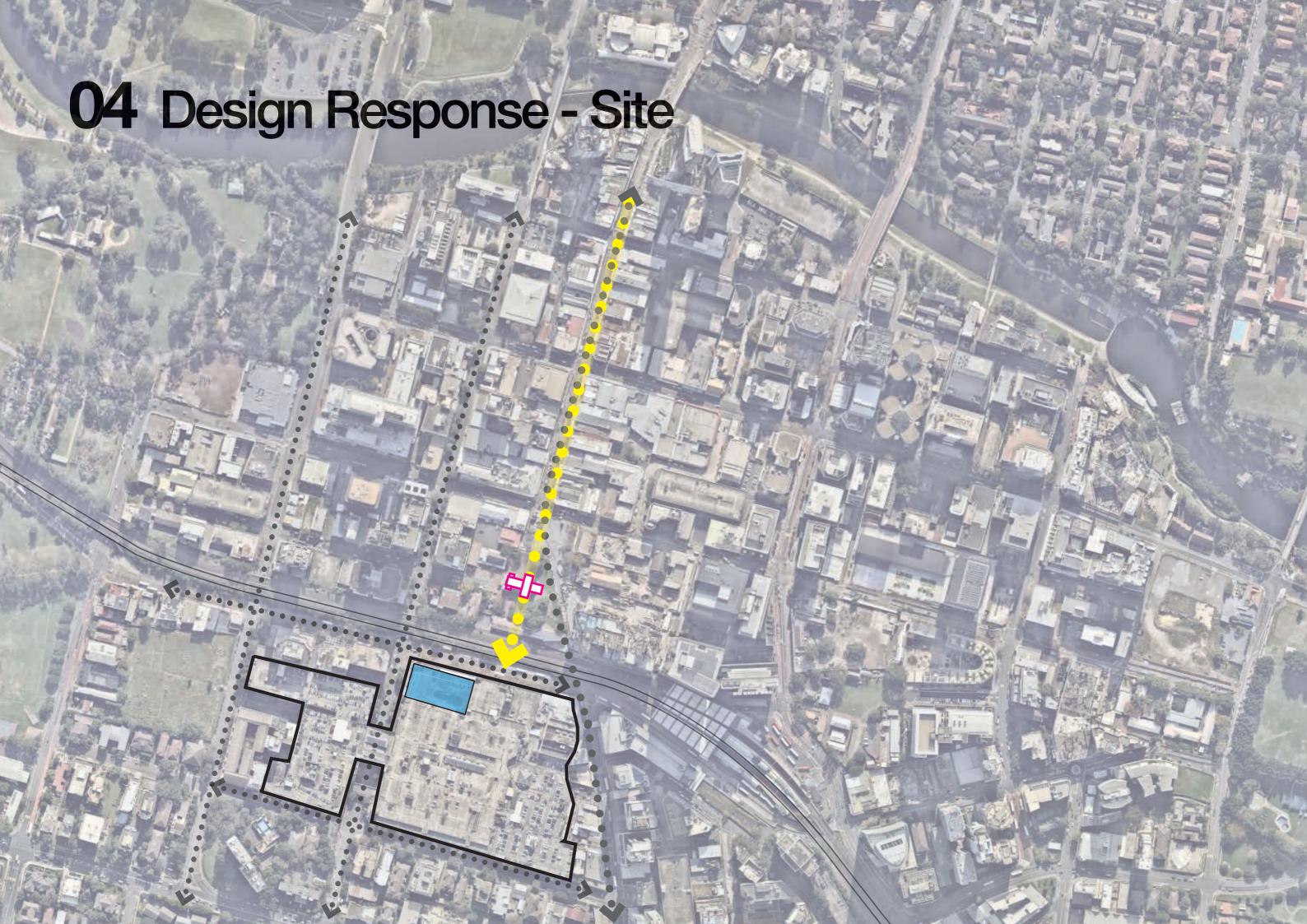
Two options for the orientation for the relocated tower have been considered, an "East- West" orientation and a "North-South" orientation. The comparison table on the following page summarises that the "East-West" orientation has the best outcome to enhance the urban fabric and minimise potential contextual impacts.





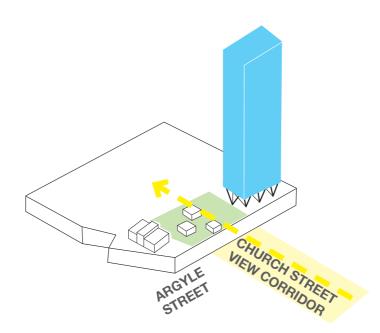
## Comparison of "North south" and "East West" Orientation Tower Analysis

	Tower with long elevation facing East West on Argyle Street Option	Tower with long elevation facing North South on Marsden Street Option
Urban Design	Views down Church Street Heritage Corridor: The tower has been relocated to the corner of Argyle and	Views down Church Street Heritage Corridor: The North-south tower incurs into the Church Street view corridor, and impedes onto the St John's Cathedral and the Spire's presence in the skyline. The position is not aligned with the 12m Upper level Church Street setback which Council proposes North of Macquarie Street.
	<b>Urban Fabric:</b> Tower location enhances, and is in alignment with the Parramatta City urban grid and creates a legible urban corner marker for the precinct. The tower is located closer to the CBD than the North-South location, thereby integrating better with future development patterns.	<b>Urban Fabric:</b> Tower position is not in alignment with the Parramatta city grid and does not reinforce the adjacent urban precinct alignment, it is located approximately 30m further away from the CBD & Parramatta Square, thereby isolating the tower from the city development patterns.
	Over-shadowing: With its newly proposed location and a slender proportioned tower, the shadows cast from the East-West tower location will move quicker and be further from the adjoining context resulting in reduced impact than that of the North-West tower. Refer to detailed shadow studies.	Over-shadowing: The North-West tower will have more impact on the adjoining context than that of the East-West tower proposal. Refer to detailed shadow studies.
	Relationship to Centenary Square: The relocation of the tower has presented a possible opportunity for the creation of a raised landscaped, activated rooftop precinct which is visually connected on the Church street axis to Centenary Square and the Church Street public domain.	Relationship to Centenary Square: The North-South tower location does not allow for the opportunity for the creation of raised landscaped, activated rooftop which would be visually connected on the Church street axis to Centenary Square and the Church Street public domain.
	Access: The East -West orientated tower proposal provides primary pedestrian access at ground level off Argyle Street which is a more important urban pedestrian route than Marsden Street. The proposal clearly separates pedestrian access from vehicle access, with the vehicle entry to the proposal located on Marsden Street.	Access: The North-South tower option provides primary pedestrian access at ground level off Marsden Street which is a less important urban pedestrian route than Argyle Street. This option is far less effective at seperating pedestrian access from vehicle access, with both the vehicle entry to the proposal and the primary pedestrain entry located on Marsden Street relatively close to each other.
	<b>Ground floor Lobby Amenity :</b> The location of the tower provides a lobby that is closer to the railway station and transport interchange. The lobby will have a well-lit northerly aspect offering a wholly pedestrianised primary frontage on Argyle Street.	<b>Ground floor Lobby Amenity</b> : The lobby location would be further away from the railway station as well as the transport interchange. The lobby would have a westerly aspect with potentialy high heat exposure, and is located on the less pedestrianised frontage on Marsden Street.
Commercial office tower	<b>Orientation:</b> A majority North/South facing façades results in generous Day Light access for commercial floor plates.	<b>Orientation:</b> A majority East/West facing façades results in narrow facades at North and South limiting Day Light access to floor plates.
	<b>Public Spaces:</b> Greater activation of public spaces along Argyle Street is provided as the tower will have a longer frontage (over 70m) to Argyle Street.	Public Spaces: Limited activation of Argyle Street is provided as the tower will have less frontage to Argyle Street.
	<b>Street Facade activation:</b> A greater portion of the Argyle Street façade can be activated as the rebuilding of retail and the commercial tower provides activation opportunities along Argyle Street.	<b>Street Facade activation</b> : A limited portion of the Argyle Street façade can be activated as only the narrow elevation of the commercial tower and associated retail area is to be rebuilt.
	<b>Tower Proportion:</b> The tower would have a slimmer Western elevation exposed to afternoon summer sun and so should enable a more efficient ESD design.	<b>Tower Proportion:</b> The tower would have a longer Western elevation exposed to afternoon summer sun which may raise ESD issues.
Structure	Structure As the new develoment footprint will be bounded by an existing expansion joint, the demolition and construction of the new tower can run independently from th remainder of the centre. No structural strengthening required to adjacent existing structure.  Access arrangemenmts preserved, utalizing existing Marsden Street loading dock access. No impact on Argyle Street bus and traffic operations.	As a consequence of the North /South arrangement, muliple structural blocks are affected with major impacts on existing structures, significantly affecting more tenancies and the operational capacity of the centre. The main access would need to be from Argyle Street having major impacts on Bus Services and traffic flows.
Construction	Construction: Ability to modify loading dock to provide temporary facilities during construction and maintaining access from Marsden street:	Entire Loading Dock on the corner of Marsden and Argyle street would have to be demolished affecting a significant portion of the retail centres operational ability including:
20	Modification of Loading Dock to service David Jones (2 levels) David Jones remains operational during construction  Modification of Loading Dock to service Myer (4 levels) Myer remains operational during construction	No loading dock facilities to David Jones (2 levels) during construction (David Jones has to cease operation during construction)  No loading dock facilities to Myer (4 levels) during construction (Myer has to cease operation during construction)
	Partial impact to David Jones store on L3 & L4 which can be isolated.	Significant impact to David Jones on L3 & L4 by demolition as remaining area is not suitable for DJ layout and operations
	Ability to use the retail loading dock for material handling and a construction site.	Loss of Loading Dock does not allow use of loading dock for material handling and a construction site.
	The site can be more easily accessed through the remaining section of the loading dock from Marsden Street (Argyle Street cannot be used due to bus servicing).	Problematic site access as both Marsden and Argyle street will not have a direct access during excavation/construction due to no remaining loading dock.

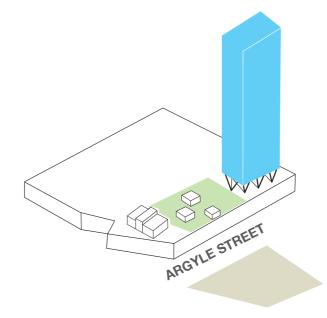


## **Key Concepts - Tower form**

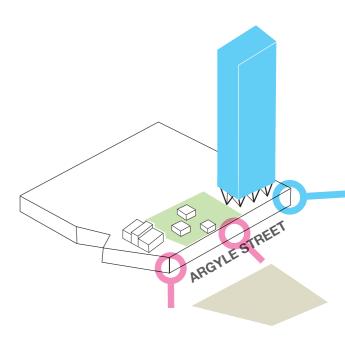
The key strategies driving the outcome and location of the tower design. Scale, activation and address points are all factors when designing to the existing urban fabric of Parramatta.



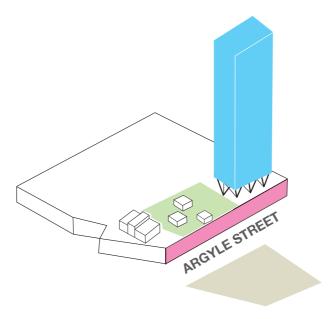
Church Street view corridor
 maintained with new tower location



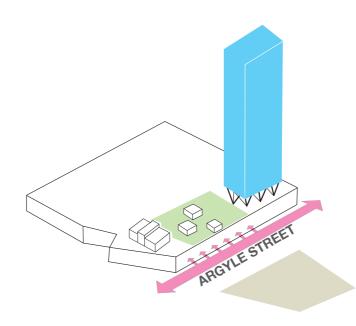
Locate tower west to improve contextual separation and create an urban marker at corner



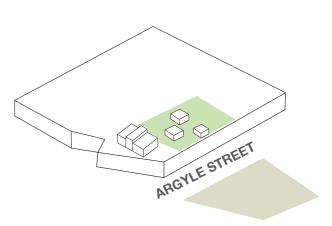
Locate new commercial address to corner and increase retail connectivity to Argyle street



3. Potentially activate Argyle street with visually active street facing retail facade



 Opportunity to potentially activate Argyle street with increased porosity, potential streetscape and awning improvements



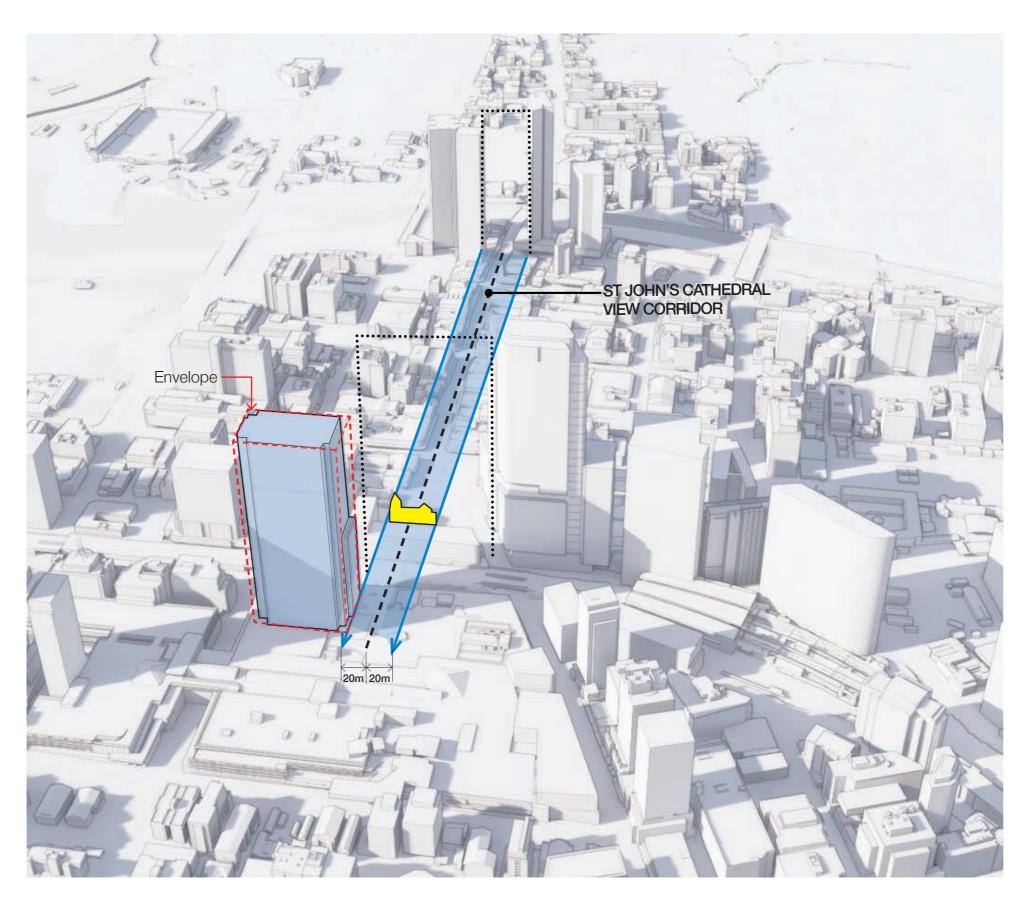
 Opportunity create potential landscaped and activated roofscape overlooking PSQ

### **Key Concepts - Church St View Corridor**

The current proposal seeks to respond to maintaining the view vistas down Church Street. The tower has been relocated to the corner of Argyle and Marsden Streets to avoid incursion into the Church Street view corridor, and to allow St John's Cathedral and its Spire to be prominent in the skyline.

Parramatta council has defined the Northern Gateway at the junction of Church street and Parramatta River, with the Meriton's Altitude development and the recently approved Riverside Tower providing built form markers of the location.

The relocation of the tower to the corner of Argyle Street and Marsden Street aim to further strengthen and frame the Church Street axis by defining the next Gateway corridor. Further defined with the already approved 'Aspire' tower development, the two 'bookmarks' are thus created in defining the next Gateway in Parramatta's CBD.

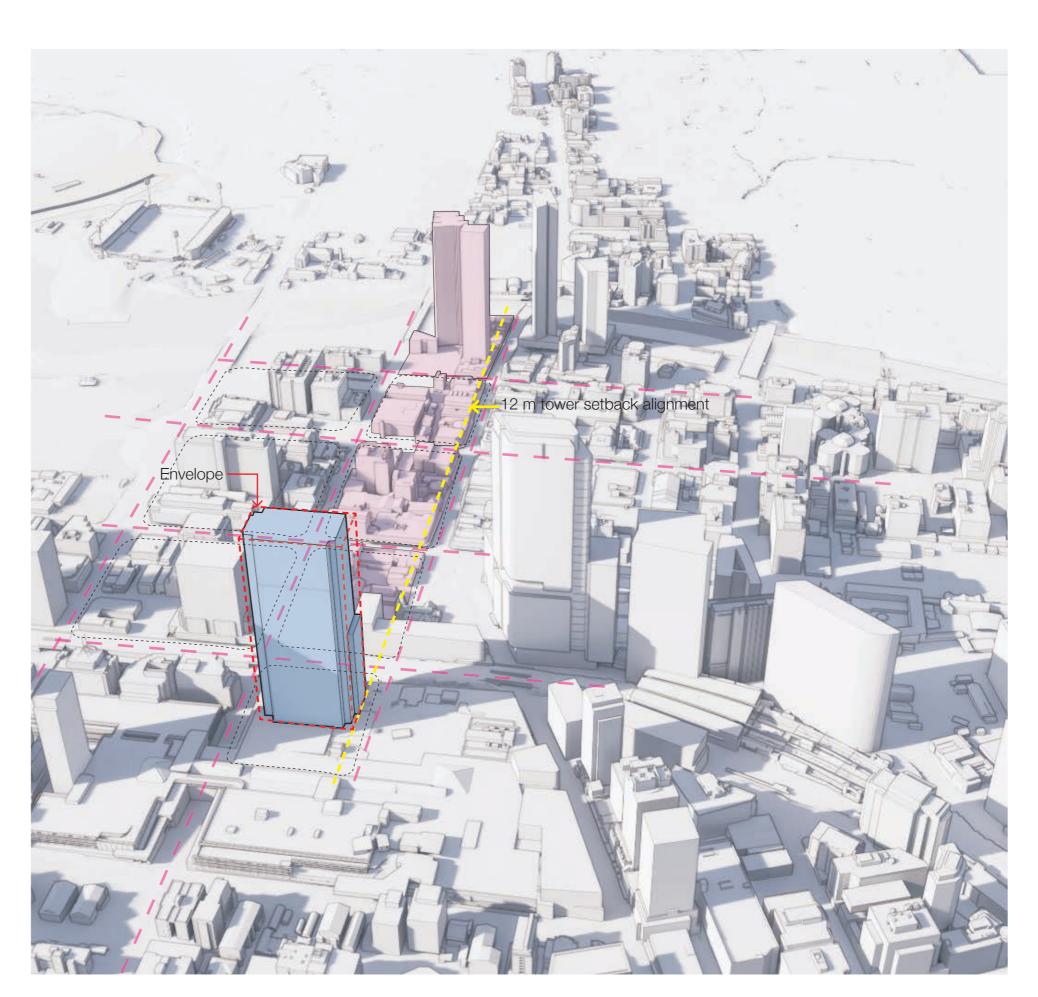


## $04 \frac{\text{Design Response}}{\text{Site}}$

## **Key Concepts - Parramatta City Grid**

The relocation of the proposed tower to align between the eastern city grids creates continuity in the urban massing build-up adjacent to Church Street.

Locating the built tower form in alignment with the north-south context buildings visually reinforces the city grid pattern, and creates clear visual vistas down Church Street.

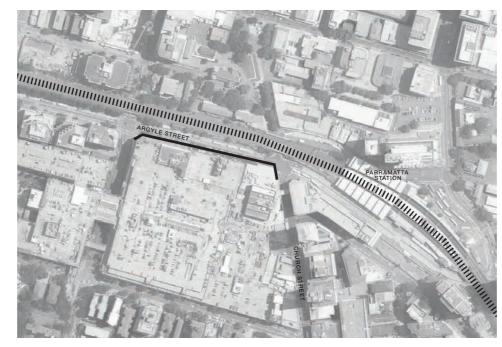


### **Key Concepts - Public Domain**

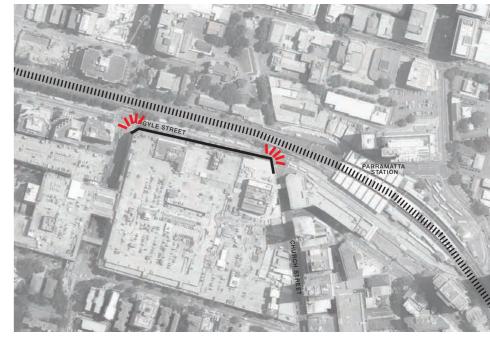
The pedestrian crossing acts as an natural urban linkage from Parramatta Square to the southern end of Church Square as a natural connection. Argyle street is a busy nexus between public transport nodes and acts as a thoroughfare through to other established offices and mixed use destinations. Our proposal seeks to leverage the increased commercial activity to further augment Argyle street's importance as an expansive link, west to new and future development including the aquatic centre.

#### Key concepts:

- Create defined entry points for both the retail and commercial precincts
- Increase use and potential permeability to Argyle street from retail
- Create visual connectivity and activity from retail levels to Argyle street public domain
- Create visual link from Parramatta Square to southern side of the rail line encouraging public connectivity



1. Existing condition



2. Activate the corners of Church and Marsden streets



3. Increase permeability and visual activation to Argyle street edge

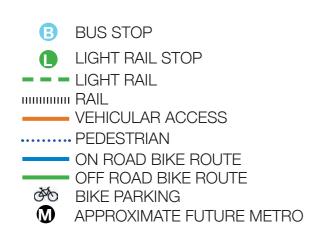


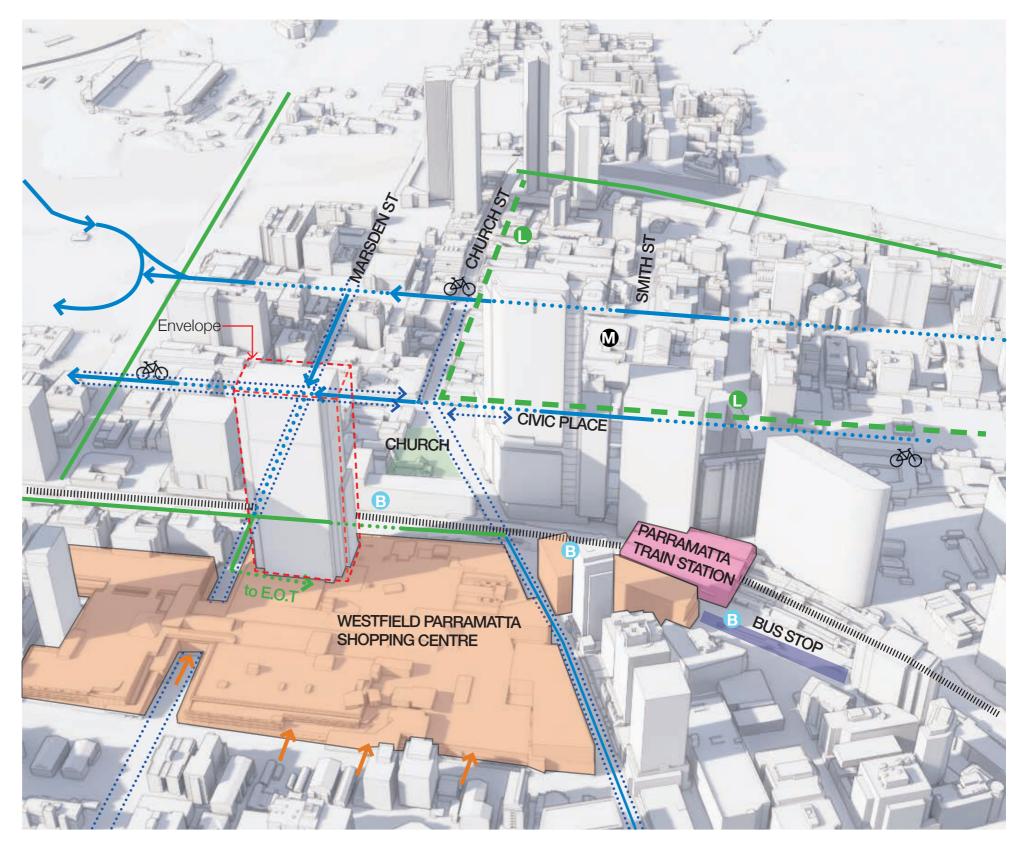
4. Potential opportunity to create landscaped, activated rooftop precinct visually connected to Square

## **Context - Connectivity**

The proposed site is very well appointed in terms of connectivity to multiple modes of access.

- / Cycling a considerable feature of all city planning and commercial offerings is the ability to cycle to work and comfortably transition from transport to workplace modes. The city has a number of existing and proposed cycle ways that will encourage this mode of transport
- / Pedestrian Parramatta is a relatively flat city which is easily traversed by pedestrians. There is also a number of residential possibilities within walking distance of the proposal to enable living within a walkable distance of employment
- / Public Transport the site is located within close proximity of Parramatta rail station, is currently adjacent a major bus interchange and will be able to accessible to other planned transport options, all of which encourage increased users' usage.
- / Vehicles The proposal utilises existing transport connections to the site for parking and servicing all of which are located to minimise impacts of major street frontages.

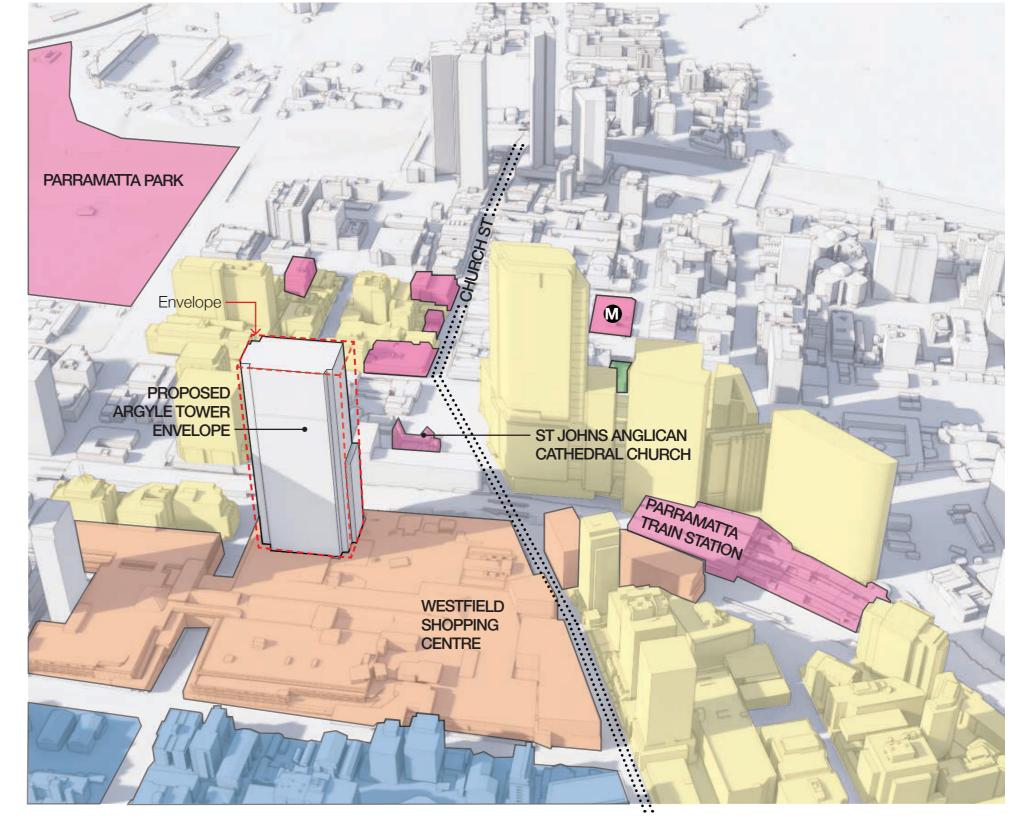




### **Context - Land Use**

The Argyle Tower site sits at the heart of Parramatta, adjacent to the emerging Parramatta Square. The land uses are commensurate to its city centre location. A diverse blend of uses, predominantly retail at ground level with changing blends of commercial, residential and others over.

The proposed tower is located over the existing retail centre providing unique and very high levels of amenity for future users, comparable to Sydney Tower and Westfield Sydney in the Sydney CBD.



### Access to and from Site

#### PEDESTRIAN ACCESS TO AND FROM SITE

The commercial lobby has been strategically located on Argyle Street Westfield block, allowing retail activation and natural surveillance along Argyle Street. The main access will be via Argyle Street from the Interchange and Parramatta Square. There are also secondary accesses via the tunnel and bridge link, strengthening the connection between the commercial tower and retail centre.

The proposed East-West orientation of the tower clearly separates pedestrian access from vehicle access by locating the primary lobby on Argyle Street, as opposed to the previously North-South tower proposed lobby on Marsden Street, which was located adjacent to the nearby vehicle entry.

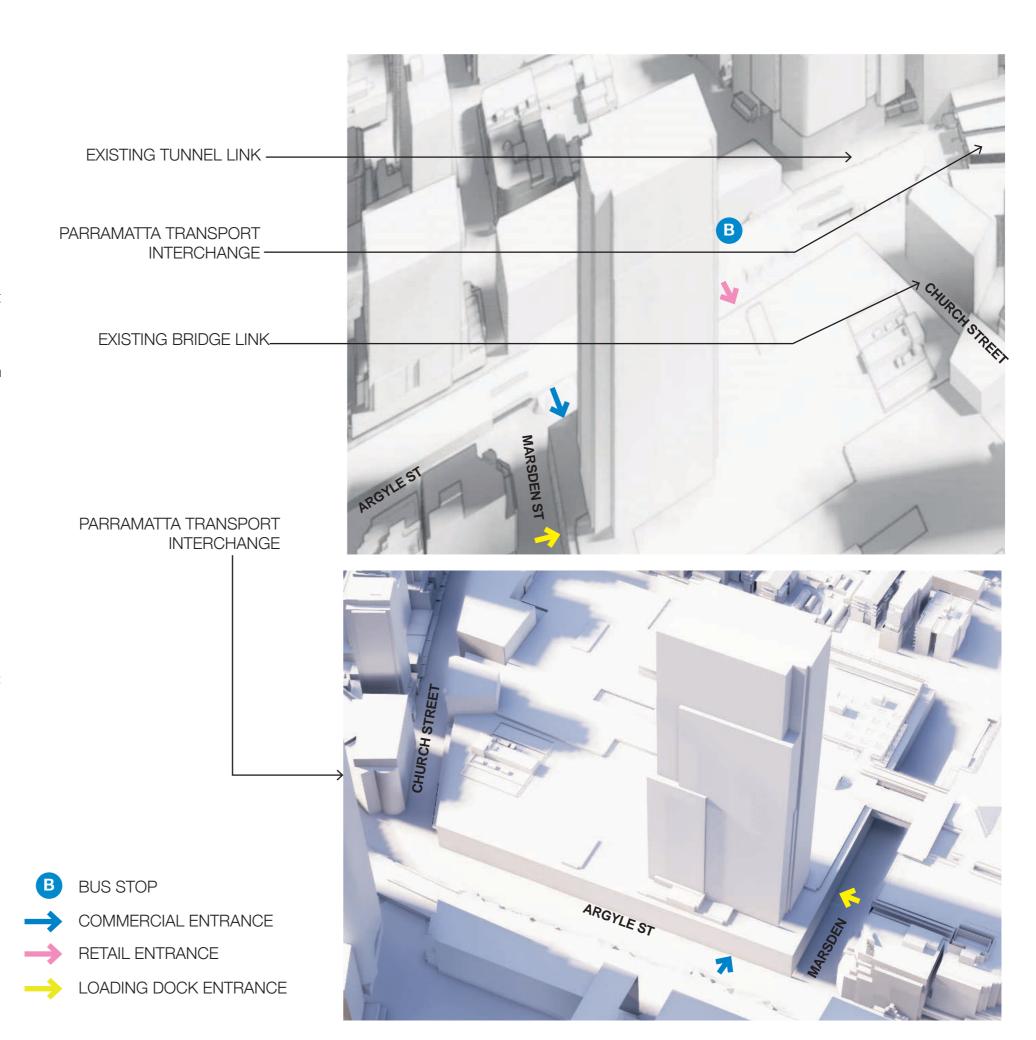
#### **VEHICULAR ACCESS TO AND FROM SITE**

Marsden Street will continue to act as the loading entrance to the Shopping Centre, servicing both retail and commercial needs. Commercial parking will be accessed using existing access points.

#### **PUBLIC TRANSPORT**

The site is very well connected by public transport with the interchange approximately 100m away. The interchange is served by:

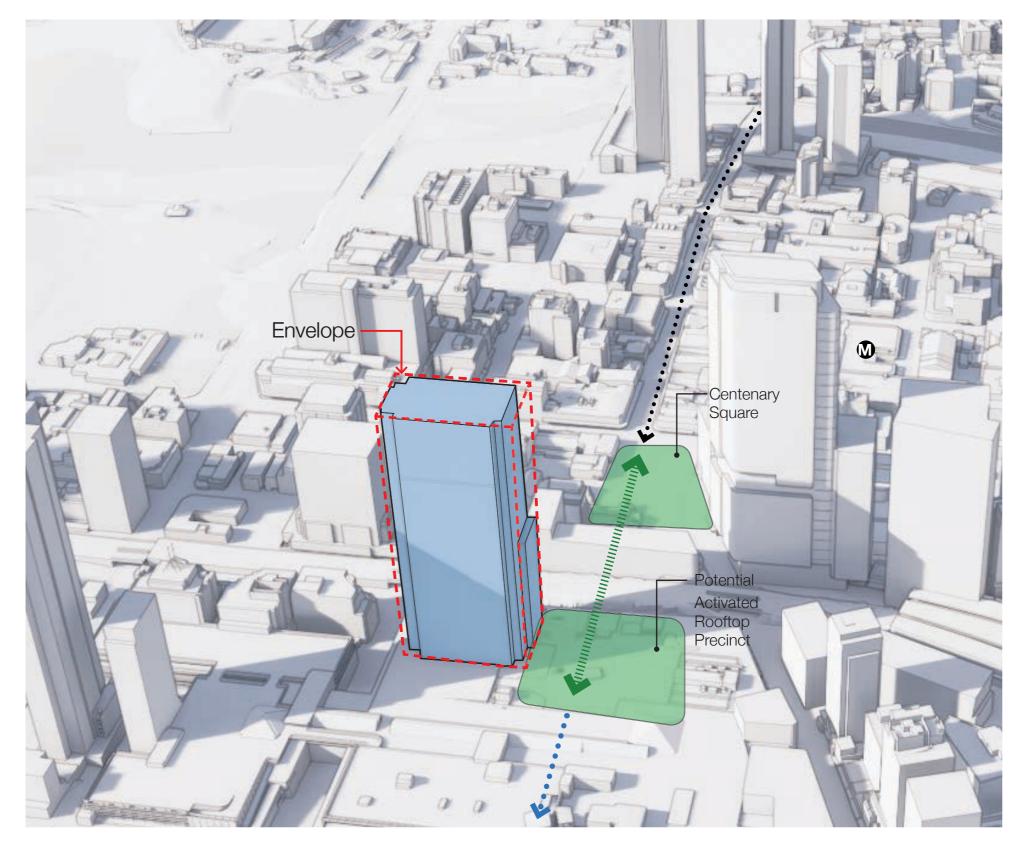
- Parramatta Station (heavy rail)
- Bus station east on Argyle Street



# Relationship to Centenary Square and Church Street

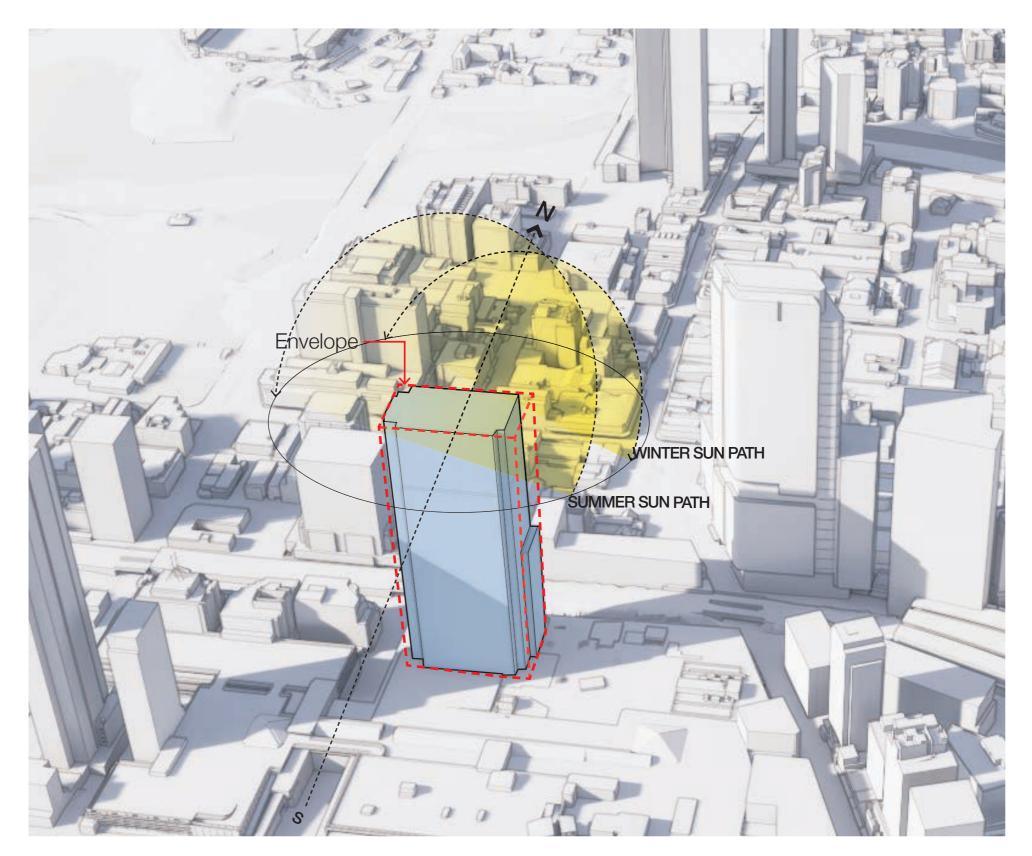
The relocation of the tower has presented a possible opportunity for the creation of a raised landscaped, activated rooftop precinct which is visually connected on the Church street axis to Centenary Square and the Church Street public domain.

This could potentially allow for the continuity of the urban public domain connectivity spine into the site with a potential activated rooftop domain.



## Solar

The tower is orientated towards the Argyle Street axis with the short faces of the building facing east and west, and long faces facing north and south. This allows for a prime northern solar aspect to the workplace floors. Solar loading on the northern and western faces will require facade solar protection, however the western face is predominantly core which will limit excessive solar gain.

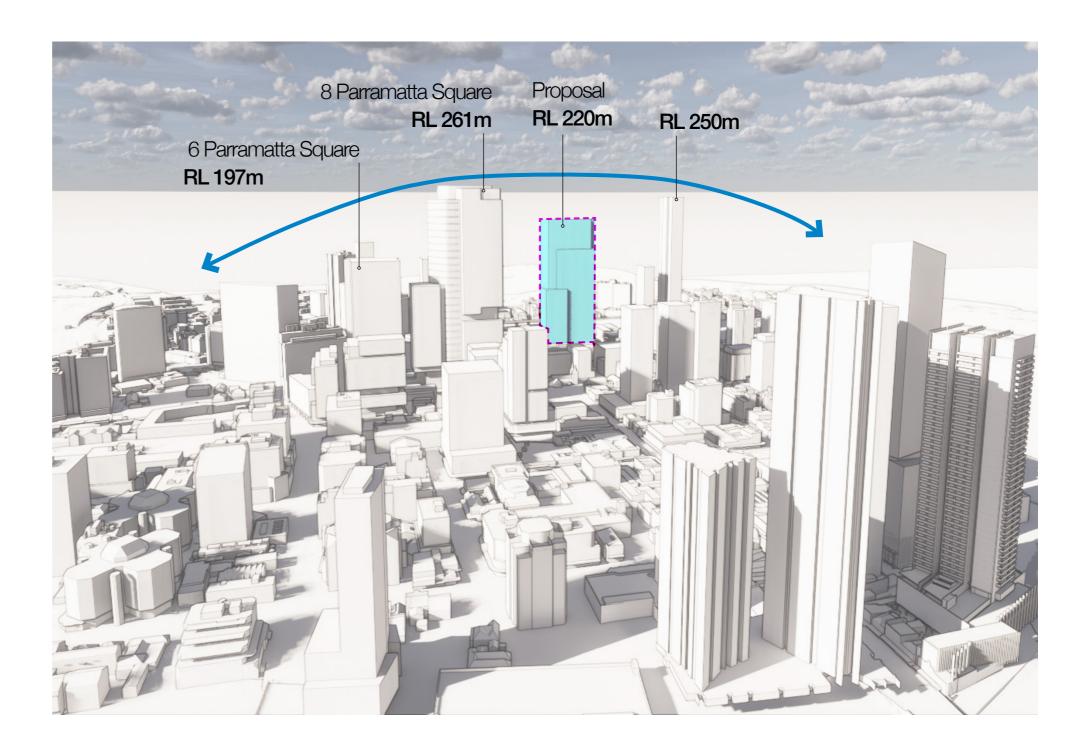


## **Proposed Height in Urban Context**

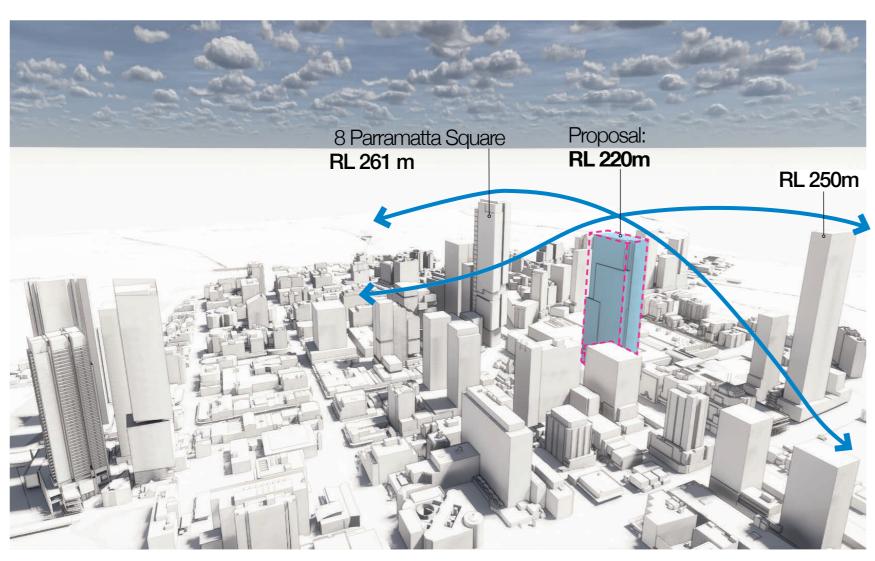
The exhibited draft LEP proposes a building height of RL 221,(subject to final approval). The current proposal proposal is designed to contextually contribute to the urban skyline build-up to towards Parramatta Square, which forms the epicentre, and comprises the tallest proposed building envelopes in the Precinct.

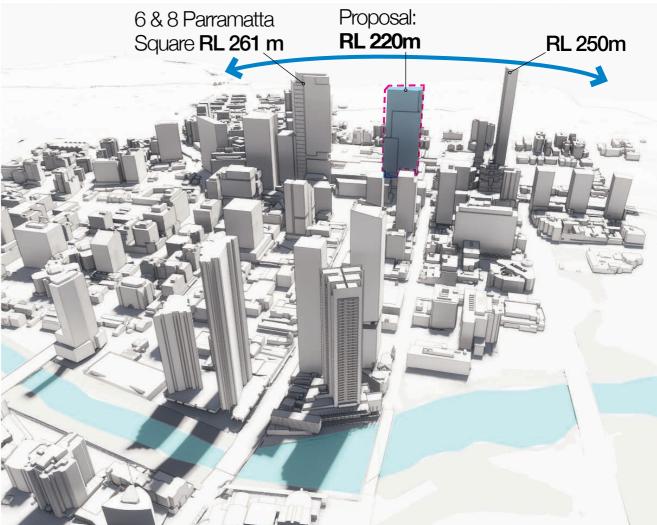
The height of buildings in the urban framework of Parramatta gradually lowers towards the outer parts of the city, moving away from Parramatta Square.

The existing site presents itself as a "gap" in the future urban skyline build-up of Parramatta. The scheme aims to positively contribute towards a legible future urban context, while simultaneously respecting heritage, the existing public domain and neighbouring buildings.



## **Proposed Height in Urban Context**





# 04 Design Response: Site

## St. John's Anglican Church View Corridor Study



St. John's Anglican Church



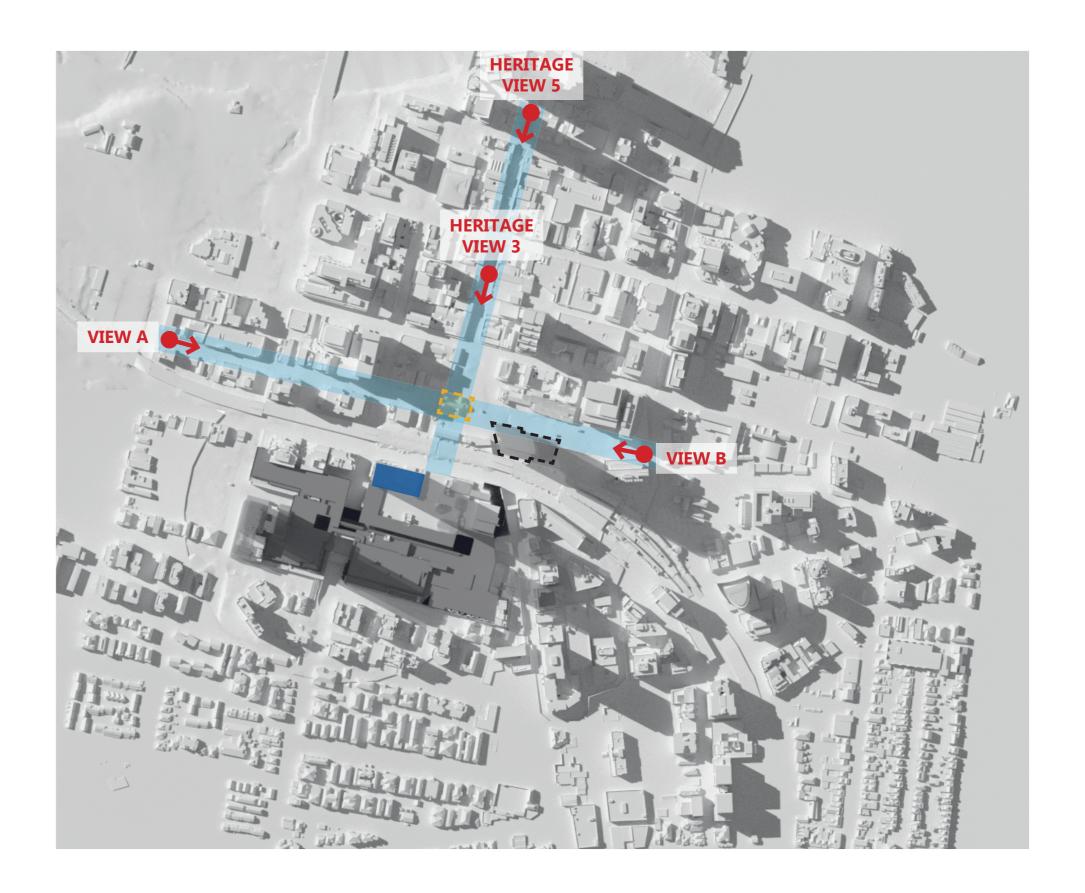
6-8 Parramatta Square



40m view Corridor



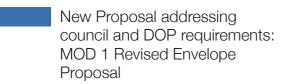
New Proposal addressing council and DOP requirements: MOD 1 Revised Envelope Proposal



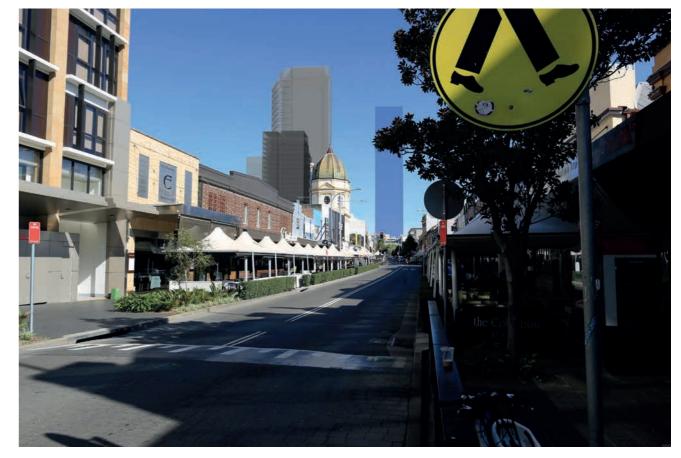




Existing Heritage View Corridor: View 5



6-8 Parramatta Square



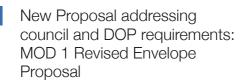
Previous Proposal Heritage View Corridor: View 5



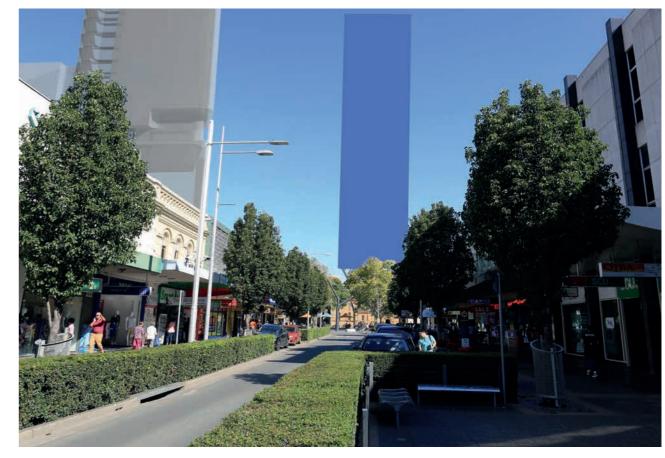
New Proposal Heritage View Corridor: View 5



Existing Heritage View Corridor: View 3



6-8 Parramatta Square



Previous Proposal Heritage View Corridor: View 3



New Proposal Heritage View Corridor: View 3

Church

Square

6-8 Parramatta

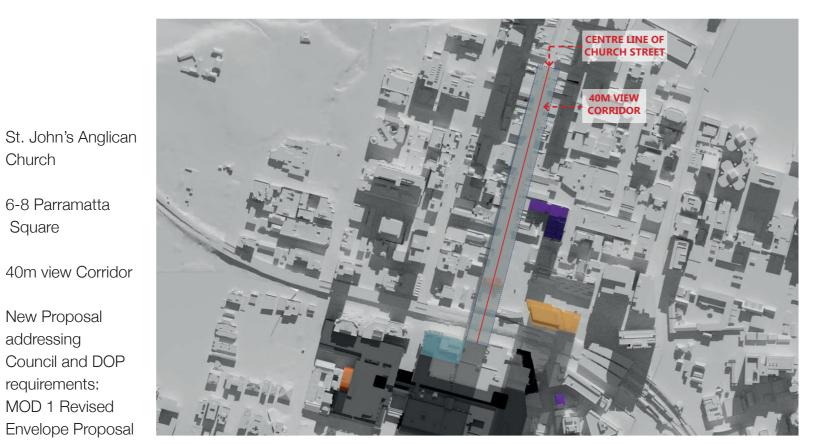
40m view Corridor

New Proposal addressing

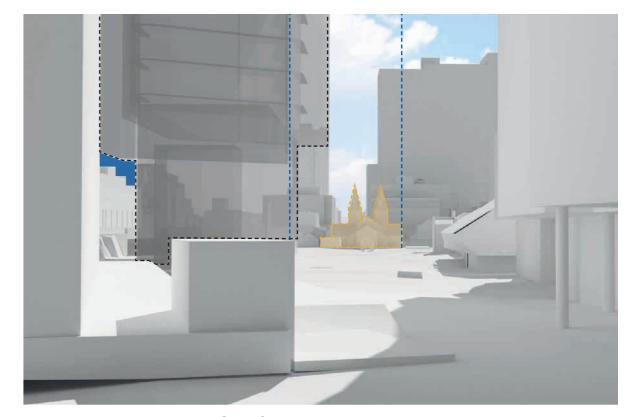
Council and DOP requirements: MOD 1 Revised



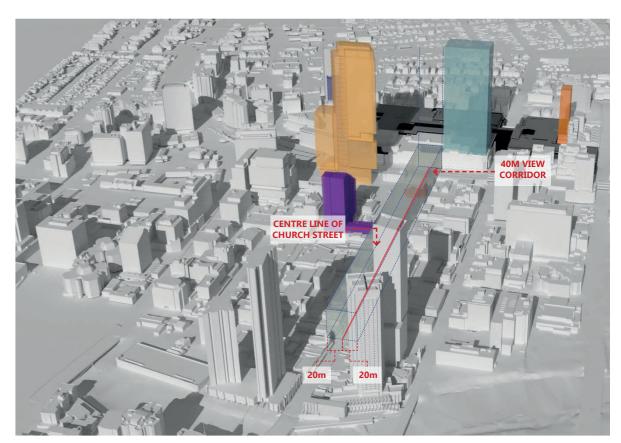
View A - East down Hunter St to Church



View Corridor Plan



View B - West down Hunter St to Church

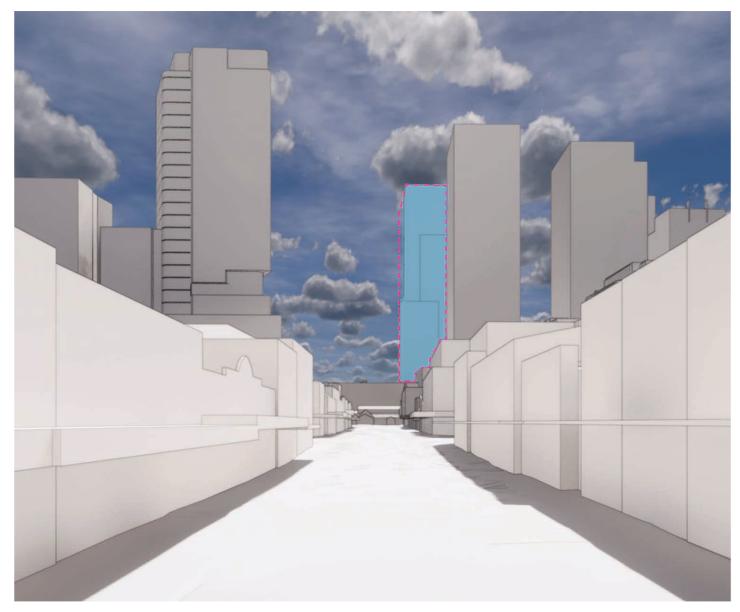


View Corridor Axonometric

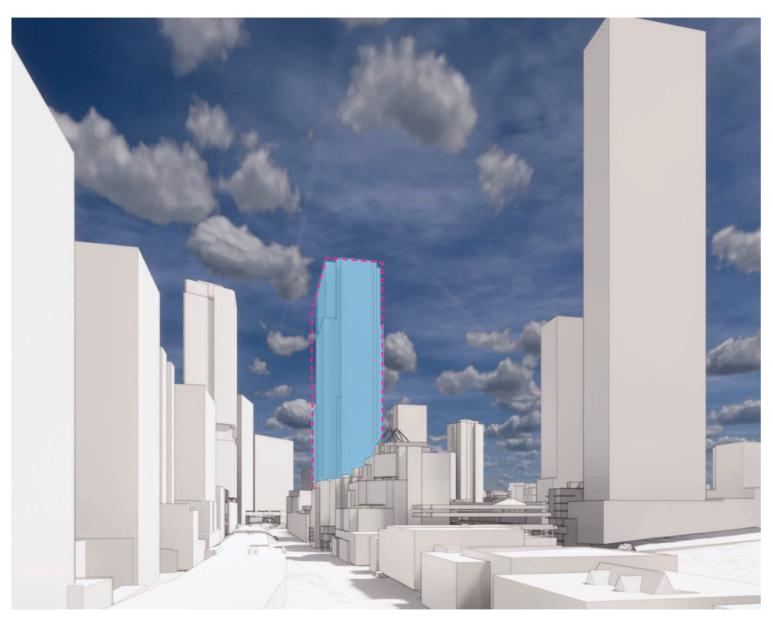


# 04 Design Response: Site

## Public Domain views to proposal



View south down Church Street with Proposed Envelope



View east down Argyle Street with Proposed Envelope

Proposed Envelope [MOD 1 - Revised Envelope Proposal]

### **Design Response: Site**

### **Shadow Analysis**

The proposed new tower location on the corner of Marsden Street and Argyle Street has relocated the building envelope to the west. This decreases the times in which overshadowing on the western facades of the existing apartment buildings on Church Street occurs to that of previous proposed tower locations, as well as in comparison to the Approved Concept Plan (2014) for a 25 storey tower.

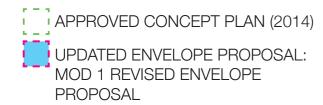
There is no shadow impact to Jubilee Park between the hours of 12pm to 2pm on 21st of June (winter solstice). There is no shadow impact to Ollie Webb Reserve between the hours of 10am to 3pm on 21st of June (winter solstice)

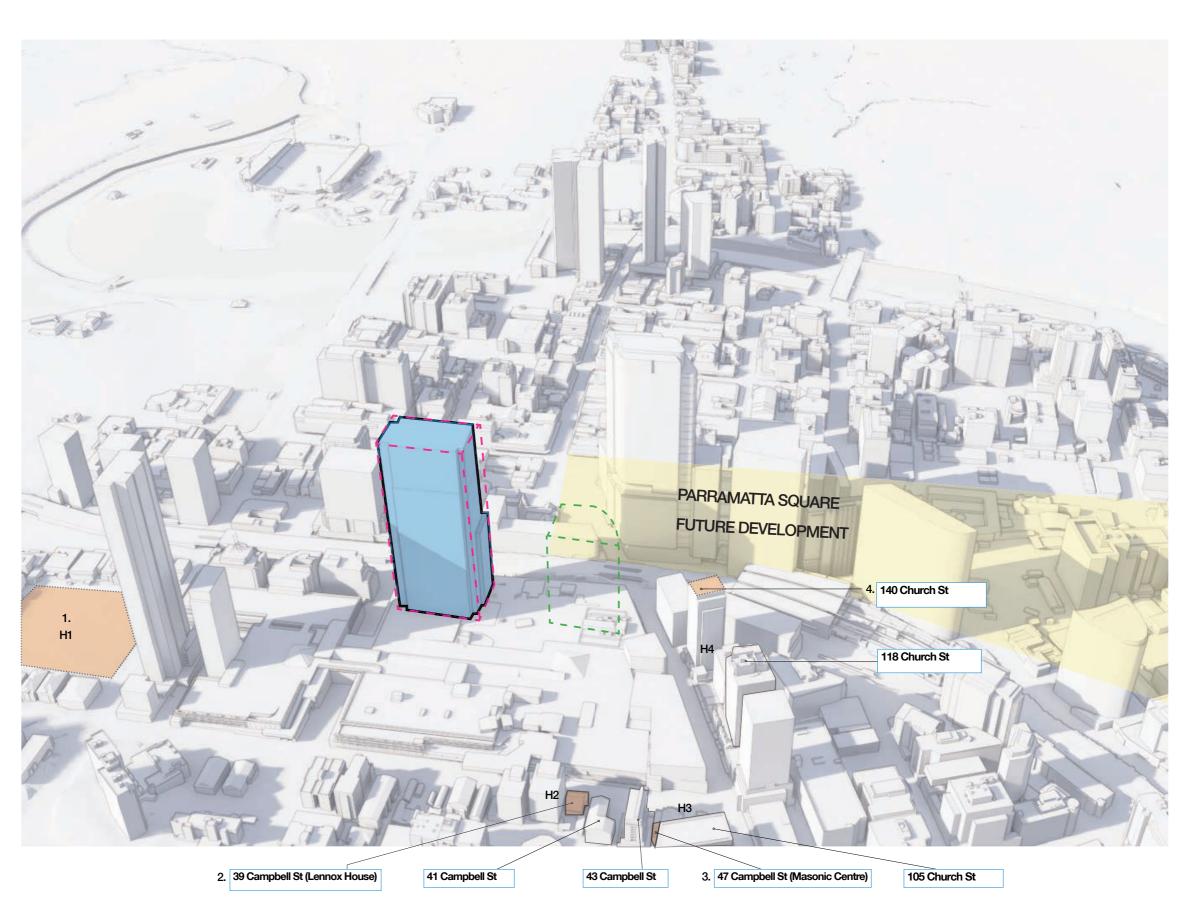
Heritage items noted below receive a minimum of two hours of sunlight. Detailed solar studies have been included in Reference Design section in this report.

Refer to heritage report for detailed heritage appraisal.

#### HERITAGE ITEMS

- 1. ST. JOHN'S CEMETERY
- 2. LENNOX HOUSE
- 3. MASONIC CENTRE
- 4. FORMER FIRE STATION

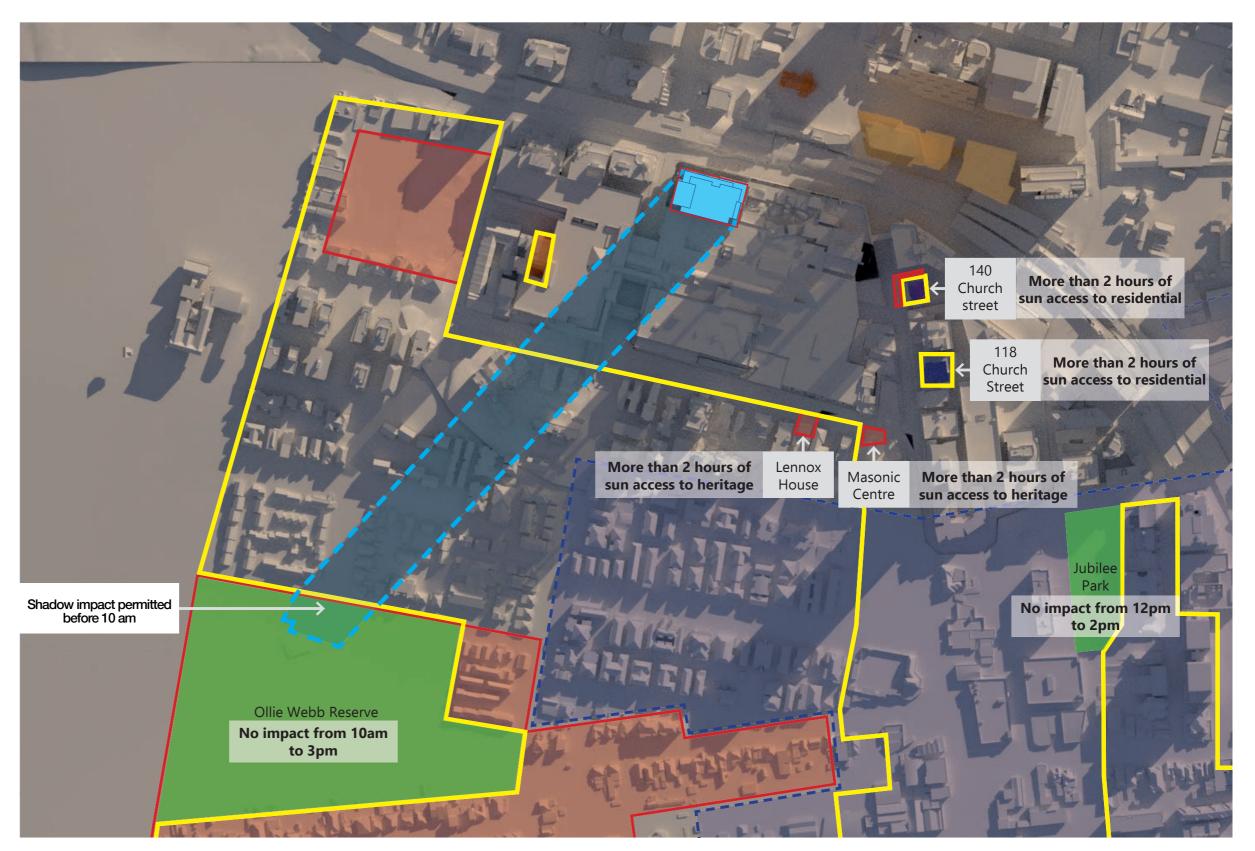




## Shadow Diagram (21st June) MOD 1 Revised Envelope Proposal

#### **SHADOW IMPACT**

Note: The shadow diagrams indicate no shadow impact to Jubilee Park between the hours of 12pm to 2pm at 21st of June (winter solstice). There is no shadow impact to Ollie Webb Reserve between the hours of 10am to 3pm on 21st of June (winter solstice).



9AM



## Shadow Diagram (21st June) MOD 1 Revised Envelope Proposal

#### MARCH EQUINOX - SHADOW IMPACT SUMMARY: MARCH 21 2PM TO 2PM

ТҮРЕ	RESIDENTIAL BUILDINGS	
NAME	140 Church Street	118 Church Street
	(Study of sunlight access period from 9am - 3pm)	(Study of sunlight access period from 9am - 3pm)
CONCLUSION	The tower envelope allows more than 2 hours of sun access to residential buildings	



10AM



11AM



12PM



1 PM



2PM



3PM



Heritage conservation Area



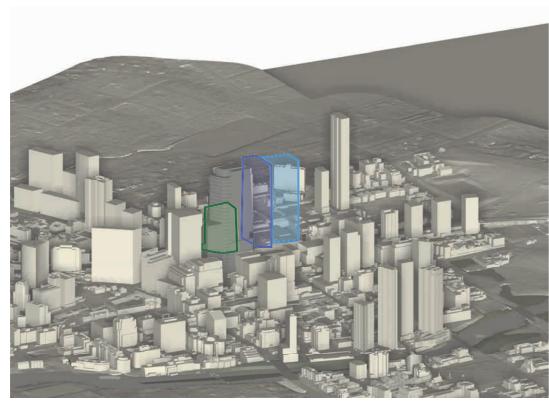
Residential Area

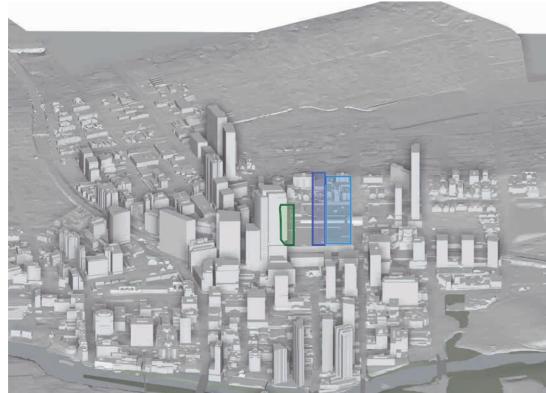
MOD 1 REVISED **ENVELOPE** PROPOSAL

MOD 1 -**EXHIBITED ENVELOPE PROPOSAL** 

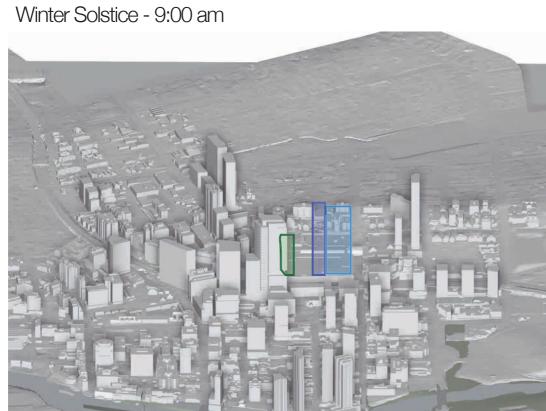
DA APPROVAL— TOWER LOCATION

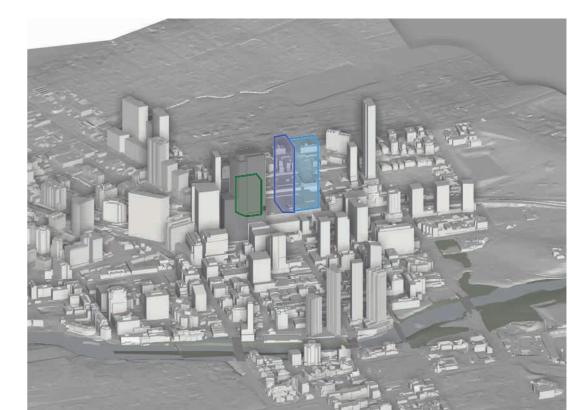
## **Suns Eye Diagrams - Tower location comparison**



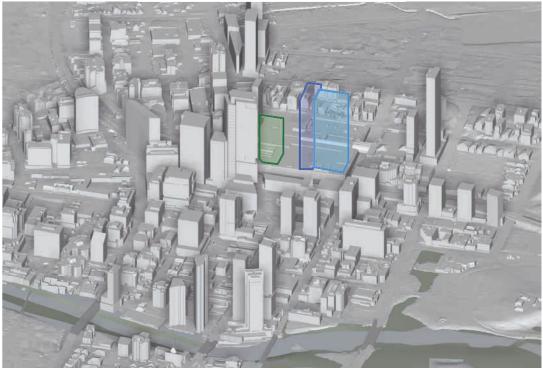


Winter Solstice - 11:00 am





Winter Solstice - 10:00 am



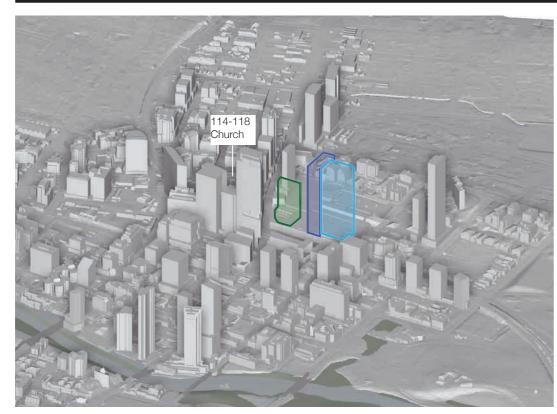
Winter Solstice - 12:00 pm

MOD 1 -REVISED **ENVELOPE** PROPOSAL

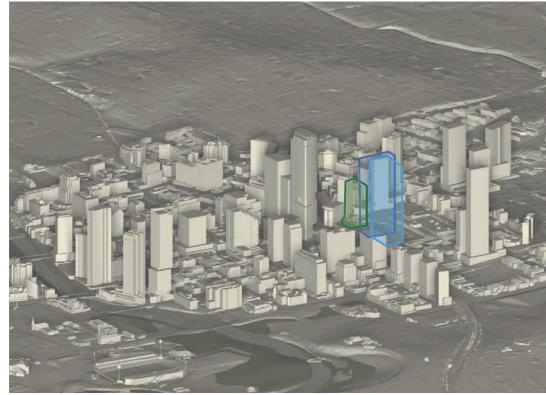
MOD 1 -**EXHIBITED** ENVELOPE PROPOSAL

DA APPROVAL— TOWER LOCATION

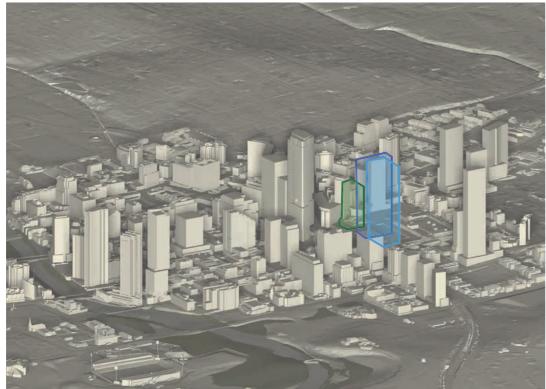
## **Suns Eye Diagrams - Tower location comparison**

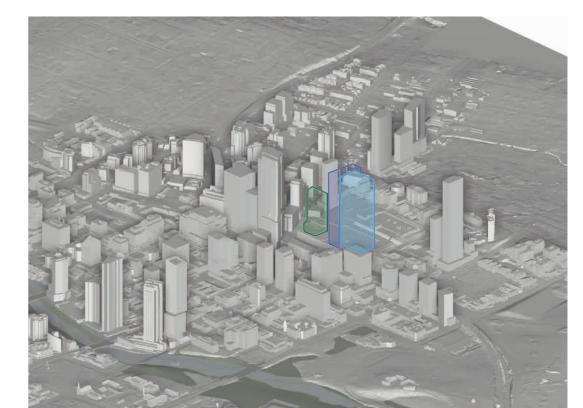


Winter Solstice - 1:00 pm



Winter Solstice - 3:00 pm



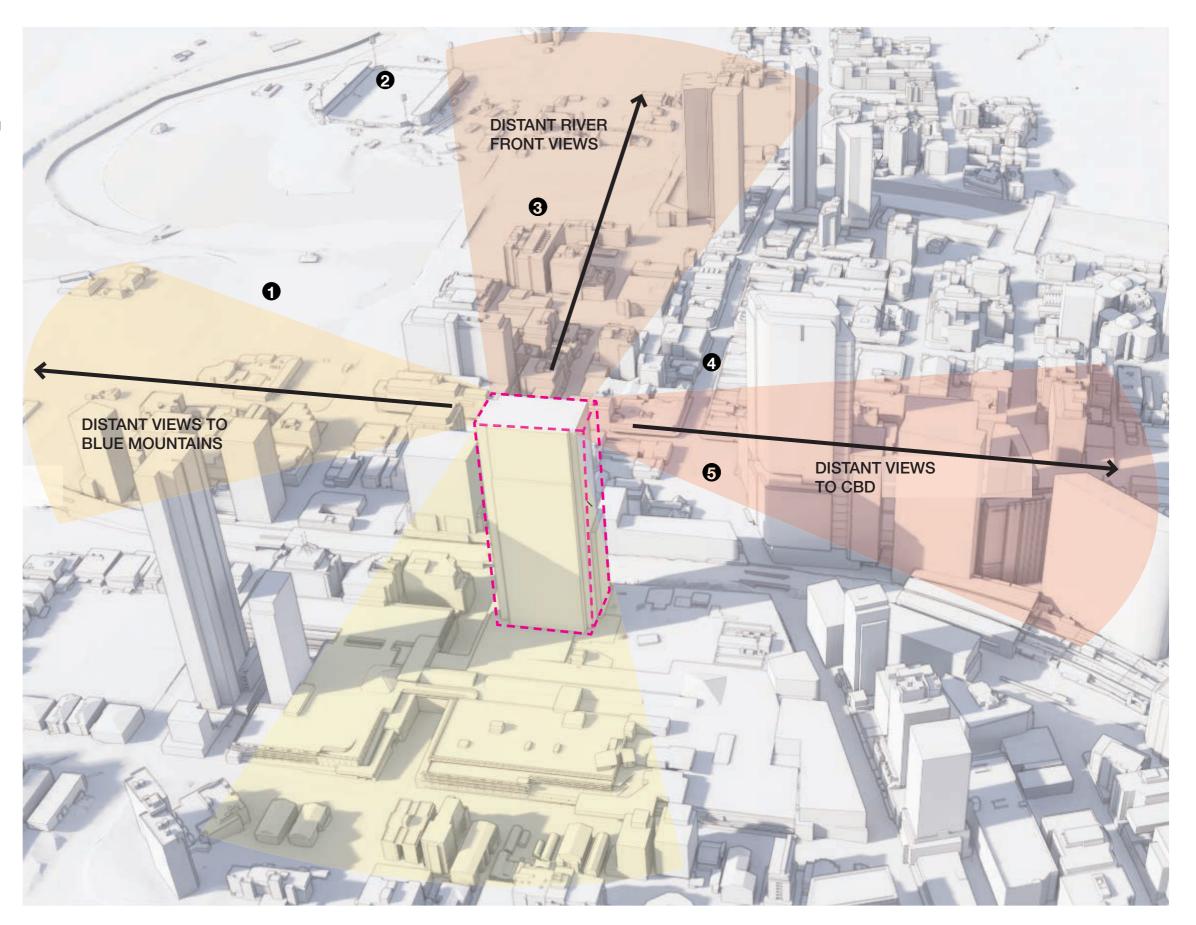


Winter Solstice - 2:00 pm

## Views from site

Key views from the proposed tower will be:

- View north along Church Street axis looking towards Parramatta River
- View east to Sydney CBD and Chatswood
- Views west to distant Blue Mountains



## Design Response: Site

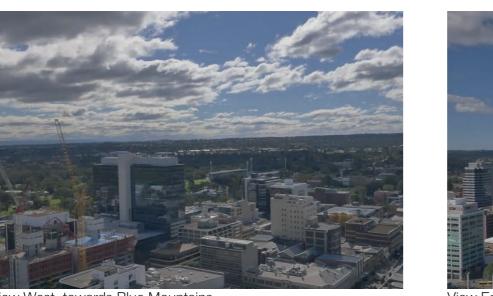
## Views from site



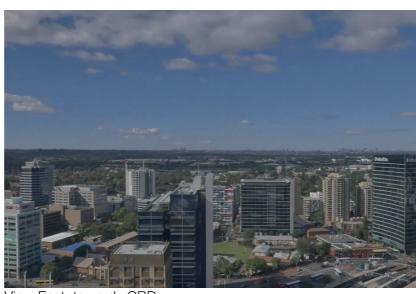
01. Parramatta Park



03. Parramatta River



View West, towards Blue Mountains



View East, towards CBD



02. Bankwest Stadium



04. Church street



05. Parramatta Square



### **Design Response: Streetscape**

### **Ground Plan and Public Domain Activation**

Integrated with Westfield Shopping Centre, the new development has the potential to further uplift Argyle Street and strengthen the urban fabric.

#### / Commercial Arrival

The commercial lobby will be strategically located on Argyle Street. The proposed double height space at the entrance will create a highly legible commercial offer to define a strong street address.

The commercial lobby provides a destination on Argyle Street aligned with the bus drop off areas and current activation of Argyle Street. Further possible street activation may be possible linking to future proposed development along Argyle Street and the proposed Aquatic Centre.

#### / Retail Arrival

Improvements to retail activation on Argyle Street may be possible with improved linkage to the shopping centre at ground floor level. The commercial lobby provides a destination on Argyle Street aligned with the bus drop off areas and current activation of Argyle Street. The commercial tower lobby will provide a bookend destination at the corner of Argyle Street and Marsden Street.

#### / Loading

Marsden Street will continue to act as the loading entrance to the Shopping Centre, servicing both retail and commercial needs.

#### / Commercial Core

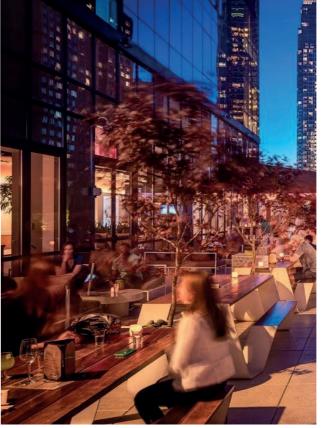
The indicative scheme proposes the commercial core to be located on Argyle Street. With convenient access to the existing loading dock, the core is positioned to have minimal impact to the existing trading retail levels.

#### / Podium

There is a potential to refurbish the facade and podium rooftop. This presents an opportunity to significantly improve the Argyle Street human dimension and initiate a high quality, design focused, place making improvement.















## 06

### **Design Response: Tower**

### **Tower Plan**

The modern workplace is about providing a seamless client experience with increased collaboration and maximum diversity of offer. It is a multi-use space capable of accommodating many overlapping activities and patterns of use within a highly configurable environment.

The proposed workplace objectives are:

/ Large floor plates between 1800m² - 2300m² NLA with a regular shape for maximum flexibility

/ Side core to increase visual connectivity across and between floors

/ Large column spacings related to planning and facade grid

/ Spaces are easily subdivided, without compromising amenity or access

#### / Low Rise

Potentially offering approximately 2,300m<sup>2</sup> of NLA on 2,865m<sup>2</sup> GBA floor plate.

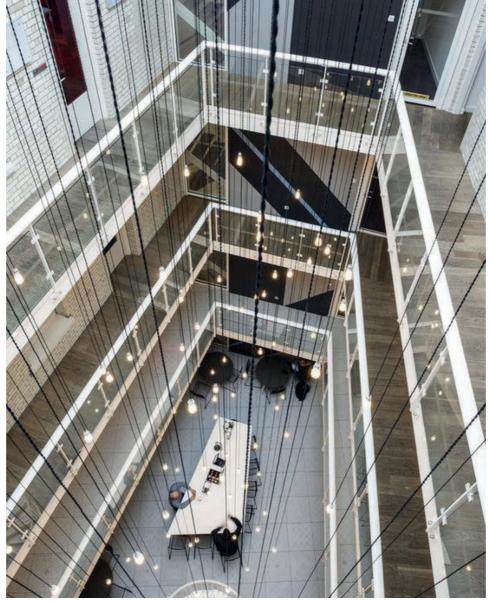
#### / Mid Rise

Potentially offering approximately 2,155m² of NLA on a 2,400m² GBA floor plate. The tower proposes a side core on the west with structural spans of up to 18m.

The floor plate represents a large, contiguous, flexible workplace floor suitable to modern tenant requirements.

#### / High Rise

Potentially offering approximately 1,820m<sup>2</sup> of NLA on a 2,300m<sup>2</sup> GBA floor plate.













## **Design Response: Rooftop**

## **Podium Rooftop**

This rooftop will provide a connection between the workplace offering in the tower and the retail and lifestyle amenity below.

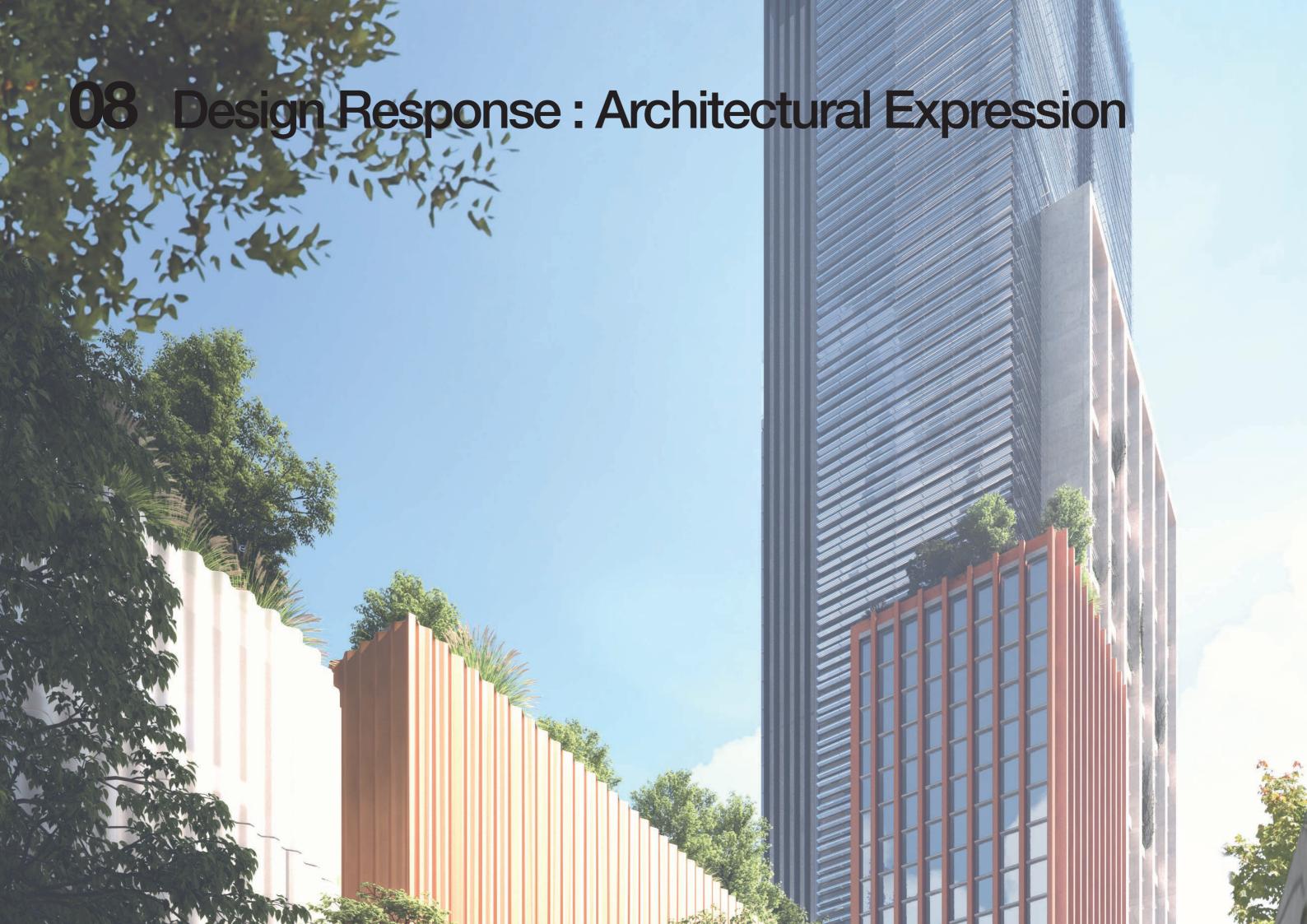
These spaces are likely to contain a mix of supporting third space style uses such as leisure facilities, bars, cafes, meeting areas, flexible work zones and the like that will contribute to commercial tower amenity.

The existing retail levels can potentially be connected from level 2 Argyle Street retail level to level 6. This will connect the existing retail with lifestyle levels at podium roof.









### Example Architectural Response - Reference design scheme

#### Architectural expression

The proposed form identified in this reference design scheme of this report is appropriate to facilitate a high quality, contemporary workplace tower. Key to a successful outcome is an architectural expression for the tower that should achieve the following requirements:

- creatively respond to the required efficiencies of the commercial floorplate,
- the creation of high quality amenity for a contemporary workplace ie. light, outlook
- foster a high quality, environmental outcome through integrated environmental control where appropriate
- create an iconic building form that fits the city scale visually and formally engaging

#### **Podium**

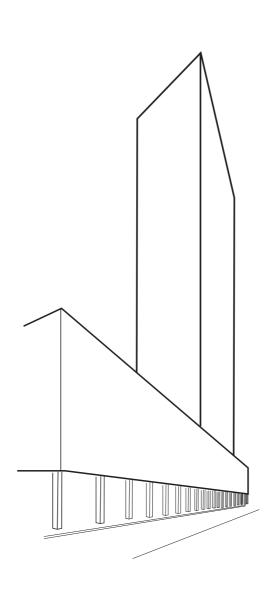
The podium responds to the human-scale ground floor domain, providing a continuous Street colonnade and a continuous podium at the lower levels.

#### Tower

The Tower has been located off the Church street visual axis, creating an urban marker on the corner of Argyle Street and Marsden Street, and allowing uninterrupted vistas down Church Street.

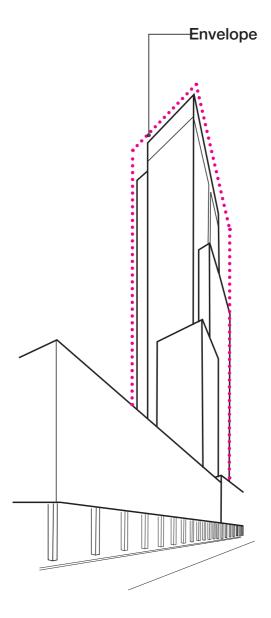
To articulate the upper tower form, the mass has been sculpted to be lighter towards the sky reducing the ground level perception of one, large singular tower mass.

A light, slender upper tower has been created, with more articulated, solid lower forms at the base and podium levels.



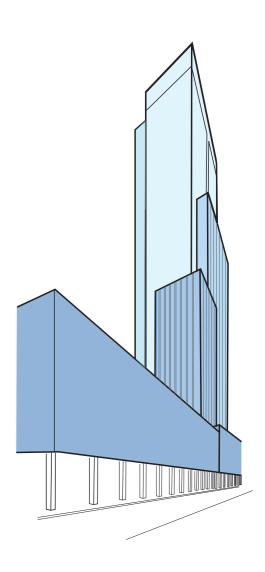
#### Podium + Tower

- Continuous Street Colonnade and podium at lower levels
- Tower located off Church street visual axis; an urban marker on the corner of Argyle Street and Marsden Street



#### Articulated Tower

 Articulated upper tower form reduce ground level perception of one singular tower mass



#### Facade Articulation: Lighter towards sky

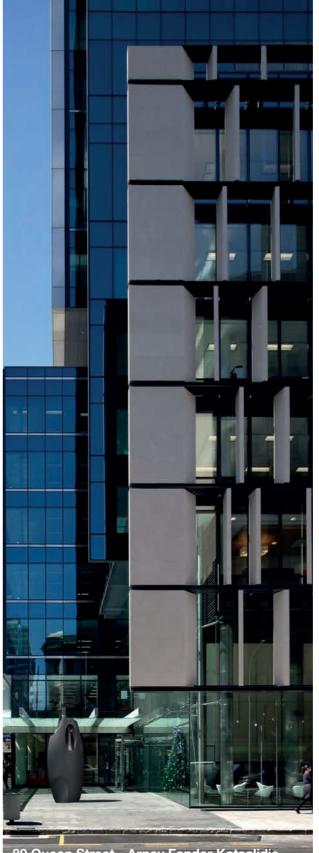
• Light & slender upper tower / solid. articulated lower forms

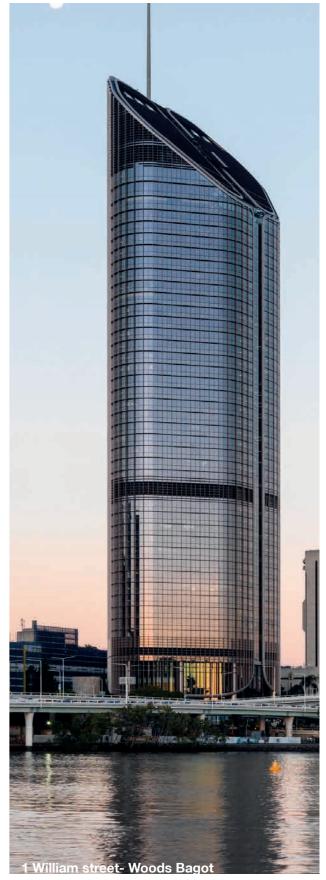
## **Architectural Response - Facade**

Simple architectural facades can be wrap responsive changes to the base form to create elegant outcomes like KPF's 10 Hudson Yards or Woods Bagot's 1 William street building amongst others or more heavily articulated facades can be applied to simpler forms to achieve visual interest and relief.

The facade response is intended to align with the envelope articulation response, a lighter slender tower form is proposed at the upper levels with a more articulated, solid lower level response.







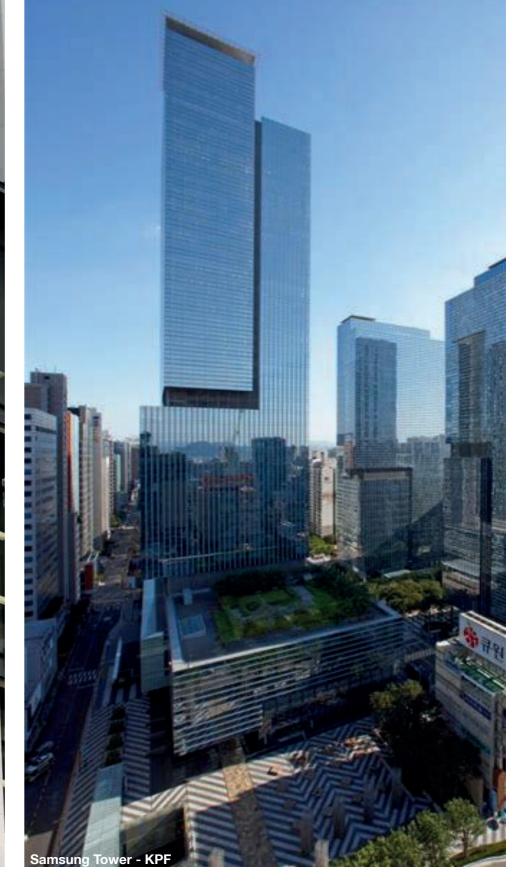
Podium

Mid-Rise

High-Rise









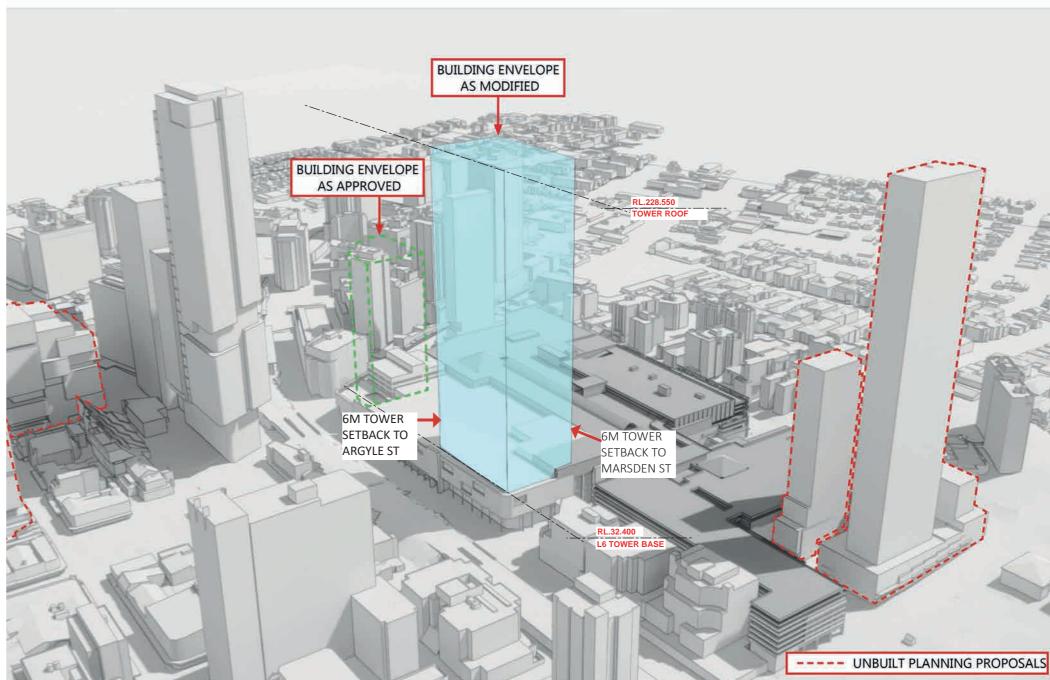
## Modified Concept Plan Tower Envelope Design Setbacks

### **Setbacks**

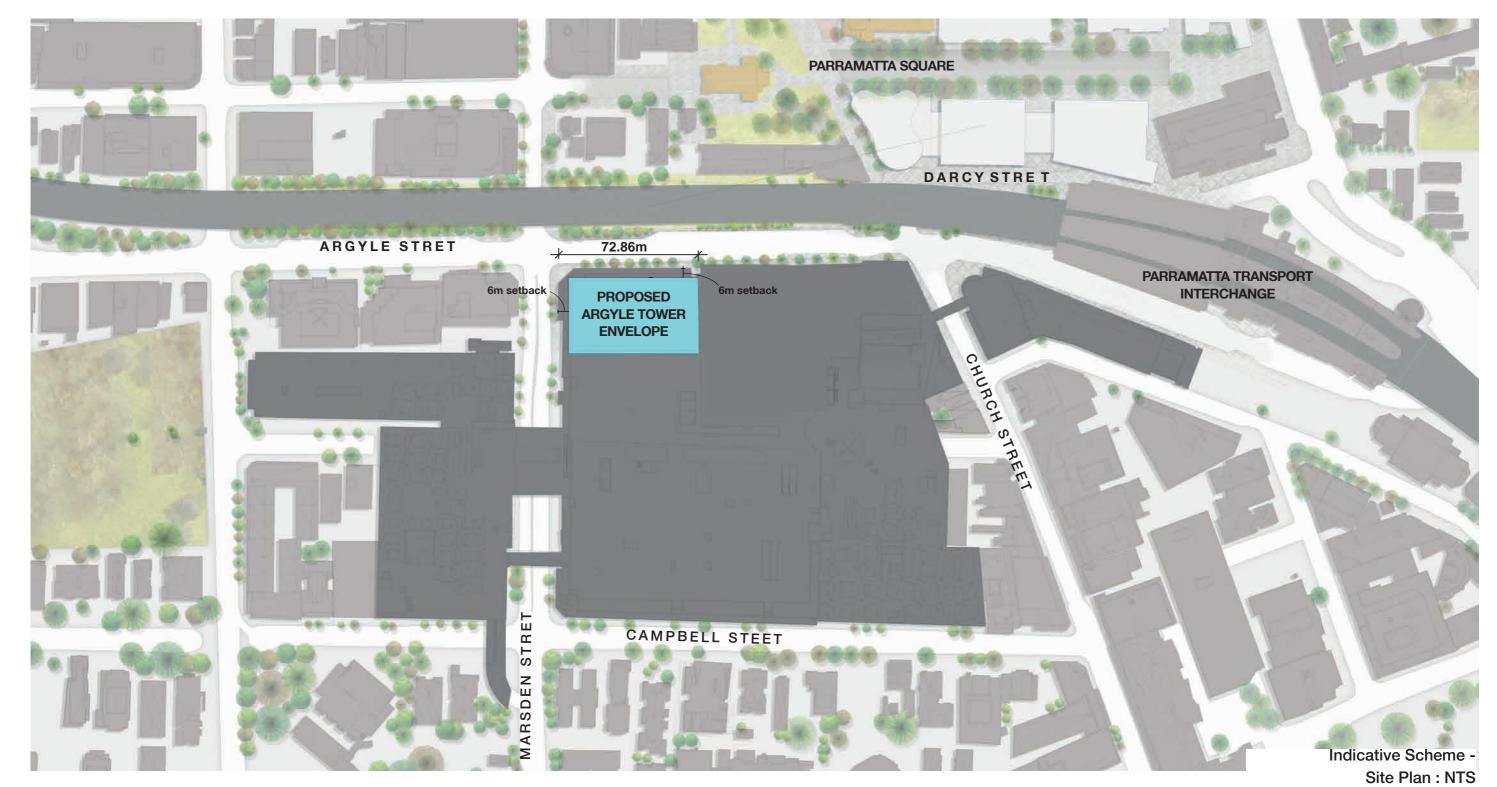
As a response to the Approved Concept (2014), the proposal (MOD 1 Revised Envelope Proposal) shifts the tower to the corner of Argyle Street and Marsden Street. This allows an improved building separation to the already approved Aspire development. This also relocates the proposed Tower lobby further west on Argyle Street, freeing up the previously approved lobby location on the Argyle Street / Church Street corner for better retail and public activation.

To strengthen the Argyle Street and Marsden Street corner address and Tower form, a 6m setback to Argyle Street and Marsden Street boundaries is proposed, adhering to setback controls.





## Modified Concept Plan Tower Envelope Design Site Plan

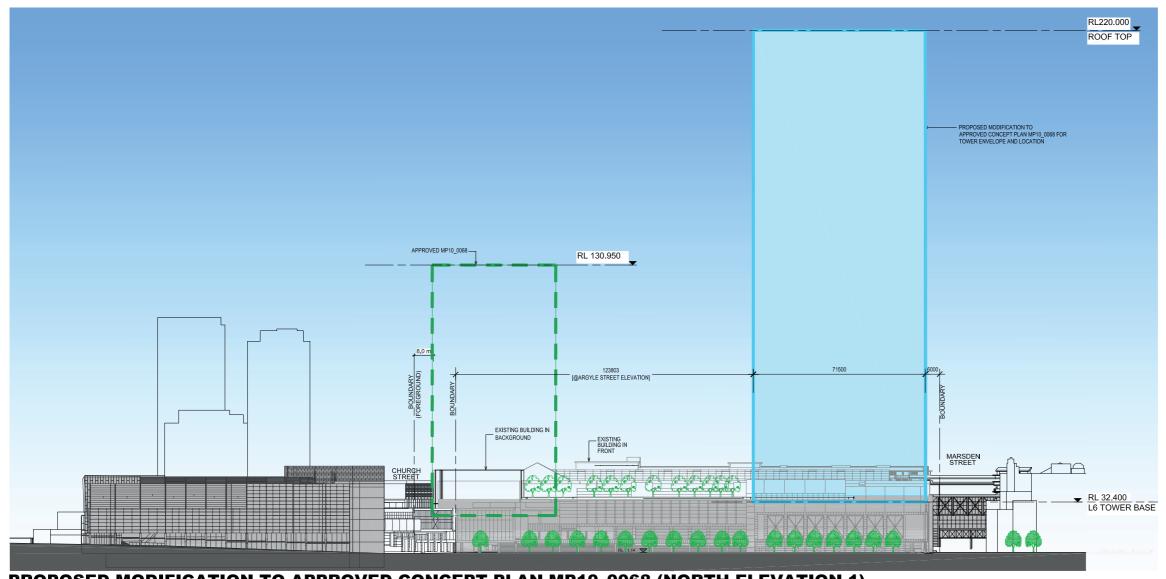


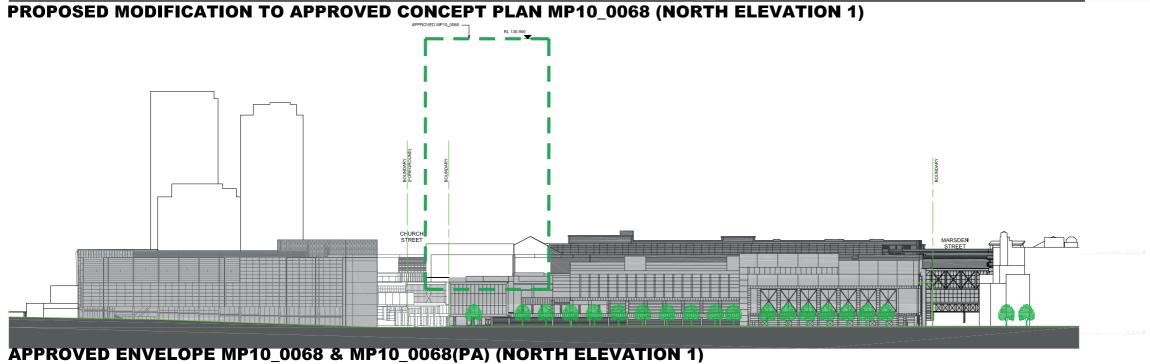


PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10\_0068

PPROVED RETAIL & PARKING

## $09^{\frac{\text{Modified Concept Plan Tower Envelope Design}}{\text{Envelope Elevations}}}$

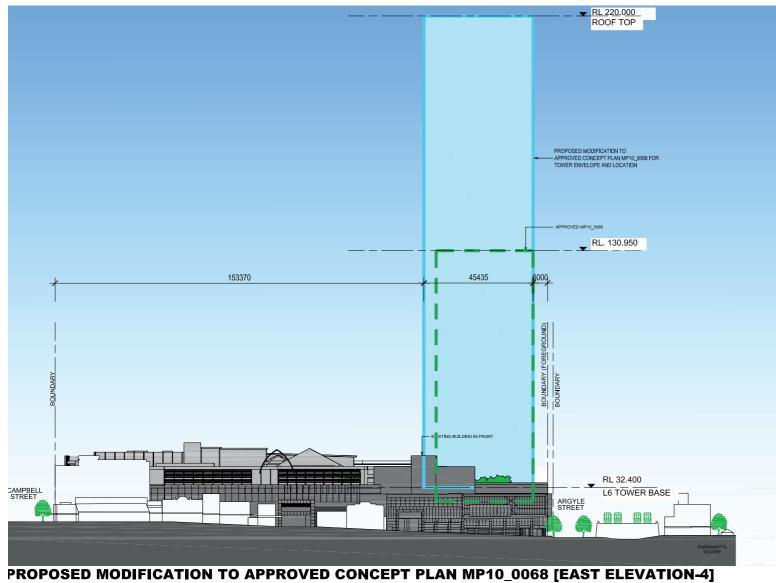




## 09

## **Modified Concept Plan Tower Envelope Design**

## **Envelope Elevations**



RL220.000 ROOF TOP **KEY PLAN** LEGEND PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10\_0068 APPROVED MP10\_0068 RL 130.950 APPROVED RETAIL & PARKING EXISTING BUILDING IN FRONT RL 32.400 L6 TOWER BASE

EVATION-4] PROPOSED MODIFICATION TO APPROVED CONCEPT PLAN MP10\_0068 [WEST ELEVATION-5]



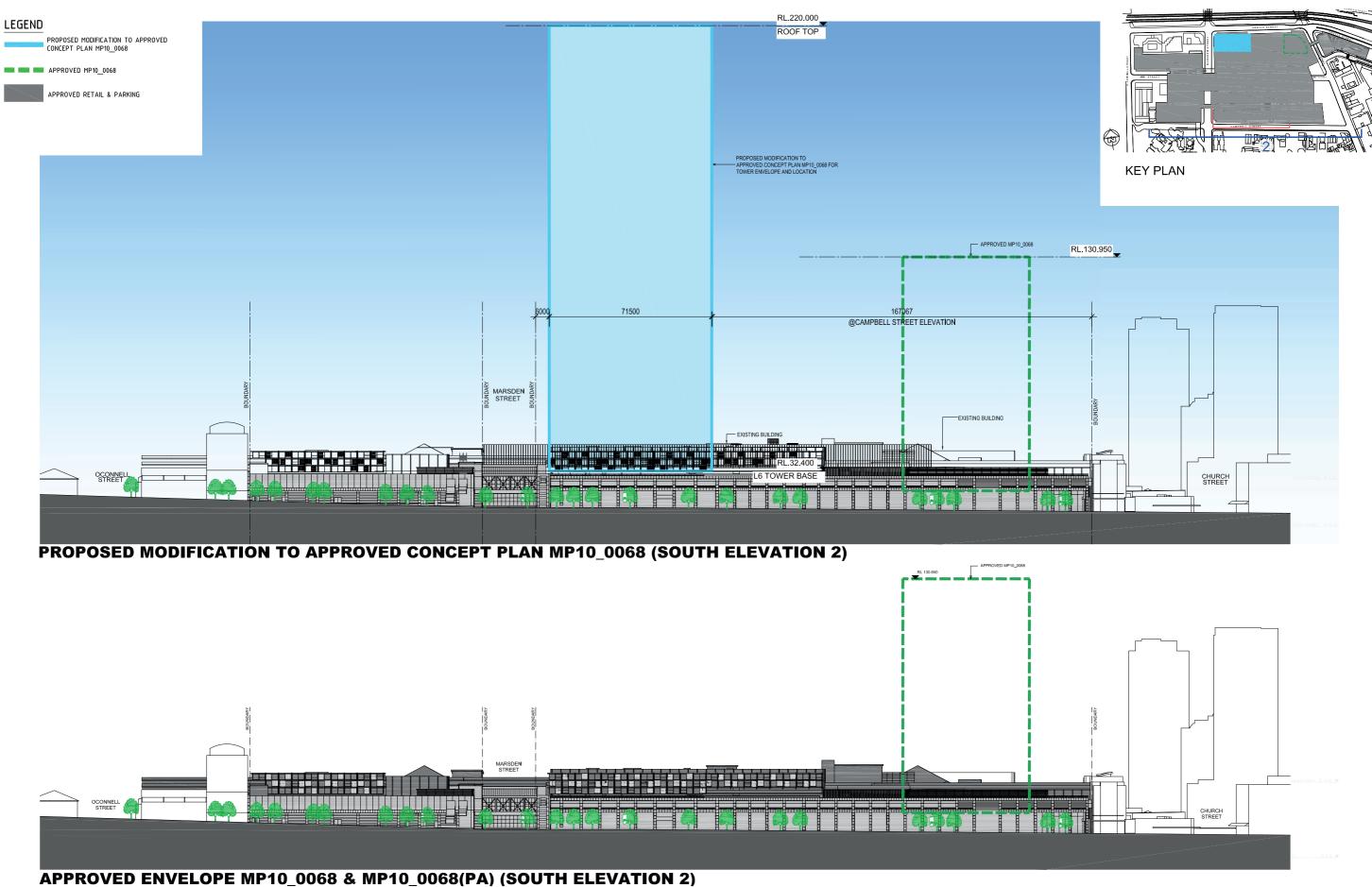
APPROVED ENVELOPE MP10\_0068 & MP10\_0068(PA) (WEST ELEVATION 5)

APPROVED ENVELOPE MP10\_0068 & MP10\_0068(PA) (EAST ELEVATION 4)

## 09

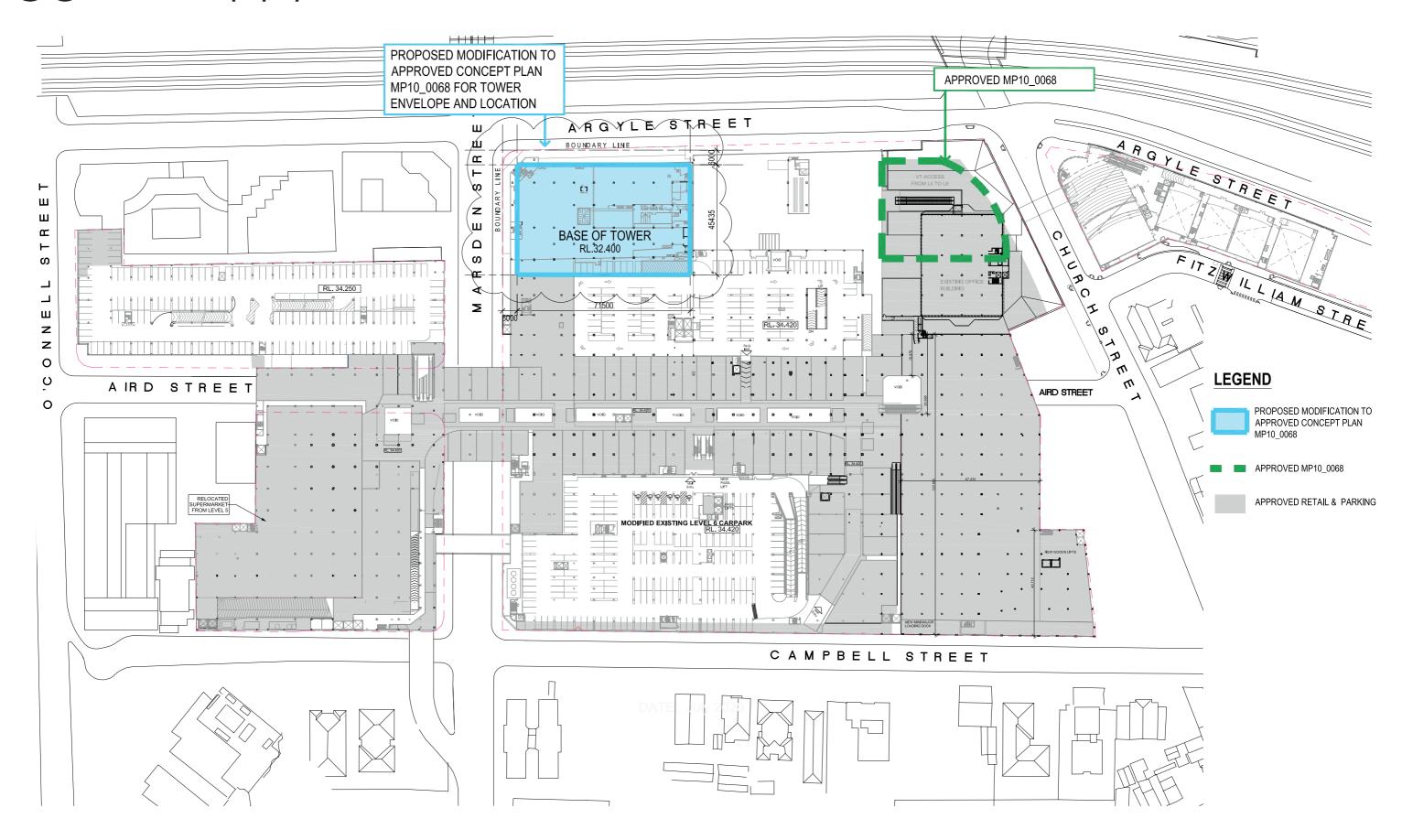
## Modified Concept Plan Tower Envelope Design

### **Envelope Elevations**



### **Modified Concept Plan Tower Envelope Design**

Plans: Envelope proposed Level 06

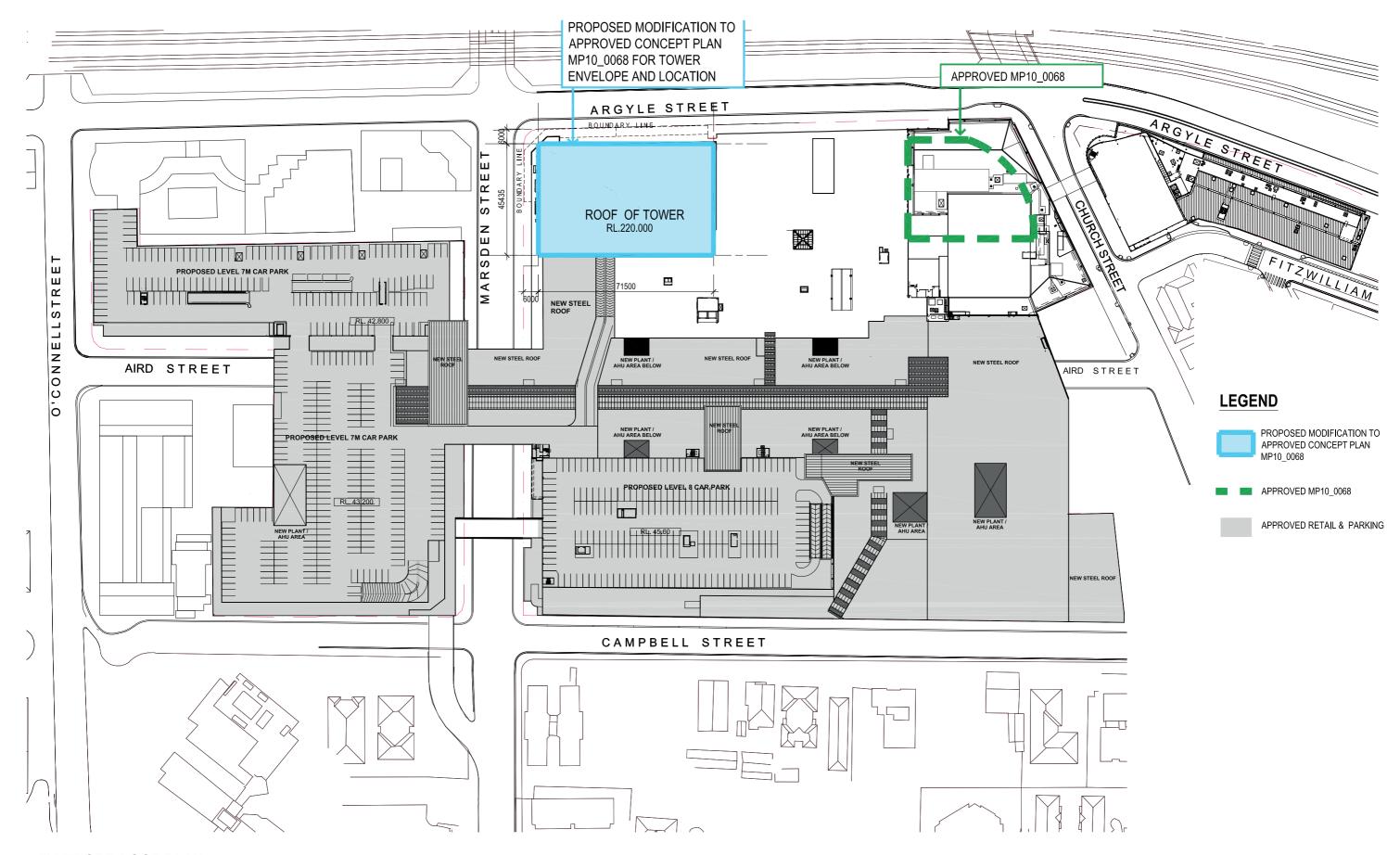




## 09

## **Modified Concept Plan Tower Envelope Design**

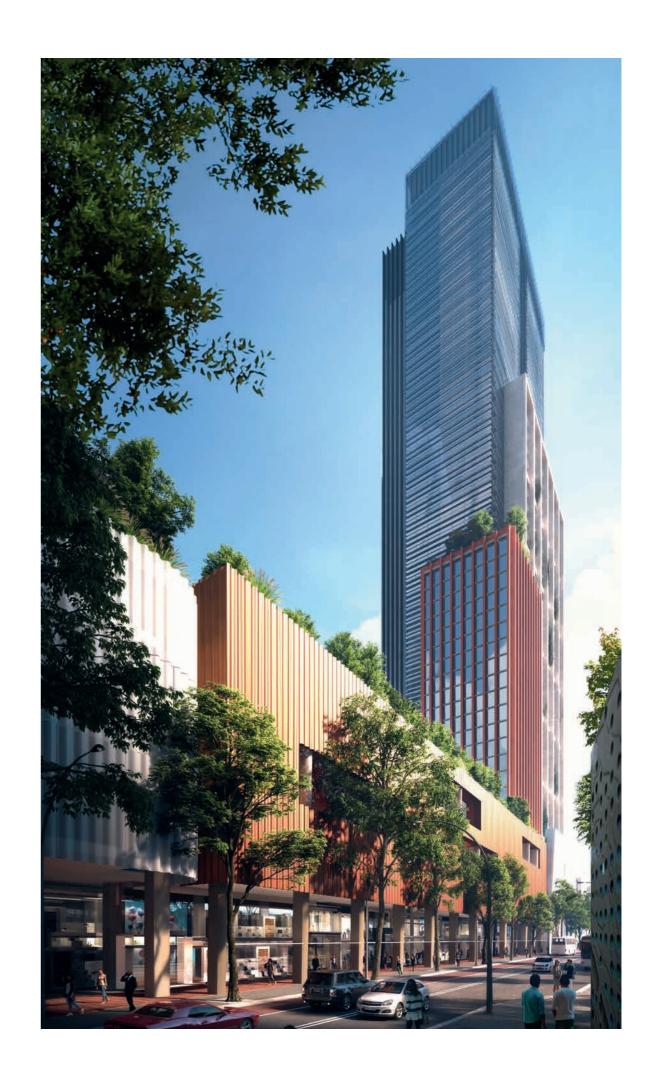
Plans: Envelope Roof Plan



ENVELOPE ROOF PLAN Scale 1:2000 @ A3



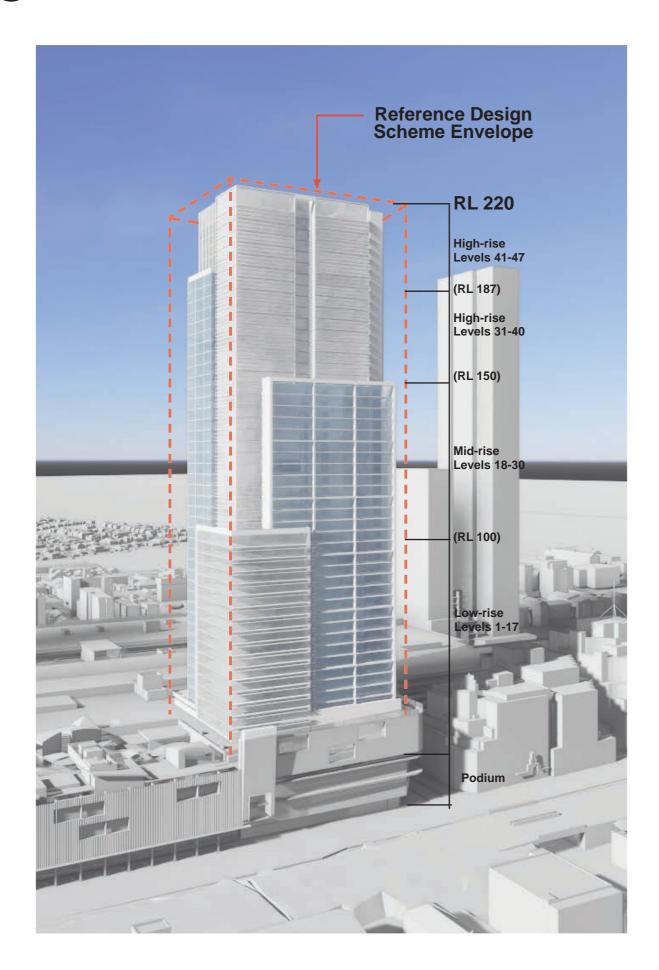
## 10 Reference Design



## 10 Reference Design Indicative 3D model



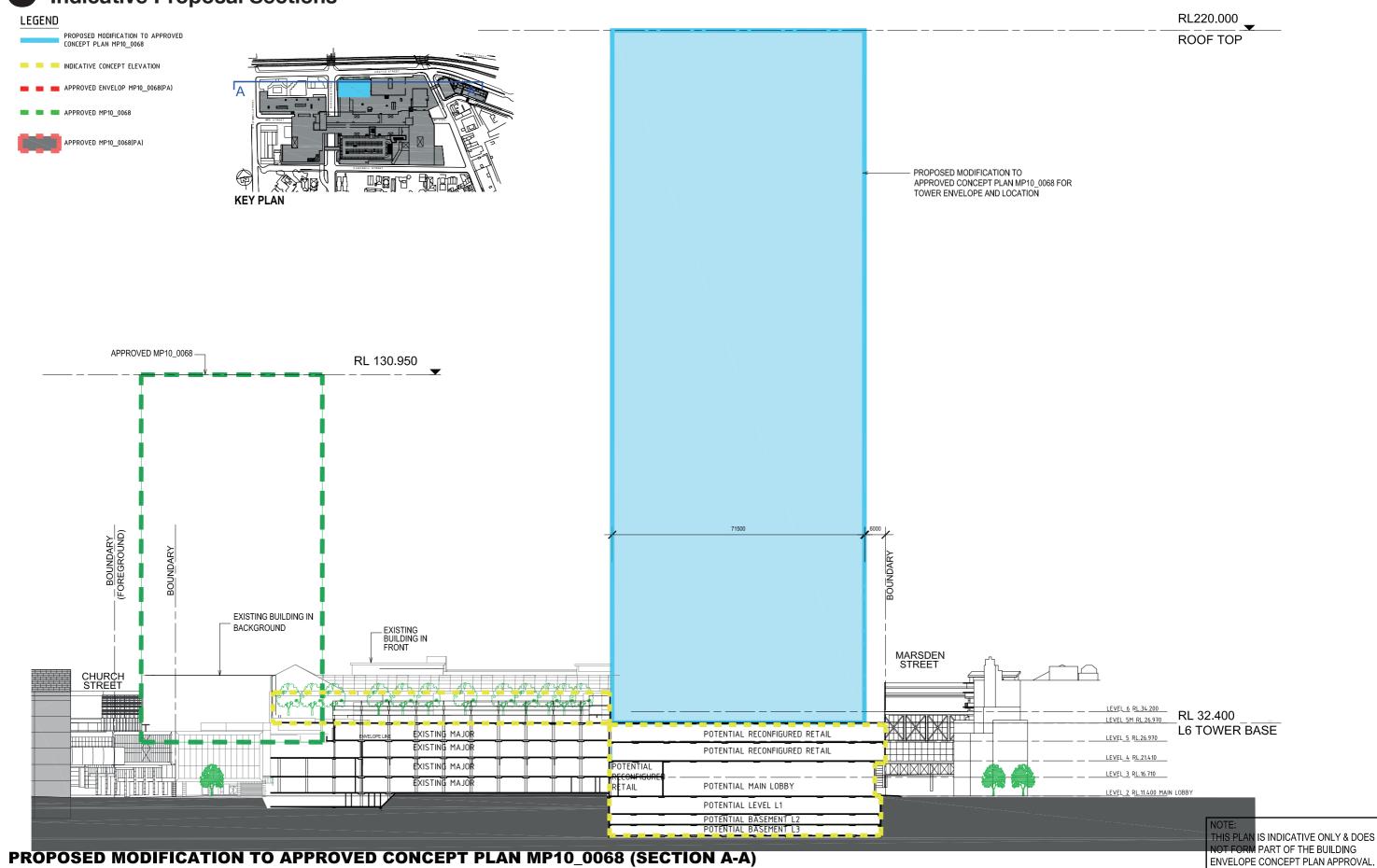
## Reference Design Indicative 3D model







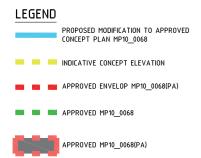
## 10 Reference Design Indicative Proposal Sections

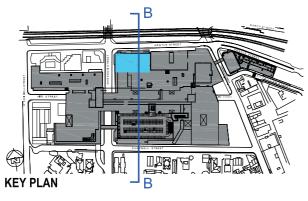


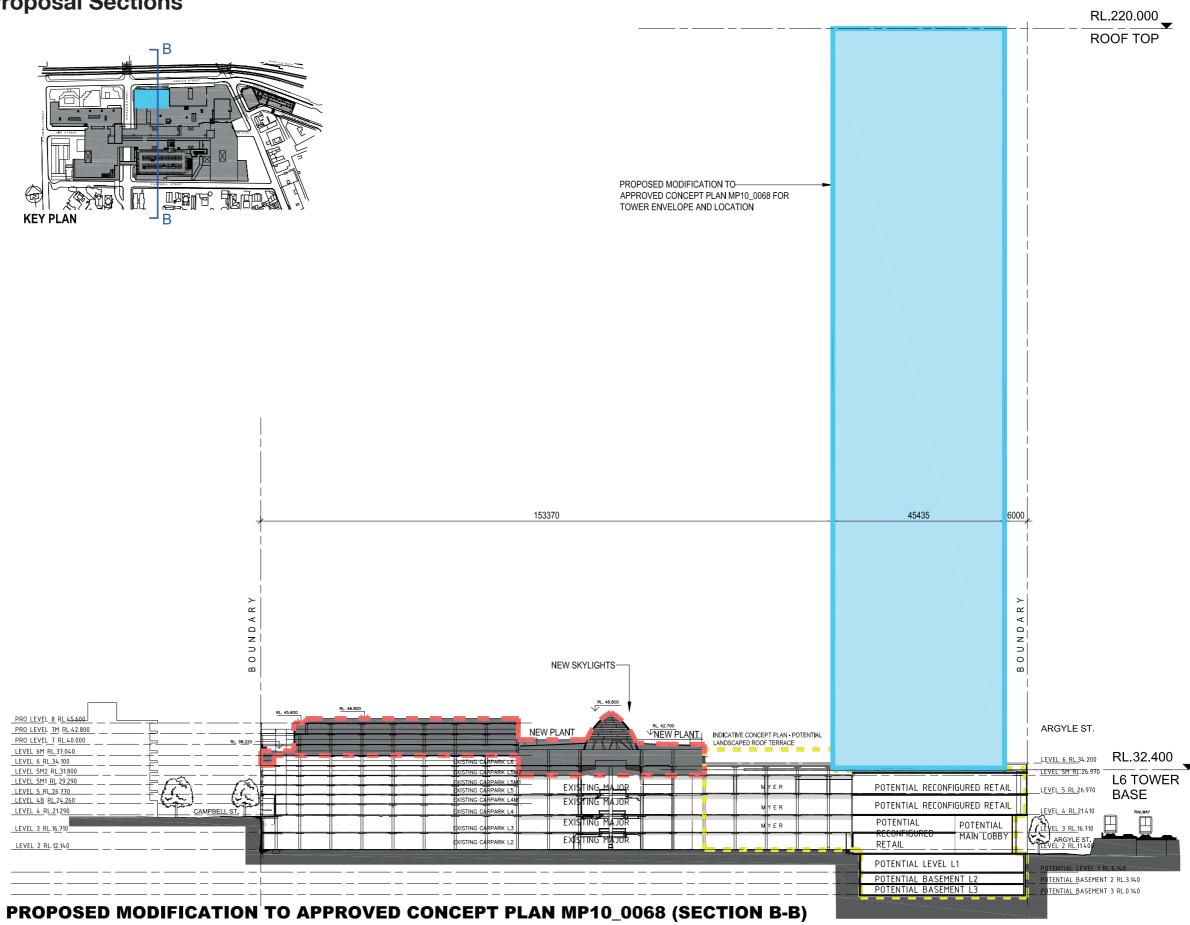
PROPOSED COMMERCIAL TOWER SECTION

## **Reference Design**

#### **Indicative Proposal Sections**

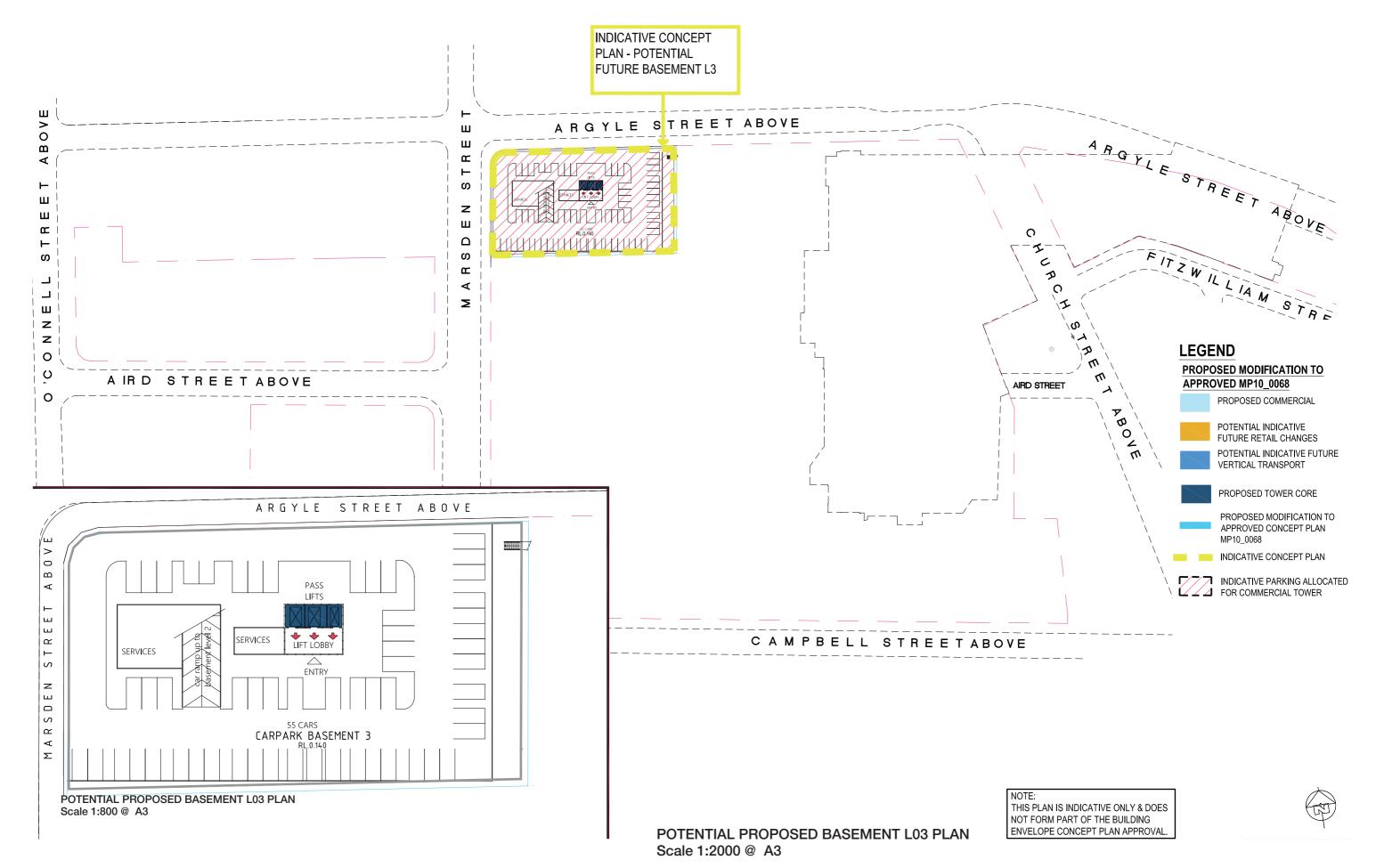


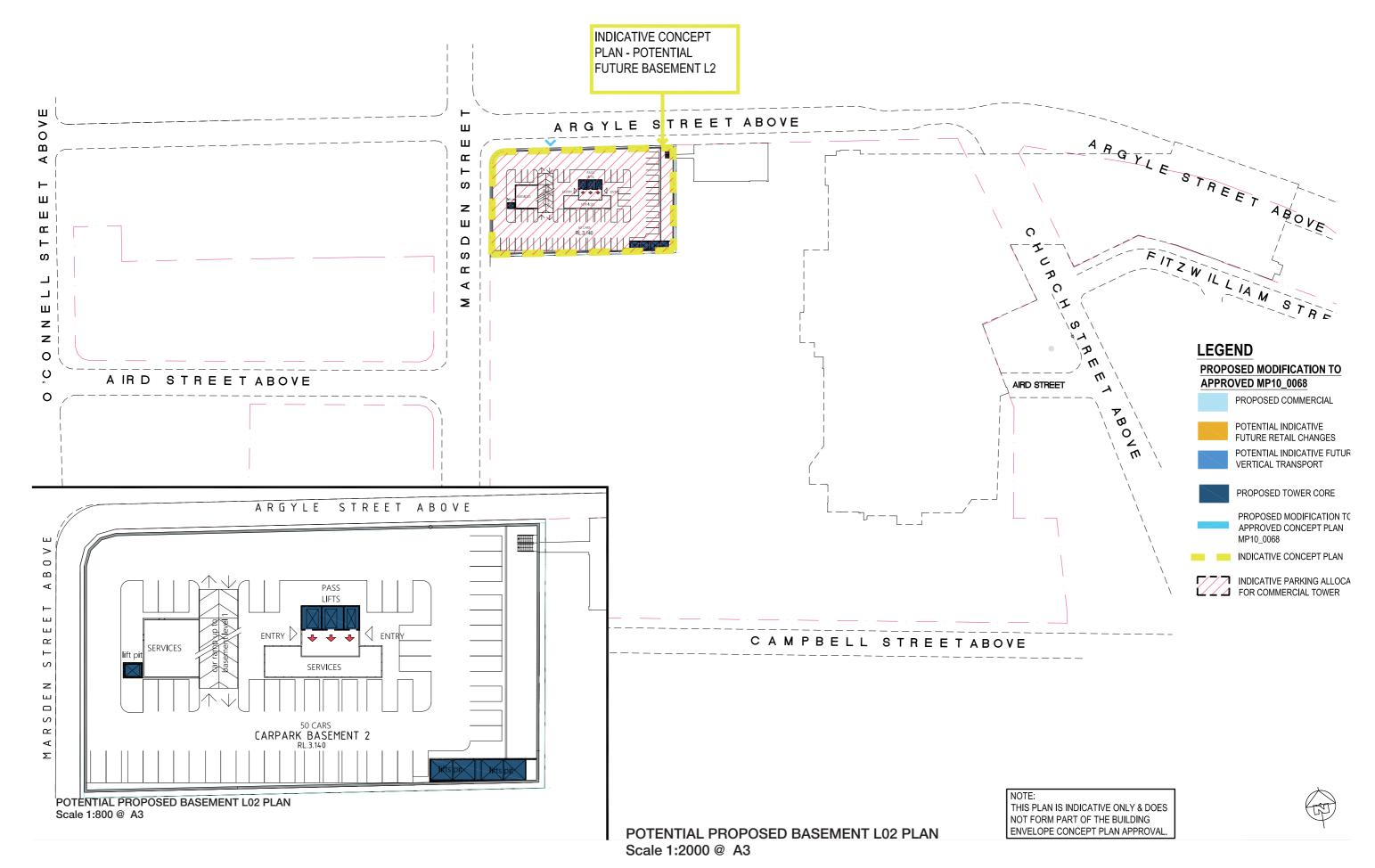


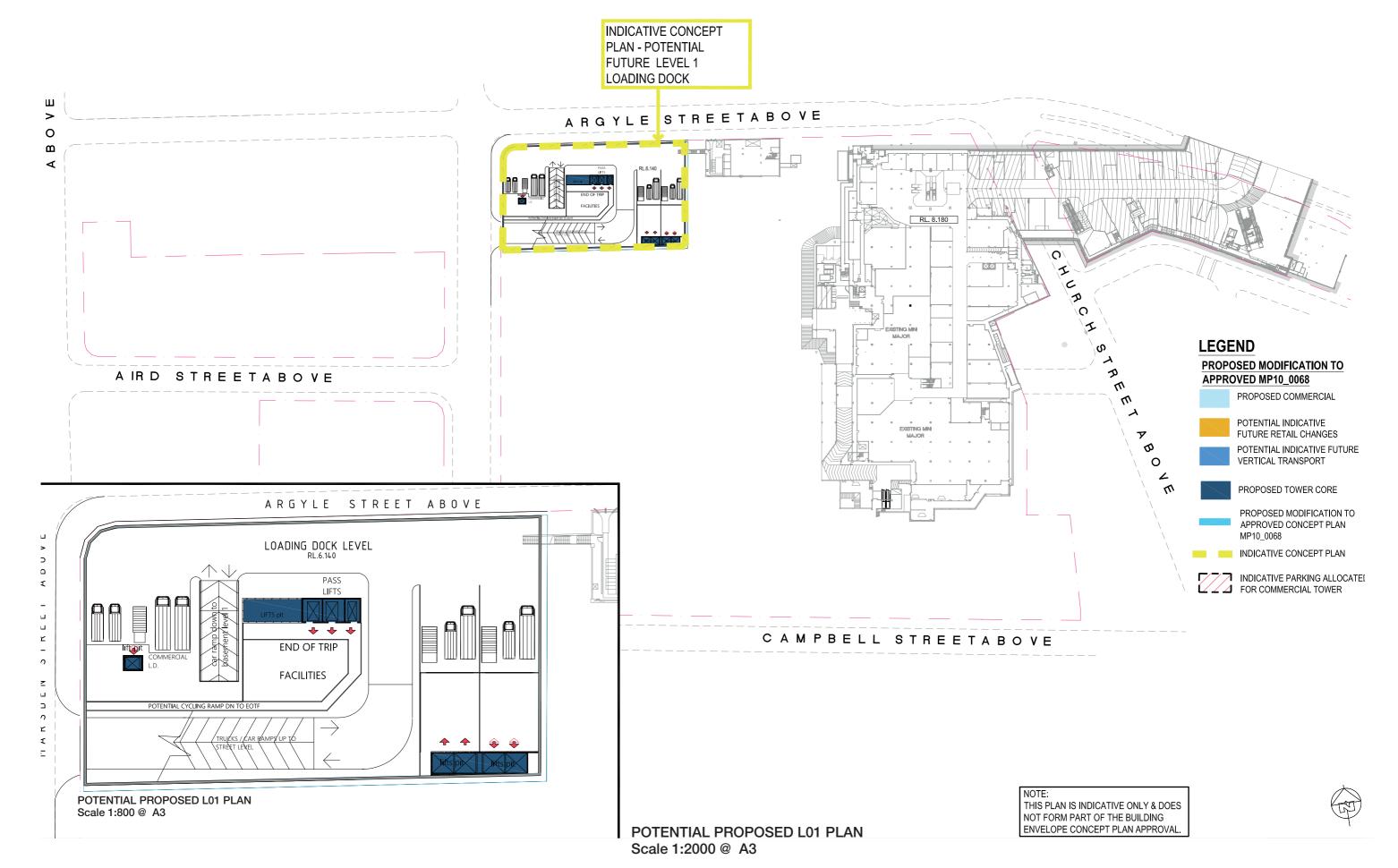


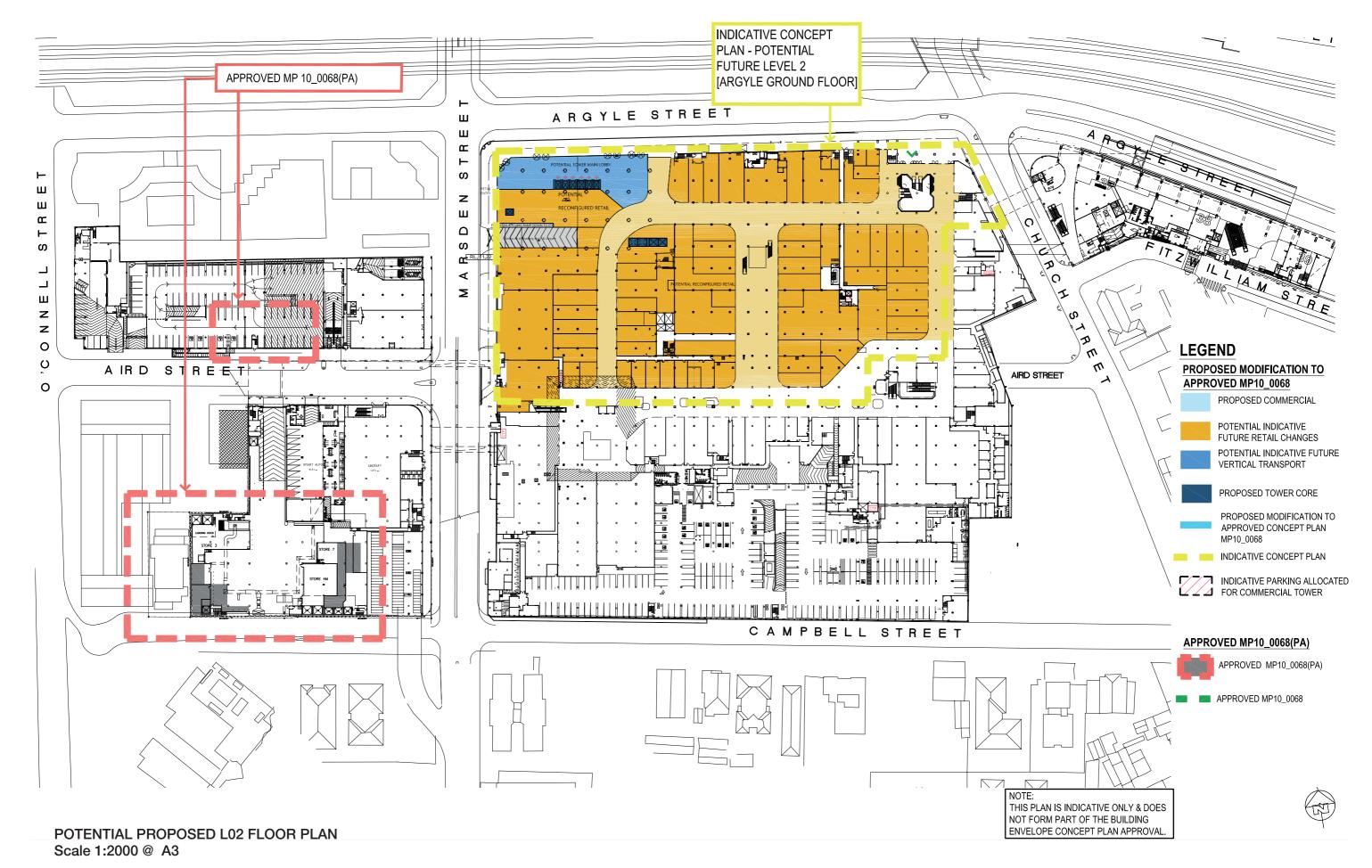
NOTE:

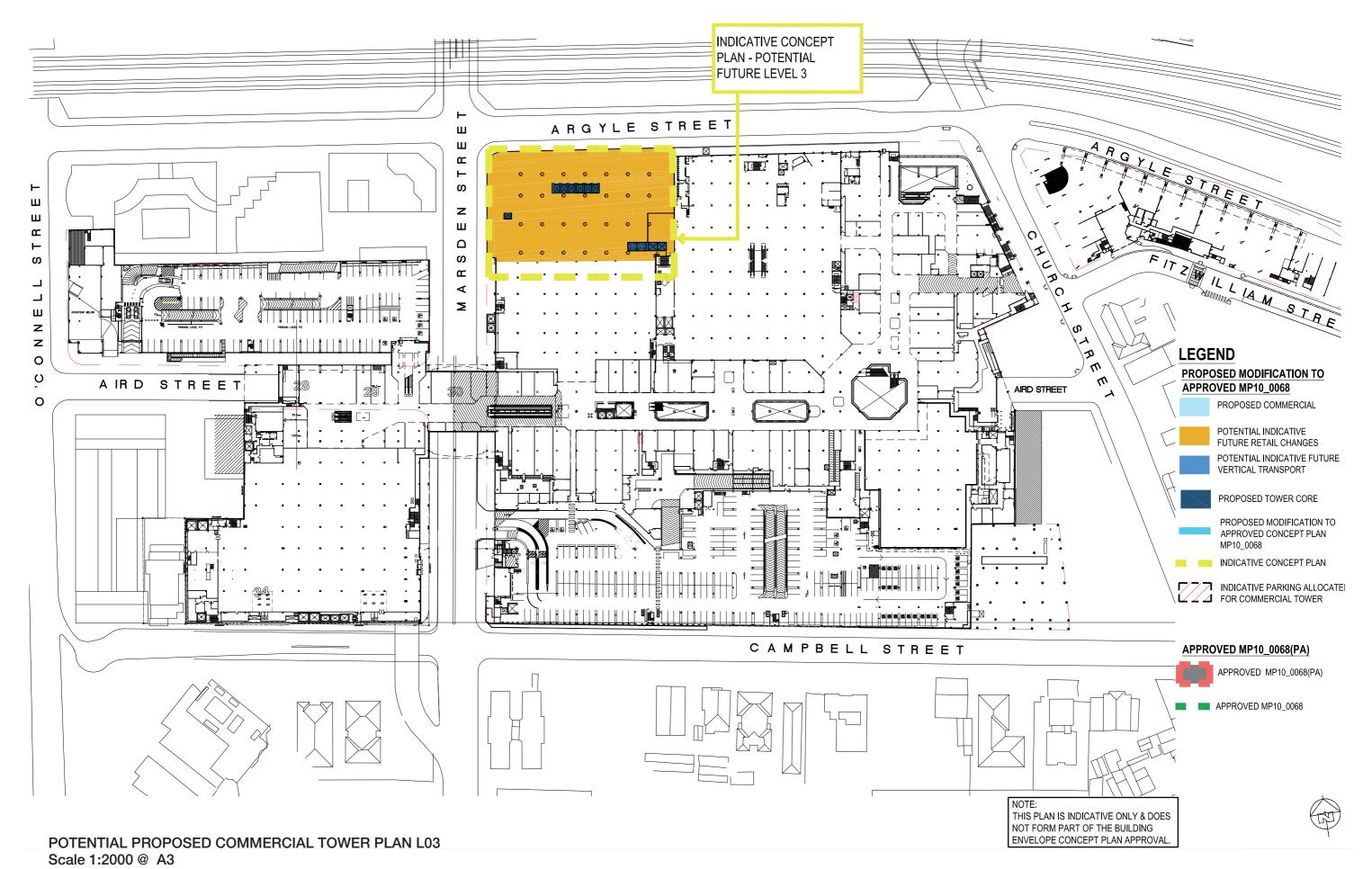
THIS PLAN IS INDICATIVE ONLY & DOES NOT FORM PART OF THE BUILDING ENVELOPE CONCEPT PLAN APPROVAL.

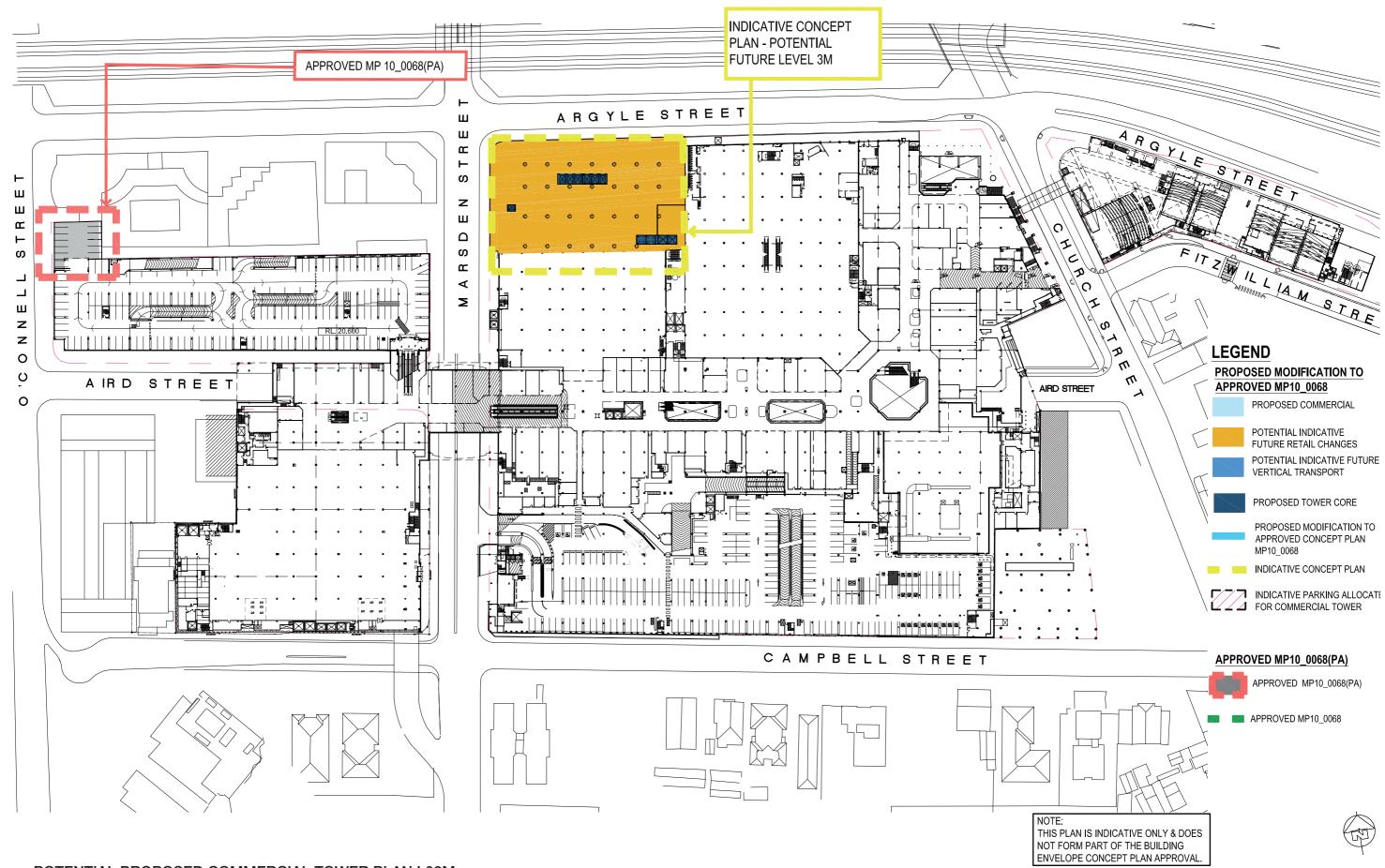


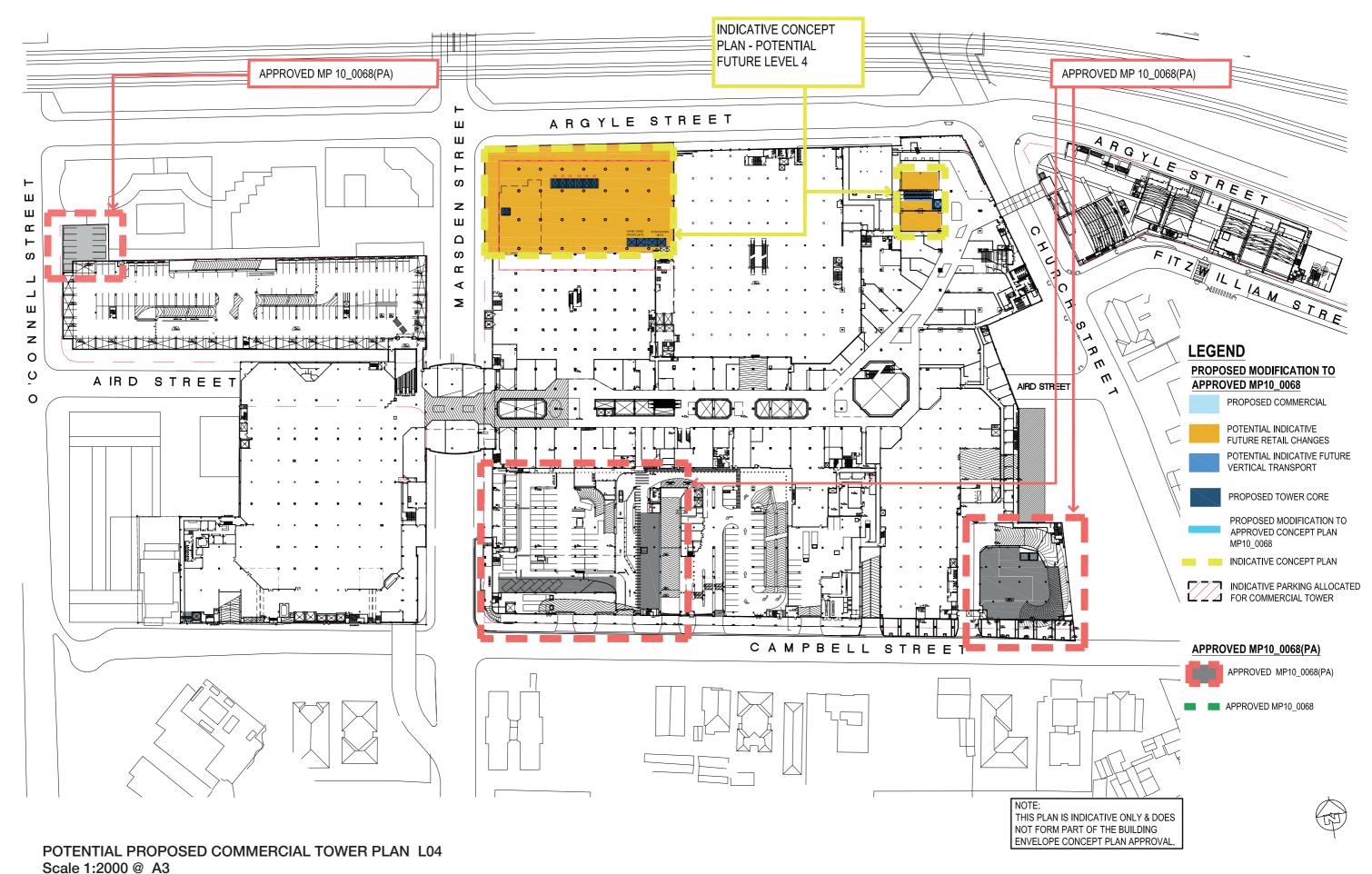


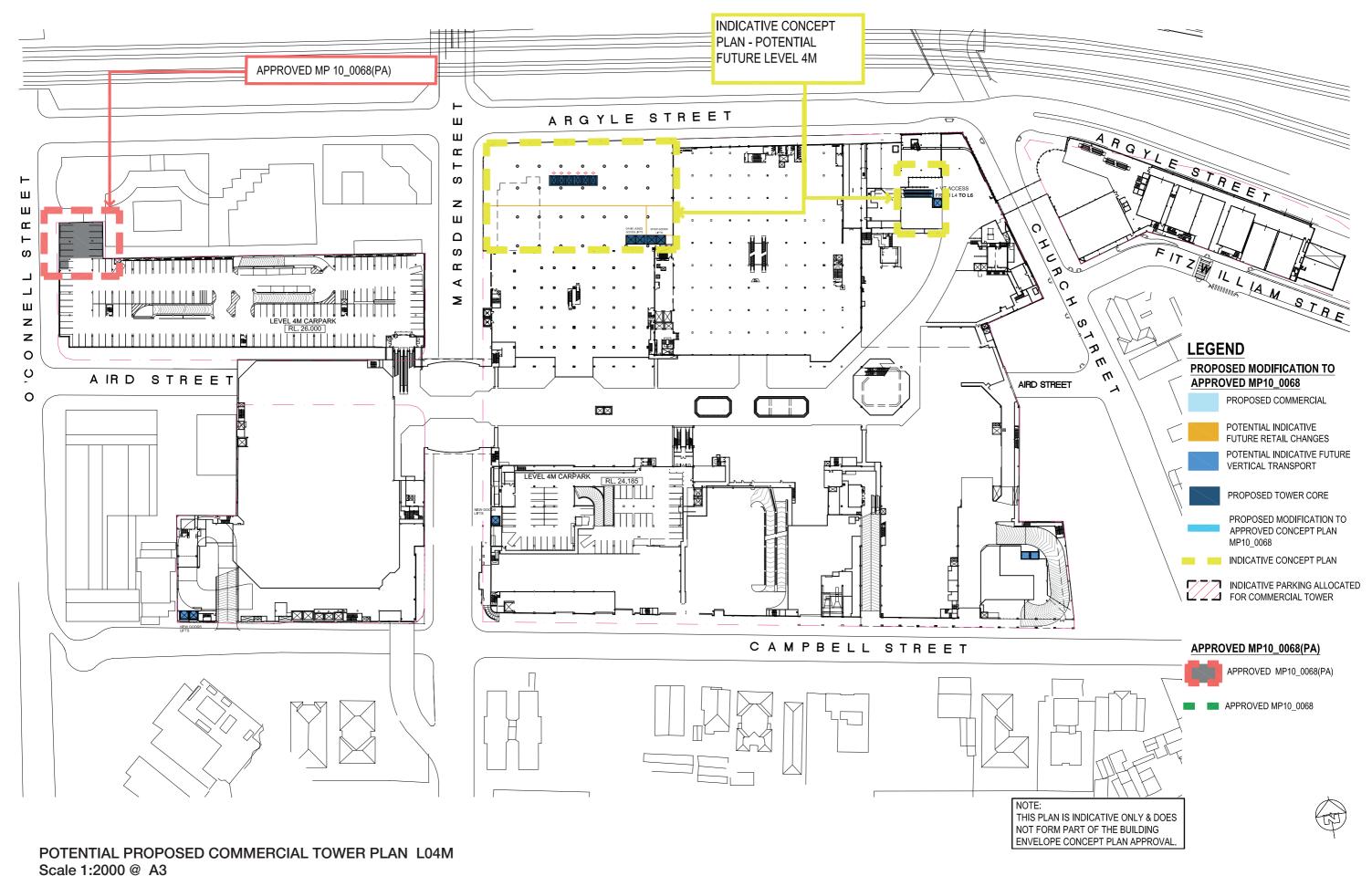


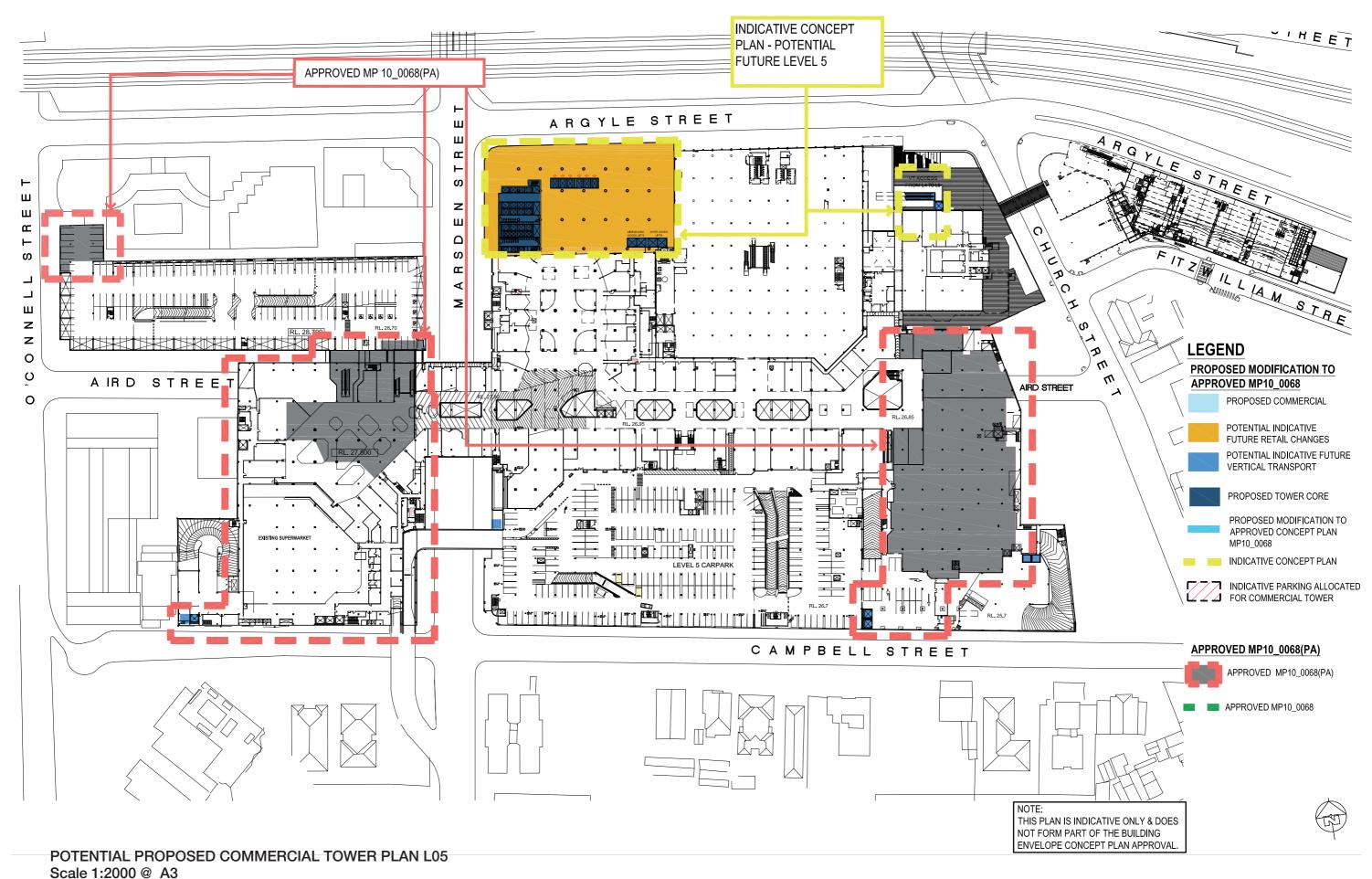


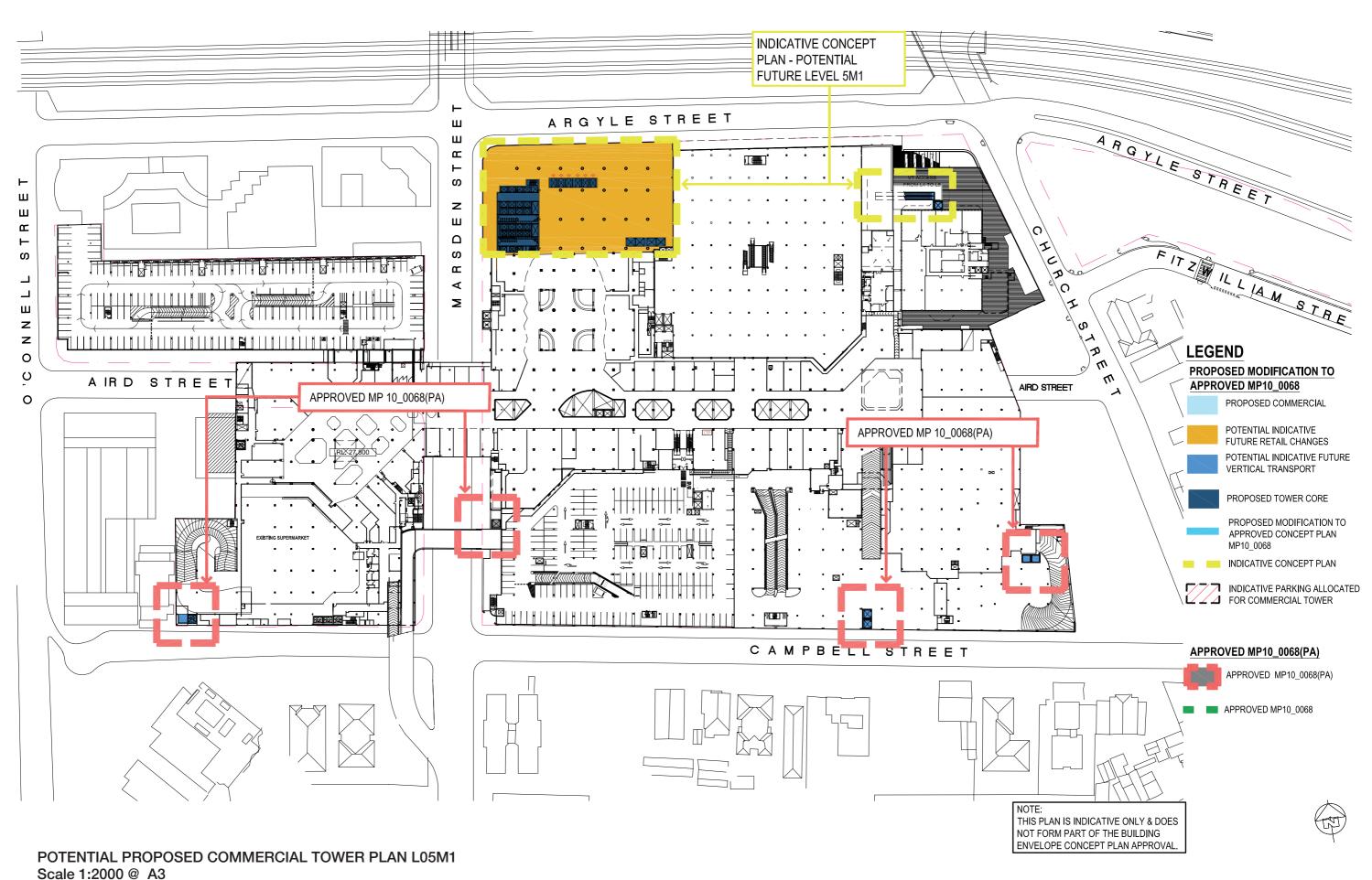




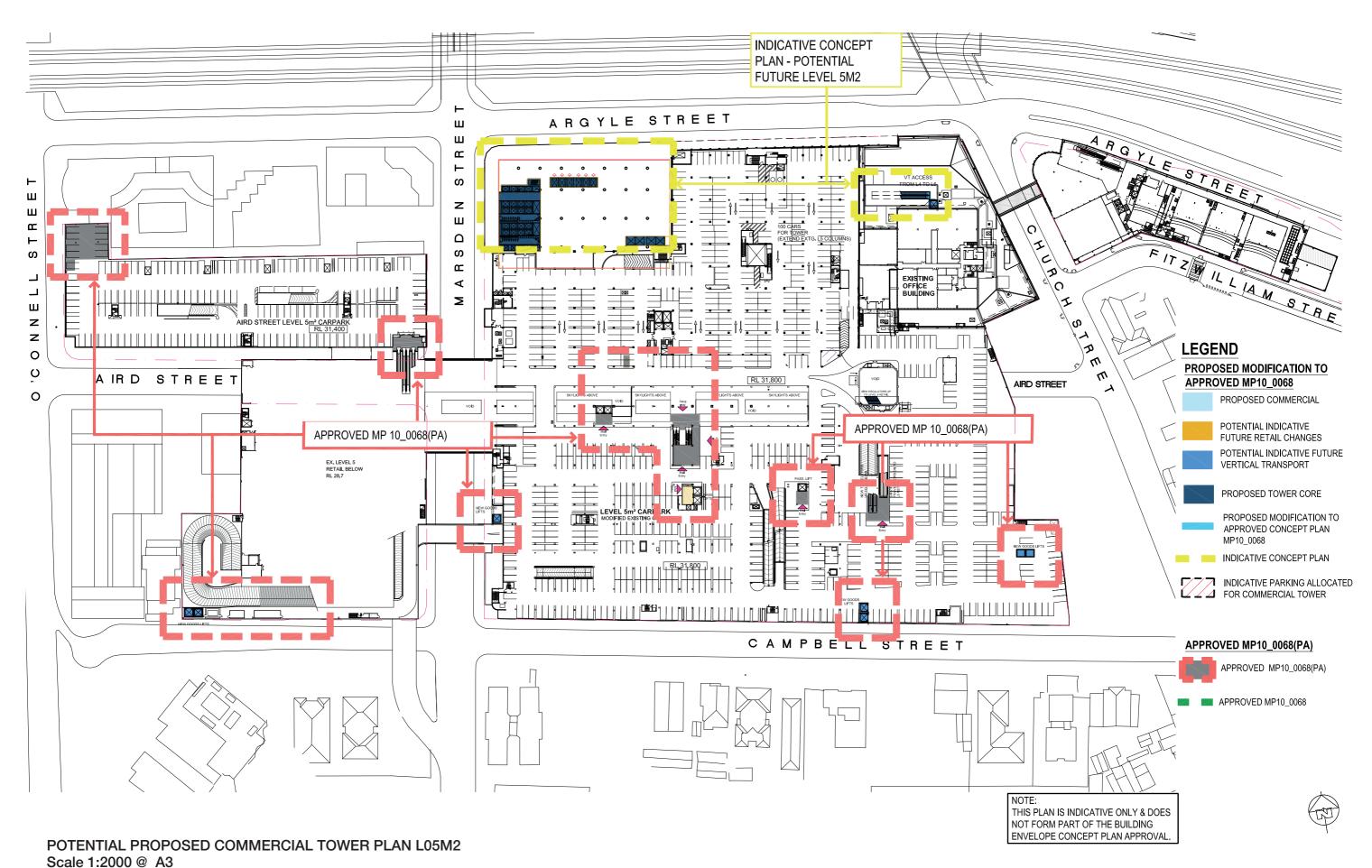


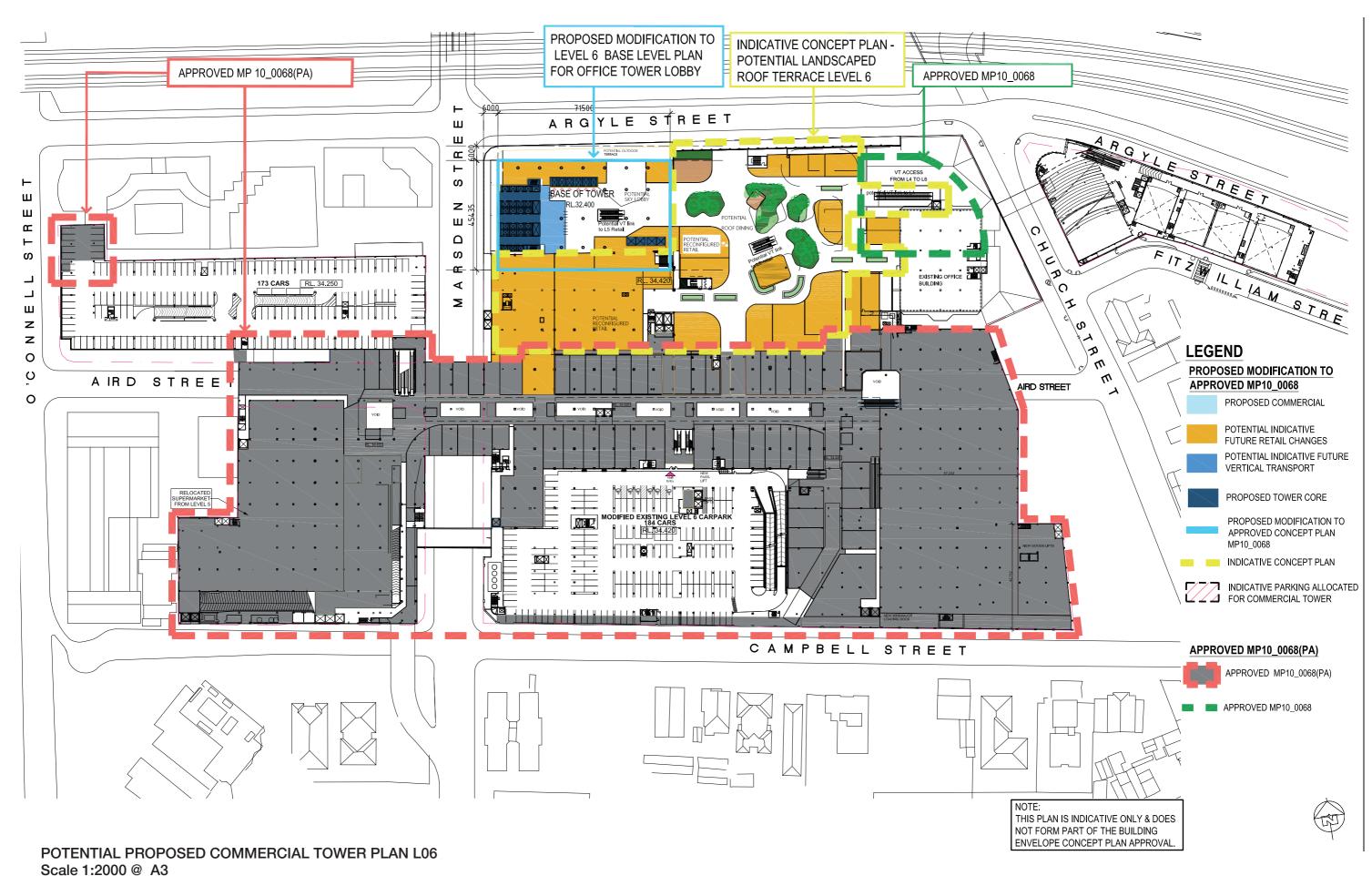




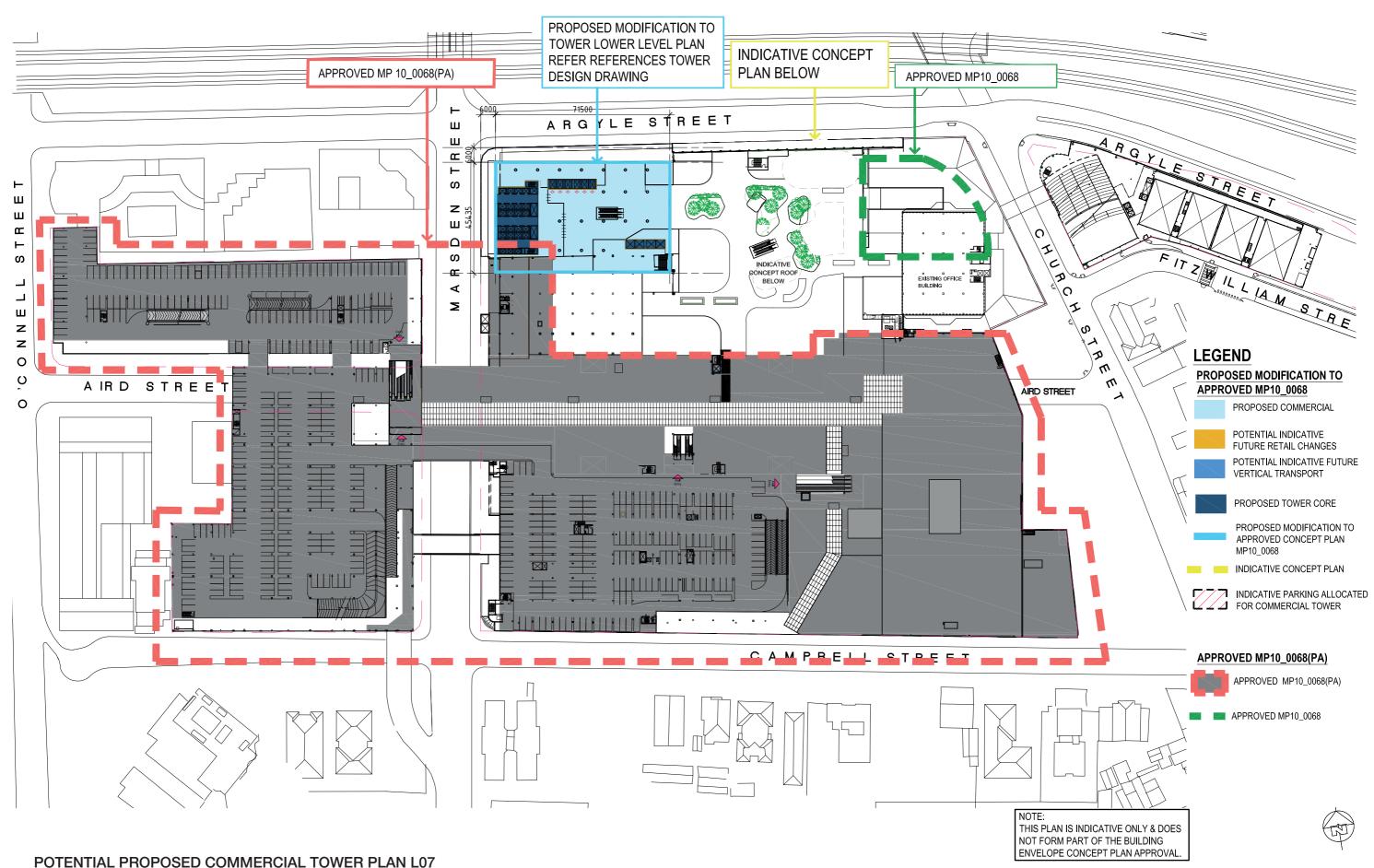


- 82 -





Scale 1:2000 @ A3



#### **Tower Plan Low Rise**

#### **Test Fit**

Based on the indicative floor plans, the Test Fit demonstrates the floor plate quality with regard to contemporary workplace criteria such as:

/ Capacity 1:10

/ Interconnecting void with stair shown

/ Variety of working environments



71.5 m 0000 

**ENVELOPE LINE** 



### **Tower Plan Mid Rise**

**Test Fit** 



71.5 m **ENVELOPE LINE** 

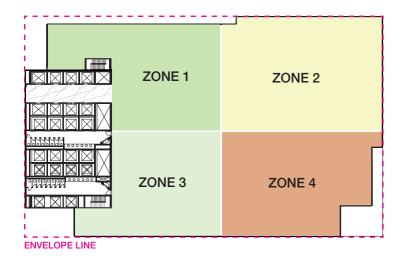
Indicative Test fit: Mid Rise -Axo

Indicative Test Fit: Mid Rise

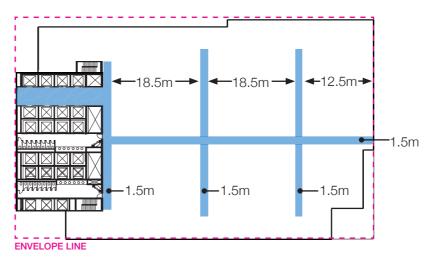


# Tower Plan Workplace Criteria

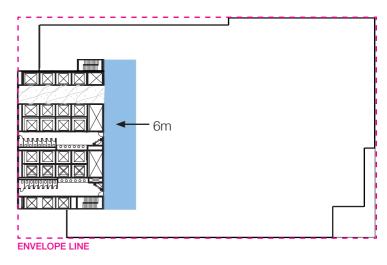
Based on the indicative floor plans, the following diagrams demonstrate the floor plate quality with regard to contemporary workplace criteria. Note that the low-rise floor plate has been Analysed below.



**ACHIEVED EFFICIENCY 95%** 



**EFFICIENCY 92%** 



HSZ = 10% OF NLA

#### **SUB-DIVISIBILITY**

This is the measure defining the ease with which the floor plate can be subdivided into separate departments or teams. The floor plate can be easily divided into 300-850sqm separate zones of similar size with a minimal loss of occupiable space to shared circulation. The loss of space required to provide access to shared circulation is minimal resulting in an excellent efficiency.

#### CIRCULATION EFFICIENCY

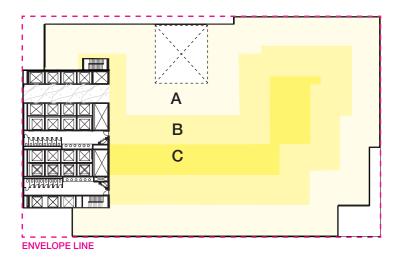
A well designed floor plate will provide usable space rather than excessive circulation routes. This measure is a key factor in identifying wasted circulation due to inefficient cores and fire stairs or building envelope shape.

This calculation is the NUA (net usable area) divided by the NLA (Net Lettable Area). For this calculation net usable area can be calculated as the NLA minus a path of primary circulation. The path should be 1.5m wide and leave no point on the floor plate further than 10m from the defined circulation path, including the perimeter stairs and balconies.

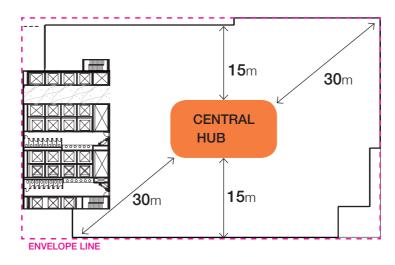
#### HIGHLY SERVICED ZONES

This measure defines the section of the floor plate best able to accommodate tenant support areas requiring a high level of service access such as kitchens, computer rooms etc.

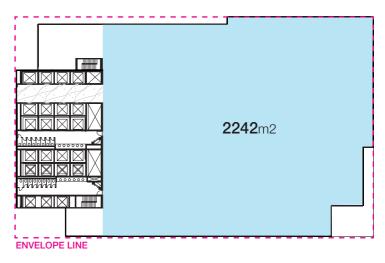
A high percentage score suggests increased flexibility for long term space planning. This measure is the percentage of NLA within 6m of the service core(s).



80% (MINIMUM) OF FLOORPLATE TO HAVE ACCESS TO NATURAL LIGHT



100% OF NLA IS WITHIN 40M OF HUB



2242 M2 CONTIGUOUS FLOOR PLATE

#### **ACCESS TO NATURAL LIGHT**

This calculation is a measure of the area available to locate staff work areas near natural light and views. It also identifies the area available to the fitout designer for locating storage, hub spaces and support spaces. The measure defines 4 types of spaces:

Type A: 1122m2 of 2272m2 (49%) The % of the NLA within 6m of natural light

Type B: 819m2 of 2272m2 (36%) The % of the NLA within 12m of natural light

Type C: 349m2 of 2272m2 (15%)

The % of the NLA beyond 12m of natural light

Note: At least 80% of the floorspace will have adequate access to natural light. Refer to appendix for to-scale access to natural light typical floorplate plan.

#### **HUB CONNECTIVITY**

This is a measure of the efficiency of the floor plate in creating hub zones. It measures where staff will cross paths in their everyday work activities; the visibility and accessibility of the hub locations.

The diagram should identify a hub zone for every 1200-2450sqm of floor plate. The hub is to be connected to as many circulation paths on the floor plate as possible. This measure is the percentage of the NLA that is within 40m walk of each hub.

100 % of NLA is within 40m of the hub.

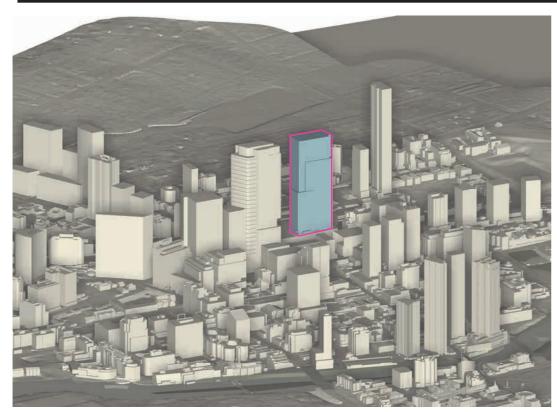
#### **CONTIGUITY**

This measures how effectively the floor plate will support an interactive team focused work environment. A contiguous space on the floor plate is a single area within which every person is within sight line of each other.

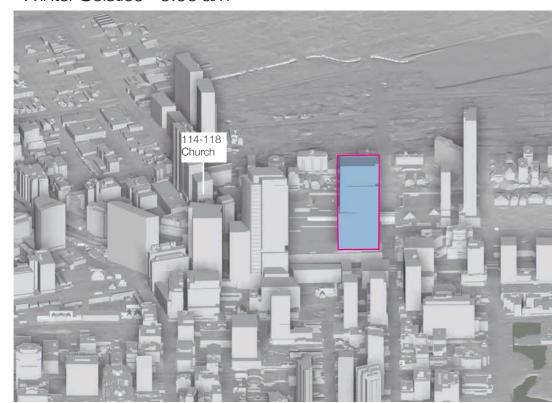
This is the measure of the size of each space on the floor plate that fits a regular shape. The figure is given in square metres of NLA (not a percentage). Note that a non-glazed atrium space does not impede contiguity but that a glazed atrium does.

# 11 Shadow Studies & Suns Eye Views

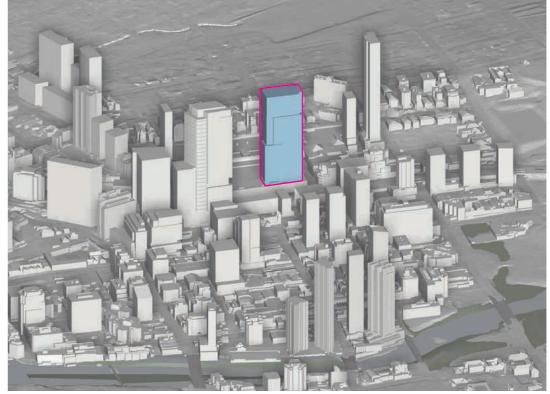
### Suns Eye Diagrams MOD 1 Revised Envelope Proposal



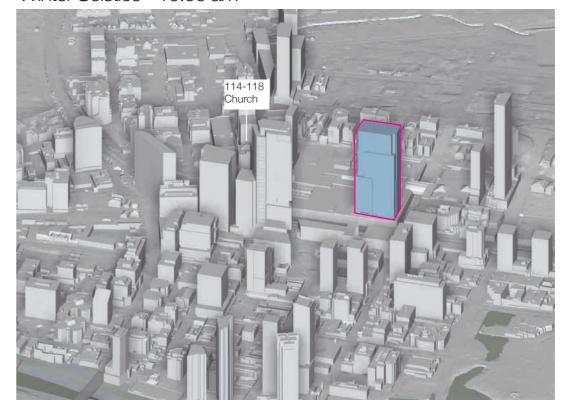
Winter Solstice - 9:00 am



Winter Solstice - 11:00 am

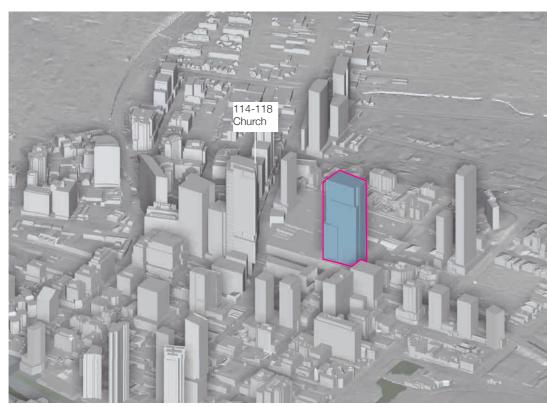


Winter Solstice - 10:00 am

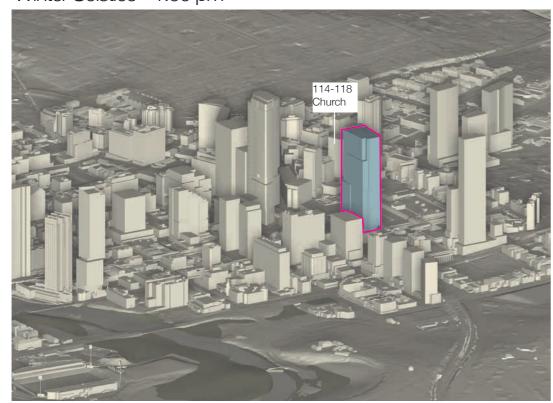


Winter Solstice - 12:00 pm

## Suns Eye Diagrams MOD 1 Revised Envelope Proposal

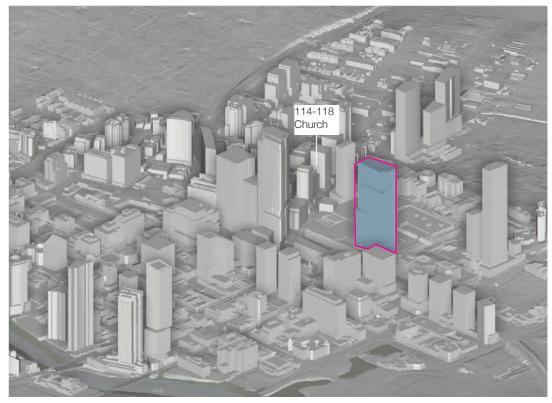


Winter Solstice - 1:00 pm



Proposal— Envelope

Winter Solstice - 3:00 pm



Winter Solstice - 2:00 pm

Note: 114 and 118 Church Street will receive 2 hours solar access in mid-winter and will continue to do so in the after scenario.

# Shadow Diagrams Shadow Analysis: Provious tower veri

#### Previous tower vs Proposed tower (MOD 1 Exhibited Envelope Proposal vs MOD 1 Revised Envelope)

#### **POSITION 1**

Winter Solstice - 10:00 am

#### (MOD 1 Exhibited Envelope Proposal)

#### **WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM**

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm  Therefore no imapct to parks	2hrs 10min of 2hrs 30min of sun access sun access  Therefore more than 2 hours of sun access to heritage	2hrs 10min of 2hrs 30min of sun access sun access  Therefore more than 2 hours of sun access to residential	



#### **POSITION 2**

Winter Solstice - 10:00 am

#### (MOD 1 Revised Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm	2hrs 30min of 2hrs 35min of sun access sun access	2hrs 10min of 2hrs 45min of sun access sun access	
G011G2G2G11	Therefore no imapct to parks	Therefore more than 2 hours of sun access to heritage	Therefore more than 2 hours of sun access to residential	











Heritage Conservation Area



## **Shadow Diagrams Shadow Analysis:**

#### Previous tower vs Proposed tower (MOD 1 Exhibited Envelope Proposal vs MOD 1 Revised Envelope)

#### **POSITION 1**

Winter Solstice - 11:00 am

(MOD 1 Exhibited Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks		Heritage Buildings		Residential Buildings	
NAME	Ollie Webb Reserve	Jubilee Park	39 Campbell Street	45 Campbell Street	140 Fitzwilliam Street	118 Church Street
CONCLUSION	No Impact from 10 am to 3pm	No Impact from 12pm to 2pm		2hrs 30min of sun access e than 2 hours of		2hrs 30min of sun access e than 2 hours of
	Therefore no in	napct to parks	sun access	to heritage	sun access	to residential



#### **POSITION 2**

Winter Solstice - 11:00 am

(MOD 1 Revised Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm	2hrs 30min of 2hrs 35min of sun access sun access	2hrs 10min of 2hrs 45min of sun access Therefore more than 2 hours of	
	Therefore no imapct to parks	sun access to heritage	sun access to residential	













## Shadow Diagrams Shadow Analysis: Provious tower ve

#### Previous tower vs Proposed tower (MOD 1 Exhibited Envelope Proposal vs MOD 1 Revised Envelope)

#### **POSITION 1**

Winter Solstice - 12:00 pm

#### (MOD 1 Exhibited Envelope Proposal)

#### **WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM**

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm  Therefore no imapct to parks	2hrs 10min of 2hrs 30min of sun access sun access  Therefore more than 2 hours of sun access to heritage	2hrs 10min of 2hrs 30min of sun access sun access Therefore more than 2 hours of sun access to residential	



#### **POSITION 2**

Winter Solstice - 12:00 pm

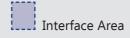
#### (MOD 1 Revised Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm  Therefore no imapct to parks	2hrs 30min of 2hrs 35min of sun access sun access  Therefore more than 2 hours of sun access to heritage	2hrs 10min of 2hrs 45min of sun access sun access  Therefore more than 2 hours of sun access to residential	











Heritage Conservation Area



## Shadow Diagrams Shadow Analysis: Provious tower ve

#### Previous tower vs Proposed tower (MOD 1 Exhibited Envelope Proposal vs MOD 1 Revised Envelope)

#### **POSITION 1**

Winter Solstice - 1:00 pm

(MOD 1 Exhibited Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks		Heritage Buildings		Residential Buildings	
NAME	Ollie Webb Reserve	Jubilee Park	39 Campbell Street	45 Campbell Street	140 Fitzwilliam Street	118 Church Street
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm		2hrs 10min of 2hrs 30min of sun access sun access		2hrs 10min of 2hrs 30min of sun access sun access	
	Therefore no imapct to parks		sun access to heritage		sun access to residential	

#### **POSITION 2**

Winter Solstice - 1:00 pm

(MOD 1 Revised Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm  Therefore no imapct to parks	2hrs 30min of 2hrs 35min of sun access sun access  Therefore more than 2 hours of sun access to heritage	2hrs 10min of 2hrs 45min of sun access  Therefore more than 2 hours of sun access to residential	











Heritage Conservation Area



# Shadow Diagrams Shadow Analysis: Provious tower veri

#### Previous tower vs Proposed tower (MOD 1 Exhibited Envelope Proposal vs MOD 1 Revised Envelope)

#### **POSITION 1**

Winter Solstice - 2:00 pm

(MOD 1 Exhibited Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm  Therefore no imapct to parks	2hrs 10min of 2hrs 30min of sun access sun access  Therefore more than 2 hours of sun access to heritage	2hrs 10min of 2hrs 30min of sun access sun access Therefore more than 2 hours of sun access to residential	



#### **POSITION 2**

Winter Solstice - 2:00 pm

(MOD 1 Revised Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm	2hrs 30min of 2hrs 35min of sun access sun access	2hrs 10min of 2hrs 45min of sun access sun access	
	Therefore no imapct to parks	Therefore more than 2 hours of sun access to heritage	Therefore more than 2 hours of sun access to residential	













# Shadow Diagrams Shadow Analysis: Provious tower vs.

#### Previous tower vs Proposed tower (MOD 1 Exhibited Envelope Proposal vs MOD 1 Revised Envelope)

#### **POSITION 1**

Winter Solstice - 3:00 pm

(MOD 1 Exhibited Envelope Proposal)

#### **WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM**

ТҮРЕ	Parks	Heritage Buildings	Residential Buildings	
NAME	Ollie Webb Jubilee Reserve Park	39 Campbell 45 Campbell Street Street	140 118 Church Fitzwilliam Street Street	
CONCLUSION	No Impact from No Impact from 10 am to 3pm 12pm to 2pm	2hrs 10min of 2hrs 30min of sun access sun access	2hrs 10min of 2hrs 30min of sun access Therefore more than 2 hours of	
	Therefore no imapct to parks	sun access to heritage	sun access to residential	

#### **POSITION 2**

Winter Solstice - 3:00 pm

(MOD 1 Revised Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks		Heritage Buildings		Residential Buildings	
NAME	Ollie Webb Reserve	Jubilee Park	39 Campbell Street	45 Campbell Street	140 Fitzwilliam Street	118 Church Street
CONCLUSION	No Impact from 10 am to 3pm	No Impact from 12pm to 2pm	2hrs 30min of sun access	2hrs 35min of sun access	2hrs 10min of sun access	2hrs 45min of sun access
	Therefore no im	napct to parks		than 2 hours of to heritage		e than 2 hours of to residential













Heritage Conservation Area



## Shadow Diagrams Shadow Analysis: Provious tower ve

#### Previous tower vs Proposed tower (MOD 1 Exhibited Envelope Proposal vs MOD 1 Revised Envelope)

#### **POSITION 1**

Winter Solstice - 9:00 am

(MOD 1 Exhibited Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks		Heritage	Buildings	Residential Buildings			
NAME	Ollie Webb Reserve	Jubilee Park	39 Campbell Street	45 Campbell Street	140 Fitzwilliam Street	118 Church Street		
CONCLUSION	No Impact from 10 am to 3pm Therefore no in	No Impact from 12pm to 2pm napct to parks		2hrs 30min of sun access e than 2 hours of to heritage		2hrs 30min of sun access e than 2 hours of to residential		

# Cris Web Reary Consight access Pariet from Tagman Consight acces

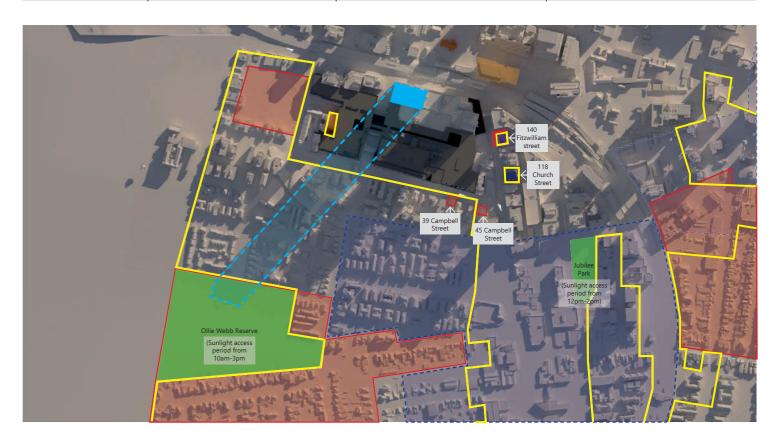
#### **POSITION 2**

Winter Solstice - 9:00 am

(MOD 1 Revised Envelope Proposal)

#### WINTER SOLSTICE - TOTAL SUNLIGHT ACCESS BETWEEN 10AM AND 3PM

ТҮРЕ	Parks		Heritage B	Buildings	Residential Buildings			
NAME	NAME Ollie Webb Jubilee Reserve Park		39 Campbell Street	45 Campbell Street	140 118 Church Fitzwilliam Street Street			
CONCLUSION		act from to 2pm	2hrs 30min of sun access Therefore more sun access t		2hrs 10min of sun access Therefore more sun access to			



















**WESTFIELD TOWER PARRAMATTA** 

Typical floor plan\_Access to Light

Project no. 121011 Sheet no. 9004

Scale 1:250 Revision Sheet size **A3** Date

© Woods Bagot

## 12 Appendix Area Schedule

1					MDE (mg)									
		Total			MPE (m²) (Maximum									
		GFA (m²)	Floor to		Planning	Efficiency		Articulation	Articulation	Efficiency		Efficiency	Efficiency	
LEVEL	USE	Per Rise	Floor	RL		GBA->MPE	GBA (m²)		Ratio	GFA->GBA	GFA (m²)	GFA->MPE	NLA->GFA	NI A (m²
Top of Envelope / Roof	OOL	1 61 1436	1 1001	220.00	Liivelope)	ODA->IVII L	ODA (III )	Alea (III )	IVALIO	OI A-ZODA	OIA (III )	OI A->IVII E	NEA-201 A	INLA (III
Commercial Level 47	Commercial / Plant / Services		6.55	213.45	0040	222/	0.000	4 000	0.407	400/	4 000	32%	76%	78
		- 2		_	3249	69%	2,226	1,023	31%	46%	1,032			
Commercial Level 46	Commercial	2 - 13,224	3.75	209.70	3249	69%	2,226	1,023	31%	91%	2,032	63%	88%	1,78
Commercial Level 45	Commercial	7	3.75	205.95	3249	69%	2,226	1,023	31%	91%	2,032	63%	88%	1,78
Commercial Level 44	Commercial	9.2	3.75	202.20	3249	69%	2,226	1,023	31%	91%	2,032	63%	88%	1,78
Commercial Level 43	Commercial	Rise	3.75	198.45	3249	69%	2,226	1,023	31%	91%	2,032	63%	88%	1,78
Commercial Level 42	Commercial	<u>د</u>								91%	2,032	63%	88%	
		High	3.75	194.70	3249	69%	2,226	1,023	31%					1,78
Commercial Level 41	Commercial		3.75	190.95	3249	69%	2,226	1,023	31%	91%	2,032	63%	88%	1,78
Commercial Level 40	Commercial		3.75	187.20	3249	71%	2,310		29%	92%	2,115	65%	88%	1,86
Commercial Level 39	Commercial	19,150	3.75	183.45	3249	71%	2,310		29%	92%	2,115	65%	88%	1,86
Commercial Level 38	Commercial	9,1	3.75	179.70	3249	71%	2,310		29%	92%	2,115	65%	88%	1,86
Commercial Level 37	Commercial	-	3.75	175.95	3249	71%	2,310	939	29%	92%	2,115	65%	88%	1,86
Commercial Level 36	Commercial	-	3.75	172.20	3249	71%	2,310	939	29%	92%	2,115	65%	88%	1,86
Commercial Level 35	Commercial	Rise 1	3.75	168.45	3249	71%	2,310		29%	92%	2,115	65%	88%	1,86
Commercial Level 34	Commercial	ピ	3.75	164.70	3249	71%	2,310		29%	92%	2,115	65%	88%	1,86
Commercial Level 33	Commercial	High	3.75	160.95	3249	71%	2,310	939	29%	92%	2,115	65%	88%	1,86
Commercial Level 32	Commercial / Plant / Services	+	3.75	157.20	3249	71%	2,310	939	29%	48%	1,115	34%	78%	86
Commercial Level 31	Commercial / Plant / Services		3.75	153.45	3249	71%	2,310	939	29%	48%	1,115	34%	78%	86
Commercial Level 30	Commercial	Ц	3.75	149.70	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 29	Commercial	4	3.75	145.95	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 28	Commercial	Ц	3.75	142.20	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 27	Commercial	29,070	3.75	138.45	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 26	Commercial	0,6	3.75	134.70	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 25	Commercial		3.75	130.95	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 24	Commercial	Rise	3.75	127.20	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 23	Commercial	- 2	3.75	123.45	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 22	Commercial	Mid	3.75	119.70	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 21	Commercial	=	3.75	115.95	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 20	Commercial		3.75	112.20	3249	82%	2,659	590	18%	90%	2,390	74%	90%	2,15
Commercial Level 19	Commercial / Plant / Services		3.75	108.45	3249	82%	2,659	590	18%	52%	1,390	43%	83%	1,15
Commercial Level 18	Commercial / Plant / Services		3.75	104.70	3249	82%	2,659	590	18%	52%	1,390	43%	83%	1,15
Commercial Level 17	Commercial	H	3.75	100.95	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 16	Commercial	Ш	3.75	97.20	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 15	Commercial	H	3.75	93.45	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 14	Commercial	Ш	3.75	89.70	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 13	Commercial		3.75	85.95	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 12	Commercial	1 20	3.75	82.20	3249	88%	2,865	384	12%	88%	2,534	78%	91%	
Commercial Level 11	Commercial	43,078	3.75	78.45	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 10	Commercial		3.75	74.70	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 09	Commercial	Rise	3.75	70.95	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 08	Commercial		3.75	67.20	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 07	Commercial	Low	3.75	63.45	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 06	Commercial		3.75	59.70	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 05	Commercial		3.75	55.95	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 04 Commercial Level 03	Commercial Commercial	H	3.75 3.75	52.20 48.45	3249 3249	88% 88%	2,865 2,865	384 384	12% 12%	88% 88%	2,534 2,534	78% 78%	91% 91%	2,29
Commercial Level 02	Commercial		3.75	44.70	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Commercial Level 01	Commercial		3.75	40.95	3249	88%	2,865	384	12%	88%	2,534	78%	91%	2,29
Existing Retail Level 06 / Sky Lobby* / Rooftop R			8.55	32.40	- UZ-10	0070	2,000	004	1270	0070	2,004	1070	3170	2,20
Existing Retail Level 05	Retail		5.03	26.77										
Existing Retail Level 04	Retail		5.36	21.41										
Existing Retail Level 03	Lobby Void / Retail		4.70	16.71										
Existing Retail Level 02 / Argyle st	Ground Lobby / Retail / Loading	Dock	5.57	11.14										
J														
			Total Height											

\*Existing Level 6 Retail area to be converted into Sky Lobby

Definitions

GBA: Gross Building Area: means the sum of the floor area of a building measured from the external face of external walls including all lifts, stairs, services risers, structure, plant, internal atrium voids and covered residential wintergarden / balcony areas. Excludes external roof terraces open to the sky.

GFA: As defined in Sydney LEP 2016 gross floor area means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes: (a) the area of a mezzanine, and (b) habitable rooms in a basement or an attic, and (c) any shop, auditorium, cinema, and the like, in a basement or attic, but excludes: (d) any area for common vertical circulation, such as lifts and stairs, and (e) any basement: (f) storage, and (ii) vehicular access, loading areas, garbage and services, and (f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and (g) car parking to meet any requirements of the consent authority (including access to that car parking), and (h) any space used for the loading or unloading of goods (including access to it), and (i) terraces and balconies with outer walls less than 1.4 metres high, and (j) voids above a floor at the level of a storey or storey above.

GLAR / NLA: Measured in accordance with PCA method, PCA Commercial Areas - 1st July 2008

Ratio to MPE		
GBA>MPE	GFA>MPE	NLA> GB/
80%	68%	76%
Ratio to Measurment methods		
GBA>MPE	GFA>GBA	NLA>GFA
80%	86%	89%
Articulation		
Average Ariculation per floor	655	

Articulation Total 30,771 Articulation Ratio