

October 2025

# 20-22 Atchison Street, St Leonards, NSW

SSDA Design Report

Report by COX Architecture

**Setia** C O X



Setia and COX Architecture acknowledge the Traditional Custodians of the land, the Cammeraygal People of the Eora Nation, on which the project site is located. We acknowledge the cultural landscape of the area, it's importance to the Cammeraygal people, and how it has changed over time.

We pay our respects to the First Nations Elders past, present and future for they hold the memories, the traditions, the culture and hopes of Australia's First Nations peoples.

## Project Information

### Project Representatives

Discipline	Representation
Client	Setia Sydney Pty Ltd
Architect	COX Architecture
Planner	Urbis
Structure	Meinhardt
Services	Meinhardt
Civil/ Stormwater	Meinhardt
Geotechnical & Environmental Engineer	Douglas Partners
Fire Engineer	RED Fire Engineer
Accessibility & BCA	JAZ Building Consultants
Landscape	Tract
Arborist	Bluegum
Traffic	Salt <sup>3</sup>
Waste	Salt <sup>3</sup>
Wind	SLR Consulting
Acoustic	Pulse White Noise Acoustics
Surveyor	TSS Total Surveying Solutions
ESD Consultant	LCI Consultants
Aviation	AviPro
Archaeology	Urbis
Economist	Urbis
Quantity Surveyor	WT Partnerships
Biodiversity Development Assessment Report (BDAR)	Eco Logical

### Document Register

Issue	Amendment	Date	Checked
A	DRAFT DESIGN REPORT ISSUE	04/09/2025	KH
B	SSDA ISSUE	14/10/2025	KH

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Chapter 4 Housing SEPP Assessment

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ADG Compliance Table



C O X

01

Introduction

## 1.1 Purpose of This Report

This application seeks development consent for an SSDA which will facilitate the redevelopment of the site (20-22 Atchison Street, St Leonards) for a shop top housing development using the recently introduced provisions under the Transit Oriented Development (TOD) reforms.

The project seeks consent for:

- Demolition of existing buildings on site and tree removal.
- Construction of a 40-storey shop top housing development comprising:
  - 4-storey mixed-use (commercial, residential and retail) podium with a retail tenancy at ground level (Atchison Street frontage).
  - 36 levels of residential apartments and residential amenities within the tower.
  - Landscaping and public amenities along the Mitchell Street eastern elevation at ground level.
  - Consolidated vehicular and loading access from Atchison Lane.
  - 5 storey basement accommodating car, bicycle and motorcycle parking, storage, plant and end of trip facilities (EOTF) for the commercial component.
- Amalgamation of Lot 1 in DP740017 and Lot 120 DP564606.
- 10% of residential floor space to be utilised for affordable housing via monetary contribution.
- Storage areas, utilities and service provision.

The purpose of the project is to facilitate the delivery of high-quality housing at a strategically located site and deliver a built tower outcome that is consistent with the desired future character of St Leonards and aligns with the TOD controls.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 09/07/2025 and issued for the SSDA (SSD-87486461).

We confirm that Ramin Jahromi of Cox Architecture directed the design of the enclosed development application, which is represented by drawings A-DA-0001 to A-DA-9103 and that Ramin Jahromi is registered as an architect in accordance with the NSW Architects Act 2003. (ARB 10000).



Ramin Jahromi



Figure 1: Location Plan



# 1.2 Executive Summary

Building Use:

**Mixed Use/ Built to Sell** in a MU1 Mixed-Use Zone

Site area **1374.4 sqm**

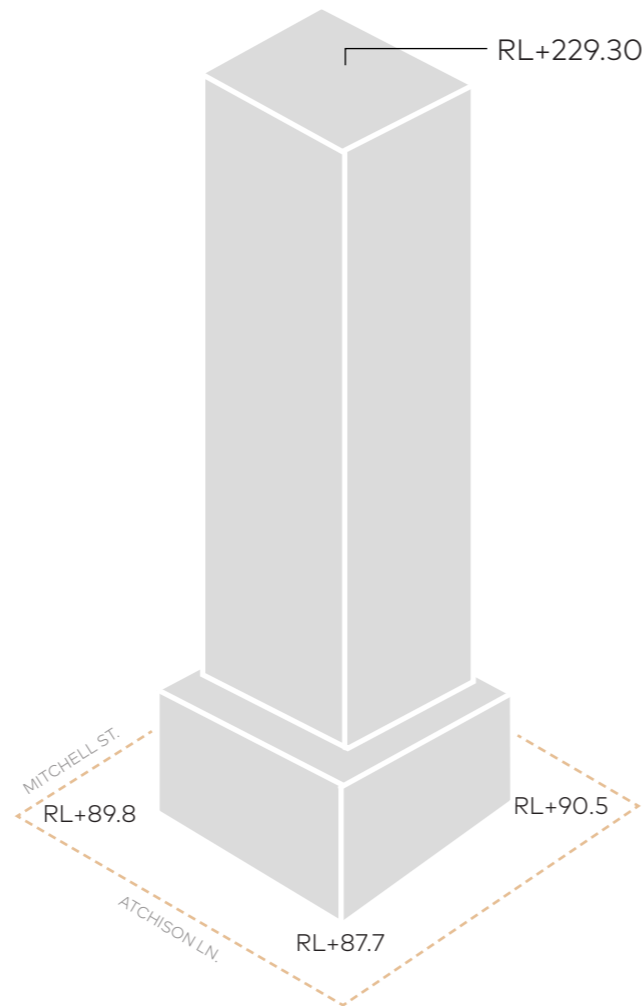
Allowed FSR Residential **10.8 :1**  
 Proposed FSR Residential **12.15:1**

Target GFA **18961 sqm**  
 Proposed GFA **18387 sqm**

Allowed FSR Residential **3:1**  
 Proposed FSR Commercial **1.39 :1**



Proposed Resi. FSR = **11.92:1**  
 Proposed Non-Resi. FSR = **1.43:1**  
**TOTAL FSR PROPOSED = 13.35:1**

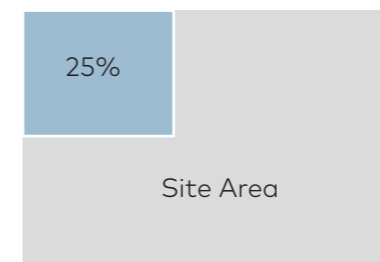
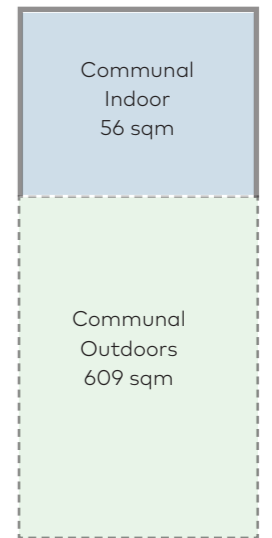


Height consistent with TOD Design Guide to address the development and growth of the town centre.

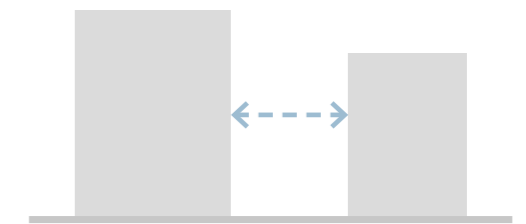
**181** Units  
 35 1Bed, 39 1 Bed+, 85 2Bed, 22 3Bed

**96** Parking Spaces  
 in 5 levels of basement (1 service, 5 commercial, 81 residential, 10 motorcycle)

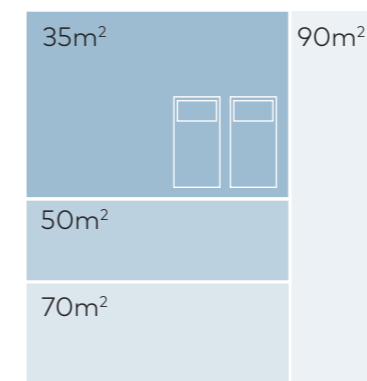
**665** sqm of Communal Spaces



Communal Open Space

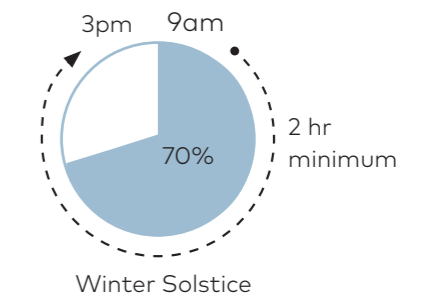


ADG Building Separation



Studio 3 Bed

Accommodation Size



Solar and Cross Ventilation

### 1.3 The Site

The site is situated at 20-22 Atchison Street, St Leonards, NSW, within the North Sydney Council area. The site falls within the St Leonards and Crows Nest (SLCN) 2036 Plan, where high-density mixed use development is replacing low-scale commercial and retail buildings along the Pacific Highway Corridor, as the highway is a major arterial road on Sydney's Lower North Shore.

The site has also been identified as a key site within the approved Transport Orientated Development (TOD) controls, finalised in November 2024. The TOD controls implemented the agreed setbacks from the site's Planning Proposal, while approving additional height controls overlaid onto the site's planning controls.

St Leonards, along with near by Crows Nest, is a part of a vibrant precinct known for it's mix of residential, commercial and retail spaces. St Leonards is one of the centres that have been chosen to be developed and managed strategically in order to provide an enhanced, vibrant and sustainable centre; catering to the needs of local residents and businesses. The site is in close proximity to the St Leonards Train Station, and the Crows Nest Metro Station, creating a highly connected and walk-able location. The proposed residential tower benefits from this close proximity to urban services, while also experiencing largely uninterrupted views to the North over the lower density residential areas not altered by the TOD controls.

The site is owned by Setia Sydney Pty Ltd, and has it's primary street frontage to Atchison Street, with secondary frontages to Mitchell Street and Atchison Lane, it is a stand alone site with the existing pedestrian through-site link connecting Atchison Street and Lane on it's Western boundary.

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 9 July 2025 (SSD-87486461).

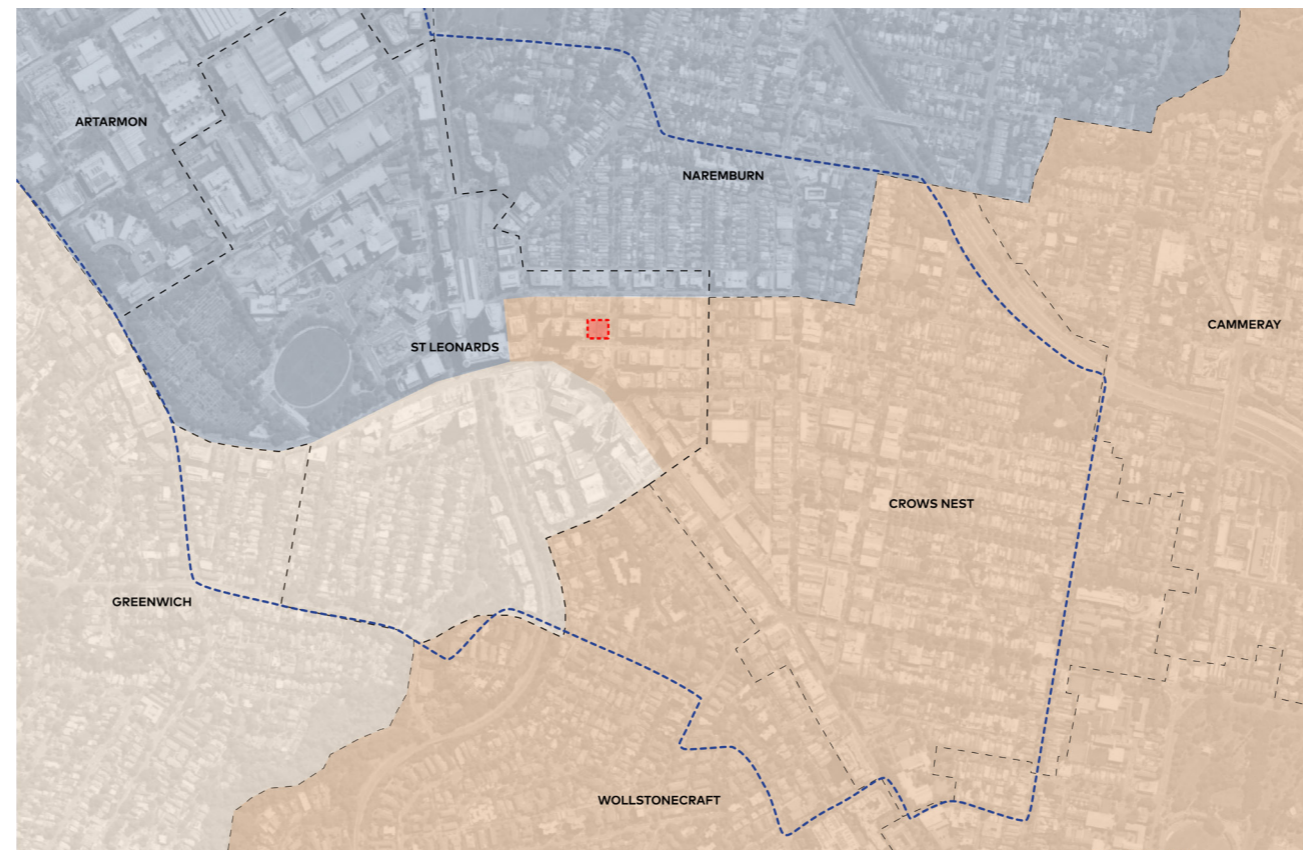


Figure 1: Indicative Site Boundary and Surrounding Context

The site is situated within the SLCN 2036 Plan, which encompasses three Local Government Areas: North Sydney Council, Lane Cove Council, and Willoughby Council.

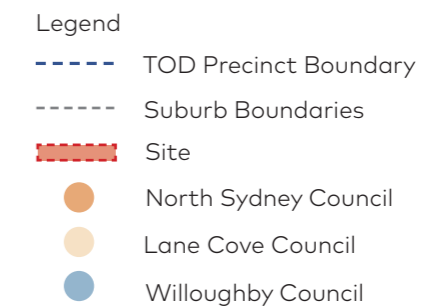
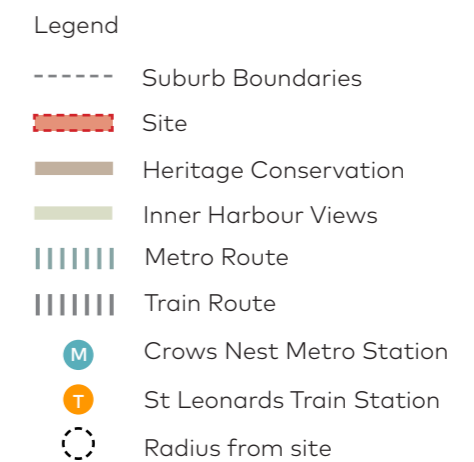


Figure 2: Project Area Map

This illustrates the project area relative to the overall site area.



# 1.4 Changing Context

Demographic Study from 2021 Census



**34**

**Youthful Average Age**



**70%**

**Professionals or Managers**

- Highly educated individuals working in the medical, tech and finance industries



**40%**

**Studying**

- Large percentage of students
- Specialty education facilities



**27%**

**Small Families**

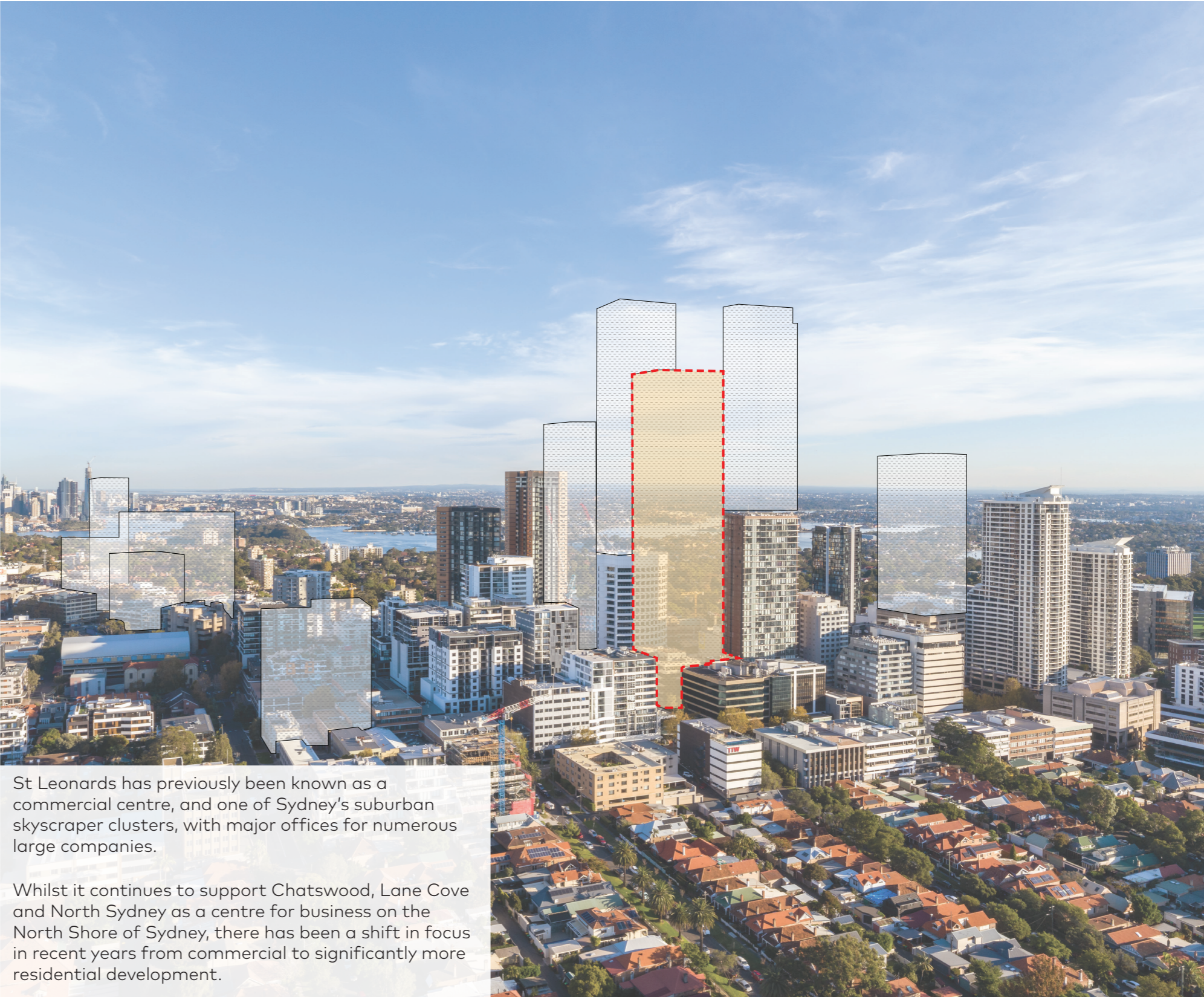
- Lower percentage of families 1.4 children average



**26%**

**Chinese Ancestry**

- Multicultural population



St Leonards has previously been known as a commercial centre, and one of Sydney's suburban skyscraper clusters, with major offices for numerous large companies.

Whilst it continues to support Chatswood, Lane Cove and North Sydney as a centre for business on the North Shore of Sydney, there has been a shift in focus in recent years from commercial to significantly more residential development.

C O X

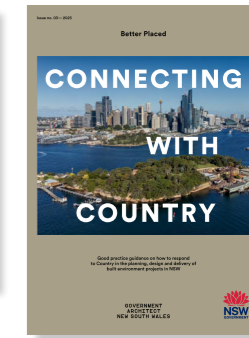
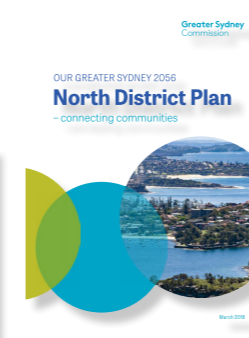
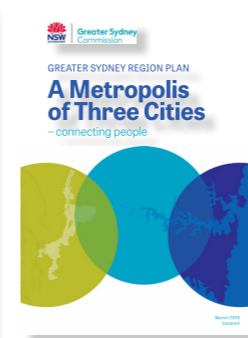
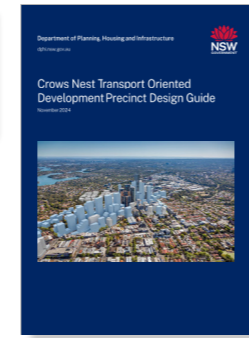
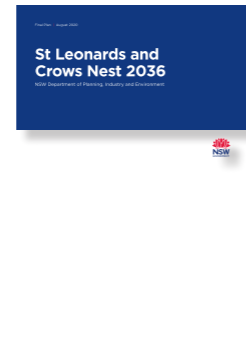
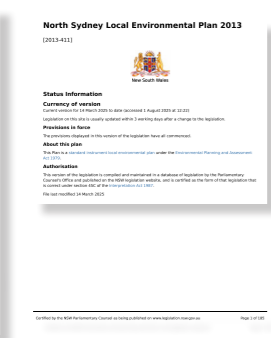
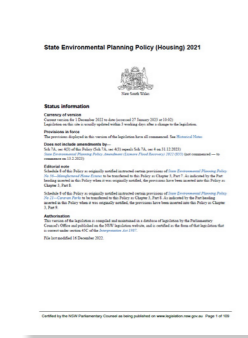
02

Planning Context

# 2.1 Strategic Planning Context

## Statutory Documents

## Strategic Documents



SEPP (Housing) 2021

North Sydney LEP 2013

SEPP 65 and ADG

St Leonards Crows Nest 2036 Plan

Crows Nest TOD Design Guide (November '24)

NSW Government Greater Sydney Region Plan

North District Plan

North Sydney Local Strategic Planning Statement

North Sydney Local Housing Strategy

GANSW Better Placed

GANSW Connecting with Country

The St Leonards and Crows Nest 2036 Plan will facilitate the urban renewal of St Leonards and Crows Nest for an expanding employment centre and growing residential community in the suburbs of St Leonards, Greenwich, Naremburn, Wollstonecraft, Crows Nest and Artarmon.

The purpose of the Design Guide is to support the implementation of the planning controls for the Crows Nest TOD Precinct by providing more detailed provisions to guide development.

The 40 year vision of the Greater Sydney Region Plan is to accommodate the needs of Sydney's growing population within a metropolis of three cities; Western Parkland City, Central River City and Eastern Harbour City, where residents live within 30 minutes of their jobs, education, health facilities, services and great places.

The North District Plan is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney. It is a guide for implementing the Greater Sydney Region Plan, A Metropolis of Three Cities, at a district level and is a bridge between regional and local planning.

The Planning Statement (LSPS) 2020 sets out Council's land use vision, planning principles, priorities, and actions until 2040. It also outlines the desired future direction for housing, employment, transport, recreation, environment and infrastructure for North Sydney LGA.

The North Sydney Local Housing Strategy (NSLHS) is a 20-year plan guiding housing development in the North Sydney Local Government Area (LGA). It aligns with higher-level regional and district plans and focuses on delivering housing to meet the needs of a growing population.

Better Placed has been developed by the Government Architect to deliver the strategic approach needed to ensure that as our cities and towns grow bigger they get even better. Better Placed provides clarity on what the NSW Government means by good design, not just how a place looks, but how it works and feels for people, and outlines processes for achieving this.

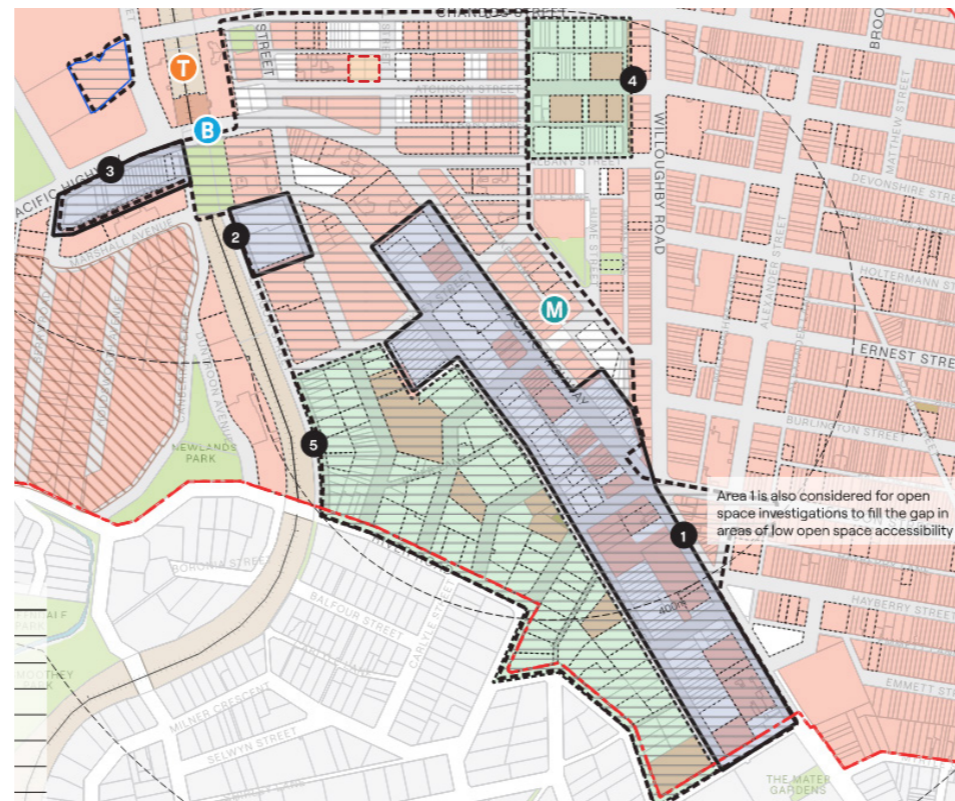
The Connecting with Country Framework is a guide for good practice to help you respond to Country when you plan, design and deliver built environment projects.

## 2.2 TOD Investigation Areas

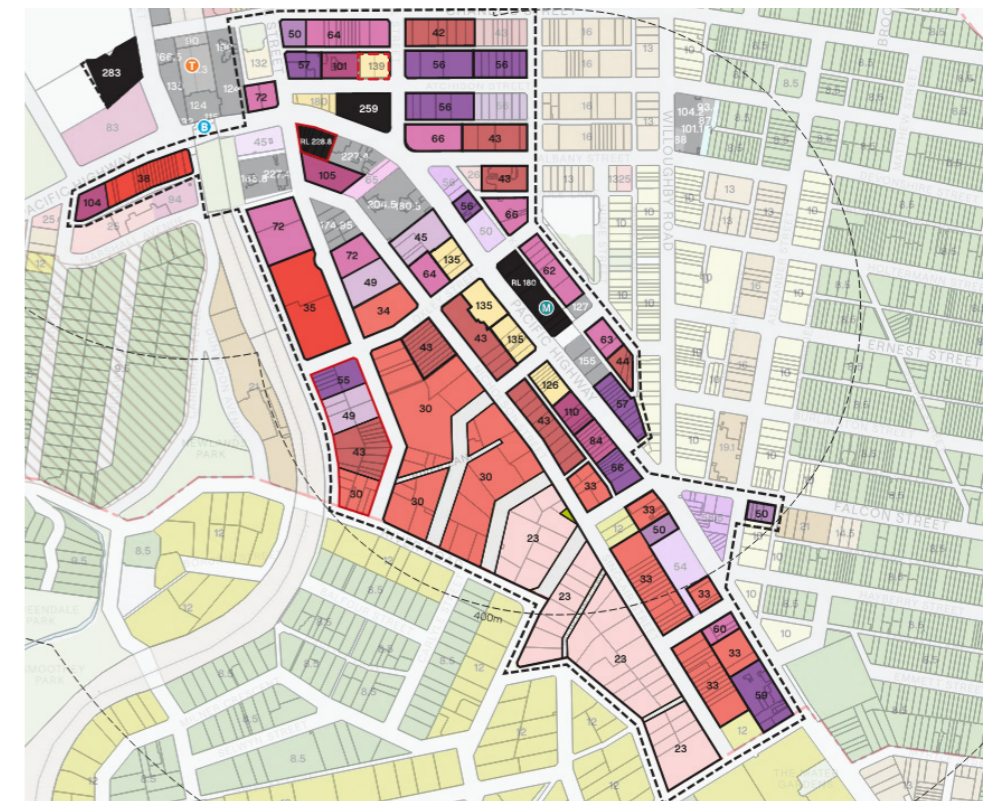
### TOD Investigation Areas

The rapid development of St Leonards as an expanding employment centre and growing residential community, means that the area will significantly transform. Studies were undertaken to understand how to integrate contextually. The importance of creating a cohesive urban fabric with both existing and anticipated future developments cannot be overstated. It's crucial to consider how these additional developments may impact the surrounding context and inform the development's design in order to ensure the design remains relevant and adaptable. A height expectation of taller buildings (up to 50 storeys) between the St Leonards and Crows Nest stations has already been set by recent approvals along the Pacific Highway between Oxley Street and Herbert Street.

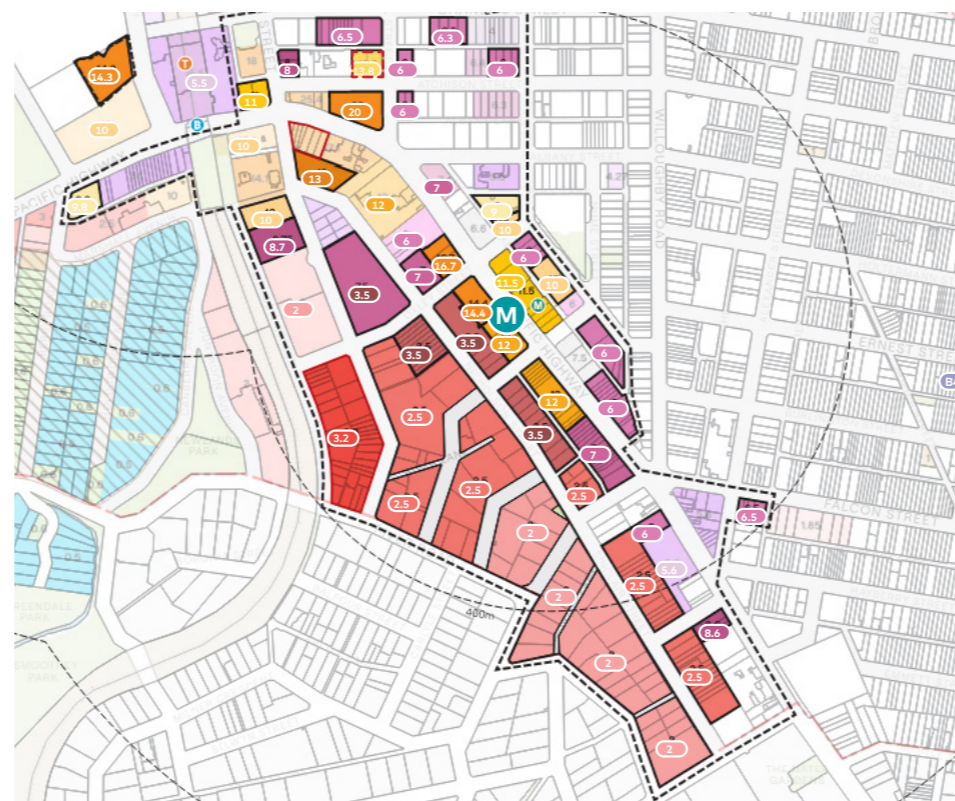
By studying and evaluating the TOD controls and proposed future character of the neighbourhood, we validated our approach to ensure that the design thoughtfully integrates with the existing built environment while aligning with the future vision of St Leonards.



Key Sites



Finalised Building Heights



Floor Space Ratio

### Legend

#### Figure 1

- Site Boundary
- Mixed Use Centre
- TOD Accelerated Rezoning Area
- St Leonards South
- M Crows Nest Metro Station

#### Figure 2

- 25-29.9m
- 30-34.9m
- 35-39.9m
- 40-44.9m
- 45-49.9m
- 50-54.9m
- 55-59.9m
- 40-44.9m
- 45-49.9m
- 50-54.9m
- 55-59.9m
- 35-39.9m

#### Figure 3

- 2
- 2.5
- 3.2
- 5.2
- 6
- 7
- 8.7
- 3.5
- 9
- 10
- 11
- 12
- 13
- 14.4
- 16.7
- 20

## 2.3 TOD Planning Controls

### TOD Planning Controls - Future Vision

The TOD Planning Controls were finalised in November 2024. Under the rezoning some sites within the St Leonards precinct were provided greater uplift than the recommended planning controls in the SLCN 2036 Plan. The subject site at 20-22 Atchison St was granted an uplift from 31 storeys to 40 under the updated controls. It is noted, that in this context the impacts associated with the built form of the St Leonards and Crows Nest precincts approved under the TOD Controls will be greater than the context under the 2036 Plan.



Approved TOD Zoning (provided by SJB)



Approved TOD Height (provided by SJB)

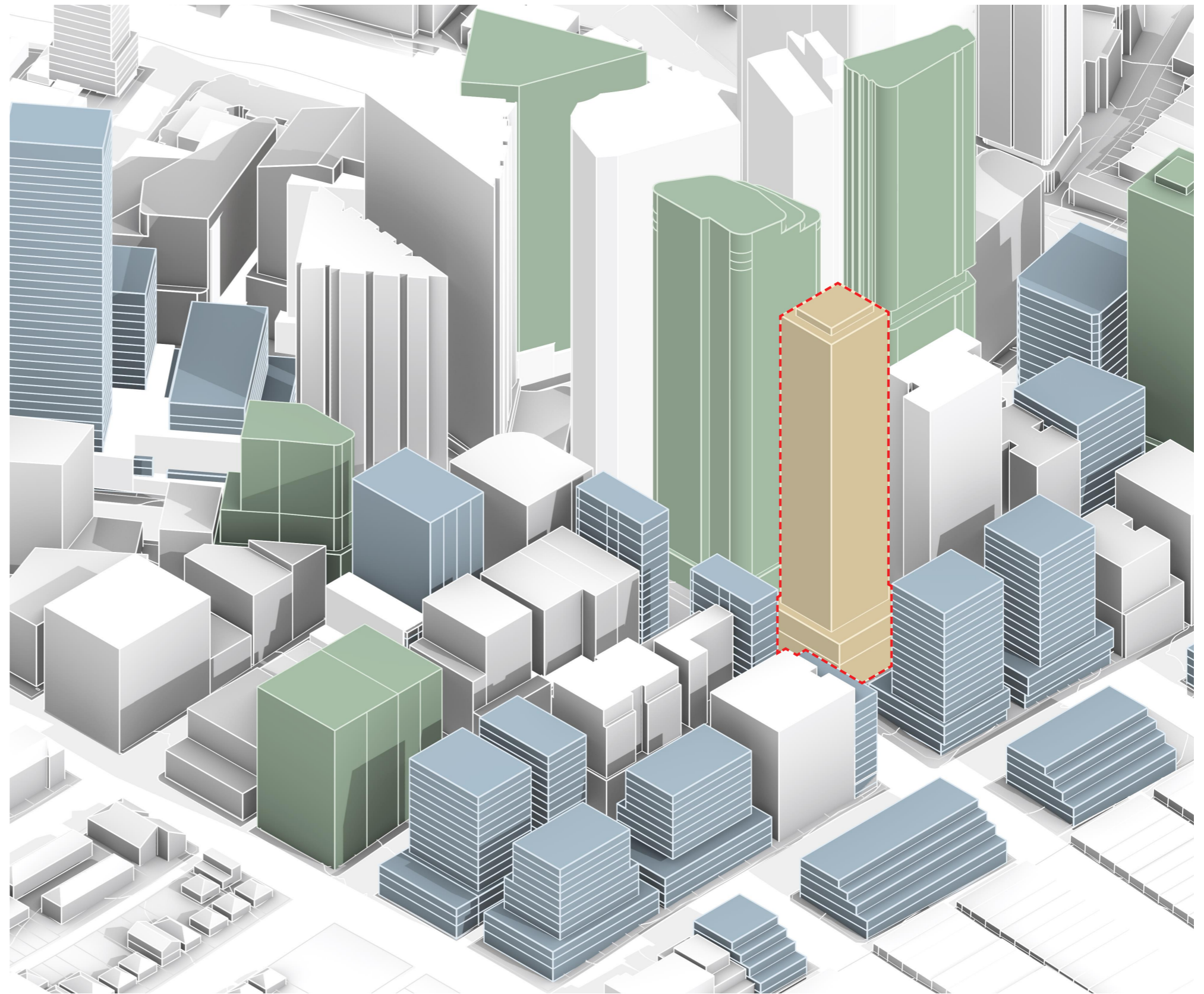
\*Refer to Crows Nest State-Led Rezoning Urban Design Report by SJB for more in-depth information.

#### Legend

- Proposed Residential
- Proposed Non-Residential
- Rezoned / DA Approved
- Subject to Active Planning Proposal / Rezoning
- Existing Built Form
- Not Subject to Submission or Recommended Change
- Approved Residential Above Exhibited Height

## 2.4 Precinct Vision

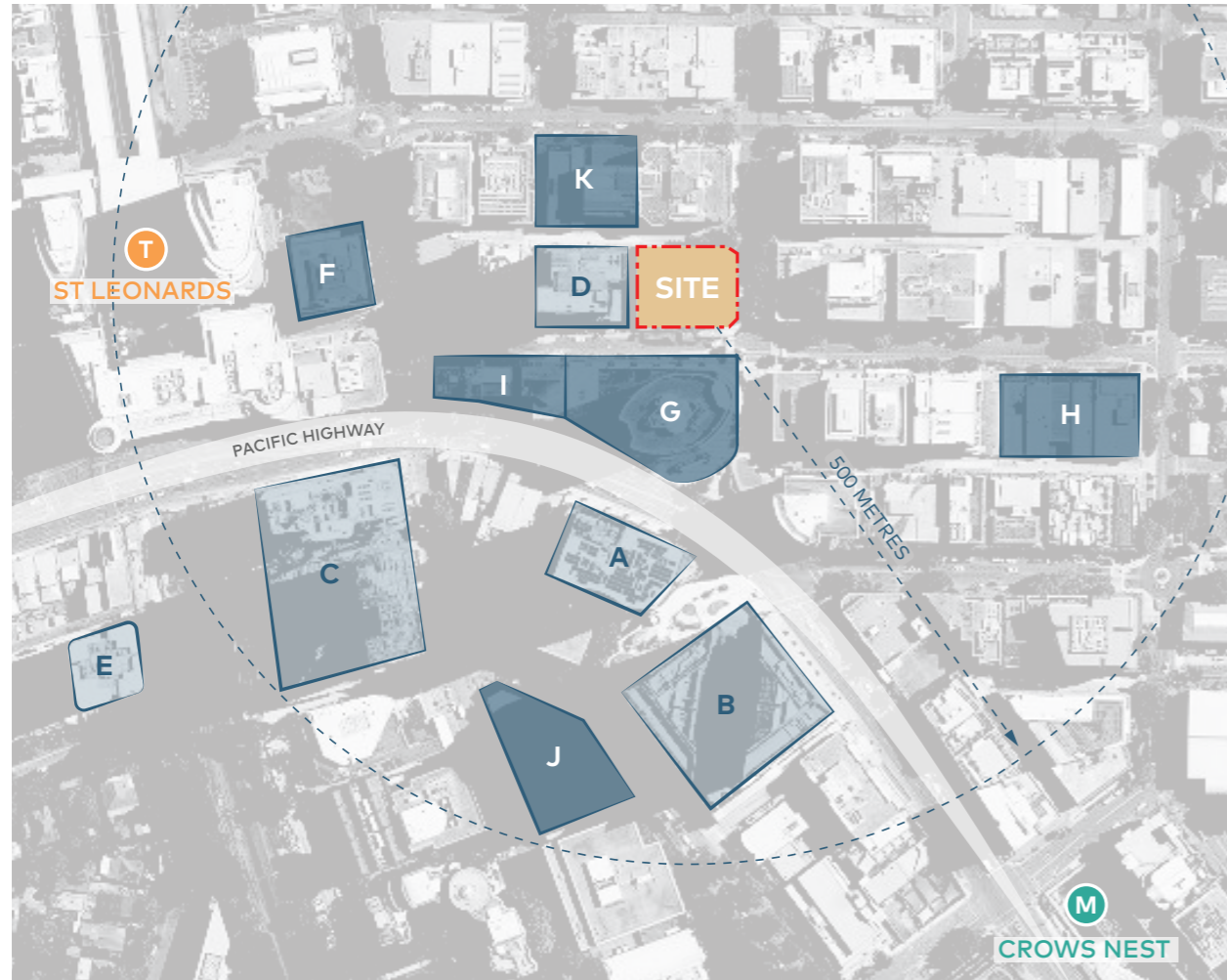
An extensive study of the St Leonards and Crows Nest urban context was undertaken to understand the rapidly developing area. The existing site conditions have been understood, as well as Approved Development Applications and Planning Proposals in the proximity to the site. The proposed guidelines outlined in the TOD controls demonstrated in the image to the right. Based on this analysis of the future context, the proposed form is a positive contribution that aligns with the overall vision for St Leonards.



### Legend

- Subject Site (20-22 Atchison Street)
- Proposed DA/ PP
- TOD Uplift

## 2.5 Approvals & Significant Sites



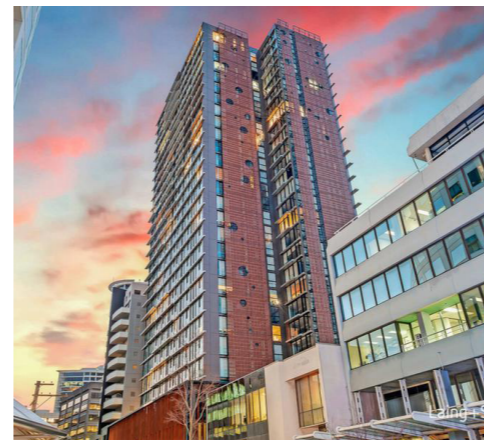
A) 500, 504-520 Pacific Hwy



B) St Leonards Square



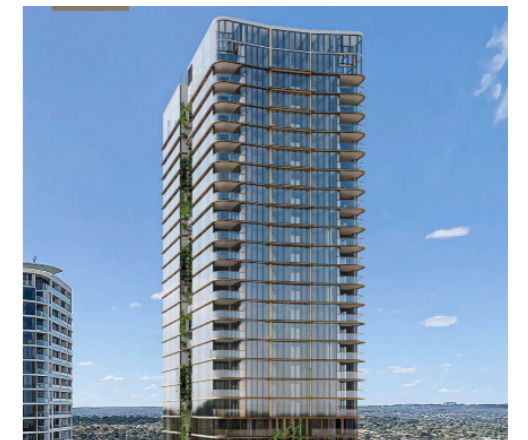
C) 88 Christie Street



D) 6-18 Atchison Street



E) Embassy Tower



F) 100 Christie Street

### Legend

- Significant Sites
- Proposed Buildings
- Subject Site (20-22 Atchison Street)

- |                             |                            |
|-----------------------------|----------------------------|
| A) 500, 504-520 Pacific Hwy | G) 601 Pacific Highway     |
| B) St Leonards Square       | H) 23-25 Atchison Street   |
| C) 88 Christie Street       | I) 617-621 Pacific Highway |
| D) 6-18 Atchison Street     | J) Nicholson Place         |
| E) Embassy Tower            | K) 19-33 Chandos Street    |
| F) 100 Christie Street      | (HDA Declared Site)        |



G) 601 Pacific Highway



H) 23-25 Atchison Street



I) 617-621 Pacific Highway



J) Nicholson Place

## 2.6 Overshadowing Controls



### Crows Nest TOD Precinct Design Guide

Areas to be protected from overshadowing:

1. Christie park
2. St Leonards South
3. Propsting Reserve
4. Newlands Park
5. Hume Street Park
6. Ernest Place
7. Gore Hill Oval
8. Talus Reserve
9. Potential Park – Corner Oxley and Christie Street
10. Mitchell Street
11. Oxley Street
12. Willoughby Road

Conservation Areas (inside investigation area boundary)

Low Density Residential Areas (inside investigation area boundary)

Low Density Residential Areas (outside investigation area boundary)

### 2036 Plan

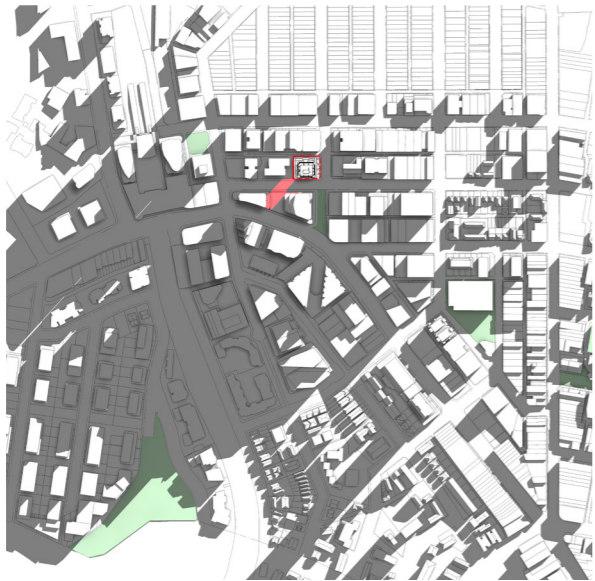
Public Open Space - no additional shadow between 10:00am-3:00pm:

- C Christie Street Reserve
- N Newlands Park**
- S St Leonards South
- P Propsting Park
- H Hume Street Park**
- E Ernest Place**
- HP Holtermann Reserve (proposed)**
- G Gore Hill Oval
- T Talus Reserve

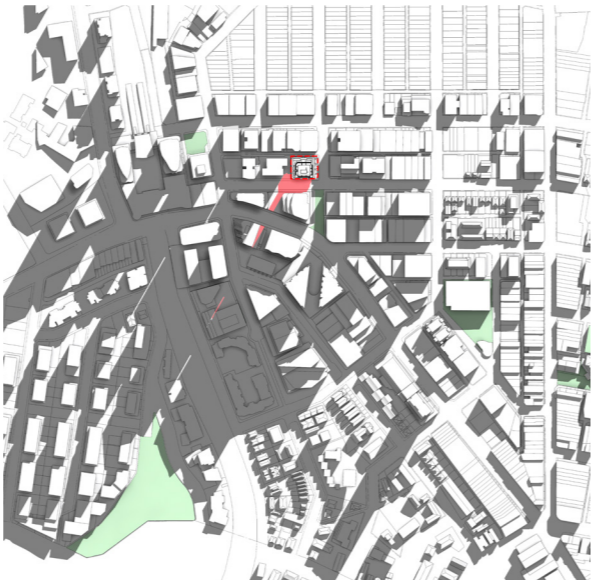
Streetscape - no additional shadow between 11:30am-2:30pm:

- M Mitchell Street and (P) Oxley Streets**
- W Willoughby Road**

# 2.6 Overshadowing Controls



Winter Solstice (21 June)  
9am



Winter Solstice (21 June)  
10am



Winter Solstice (21 June)  
11am



Winter Solstice (21 June)  
12pm



Winter Solstice (21 June)  
1pm



Winter Solstice (21 June)  
2pm



Winter Solstice (21 June)  
3pm

Legend

- Proposal Shadow
- Contextual Shadow
- Control Zones

## 2.6 Overshadowing Controls

### Control Area N - Newlands Park

#### 2036 Plan

Public Open Space - no additional shadow between 10:00am-3:00pm:

#### Newlands Park

The DPE's endorsed 2036 Plan (August 2020) has assessed solar amenity controls found in:

- N.S. Council's "St Leonards Planning Study Precinct 2 and 3" (2015)
- N.S. Council's "Crows Nest Placemaking & Principles Study" (2016)

Note that for control areas where minor variations occur the 2036 Plan has taken precedence.

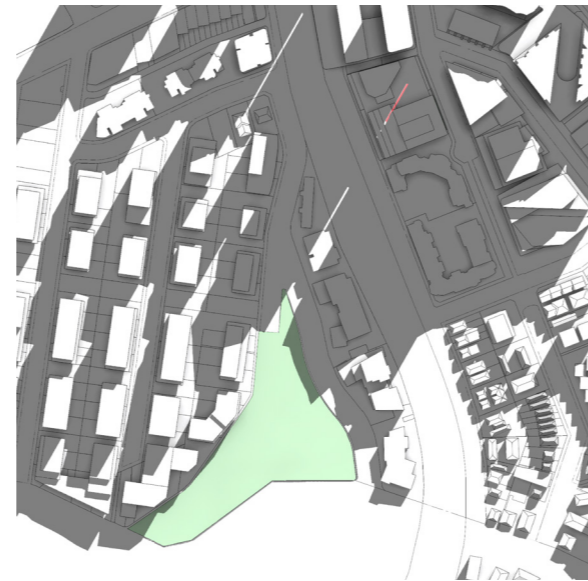
#### Crows Nest TOD Design Guide

Objectives	Requirement
N Existing and Planned Public open spaces. 4. Newlands Park	No additional overshadowing. 10am to 3pm Winter Solstice (June 21)



Legend

- Proposal Shadow
- Contextual Shadow
- Control Zones



Winter Solstice (21 June)  
10am



Winter Solstice (21 June)  
11am



Winter Solstice (21 June)  
12pm



Winter Solstice (21 June)  
1pm



Winter Solstice (21 June)  
2pm



Winter Solstice (21 June)  
3pm



## 2.6 Overshadowing Controls

### Control Area M - Mitchell St Plaza

#### 2036 Plan

Streetscape - no additional shadow between 11:30am-2:30pm:

#### Mitchell Street

The DPE's endorsed 2036 Plan (August 2020) has assessed solar amenity controls found in:

- N.S. Council's "St Leonards Planning Study Precinct 2 and 3" (2015)
- N.S. Council's "Crows Nest Placemaking & Principles Study" (2016)

Note that for control areas where minor variations occur the 2036 Plan has taken precedence.

#### Crows Nest TOD Design Guide

Objectives	Requirement
M Streetscapes. 10. Mitchell Street	No additional overshadowing. 11:30am to 2:30pm Winter Solstice (June 21)



#### Legend

- Proposal Shadow
- Contextual Shadow
- Control Zones



Winter Solstice (21 June)  
11am



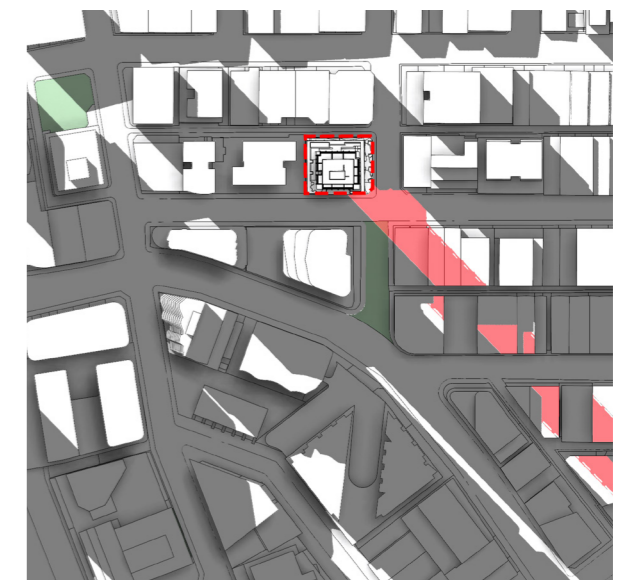
Winter Solstice (21 June)  
12pm



Winter Solstice (21 June)  
1pm



Winter Solstice (21 June)  
2pm



Winter Solstice (21 June)  
3pm

NEGLIGIBLE OVERSHADOWING CONTRIBUTION DESPITE SETBACK AND HEIGHT COMPLIANCE

## 2.6 Overshadowing Controls

### Control Area H - Hume St Park

#### 2036 Plan

Public Open Space - no additional shadow between 10:00am-3:00pm:

#### Hume St Park

The DPE's endorsed 2036 Plan (August 2020) has assessed solar amenity controls found in:

- N.S. Council's "St Leonards Planning Study Precinct 2 and 3" (2015)
- N.S. Council's "Crows Nest Placemaking & Principles Study" (2016)

Note that for control areas where minor variations occur the 2036 Plan has taken precedence.

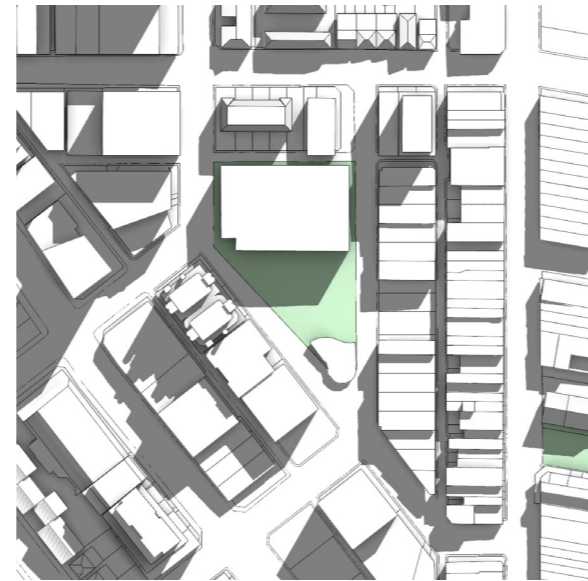
#### Crows Nest TOD Design Guide

Objectives	Requirement
H Existing and Planned Public open spaces. 5. Hume Street Park	No additional overshadowing. Ensure 50% of the park receives solar access from 10am to 3pm Winter Solstice (June 21).

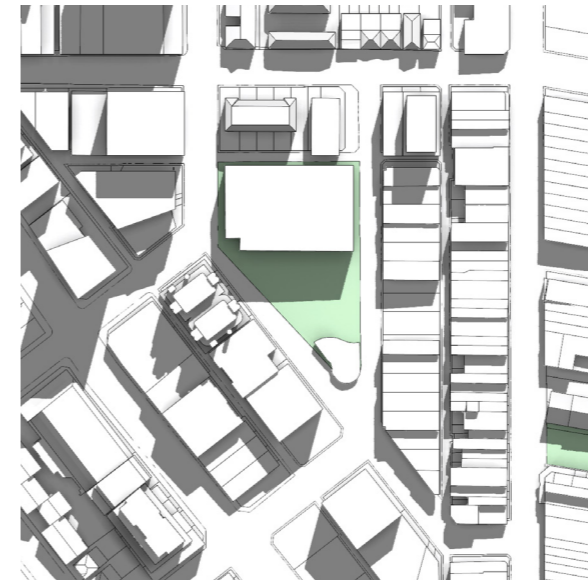


#### Legend

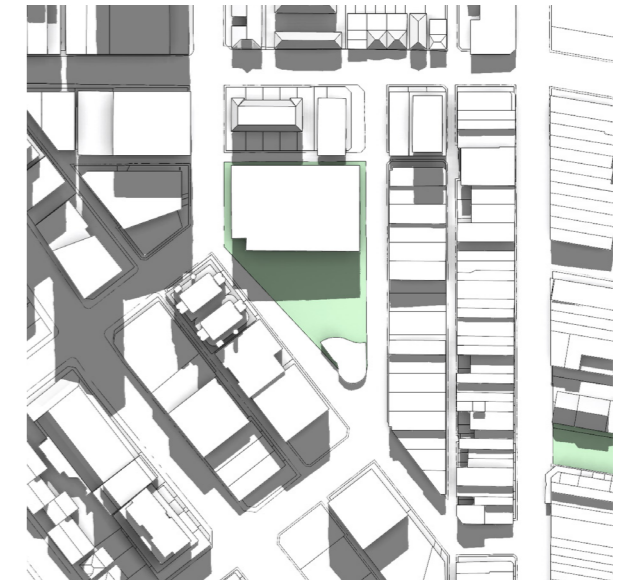
- Proposal Shadow
- Contextual Shadow
- Control Zones



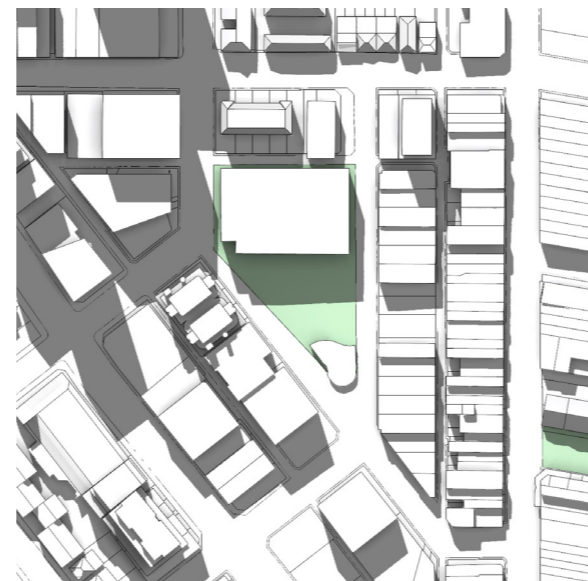
Winter Solstice (21 June)  
10am



Winter Solstice (21 June)  
11am



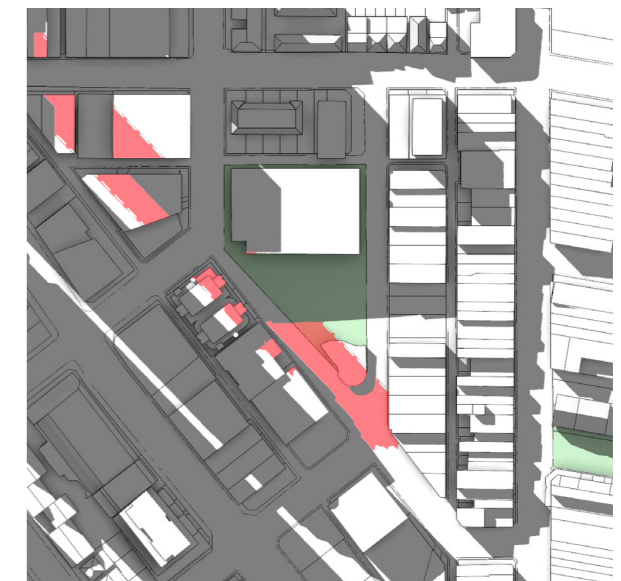
Winter Solstice (21 June)  
12pm



Winter Solstice (21 June)  
1pm



Winter Solstice (21 June)  
2pm



Winter Solstice (21 June)  
3pm

NEGLIGIBLE OVERSHADOWING CONTRIBUTION DESPITE SETBACK AND HEIGHT COMPLIANCE

## 2.6 Overshadowing Controls

Control Area **E, HP & W** - Ernest Place (E), Holtermann Reserve (proposed) (HP) & Willoughby Road (W)

### 2036 Plan

Public Open Space - no additional shadow between 10:00am-3:00pm:

#### 4) Ernest Place & 5) Holtermann Reserve

Streetscape - no additional shadow between 11:30am-2:30pm:

#### 6) Willoughby Road

The DPE's endorsed 2036 Plan (August 2020) has assessed solar amenity controls found in:

- N.S. Council's "St Leonards Planning Study Precinct 2 and 3" (2015)
- N.S. Council's "Crows Nest Placemaking & Principles Study" (2016)

Note that for control areas where minor variations occur the 2036 Plan has taken precedence.

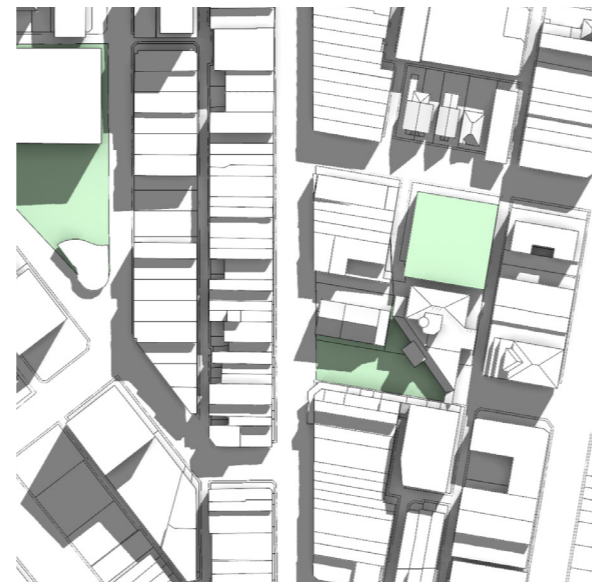
### Crows Nest TOD Design Guide

Objectives	Requirement
E Existing and Planned Public open spaces. 6. Ernest Place	No additional overshadowing. 11:30am to 2:30pm Winter Solstice (June 21)
W Streetscapes. 12. Willoughby Road	No additional overshadowing. 11:30am to 2:30pm Winter Solstice (June 21)

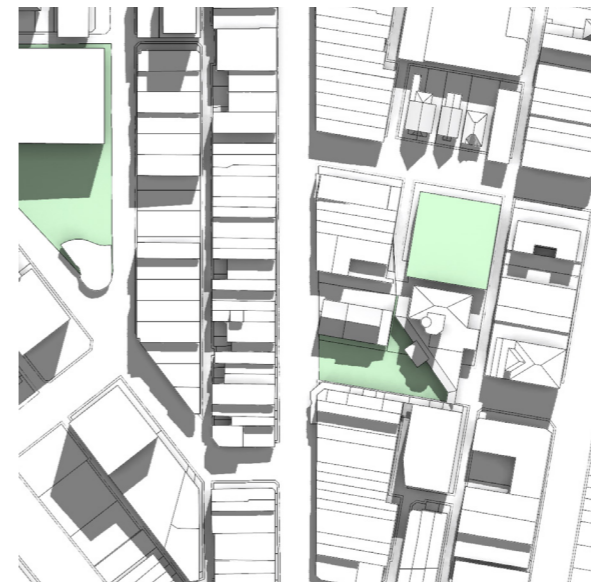


Legend

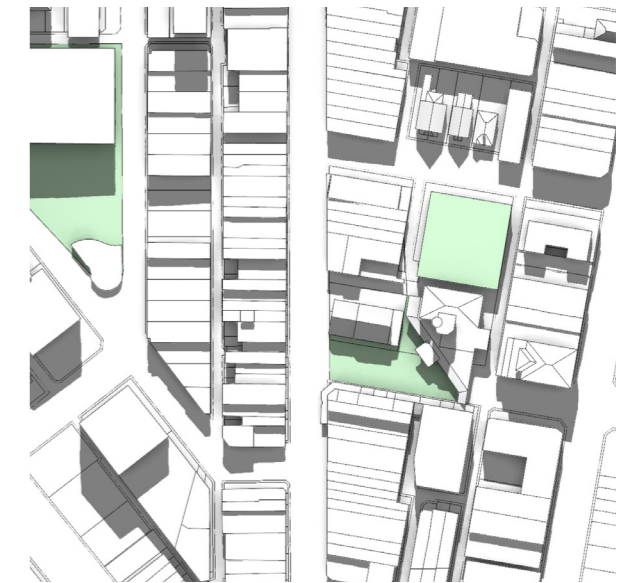
- Proposal Shadow
- Contextual Shadow
- Control Zones



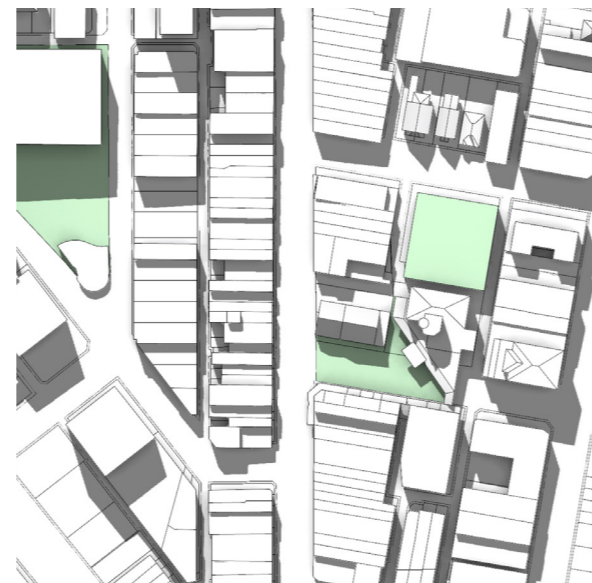
Winter Solstice (21 June)  
10am



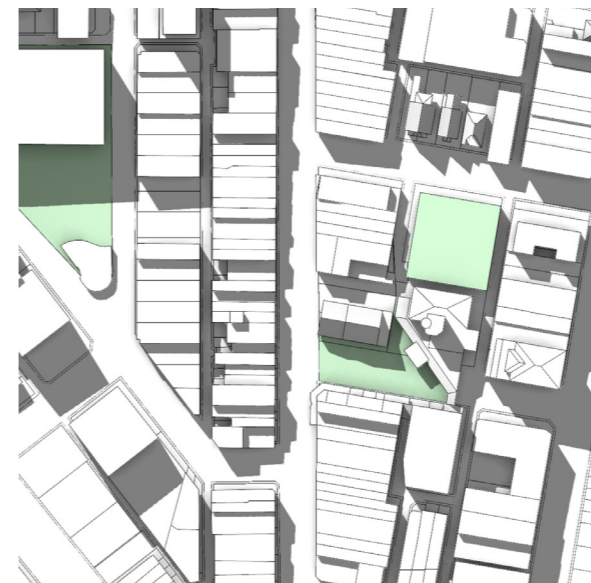
Winter Solstice (21 June)  
11am



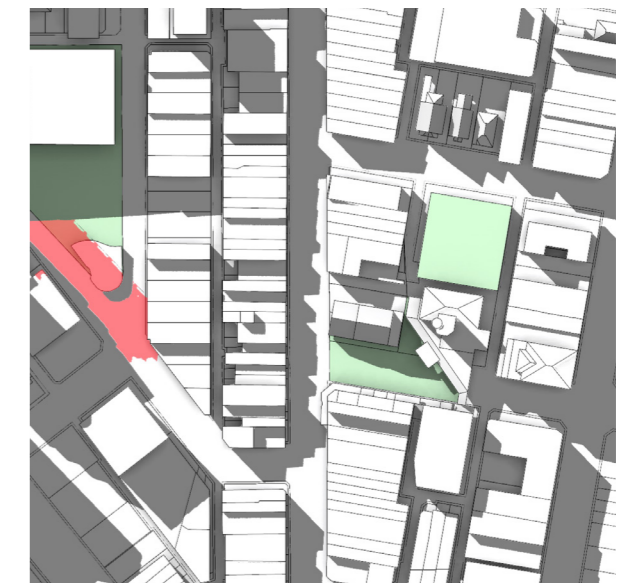
Winter Solstice (21 June)  
12pm



Winter Solstice (21 June)  
1pm



Winter Solstice (21 June)  
2pm



Winter Solstice (21 June)  
3pm

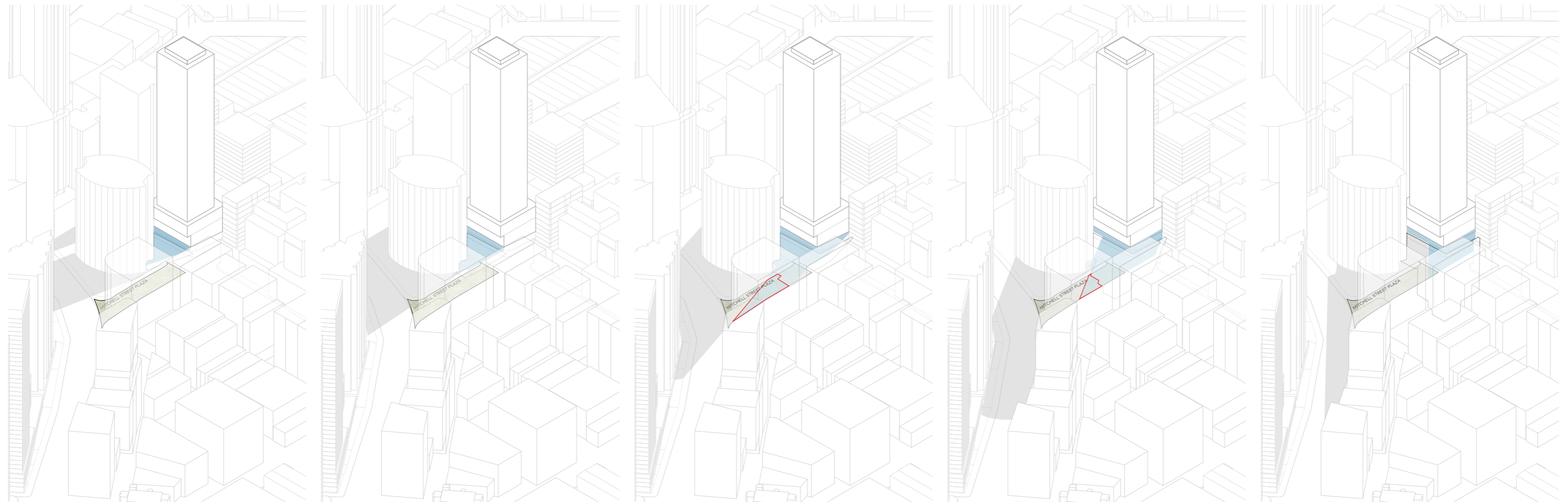


## 2.6 Overshadowing Controls

### Proposed Scheme

Retaining solar access to public open space, valued street scape and residential areas was a key objective of the SLCN 2036 Plan that was adopted into the TOD Controls. The solar access controls protect Mitchell Street, and therefore Mitchell Street Plaza from any additional overshadowing between 11:30am and 2:30pm on the June 21st Solstice. The following diagram demonstrates that the increased building height, compliant with the TOD Controls, does increase overshadowing to the Mitchell Street Plaza at 1pm and 2pm.

The proposal is wholly compliant with the height controls applied to the site, and setback controls to the north, east and southern boundaries, however due to the existing site conditions the western facade does not comply with ADG setbacks as they prohibit the efficient development of the site. An ADG compliant setback shadow diagram is provided to demonstrate that the current proposal does not create additional overshadowing.



Winter Solstice (21 June)  
11am





Winter Solstice (21 June)  
12pm

Winter Solstice (21 June)  
1pm

Winter Solstice (21 June)  
2pm

Winter Solstice (21 June)  
3pm

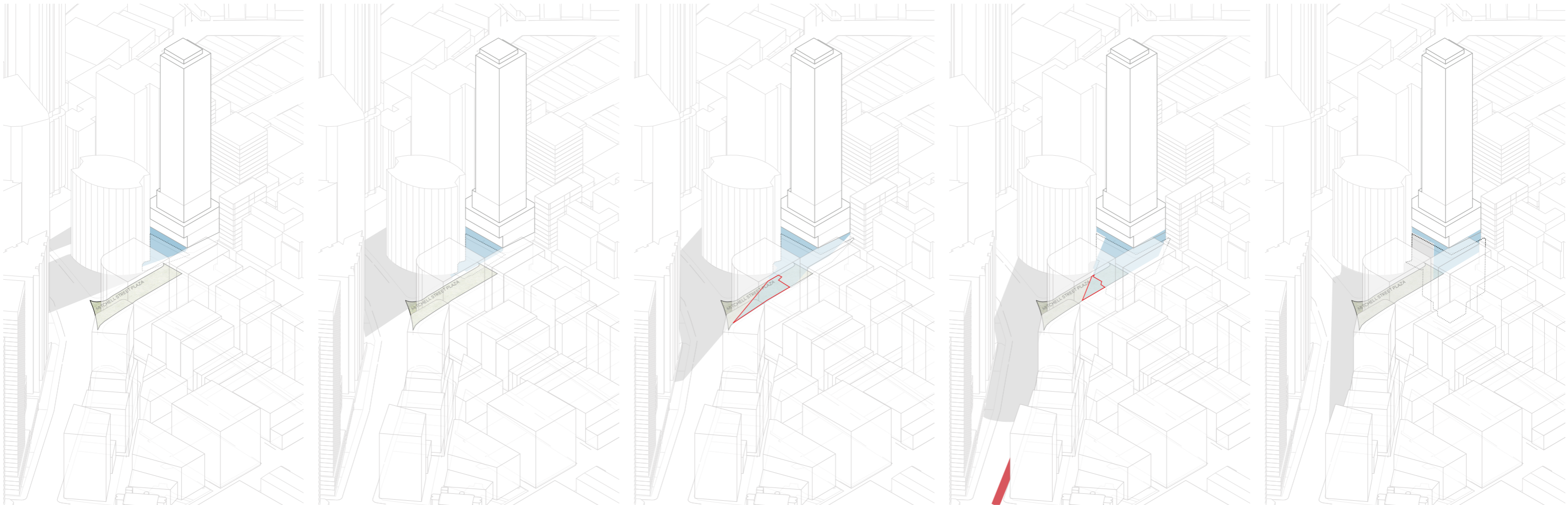
#### Legend

-  Existing 20-22 Atchison Street Shadow
-  Existing Shadow
-  Proposal's Shadow
-  Additional Shadow on Mitchell St Plaza

# 2.6 Overshadowing Controls

## Compliant Scheme Comparison

The following diagram demonstrates that the ADG compliant setbacks do not reduce the impact overshadowing of Mitchell St Plaza, as it continues to increase the overshadowing at 1pm and 2pm. The increased overshadowing is therefore driven by approved increase in height for the site to 139m, which the proposal is wholly compliant with.



Winter Solstice (21 June)  
11am

Winter Solstice (21 June)  
12pm

Winter Solstice (21 June)  
1pm

Winter Solstice (21 June)  
2pm

Winter Solstice (21 June)  
3pm

Legend

- Existing 20-22 Atchison Street Shadow
- Existing Shadow
- Proposal's Shadow
- Additional Shadow on Mitchell St Plaza
- Additional Shadow Cast by Proposed Scheme in Comparison to Compliant Scheme

C O X

03

Design Quality

### 3.1 Connection to Country Principles

The First People of the lands surrounding St Leonards, are the Cammeraygal People and Gai-maragal People of the Eora Nation, who have been the traditional custodians of these lands since time immemorial. It is a place of rugged coastal riverside, creek lines, gullies, sandstone ridge-tops and views back both north and south to harbours. The Connecting to Country Principles developed throughout the design process revolve around the theme of 'A Connection to Place', which can be explored through a human connection to Country, a spiritual connection to Country, and a natural connection to Country.

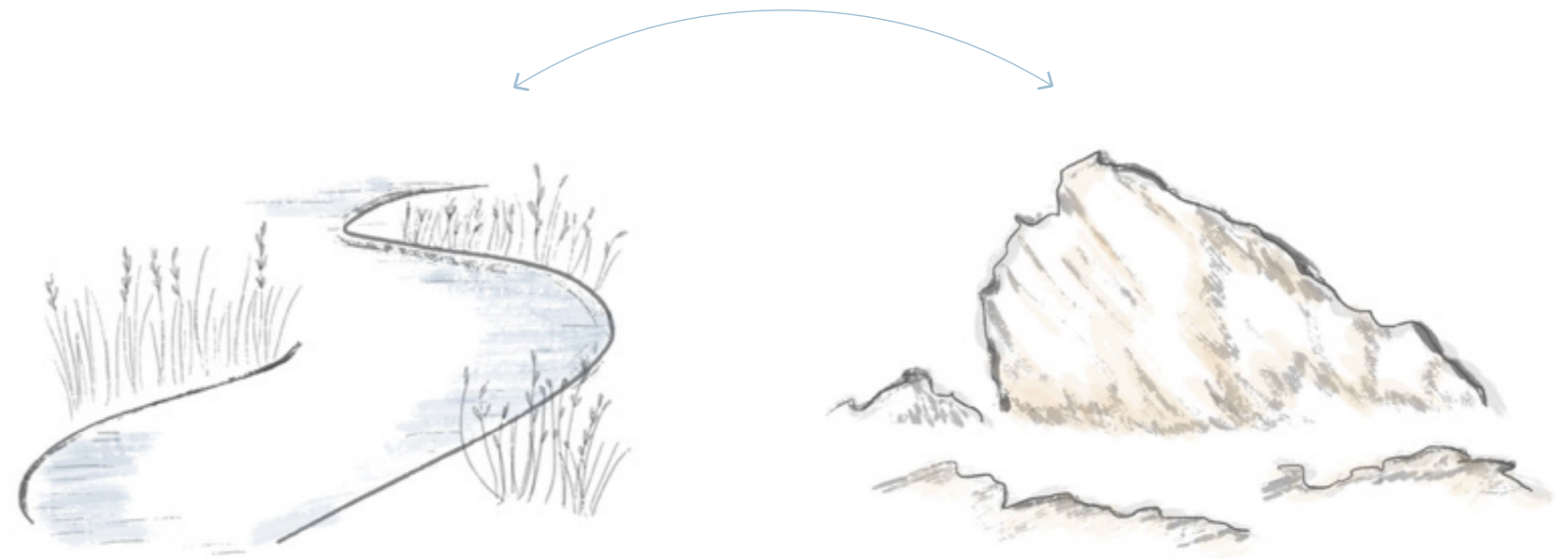
The design has taken inspiration from 'A Connection to Place' to ground the architecture and materials palette in the Sydney bedrock, using sandstone to inspire the project colour palette, and a strong solid podium base to reflect the link to bedrock. The ground plane landscape proposal provides a place for meeting, inviting residents and the wider public to congregate and interact. The inclusion of native flora and fauna throughout the street scape planting creates a physical location for a human connection to Country through natural landscape that is traditional to the area.

Further podium level planting supports a connection and caring for Country approach, providing therapeutic and mindfulness opportunities for residents to engage with nature and culture.



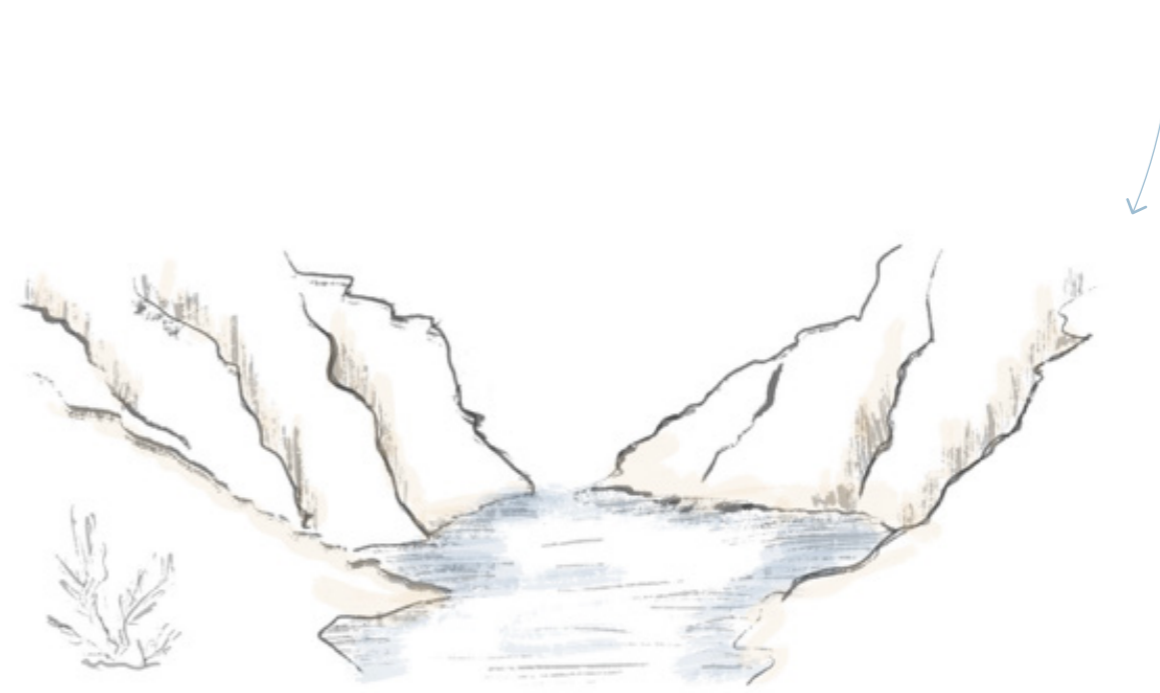
Cammeraygal Country Painting

#### A Connection to Place



Coastal Character

Sydney's Bedrock



Where they meet

## 3.2 NSW 'Better Placed' Objectives



### OBJECTIVE 1.

#### Better Fit

##### Contextual, local and of its place

Good design in the built environment is informed by and derived from its location, context and social setting. It is place-based and relevant to and resonant with local character, and communal aspirations. It also contributes to evolving character and setting.



### OBJECTIVE 2.

#### Better Performance

##### Sustainable, adaptable and durable

Environmental sustainability and responsiveness is essential to meet the highest performance standards for living and working. Sustainability is no longer an optional extra, but a fundamental aspect of functional, whole of life design.



### OBJECTIVE 3.

#### Better for Community

##### Inclusive, connected and diverse

The design of the built environment must seek to address growing economic and social disparity and inequity, by creating inclusive, welcoming and equitable environments. Incorporating diverse uses, housing types and economic frameworks will support engaging places and resilient communities.



### OBJECTIVE 4.

#### Better for People

##### Safe, comfortable and liveable

The built environment must be designed for people with a focus on safety, comfort and the basic requirement of using public space. The many aspects of human comfort which affect the usability of a place must be addressed to support good places for people.



### OBJECTIVE 5.

#### Better Working

##### Functional, efficient and fit for purpose

Having a considered, tailored response to the program or requirements of a building or place, allows for efficiency and usability with the potential to adapt to change. Buildings and spaces which work well for their proposed use will remain valuable and well-utilised.



### OBJECTIVE 6.

#### Better Value

##### Creating and adding value

Good design generates ongoing value for people and communities and minimises costs over time. Creating shared value of place in the built environment raises standards and quality of life for users, as well as adding return on investment for industry.



### OBJECTIVE 7.

#### Better Look and Feel

##### Engaging, inviting and attractive

The built environment should be welcoming and aesthetically pleasing, encouraging communities to use and enjoy local places. The feel of a place, and how we use and relate to our environments is dependent upon the aesthetic quality of our places, spaces and buildings. The visual environment should contribute to its surroundings and promote positive engagement.

### 3.3 Project Vision Response

#### An Emerging Precinct

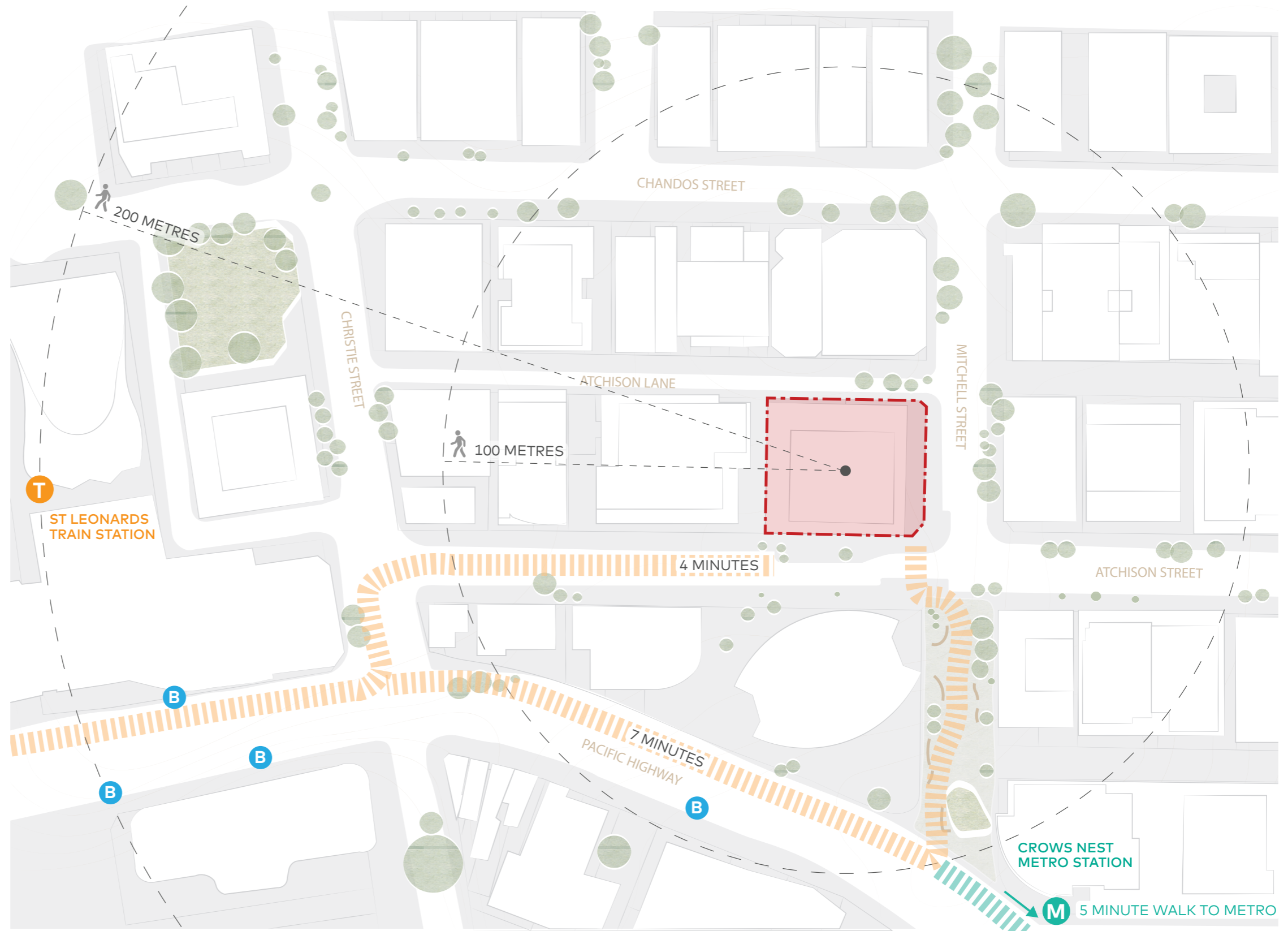


#### Better Fit

##### Contextual, local and of its place

The subject site presents an opportunity to add to the life and character of its neighbourhood. The development of the under-utilised commercial sites at existing lots Lot 1 DP740017 and Lot 120 DP564606, into a mixed use precinct that provides both public space and improved connection to the surrounding street scape, creates greater opportunities for the site to connect with its surrounding growing community. Activating the street frontages and providing a mixed use podium that targets services for the local community, will enliven the site's context and promote a higher cross-flow of local residents and visitors along Atchison St, Mitchell St, Atchison Lane and the Through-site link. The site is proposed to evolve into a blend of residential, retail or personal service and commercial uses, consistent with it's MU1 Mixed Use zoning.

The site is within the 200m walking radius of St Leonards Train Station, as well as being a short walk to the Crows Nest Metro Station. It's proximity to Royal North Shore Hospital and Crows Nest shopping precinct allows convenience for residents, while also offering views to the north of established lower density suburbs, green spaces and Middle Harbour.



Site Context Diagram



### 3.3 Project Vision Response

#### A Sustainable Development



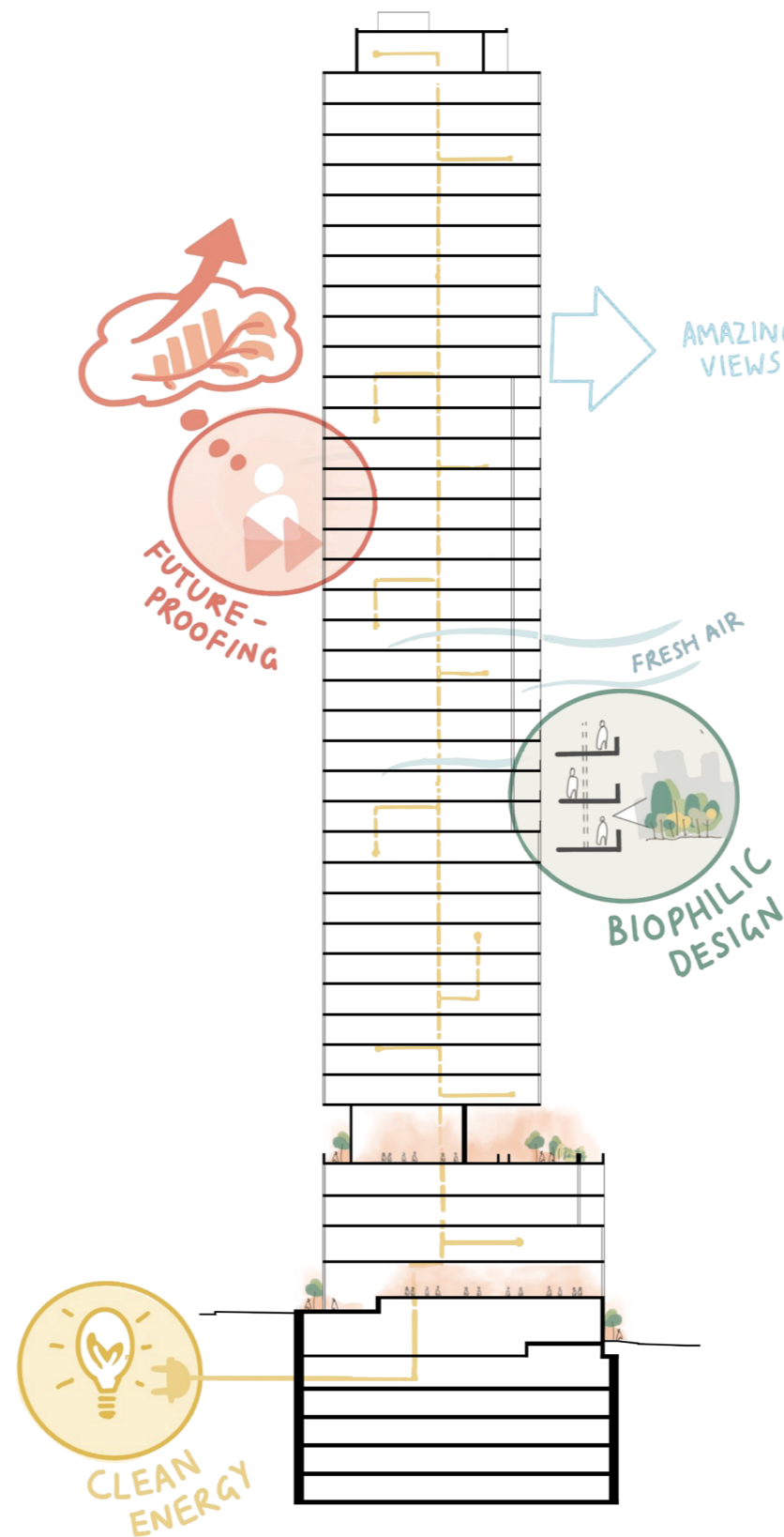
#### Better Performance

Sustainable, adaptable and durable

The proposed development prioritises sustainability through a range of initiatives to improve its performance.

- On-site renewable energy generation through solar photovoltaic (PV).
- Appropriately sized and high efficiency centralised building service systems such as domestic hot water and mechanical HVAC.
- Renewable energy on site to minimise energy consumption
- Passive design principles and features such as shading and a high-performance thermal envelope to balance daylight access and solar heat loads.
- Use of materials which demonstrate low environmental impact and minimising the overconsumption and wastage of resources.
- Consideration to achieve a high-quality indoor environment for occupants including access to natural light and optimized acoustic comfort.
- Implementing mitigation strategies in response to climate change and the Urban Heat Island Effect.
- Use of WSUD principles to mitigate impacts on local waterways and infrastructure.
- Site-wide greening, prioritizing a diverse range of native and resilient planting.

\*Refer to ESD Report prepared by LCI Consultants for further initiatives



Summary of ESD Initiatives

- 1 Refined tower form, providing legible articulation in order to maximise solar access and cross ventilation to apartments
- 2 High performance facade systems provide shading whilst consideration of window to wall ratio reduces solar gain
- 3 Communal outdoor areas providing connection to nature and to Country
- 4 Water efficiency provided; rainwater harvesting tank serving irrigation. Use of efficient fixtures & appliances to minimise water consumption
- 5 Substation sized to cater for a fully electric building to allow for operational net zero
- 6 Proximity to Metro station & provision of high quality end of trip facilities on Basement 1 and bicycle parking to encourage active transport

### 3.3 Project Vision Response

#### Boosting Housing



#### Better for Community

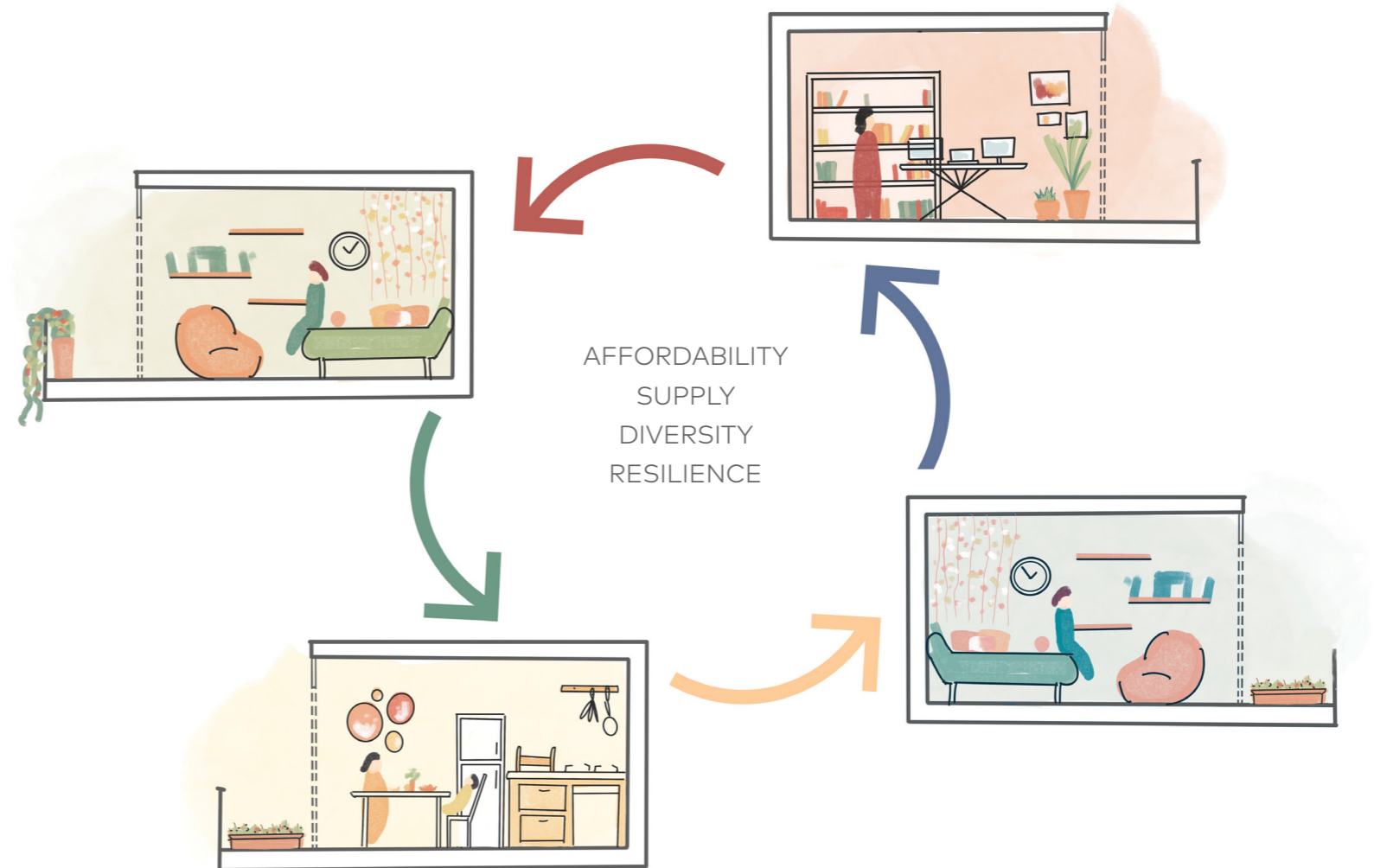
Inclusive, connected and diverse

The NSW Government recognises the need to build more homes for our growing population and boost housing supply.

Residential amenity considerations align with the design quality standards outlined in Chapter 4 of the Housing SEPP. These standards ensure that the proposed dwellings adhere to appropriate room dimensions, access to sunlight, natural ventilation, scenic views, visual and acoustic privacy, storage provisions, indoor and outdoor spaces, layout efficiency, and accessibility catering to all age groups and mobility levels.

This project encompasses a mix of dwelling types including adaptable, 1 bed, 2 bed, 3 bed, and penthouses. Residents are offered communal amenity on Level 4. There are private pockets for intimate and personal use, active spaces for well-being and recreation, as well as dining opportunities for larger group settings.

The proposed development aligns with the housing pillars set in the Housing 2041 framework in order to satisfy the changes in trend for home ownership.



NSW Housing Pillars

### 3.3 Project Vision Response

#### A Public Realm



#### Better for People

Safe, comfortable and liveable

The public activation of the ground plane along Atchison St and Mitchell St creates a range of mixed offerings to the community that compliments the existing open public space of the Mitchell St Plaza and the existing retail and commercial offerings in the immediate area. The main frontage along Atchison St offers residential and commercial lobby entrances to the site as well as a public commercial premises activating the south western corner, meanwhile vehicle access to the site is provided on the quieter Atchison Lane.

While the Mitchell St link provides green space for the community, the level 4 communal open space provides a more intimate outdoor space for the use of the buildings residents only. The planting to the podium edges benefits both the L4 communal space and street, the planting is designed to spill over the edge of the podium, softening the architecture and providing views of greenery to the surrounding public streets. This thoughtfully designed space offer diverse opportunities for engagement and relaxation, ranging from private seating nooks and wellness zones to activated play areas for children.

The design prioritises the activation of the ground plane through the use of both public open space and commercial premises offerings that draw both residents and the wider community into the site.



Ground Plane Diagram

- COMMUNAL GREEN SPACES
- GREEN LINK CONNECTION
- COMMERCIAL
- ATCHISON LANE ACTIVATION
- INCREASED VEGETATION

### 3.3 Project Vision Response

Curated for Purpose



#### Better Working

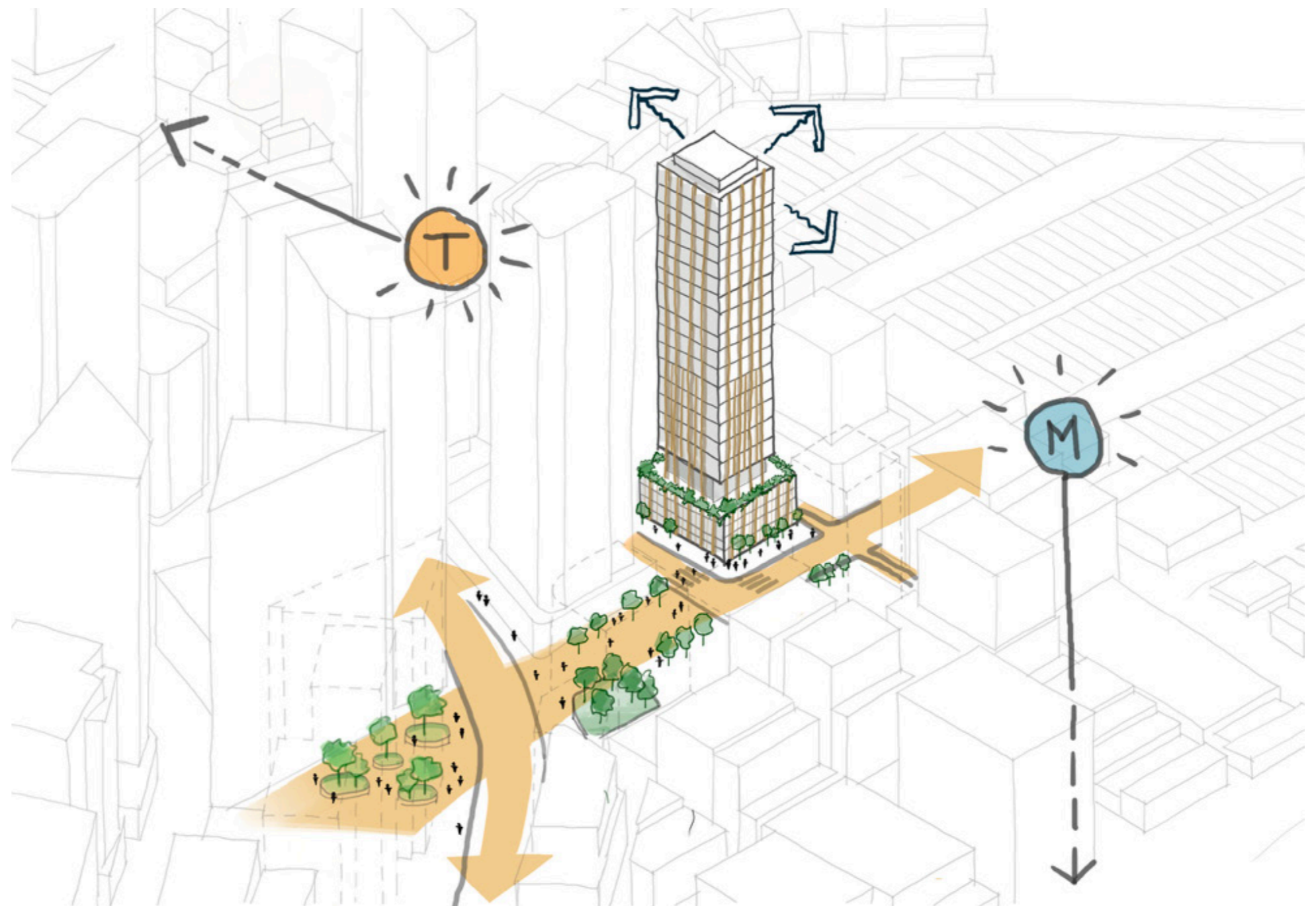
Functional, efficient and fit for purpose

The design embodies a tailored response to the demand for high quality housing in St Leonards, showcasing its capacity to adapt to diverse housing needs. In addition to its residential offerings, the proposal introduces commercial spaces at podium levels, fostering local economic opportunities and enlivening the public realm.

By identifying and addressing gaps in the existing cultural and economic infrastructure of the area, this development aims to provide a rich array of programs and amenities that cater to a wide spectrum of users, ensuring accessibility. Prioritizing efficiency and usability, the design ensures resilience and adaptability to the evolving needs of the community over time.

Level 4 provides residential communal open space. There is an array of outdoor seating and cooking facilities, providing a great gathering point, and encouraging interaction. Planters create a buffer to the collective outdoor zones. This level becomes the principle space for solar access to the tower.

Ultimately, by creating a building that caters to both current and future demographics, it stands to become a lasting asset, serving as a valuable and well-utilized space for years to come.



MIXED USE  
PRECINCT

GROUND  
FLOOR  
ACTIVATION

COMMUNAL  
GREEN  
AMENITIES

SUSTAINABLE  
DESIGN

INCLUSIVE  
LIVING &  
CONNECTION

# 3.3 Project Vision Response

## Future-Proofing

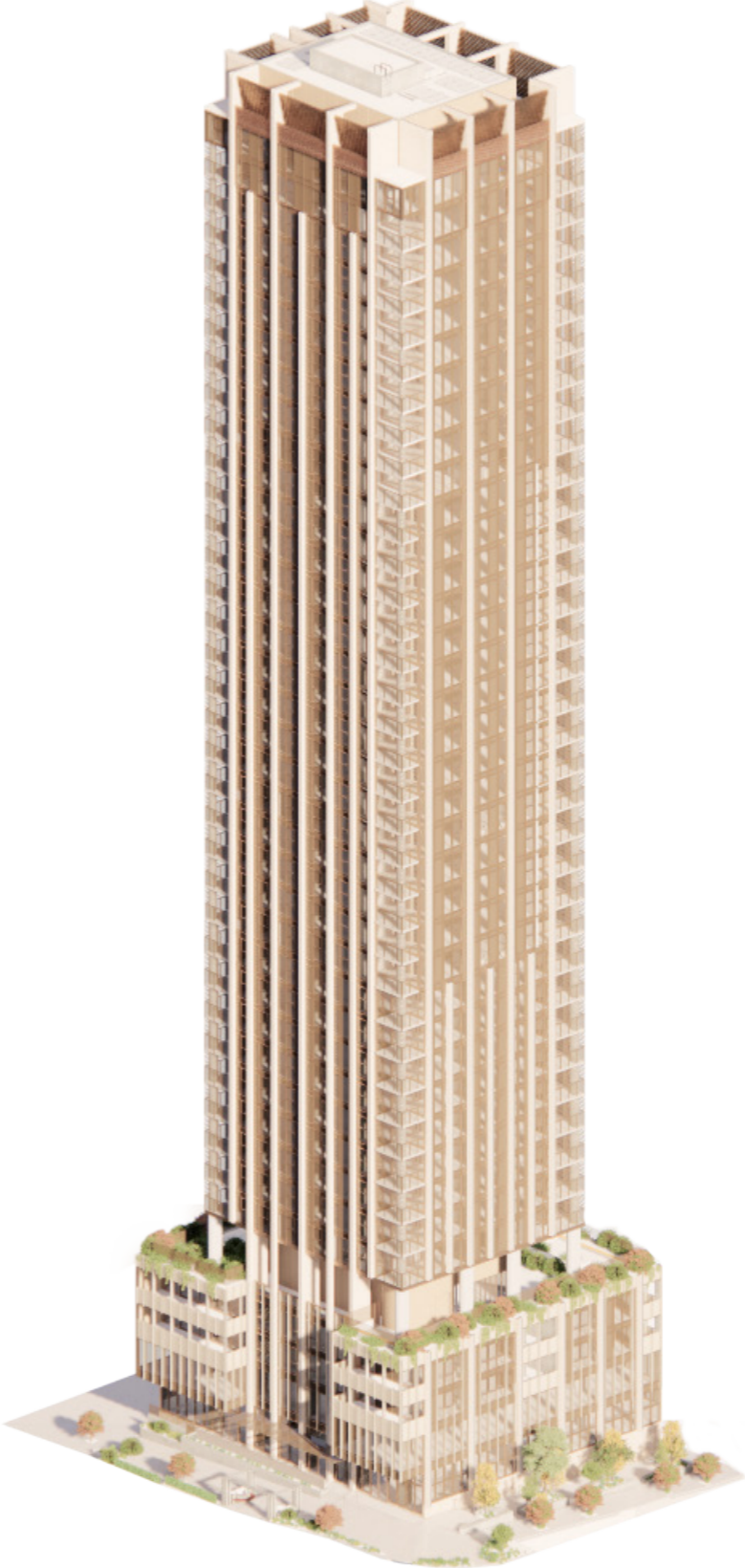


## Better Value

### Creating and adding value

The incorporation of a diverse range of building uses within the design scheme offers a strategic advantage in fostering future stability. By blending distinct tenures - market housing, affordable housing and mixed-use commercial spaces at podium levels - the project not only enriches the urban landscape but also fortifies St Leonards economic resilience.

This multifaceted approach ensures that the development remains adaptable to varying market conditions, thereby safeguarding against potential downturns and strengthening long-term economic sustainability.



Building Axonometric Diagram

## 3.3 Project Vision Response

Magnetic Arrival



### Better Look and Feel

**Engaging, inviting and attractive**

To foster a positive engagement with the contextual surroundings, the project demonstrates the capacity for an activated domain at the ground plane, which serves as an invitation to the public as various entries to the building. This design strategy contributes to the overall quality of public domain in the surrounding area by creating a strong sense of place through clearly defined entries identified in the architecture by the use of a reverse setback to Atchison Street, which provides protection to the entrances to the commercial spaces. A cut out to this setback creates a grand gesture that highlights the main residential building entrance, protected with a glass awning. This differentiation in approach clearly defines the residential entrance from those of the commercial spaces as it is visually connected to the residential tower above. This architectural move provides intrinsic wayfinding and provides a strong identity to the proposals residential offering. The vertical expression of the tower and podium is lightened on the ground floor, communicating an open and permeable facade.

The commercial premises offerings that activate both the north east and south west corners of the site demonstrate how the proposal activates it's multiple street frontages, allowing engagement with the community across multiple offerings.

This public offering is a fundamental element in creating a magnetic arrival that encourages social interaction and community engagement.



Entry Perspective

C O X

04

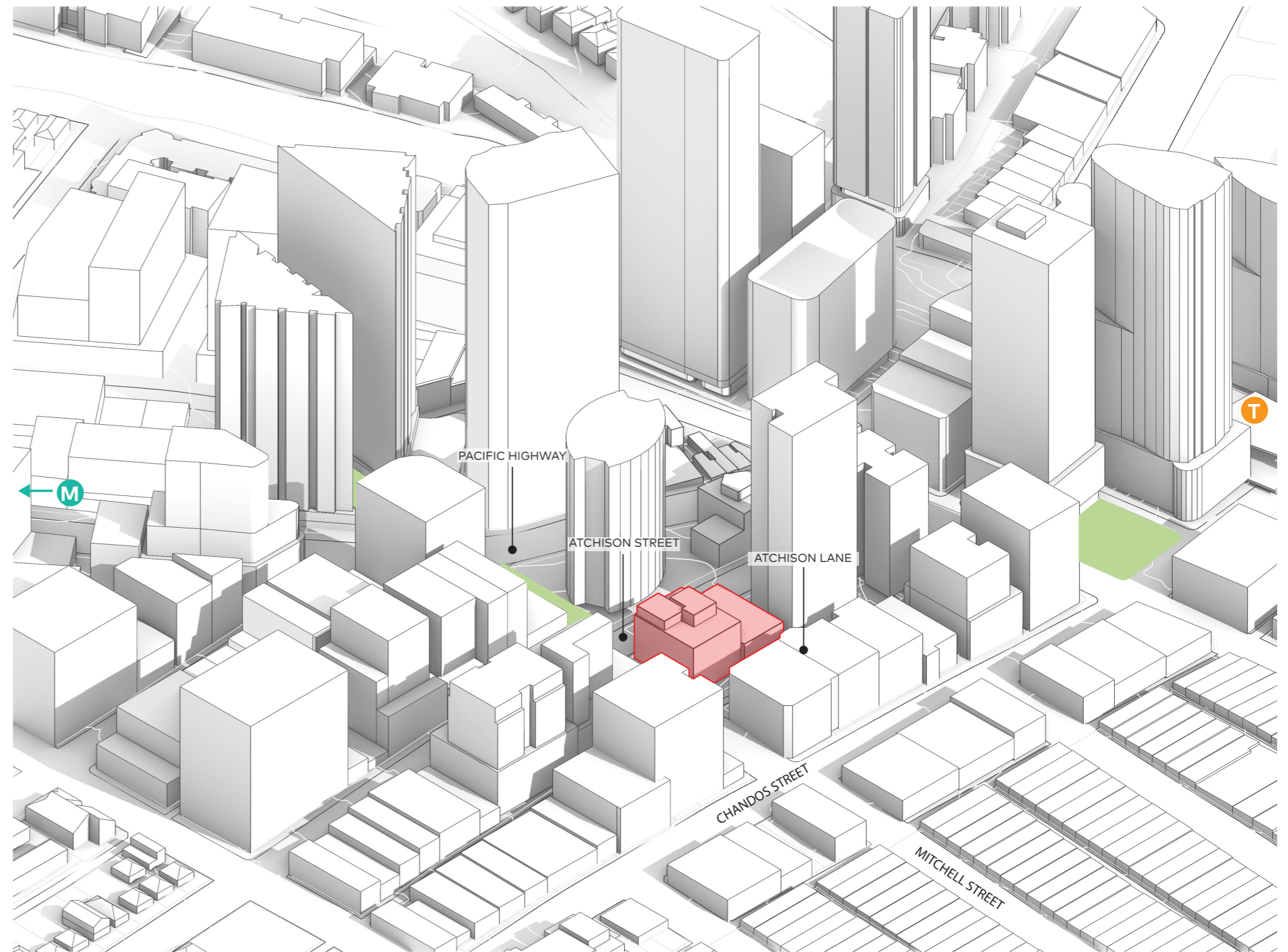
Site and Context

## 4.1 Existing Condition

St Leonards existing condition is a mix of low, medium and high rise buildings, consisting of a mix of older homes on the southern side of Pacific Highway, as well as mid rise a high rise residential and commercial buildings concentrated along and to the north of Pacific Highway. The approved TOD controls prescribes higher density and taller building developments along this Pacific Highway corridor, spanning between the St Leonards train station and Crows Nest Metro station locations.

This increase in density aligns with the site's proposal, with setbacks and heights in alignment with the TOD controls and in keeping with the aspirations for the area.

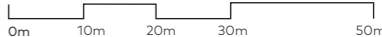
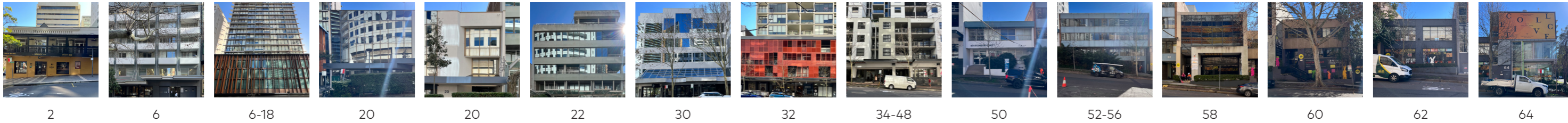
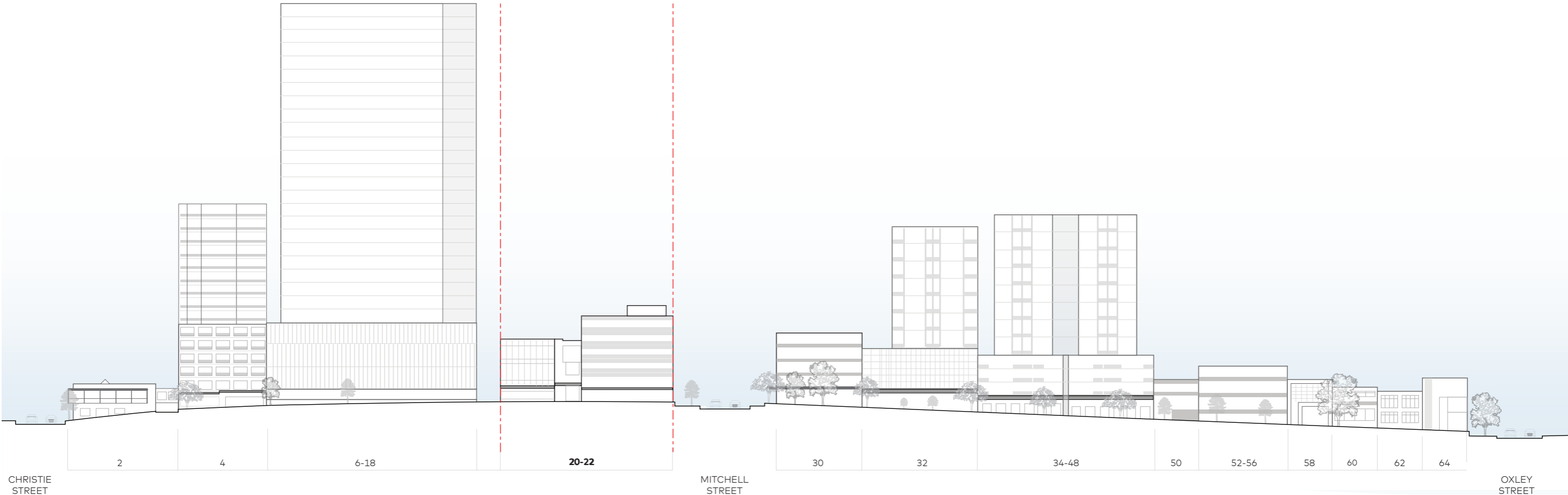
Pacific Highway is one of Sydney's key north-south routes. It is a significant arterial road that connects multiple suburbs while also acting as a feature of commercial, retail and residential activity.



Existing Site Condition

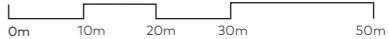
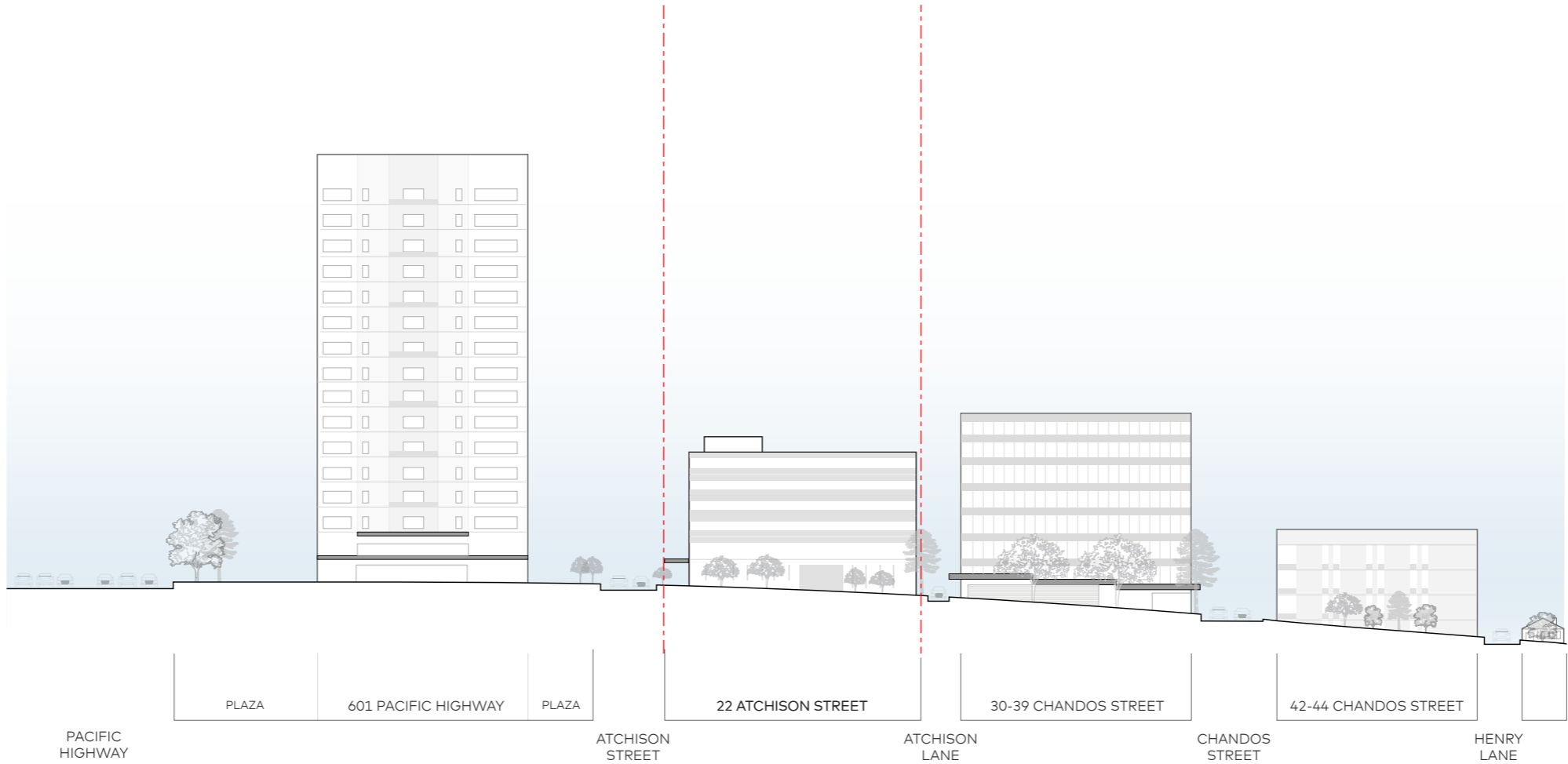
# 4.1 Existing Condition

## Atchison Street Section



# 4.1 Existing Condition

## Mitchell Street Section



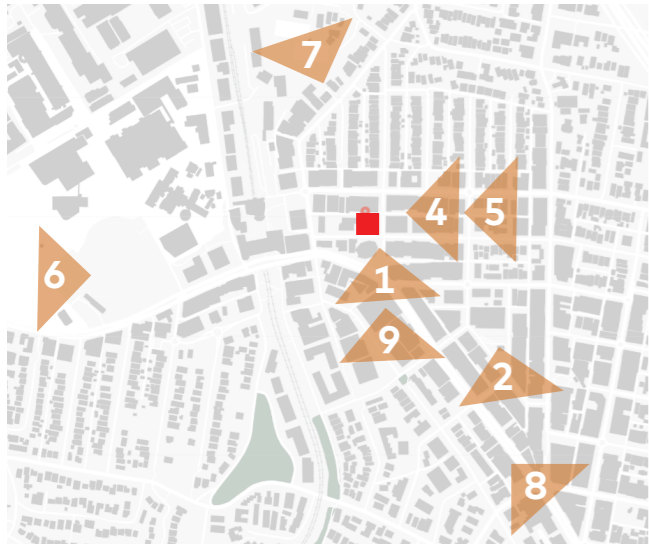
# 4.2 Street Impact Analysis

A Visual Impact Assessment (VIA) of the site was conducted. Overall, the analysis of the visual impacts concluded that the proposal will result in a low to moderate rating.

- 1 - View from Mitchell Street Plaza
- 2 - View from Hume Street Park
- 3 - View from St Thomas Rest Park
- 4 - View from 34 Atchison Street
- 5 - View from 66 Atchison Street
- 6 - View from Gore Hill Oval
- 7 - View from Naremburn Tennis Courts
- 8 - View from 452 Pacific Highway
- 9 - View from St Leonards Square



Key Plan



## 4.3 Street View Analysis

Generous public domain offerings surround our site, featuring spaces for recreation, rest and interaction. This development is set to be a direct extension of the Mitchell Street Plaza, providing additional zones of amenity to the St Leonards neighbourhood.

1 - View of Mitchell Street Plaza

2 - View of Mitchell Street Plaza

3 - View of Mitchell Street Plaza

4 - View of Existing Forecourt

5 - View of the Forum Plaza

6 - View of the Forum Plaza

7 - View of St Leonards Square Plaza

8 - View of St Leonards Square Plaza

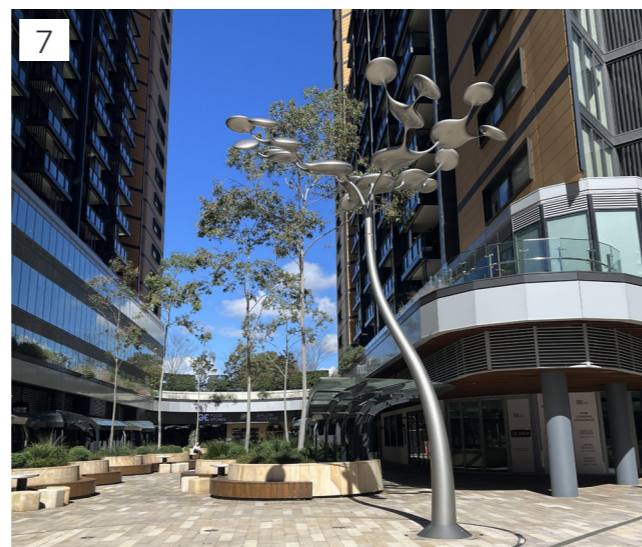
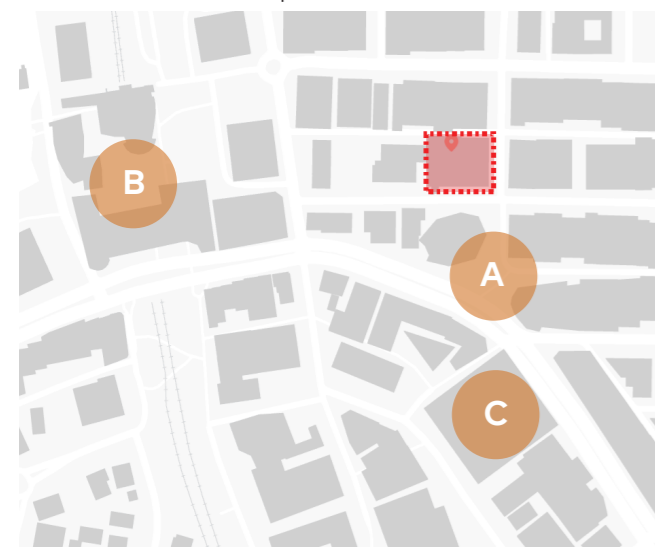
9 - View of St Leonards Square Plaza

Key Plan

A - Mitchell St Plaza

B - Forum Plaza

C - St Leonards Square Plaza



## 4.4 Precinct Connection

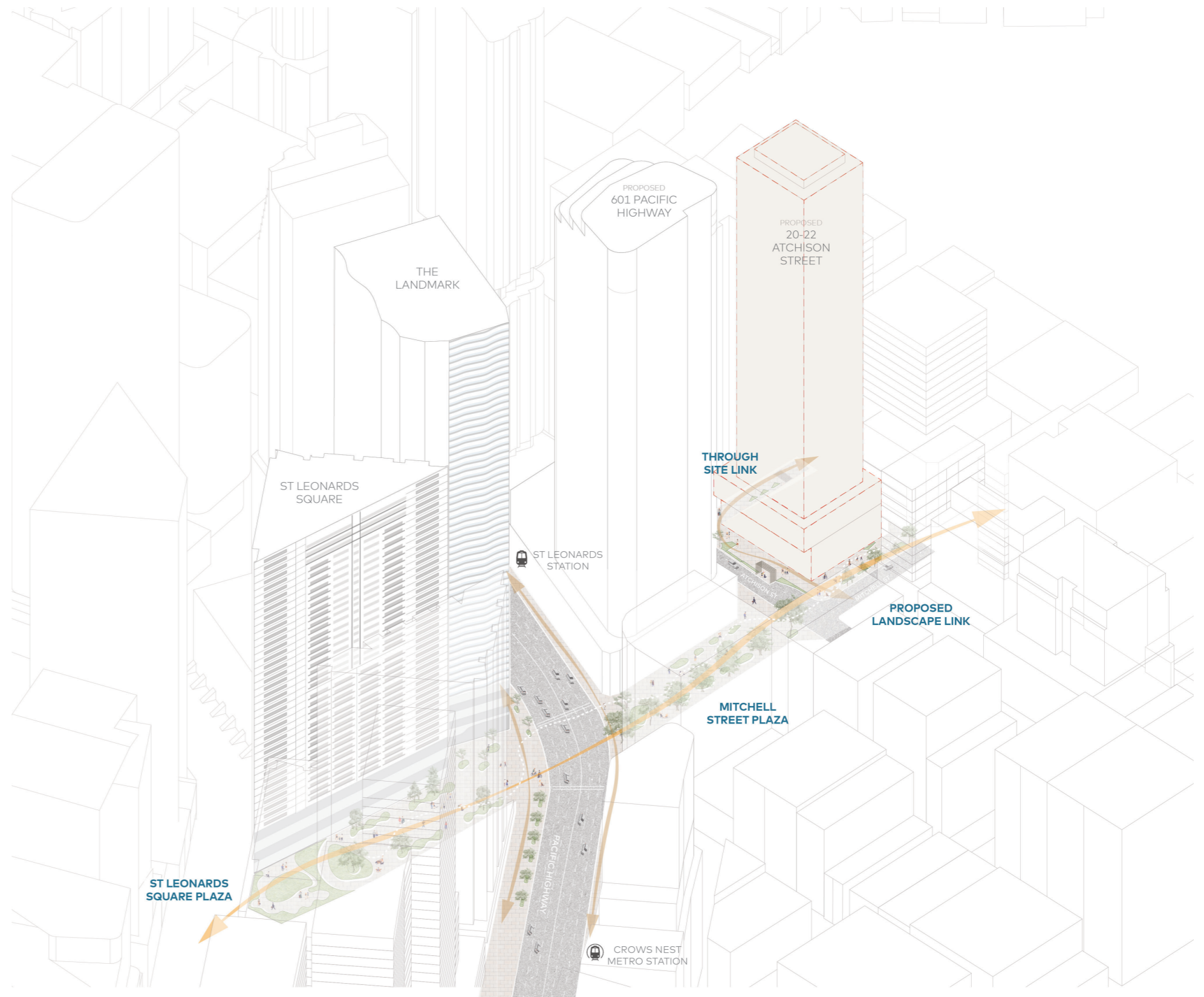
### Pedestrian Experience

The increased 5m setback along Mitchell Street provides an open landscaped ground floor offering, the design of which clearly links it to the existing Mitchell St Plaza, increasing the visual and physical amenity to Mitchell Street. This landscaped setback provides space for planting, and incidental seating that encourages the community to enter the site boundary, congregate and connect with each other and the vegetation.

This green space is designed to be accessible to all, with direct accessible access from Mitchell St into the various tiered gathering zones. This spaces draws people north from the pacific highway, further into St Leonards, and well as creating a strong pedestrian link back towards Pacific Highway and its transport and commercial offerings.

The pedestrian experience is also improved along Atchison Street, with a landscaped edge to the public footpath and a setback providing protection to the building entrances and spill out seating zone for the commercial premises.

The proposal looks at improving the pedestrian experience along Atchison Lane by introducing a landscaped verge and improved path way experience, aiming to increase foot traffic along the Laneway towards the existing through-site link.



Pedestrian Journey

## 4.5 Contextual Analysis

### Site and Context Analysis

St Leonards evolution into a mixed use precinct is evidenced by the ground plane uses that are becoming increasingly diverse, featuring a blend of residential, retail, commercial, and community spaces. The changing nature of the precinct has created an opportunity for the development of more vibrant, pedestrian-friendly streetscapes, with a focus on creating spaces that are welcoming and accessible to all.

As the area continues to evolve, it is anticipated that it will become a more dynamic and cohesive community, with a mix of uses that support the current and future demographic of St Leonards. Our proposed building will create connections between the lower density residential areas and the bustling mixed use precinct surrounding the Pacific Highway area.

The existing 1:14 steep topography along Mitchell St will be addressed with terraced landscape gathering spaces that increase the sites permeability and offering to the public.

Refer to the TOD Design Guide and TOD Precinct Controls Reports by SJB for more in-depth information.

#### Legend

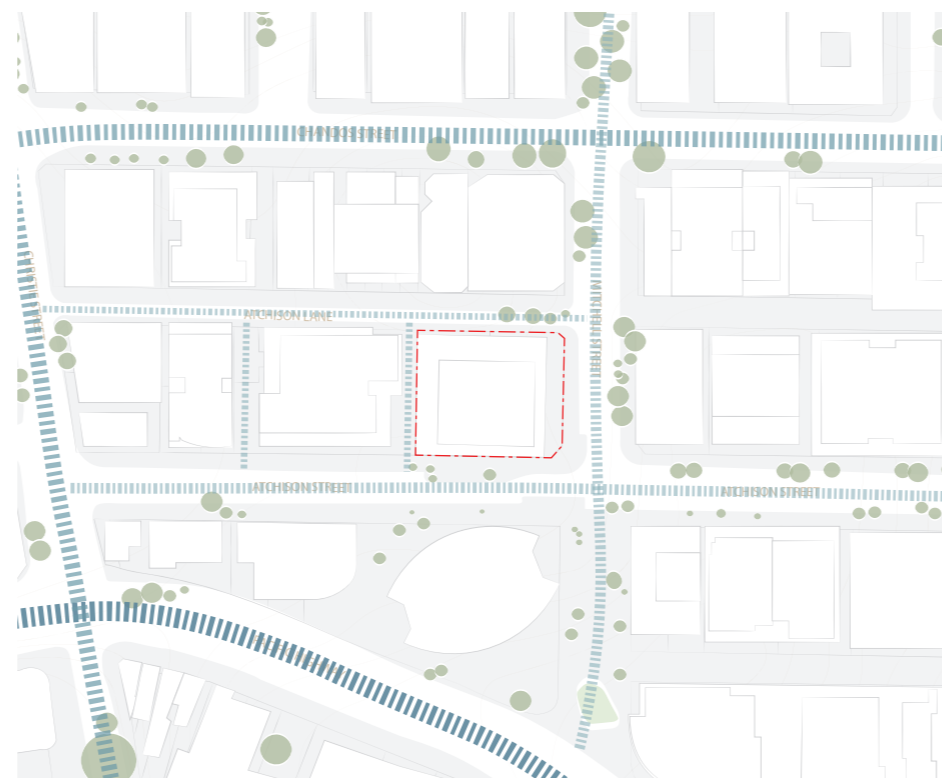
- ▬ Site Boundary
- Residential
- Commercial
- ▬▬▬▬ Public Interface
- ▬▬▬▬▬▬ High Density Movement
- ▬▬▬▬▬▬▬▬ Medium Density Movement
- ▬▬▬▬▬▬▬▬▬▬▬▬ Low Density Movement



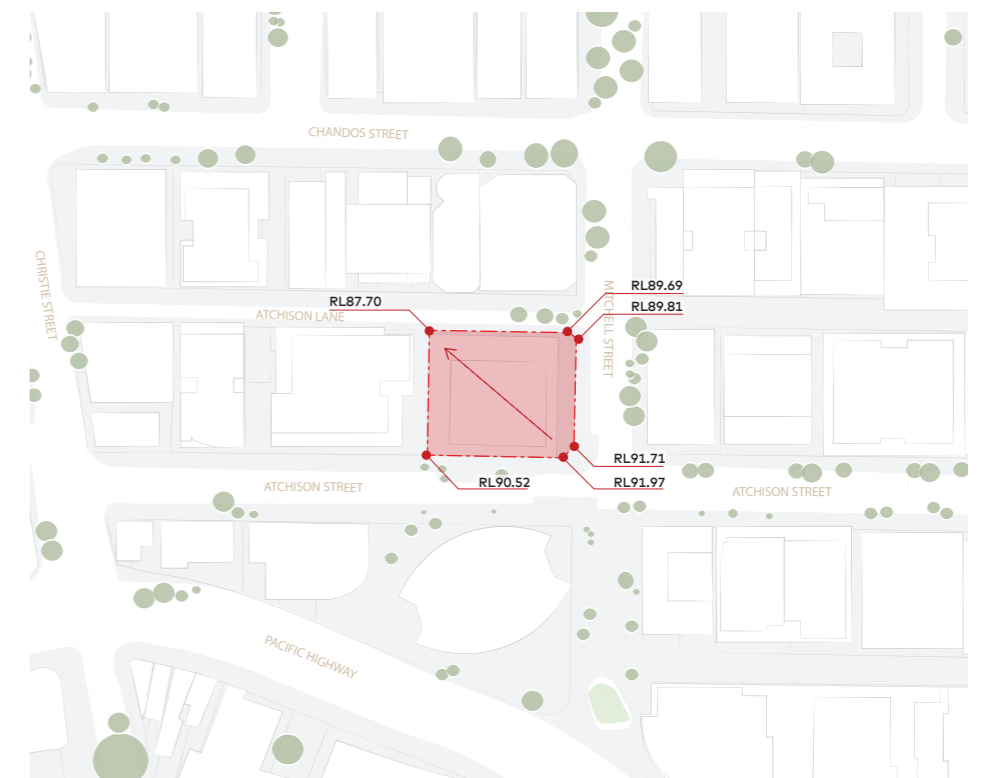
Building Uses



Active Frontages



Precinct Circulation



Topography

## 4.6 Site Analysis

### Ground Plane

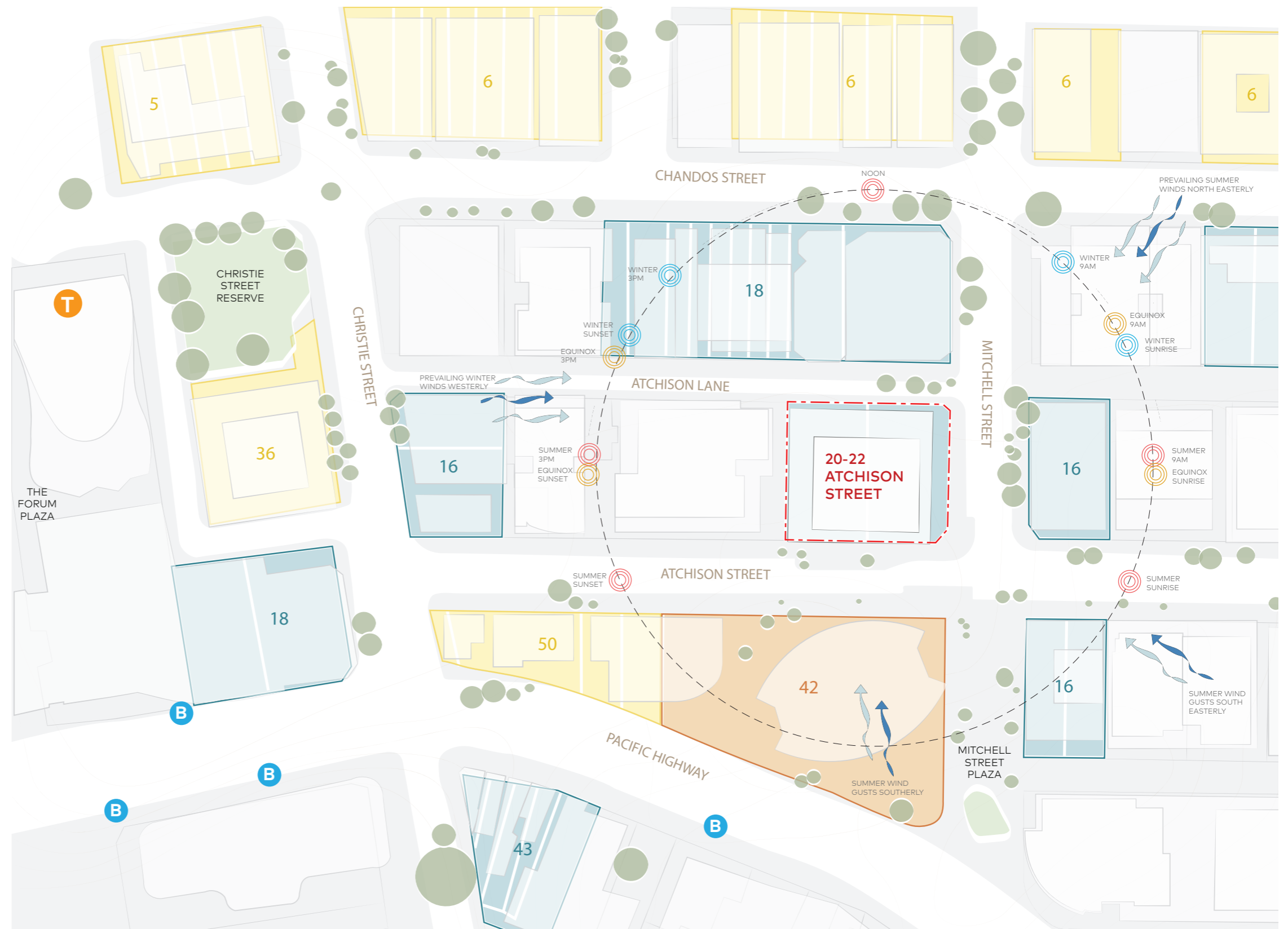
The ground plane of the site proposed to add to the existing green street scape and closely accessible public spaces of the Mitchell Street Plaza, and the Christie Street Reserve. The proposal is in line with the North Sydney councils desire to widen the setbacks on Mitchell Street and increase planting to create a green link corridor that connects Chandos St through to Pacific Highway.

The proposed pedestrian entrances directly respond to the widened footpath and green offerings along Atchison Street, creating strong pedestrian pathways that encourage foot traffic and the utilisation of near by public transport offerings.

Refer to the TOD Design Guide and TOD Precinct Controls Reports by SJB for more in-depth information.

### Legend

- Site Boundary
- T St Leonards Station
- B Bus Stop
- Rezoned Sites
- Subject to Active Rezoning/  
Planning Proposals
- Subject to Rezoning -  
Anticipated Change
- XX No. of Storeys



Site Plan



C O X

**05**

Urban Design Response

## 5.1 Urban Design Principles

### 1. Welcoming, Attractive and Accessible for All

The project prioritises working with the existing topography while providing dynamic and interesting spaces that can be experienced by all. The 3 main entrances to the building are provided an accessible path of travel from the highly visible corner of Atchison and Mitchell Streets. As we move down Mitchell St, the steep existing topography is terraced to provide gathering spaces, accessed by compliant ramp to the existing Mitchell St foot path.

### 2. Solar Amenity

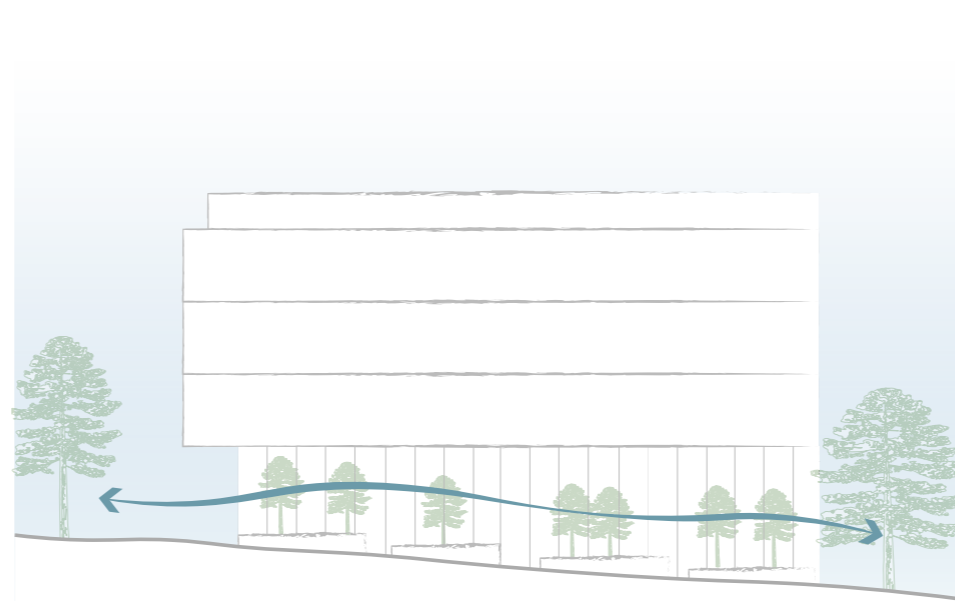
The site is orientated towards north, providing nearly uninterrupted solar access on the east and north façades and north-west corner of the building. While the south and south-east areas of the building provide views back towards Sydney City and the Harbour, the uninterrupted northern solar access and district views become a key driving factor when designing the apartments and communal open space within the proposal.

### 3. Permeability and Connectivity

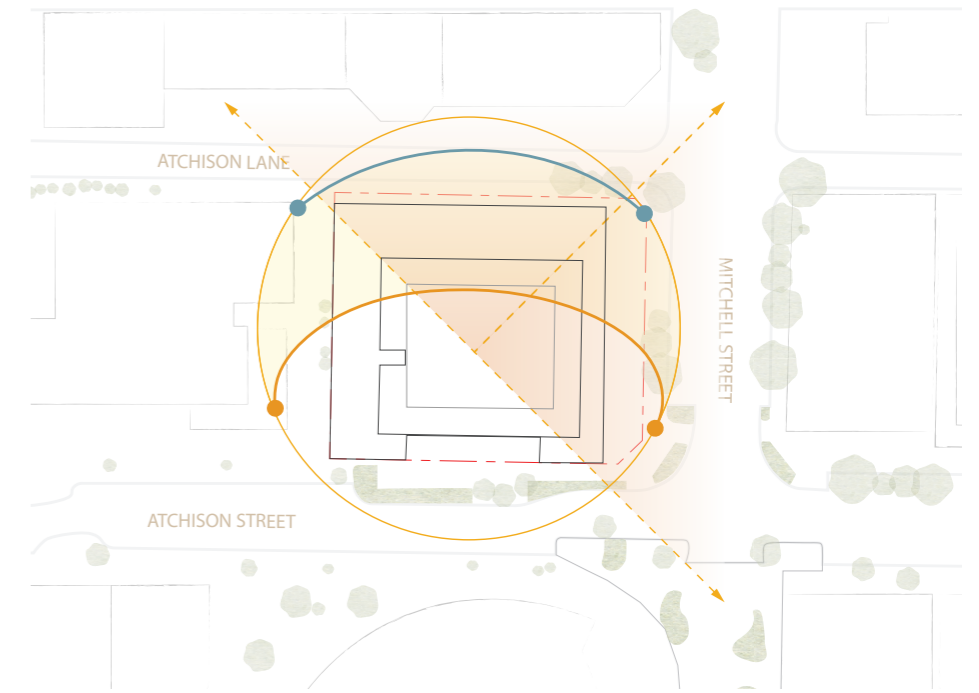
The site is adjoined by roads to the north, east and south façades with existing pedestrian walkways following the site boundaries. The western façade adjoins a pedestrian through-site link that sits within the boundary of 6-16 Atchison Street. These existing conditions provide opportunity for a highly permeable site that is strongly connected to its surrounding public access ways.

### 4. Carving out Public Offering

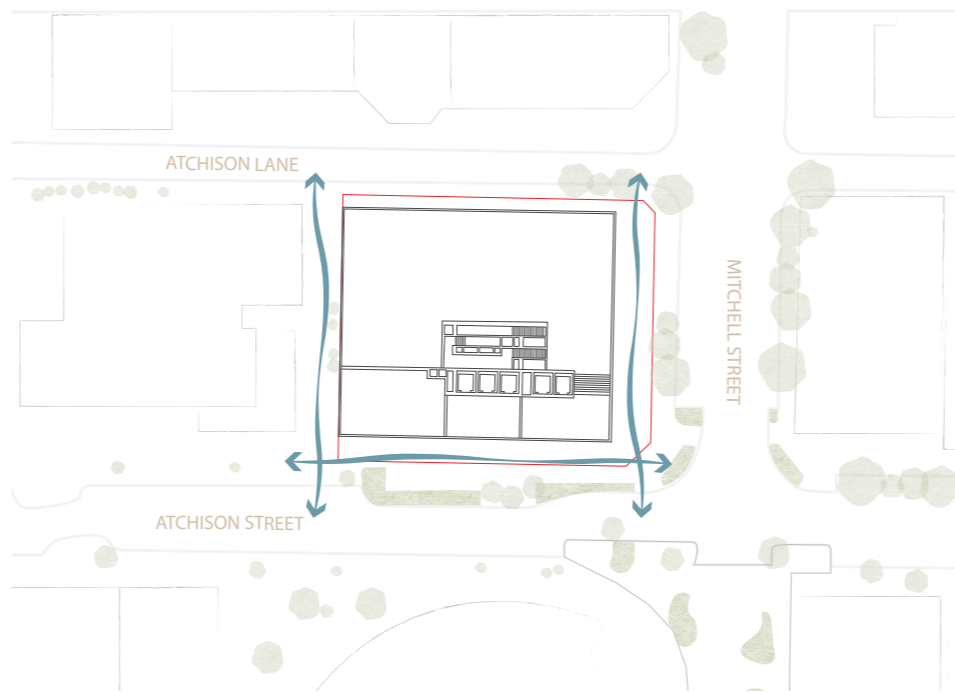
To further connect the site with the surrounding public realm, a 5m setback has been introduced along the Mitchell St boundary, as per the TOD setback requirements. Within this setback an extension of the Mitchell St Plaza is proposed, which provides space for residents and the wider public to gather. In addition to this the project focuses on activating the NE and SW corners with commercial offerings for the public.



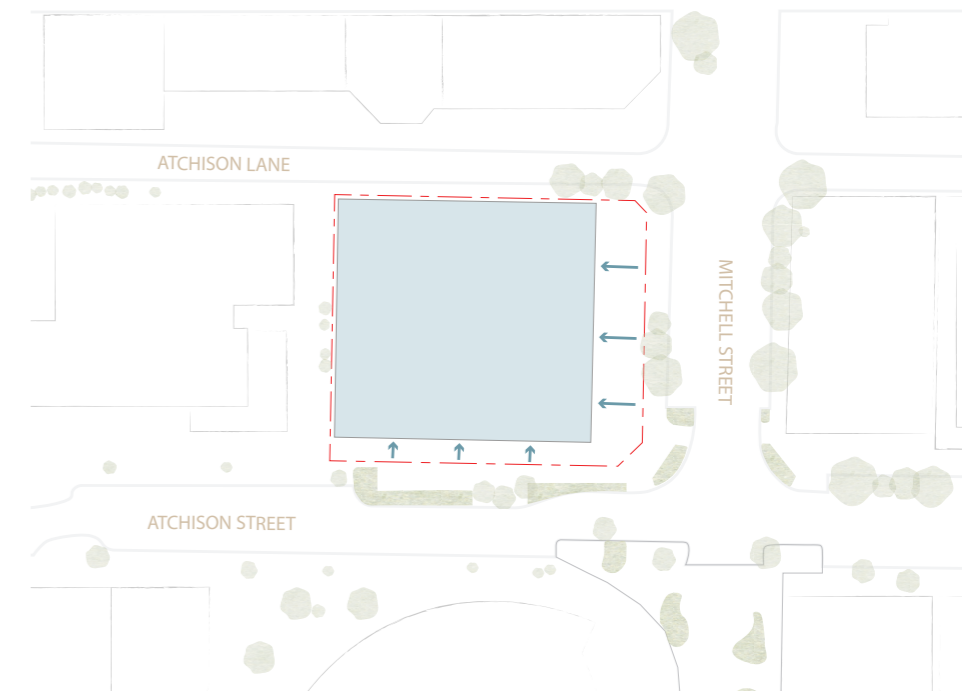
Welcoming, Attractive, and Accessible for All



Solar Amenity



Permeability and Connectivity



Carving Out Public Offering

## 5.1 Urban Design Principles

### 1. Street Activation

The highly visible corners of the site have been activated through commercial offerings that connect with the street. The architecture and design of the façade demonstrates this by providing high visibility into these spaces.

### 2. Facade Articulation

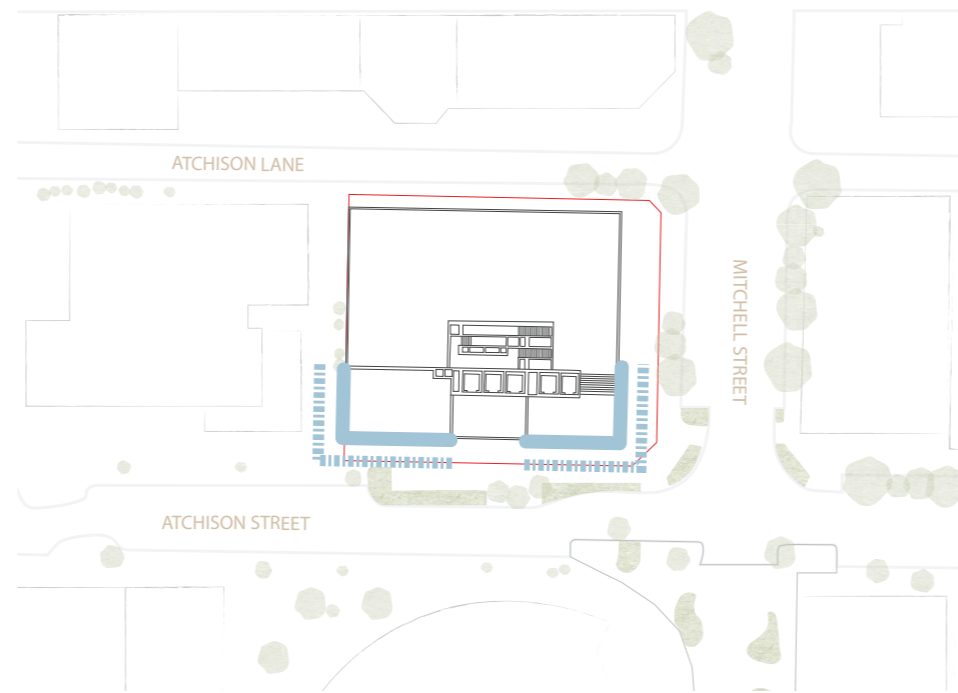
Due to the compact nature of the site, the façade typically follows straight setback lines in order to maximise the use of the floor plate. However, the façade is articulated through a large void cut out of the podium to highlight the entrance to the building, particularly to provide a grand arrival experience for the residential lobby. This move clearly defines and identifies the entry points of the building and visually connects the residential entry to the residential tower above.

### 3. Aligning amenity and usage of space

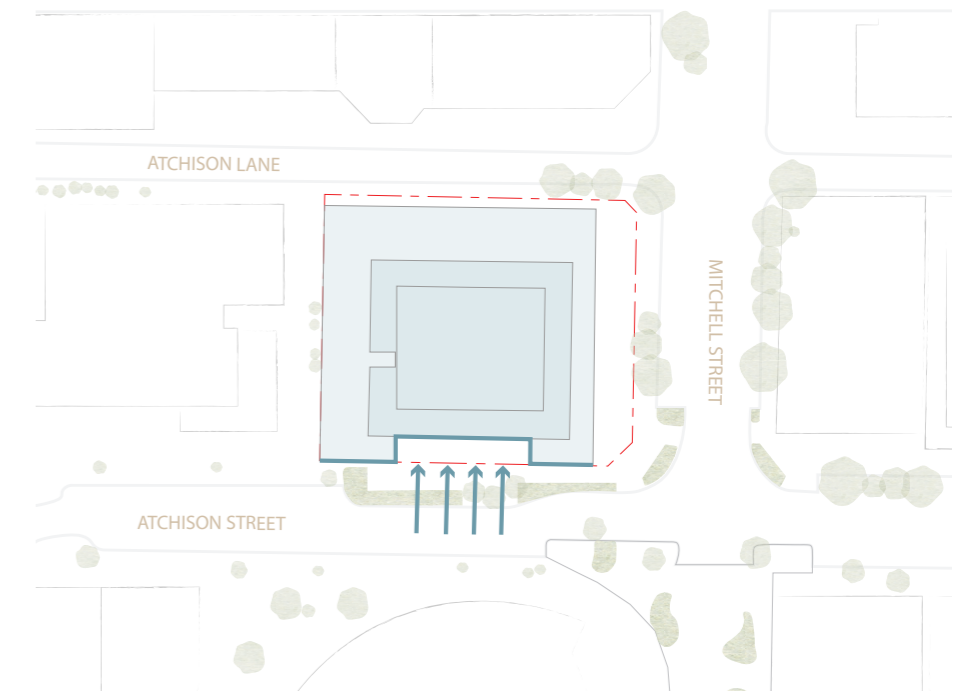
Spaces that are quickly moved through such as lobbies are positioned on the southern side of the building, while the large commercial space that may hold both workers and visitors is positioned to the north to make the most of the solar amenity. The corners of the site benefit from improved solar and visibility and house the public facing space offerings.

### 4. Pedestrian vs Vehicular Entries

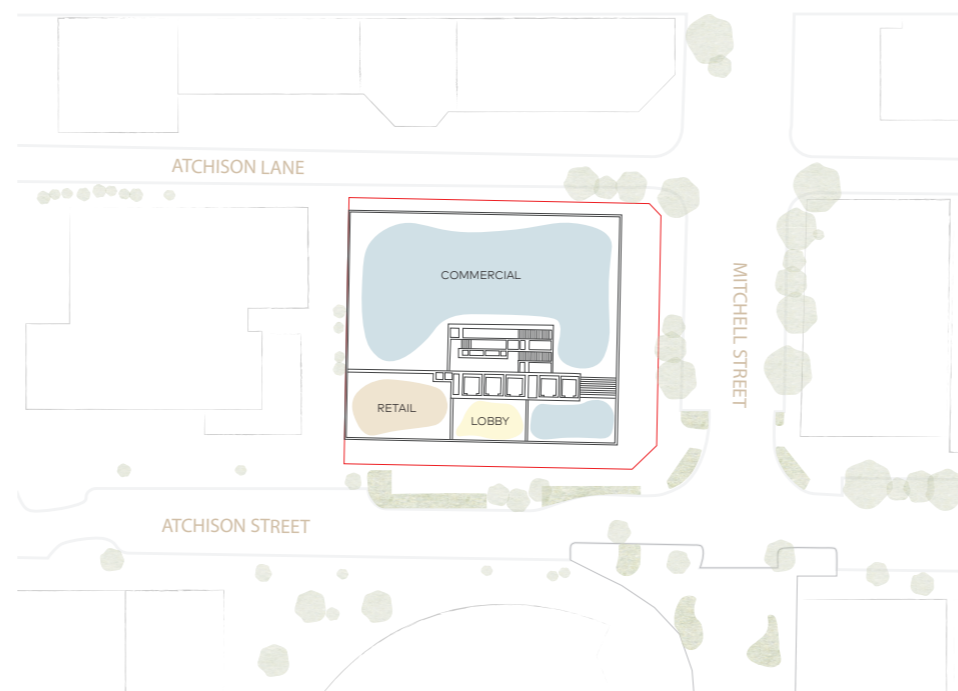
The pedestrian entries located along Atchison Street are located alongside highly active foot traffic routes from the St Leonards Train Station, and through the Mitchell Street Plaza onto Pacific Highway and the Crows Nest Metro Station. The vehicle entry also acts as the service entry, and is located on the quieter Atchison Lane.



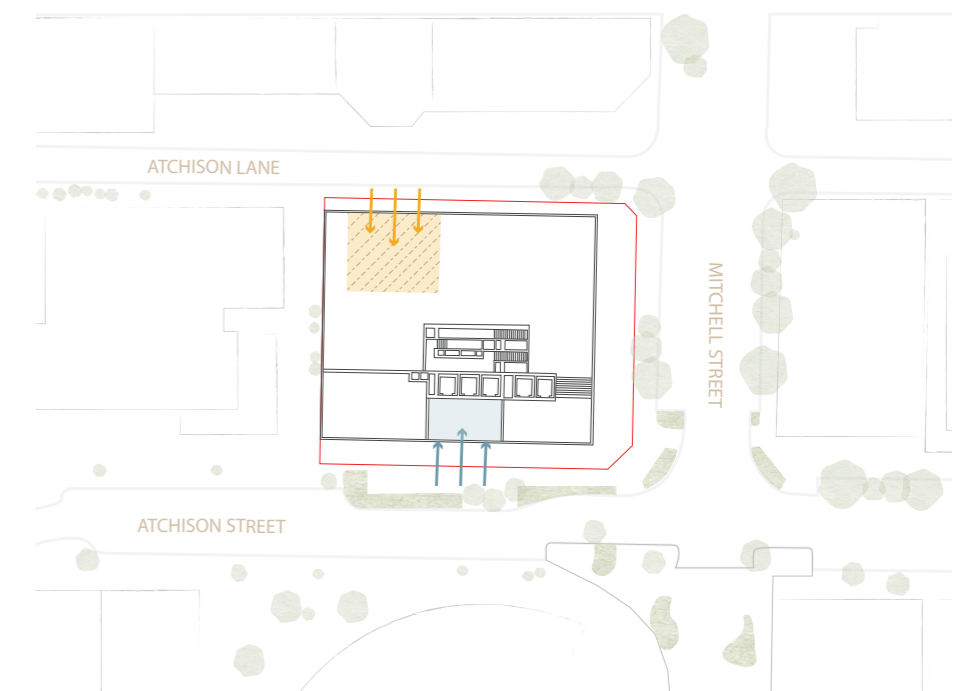
Street Activation



Facade Articulation

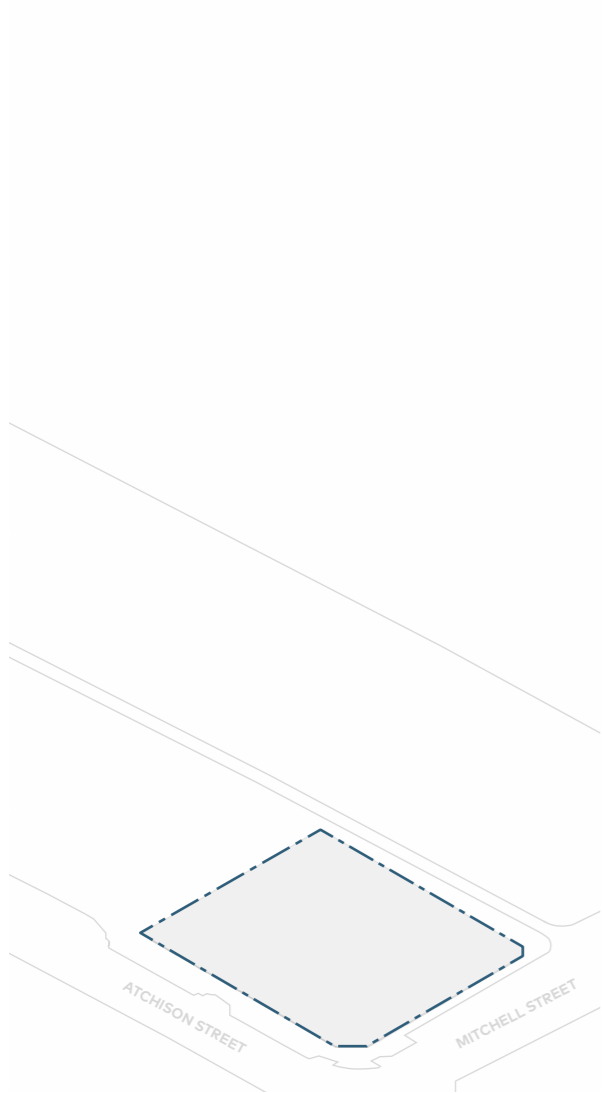


Aligning amenity and usage of space

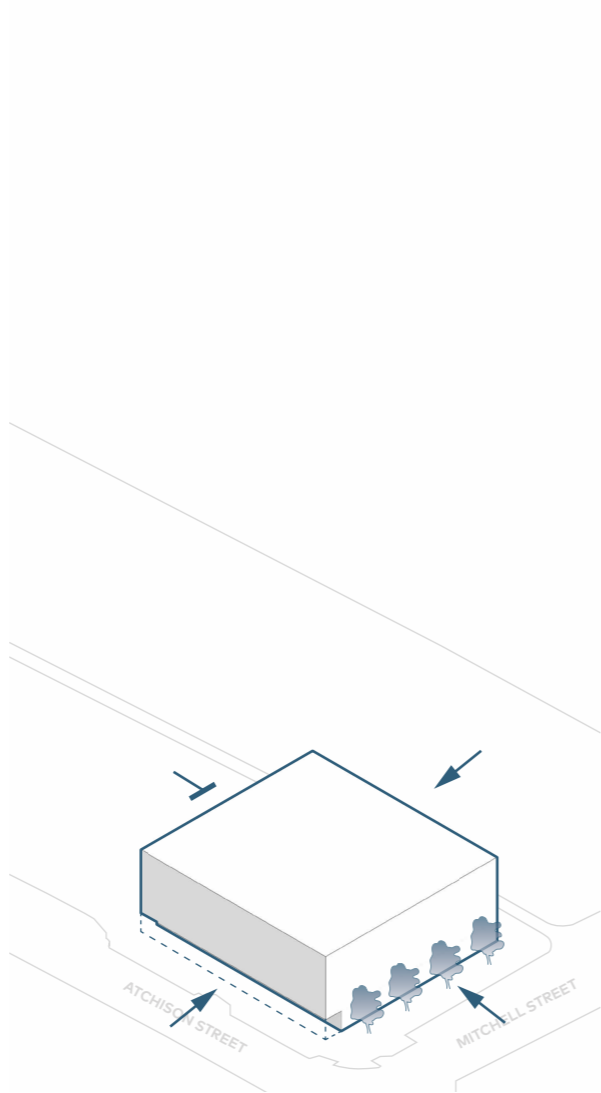


Pedestrian vs Vehicular Entries

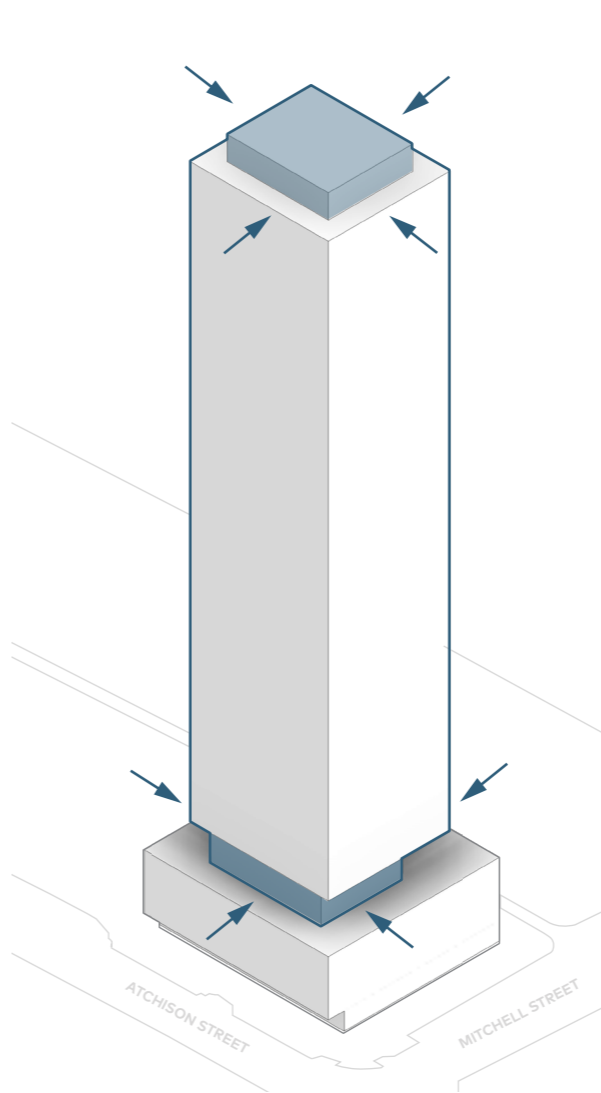
# 5.2 Massing Development



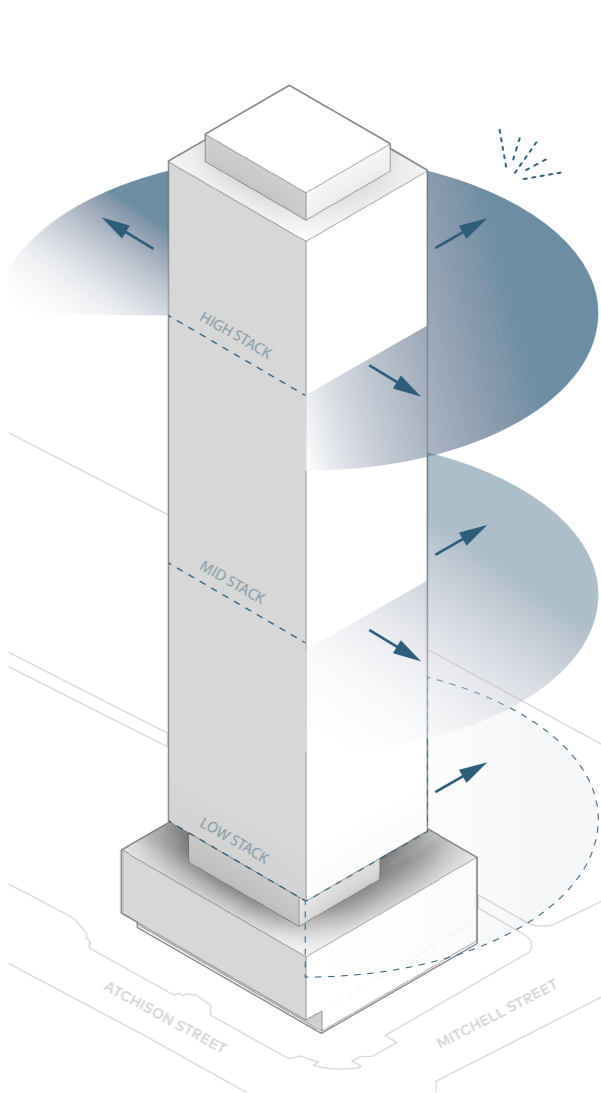
**Site**  
 The subject site at 20-22 Atchison Street is 40.24 metres wide by 34.29 metres long



**Podium**  
 Podium Height: 108.5 AHD (19m)  
 North - 1.5m  
 East - 5m  
 South - Reverse setback 3m  
 West - 0m



**Tower**  
 Tower Height: 229.3 AHD  
 North - 8.2m  
 East - 8m  
 South - 3m  
 West - 6m



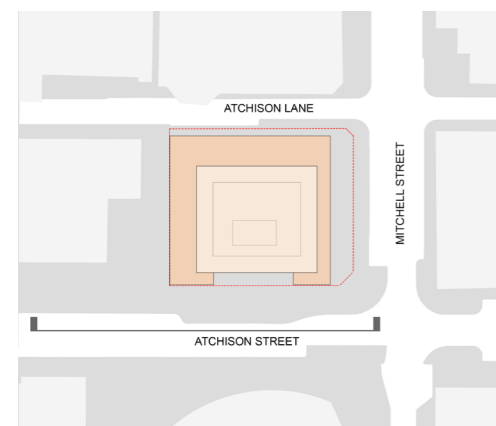
**Views**  
 Site views and vistas on the North and East orientations include visibility to Sydney's Lower North Shore of Northern Sydney.

## 5.3 Addressing the Street

### Atchison Street

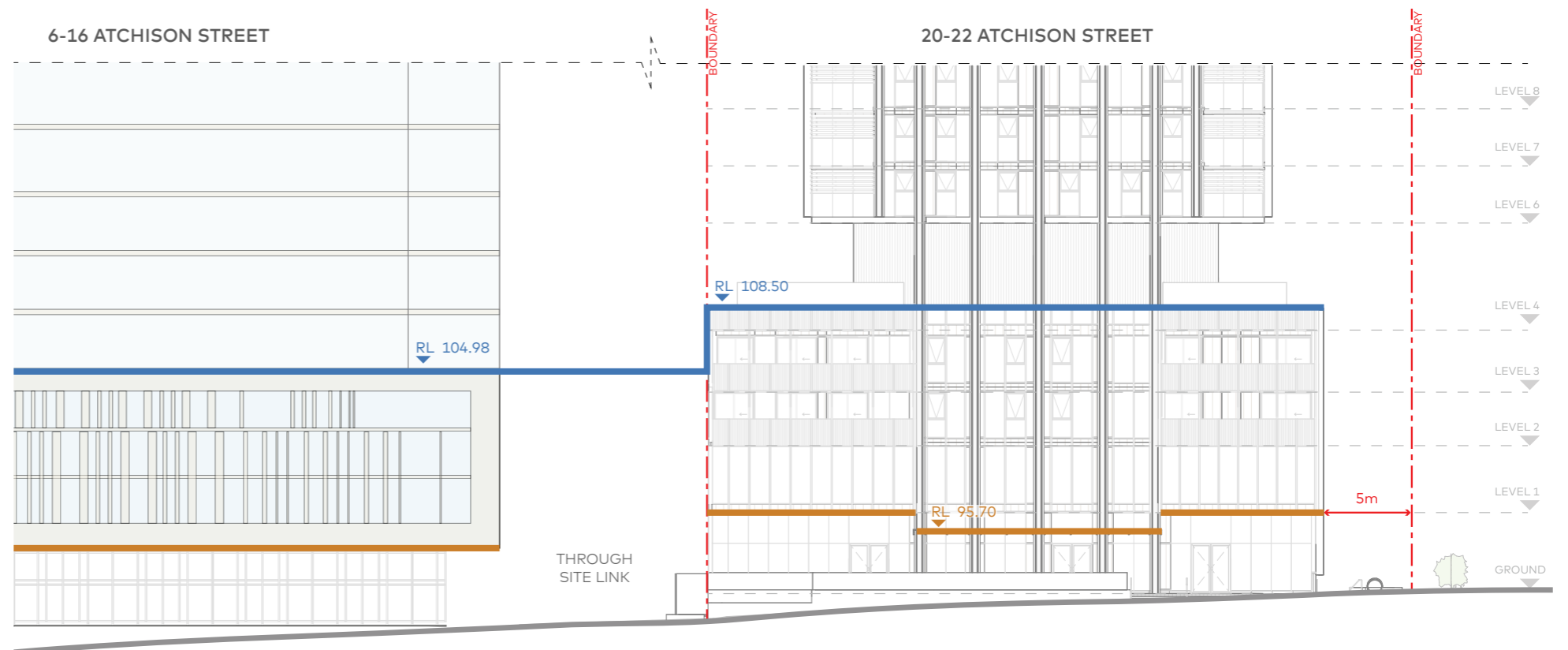
The proposed podium creates a 4-storey high street wall along Atchison St as outlined in the Crows Nest Design Guide, and adapted into the TOD program controls. As street wall heights were guided by existing developments, the relationship to the neighbouring building at 6-16 Atchison St is shown in the below elevation, due to the sloping nature of Atchison St, the consistent 4-storey height creates a stepped street wall.

The proposed podium zero lot setback matches that of 6-16 Atchison St in order to create a cohesive streetscape, with a ground floor reverse setback, shown in orange, continuing the language of the established street wall. This continuity reinforces the cohesive integration of the design with its surroundings.



#### Legend

- Street Wall Datum
- Awning/ Under-croft
- TOD Uplift Zone



Atchison Street Elevation

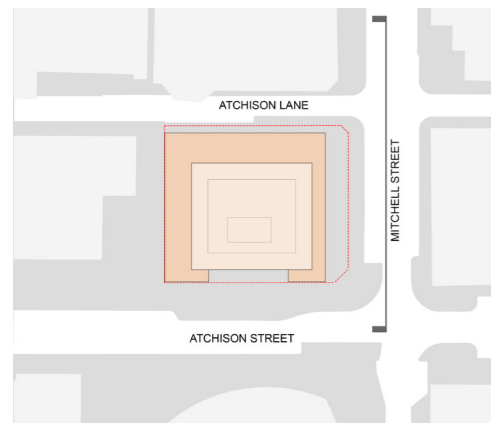


## 5.3 Addressing the Street

### Mitchell Street

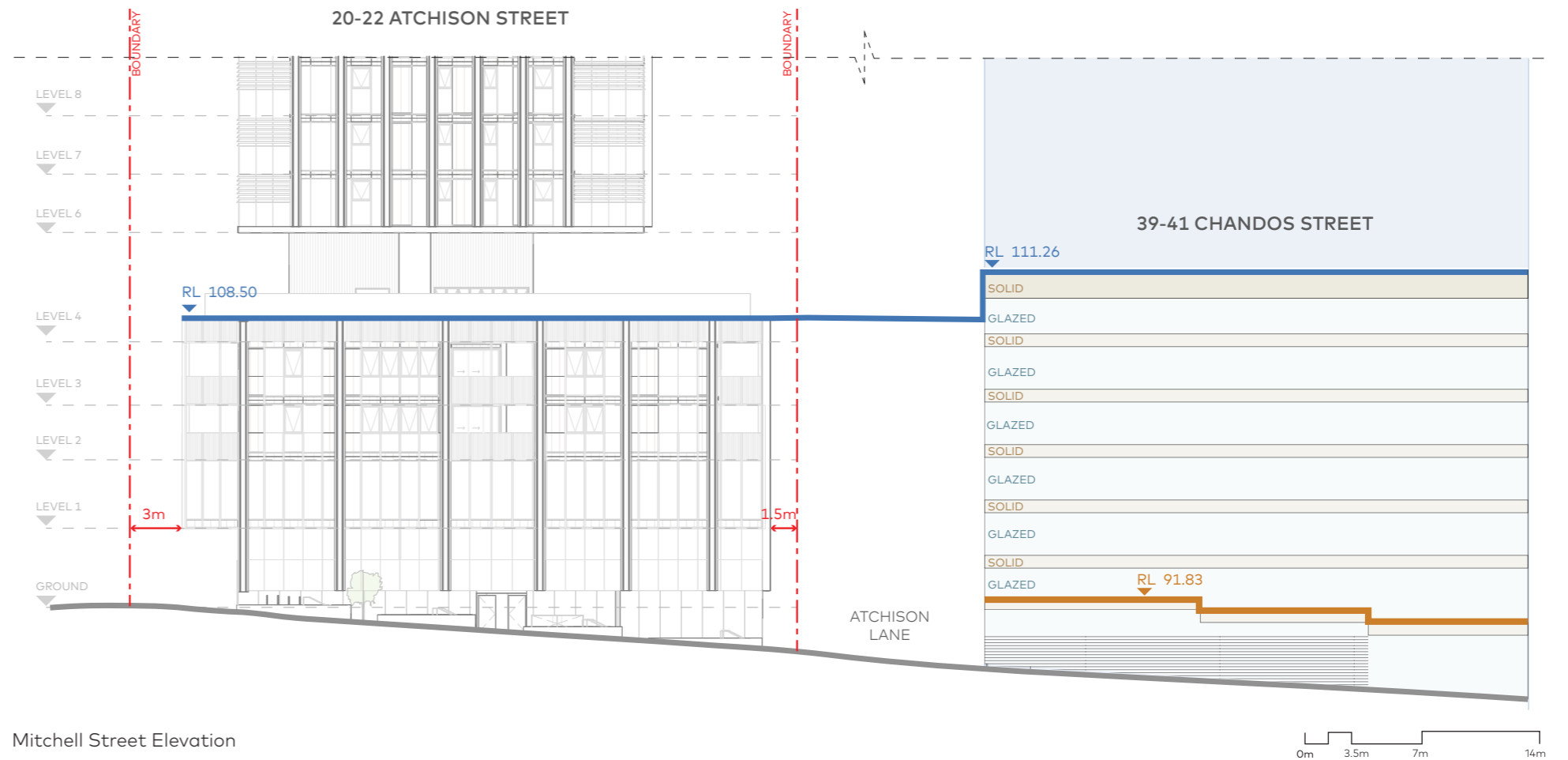
Similarly to the Atchison St frontage, the Mitchell St podium follows the 4-storey high street wall requirement as outlined in the Crows Nest Design Guide, and adapted into the TOD program controls. Due to the steep slope of 1:14 running down Mitchell St, the consistent podium height results in a 5-storey street wall to Atchison Lane. The elevation below shows this aligns to the existing building neighbouring the site at 39-41 Chandos St. As per the stepped street wall created along Atchison St, the dashed future TOD massing shows at 39-41 Chandos St shows the stepped 4-storey high street wall that will be created.

The Mitchell St podium is set back 5m from the site boundary, as per the Crows Nest Design Guide. This allows the project to create a landscape link that continues the language of the Mitchell St plaza, and extends the street green scape and activation from the plaza to Atchison Lane. This landscape link is proposed as a series of paved terraces with planters that provides space for seating and gathering.



Legend

- Street Wall Datum
- Awning/ Under-croft
- TOD Uplift Zone



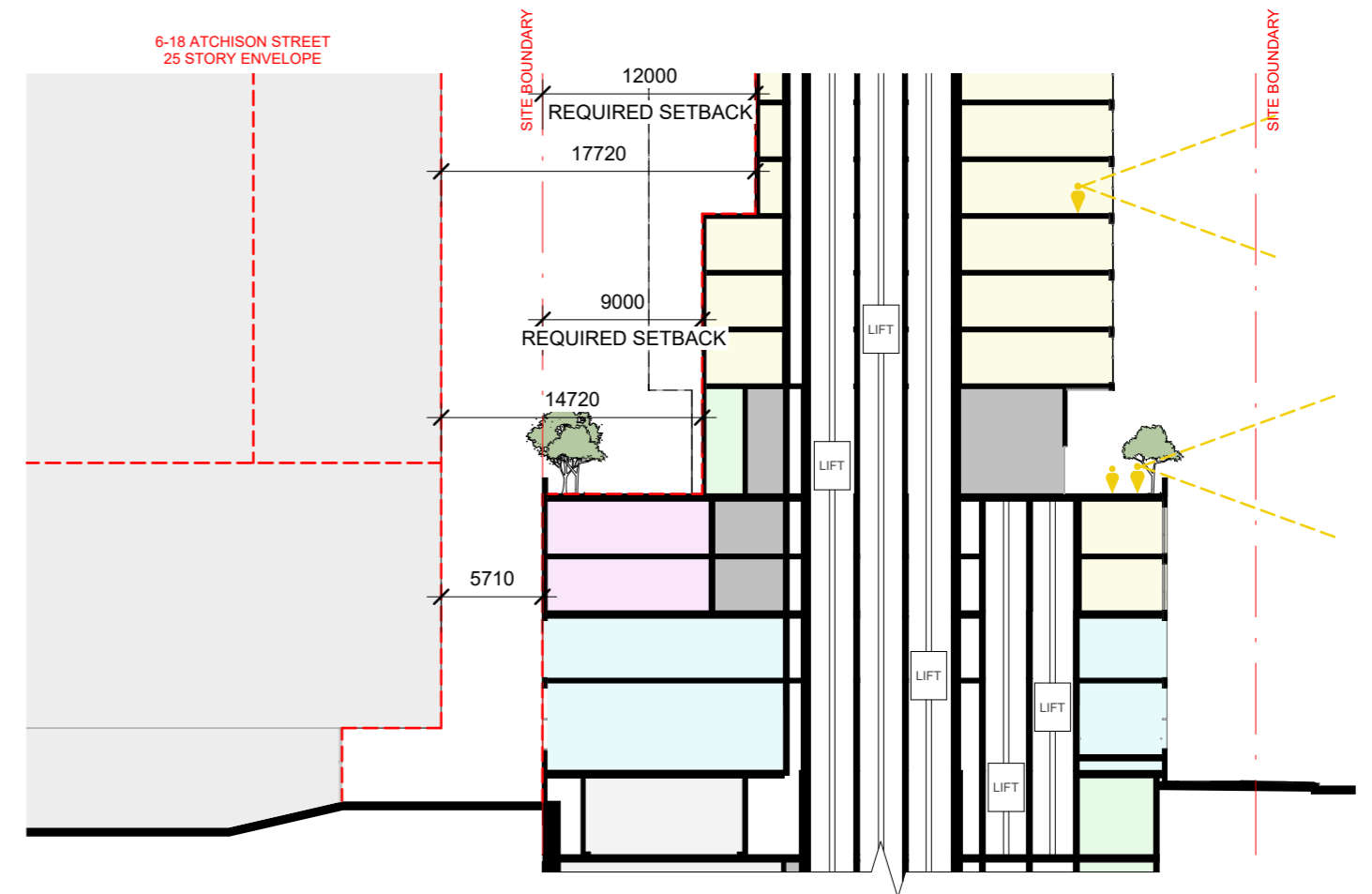
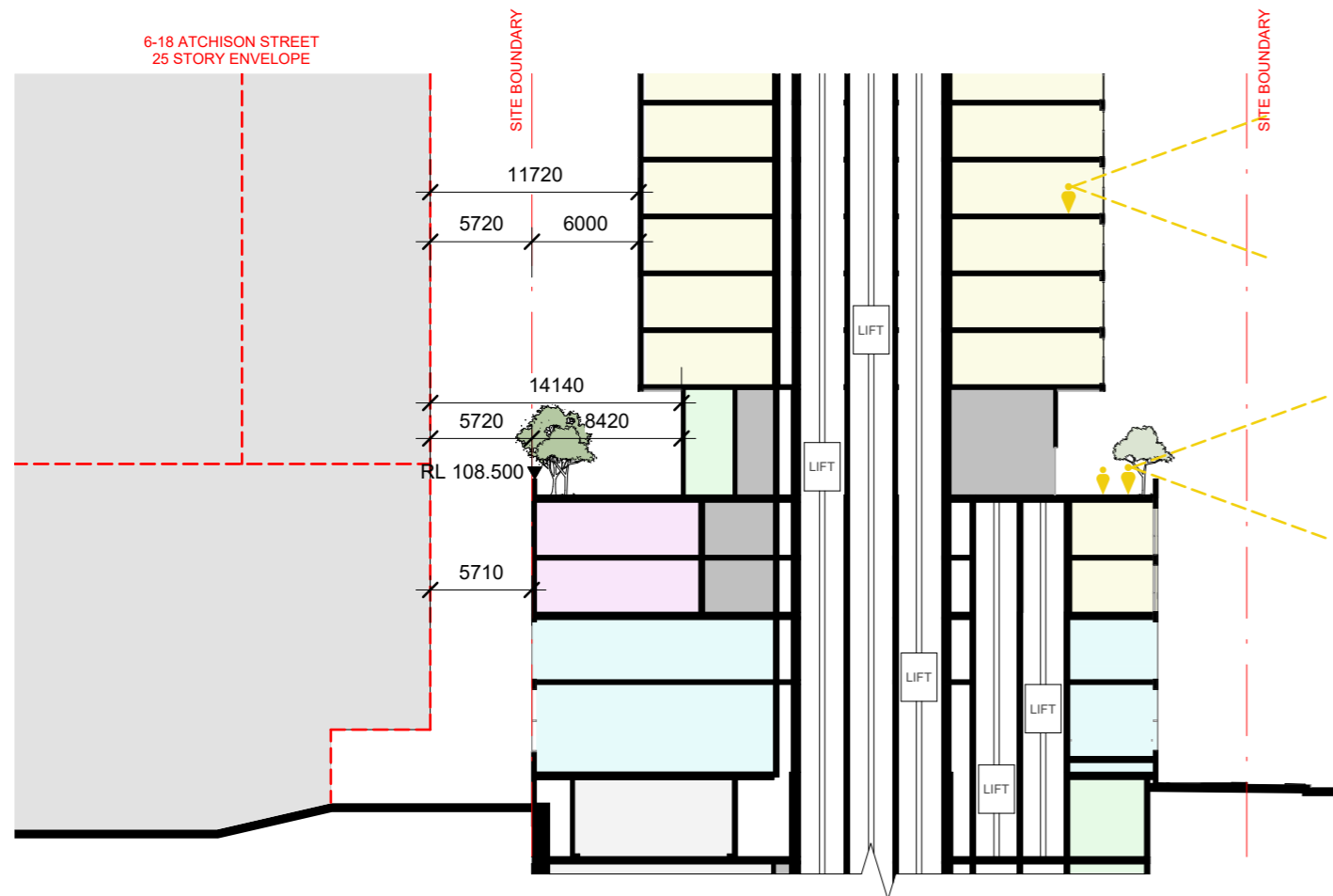
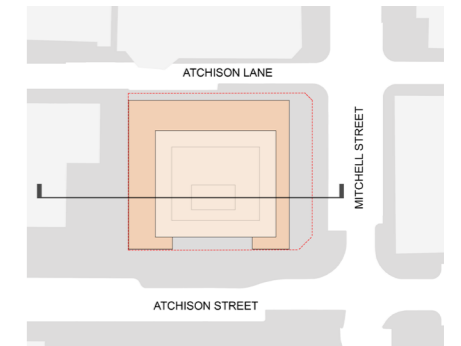
Mitchell Street Elevation

## 5.4 ADG Design Considerations

### Legend

- Commercial
- Residential
- Services
- Amenity

### Key Plan



The proposal has been carefully designed to respect the privacy of the adjacent neighbour at 6-16 Atchison Street. The proposal features podium setbacks in accordance with the site's TOD controls, providing a 4 storey high street wall. As the above section demonstrates, all of the residential levels to the podium and the tower utilise a solid wall to the western boundary, ensuring no views out to the neighbouring residential property. The neighbouring property has a non-compliant tower setback of 6m, with screening in front of windows, the proposed residential tower matches this 6m setback, but does not provide any windows along the façade wall that could overlook the neighbour.

The section above demonstrates the built form of a tower compliant with ADG setbacks, two issues are apparent.

1. The overall separation distances required by the ADG are not achieved due to the non-compliant 6m setback of the 6-16 residential tower
2. Due to the small site size, the tower becomes too small to develop efficiently, with only 2-3 units able to be located on each level above level 9.

## 5.5 Built Form Principles

The diagrams to the right highlight the key design principles implemented to the proposed tower in order to respond appropriately to the urban context. The vertical fins at each facade elevation embody a direct response to the contextual orientation, with primary response to SOLAR AMENITY, VIEW ASPECT AND BUILT DENSITY.

### 1. Solar Amenity:

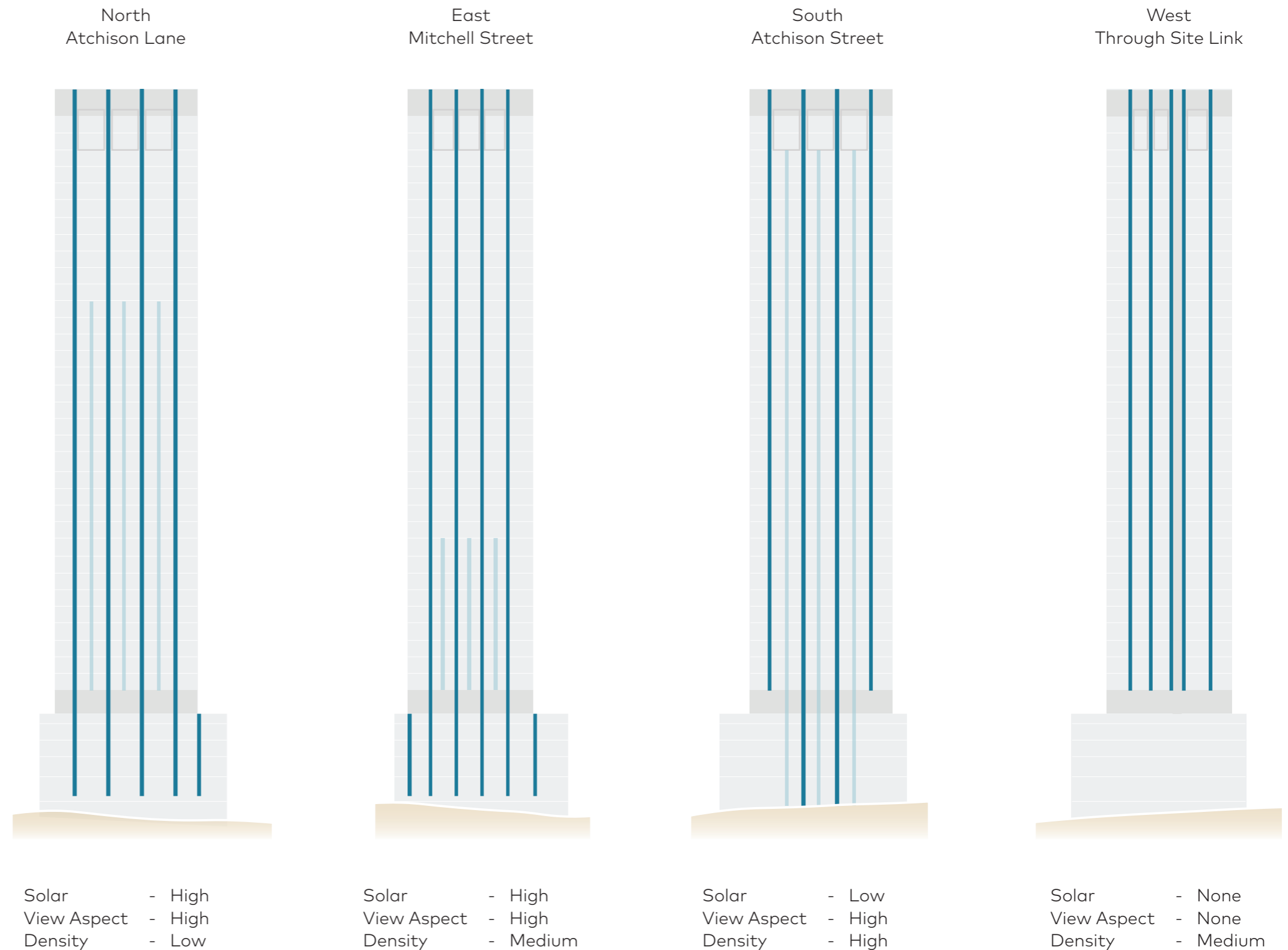
The orientation of the tower means that the north, east and west orientations gain more light while the south receives more outlook towards St Leonards. Optimal solar access to the apartments became crucial in the design process, as well as ensuring that sufficient solar access is granted to the communal open spaces within the development.

### 2. View Aspect:

The proposed tower offers a range of views and vistas on the North and East orientations, including visibility to Sydney's Lower North Shore of Northern Sydney

### 3. Built Density Difference:

The development acknowledges the contrast between the residential zone of Naremburn; which is characterized by residential low-rise properties; with the more urbanized conditions along Pacific Highway consisting of a larger concentration of high-rise, mixed-use developments.

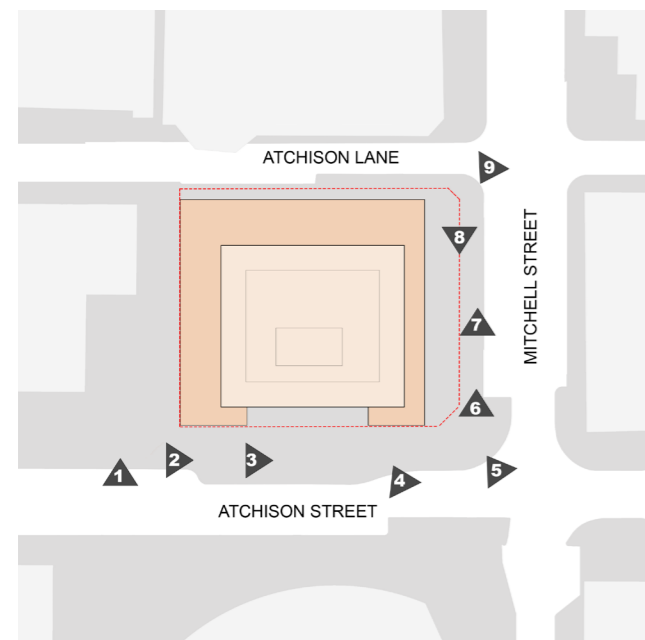


## 5.6 Pedestrian Experience

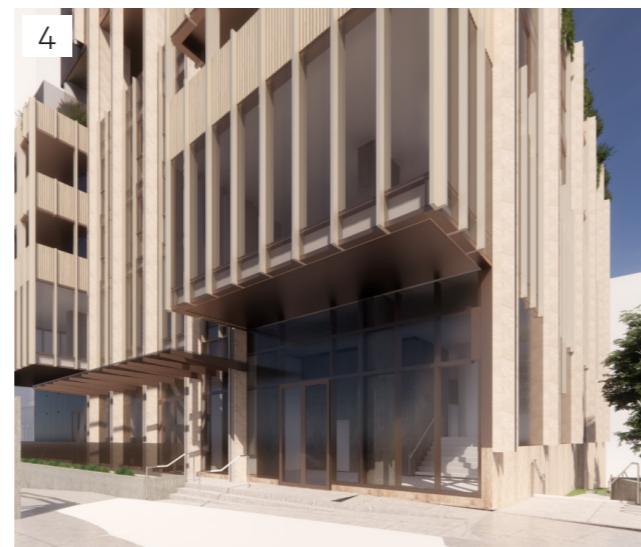
### Site and Context Analysis

St Leonards' evolution into a mixed use precinct is evidenced by the ground plane uses that are becoming increasingly diverse, featuring a blend of residential, retail, commercial, and community spaces. The changing nature of the precinct has created an opportunity for the development of more vibrant, pedestrian-friendly streetscapes, with a focus on creating spaces that are welcoming and accessible to all like the Mitchell St Plaza development.

As the area continues to evolve, it is anticipated that it will become a more dynamic and cohesive community, with a mix of uses that support the current and future demographic of St Leonards. Our proposed building will create connections to north and south along Mitchell St through the introduction of the terraced green link on the eastern boundary of the site parks, improving the pedestrian experience and connecting the lower residential district through to Pacific Highway.



Key Plan



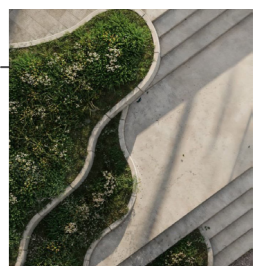
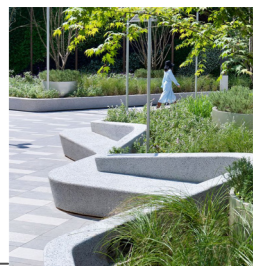
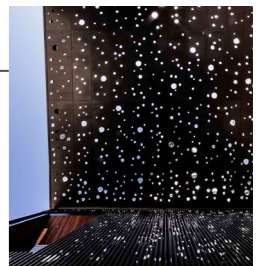
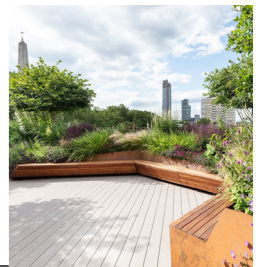
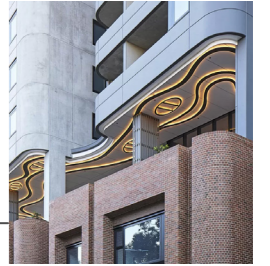
## 5.7 Landscape Experience

### Ground Floor & Level 4 Amenity

The design approach to the Ground Floor as well as the level 4 podium perimeter assist in providing a landscaped green experience for those passing through and around the site.

The ground plane landscape proposal provides a place for meeting, inviting residents and the wider public to congregate and interact. The inclusion of native flora and fauna throughout the street scape planting creates a physical location for a human connection to Country through natural landscape that is traditional to the area.

Further podium level planting supports a connection and caring for Country approach, providing therapeutic and mindfulness opportunities for residents to engage with nature and culture. Opportunities for public art further creates a connection to Country on the soffit's which are visible from both the communal area and the street surrounding the building.



Podium Axonometric View

C O X

06

Built Form Response

# 6.1 Design Pillars

Our vision for the next phase of the site's evolution in St Leonards is grounded in three design pillars that guide the design response, being PLACE, IDENTITY and RESPONSIVE.

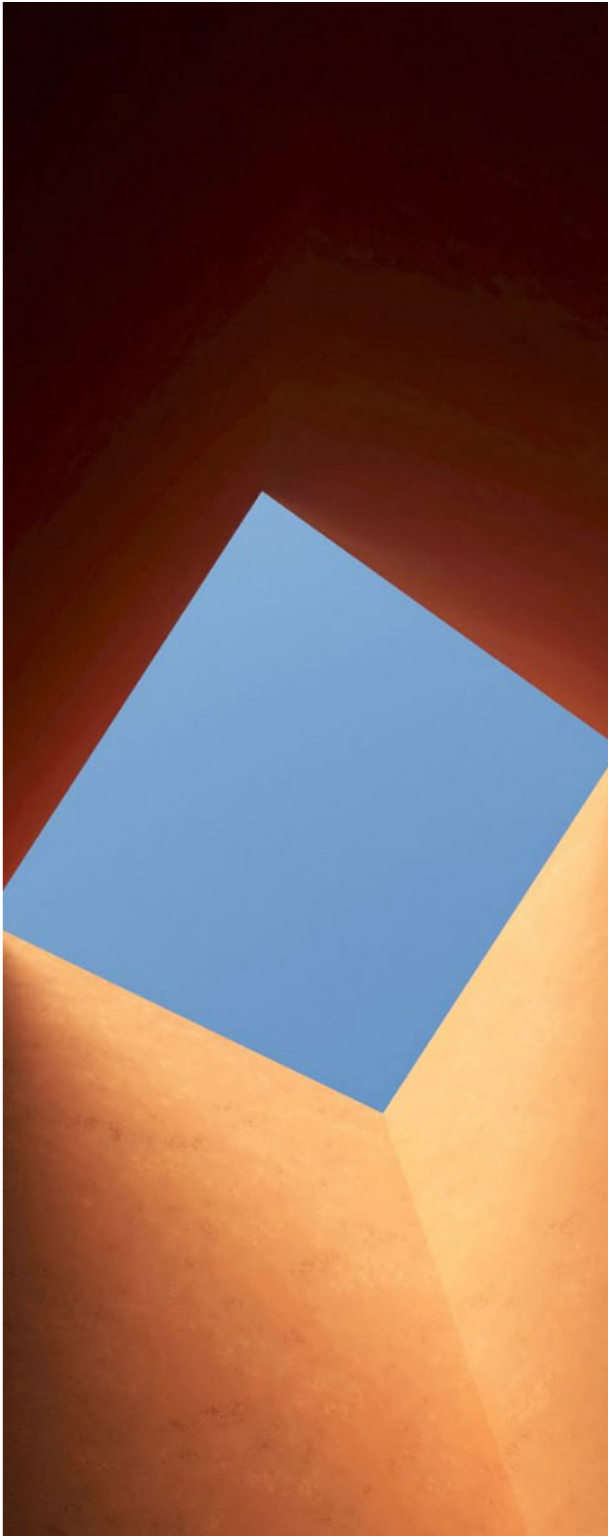
Inspired by it's surroundings and grounded in the place of the sites location, Sydney, the design proposal acknowledges the established surroundings of its setting while working to create a unique and timeless identity that sits harmoniously in place. The design proposal responds to it's specific site conditions, acknowledging both the vegetation micro climates, wind conditions and solar access to the site.



Place



Identity



Responsive

## 6.2 Built Form Strategy

The diagrams to the right highlight the key built form principles that form the foundation of the proposed development:

### 1. Human Scale:

Designing the podium with the human scale at the forefront, helps to create spaces that feel more personal and approachable. The podium level is designed to scale with human dimensions, fostering a sense of belonging and community. This allows for better interaction between the building and its users. Furthermore, this ensures that the podium level contributes positively to the overall urban experience and integrates well with its surrounding context.

### 2. Addressing the Street:

The design addresses the existing built form along with considering the future that is envisioned for St Leonards. The TOD controls and guidelines means that the area will undergo immense transformation, as a result we must meet the city's ambition in providing a built form response that dignifies the future streets of St Leonards.

### 3. Materials:

Sandstone is a material commonly used in the surrounding building environment of St Leonards, being the bedrock of Sydney's landscape. Employing sandstone at the podium level helps the new building blend seamlessly with the existing architecture, maintaining the area's character and aesthetic continuity. In addition to this, the use of sandstone helps to create a more relatable, human-scale environment. Its texture and warmth can make the ground floor more inviting and engaging for pedestrians, enhancing the overall street experience.

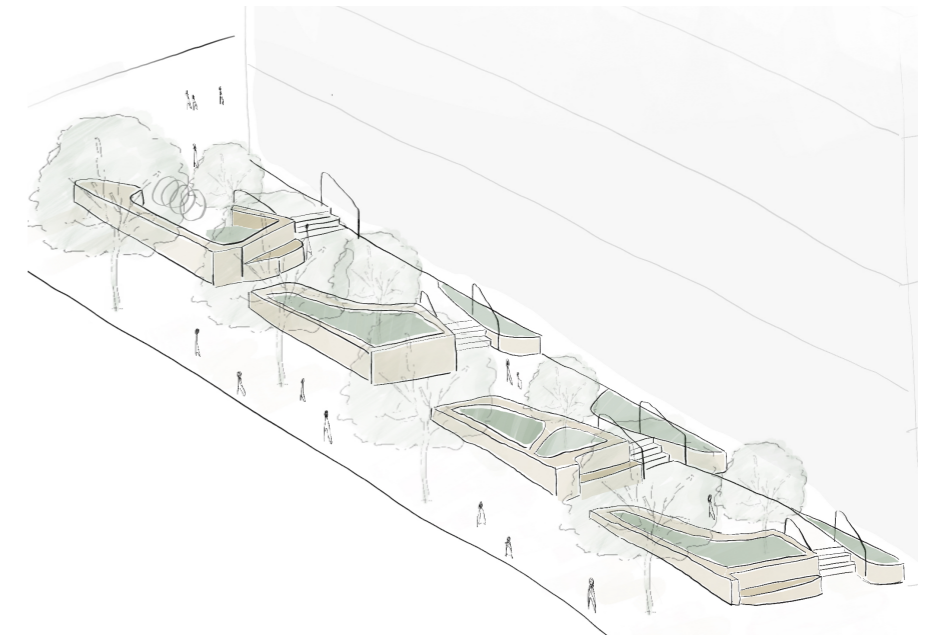
### 4. Craft:

Intricacy and craftsmanship are incorporated in the design of the building to ensure that we are reminded of the importance of human intimacy and human scale in our development. This re-asserts the importance of the human connection between the building to both its users and the local community.



1. Human Scale

### Macro Scale

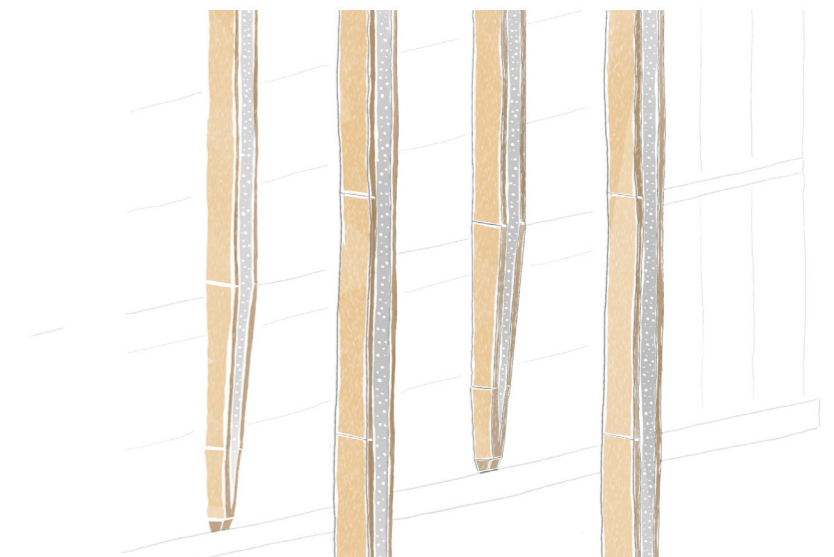


2. Addressing the Street



3. Materials

### Micro Scale



4. Craft

## 6.3 Urban Design Response

### Ground Plane Activation

The close proximity of the St Leonards Train Station and Crows Nest Metro Station is of paramount importance as it allows for ease of movement within the precinct, facilitating a higher cross flow of visitors and pedestrians around the site. The strategic location of the site within a 5-minute walking distance from both transport hubs further enhances its accessibility and ensures that it is well-connected to the surrounding precinct.

In addition to these close modes of transport, the site further connects itself to the surrounding precinct by providing a green link extension of the Mitchell St Plaza. Physically drawing pedestrians through the site along Mitchell St.

There is a diverse offering of commercial, residential and landscape activation across the site at ground level, which will create a harmonious offering and strong connection to existing and proposed neighbouring context, thus supporting the diverse and interactive zone created in this area of St Leonards.

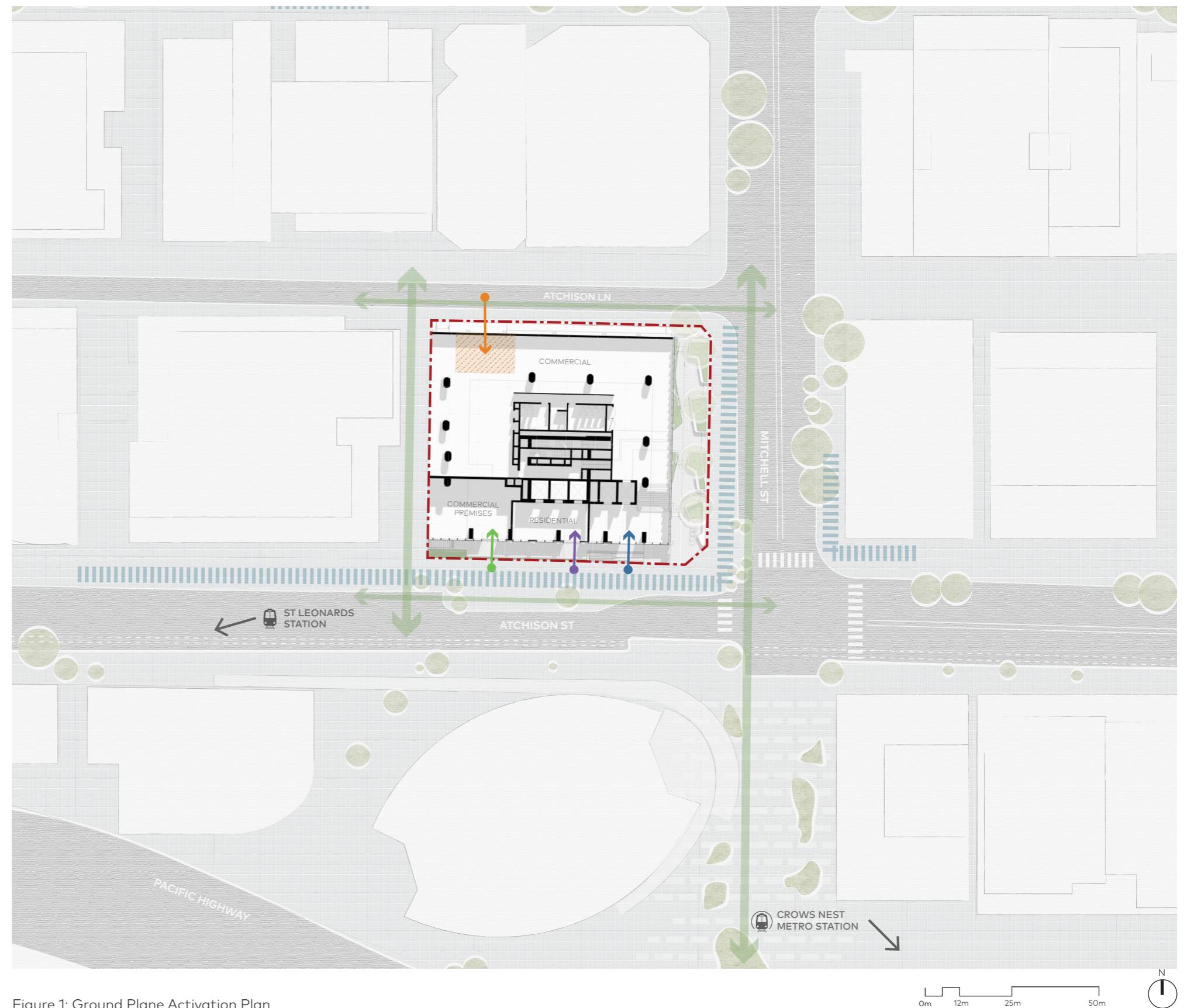


Figure 1: Ground Plane Activation Plan

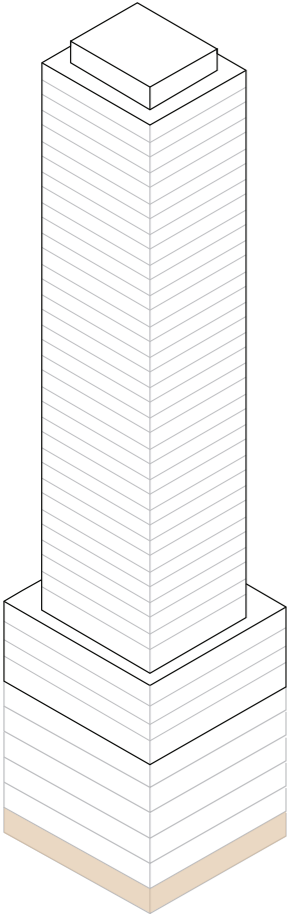
#### Legend

- Commercial
- Residential
- Retail
- Commercial Entry
- Residential Entry
- Retail Entry
- Vehicular Entry
- Landscaped Connections
- ▨ Active Frontage

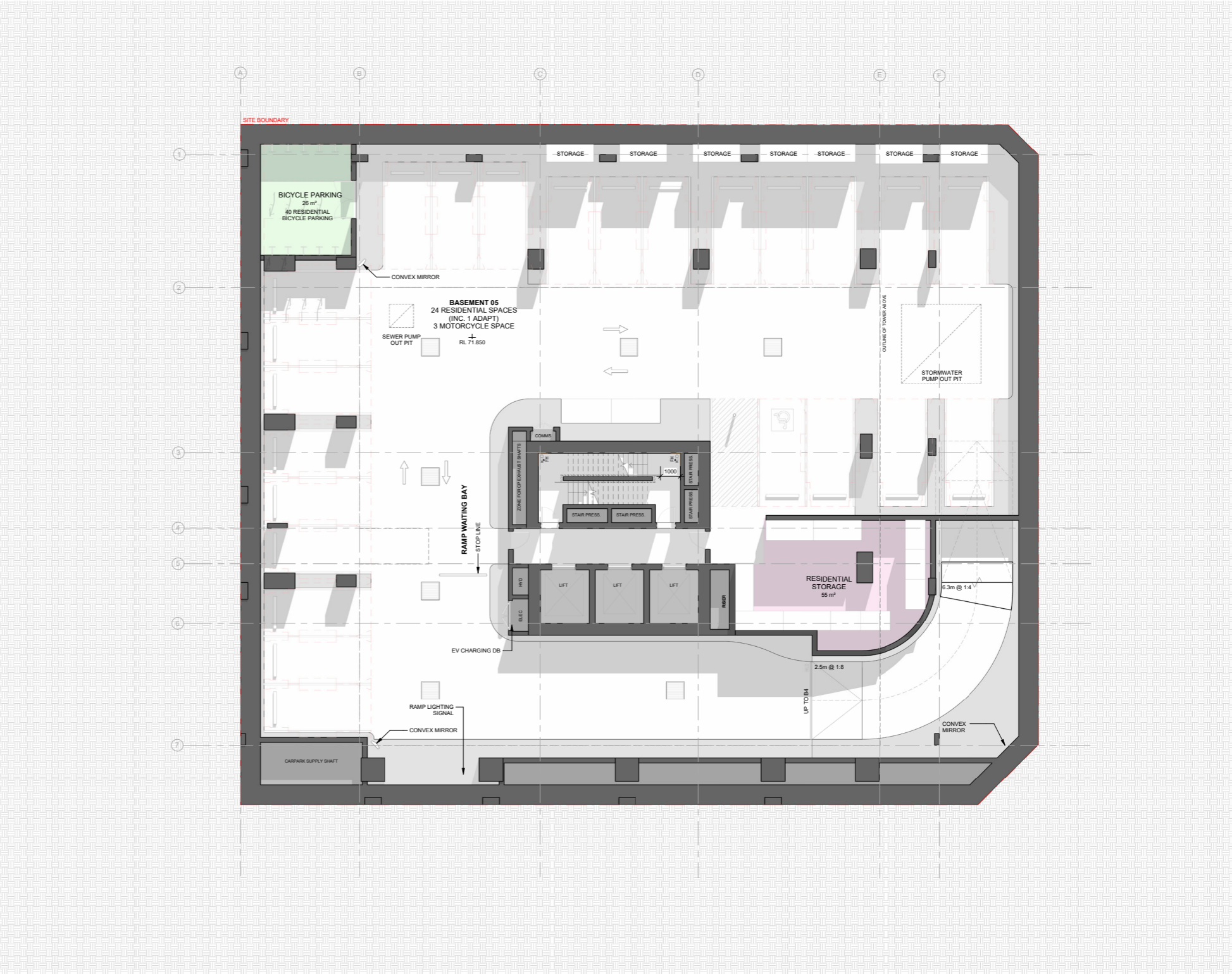
# 6.4 Basement Design

## Basement 5

Basement level 05 houses twenty-four residential parking spaces including one adaptable. Three motorbike parking spaces can also be found here, in addition to further provision of bicycle parking and residential storage.



Basement 5



Basement 5 Plan

## 6.4 Basement Design

### Basement 4

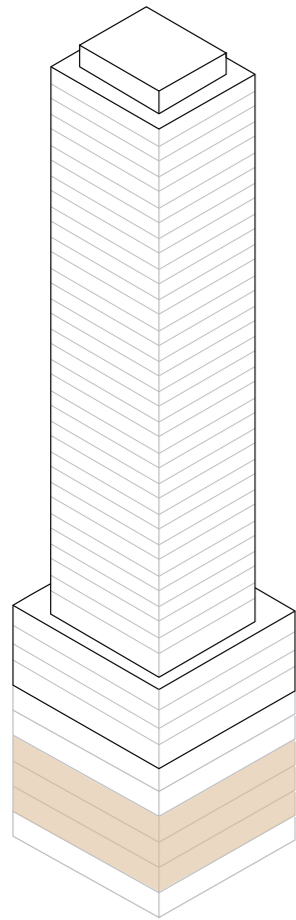
Basement level 04 houses seventeen residential parking spaces including twelve adaptable spaces. Three motorbike parking spaces can also be found here, in addition to bicycle parking and residential storage.

### Basement 3

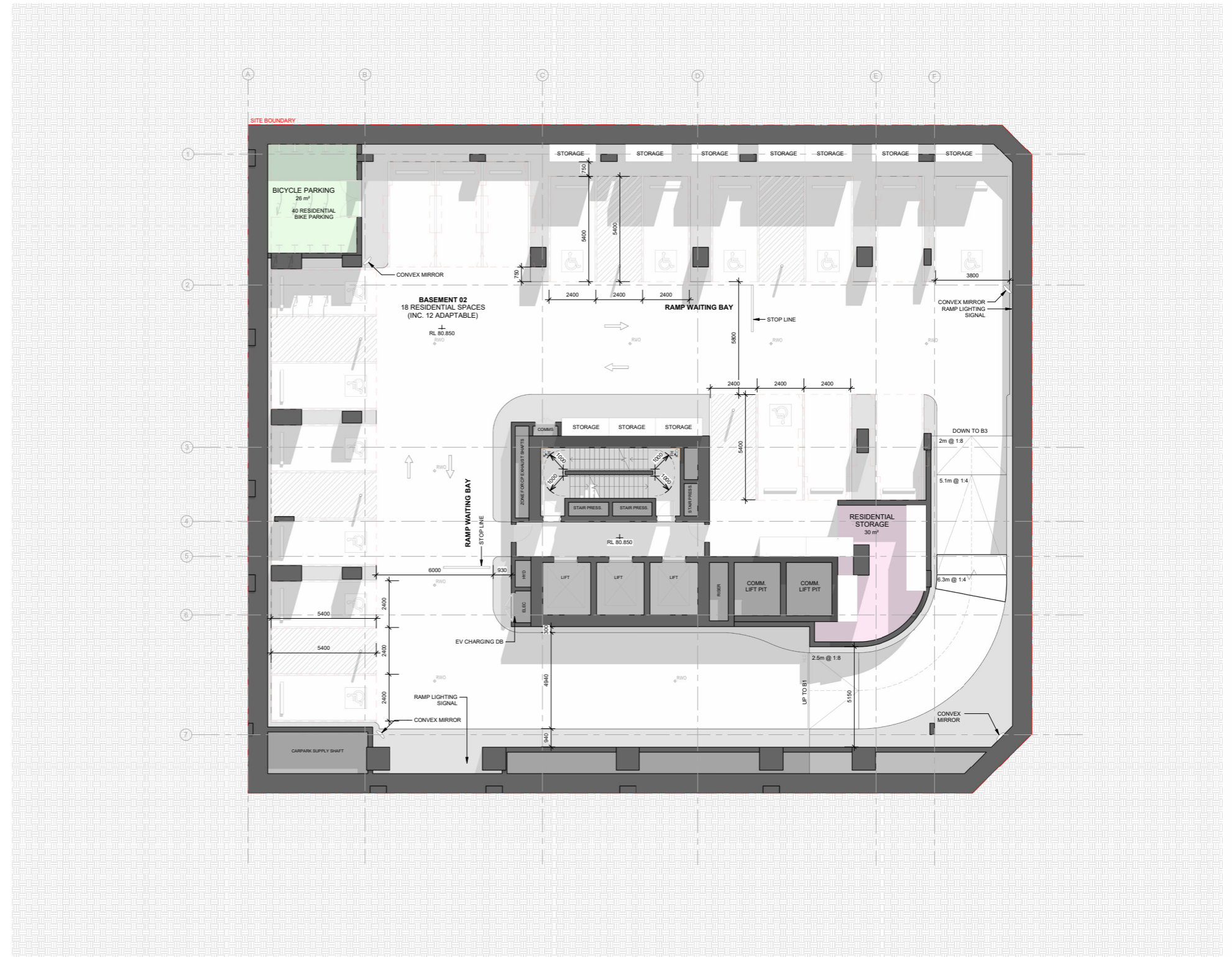
Basement level 03 houses eighteen residential parking spaces including twelve adaptable spaces and three motorbike parking spaces.

### Basement 2

Basement level 02 houses eighteen residential parking spaces including twelve adaptable spaces.



Basement 2 - 4



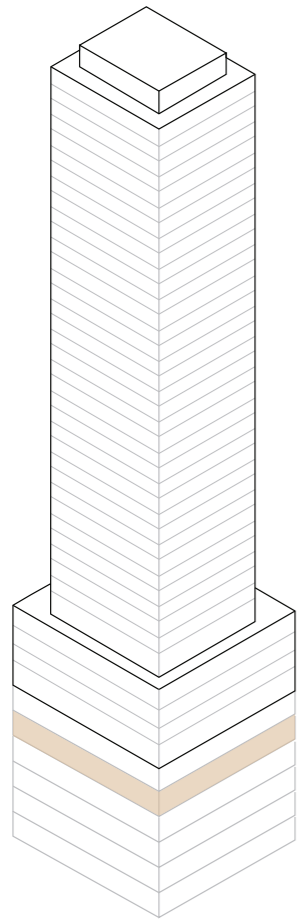
Basement 2 Plan



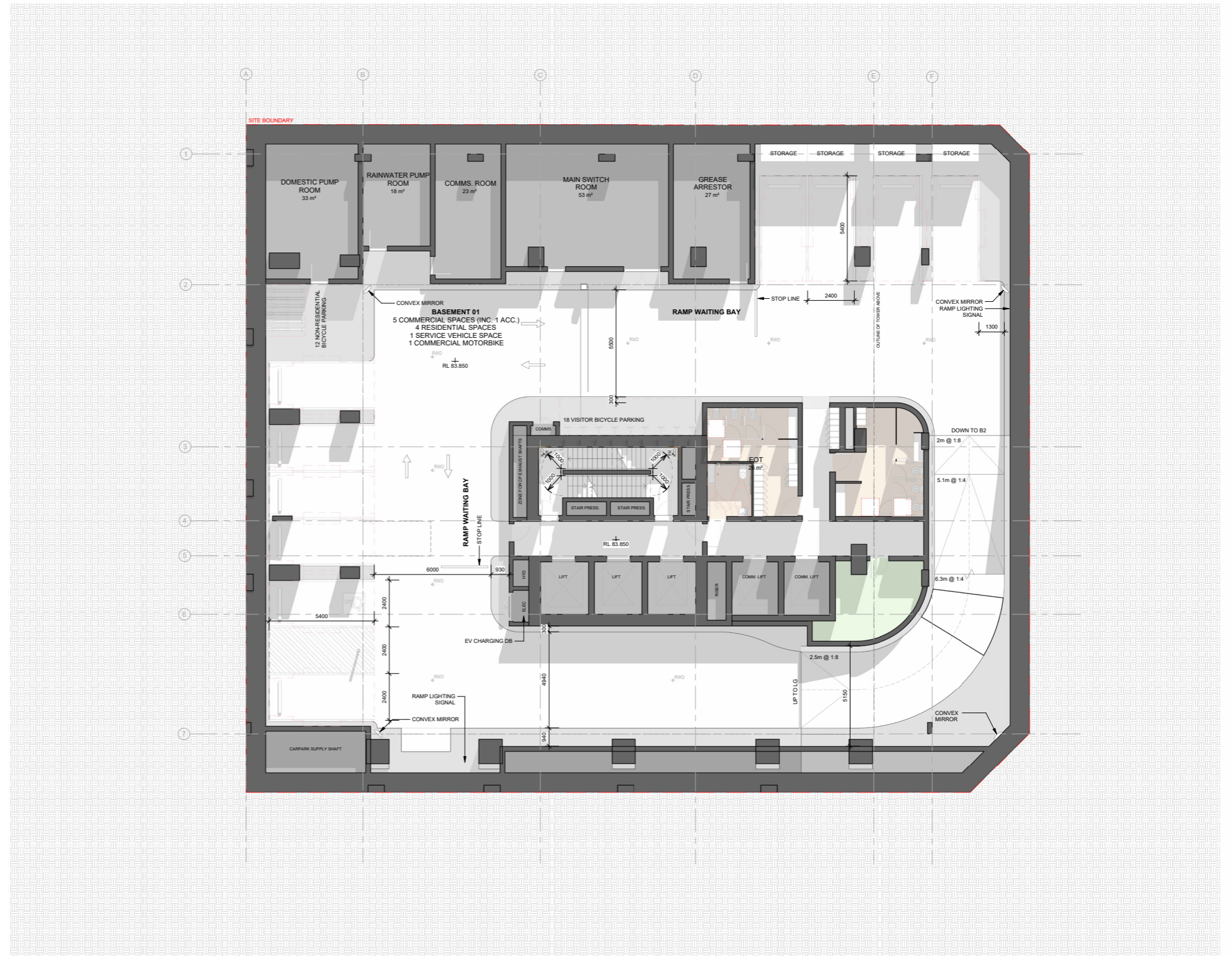
## 6.4 Basement Design

### Basement 1

Basement level 01 contains the main bulk of building services such as machinery rooms, grease arrestors, main switch room, communications room and water systems. In addition, End-of-Trip (EOT) facilities for retail employees within the podium as located here for easy access. Bicycle storage for both residents within the tower, and retail and commercial occupants within the podium is provided in close proximity to the EOT facilities. This level includes five commercial parking spaces, four adaptable residential spaces and one service vehicle space.



Basement 1



Basement 1 Plan



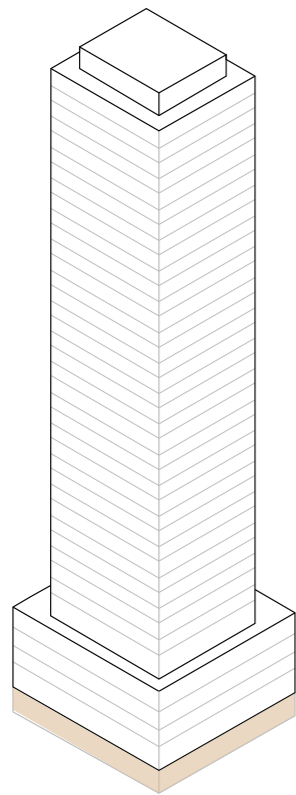
## 6.5 Podium Design

### Lower Ground

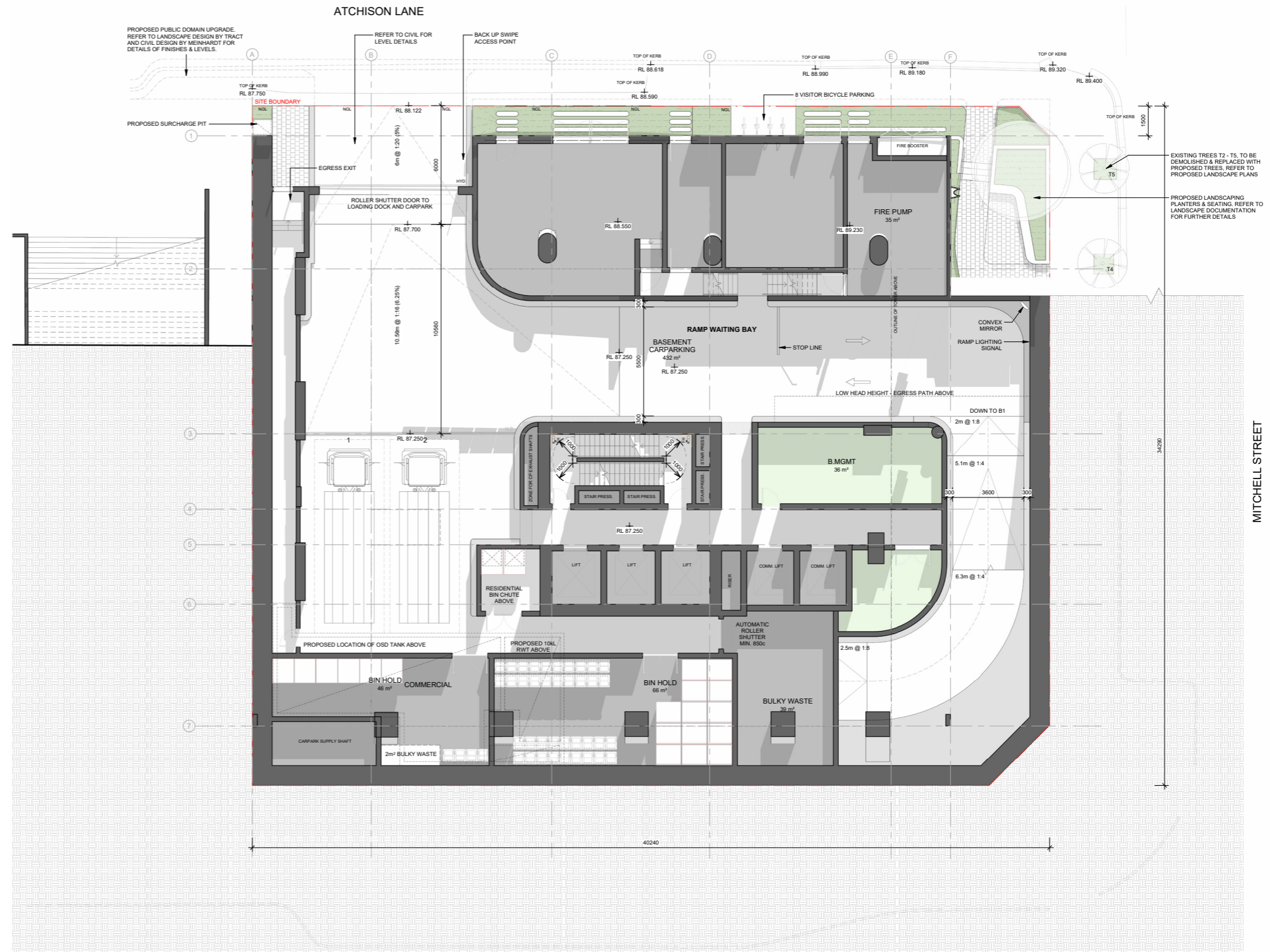
The Lower Ground Floor primarily support vehicular access into the site and the services required for the buildings successful operation, including the substation, waste rooms, building management office and fire control areas.

The services location along the Atchison Lane frontage is an appropriate location and works harmoniously with the existing condition on the laneway.

The green link along Mitchell St extends the activation of the Mitchell St Plaza down to the north east corner of the subject site.



Lower Ground



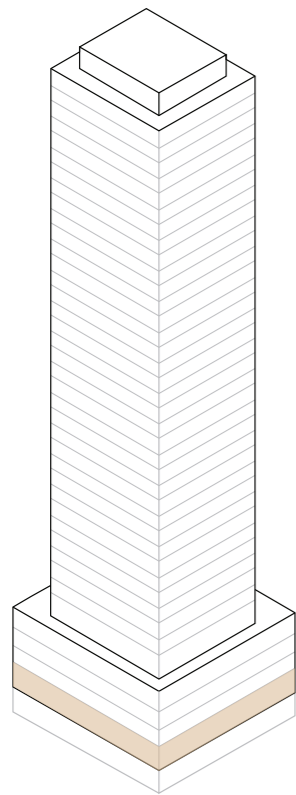
Lower Ground Plan

# 6.5 Podium Design

## Ground Floor

The Ground Floor plane has prioritised activated frontages that create a strong connection between the sites interior and surrounding public spaces. The entrances to the commercial spaces are highlighted via a reverse setback to Atchison Street, while the residential lobby entrance is defined by a recess in the podium facade that visually connects the entrance to the residential tower above.

With the vehicular entry and services contained to the Lower Ground Floor, Ground Floor is able to have an open glazed facade to all four boundaries, increasing the sites visual permeability and connection to it's surrounds, resulting in a seamless facade treatment.



Ground Floor



Ground Floor Plan

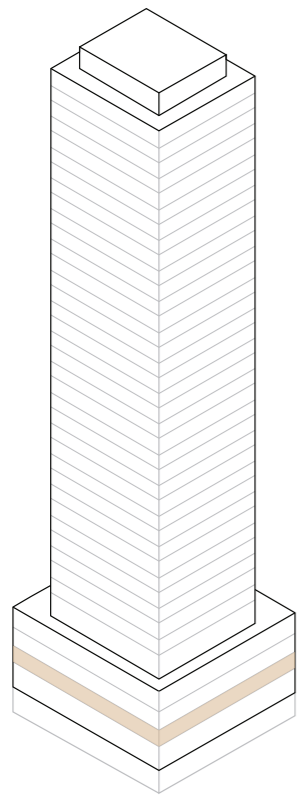
## 6.5 Podium Design

### Level 1

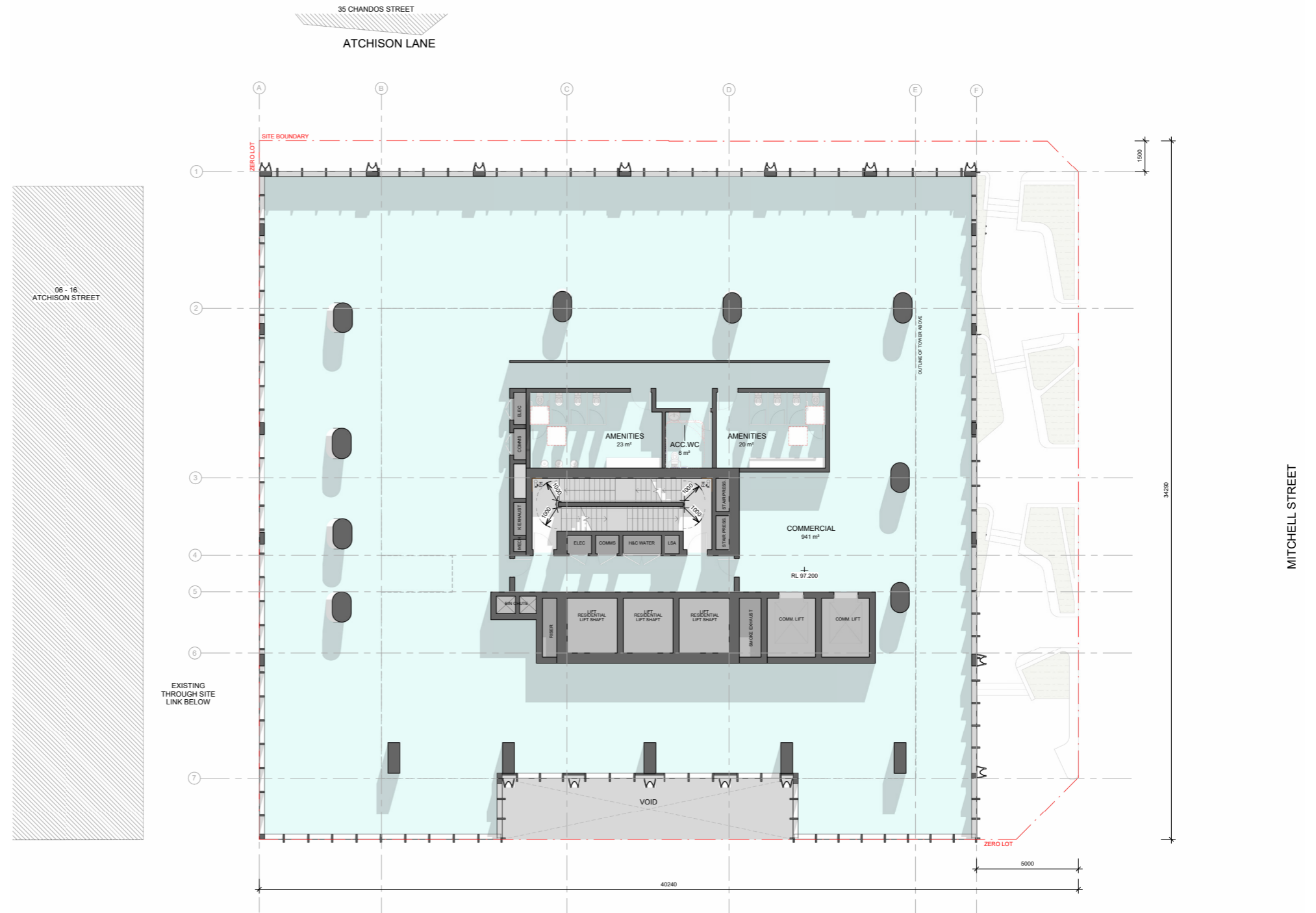
The Level 1 Commercial space has been designed with flexibility in the finalised program. There is potential for Level 1 to host a single tenant or multiple tenancies. Connection to the Ground Floor Commercial space can be achieved through inter tenancy feature staircases, which would guide staff, patrons or visitors up into Level 1 and provide a larger more connected Commercial space.

The configuration of the plan consists of a centralised core with open plan space on the periphery, this is a strategic design approach that enhances functionality, flexibility and efficiency.

The design approach to the Commercial levels allows for adaptable usage, maximises solar access and views, and supports a well-organised architectural environment.



Level 1



Level 1 Plan

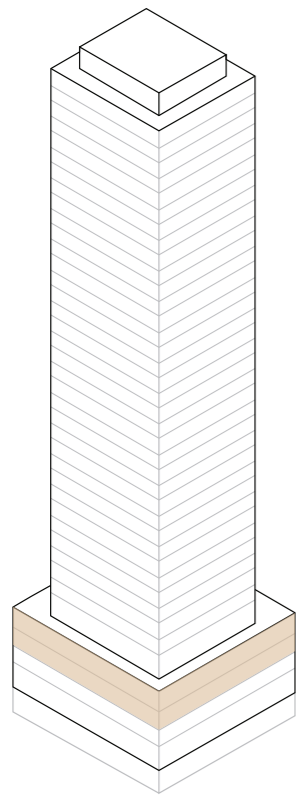
## 6.5 Podium Design

### Level 2 - 3

Residential spaces are provided to the upper two levels of the mixed use podium. Levels 2 and 3 apartments are provided with expansive balcony spaces, improving the amenity of the apartments.

Levels 2 and 3 are designed to accommodate 7 units, made up of a mix of one, two and three-bedroom apartments. The apartments feature enlarged balconies, offering an exceptional outdoor experience to the inhabitants.

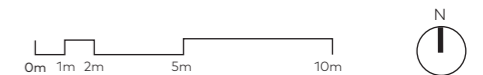
These levels also provide additional residential storage space that is to be shared and allocated across the building between units that do not have a car space and basement level storage. This storage area takes advantage of the inability to place windows along the western zero setback facade.



Level 2 - Level 3



Level 2 - Level 3 Plan



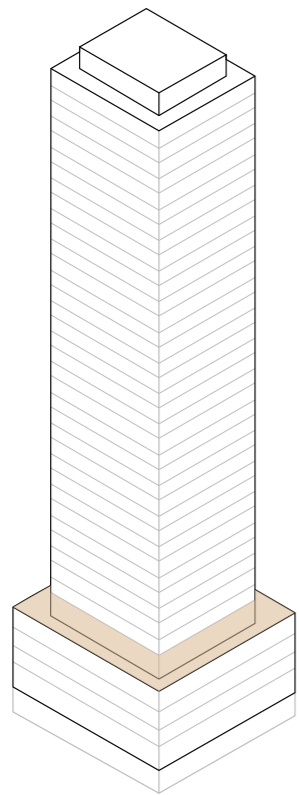
## 6.5 Podium Design

### Level 4

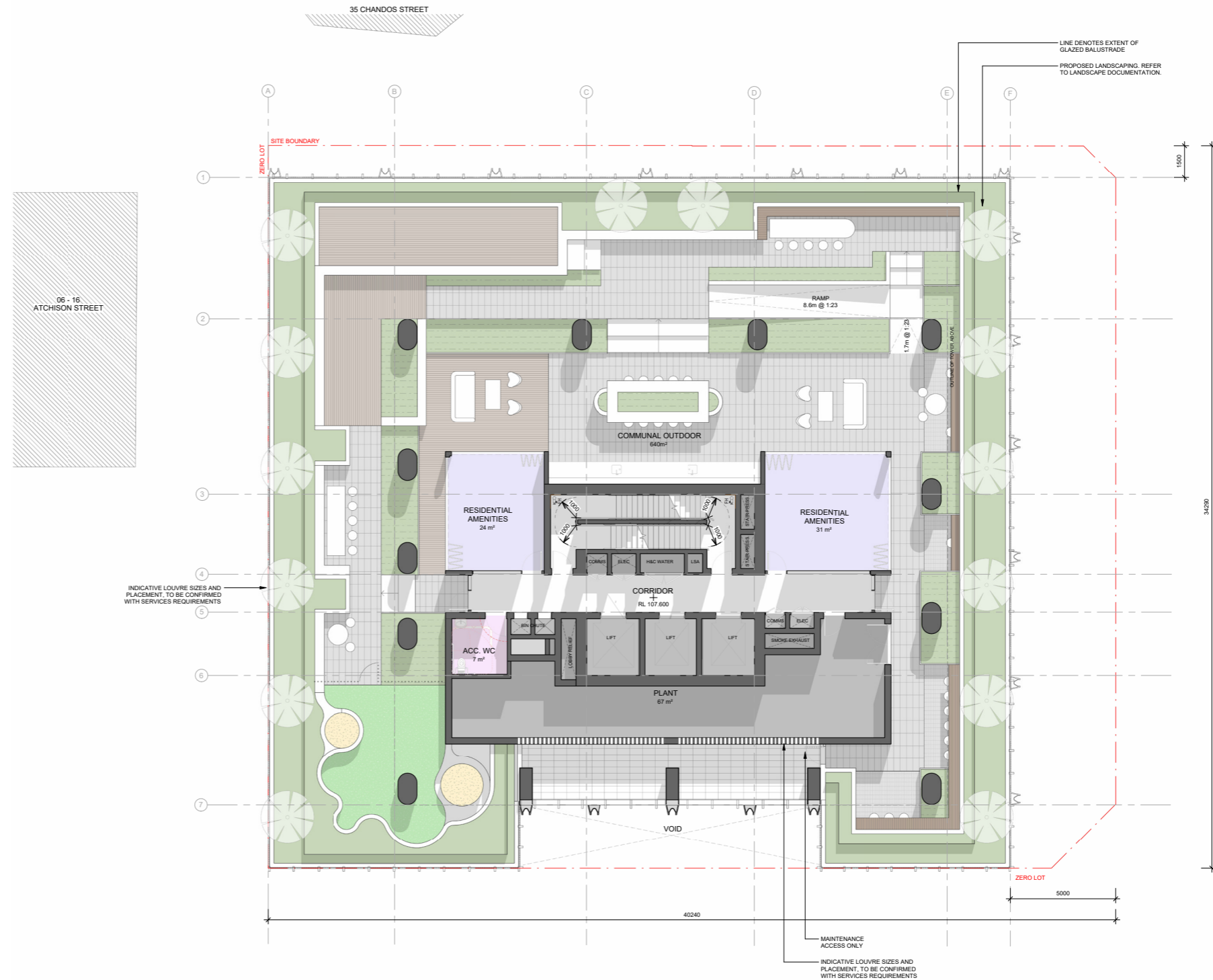
Level 4 provides the communal indoor and outdoor space for the residents of the building. Internally the communal space is flexible, consisting of dining and lounge spaces that operate as indoor/ outdoor spaces that have a strong connection to the surrounding terrace. Externally the podium perimeter uses deep lush garden beds to provide vegetation and planting, including trees that improve shading and wind protection. The communal outdoor space offers outdoor cooking and dining areas, wellness spaces for activities such as yoga, relaxed seating areas for individuals and groups of varying sizes as well as a child's play space.

The architectural form of the amenities level and landscaping is in keeping with the simple linear expression of the built form architecture found in the podium and tower. The lush perimeter planting is visible both from Level 4, the tower above and the street below. Providing visual amenity for a range of on lookers.

Refer to landscape plans by Tract for further information.



Level 4

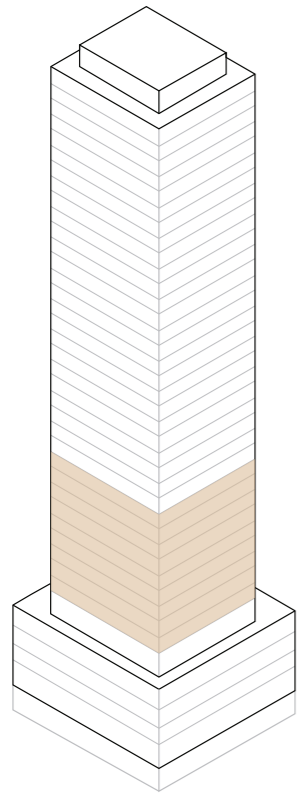


Level 4 Plan

## 6.6 Tower Design

### Level 6 - 14

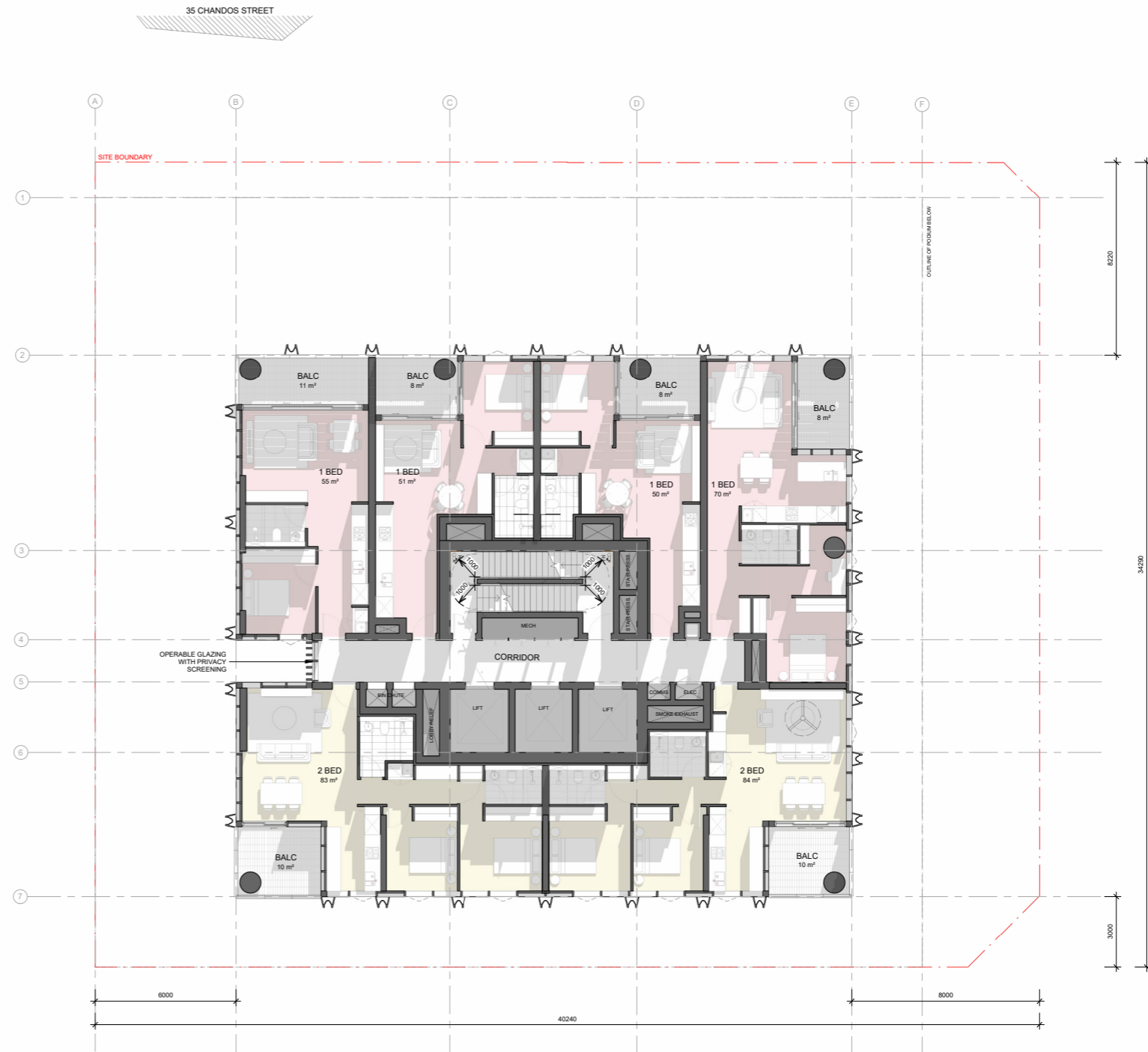
Levels 6 through to 14 are designed with six apartments per floor, featuring a mix of one and two-bedroom units. Of the six apartments, five achieve the ADG minimum 2 hour solar to living room requirement, showing a highly efficient layout that responds to it's location.



Level 6-14



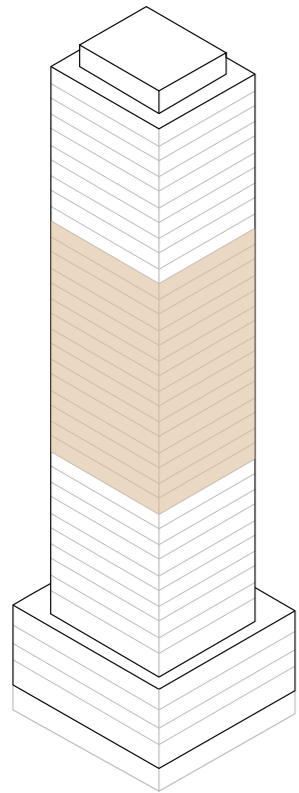
Level 6-14 Plan



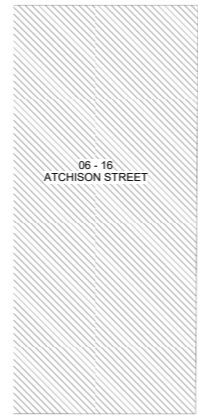
# 6.6 Tower Design

## Level 15-29

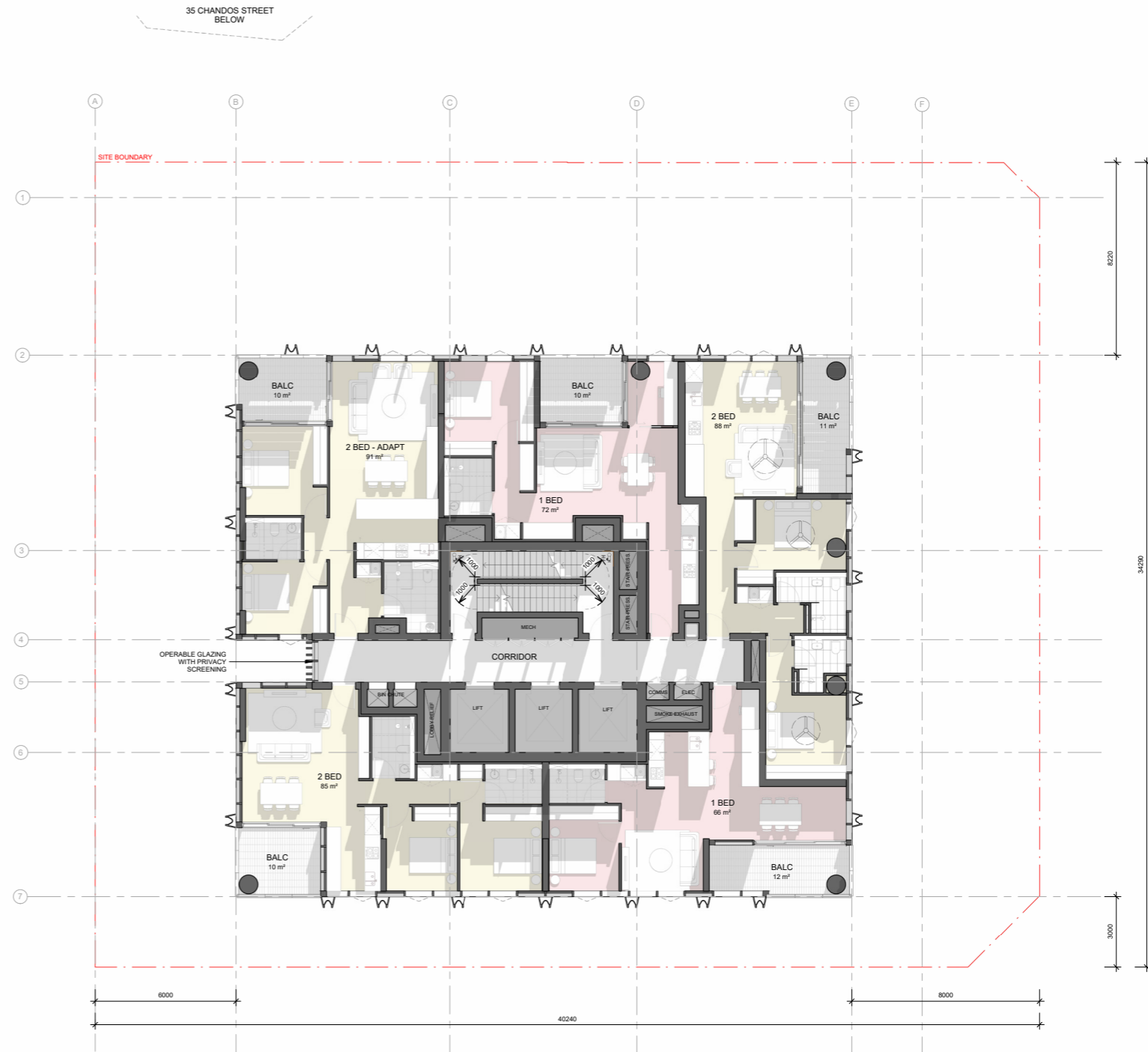
Levels 15 through to 29 are designed with five apartments per floor, again featuring a mix of one and two-bedroom units. Among these is one adaptable two-bedroom apartment on the north west corner, the layout of which ensures compliance with AS1428.1 and the ADG requirements for adaptable apartments.



Level 15-29



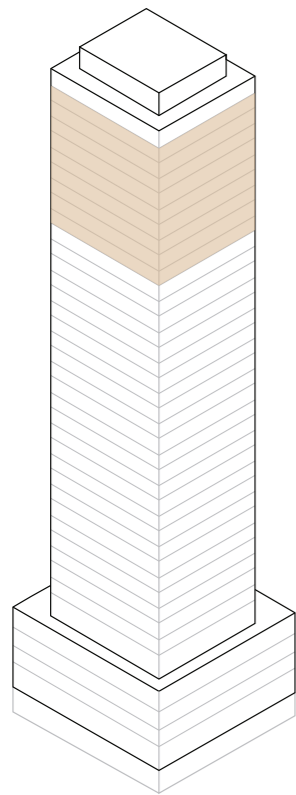
Level 15-29 Plan



## 6.6 Tower Design

### Level 30-38

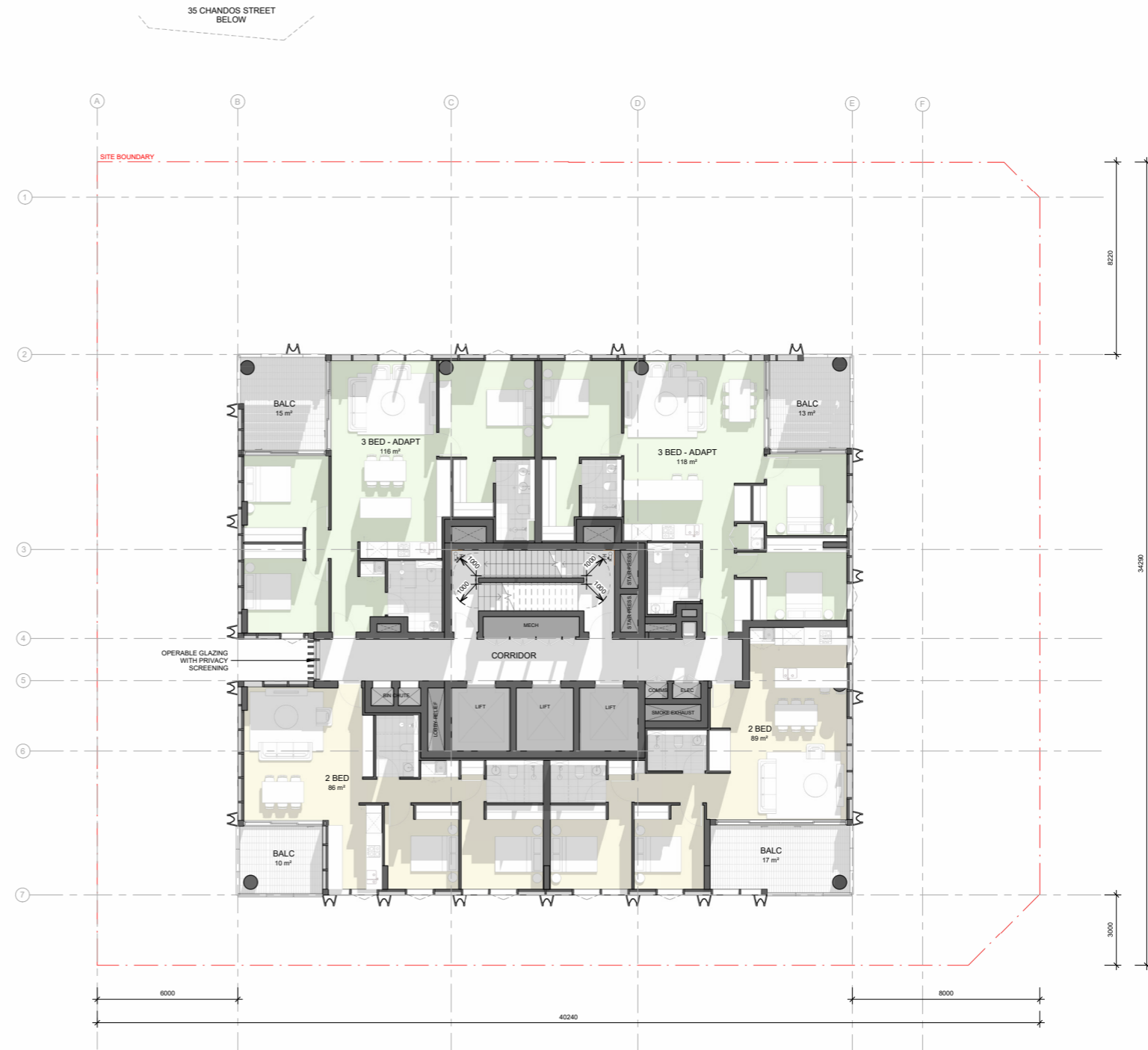
Levels 30 through to 38 are designed with four apartments per floor, featuring a mix of two and three-bedroom units. Among these are two adaptable apartments, consisting the two north facing three-bedroom apartments. The layout of these apartments ensures compliance with AS1428.1 and the ADG requirements for adaptable apartments. Both the typical and adaptable apartments are thoughtfully designed to offer spacious living areas. The layout includes open-plan living and dining spaces, generous bedrooms, and well-appointed bathrooms. Additionally, each apartment benefits from large windows that maximise solar access and provide impressive views. The layouts ensure comfort and functionality while accommodating various lifestyles and evolving requirements.



Level 30-38



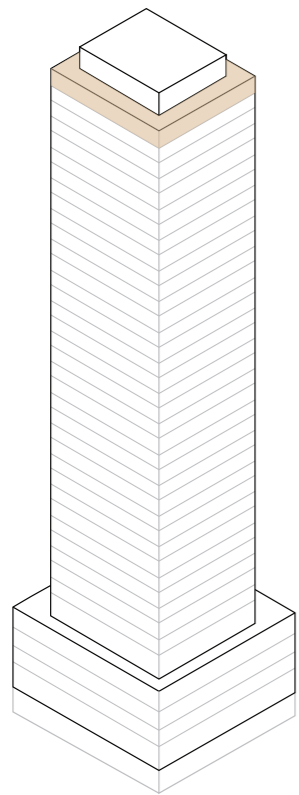
Level 30-38 Plan



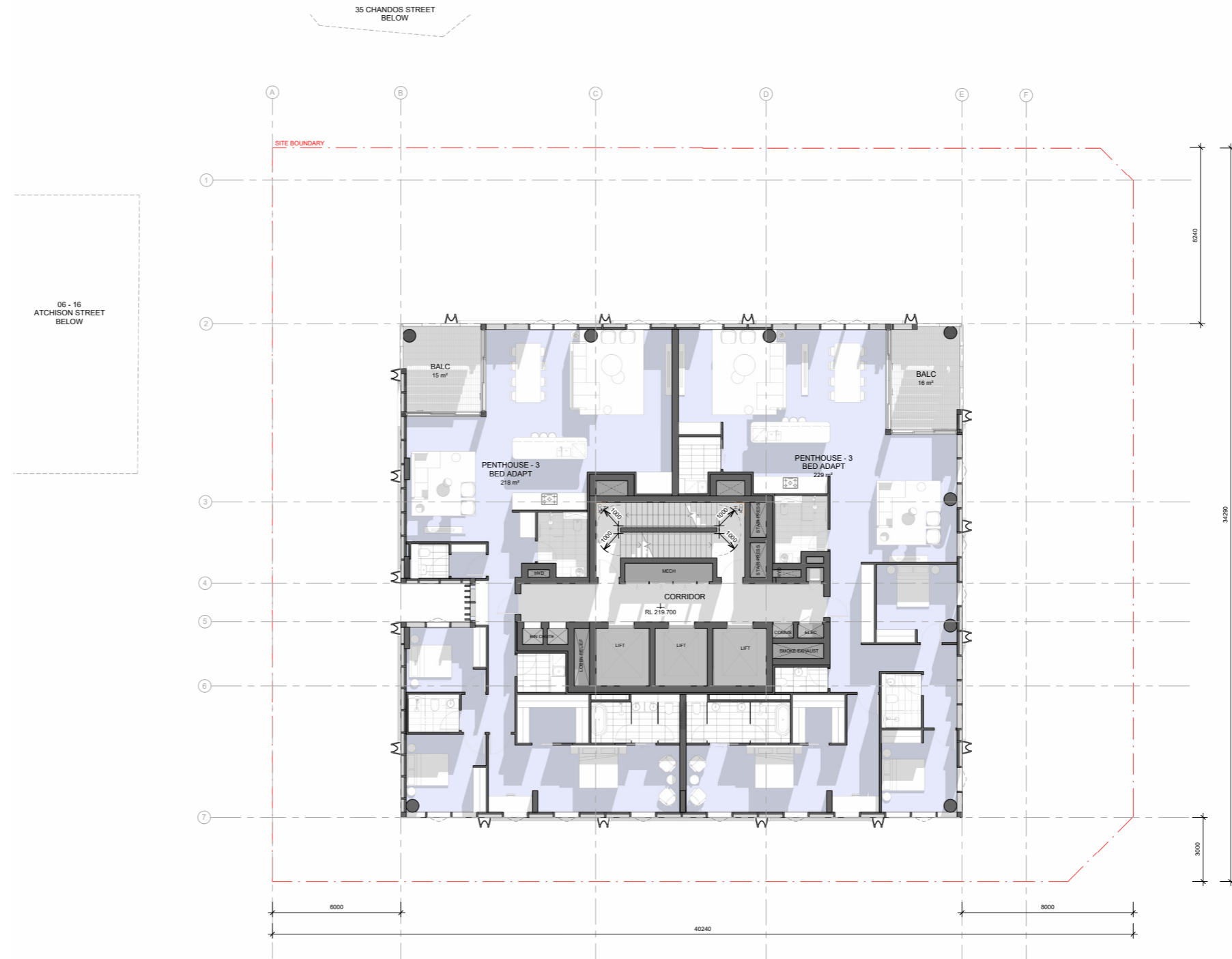
## 6.6 Tower Design

### Penthouse Level

Level 39 is dedicated to two exclusive penthouse apartments, consisting of a two three-bedroom apartments that offer an exceptionally spacious layout. These penthouses feature expansive balconies that provide unparalleled views over the surrounding precinct across to Middle Harbour, with the eastern balcony providing a view back across Crows Nest and North Sydney towards Sydney Harbour. The generous balconies are designed to maximise outdoor living and entertainment opportunities, allowing residents to fully enjoy the stunning vistas.



Level 39



Level 39 Plan



# 6.7 External Amenity

## Ground Floor Plan

The ground plane aims to contribute to the local context by considering the western public offering as an extension of the Mitchell St Plaza. The design proposal seamlessly integrates with the existing Mitchell St footpath and street trees, while the form and design speaks directly to the design language of the existing Plaza structures. This strong connection is vital in identifying this zone as a public offering, ensuring all people passing the site feel welcome to engage with the space. Due to the sloping site and subsequent height differences between Atchison St footpath and the building lobbies, the physical connection to the ground plane is less direct along this boundary. The proposal aims to provide safe and equitable access to the building while providing amenity to the street through the use of cascading planting and large planter beds.



- | EXISTING  | PROPOSED   |
|---|--|
| Existing Trees to be removed. Refer Arborist's Report.  | Vehicular entry / exit to basement   |
| Existing Trees to be retained and protected. Refer Arborist's Report.   | Emergency egress / service access  |
| TPZ shown pink / dashed line  | Commercial premises  |
| SRZ shown purple / dashed line  | Residential building entry   |
| Site Boundary   | Commercial building entry  |
| Garden bed to be retained and protected   | Grade responsive seating terraces integrated with planting & feature lighting (extension of Mitchell Street Square)  |
| Pergola with raised planter and integrated seating to be retained and protected   | Outdoor dining opportunities   |
| Split level paved terraced (alfresco dining opportunity for adjacent retail occupancy) area to be retained and protected              | Fading Steps   |
| Public domain paving treatment as per NSC Public Domain & Design Code - 06 Special Areas: A. St Leonards to be retained and protected | Vegetated verge  |
| Public domain paving treatment as per Mitchell Street Square to be retained and protected   | Raised planter with spillover planting to reflect biophysical design response to perimeter of Level 4 (podium) above |
| Through Site Link to be retained and protected  | Proposed public domain treatment (subject to council approval and relevant conditions of development consent)        |
| Recently upgraded public domain treatment to be retained and protected  | Bike racks   |
|   | Steppers in garden bed (DDA compliant path not required)   |
|   | Extend existing kerb alignment to facilitate accessible path of travel around neighbouring non-conformances          |

Landscape Ground Level Plan (provided by Tract)



# 6.7 External Amenity

## Ground Floor Sections



1 Grade responsive seating opportunities integrated with raised planter



2 Raised planter responds to grade variations



3 Feature lighting integrated into planters



4 Paving to match existing Mitchell Street Square



1 Spillover Planting to raised planter



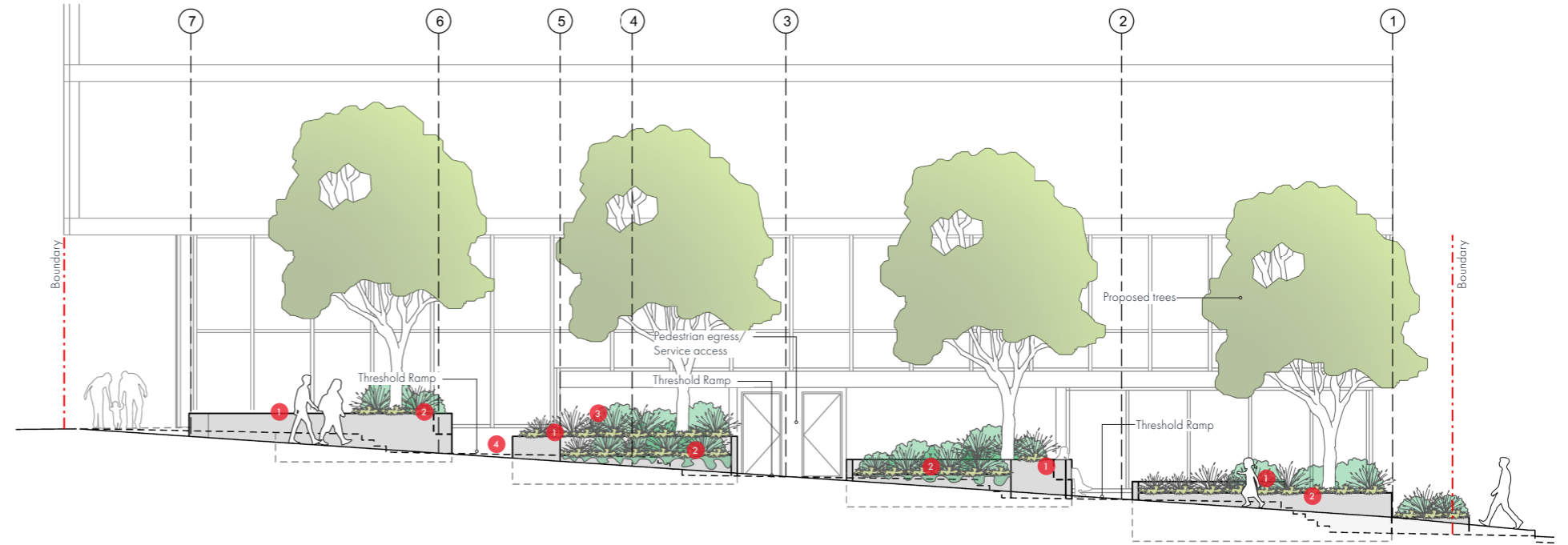
2 Outdoor dining opportunity planter



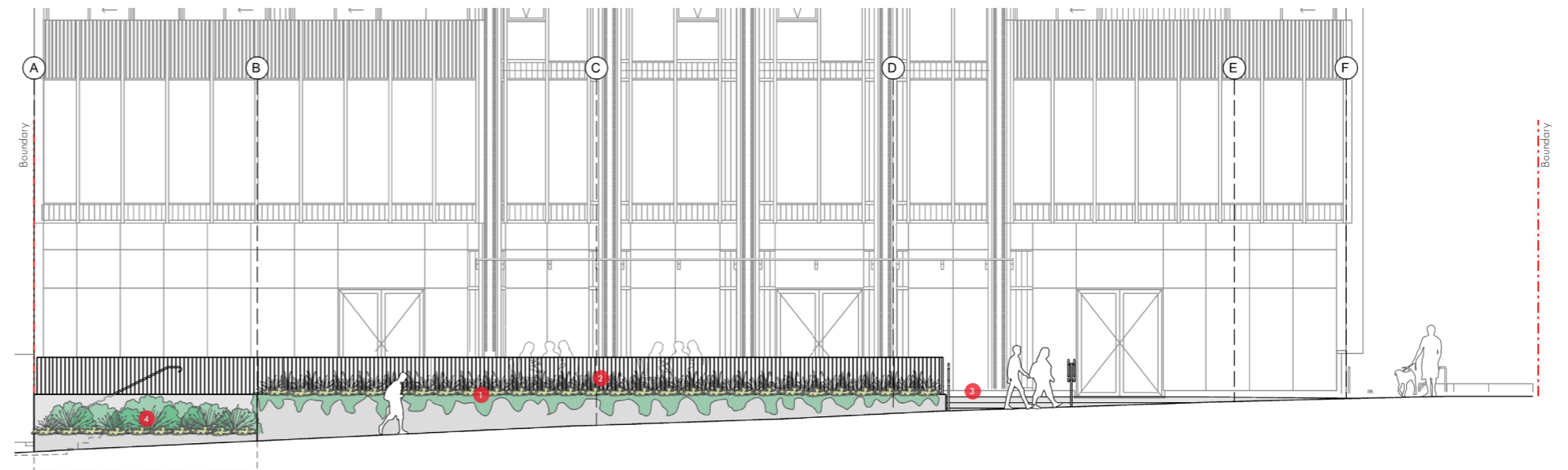
3 Fading concrete steps



4 Raised planter



Landscape East Elevation (provided by Tract)



Landscape South Elevation (provided by Tract)

## 6.7 External Amenity

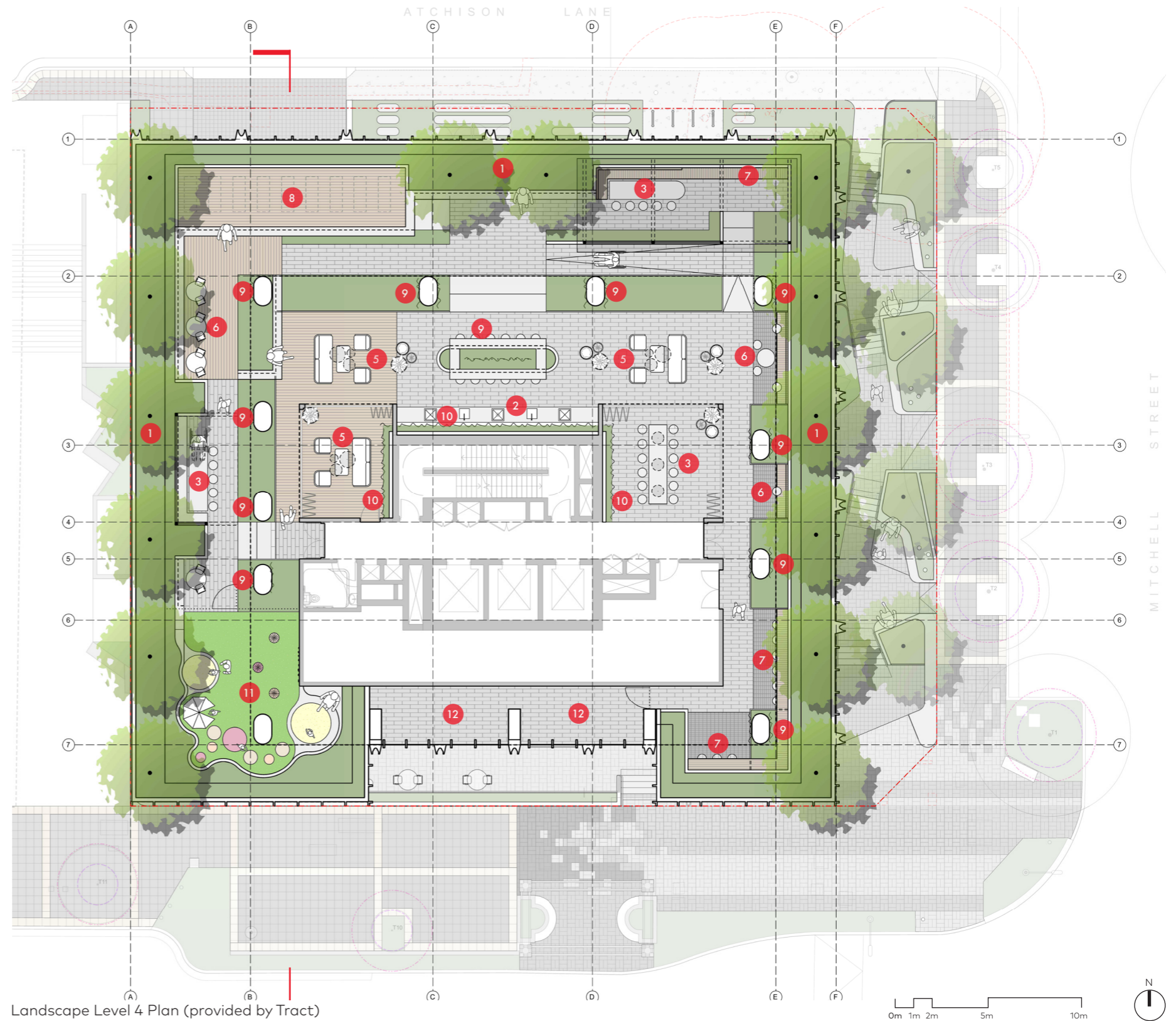
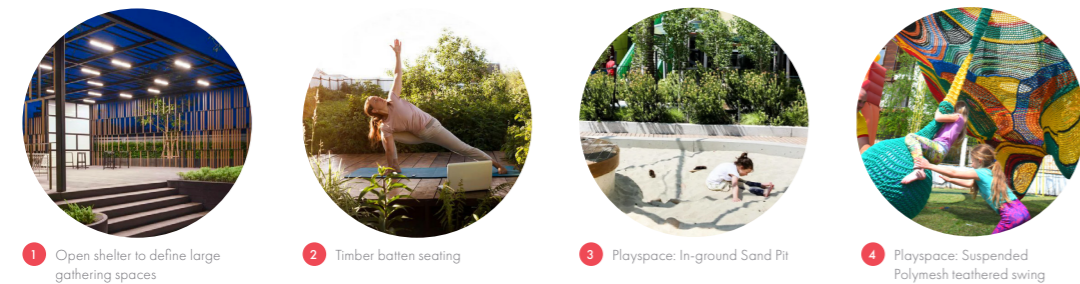
### Level 04 Plan

Level 4 provides communal open space amenities for the building's residents. The amenity is largely focused on external space, with the internal lounge and dining functioning as operable indoor/ outdoor spaces to take advantage of Sydney's desirable climate. The remained of Level 4 provides a variety of amenity through smaller individual seating to large group gathering areas, a outdoor kitchen and dining zone, a passive health and wellness zone to support activities such as yoga, and a dedicated area for children to play.

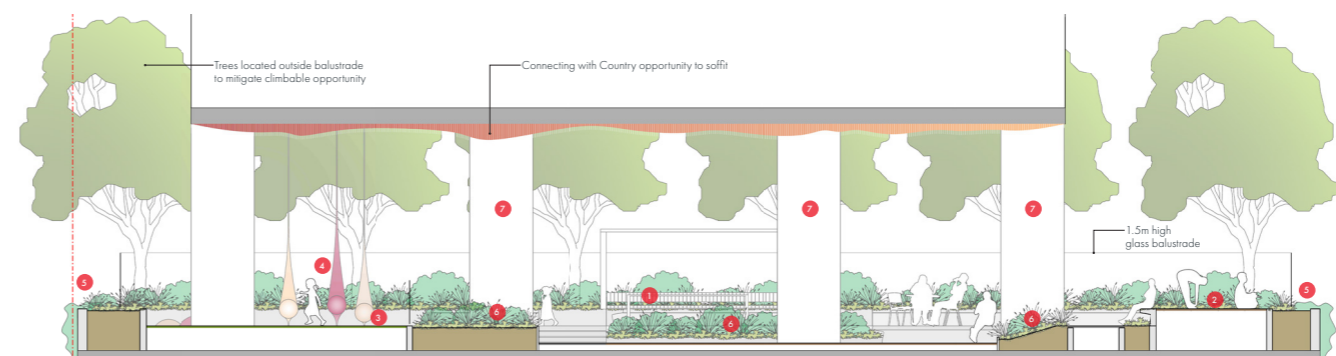
Various seating is provided, high bar seating to the South East corner takes advantage of views to the immediate precinct, while areas where views are blocked due to near by neighbours provide tables that encourage gathering and conversation. The perimeter planter beds provide space for both trees and cascading planting, providing visual amenity to both the street and Level 4, while also providing the benefits of wind and solar protection to the communal outdoor space.

— Site boundary

- 1 Perimeter tree planting (trees, shrubs, grasses, groundcovers, spillovers)
- 2 Communal kitchen (BBQs, Sinks, Fridges, etc)
- 3 Large dining space for bigger groups (birthday parties) with level change & open shelter to external areas
- 4 Medium/small group communal bar space integrated with raised planter
- 5 Medium/small gathering space incl. lounge setting, pendant lighting, pot clusters, etc
- 6 Small meeting / dining space with built-in timber seating & tables
- 7 Raised hardwood timber bar with GPO's for WFH opportunities
- 8 Multi-use communal space (passive activities: yoga, outdoor cinema, etc)
- 9 Living Greencolumn
- 10 Living Greenwall
- 11 Playspace (imagination play, teepee, sand pit, sensory swing, play mounds, rock-climbing, etc)
- 12 Maintenance access only



Landscape Level 4 Plan (provided by Tract)



Landscape Section (provided by Tract)

C O X

**07**

Facade Studies

## 7.1 Facade Concept

### Material + Finishes + Colours

Being driven by the opportunities highlighted in the Connecting to Country investigation, the façade takes inspiration from the Sydney sandstone bedrock and the connection point where the land meets the harbour. The façade materials respectfully pay homage to the area by incorporating a strong solid base that visually grounds the proposal to the surrounding ground plane. The materials palette is derived from this inspiration, utilising tones that range from sandy to bronze, with reflective glass mimicking light reflecting off the existing creeks and ocean waters in the area.

A thorough study of the St Leonards, North Sydney and Chatswood areas was undertaken, looking at built, approved and proposed tower form projects to create an understanding of the common architectural language used. It was found that common themes ran through these projects, including a horizontal grid façade, cool tone glazing, heavy solid elements and flat top towers that do not address the crown of the building. In order to create a project that both sat harmoniously with its surroundings but had a unique identity, the façade articulation developed into a simple linear approach that took inspiration from the verticality of pencil towers.

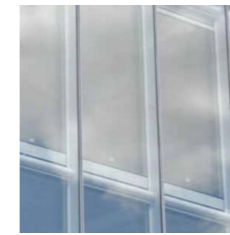
The vertical expression of the façade envelope provides a simple yet strong form to the slim tower and allows the tower and podium to successfully integrate into one another, creating a visual connection from land to sky. The verticality of the façade becomes integral to its unique identity, with the blades reflecting the colours of Sydney sandstone back to the surrounding area during the day, and softly illuminating the project with diffused lighting at night.



Axonometric Materiality Scheme



Glass Balustrade



Glazing



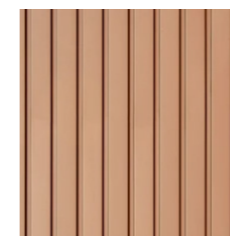
Shadow Box Glazing



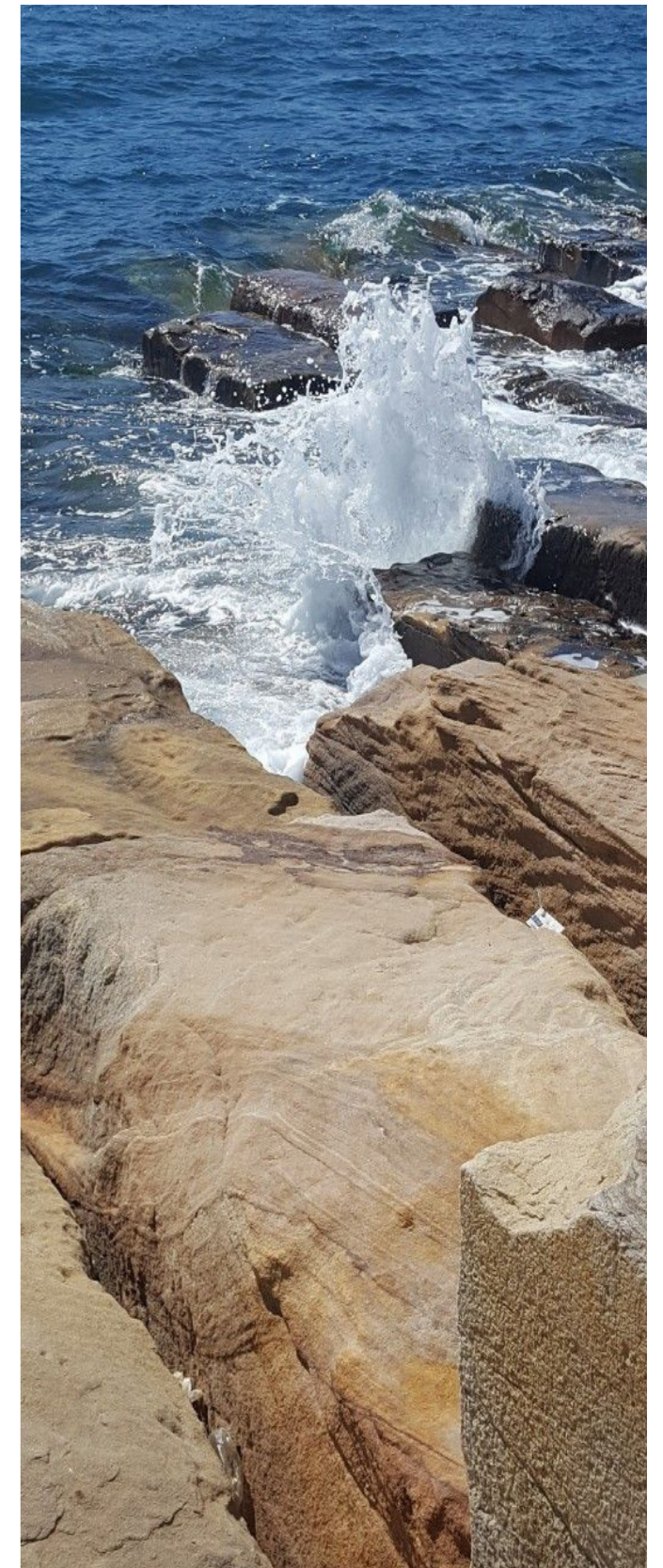
Light Bronze Finish



Sandstone Look Finish



Metal Cladding

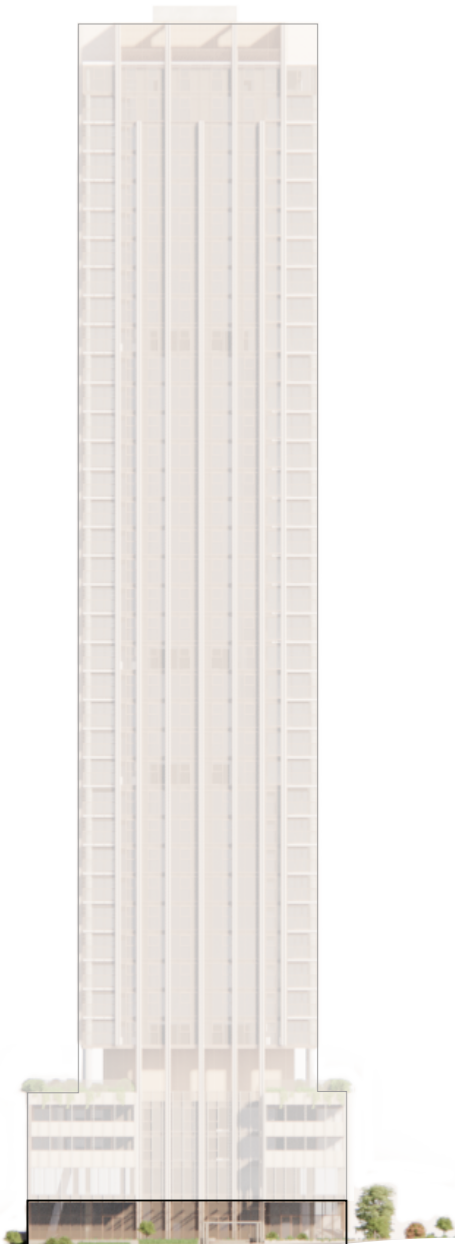


Bedrock Meets the Harbour

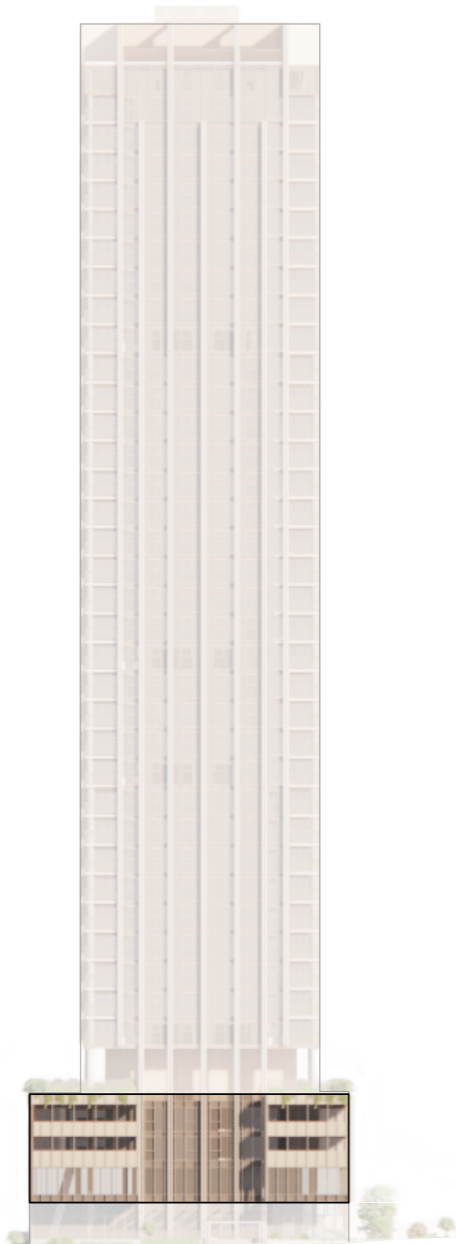
# 7.2 Facade Articulation

The façade articulation highlights the various uses that occur throughout the project, an open and transparent entry invites people in to meet, while the commercial podium language seamlessly integrates the proposed residential to Level 2 and Level 3 into the commercial streetscape below. The L4 amenities provides a green break in the form, inviting relaxation, while the tower provides a simple functional form that integrates articulation with shading, and wind protection for a comfortable experience for inhabitants. The last element of the building, the tower, elongates the form to touch the sky memorably.

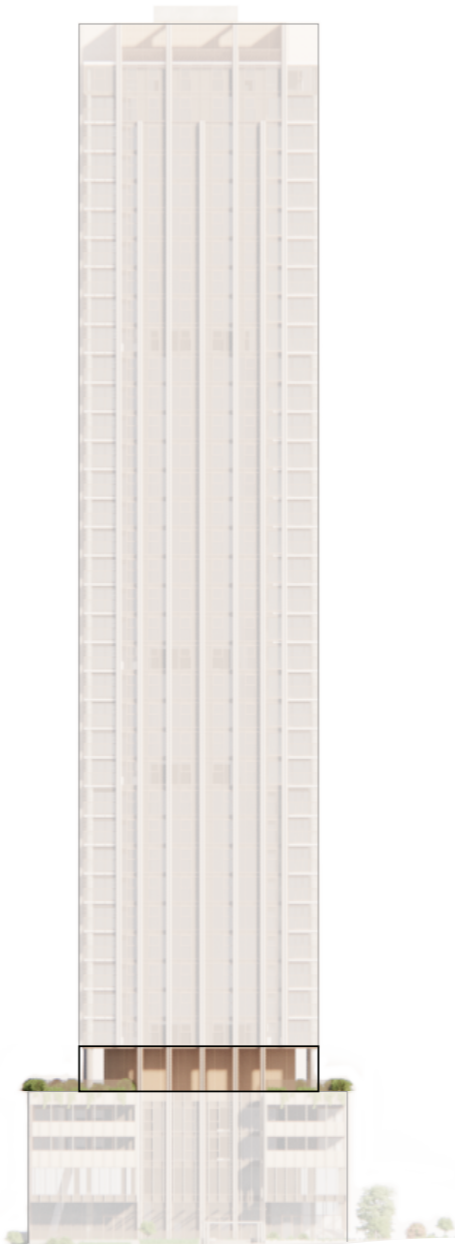
Ground Floor  
A Place to Meet



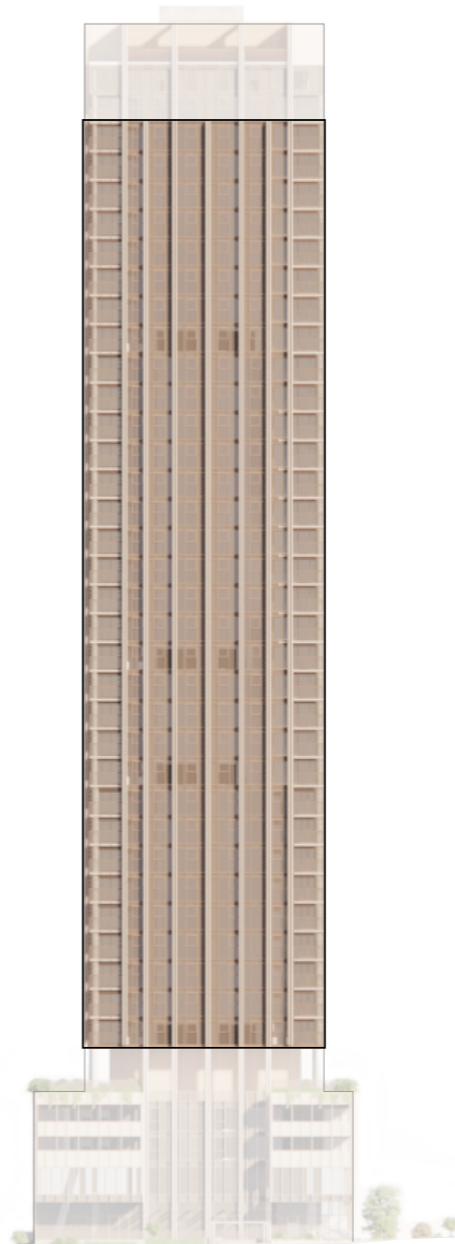
Podium  
A Place to Work



Level 4  
A Place to Relax



Tower  
A Place to Live



Crown  
Touch the Sky Memorably



## 7.2 Facade Articulation

### Podium

The external appearance of the podium creates a balance between solidity and transparency, grounding the base of the project in the surrounding 'bedrock', while simultaneously providing an open and inviting entry into the commercial and residential lobbies. The podium focuses on providing a fine grain articulation that speaks to the close proximity of the built form to the public domain and, therefore, the increased experiential condition it creates for people passing the built form.

The solidity is achieved through using sandstone look panelling to the Lower Ground Floor portion of the site, providing a natural textural material with a rhythmic panelling that breaks up the expanse of the façade, also allowing the service entries to be seamlessly integrated into this rhythm. The transparency of the commercial and residential entries is further accentuated through the use of a glazed awning over the residential entry. This awning not only provides comfort and protection to the entry, but visually connect the entry to the residential tower above, clearly defining the use of the lobby.

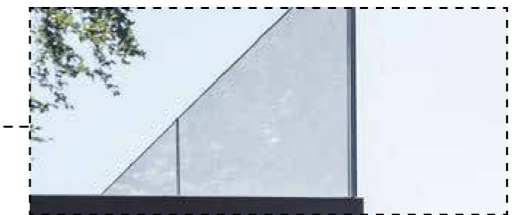
The primary vertical blades create an even pattern across the façade, providing various textures through the sandstone coloured exterior, and reflective mesh interior. At night these mesh panels glow softly to provide a sense of the building's identity, while safely illuminating the surrounding public realm. Secondary vertical battens are integrated into the curtain wall façade, further accentuating the vertical nature of the proposal through a fine grain detailed approach. The battened balustrade to the podium level residential apartments provides both a sense of privacy for the balconies closer to the street level and another layer of texture and interest to the podium material palette. This façade approach serves as the foundation for the site, expressing a simple yet intentional language that is refined and carried through to the tower form above.



Bronze Colour Metal



Metal Batten Cladding



Glass Balustrade



Sandstone Colour Cladding



Performance Glazing



Shadow Box Glass Panel

## 7.2 Facade Articulation

### Tower

The tower form starts its expression at the base of the residential lobby, with primary vertical elements connecting the lobby up through the tower to the crown of the building above. The tower façade articulation takes direction from the podium, however the approach is simplified as the tower risers, with secondary vertical elements falling back to lower levels, allowing the tower to lighten as it rises towards the crown.

The vertical elements play an integral role in the shading of the tower, particularly from the hot east and west sun. The intentional offset of the solid vertical blades from the corners of the tower provides the opportunity for the balconies to fade and soften the edges of the square form. These balconies integrate into the façade language through the use of fixed-open glass louvres that provide wind protection, allowing the balconies to remain comfortable and functional as they rise throughout the building.



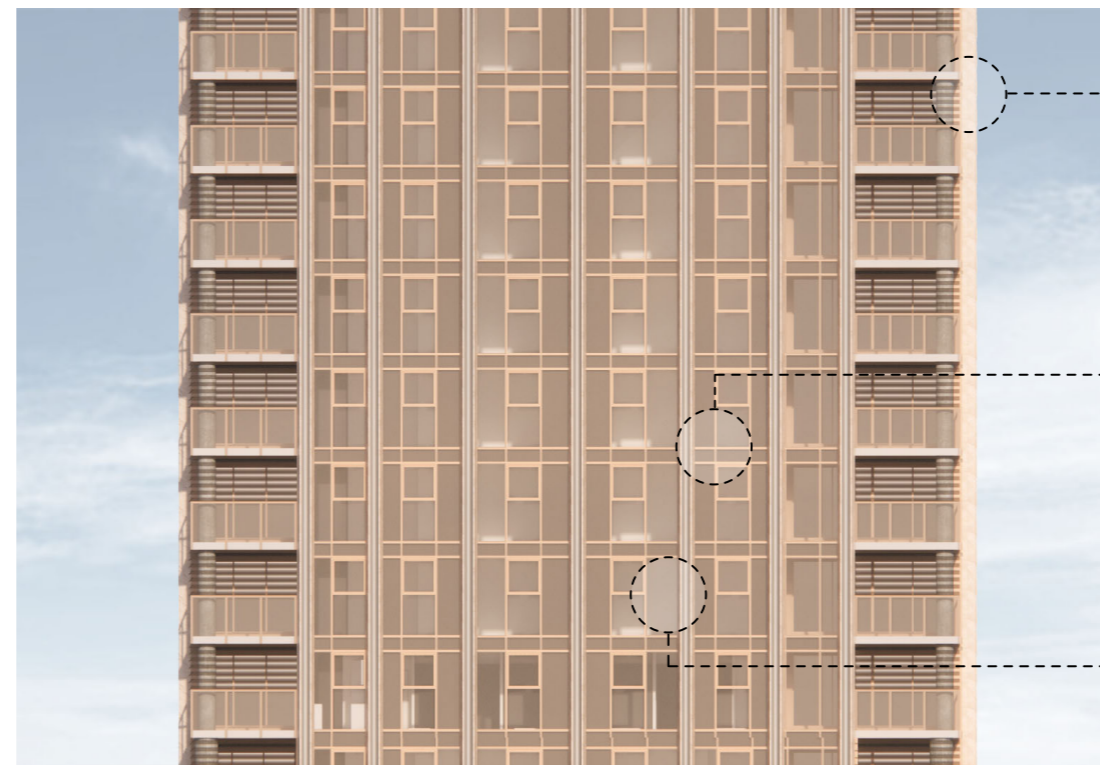
Bronze Colour Metal



Fixed Glazed Louvre



Palisade Balustrade



Sandstone Colour Cladding



Performance Glazing



Shadow Box Glass Panel

## 7.3 Elevations

### South Elevation

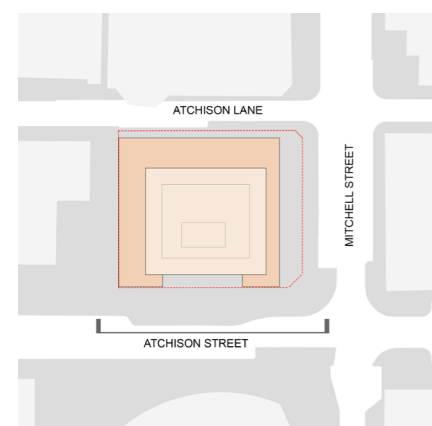
The podium and tower design has been carefully crafted to harmonize with both current and future neighbouring developments surrounding our site. The design accounts for the street slope that falls away along both Atchison and Mitchell Streets from the south east corner of the site. The proposal aligns with the evolving St Leonards TOD Precinct plans, which call for increased building heights strategically located in close proximity to transport hubs

The podiums datum aligns with the four storey street wall requirement outlined in the Crows Nest Design Guide and TOD Precinct plan, and the existing neighbouring podium at 6-16 Atchison St, providing a cohesive urban response. The awning provided above the residential entrance along Atchison Street, integrates seamlessly into the protection provided above the commercial entrances by the reverse setback tower form, ensuring a united elevation.

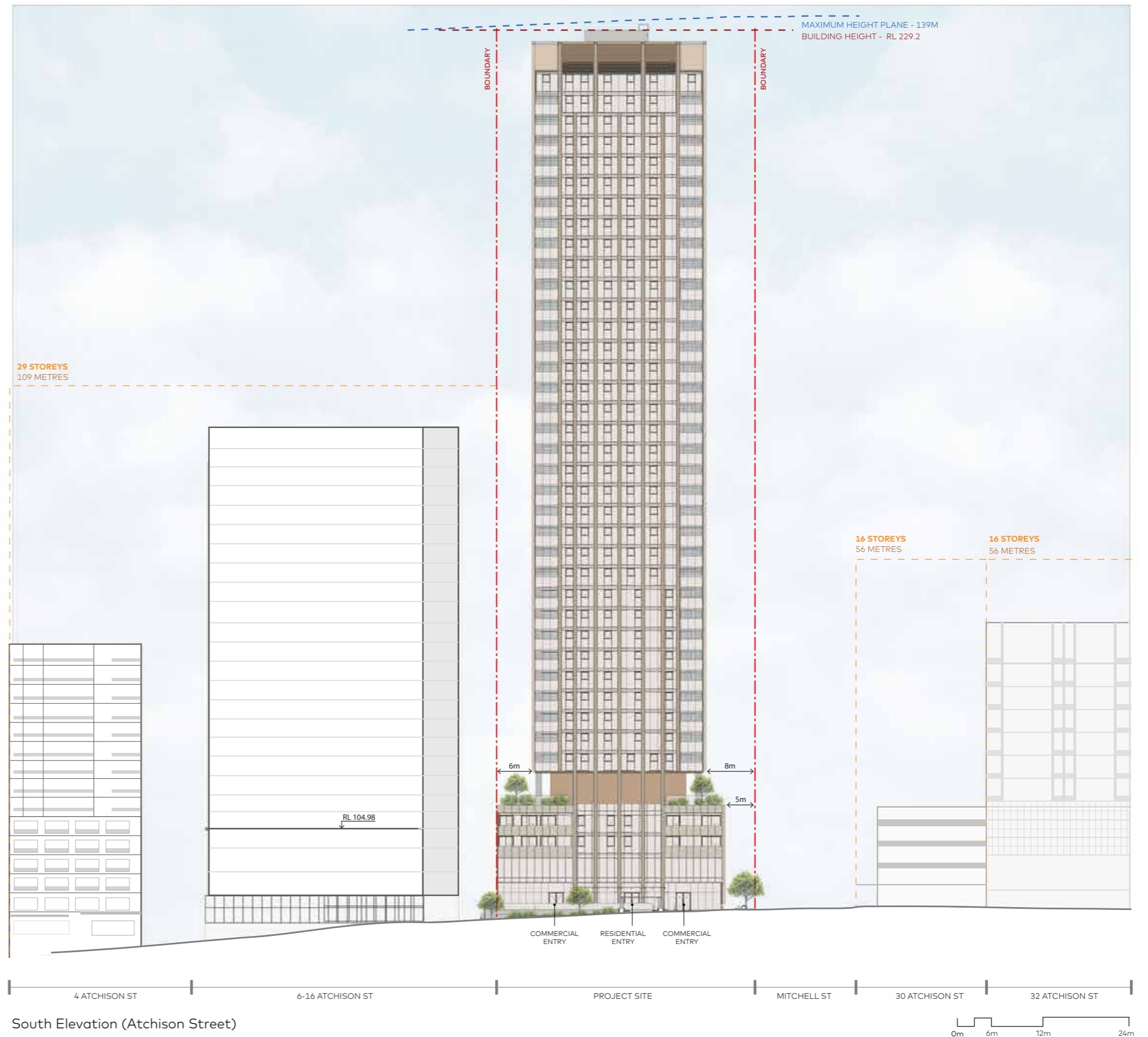
The vertical fin expression is most dense on the south elevation as it responds to the close proximity and density of the urbanised built form of St Leonards.

#### Legend

----- TOD Height Limit



Key Plan



South Elevation (Atchison Street)



## 7.3 Elevations

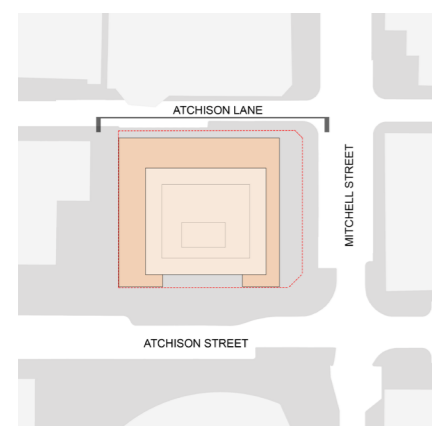
### North Elevation

The northern façade benefits from uninterrupted views over the district towards Middle Harbour, as well as solar access, above the 18 storey TOD approved envelope directly north of Atchison Lane. For this reason, the northern elevation housing the highest concentration of units and balconies to ensure the views and solar access benefit a large percentage of the buildings inhabitants. The vertical fin expression starts to lighten above the mid stack of the tower, opening the upper façade up to expansive views. In contrast to the southern facade, the northern fins respond to the vast visibility of low density housing, expanding out to Sydney's North Shore district.

The north elevation of the podium provides a solid base to the development, which also houses the vehicle entry and services which seamlessly integrate into the façade proposal, and the existing arrangement of Atchison Lane.

#### Legend

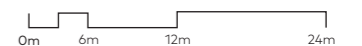
----- TOD Height Limit



Key Plan



North Elevation (Atchison Lane)



## 7.3 Elevations

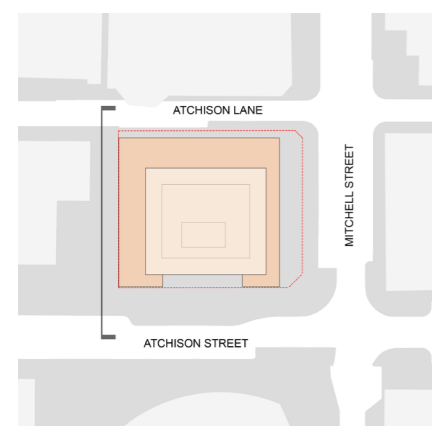
### West Elevation

The western elevation of the podium provides a seamless backdrop to the existing through site link, as the podium has a zero setback to the neighbouring property, façade articulation is removed providing a simple canvas that reflects the details of 6-16 Atchison St back to itself. The tower form above this mimics the form of the other façades, but utilises solid shadow box panels, rather than glazed windows, that provide a uniform visual approach while ensuring privacy separation between us and our neighbour.

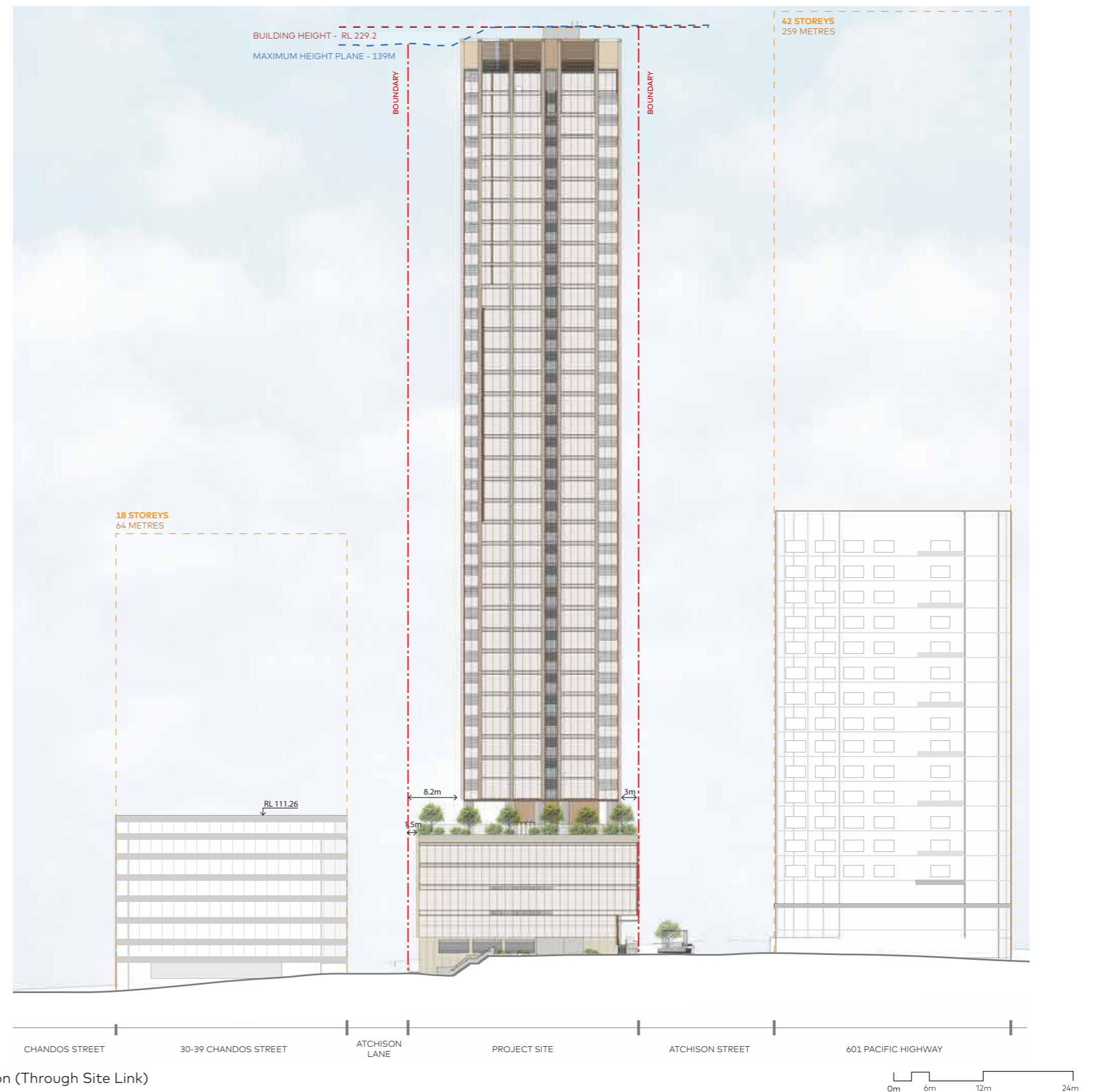
The vertical fins are minimised on this façade, with only four primary fins running from the tower to the crown, this articulation ties the façade back to the other frontages while minimising unnecessary articulation as shading to this façade is not required.

#### Legend

----- TOD Height Limit



Key Plan



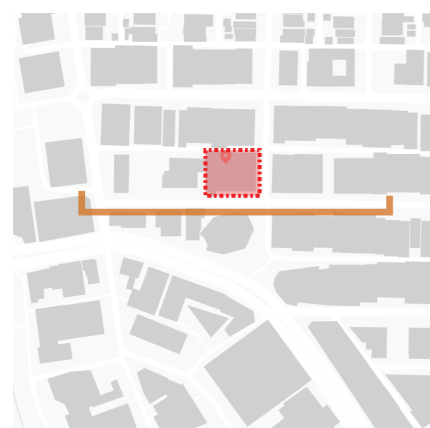
West Elevation (Through Site Link)

## 7.3 Elevations

### Site Elevation

The building envelope sits comfortably within the site, benefiting from sitting on the edge of a clear gradient of building heights that descend from Pacific Highway down towards Chandos Street. Due to this, the façade approach speaks to both the higher density tower buildings to the south of the site, and the low density residential buildings to the north.

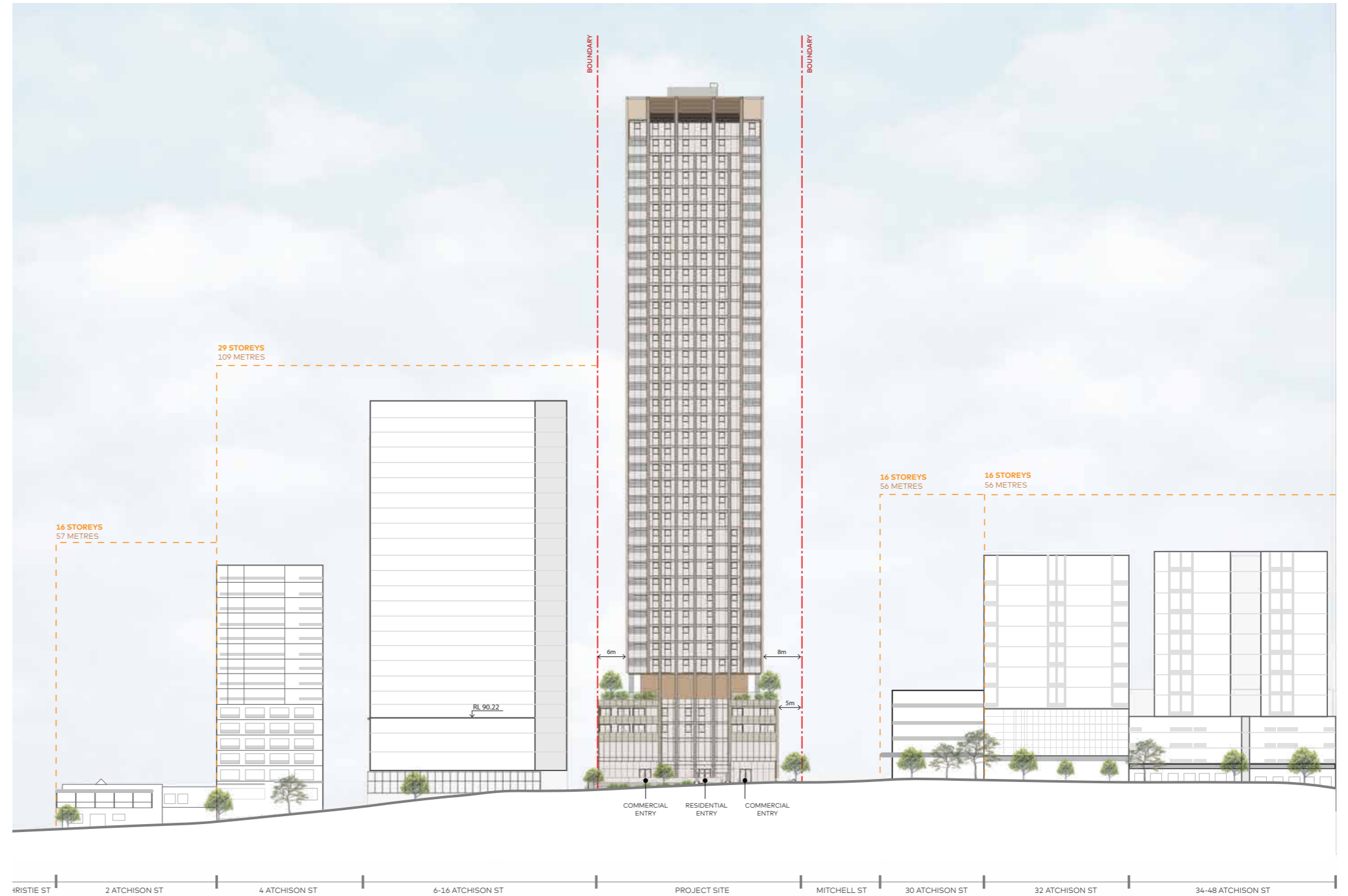
The south and eastern boundaries of the site are designed to maximise the activation of the building's façade and forecourt areas, creating an inviting ground level gathering space that allows for the flow of movement from Pacific Highway, through the Mitchell St Plaza and beyond. The natural topography of both Atchison Street and Mitchell Street provide a challenging slope that was addressed through the use of terraced landscape gathering spaces along Mitchell Street, providing a sense of privacy and intimacy in the street scape. The Atchison St entries are open and inviting at the south east corner closest to the Mitchell St Plaza, as the street slopes down and away from this corner perimeter planters are introduced to soften the potentially hard edge of the retaining wall required. The larger planter box in the south west corner defines the edge of the site and opens the pedestrian experience up into the existing through site link.



Legend

----- TOD Height Limit

Key Plan



South Elevation (Atchison Street)

C O X

**08**

Appendices

# 8.1 Solar Study

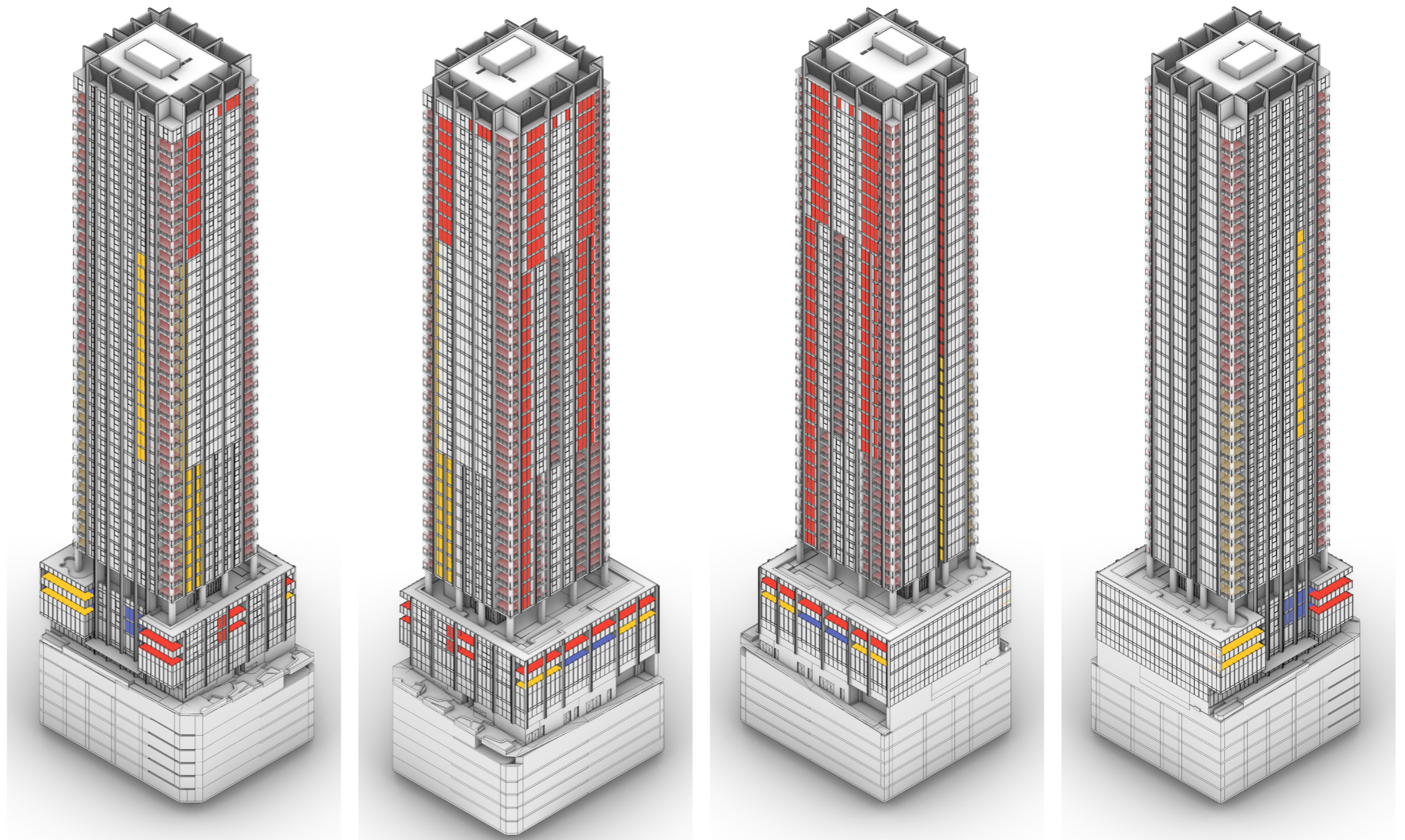
## Solar Access - Existing Context

Solar access computational design software has been used to calculate the solar access to all units as per the design guidelines of the ADG.

The building's solar access compliance is higher than the required threshold, achieving 74% compared to the 70% standard.

### Solar Access Summary Table - Overall Scheme

Solar Access (Winter Solstice)	Number	Percentage
No solar	6/181	3%
Over 2 Hrs	134/181	74%



South East

North East

North West

South West

### Legend

- > 2 Hours
- 1 - 2 Hours
- 0 Hours

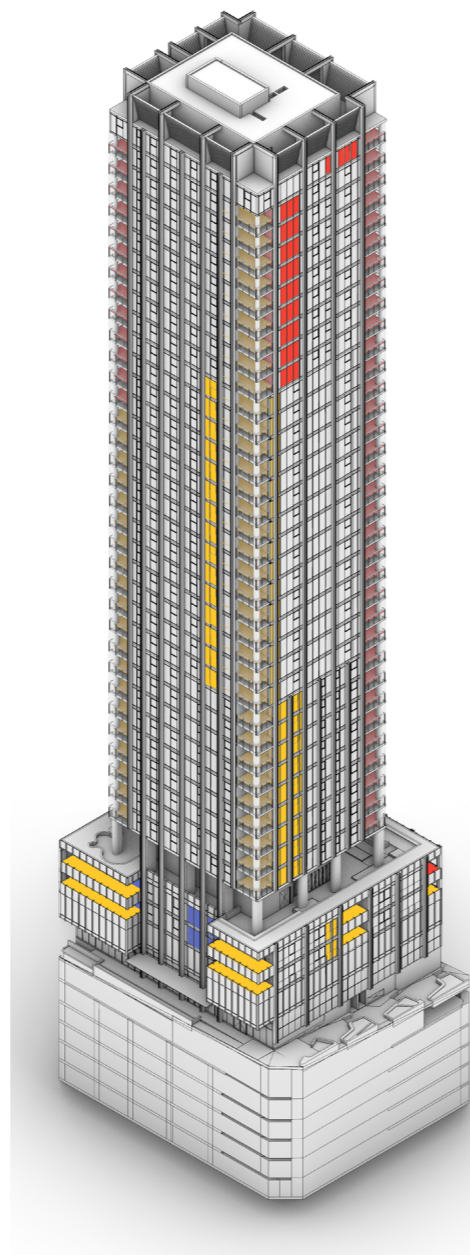
# 8.1 Solar Study

## Solar Access - TOD Uplift Context

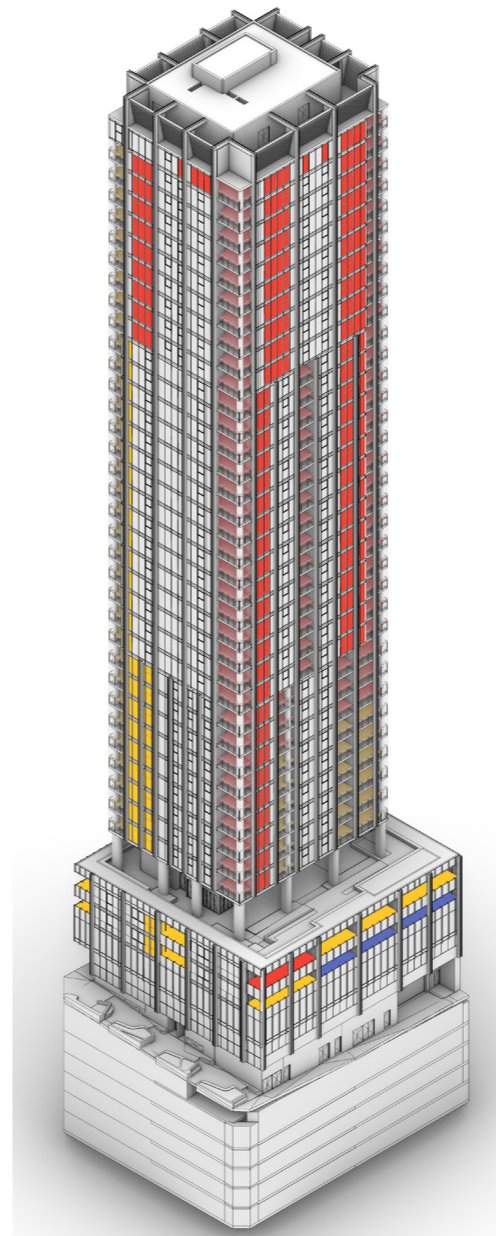
An additional study has been undertaken that considers the potential future built forms of the TOD sites. The results and impact on the solar access to the subject site are shown in the table below.

Solar Access Summary Table - TOD Site Scheme

Solar Access (Winter Solstice)	Number	Percentage
No solar	7/181	3%
Over 2 Hrs	106/181	58%



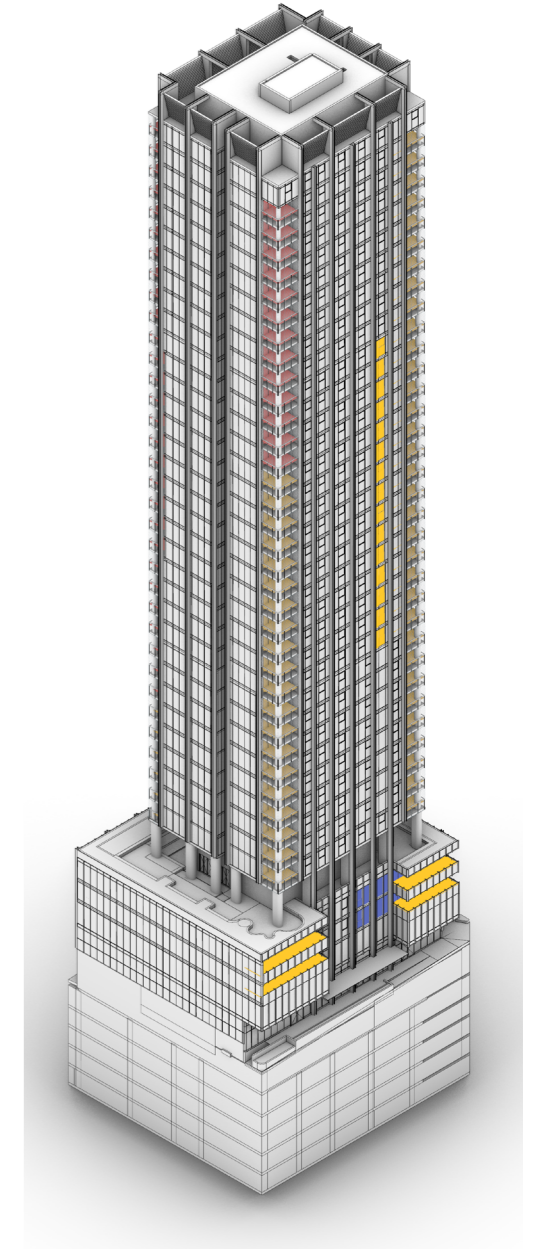
South East



North East



North West



South West

### Legend

- > 2 Hours
- 1 - 2 Hours
- 0 Hours

## 8.2 Cross Ventilation

### Cross Ventilation

The proposed design achieves site wide compliance for cross ventilation. 63% of apartments are cross-ventilated up until Level 9, as per the requirements of the ADG.

### Cross Ventilation Summary Table

Cross-Ventilation Requirements (min. 60%)	
Apartments achieving cross-ventilation	24/38
Percentage of apartments achieving cross ventilation	63%

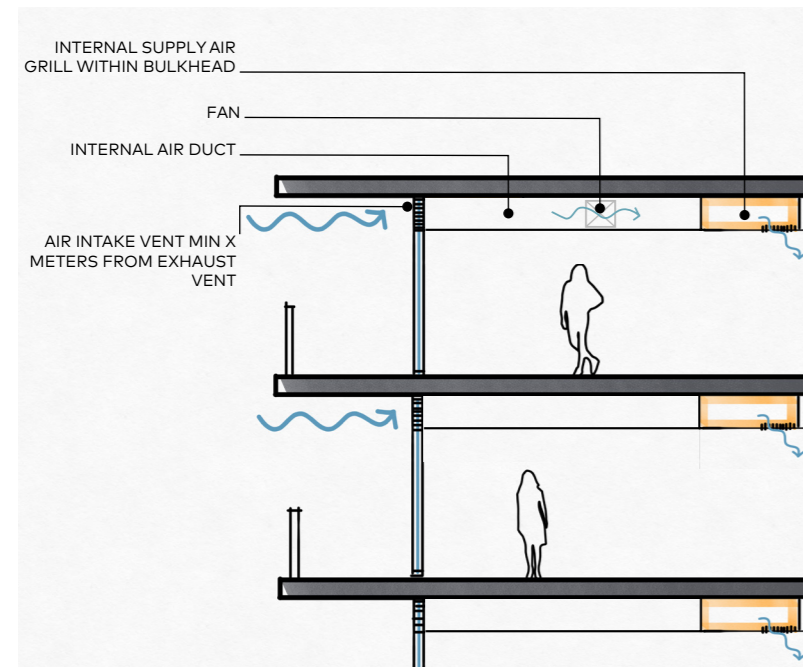
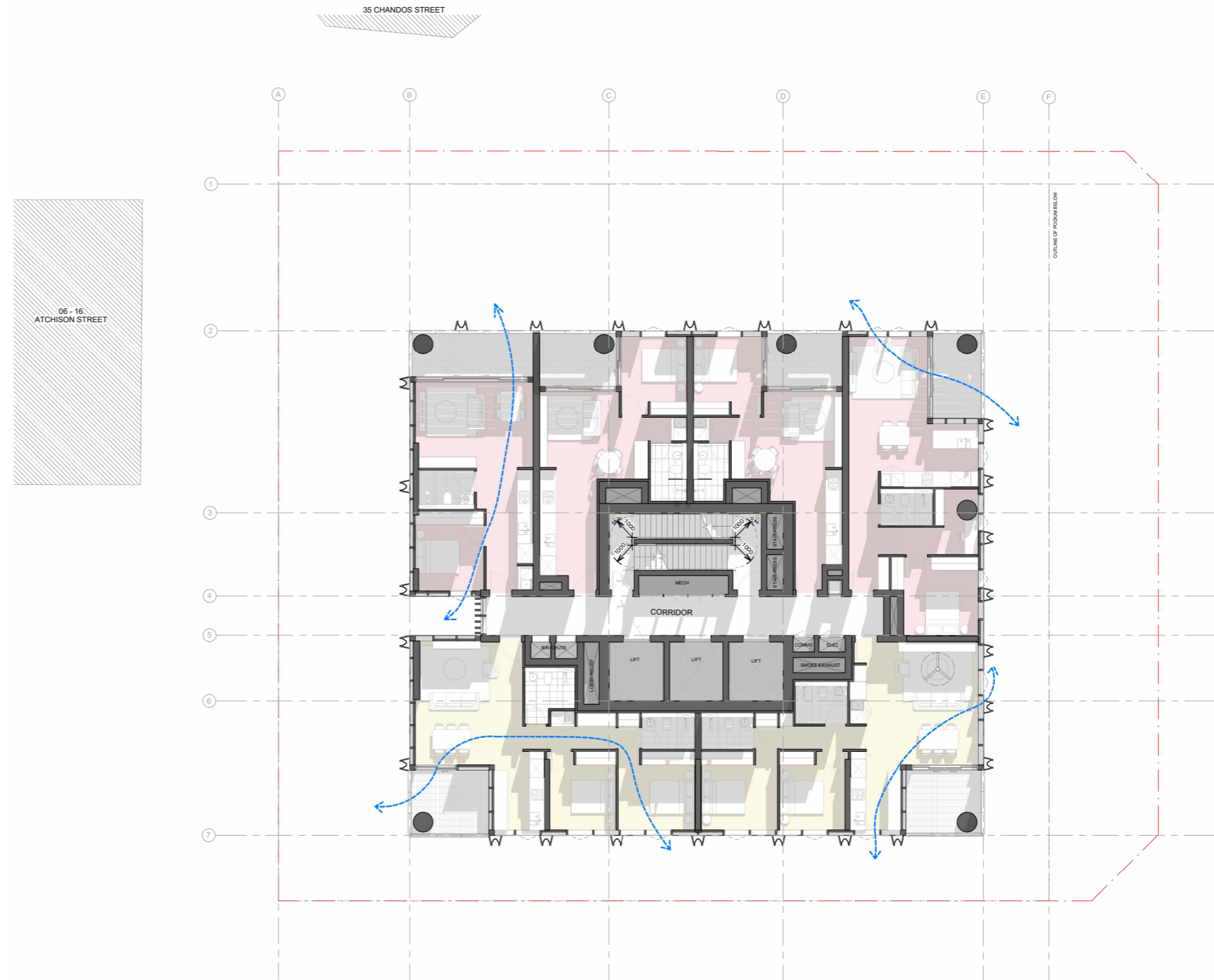


Figure 2: Sketch Section Demonstrating Mechanical Ventilation

### Mechanical Ventilation

As noted in the Acoustic Report completed by PWNA, mechanical ventilation is required to be provided to units to provide the option for natural ventilation while maintaining closed windows, ensuring compliance with target noise intrusion criteria. Mechanical ventilation system to be in compliance with "NCC 2022 F6D7 Ventilation of Rooms".



Level 6 - 14 Plan

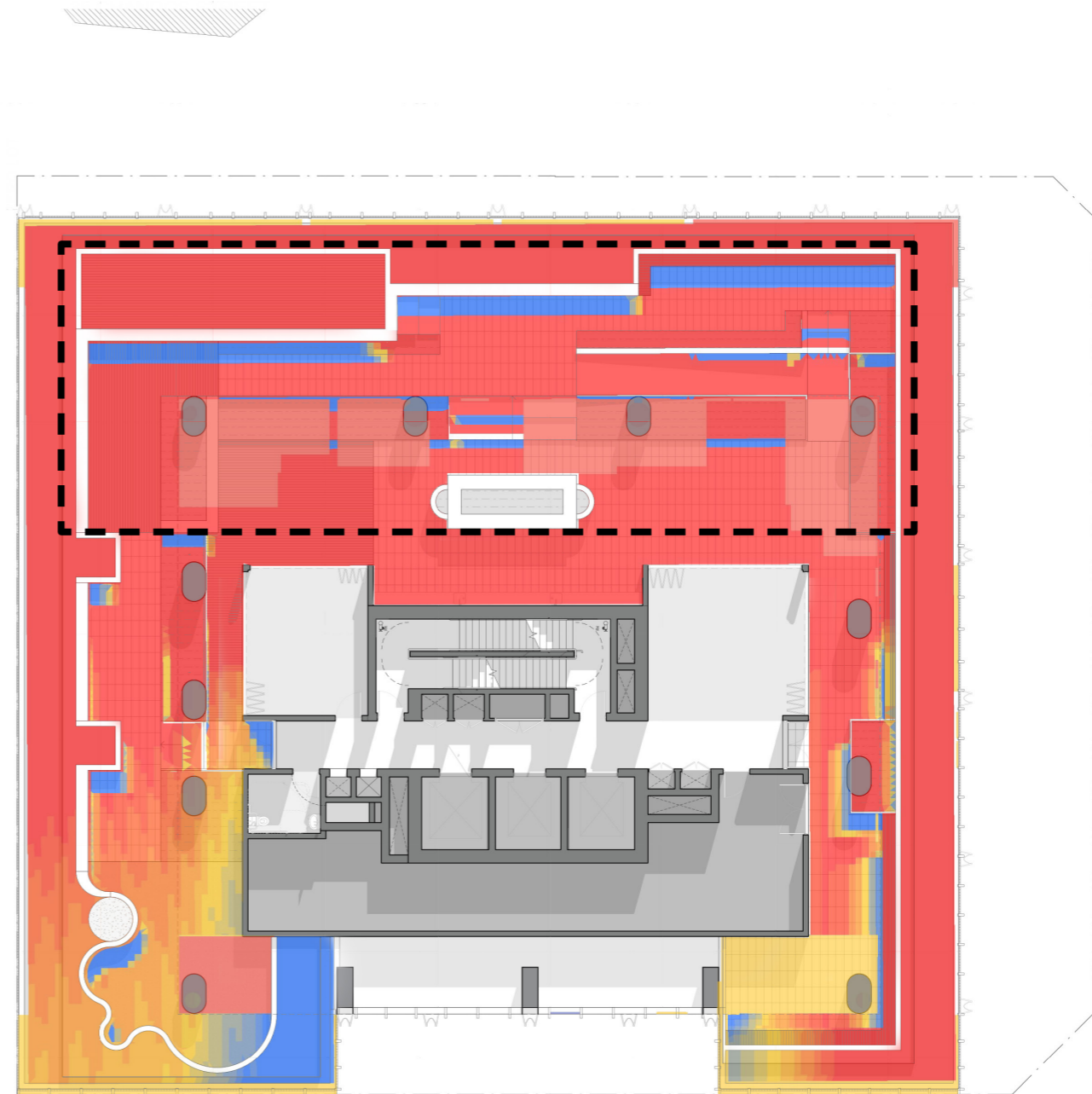


### 8.3 Solar Amenity

The communal open space for the residential tenure has been provided on the top of the podium at Level 4, easily accessible by both podium and tower residents. There are enlarged private open spaces provided to the podium level units, with ADG compliant balconies provided to the tower units. The communal outdoor space complies with the requirements of the ADG, exceeding the 25% of site area requirement.

Communal Open Space Summary Table

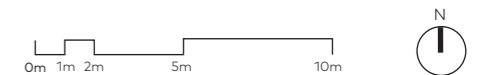
Communal Open Space (COS)	
Site area required to be COS	25%
Provision of COS	
• Level 4 COS	640m <sup>2</sup>
Total COS	640m <sup>2</sup>
Site Area	1,374m <sup>2</sup>
<b>COS Percentage of Site Area</b>	<b>46%</b>
Principle COS	343.5m <sup>2</sup>
COS receiving 2 or more hrs	302.7m <sup>2</sup>
% of COS achieving 2 or more hr	88%



Legend

- > 2 Hours
- < 2 Hours
- Principle COS

Level 4 Plan



# 8.4 Shadow Analysis

## Sun-Eye Views



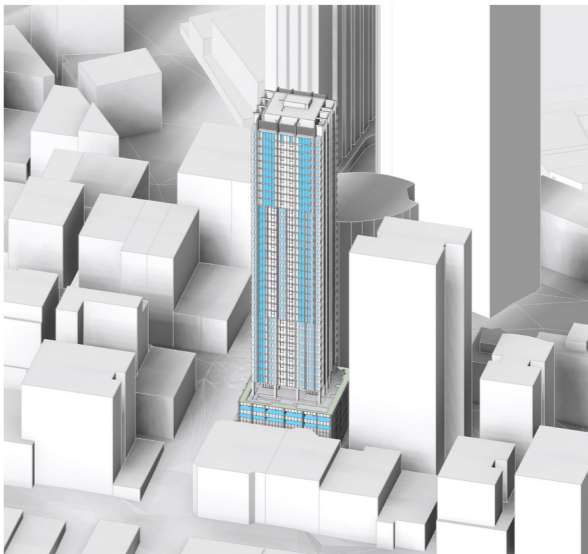
Winter Solstice (21 June)  
9am



Winter Solstice (21 June)  
10am



Winter Solstice (21 June)  
11am



Winter Solstice (21 June)  
12pm



Winter Solstice (21 June)  
1pm



Winter Solstice (21 June)  
2pm



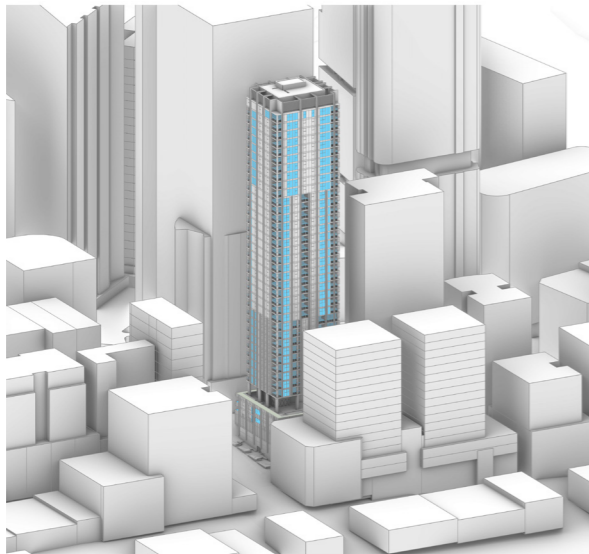
Winter Solstice (21 June)  
3pm

Legend

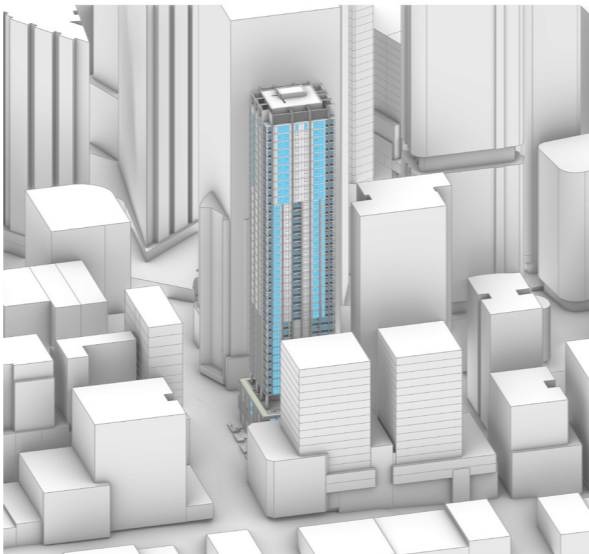
● Living Room and Balconies

# 8.4 Shadow Analysis

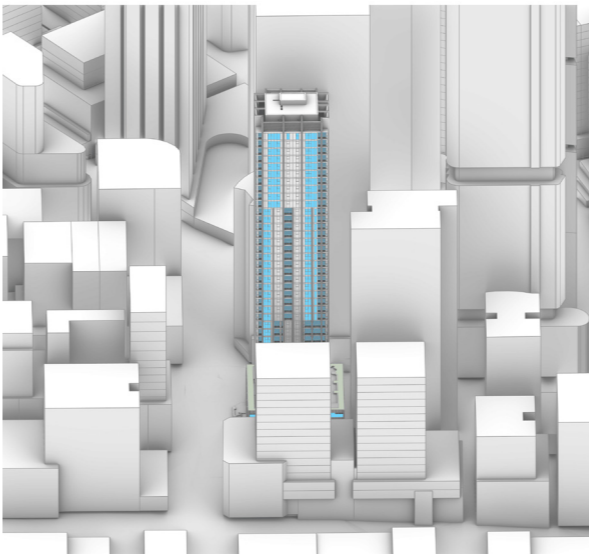
## Sun-Eye Views - TOD Uplift Context



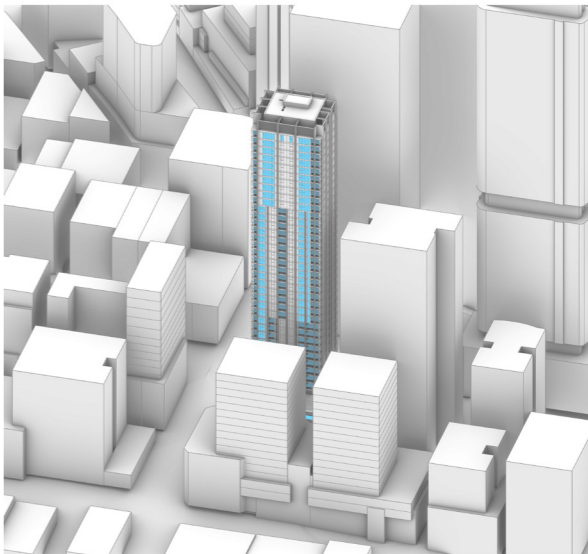
Winter Solstice (21 June)  
9am



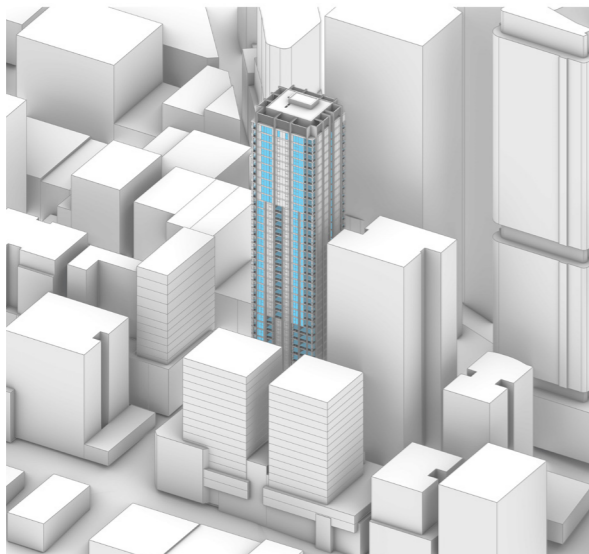
Winter Solstice (21 June)  
10am



Winter Solstice (21 June)  
11am



Winter Solstice (21 June)  
12pm



Winter Solstice (21 June)  
1pm



Winter Solstice (21 June)  
2pm



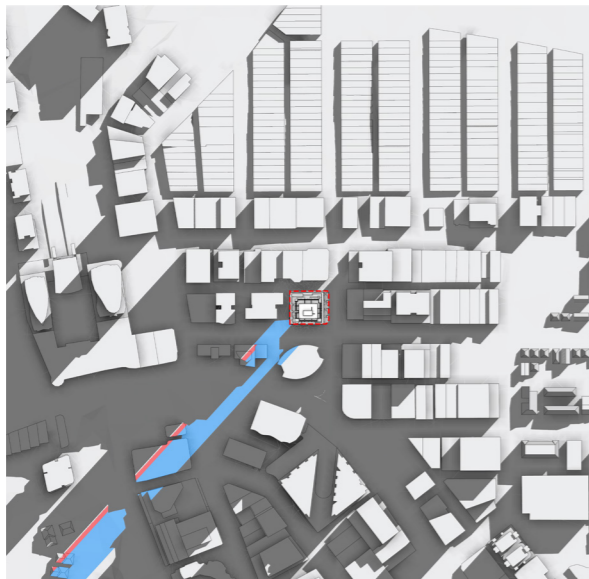
Winter Solstice (21 June)  
3pm

Legend

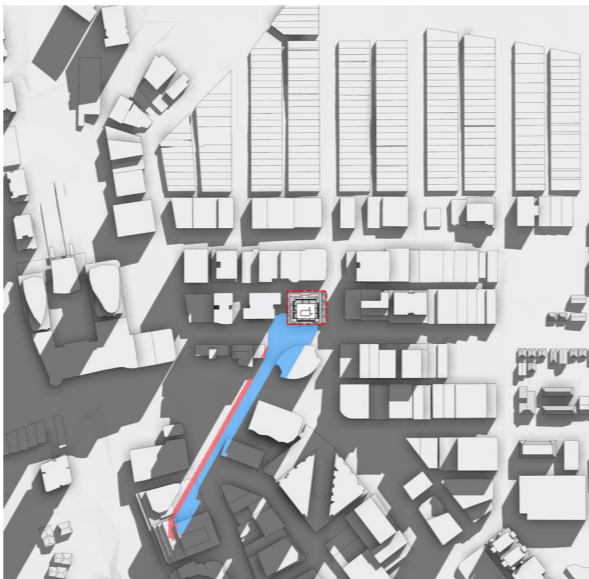
- Living Room and Balconies

# 8.4 Shadow Analysis

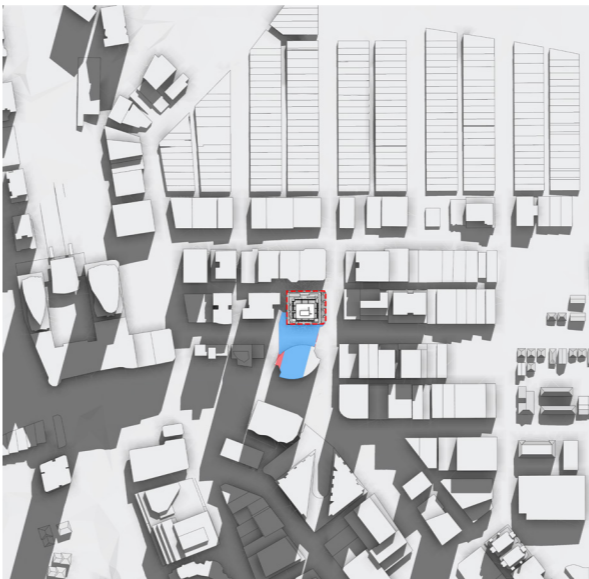
## Shadow Views



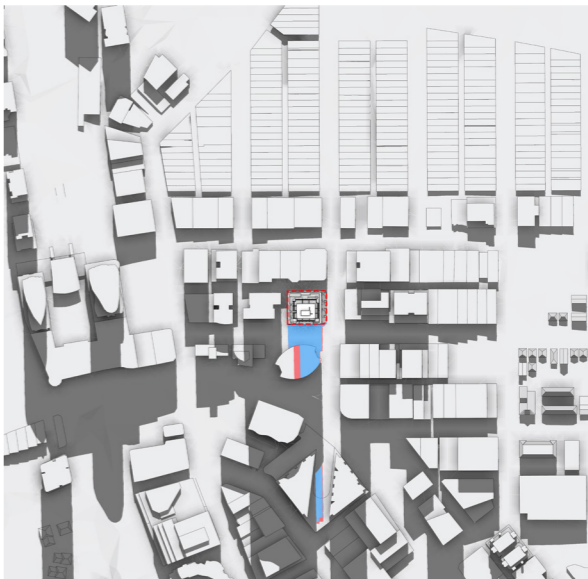
Winter Solstice (21 June)  
9am



Winter Solstice (21 June)  
10am



Winter Solstice (21 June)  
11am



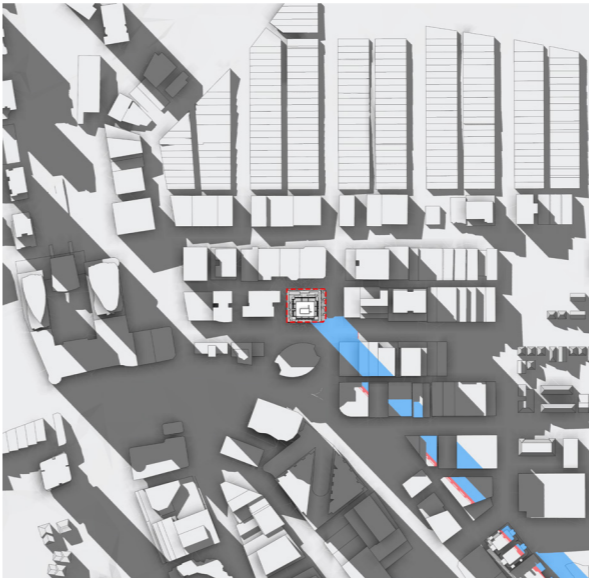
Winter Solstice (21 June)  
12pm



Winter Solstice (21 June)  
1pm



Winter Solstice (21 June)  
2pm



Winter Solstice (21 June)  
3pm

### Legend

- Compliant Massing
- Proposed Massing

## 8.5 SEARs Requirements

Table 1: SEARs Requirements

Item	Description of Requirement	Section Reference (this Report)
3	Good design in accordance with the seven objectives for good design in Better Placed	Pg. 27-34
3	Good design in accordance with the Connecting with Country Framework	Pg. 26 / 53
4	Explain and illustrate the proposed built form, including a detailed site and context analysis to justify the proposed site planning, design approach and application of the height and floor space bonuses under the Housing SEPP	Pg. 13-24 / 45-53
4	Demonstrate how the proposed built form addresses and responds to the context, site characteristics, streetscape and existing and future character of the locality.	Pg. 13-24 / 45-53
4	Demonstrate how the building design will deliver a high-quality development	Pg. 55-57
5	Address how good internal and external environmental amenity is achieved	Pg. 78-90
5	Assess amenity impacts on the surrounding locality	Pg. 17-24 / 48-50
5	Provide a solar access analysis of the overshadowing impacts of the development within the site, on surrounding properties and public spaces	Pg. 17-24 / 90
6	Provide a visual analysis of the development from key viewpoints, including photo-montages or perspectives showing the proposed and likely future development	Pg. 39
7	Demonstrate how the development maximises the amount, access to and quality of public spaces	Pg. 17-24 / 31-32 / 41 / 90
8	Identify how ESD principles are incorporated in the design and ongoing operation of the development	Pg. 29

