

PTW

# 845 PACIFIC HIGHWAY CHATSWOOD

## URBAN DESIGN REPORT

OCTOBER 2021 | REVISION C



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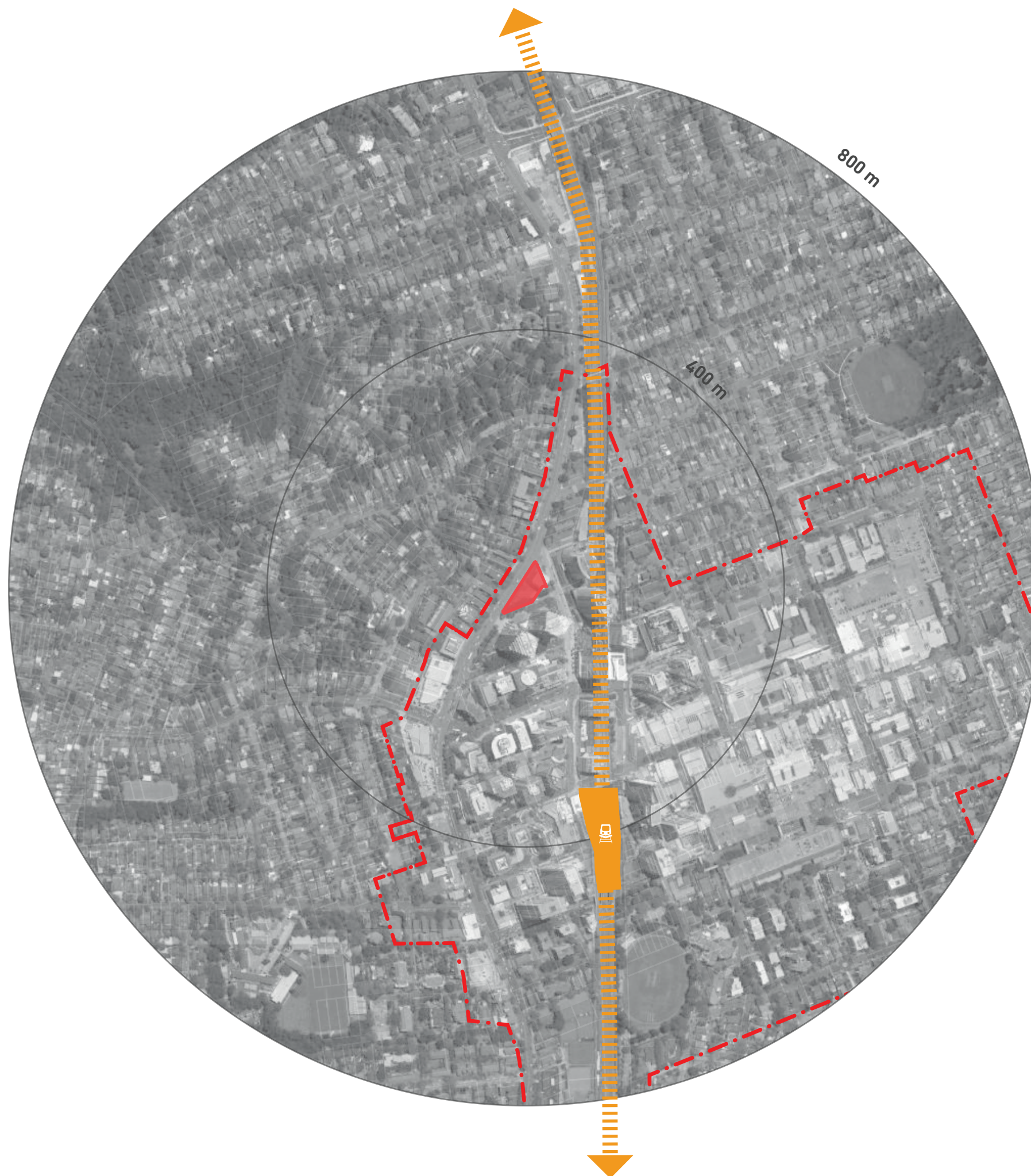


# 01

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## Introduction





# SATELLITE IMAGERY

- Site | 845 Pacific Highway
- Chatswood CBD Boundary
- Train & Metro Lines
- Chatswood Transit Station





# 1.1 INTRODUCTION

## Summary

PTW Architects have been appointed by HYG to undertake an urban design study in support of the proposed mixed-use development at 845 Pacific Highway, Chatswood. This urban design report forms part of the supporting documentation included within a Planning Proposal for the site.

The purpose of this study is to identify the constraints of the site and confirm how the proposed redevelopment will positively contribute to the city centre of Chatswood. This study therefore assesses the proposed built form and building interface in terms of the existing and desired future city context. In undertaking this urban design analysis, the existing building heights of the Chatswood CBD are modelled.

This report therefore confirms that the proposed building is applicable, especially within its northern gateway position.

## Structure of the Report

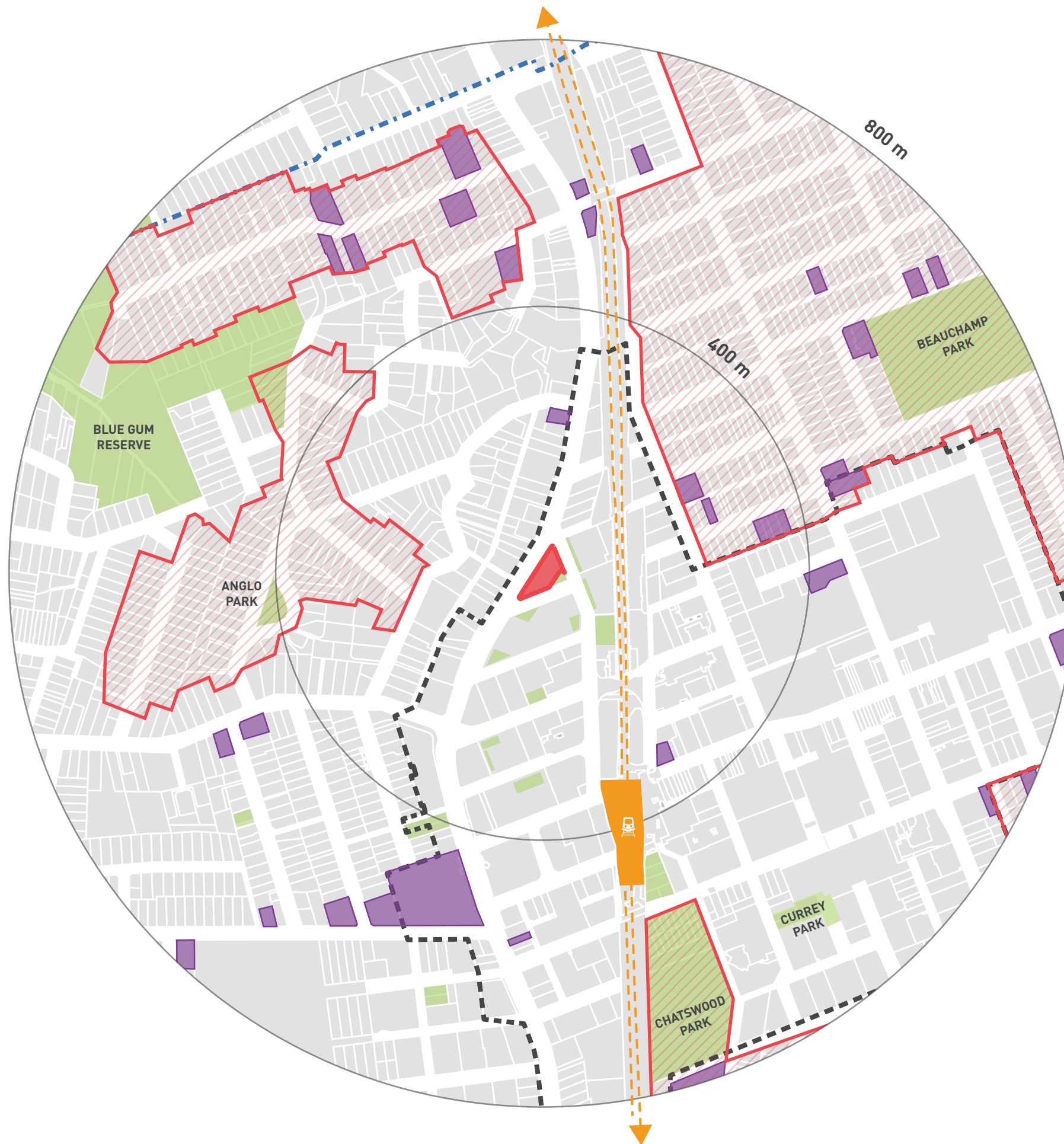
The structure of this report is undertaken with regard to the Department of Planning and Environment's "A Guide to Preparing Planning Proposals".

This report consists of the following sections:

- A description of the site within its local and broader urban context
- A brief commentary on the strategic context of Chatswood as a regional centre
- Identification of the current planning controls for the subject site
- A review of the land use, building heights and open spaces in the vicinity of the subject site
- Analysis of the merits the proposed built form to the subject site, including contribution to the public views and minimal impacts from overshadowing







# LOCATION PLAN

- Site | 845 Pacific Highway
- Open Spaces
- Heritage Items
- Conservation Areas
- Chatswood CBD Boundary
- Willoughby Council Boundary
- Train & Metro Lines





# 1.2 STRATEGIC CONTEXT

## Strategic Context

The 2018 North District Plan provides district-level planning strategies to meet the need for additional residential and employment uses, relative to the implementation of *A Metropolis of Three Cities - the Greater Sydney Region Plan*.

The catalyst of this plan addresses the need for additional densities relative to existing and improved infrastructure, as this will strengthen the connectivity of each major centre within Sydney. Importantly, Chatswood Railway Station will therefore support a greater concentration of employment uses.

The goal is to establish a compact, transit oriented city serviced by existing heavy rail and new metro stations. The context of the proposal can meet the following strategic planning objectives:

- Supports an intensification of employment uses in close proximity to new infrastructure investment, including Sydney Metro
- Provides employment uses which compliments the CBD of Chatswood, a regional mixed-use centre
- Reinforces a concentration of important employment uses along the western edge of the CBD particularly along the Pacific Highway spine of the regional centre
- Enhances the vitality for significant employment uses within a walkable mixed-use regional centre

## Recognising a Mixed-Use CBD with New Employment Uses

The merits of the proposal, strategically located within a mixed use regional centre, is noted as follows:

- Meets the intent of the Chatswood CBD Strategy by providing future employment opportunity in a significant town centre building
- The subject site is approximately 400m to the north of Chatswood Railway Station. The proposal is well serviced by public transport
- The proposal is strategically positioned on Pacific Highway within a mixed-use regional commercial centre. The strategic location of the proposal will benefit from a synergy of location with a number of important corporate headquarters, including Smith's Snackfood, Abigroup, Carnival Australia, Coffey, PepsiCo and Carter Holt Harvey as well as the offices of Nortel Networks, Optus, Lenovo, NEC, Leighton Contractors and Huawei
- Positioned within a resilient and vibrant CBD, the proposal recognises the facilitation of a compact mixed-use walkable CBD
- Located at the northern edge of the city centre, the proposal is well outside two heritage conservation areas and will therefore have limited impact

## Potential for Future Development

Chatswood Railway Station, including the new Metro Station will continue to influence the built character and density of available key sites within a 400-800m walking distance of the station.

The strategic importance of the proposal, including a proposed built form envelope, is confirmed by the following:

- The subject site is located within the northern portion of the CBD. This extension of the CBD was identified to accommodate future growth
- The subject site is capable of being redeveloped to meet the planning controls identified in the Chatswood CBD Planning and Urban Design Strategy to 2036
- The proposal will provide employment and office uses within the CBD
- The proposal is positioned at the northern edge of the CBD on Pacific Highway. It therefore has the potential to become an "urban gateway" through the modulation of new built form
- The proposal is located well away from important local heritage conservation areas
- As a large block with three street frontages, there are no shared boundaries with adjacent development
- As a consolidate full block redevelopment there is strategic justification to provide different street set backs. These will be in response to the urban condition and public domain character of each street



# FLOOR SPACE RATIO MAP

- Site | 845 Pacific Highway
- 0.25:1
- 0.40:1
- 0.70:1
- 0.90:1
- 1.00:1
- Willoughby Council Boundary
- 1.40:1
- 1.50:1
- 1.70:1
- 2.00:1
- 2.50:1
- 2.70:1
- Chatswood CBD Boundary
- 4.50:1
- 5.00:1
- 6.00:1
- 7.00:1
- 8.00:1
- Chatswood Transit Station
- Train & Metro Lines





# 1.3 PLANNING CONTROLS

## Planning Controls

The current planning controls that apply to the site and its surrounding context are identified. This will provide an understanding of the development potential for the site. The permissible planning controls, including land-use, height of buildings and the development potential (the FSR) are identified.

## Land-Use

- The subject site is situated at the north edge of the Chatswood CBD within the B3 Commercial Core land use zone
- Adjacent to the site, a small south-east portion of the block is zoned RE1 Public Recreation
- The block to the immediate east is B4 Mixed Use
- The block to the immediate south (on the east side of Pacific Highway) are also zoned B3 Commercial Core
- The block to the west (on the other side of Pacific Highway) are zoned R3 Medium Density Residential

## Building Height

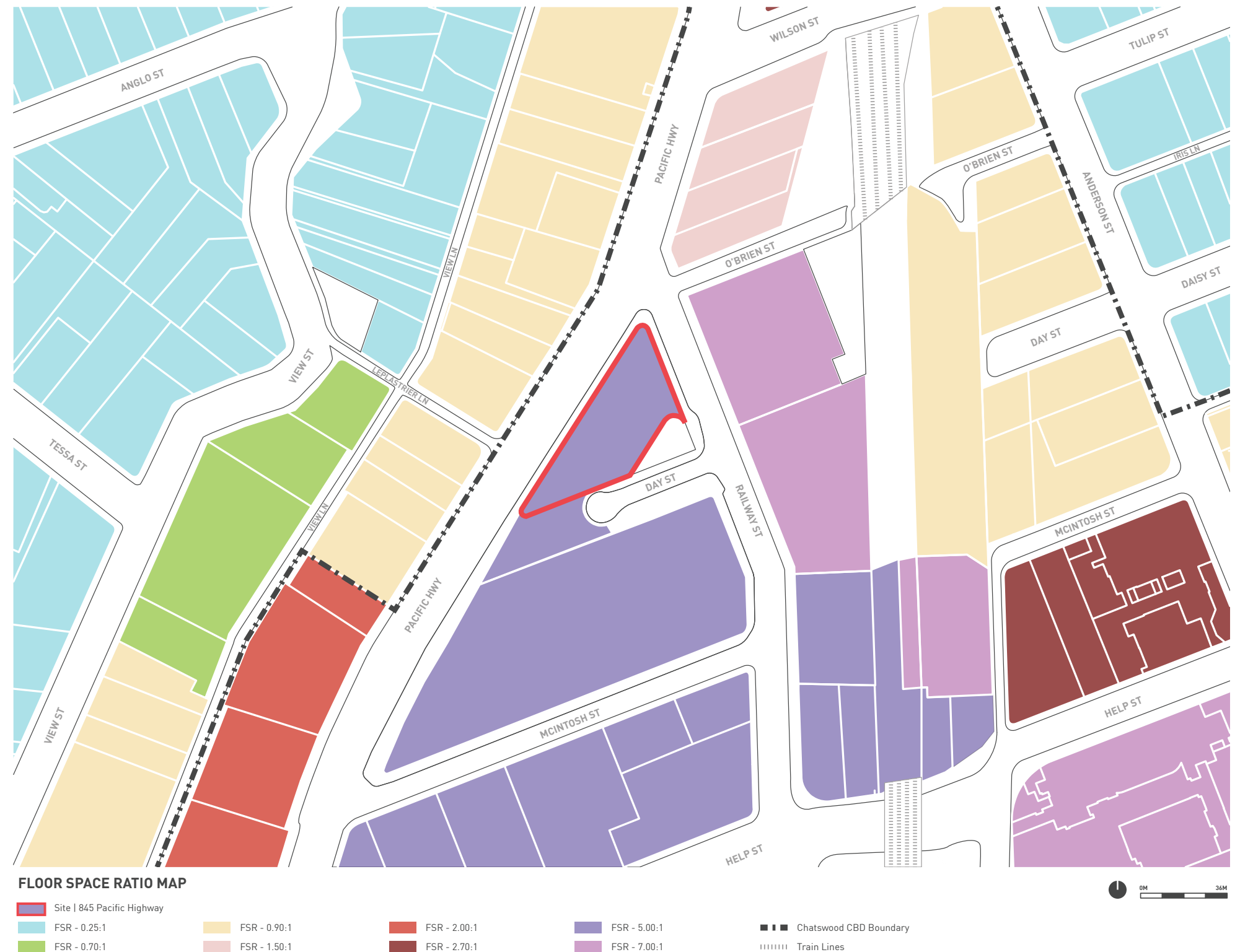
- The subject site has a permissible height of 60m (equivalent to 20-storeys) which applies across the entire block
- The block area to the immediate south has an allowable height of 90m (equivalent to 30-storeys)
- The block area to the immediate east has a maximum building height control of 175m (equivalent to 58-storeys)
- The blocks across the highway to the west of the site has an allowable building height of 11m (3-storeys)

## FSR

- The subject site has an FSR control of 5:1 (Z1)

## Heritage

- The subject site does not contain any heritage items nor is it located within a Conservation Area







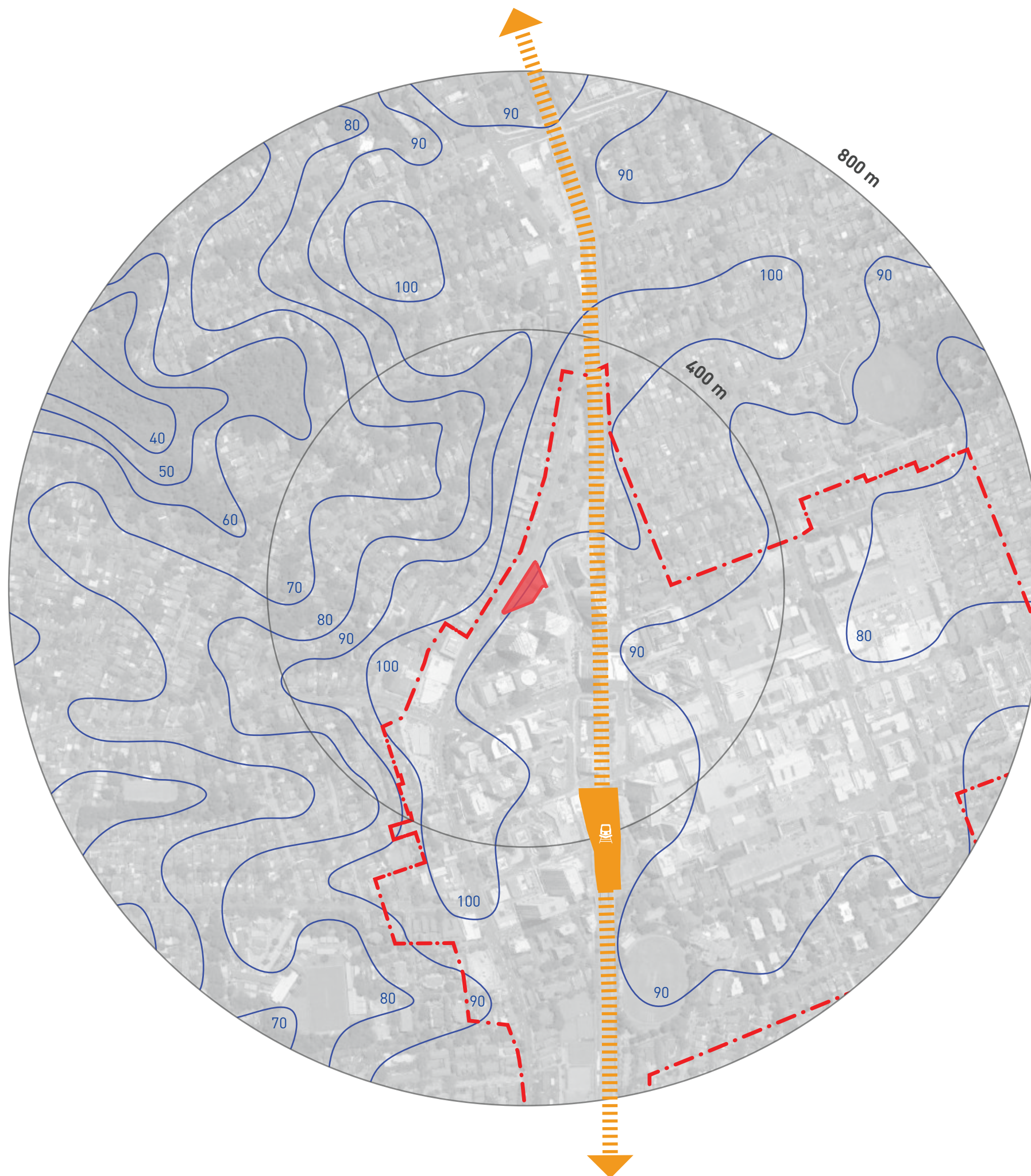


# 02


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## Site and Urban Context





## TOPOGRAPHY

-  Site | 845 Pacific Highway
-  Chatswood CBD Boundary
-  Train & Metro Lines
-  Chatswood Transit Station
-  Contours



0M

100M



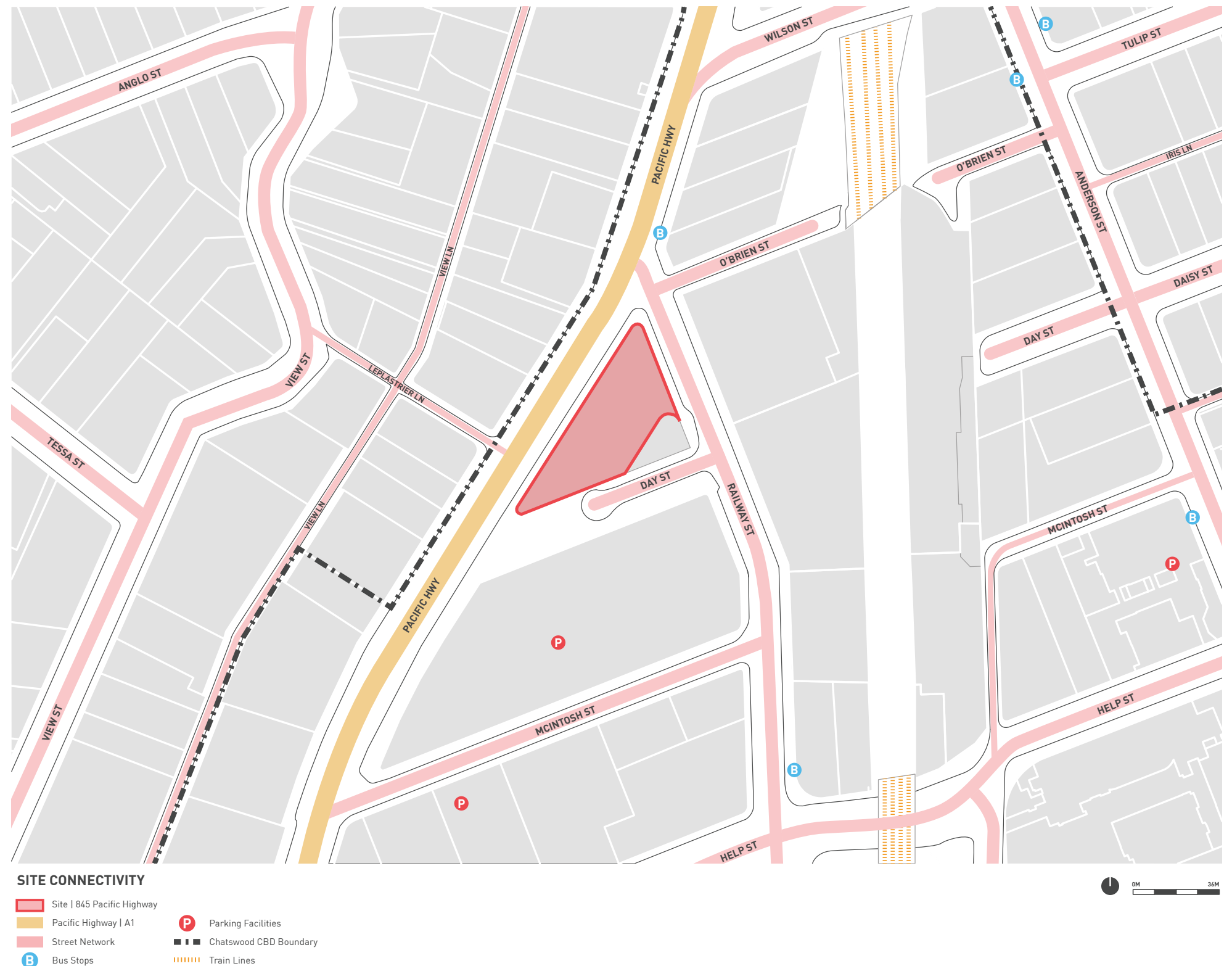
# 2.1 THE SITE

The subject site, at 845 Pacific Highway, is triangular in shape with an area of 2,074sqm. The primary street frontage, of approximately 40m, is facing towards Pacific Highway. Two other street frontages are available and these include Railway Street to the east and Day Street to the south. Day Street is now closed to Pacific Highway for vehicle access.

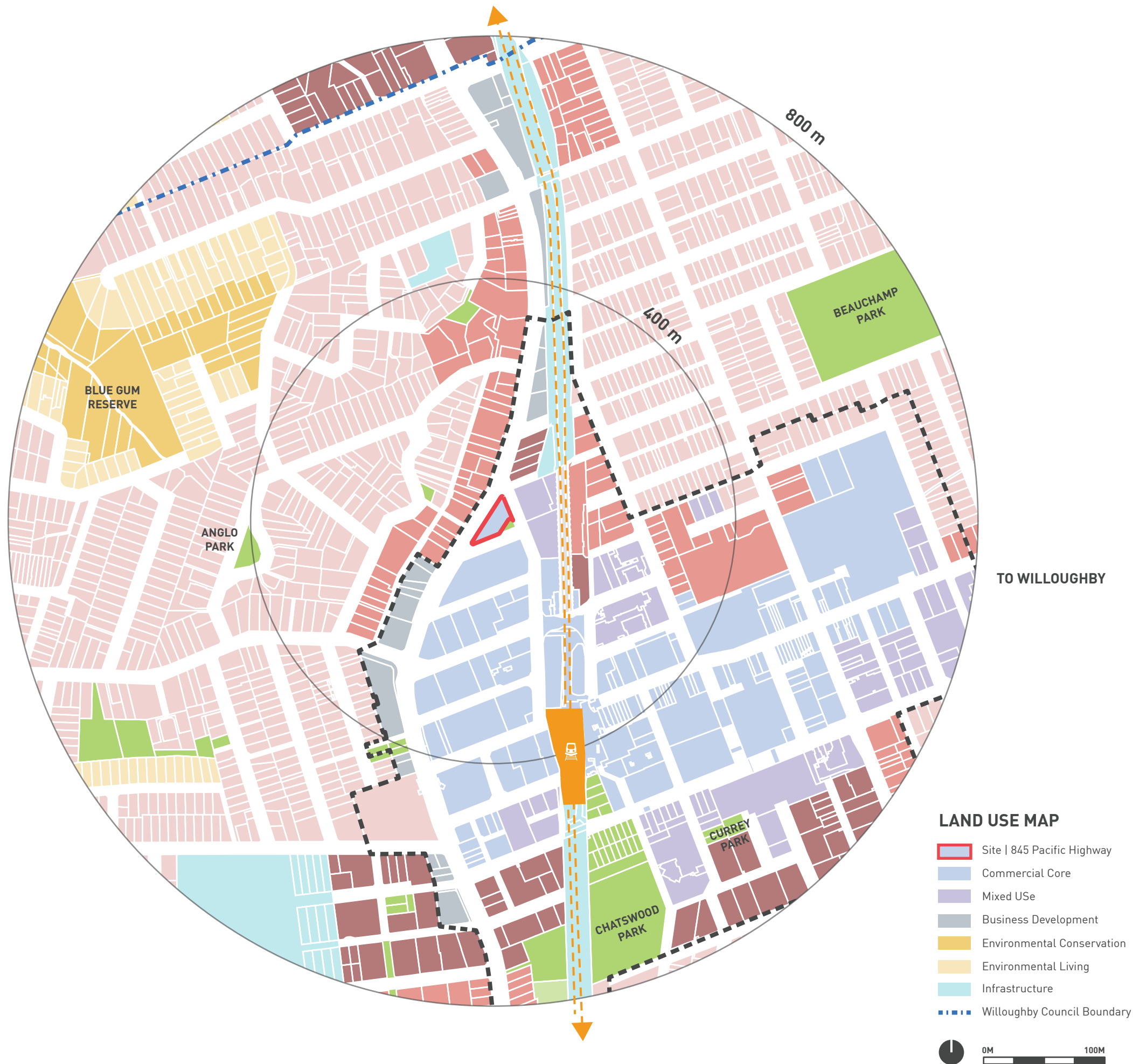
The site is currently occupied by a seven-storey commercial office building. The current vehicle entries are off Railway and Day Streets. A small pocket park abuts the site at the south-eastern corner.

The proposal addresses the key features of the site in the following ways:

















- As a large triangular site and with three street frontages, the proposal is detailed as a built form envelope "in the round". Every future building elevation is to be designed as having a public face
- Positioned on elevated ground within the CBD, the cross falls of the site has the lowest point along Day Street. A new vehicle and service entry is to be located here, the lowest portion of the site
- The proposal is located within the northern section of Chatswood CBD. This is an area identified as accommodating future growth. Recent developments in the vicinity verify this strategy and have either employment or residential uses. Such distinct developments include the "Zenith Centre" for employment uses, and "Altura", "Epica" and "Era" for residential uses







### LAND USE MAP

- |   |  |
|---|--|
|  Site   845 Pacific Highway  |  Chatswood Transit Station    |
|  Commercial Core             |  Residential (Low Density)    |
|  Mixed Use                   |  Residential (Medium Density) |
|  Business Development        |  Residential (High Density)   |
|  Environmental Conservation  |  Recreation (Public)          |
|  Environmental Living        |  Recreation (Private)         |
|  Infrastructure              |  Train & Metro Lines          |
|  Willoughby Council Boundary |  Chatswood CBD Boundary       |



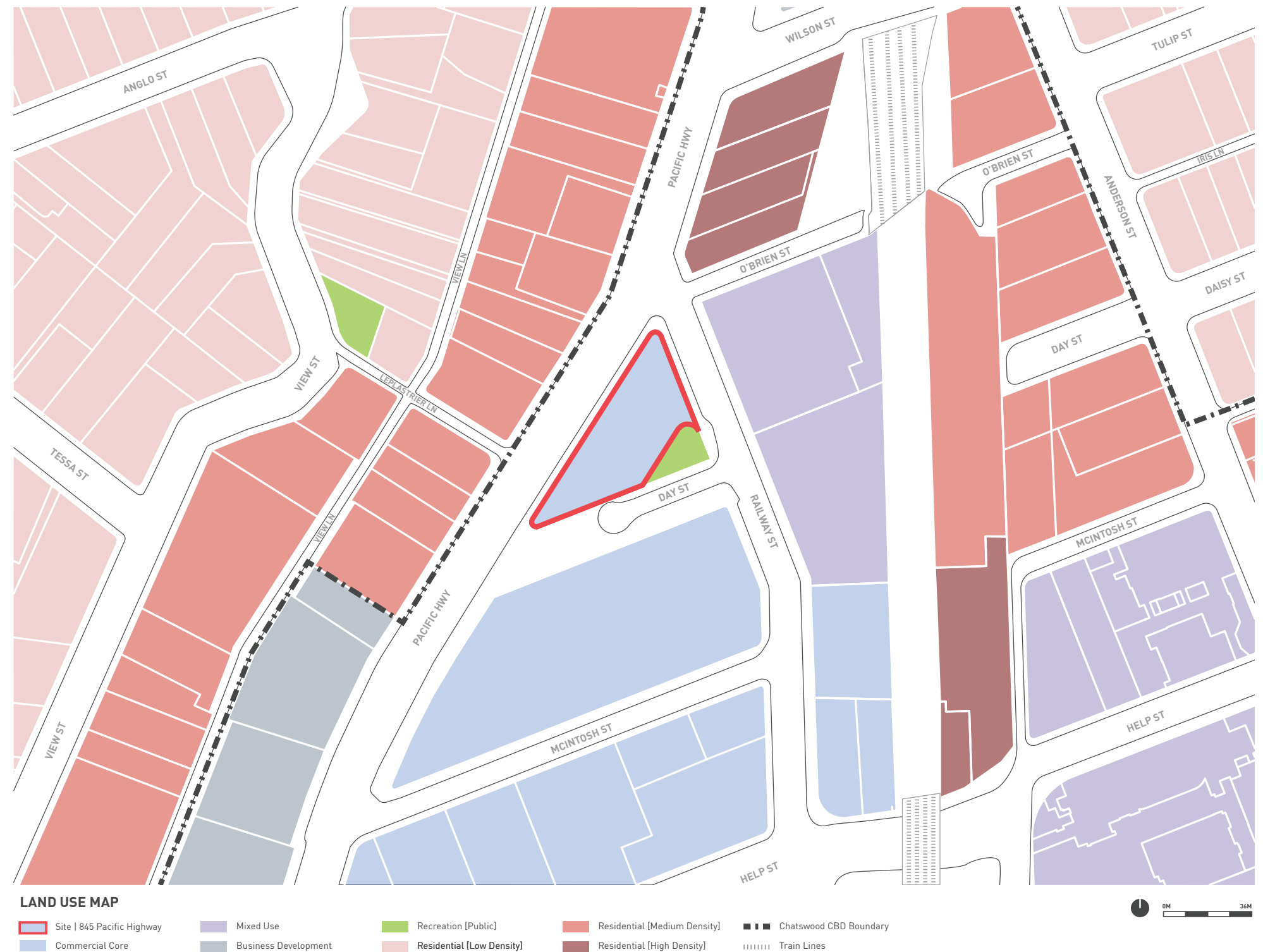


## 2.2 LAND USE MIX

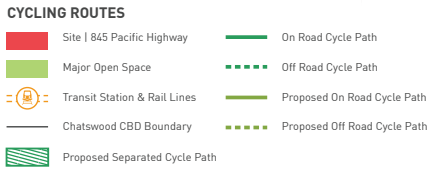
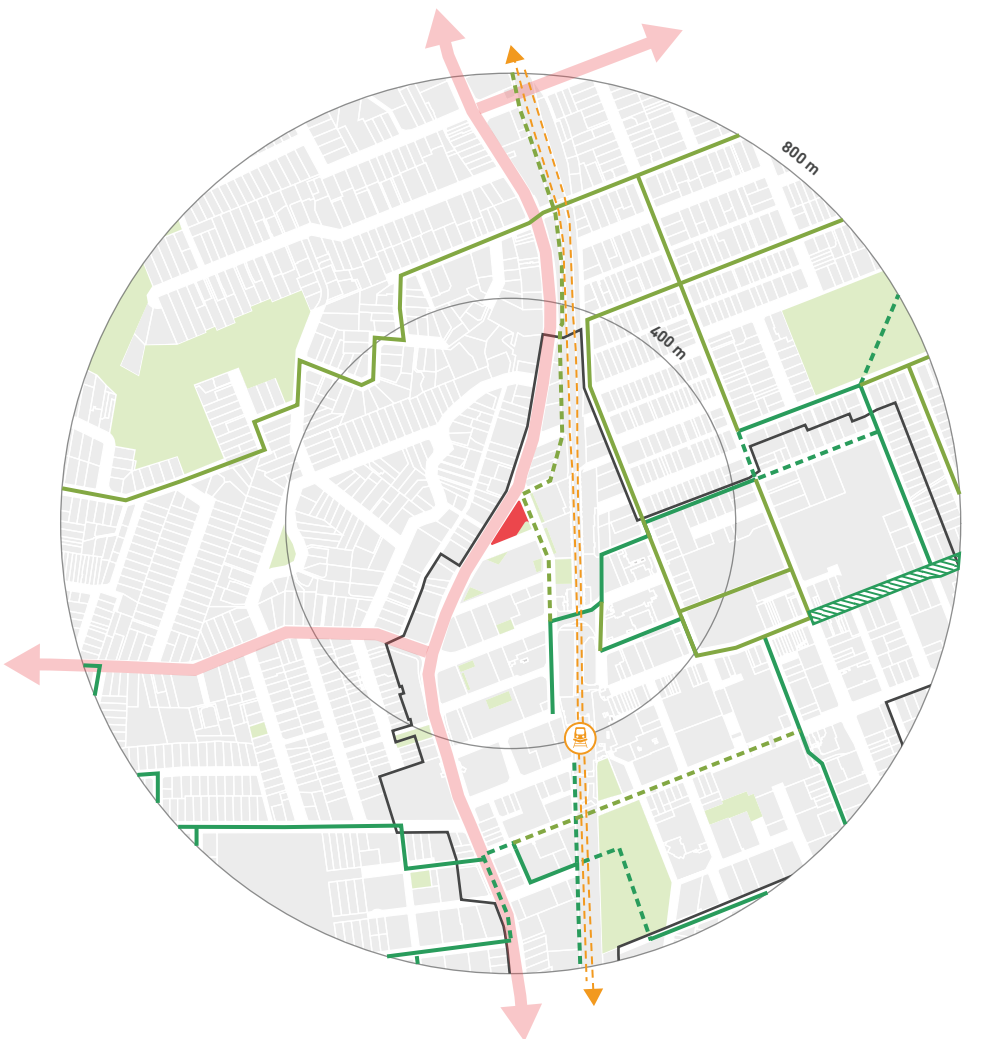
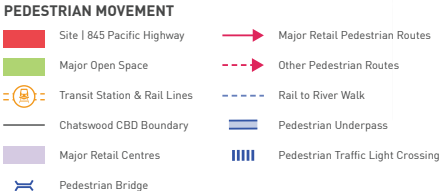
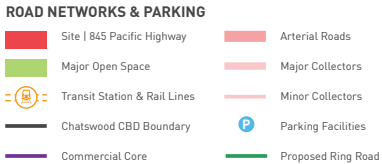
The subject site is located within a mixed-use commercial CBD area. To the south, the land use is predominately commercial office with the "Zenith Centre". To the east, the land use is predominately mixed-use residential. To the north of the site and along the western edge of the Pacific Highway, the land use changes to predominately medium density residential.

The proposal recognises an evolving land use in the following ways:

- The proposal provides an increase in employment uses within an area of the CBD that allows mixed-use commercial uses
- The site, being 2,074sqm in area, satisfies the minimum site area for new commercial uses within the CBD
- The proposed maximum floor space ratio is achievable with minimal overshadowing on adjoining residential uses
- As the site has three street faces there are little to no conflicts between pedestrian entry and vehicle entry









## 2.3 ACCESS

The site is located just north of the Chatswood Interchange. From here, access to heavy rail, the Sydney Metro and bus usage can occur.

The site is well connected to an existing road network including the Pacific Highway and an interconnected street grid system of local roadways. A signalised intersection is located immediately adjacent to the site at the corner of Pacific Highway and Railway Street. The Day Street intersection with Pacific Highway is now closed.

The site is within walking distance of the Chatswood Interchange and the primary retail uses along Victoria Street. The following is confirmed:

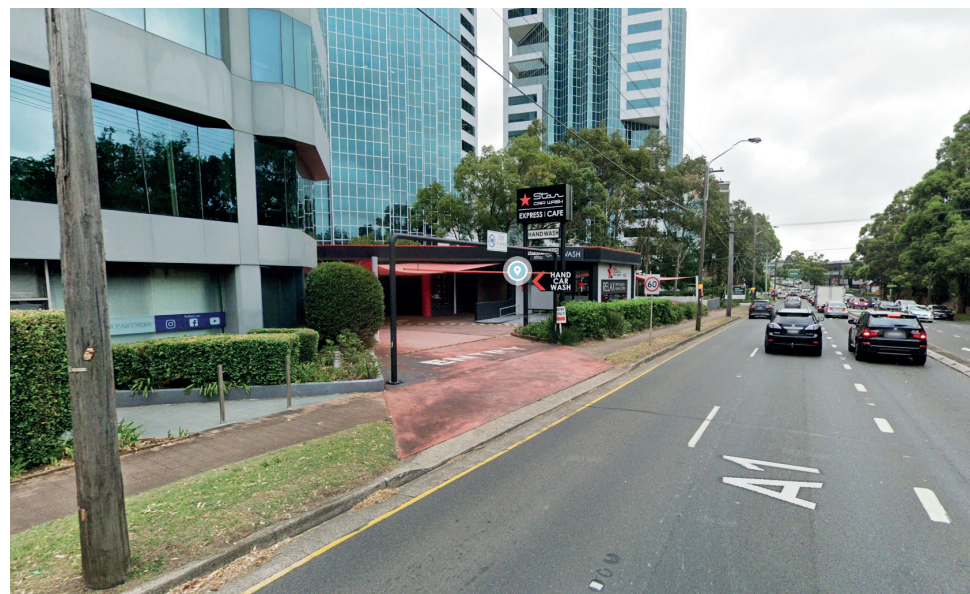
- The proposal is within walking distance of the Chatswood Interchange, an important public transport node
- The site is within walking distance of many of the facilities which define the CBD as an important regional centre
- Vehicle access to the site is more than likely to be off Day Street, a "quiet side street"
- Railway Street has the opportunity of becoming an import pedestrian entry point to the site. This street is pedestrian friendly and can accommodate secondary traffic movement from the north or south within a low speed environment
- Conceived as a transit-oriented centre with employment uses, the proposal therefore meets the objectives of "the strategy", the *Chatswood CBD Planning and Urban Design Strategy* (2018)



VIEW 01  
Vehicle entry point from the cul de sac of Day Street



VIEW 02  
Vehicle entry point from Day Street

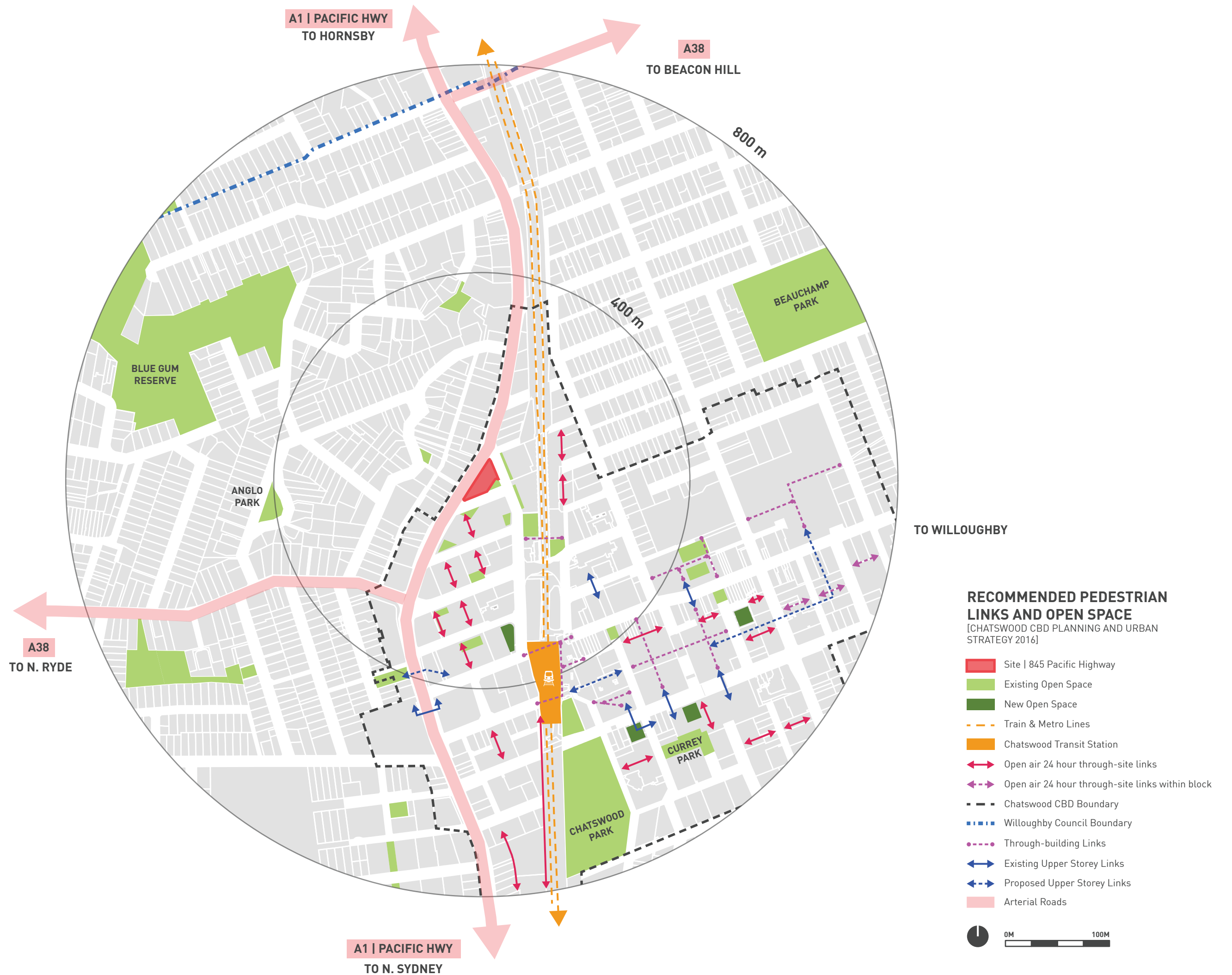


VIEW 03  
Vehicle entry point to Star Car Wash from Pacific Highway



VIEW 04  
Vehicle exit point from Star Car Wash to Pacific Highway







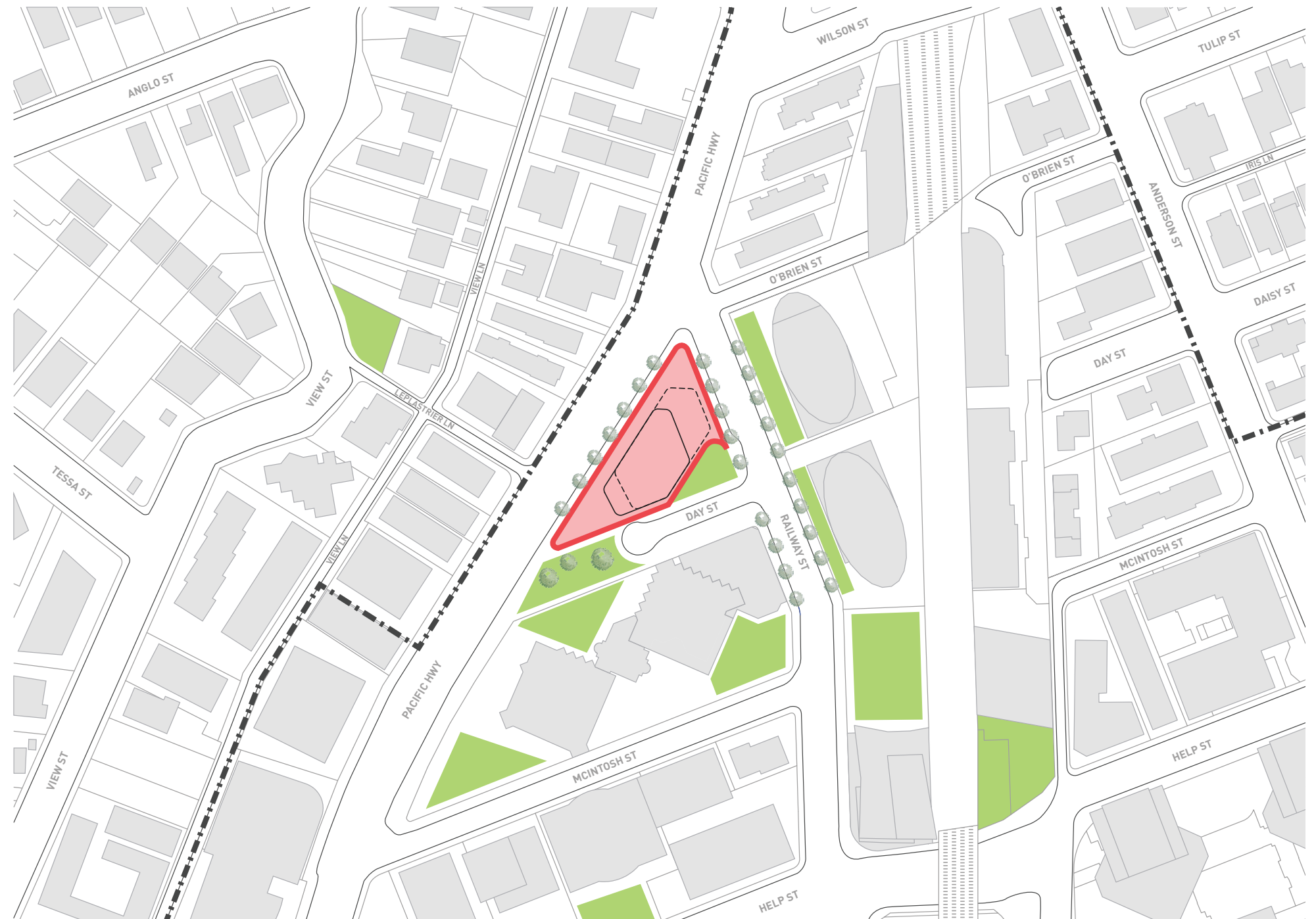
## 2.4 THE PUBLIC DOMAIN: OPEN SPACES

Publicly accessible open spaces, street trees and private landscape areas and are located adjacent to the subject site. The character of these landscapes contribute to a pleasant and pedestrian focused urban precinct.

A series of landscape forecourts are located along Railway Street and these provide an important entry experience to the more recent developments of The "Zenith Centre", "Altura", "Epica" and "Era".

The proposal enhances the existing public domain in the following ways:

- The proposal contributes to an improvement in the public domain by extending the small pocket park at the corner of Railway and Day Streets along the eastern frontage of the site - the Railway Street boundary
- Proposed landscape to each street boundary edge will enhance the amenity of the area and support an intensity of new hospitality retail land uses



### OPEN SPACES

Site | 845 Pacific Highway

Open Space

Landscape Elements

Chatswood CBD Boundary

Train Lines







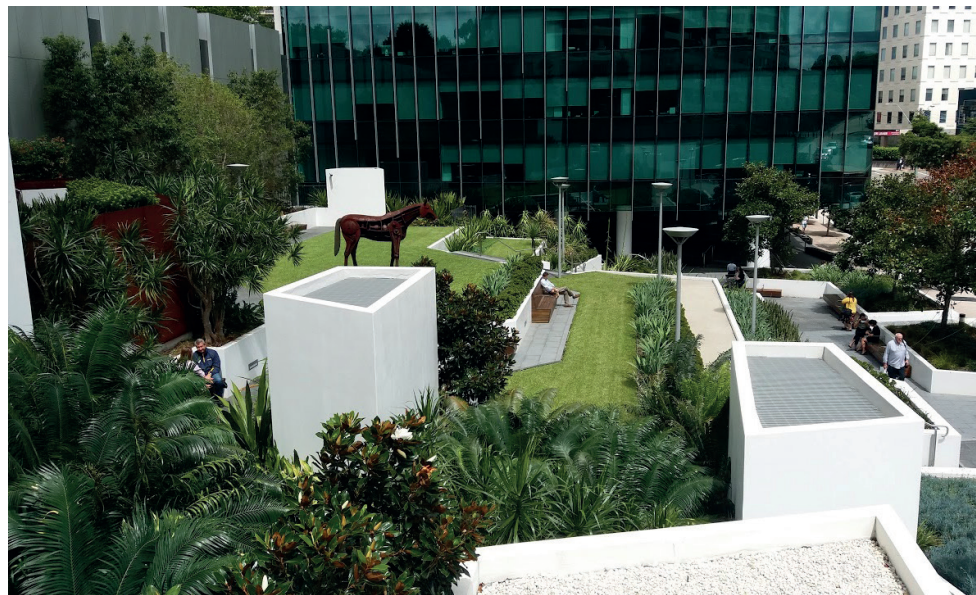
VIEW 01  
Railway Street, looking South.



VIEW 02  
View from Day street in front of the Zenith.



VIEW 03  
Brown Street, Outdoor Plaza in Central Plaza.



VIEW 04  
7 Railway Street. Public domain next to the building.



VIEW 05  
Pacific Highway and McIntosh Street intersection.



VIEW 06  
Plaza at intersection of Help St and Cambridge Lane.

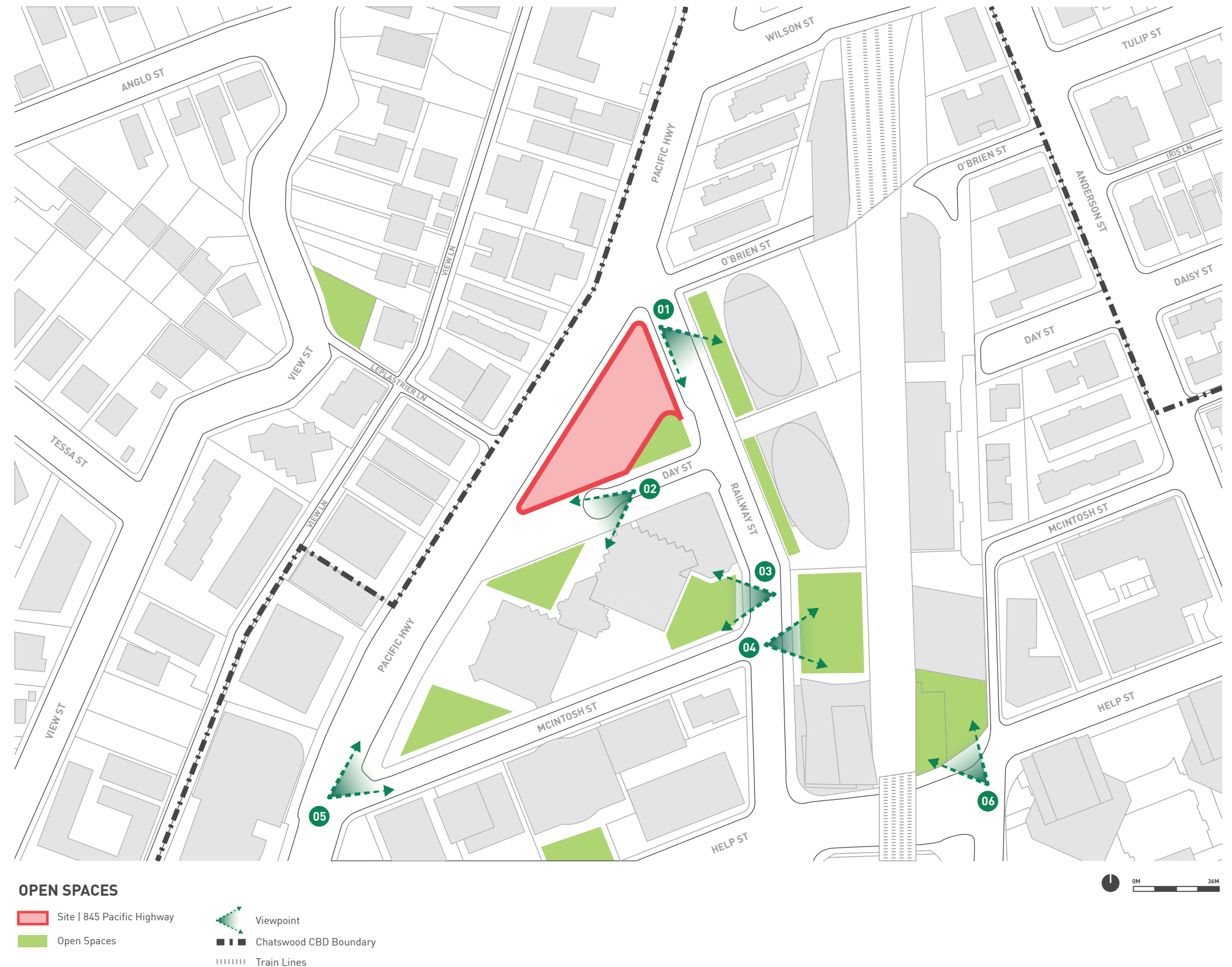


## 2.5 THE PUBLIC DOMAIN: STREET FRONTAGES

Within the northern section of the CBD, a series of private landscape forecourts and vegetated strips provide an important sequence of mid-block pedestrian pathways. The character of these landscaped setbacks are a distinct feature within the western section of the CBD.

The proposal enhances the existing street frontage character of the area in the following way:

- The proposal shall incorporate a range of setbacks for new landscape
- New landscape spaces will support a range of active street uses to enhance the vibrancy of the area







VIEW 01  
845 Pacific Highway. View from the intersection between Pacific Highway and Railway Street.



VIEW 02  
821 - 841 Pacific Highway, Zenith Tower A and B, 24 storeys built in 1990.



VIEW 03  
1 - 5 Railway Street, Chatswood Central consists of two commercial office towers linked by a retail podium.



VIEW 04  
Looking north Pacific Highway. In the foreground the site and on its back from the left, Altura - Epica Apartments and the Zenith Centre.



VIEW 05  
Looking towards Pacific Highway from Day Street with the public domain on the foreground.



VIEW 06  
9 - 11 Railway Street. Altura Apartments on the left, 25 levels from 2003 and Epica Apartments, 33 levels, from 2005.

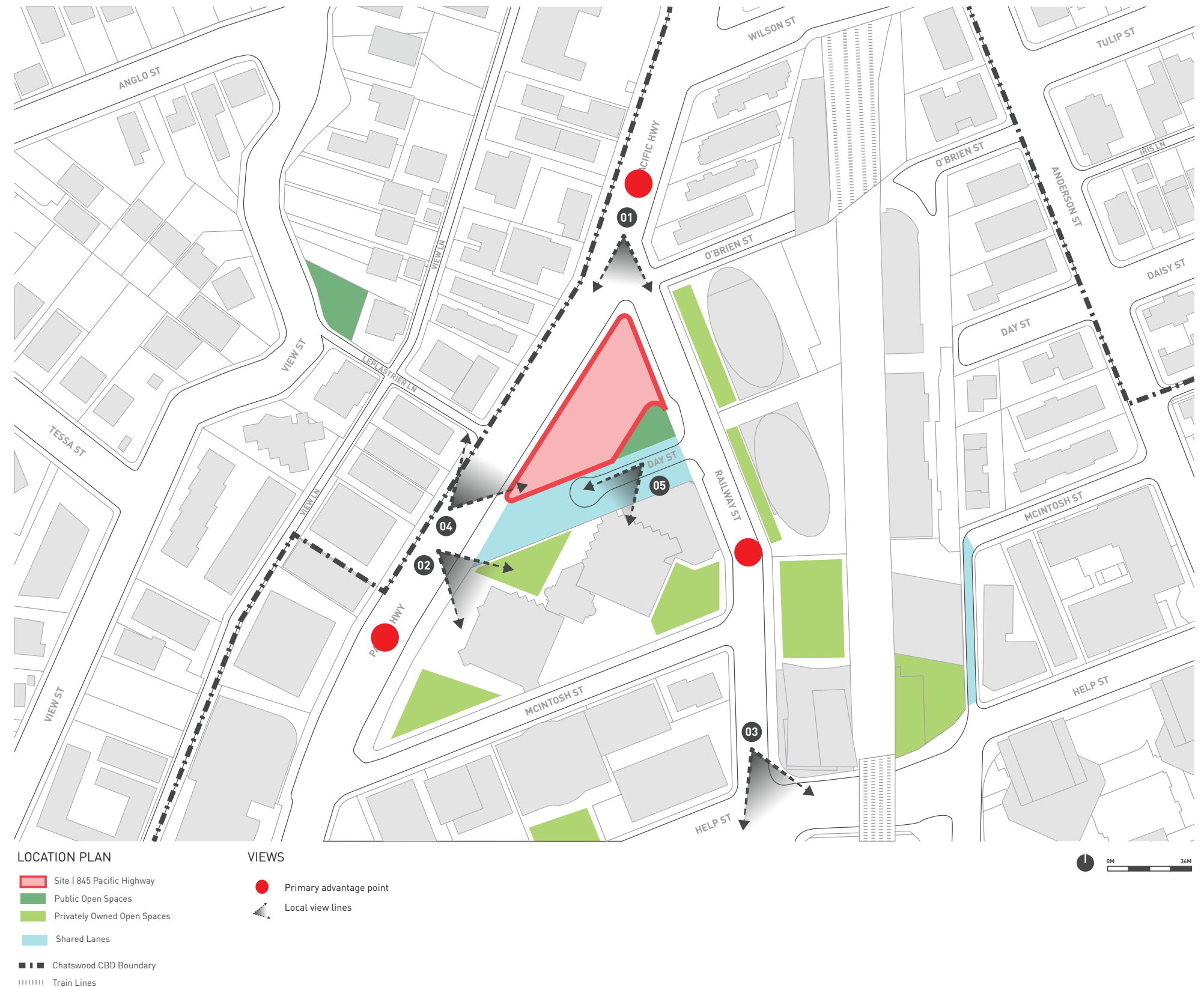


## 2.6 STREET VIEWS

Publicly accessible open spaces, street alignments and private landscape forecourts contribute to a hierarchy of street views within the area. The new and distinctively shaped tower forms also help frame the public views nearby.

The important public views within the area consists of:

- The primary street views and advantage points of the site along the Pacific Highway
- The secondary street views along Railway Street, supported by cross views along Day Street
- Immediate local and foreground views enhanced by vegetated forecourts related to the new development







**MAXIMUM BUILDING HEIGHT (M)**

- Site | 845 Pacific Highway
- 08.0m
- 08.5m
- 09.0m
- 11.0m
- 12.0m
- 14.0m
- Willoughby Council Boundary
- 18.0m
- 20.0m
- 21.0m
- 24.0m
- 25.0m
- 27.0m
- 34.0m
- Chatswood CBD Boundary
- 40.0m
- 60.0m
- 80.0m
- 90.0m
- Height as mentioned
- Chatswood Transit Station
- Train & Metro Lines





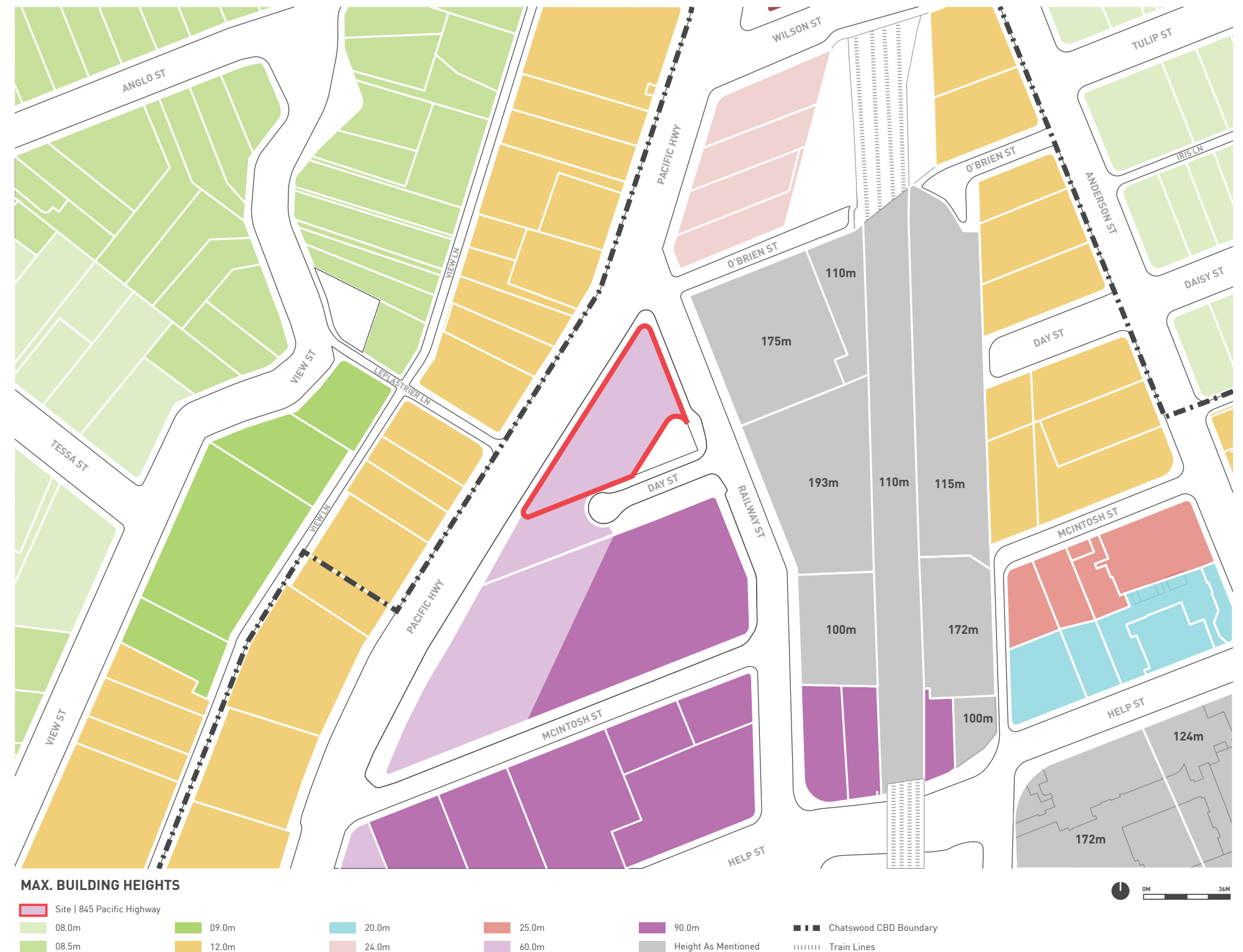
# 2.7 HEIGHT AND BUILT FORM

The existing and evolving character of the area is defined by building heights along the Pacific Highway and adjacent (and over) the railway corridor. This CBD area is defined by a spine of taller buildings that range in height down from the tallest building in the area, the "Metro Grand", a building 170m in height (40 floor levels). This height then transitions down towards the north of Railway Street with a building height of 60m (7 floor levels). Building heights within a 400m walking distance of the Chatswood Interchange range in height from 7-20 floor levels.

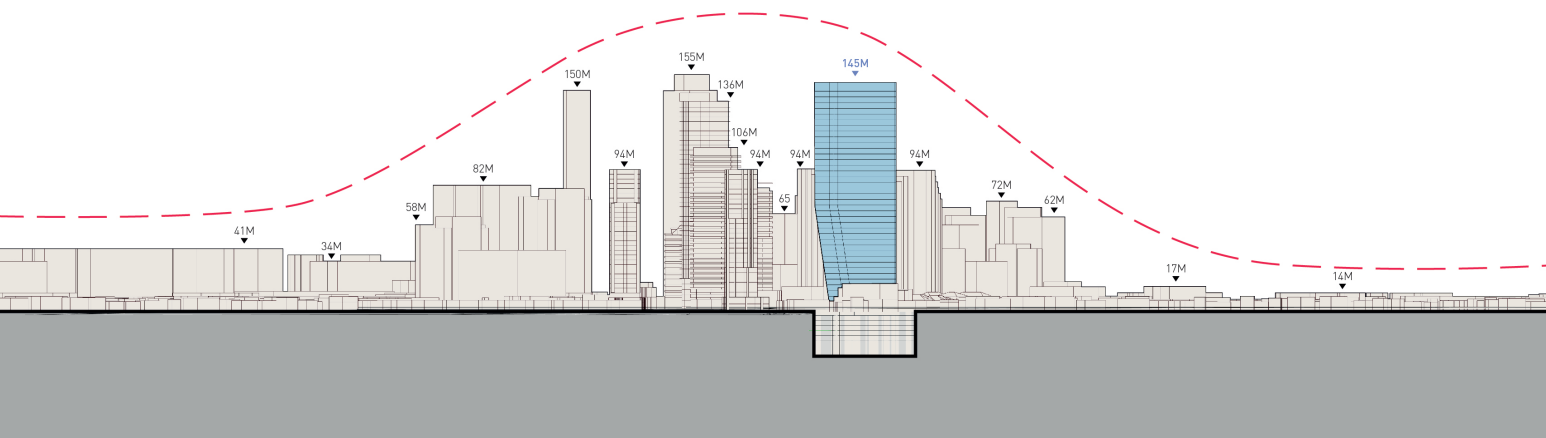
With the subject site currently occupied by a seven-storey commercial office building, the adjacent building heights correspond to a block form urban pattern of distinct "free-standing buildings". A pattern of lower buildings can also be seen within the context of the immediate area, with a significant change in scale associated with a fine-grain residential pattern (associated with two heritage conservation zones) further to the east and west of the subject site.

The subject site can benefit from additional building height due to the following:

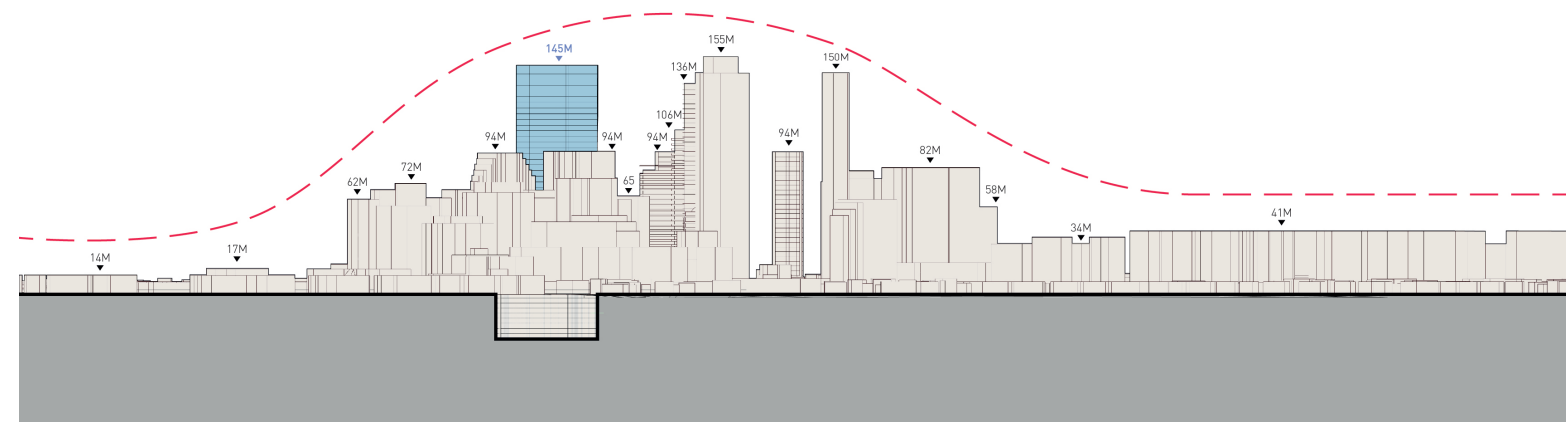
- The scale of built form envisaged by the Chatswood CBD Strategy, including a maximum building height of RL248.6 and no maximum FSR for commercial office development
- The site is strategically located at the northern edge of the CBD and within 400m of Chatswood Interchange
- The site, due to its prominent urban location, has an opportunity to incorporate a distinct silhouette and with a corresponding built form, give the necessary urban character to the most northern edge of the CBD
- The proposed envelope and corresponding built form can be perceived as "slim line" from the primary advantage points and public view lines



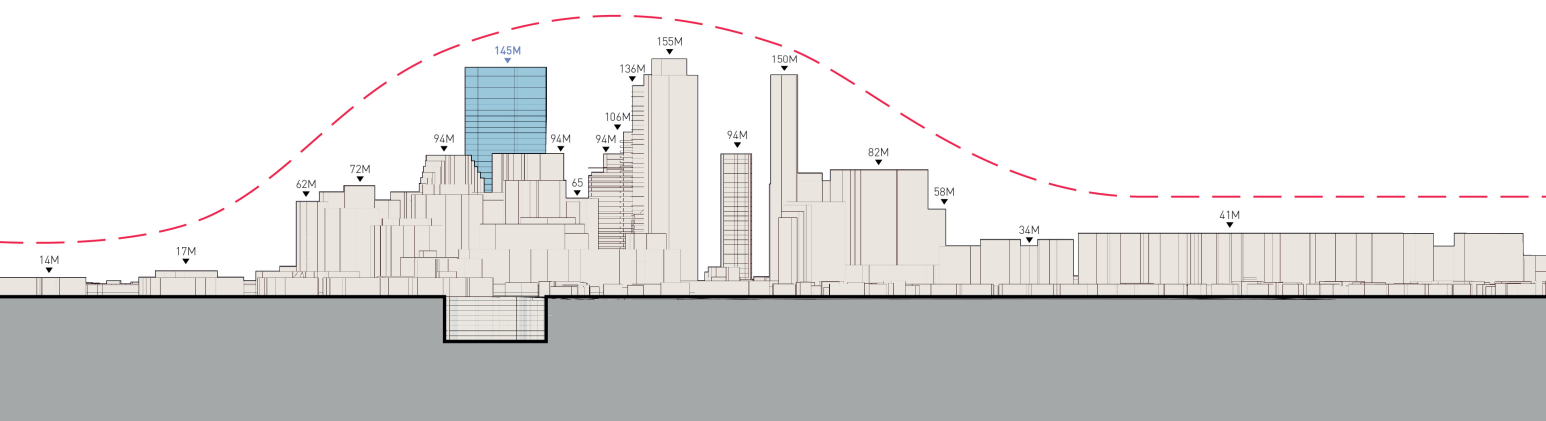




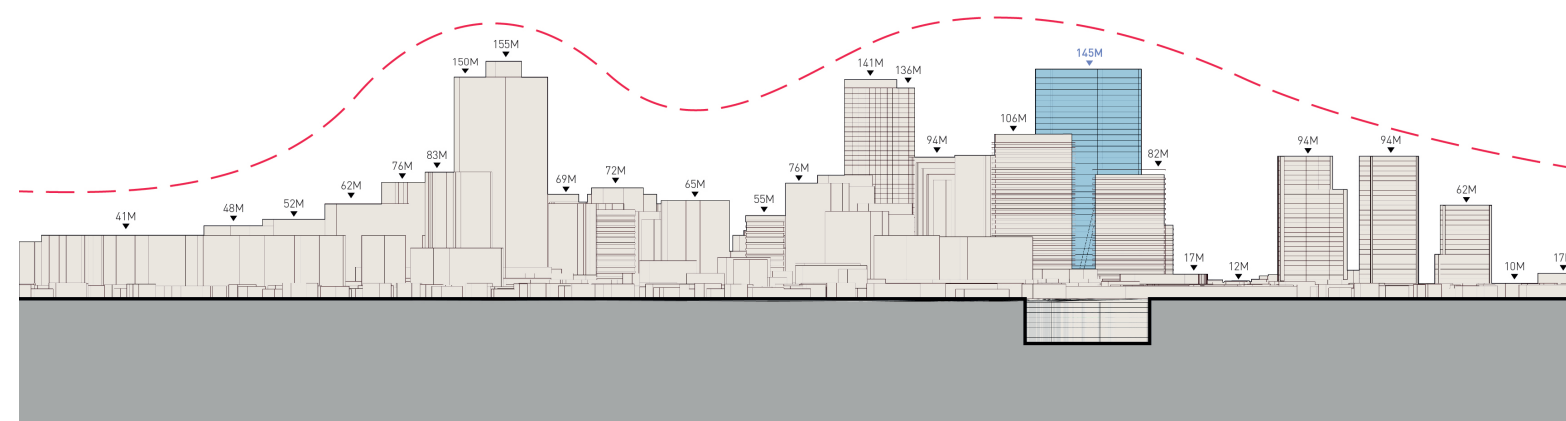
North-West City Elevation



North-East City Elevation



South-East City Elevation



South-West City Elevation



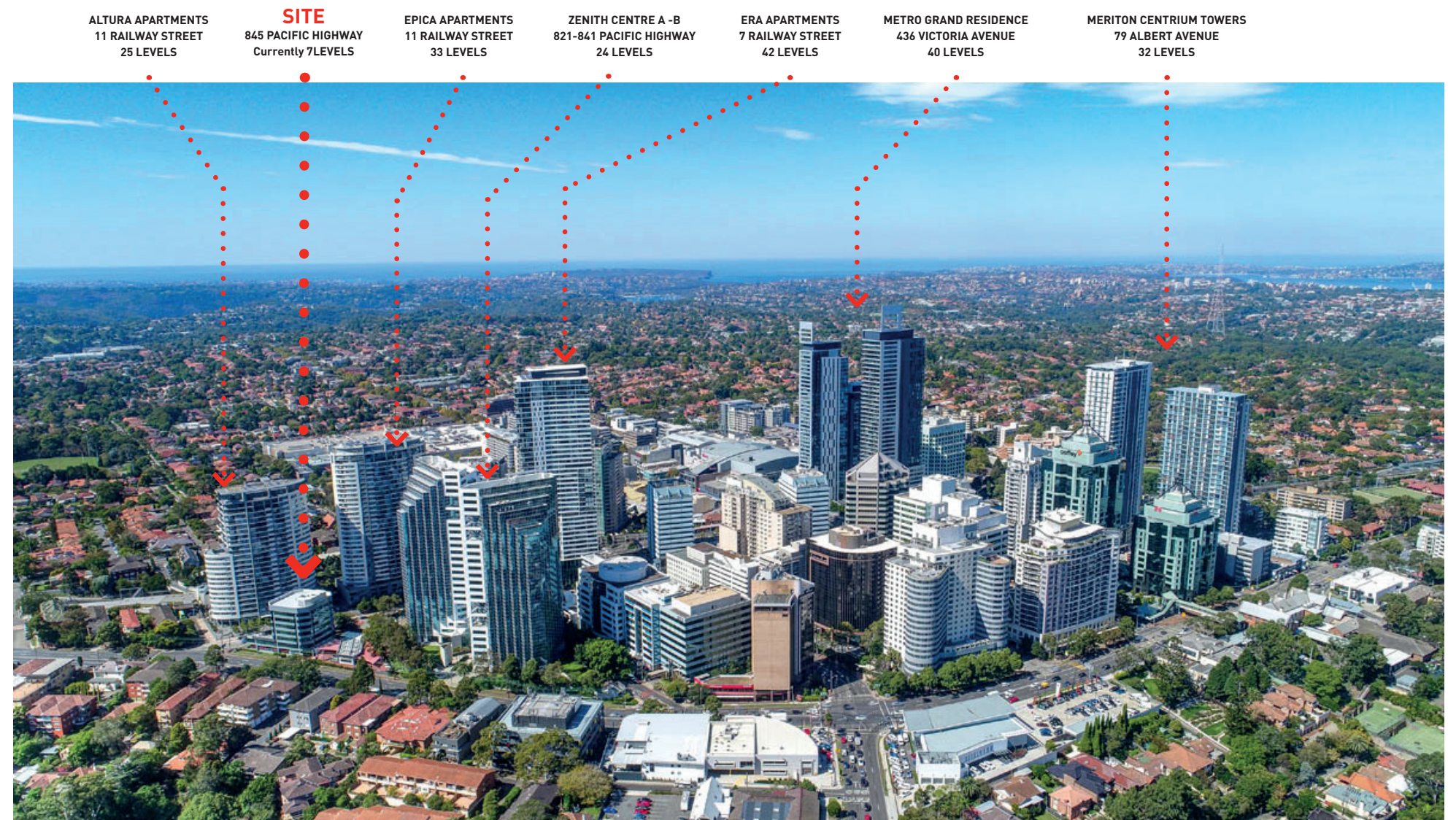
## 2.8 THE CITY SKYLINE

The opportunity for redevelopment should consider how the proposal might develop in terms of its built form silhouette within the skyline of Chatwood CBD.

The following evaluational studies of the city skyline are shown in terms of the existing built form when viewed along Pacific Highway (north-west), as well as from the north-east, south-east and south-west. These studies confirm that existing transitions in scale will be enhanced by the proposal when seen from the north-west and south-east. The skyline profile of Chatswood city centre with the proposal shown will have a more even distribution of building height.

When considering the topography of Chatswood city, as defined by the ridge line and the corresponding roadway arcs of the Pacific Highway, there is potential for the site to benefit from an uplift in additional building height. This would provide a city skyline with a graduation in building height from the centre of the city towards the lower building heights in the north and west.

Given the proximity of the site to Chatswood Interchange and the reinforcement of the urban importance of the city through building height, it is clear that the site can accommodate additional height as this will contribute positively to the city skyline of Chatswood.



*Chatswood CBD Development Context*







03

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The Proposal







# 3.1 OPPORTUNITIES AND CONSTRAINTS

When considering the constraints and opportunities in the redevelopment of the site the following is recognised:

## Opportunities

Ensuring positive development that contributes to the locality in accordance with the changing character of the area, the following opportunities for redevelopment are available (refer Section 3.2):

- A key site with an opportunity to support sustainable growth for employment use within the western portion of the city
- Direct access to public transport
- Provision of good connectivity for vehicle uses via a regional roadway network
- Able to be redeveloped with a commercially viable floor plate for contemporary work practices (refer Appendix A1)
- Become a transit orientated development through an increase in density
- Provide a sympathetic built form response to enhance the primary visual corridor along the Pacific Highway and Railway Street
- Locate on-site vehicle parking and service access off Day Street, and away from the major pedestrian pathways in the vicinity
- Provide an opportunity for a singular and better proportioned tower form, that is, a distinctly shaped tower that signifies the importance of the northern gateway location within a vibrant and mixed use city
- Provide an active street frontage within new setback zones appropriately landscaped
- Adjust the current set back provisions so that a site specific urban design response is achieved.

## Constraints

The subject site presents a number of redevelopment constraints. Ensuring that the proposal contributes positively to the locality of the city, the following are addressed:

- To review the current development controls and site setbacks envisaged by the Chatswood CBD Strategy. If these set backs are applied this will result in a small building floor plate and prevent the development of a commercially viable floor plate for contemporary workplace use. This constraint is assessed in terms of a complaint scheme and the proposed scheme (refer Section 3.3)
- To review the resultant elevation if a compliant scheme is undertaken. By adopting a site specific response a positive built form outcome with an articulated facade can be developed. The proposed envelope is assessed in terms of a complaint scheme and the proposed scheme (refer Section 3.4)
- To carefully assess any overshadowing if a complaint scheme is undertaken. This constraint is assessed in terms of the shadows generated by both a complaint scheme and the proposed site specific scheme (refer Section 3.5).

## Setbacks

When applying the current (and standard) setback and height controls across the site, a tall but skinny office tower on a single storey podium will result. As demonstrated by the urban significance of the site, this isolated development can benefit from a slight adjustment in the current setback provisions. This adjustment is considered in terms of the urban design analysis of the site and will benefit in the provision of a more user friendly public domain in addition to a commercially viable floor plate. The following set back provisions are proposed:

- **Pacific Highway setback**

*Compliant:* 4m (to podium) + 6m (to tower)

*Proposal:* 4m (combined for podium & tower with curved corners to Railway and Day Streets to reduce length of western elevation)

- **Railway Street setback**

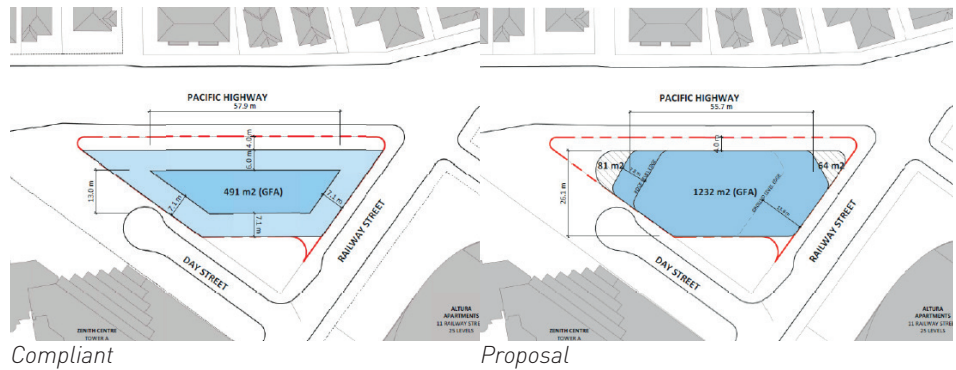
*Compliant:* 0m (to podium) + 7.1m (to tower)

*Proposal:* 0m to 13.8m (incorporating a splayed façade for an urban gateway)

- **Day Street setback**

*Compliant:* 0m (to podium + 7.1m (to tower)

*Proposal:* 0m (to both podium & tower, including a splayed façade at the Pacific Highway corner)







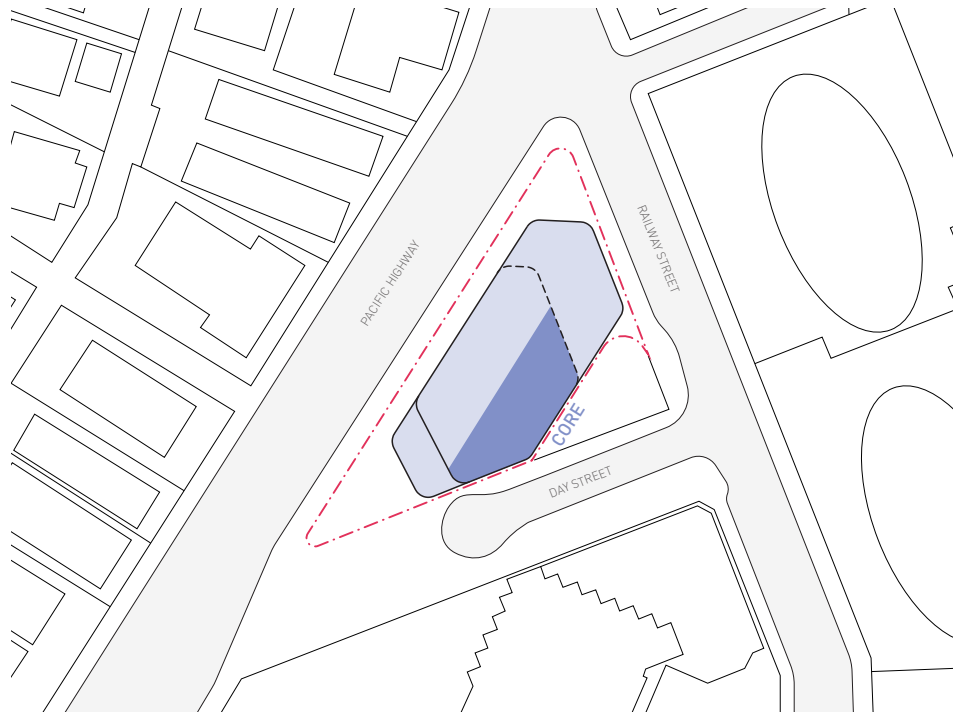
Extend the Public Domain for a Strategic Urban Gateway Site



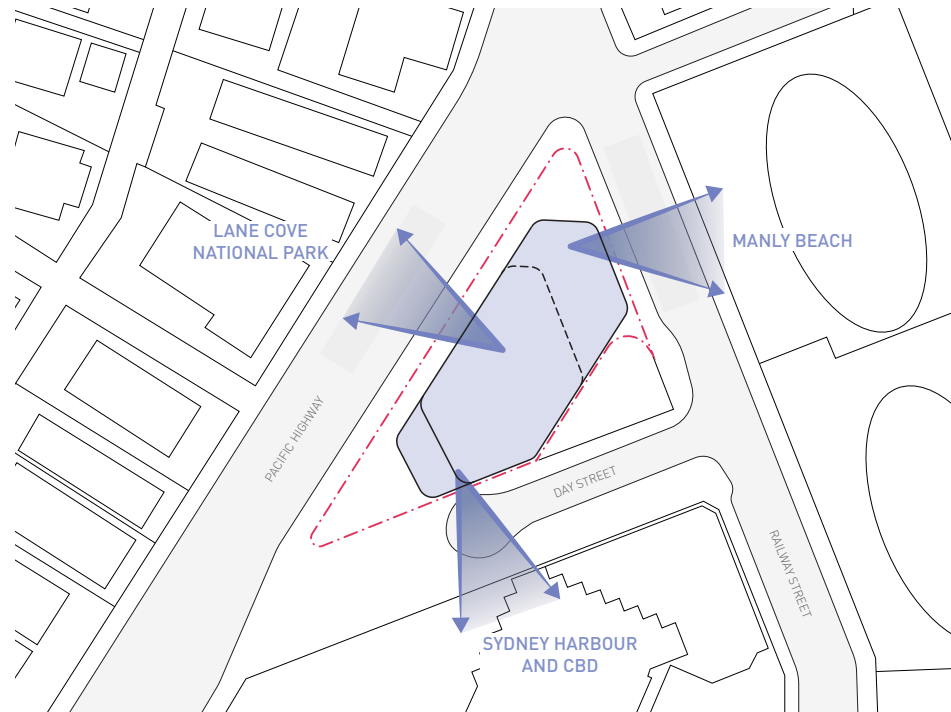
Urban Address and Street Entries



A Modulated Western Elevation



Commercially Viable Floor Plate - Lift Cores and Services Zone



Commercially Viable Floor Plate - District Views



Vehicle and Service Access



## 3.2 URBAN DESIGN PRINCIPLES

Recognising the site's strategic location and potential for new employment uses, the following urban design principles will underpin the redevelopment of the subject site. The following are identified:

### **Pedestrian Friendly Open Space Linkages**

The northern section of Chatswood city has an existing network of pedestrian focused open space linkages. These occur along each pedestrian friendly street and at landscaped mid-block pathways. The proposal will incorporate a range of landscape open spaces to facilitate new pedestrian uses within open space areas.

### **Extend the Public Domain**

Improve the public domain character of the Pacific Highway and Railway Street with new landscaped open spaces. Extend the pocket park at the corner of Railway Street and Day Street north along Railway Street to improve the public domain character of the area.

### **Urbna Address and Street Entries**

Detailed urban analysis recognises that the Pacific Highway and Railway Street provide an important urban address to the subject site. Locate new public entries off these important streets and integrate these with new publicly accessible landscape spaces.

### **Urban Gateway**

The built form of the proposal will be modulated in recognition of the public views along the Pacific Highway. The principle views of the proposal will reveal a slim line tower from these advantage points against a backdrop of taller Chatswood city buildings.

### **A Modulated Western Elevation**

The built form of the proposal correlates to a contemporary work place uses within a vibrant city centre. Having a long elevation to Pacific Highway, as a consequence of the geometry of the site, carefully modulate this elevation to reflect the urban status of the site.

### **A Commercially Viable Floor Plate**

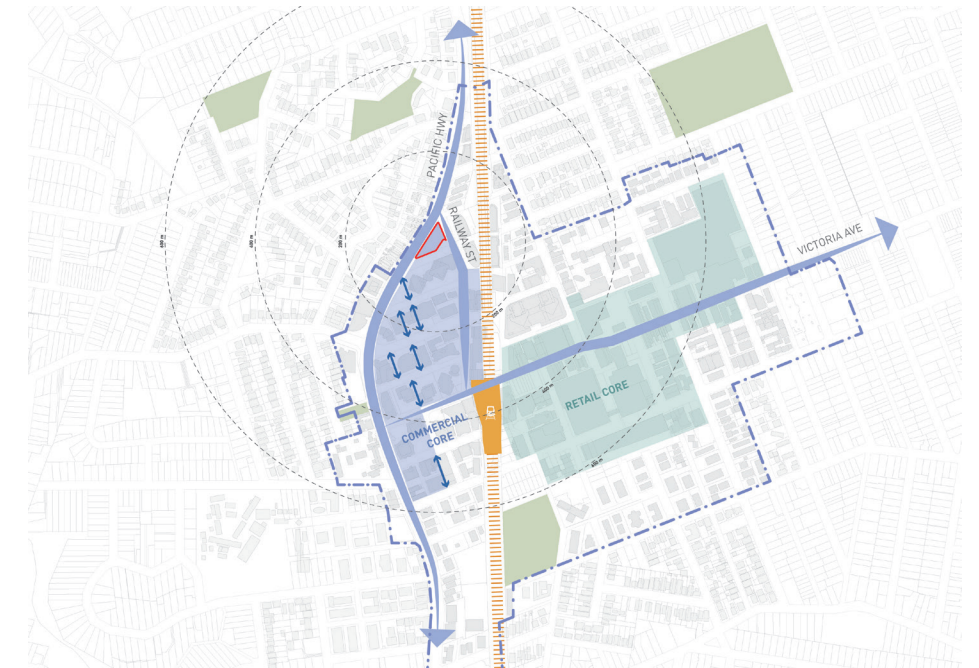
When planning the building floor plate, locate new workplace areas along the northerly edges to take advantage of natural daylight and district vegetated views. To service each new level, locate the lift cores along the southern edge of the floor plate.

### **Service Access**

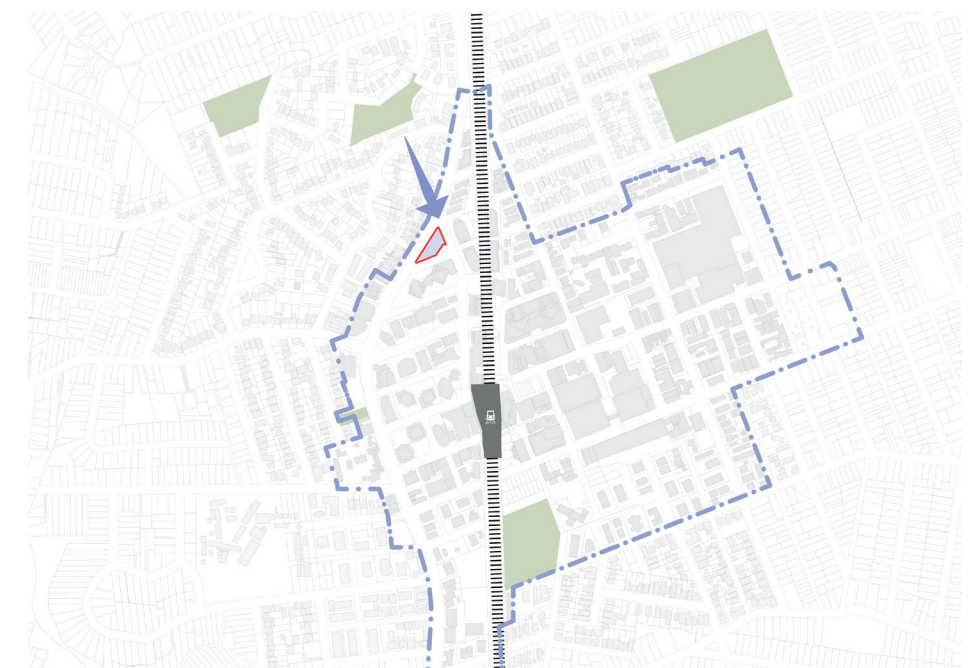
Locate a new vehicle portal for on-site basement parking (and a loading dock service vehicles) off Day Street. This corresponds to the lowest topographic point of the site and is well away from the any proposed public entry and landscape open space.

### **Site Specific Setbacks**

Each setback correlates to an assessment of the site within its urban context. This site specific approach will distinguish the public domain character of each street edge and provide urban importance to this strategic site.

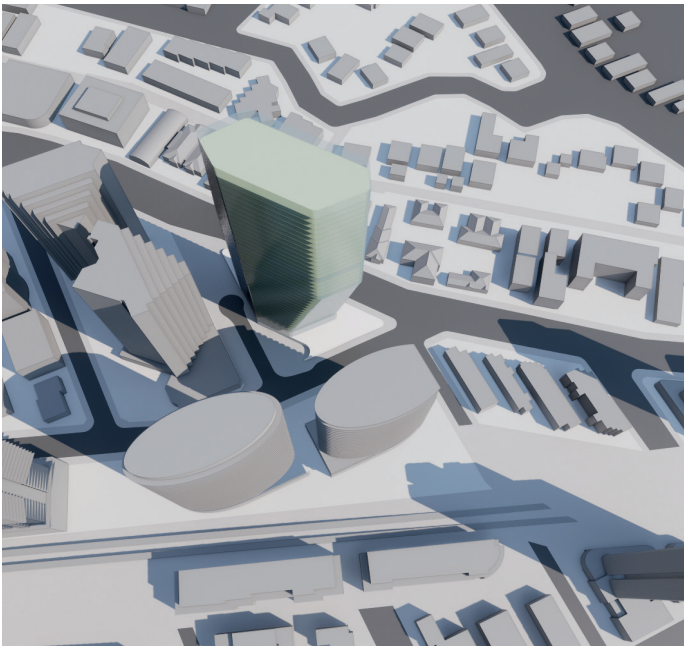
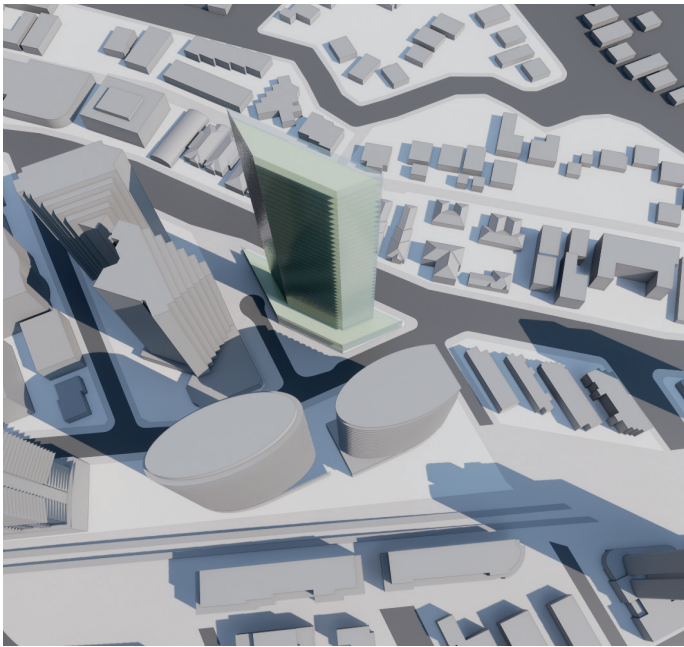
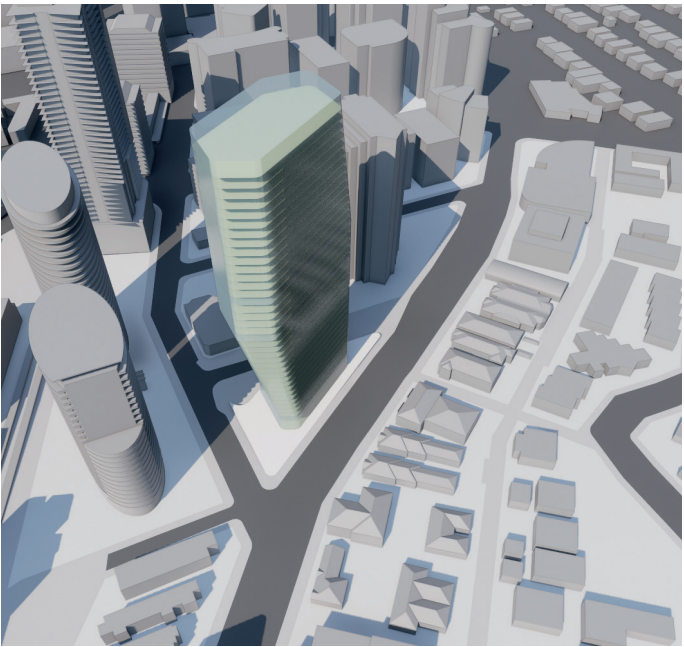
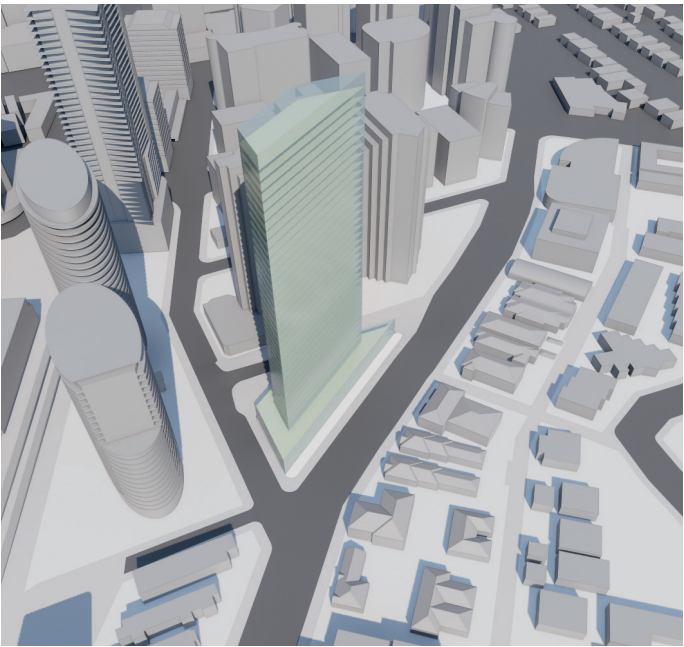
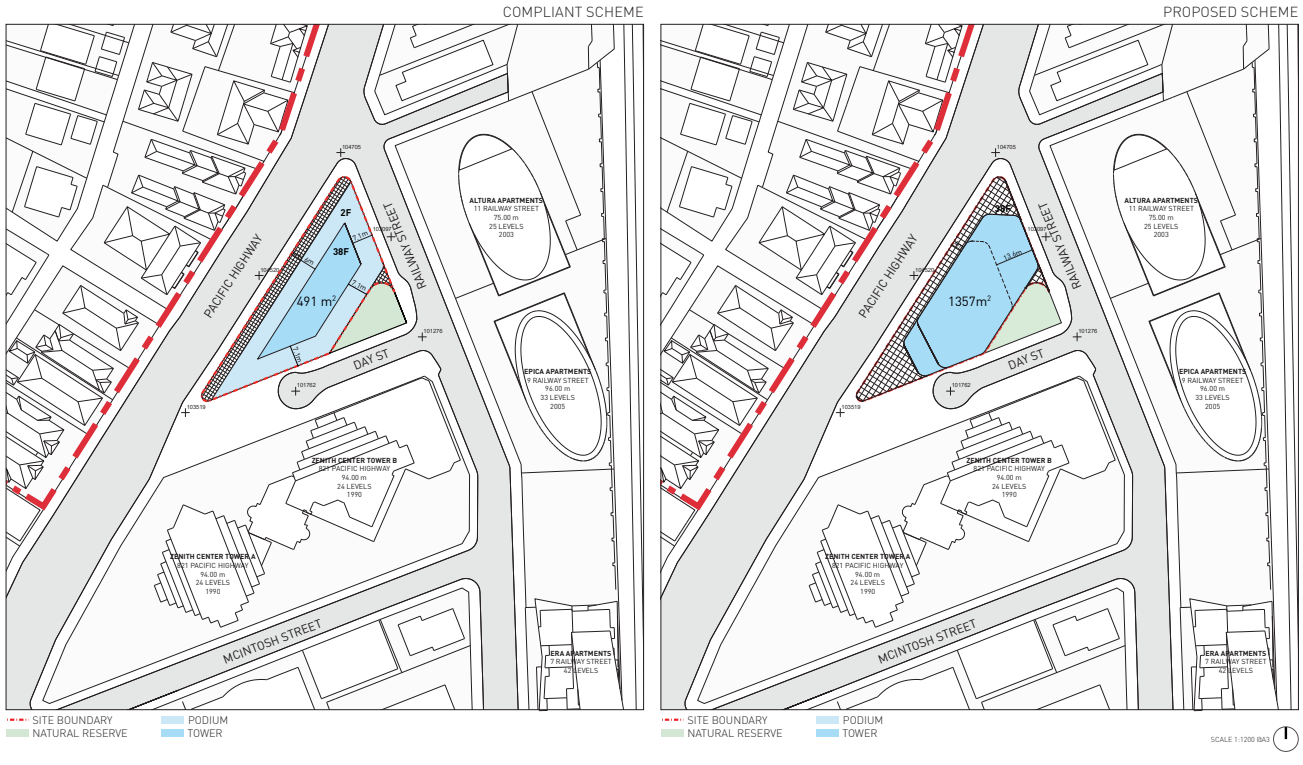
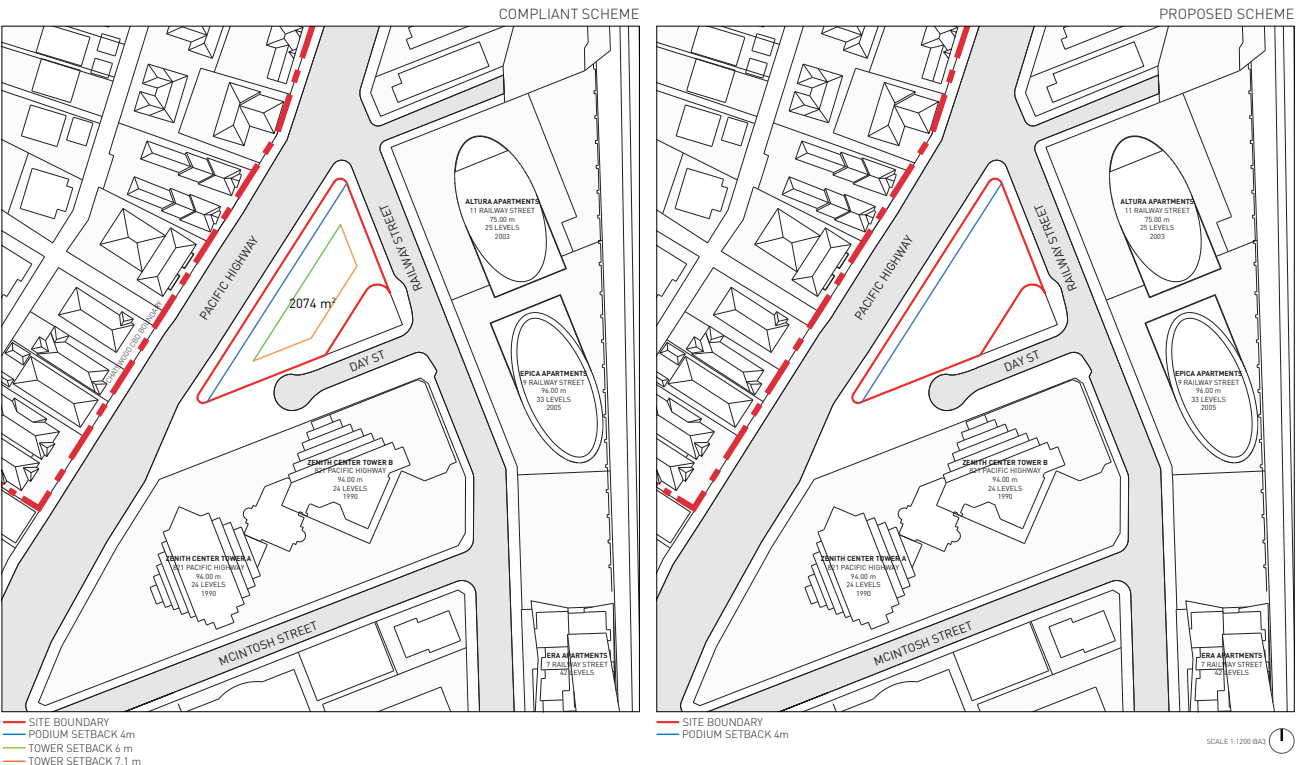


Open Space and Landscape Linkages



Urban Gateway







# 3.3 DEVELOPMENT OPTIONS

The built form outcomes of the proposal were assessed in terms of a complaint scheme and a proposed scheme. These are identified as:

- Option 1 - Complaint Block Form
- Option 2 - Tower Form with an indent to Railway Street.

## Option 1 - Compliant Block Form

Meeting the setback requirements of the current Chatswood CBD Strategy, a complaint scheme explores a block form envelope consisting of a low height podium aligned to each street edge, with a tower positioned in the centre of the site. The resultant floor plate of the tower will provide:

### Pros

- Meets current strategic planning requirements, especially in terms of building height and set backs
- Provides a plaza "strip" to the Pacific Highway within a narrow setback
- The podium, with a building height that responds to the sloping topography of the site, can accommodate a new vehicle portal for on-site parking and service vehicles off Day Street

### Cons

- The built form is not site specific and does not respond to the strategic urban location of the site
- Does not consider the public domain of Railway Street and relationship with an existing pocket park at the corner of Railway Street and Day Street
- Results in a less than adequate floor plate for contemporary work place uses. Applying the current setback provisions a tower footprint just under 500m2 will result. This is commercially too small and is inconsistent with the strategic direction of the area (refer Appendix).

## Option 2 - Tower Form With an Indent to Railway Street

This option aims to achieve a site specific urban design response by accommodating an envelope with a modulated built form. Provide a modulated and distinctly shaped tower form which meets the strategic urban gate-way location at the northern edge of Chastwood city. An indented built form envelope, as a site specific response, can also allow an extension of the public open space along Railway Street. This option balances new built form with a corresponding commercially viable floor plate while having minimal impact from overshadowing.

### Pros

- A site specific response which considers the primary view lines along the Pacific Highway
- A tower form without a podium balances a commercially viable floor plate with improvements in the public domain along the Pacific Highway and Railway Street
- Is consistent with the existing built form in the vicinity, that is, towers without podiums. The setbacks to these sites are also well landscaped
- The proposed built form has curved corners to emphasise the slenderness when viewed from important vantage points
- A landscape strategy which is sympathetic to the existing public domain
- A new podium edge will face with Day Street. This will enable a new vehicle portal for basement parking

### Cons

- Undertake careful overshadowing analysis in the same manner as a compliant scheme
- Modulation required to the western elevation

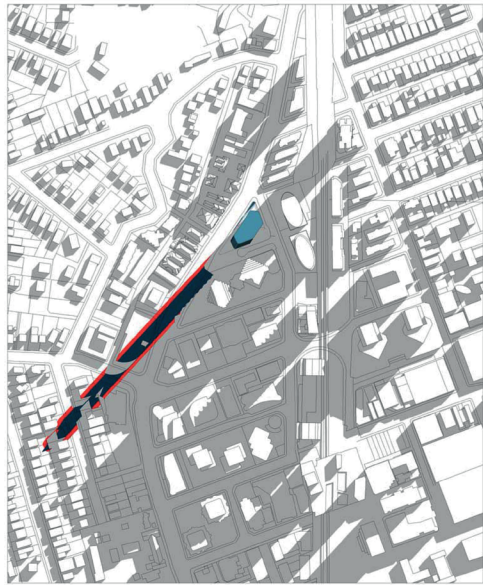
## Preferred Built Form Option

Under Option 1, a compliant built form is likely to form a wall of development along the Pacific Highway. The proposed development is undistinguishable and is not indicative of an important and strategic city site. The important vantage points of the site when viewed from the Pacific Highway and Railway Street are not considered. The potential floor plate generated under Option 1 does not represent the realisation of a viable contemporary work place. Given access to the Chatswood Interchange and the changing context of the Chatswood CBD, as identified under "the Strategy", the *Chatswood CBD Planing and Urban Design Strategy*, Option 1, therefore, has less merit.

Option 2 provides a site-specific urban design response. As a singular tower form without a podium (except to Day Street), the built form is consistent with many commercial office towers in the vicinity. The proposed indents to the built form along Railway and Day Streets, achieved through progressive changes in the setback of the overall built form envelope, will allow a distinct building shape to create now public open spaces at the street level. While potential visual impacts are likely to be greater than Option 1, especially when viewed from the west, this can be mitigated through careful articulation and detailing. By adjusting the current set back provisions a significant built form outcome will not only provide an active street frontage within new landscaped open spaces, but will also accommodate a commercially viable floor plate.

Therefore, Option 2 is considered to provide the most balanced development outcome by delivering clear public benefit through an enhanced public domain and striking urban form at a strategic city location.





SOLAR\_SHADOW\_PLAN\_0900



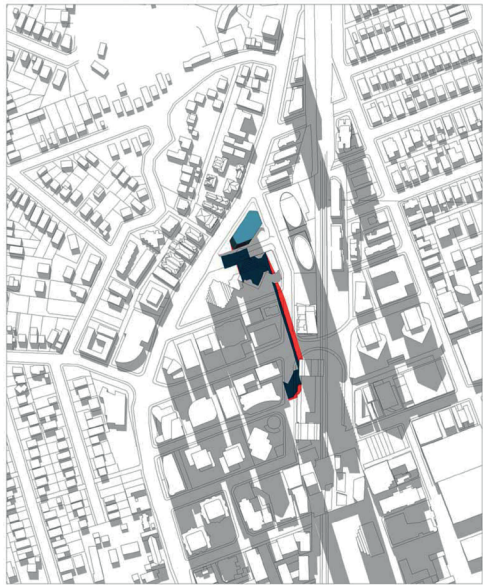
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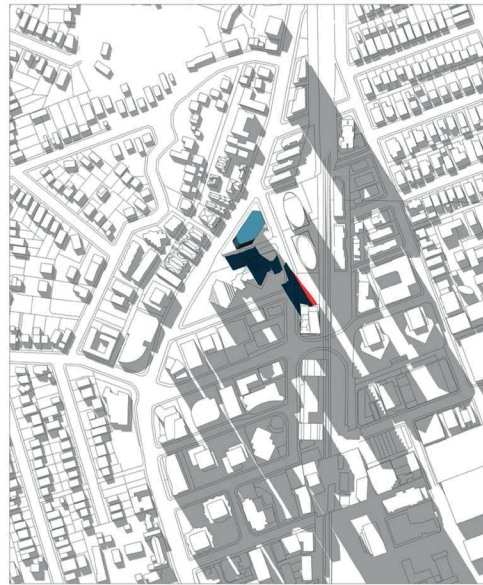
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SOLAR\_SHADOW\_PLAN\_1200



SOLAR\_SHADOW\_PLAN\_1300



SOLAR\_SHADOW\_PLAN\_1400



SOLAR\_SHADOW\_PLAN\_1500

LEGEND

- PROPOSED TOWER ADDITIONAL SHADOW
- COMPLAINT TOWER ADDITIONAL SHADOW



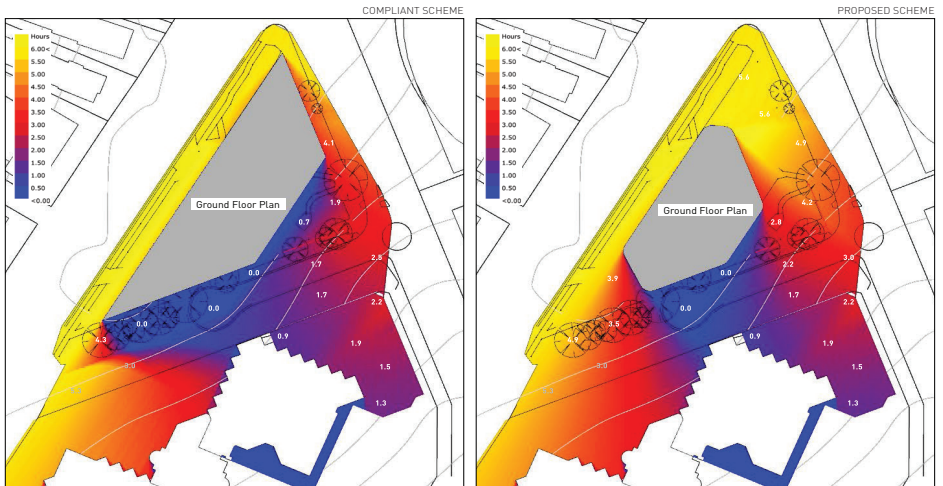
# 3.4 OVERSHADOWING ANALYSIS

The proposed building envelope has been tested in terms of shadow impacts on the surrounding areas and properties. The analysis shows the extent of shadows cast by the proposed maximum development envelope between 9am and 3pm in mid-winter. The diagrams also show a comparison of shadow impact from the existing building, the compliant envelope and the proposed envelope relative to the surrounding context.

The proposed envelope will not create any shadow impact on the adjoining Childcare Centre located within the "Zenith Centre".

The proposed envelope will create some additional impact on the western elevations to the adjoining Railway Street apartments "Epica" and "Era" between 2.30pm-3.00pm when compared to a compliant envelope. The proposed envelope, however, does (highlighted in red). Given the nature of this shadow, as a fast-moving shadow to the surrounding context, it will have minimal impact.

Based on desktop research of internal layouts of the residential properties, "Epica" and "Era", this available information show that the balcony and main living spaces will have minimal impact. Approx. 2% of the balconies to "Epica" and 3% of balconies to "Era" will have an impact.



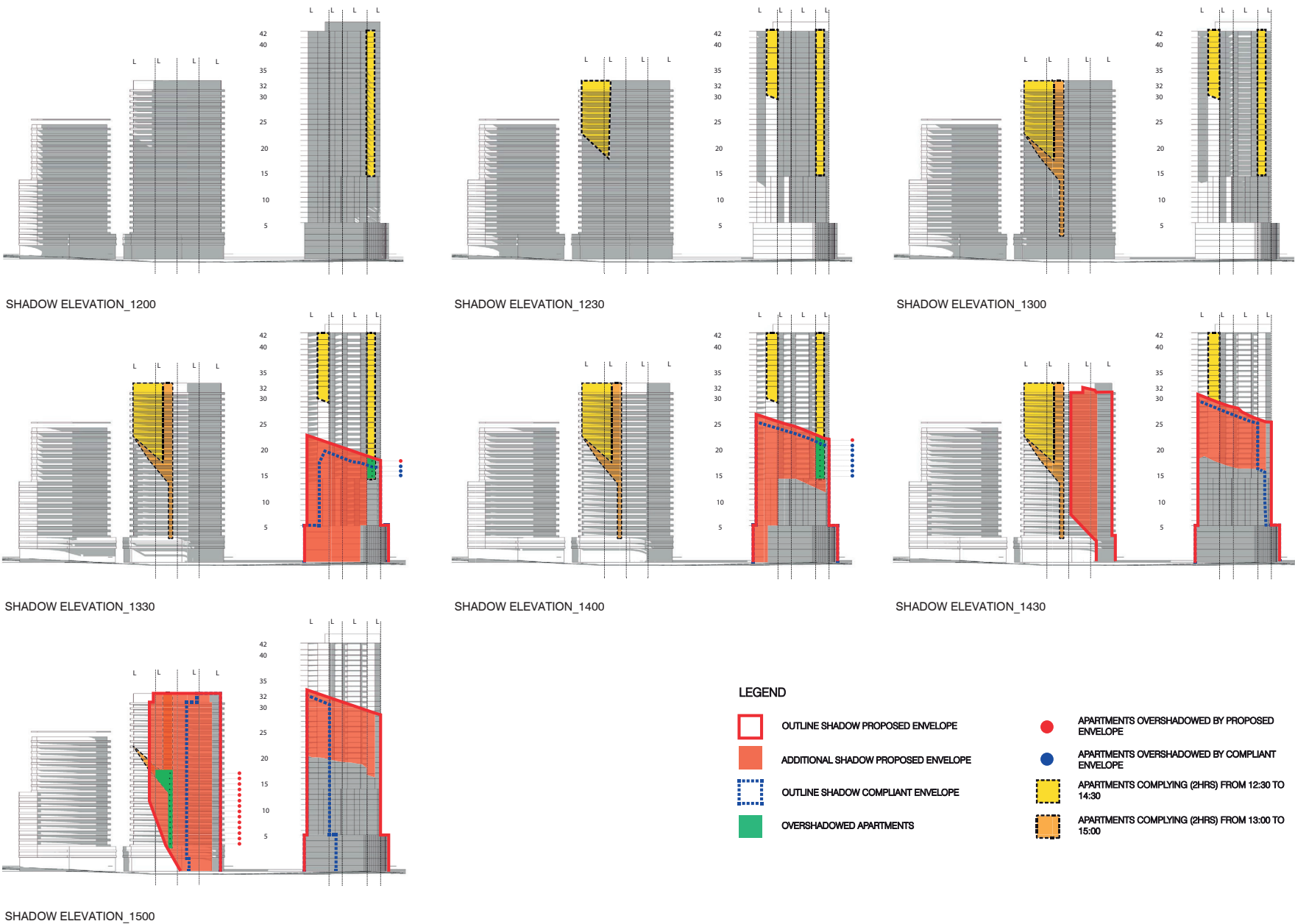
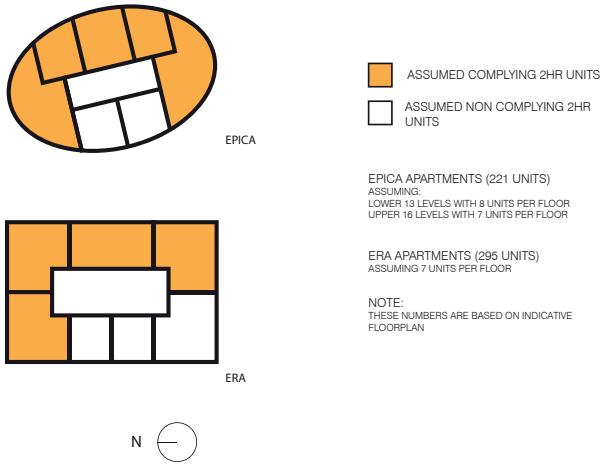
"Epica" and "Era" Solar Access Compliance Table

Epica Apartment							
	Total Number Apartments	2Hrs with No Envelope		2Hrs with Proposed Envelope		Difference	
		No.	% Overall	No.	% Overall	No.	% Overall
0900 - 1500 Complaint	221	192	86.88%	178	80.54%	14	6.33%
0900 - 1500 Non Compliant		29	13.12%	43	19.46%		

ERA Apartment							
	Total Number Apartments	2Hrs with No Envelope		2Hrs with Proposed Envelope		Difference	
		No.	% Overall	No.	% Overall	No.	% Overall
0900 - 1500 Complaint	295	196	66.44%	188	63.73%	8	2.71%
0900 - 1500 - Non Compliant		99	33.56%	107	36.27%		

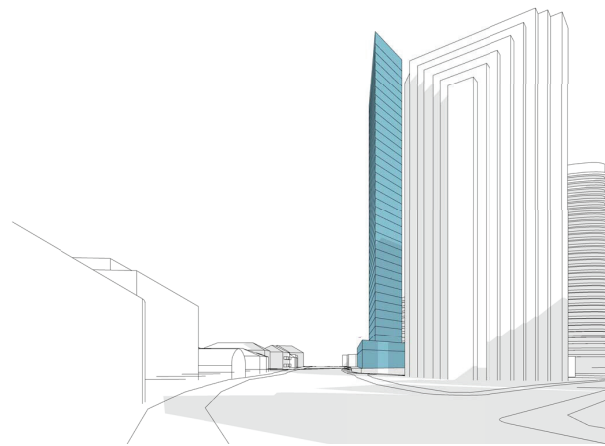
"Epica" and "Era" Indicative Floor Plans



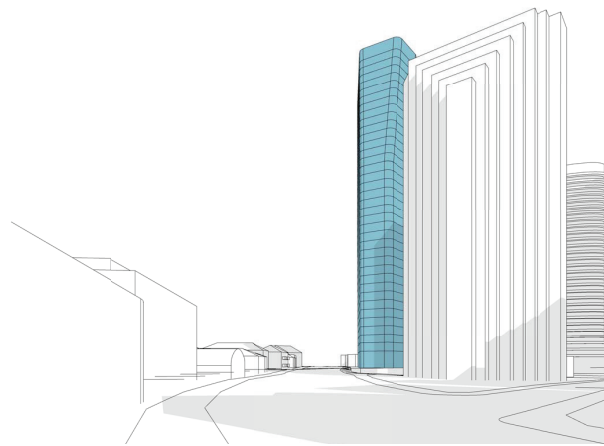


ST. PASCAL CATHEDRAL

COMPLIANT SCHEME

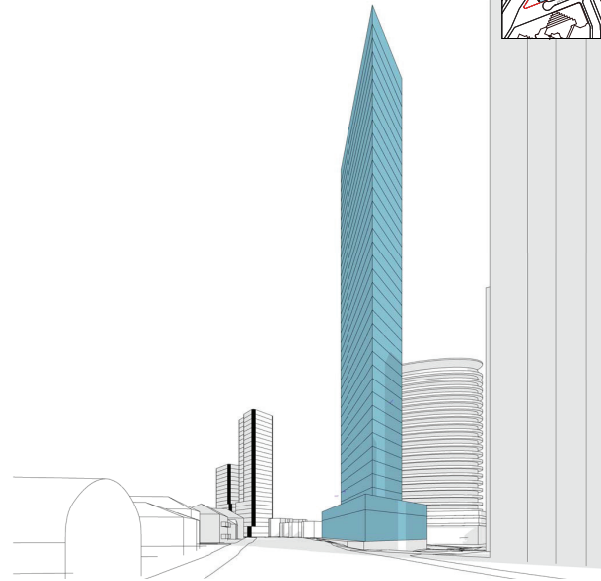
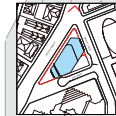


PROPOSED SCHEME

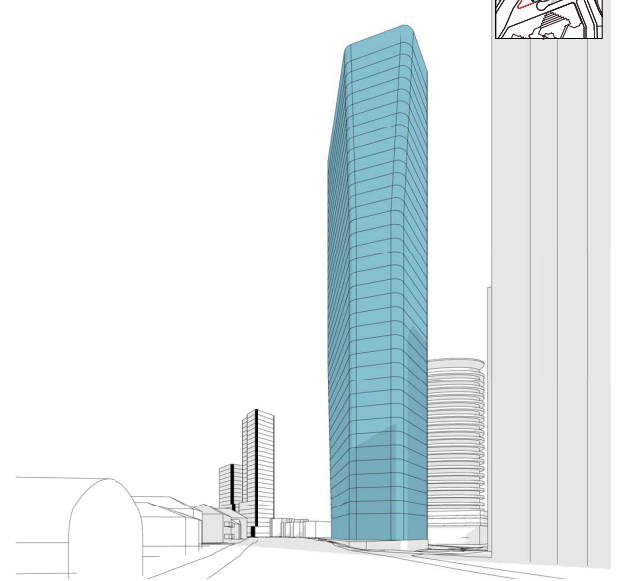


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COMPLIANT SCHEME

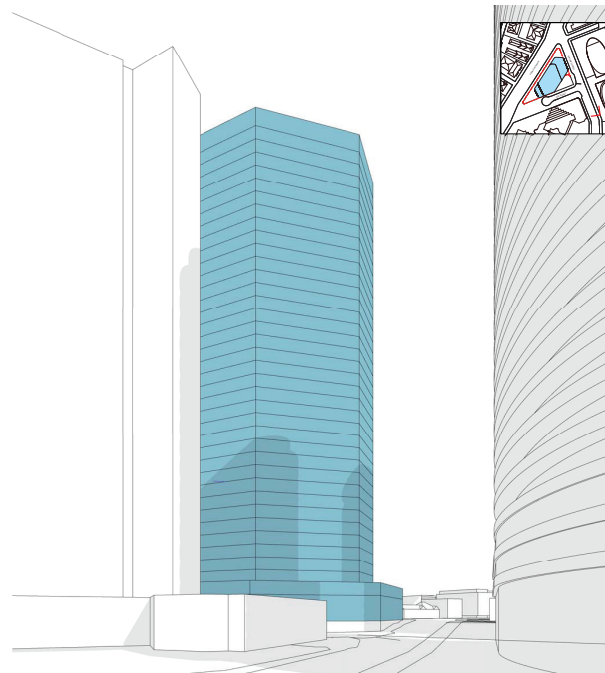


PROPOSED SCHEME

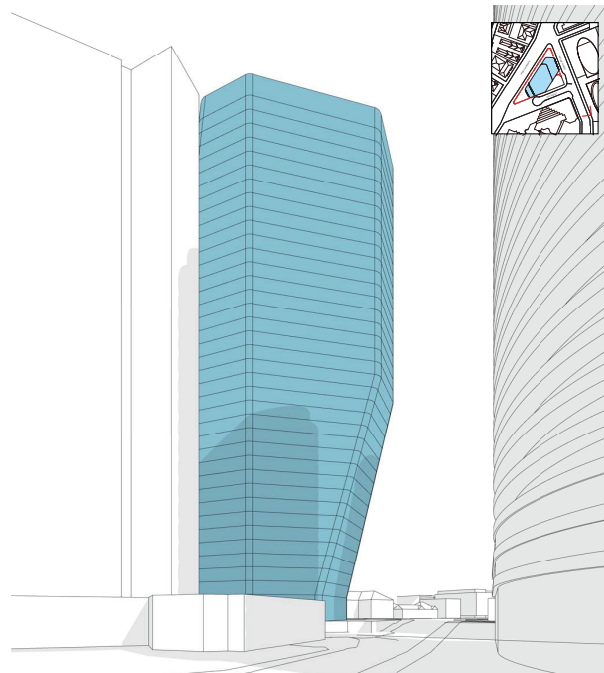


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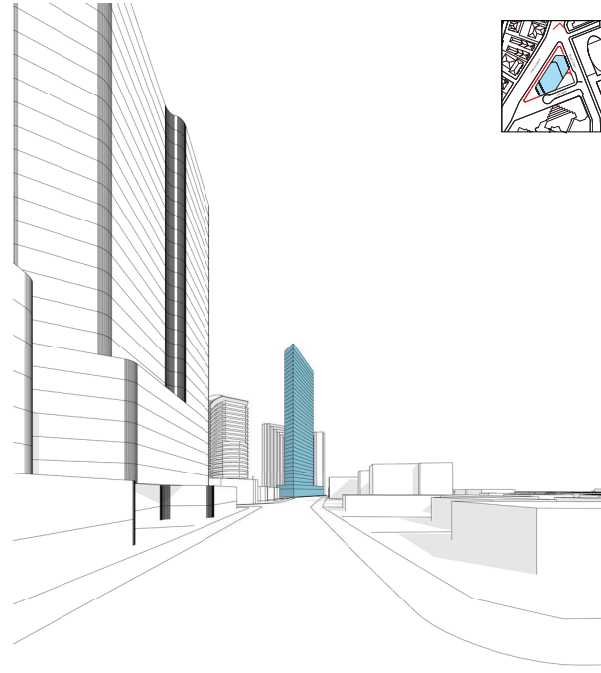
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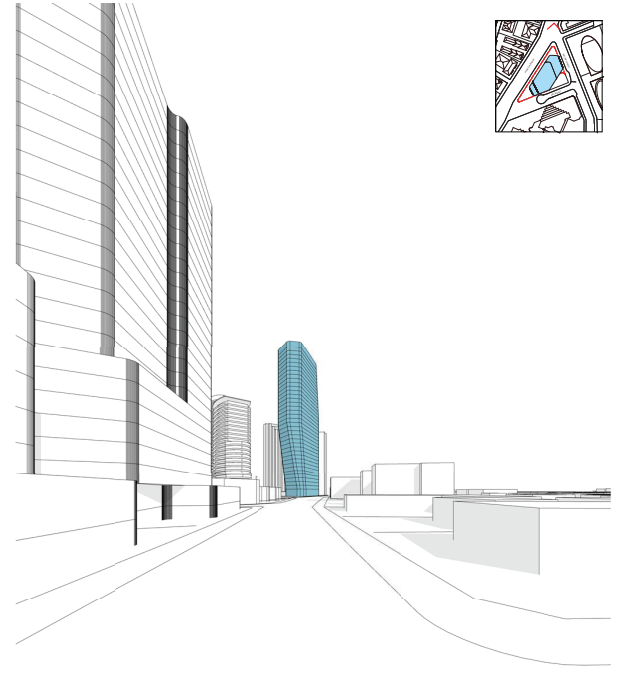
PROPOSED SCHEME



COMPLIANT SCHEME



PROPOSED SCHEME

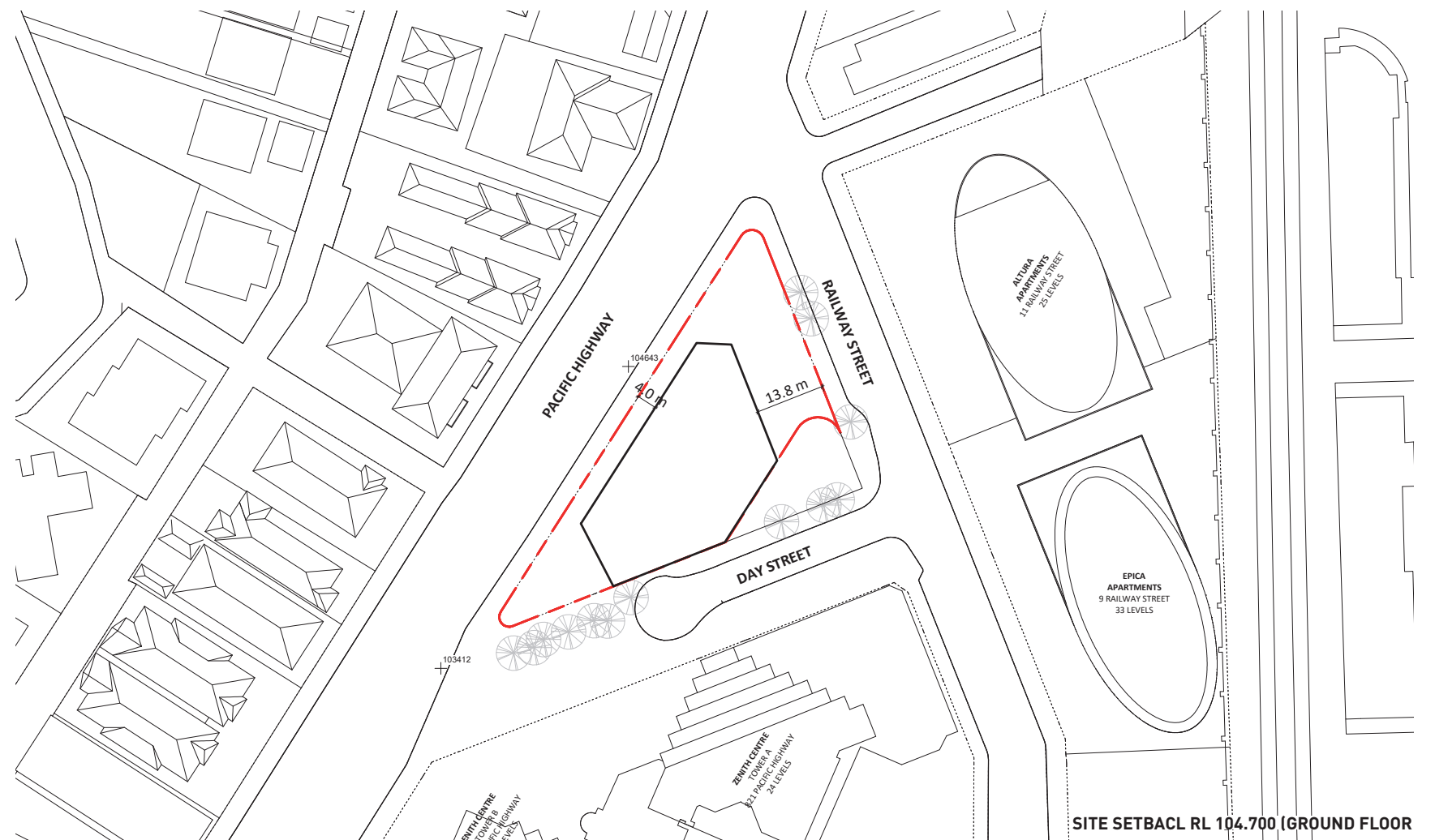
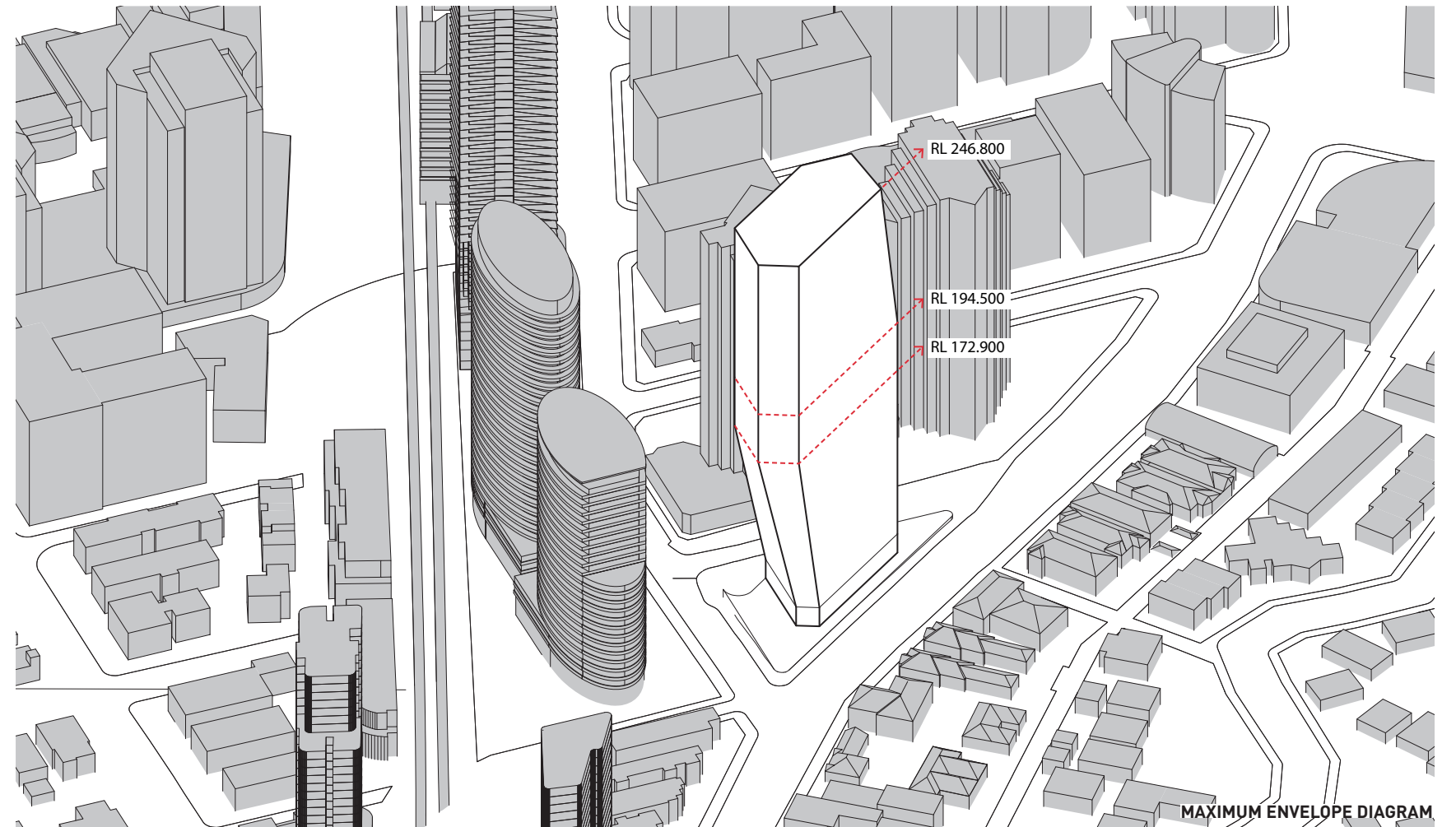




# 3.5 A CITY LANDMARK

The proposed envelope and corresponding built form outcome, when compared to the complaint scheme, recognises the following:

- The proposal is perceived as "slim line" when viewed from the important vantage points within Chatswood CBD. These include public views along the Pacific Highway from the north and south; and the northern public view along Railway Street. The proposed envelope will ensure the tower is perceived as "slim line" at these viewpoints
- The indented built form to the northern and southern corners of the site seek to capture an "uplift" in development capacity in the provision of a contemporary and viable workplace floor plate while providing improvements to the public domain along the Pacific Highway and Railway Street
- The proposed envelope and corresponding setback at each street frontage will provide a publicly accessible landscape space with good sun access
- The cross falls of the site will allow a vehicle portal within the podium for on-site basement parking and a service vehicle dock. This will be away from the important public entries.





The proposal, looking south along Pacific Highway





The proposal, looking south east from an aerial perspective







The proposal, looking south from the other side of Pacific Highway





The proposal, looking south from the other side of Pacific Highway





Street level view of the proposal, showing a new landscaped space on Railway Street





Street level view of the proposal, showing a new landscaped space on Railway Street







# 04

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## Conclusion





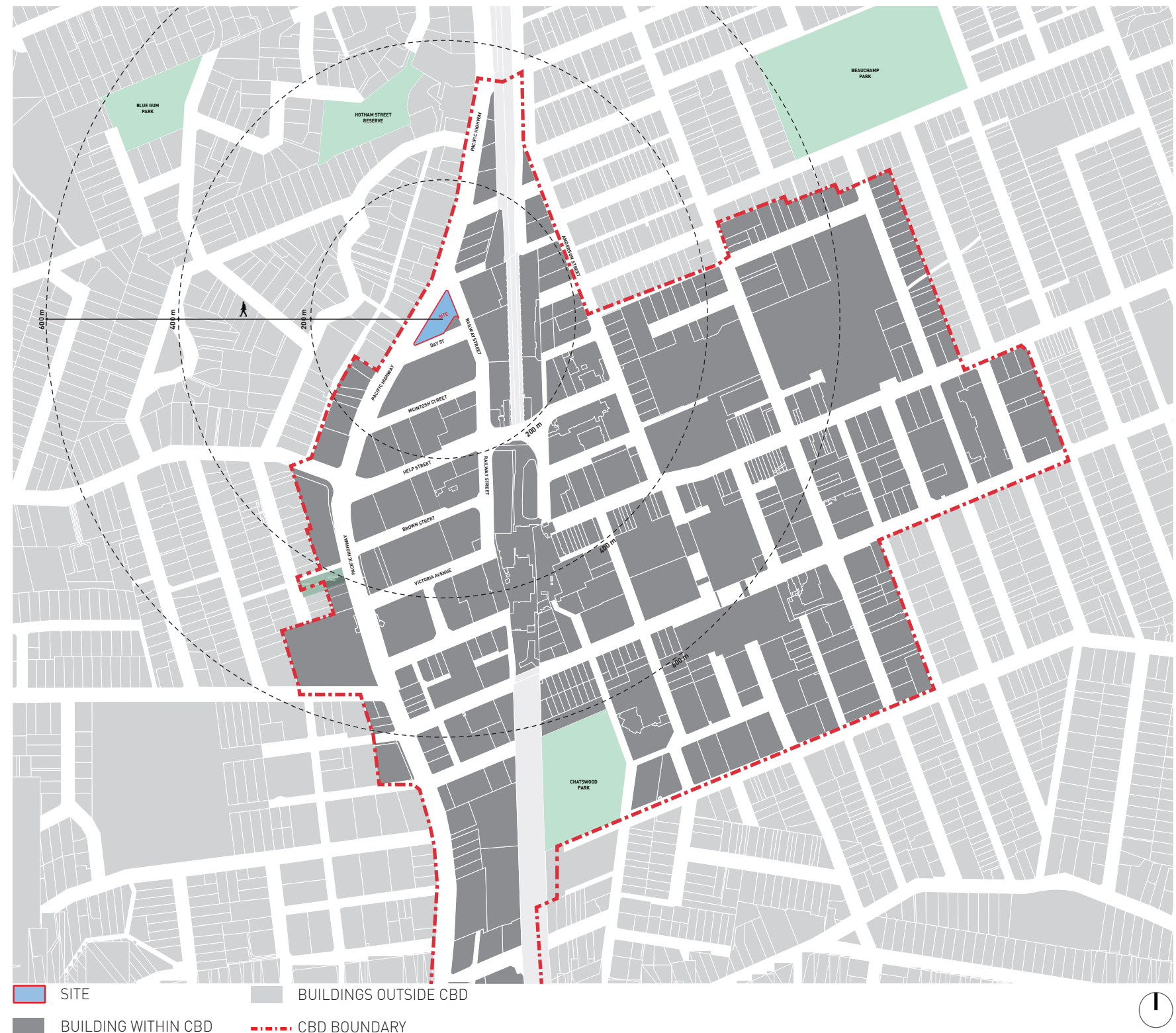


# 4.1 CONCLUSION

This urban design report confirms that the subject site can accommodate additional commercial office uses within an landmark CBD site.

The merit of the proposal is summarised as follows:

- The proposal will provide employment opportunity within the western section of the CBD, an area defined by taller buildings
- The site is located on a corner with minimal impact on adjoining residential uses, that is, the proposed envelope can have a manageable development outcome by having minimal overshadowing impact
- The proposal does not overshadow any of the Chatswood CBD public open spaces
- The site is bound by three streets and is a development that is well separated from other developments. The proposal does not need to consider site isolation, a common occurrence in many CBD sites
- A unique opportunity to provide an urban landmark in the form of a slender tower on the site when viewed from the north.
- The proposed built form envelope positively contributes to the skyline of the CBD while providing a commercially viable floor plate for a contemporary work place
- A landscape strategy that will compliment the existing public domain through improved "green" connections
- The proposal is consistent with the objectives of the "Strategy", the *Chatswood CBD Planning and Urban Design Strategy*









# APPENDIX

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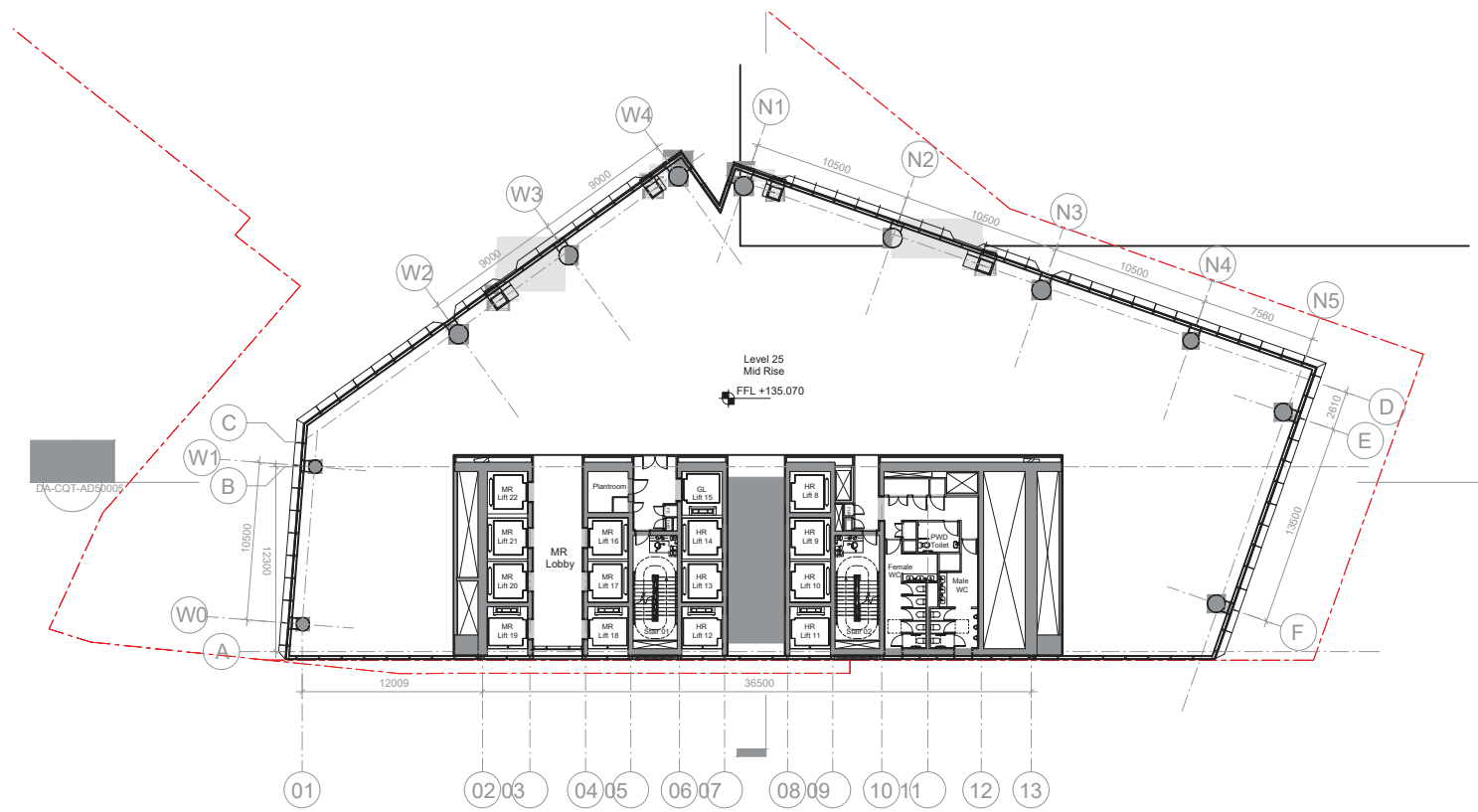


# A1

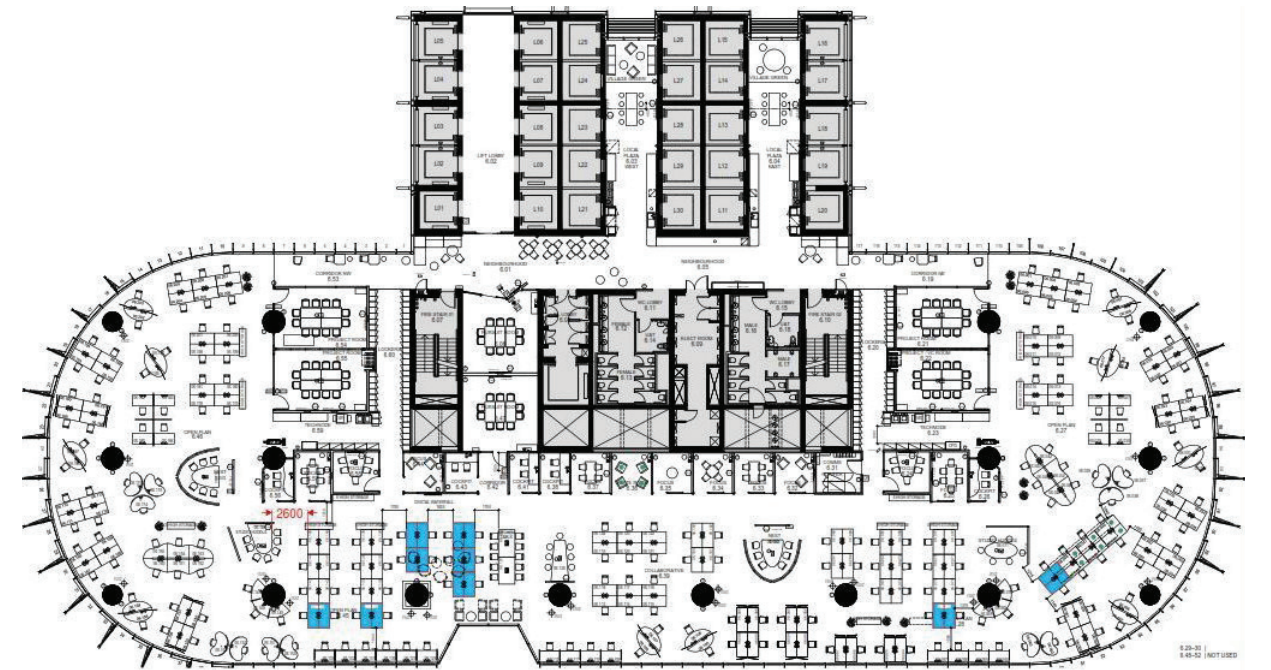
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Typical floor plates for commercial office uses

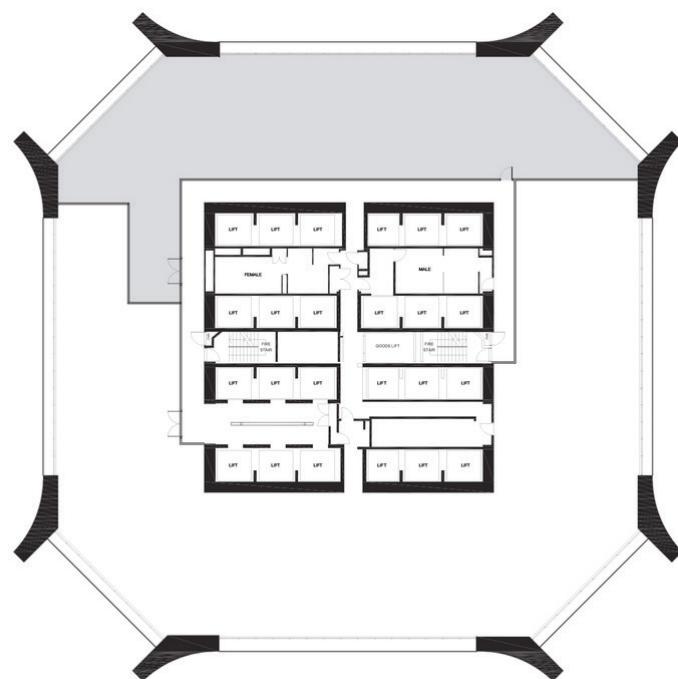




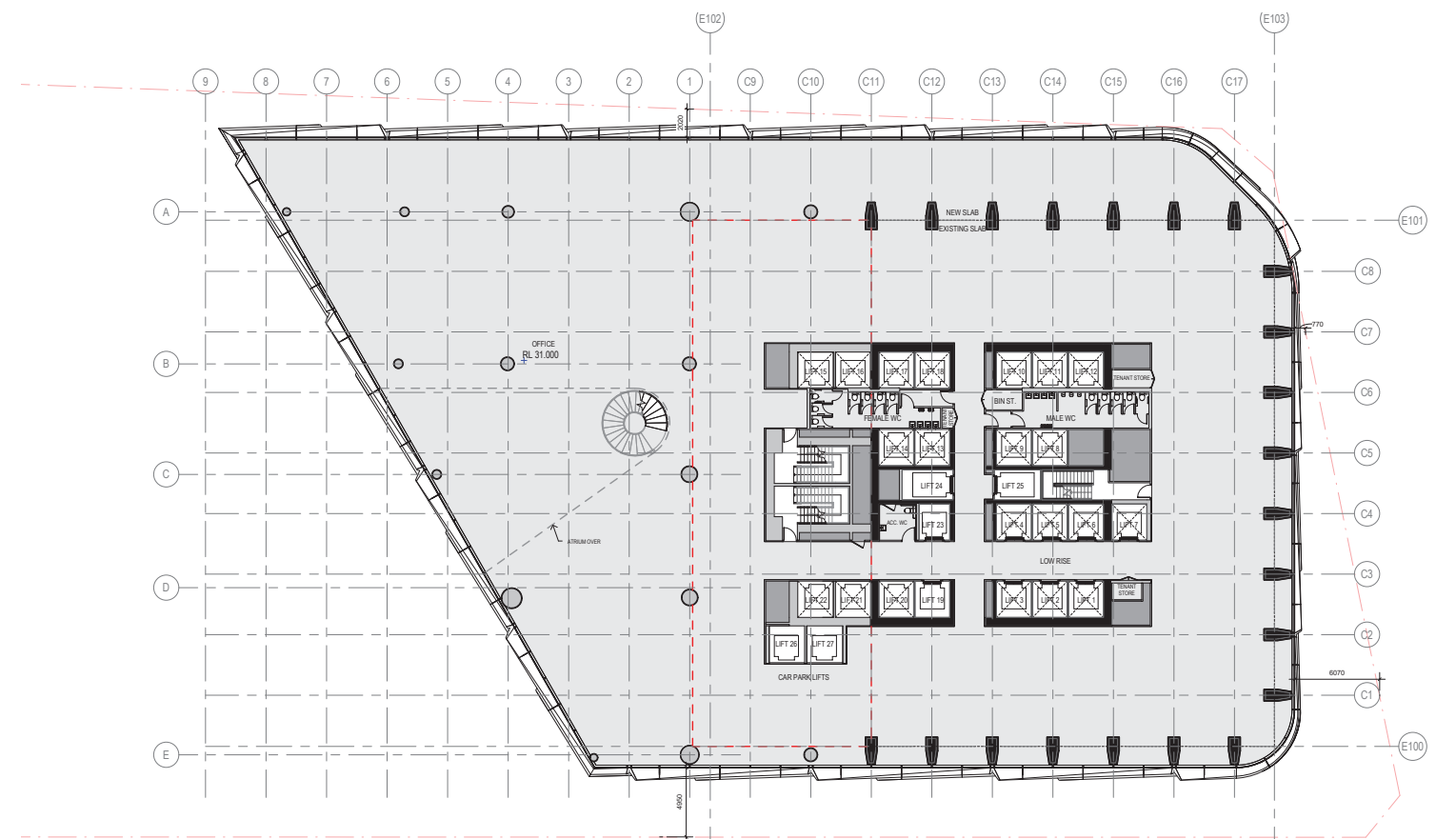
182 George St - LENDLEASE Circular Quay - GFA 1400m2



Barangaroo C3 - GFA 2500 m2



19 Martin Place - MLC Centre - GFA 1340 m2



AMP Tower - GFA 2350 m2



# A2

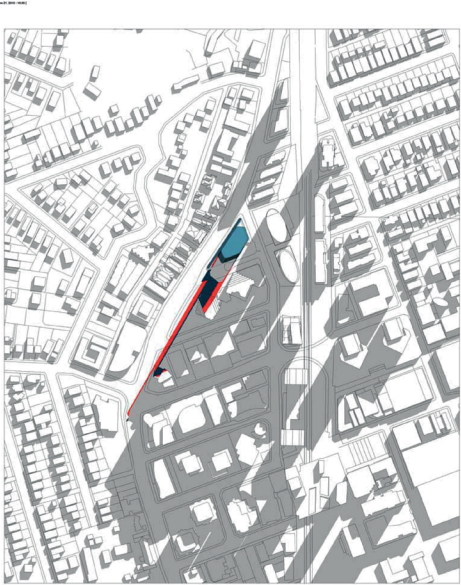
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Shadow diagrams

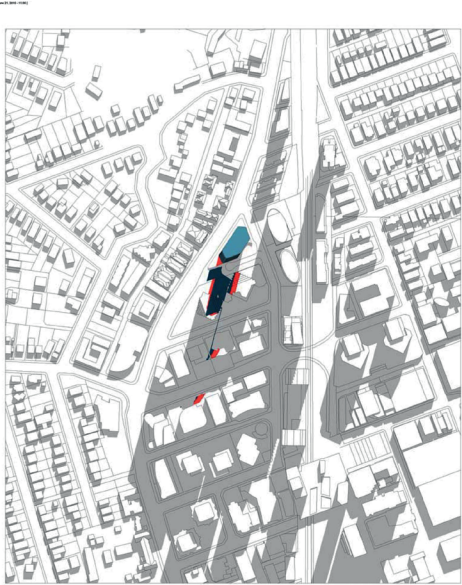




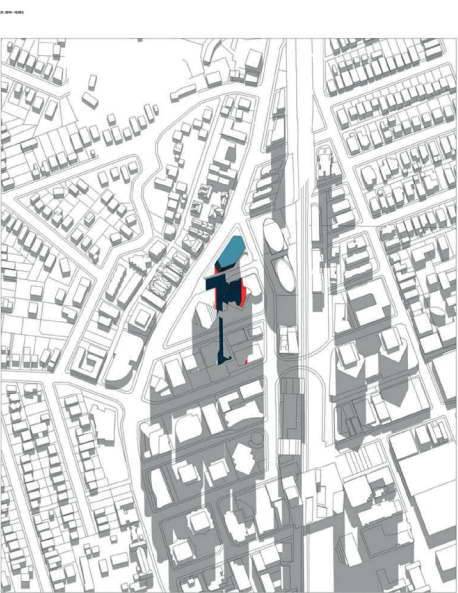
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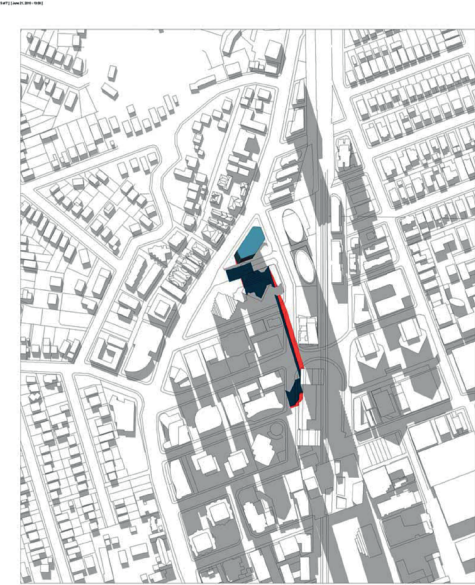
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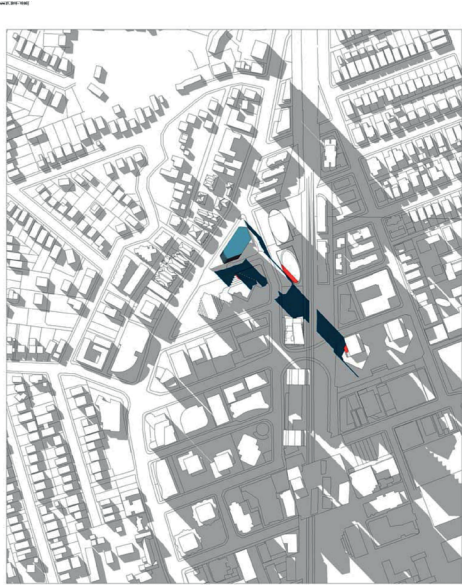
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SOLAR\_SHADOW\_PLAN\_1300



SOLAR\_SHADOW\_PLAN\_1400



SOLAR\_SHADOW\_PLAN\_1500

LEGEND

PROPOSED TOWER ADDITIONAL SHADOW

COMPLAINT TOWER ADDITIONAL SHADOW

Key Plan:

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S Parsons Architect No.6998  
D Jones Architect No.4778



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Chatswood

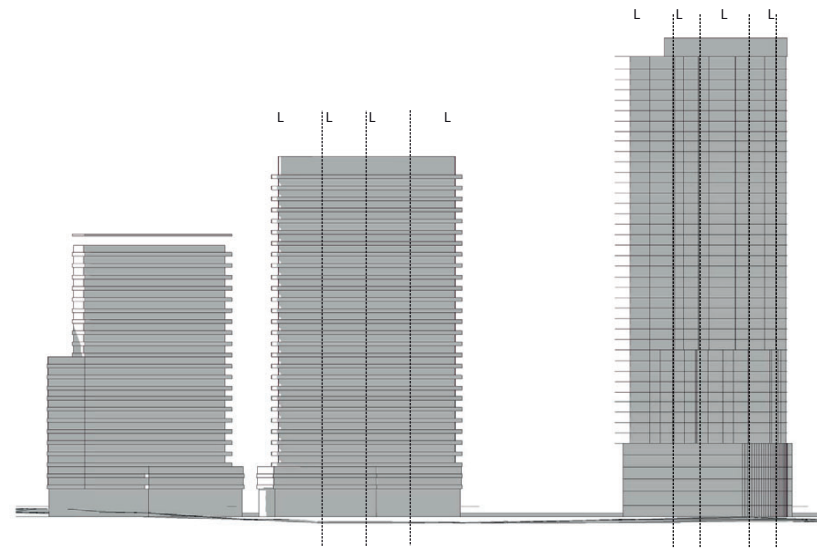
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STAGE 1 DA APPLICATION

Title  
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SHADOW DIAGRAMS

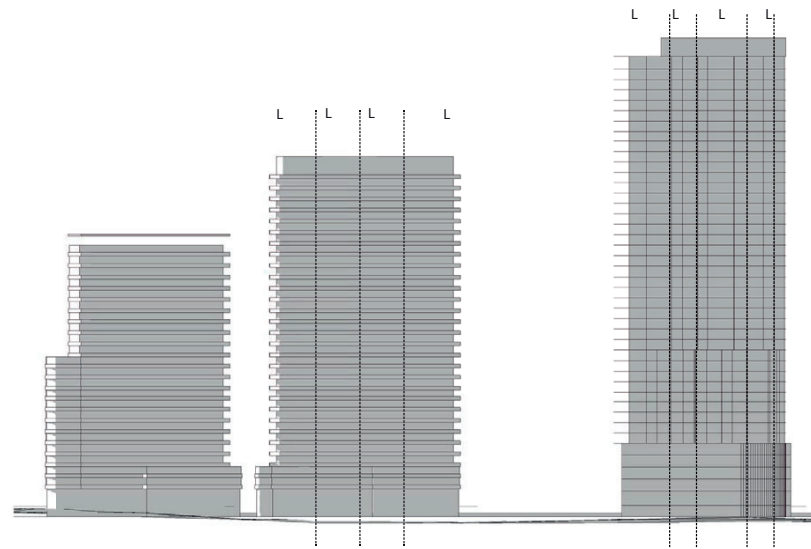
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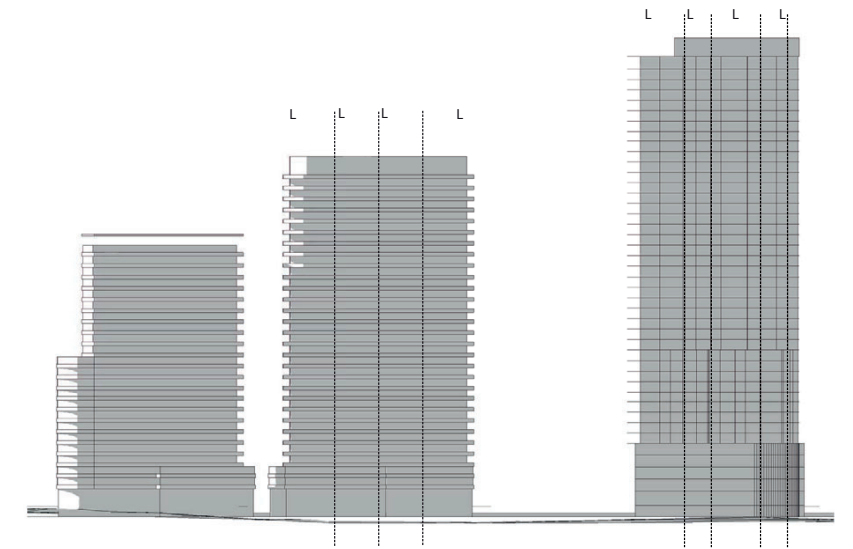




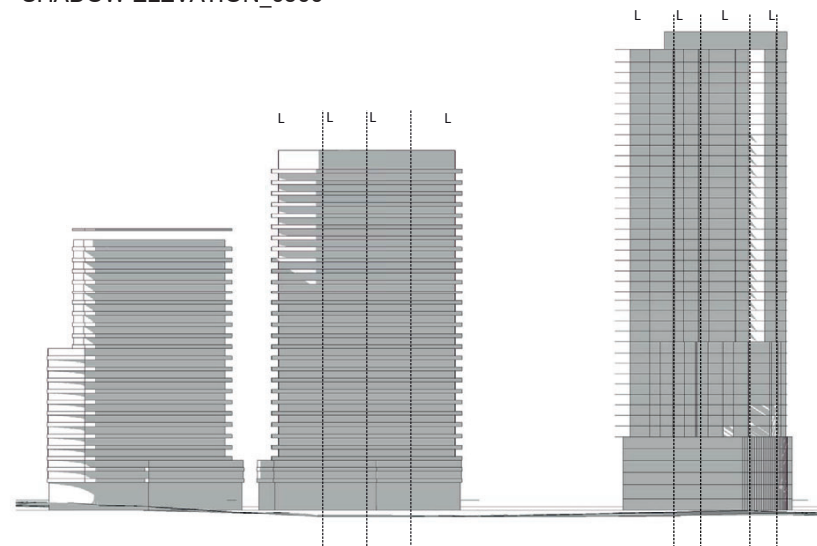
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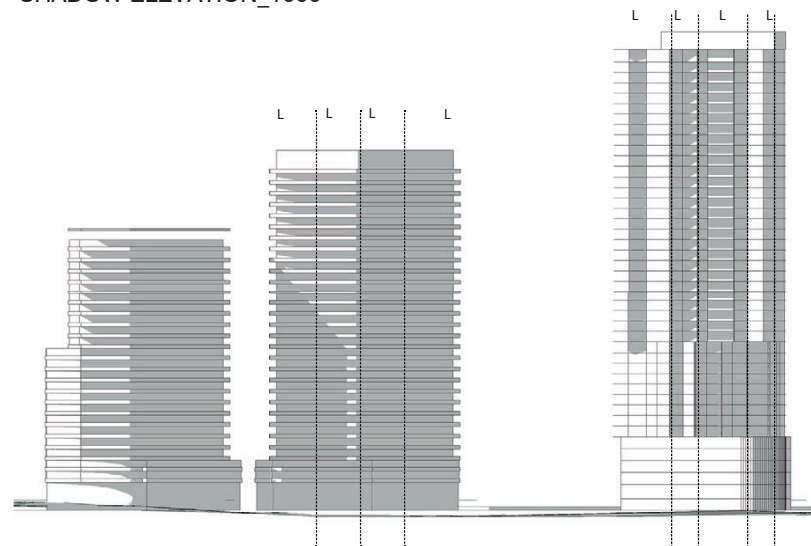
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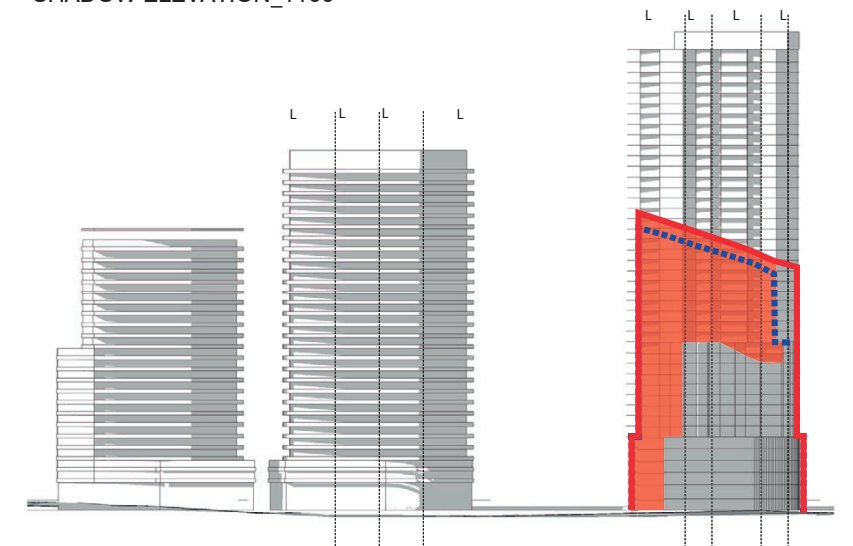
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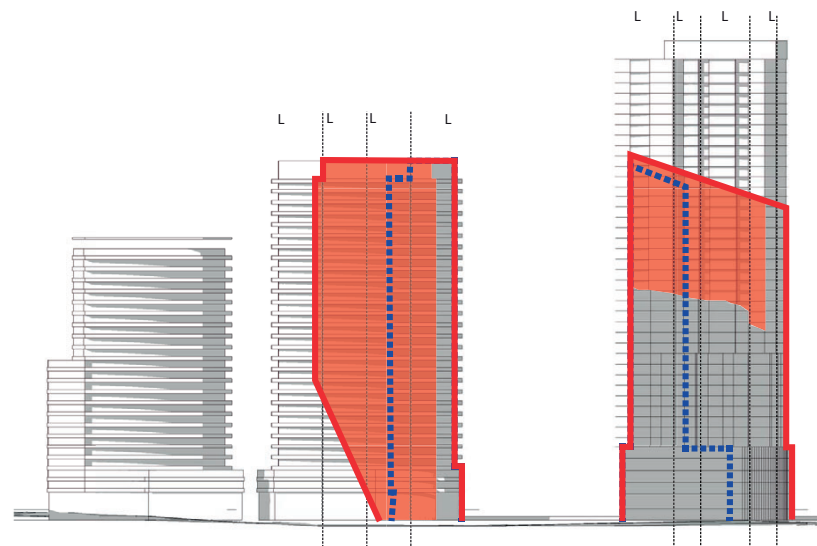
SHADOW ELEVATION\_1200



SHADOW ELEVATION\_1300



SHADOW ELEVATION\_1400



SHADOW ELEVATION\_1500

LEGEND

- OUTLINE PROPOSED TOWER SHADOW
- PROPOSED TOWER ADDITIONAL SHADOW
- OUTLINE COMPLIANT TOWER SHADOW

Key Plan:



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S Parsons Architect No 6098  
D Jones Architect No 4778

**PTW**

Project Project Number  
**845 PACIFIC HIGHWAY**  
Chatswood

Status

Title

93-SOLAR ACCESS  
**RAILWAY STREET SHADOW  
ELEVATIONS**

Drawing Number

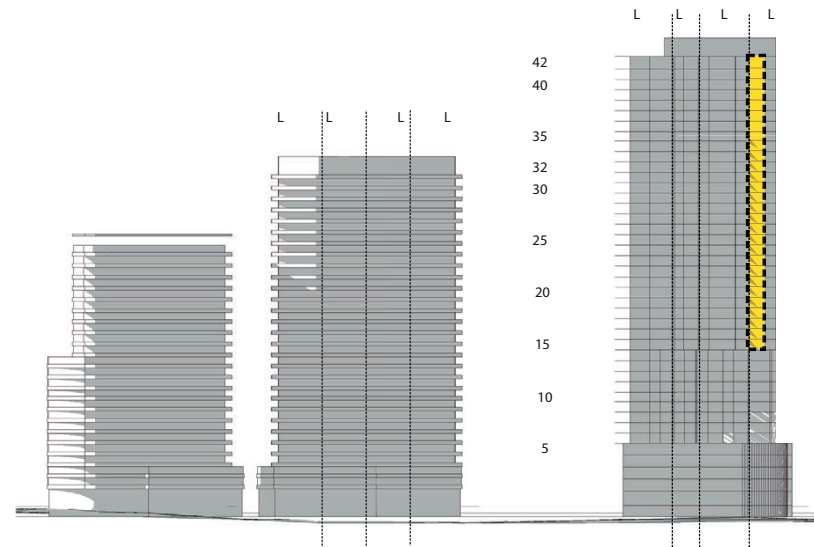
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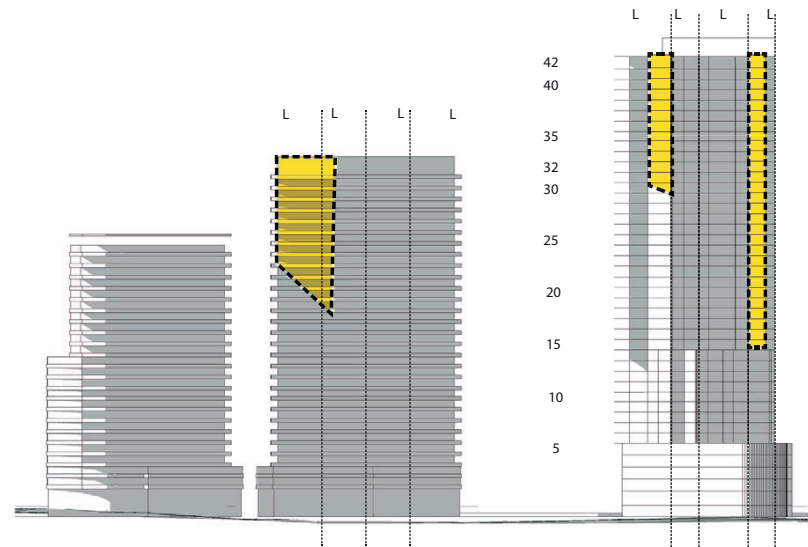
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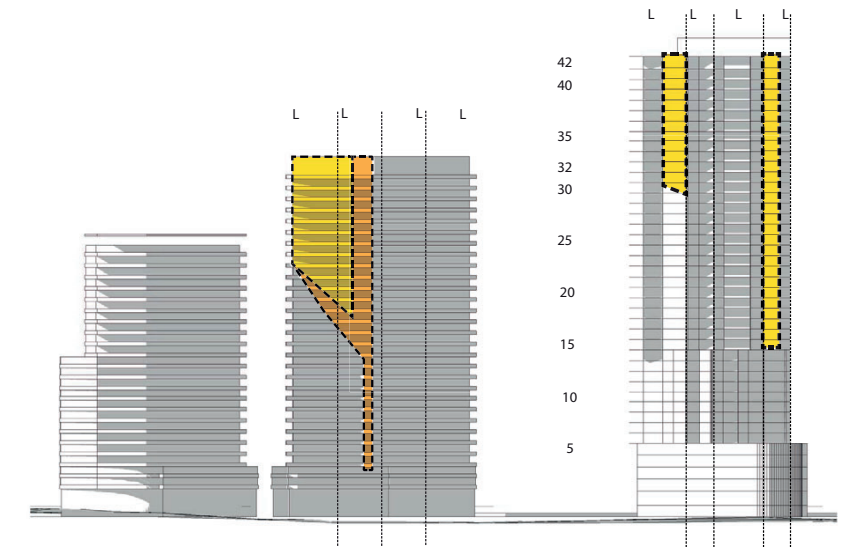




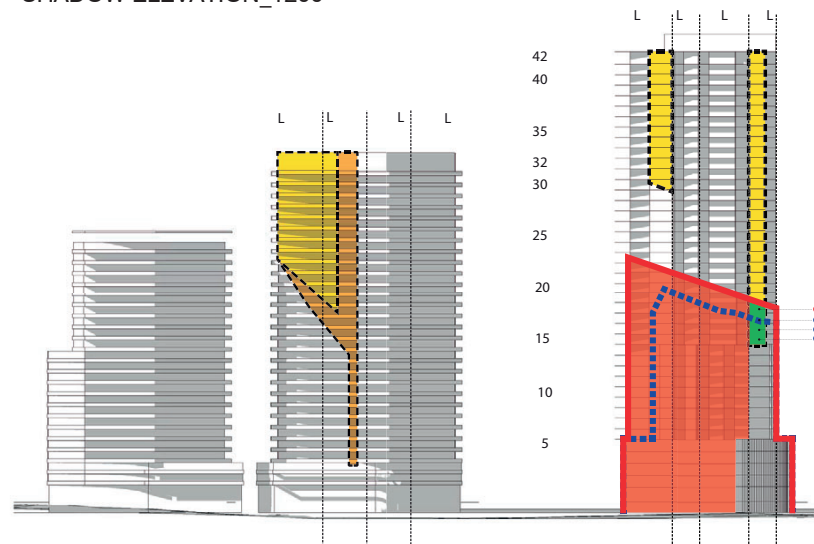
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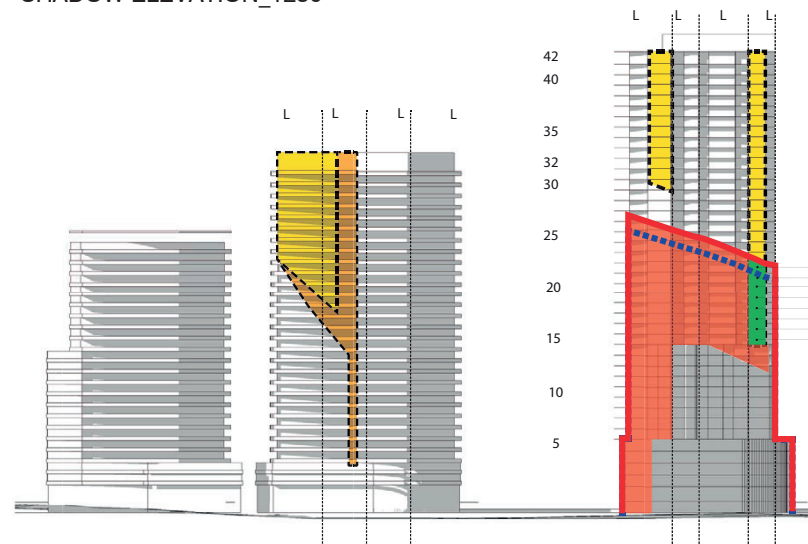
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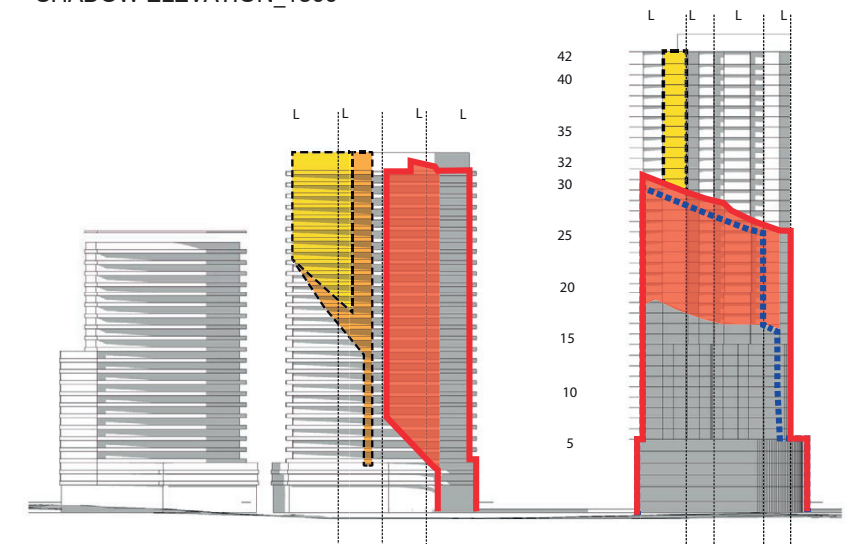
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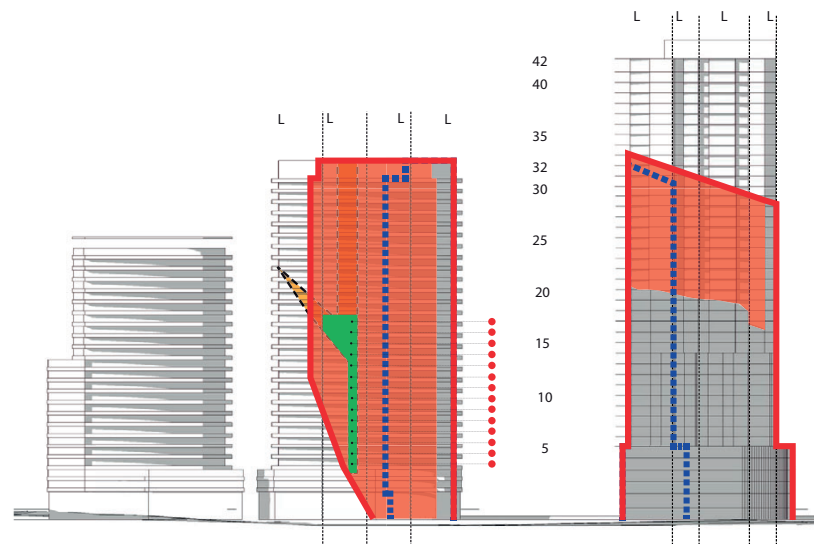
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SHADOW ELEVATION\_1400



SHADOW ELEVATION\_1430



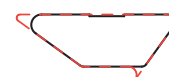
SHADOW ELEVATION\_1500

### LEGEND

- OUTLINE SHADOW PROPOSED ENVELOPE
- ADDITIONAL SHADOW PROPOSED ENVELOPE
- OUTLINE SHADOW COMPLIANT ENVELOPE
- OVERSHADOWED APARTMENTS

- APARTMENTS OVERSHADOWED BY PROPOSED ENVELOPE
- APARTMENTS OVERSHADOWED BY COMPLIANT ENVELOPE
- APARTMENTS COMPLYING (2HRS) FROM 12:30 TO 14:30
- APARTMENTS COMPLYING (2HRS) FROM 13:00 TO 15:00

Key Plan:



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**Project** Project Number  
**845 PACIFIC HIGHWAY**  
Chatswood

**Title**  
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