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Australia



**7 RAILWAY STREET,
CHATSWOOD**

DESIGN STATEMENT

JULY 2010

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1. INTRODUCTION

This Design Statement deals with siting options, built form, urban design and public domain including the through site link for the proposed development. The site forms part of the Pacific Place development, which was developed and constructed by Mirvac and is mixed use, including commercial, retail, residential, private and public open space. The proposal consists of a high rise building containing commercial and residential occupancies previously known as Building G now to be referred to as 7 Railway Street with associated public and private open space. It is the last site to be developed in the Pacific Place and will complete the Precinct.

The site is bounded by Help Street to the South, Railway Street to the West, Cambridge Street to the East and O'Brien Street to the North. The existing residential tower (Epica) is located to the North of the site. The site is adjacent the North Shore railway line and also includes the area above the adjacent railway corridor as well as a parcel of land on the Eastern side of the Railway Enclosure Structure (RES). Land use in the vicinity of the site comprises a mixture of commercial, residential and retail uses. Commercial uses are located to the West and South and commercial and retail uses associated with the Chatswood Town Centre are located South, East and South-East of the site (see figure 1).



Figure 1 – Pacific Place

The site is currently vacant except for a shared access way with the Epica building service and loading bay and covered storage area on the Northern boundary. Other than this there are no existing structures on the site requiring demolition.

Access to the site is via a shared drive way with the Epica building which services the Epica service and loading bay. The driveway and associated structure are located on the title of 7 Railway Street with an easement in place benefiting Epica with the right of access to the Epica service and loading bay area.

The driveway to the Epica service and loading bay was designed to enable access to the future 7 Railway Street development. As part of the construction of the basement for 7 Railway Street, there will be a requirement to remove a temporary wall which was installed in the Epica service and loading bay area. This will create the access to the basement of 7 Railway Street.

Development consent is now sought under a Part 3A Application for construction of a mixed use residential / commercial development and new public open space on the site. The mixed use development is proposed to comprise 304 residential apartments, approximately 3,800m² GFA of commercial area and some 140m² GFA of ground floor retail. The residential component of the development will comprise some 75 one bedroom units, 129 two bed apartments and 100 three bed apartments.

2.0 DESIGN OBJECTIVES

- Respond to the location, character and scale of the site.
- Provide high quality public and private open space.
- Provide for activation of the ground plane.
- Provide passive security of the public and private open space.
- Provide an appropriate active edge at street level.
- Achieve an appropriate relationship with other buildings on the site and neighbouring sites in terms of separation, height, amenity, materials and built form.
- Provide amenity for residents and neighbours.
- Reinforce the skyline profile of the Chatswood City Centre.
- Carefully address the East and West walls of the Railway Enclosure Structure.
- Build upon and enhance the principles set out in the masterplan.

2.1 SITE ANALYSIS

A careful analysis of the terrain, history, topography, orientation, movement of pedestrians, street scapes, views and relationships to the railway line, the railway station and adjoining buildings was carried out. The proposed design builds upon the framework of the masterplan and integrates the apartment building into the context of this important area of Chatswood.

The proposed development at 7 Railway street uses these opportunities and constraints to generate the design responses that shape the building, inform apartment planning and create the public domain. Different options were explored for the siting of the building including constructing over the RES (**see figure 2**).

2.2 URBAN DESIGN

The Urban Design Principals for the proposed development for 7 Railway Street have been to:

- Reinforce the skyline profile of the Chatswood City Centre.
- Enhance ground plane activation.
- Reinforce and enhance pedestrian links.
- Assist in creating a legible Urban Fabric
- Create quality open space and public amenity

These principals will be further elaborated in the discussion of the main components.

3.0 MAIN COMPONENTS

The proposed development at 7 Railway Street is defined by three principal components.

- the **public open space**.
- the **podium** and
- the **tower**.

3.1 THE PUBLIC OPEN SPACE

The ground floor and public open spaces have been designed to work together to ensure activation of the street and existing through site link under the RES. The proposed geometries create desire lines to the through site link and the residential entry and pool provide activation and surveillance (**see figure 3**).



Figure 3 – Artist Impression of new park west of Railway Enclosure Structure.

The design of the ground plane responds to and enhances the existing pedestrian use patterns and networks. The new public park is situated to the North of the proposed building maximizing the opportunity for solar access. It is envisioned as high quality amenity for surrounding businesses and residents. The basic structural geometry encourages access through the site increasing permeability and enhancing the connection along Railway Street to the through site link. The new public park consists of a series of planted terraces and activity zones providing for a varied experiential quality with a stairway leading to a garden on top of the Railway enclosure Structure. This also serves to connect the east and west sides of the site over the RES, offering an alternate path of discovery.

An existing lift provides public access from Cambridge Lane to the top of the Railway Enclosure Structure. The landscape design is also seen as an aerial graphic visible to the adjacent buildings providing visual amenity when looked down on (**see figure 4**).

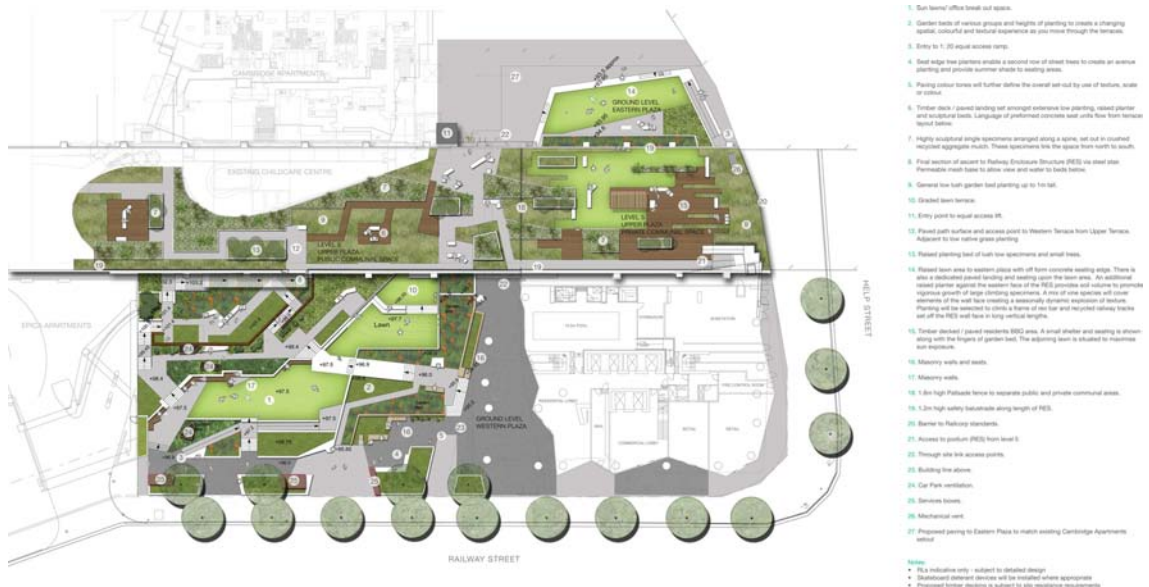


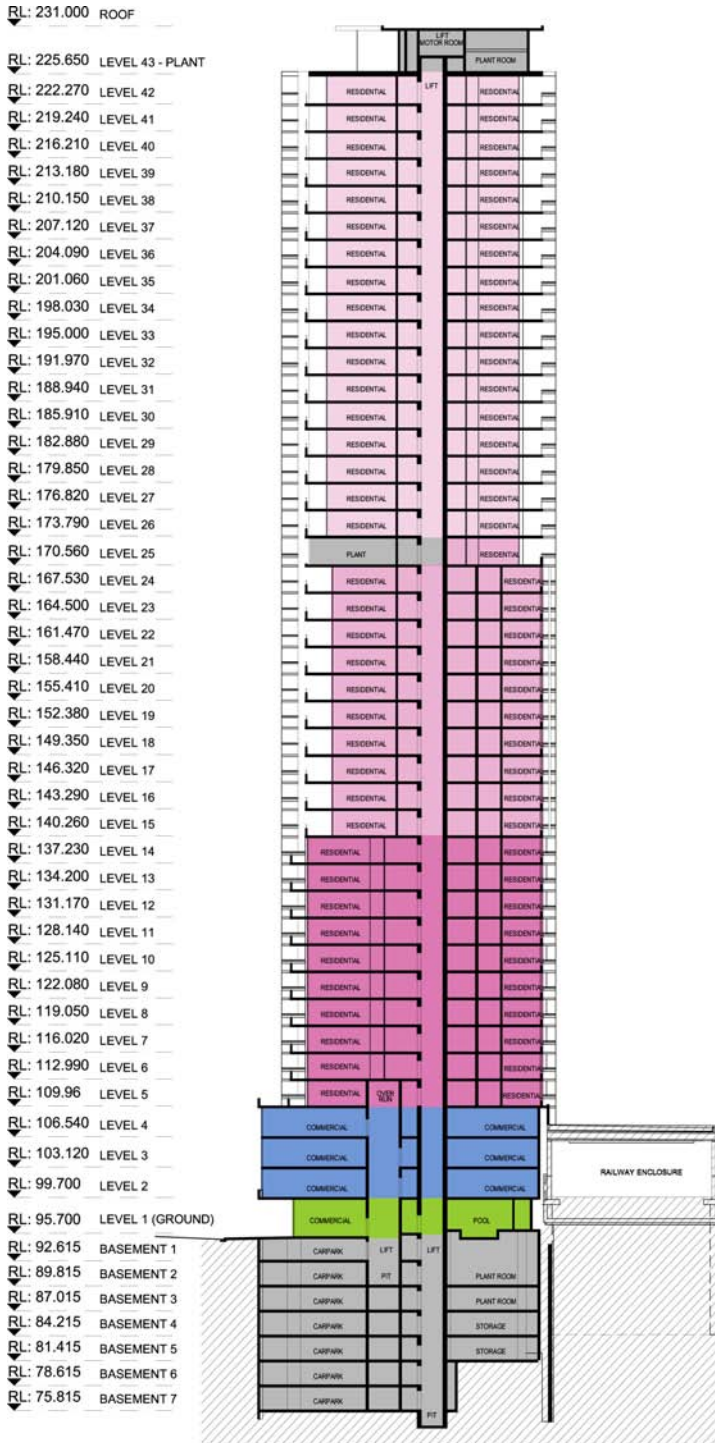
Figure 4 – Landscape Plan.

Structural railway “T” sections will be used to create trellises to allow mass planting to grow in front of and screen both east and west walls of the RES. This will not only screen the walls but will recognise the site’s origins as rail land and act as a symbolic and artistic tribute to rail in Chatswood.

There is communal private open space on top of the RES for the residents of 7 Railway Street. This is envisioned as a “big back yard” with a barbecue, seating and planted areas providing a place for residents to gather and providing a sense of community within the residential building. This is a continuation of the highly successful community facilities of the earlier stages of the development.

For more detailed discussion of the landscape and public space see the landscape report that is appended to this application.

3.2 THE PODIUM



The 4 storey podium contains lobbies and retail at Ground level and three levels of commercial space above of approximately 1245m² GFA per floor (see figure 5).

The main body of the commercial podium is aligned to the street creating a clearly defined edge. At the ground plane the footprint pulls in providing for a covered colonnade varying from 2 to 5 metres in depth 3.8 to 5 meters in height. The glass line is faceted giving the façade an interesting experiential and sculptural quality while still relating to the urban form. The entry to the retail is at the corner of Railway and Help Streets.

Separate commercial and residential lobbies have been created. The commercial entry is further along Railway Street, assisting in bringing people further into the site and activating the precinct. The location of the retail and commercial entry off Railway Street encourages pedestrian activity and forms a natural pathway to and from the train station while also activating the corner of Railway and Help Street. The commercial component is serviced by separate lifts and stairs.

The commercial component of the podium is defined by a wraparound frame element clearly articulating the 3 storeys of commercial use and providing an appropriately scaled base on which to sit the tower. This is consistent with the intent of the Willoughby Council DCP for the site.

Figure 5 – Section through Proposal

3.3 THE TOWER

The tower is composed of 3 changes of floor plate which differentiate and articulate the elevations of the building as well as providing a diversity of apartment types.

- Levels 5-14 consists of 10 units per floor comprised of 5 x 1 bed units, 4 x 2 bed and 1 x 3 bed (note; Level 5 has 9 units due to the loss of one apartment to access the communal private open space on Railway Enclosure Structure).
- Levels 15 to 25 consists of 8 units per floor comprised of 2 x 3 bed, 5 x 2 bed and 1 x 1 bed (note; Level 25 has 6 units due to mid level plant).
- Levels 26 to 42 consists of 7 units per floor comprised of 4 x 3 bed, 2 x 2 bed and 1 x 1 bed
- Level 43 contains the various plant rooms including a mezzanine level.

The Tower component is composed of five elements:

- i. The angled faces
- ii. The pop outs on the southern façade
- iii. The solid vertical elements with staggered openings
- iv. The balconies
- v. The roof element

i. ANGLED FACES

The shape of the building is generated by the opportunity to access surrounding views and the requirements for solar access to apartments. This creates a dynamic form rising above the podium with a contrasting geometry as prescribed by the DCP and Precinct Masterplan.

The southern end of the building is angled to the North, on the East and West sides. The glass lines follow the balconies stepping out to catch the sun.

The balcony on the Northwest corner unit is angled past the Northeast balcony to achieve views to the ocean on the upper levels. The angled faces create a dynamic “prow” form when viewed from the north. The “crease” between the two angles also serves to break down the form of the East and West façades .

ii. THE “POP OUTS”

The building steps out on the Southwest corner from levels 5 to 14. This corresponds to the larger floor plate on these levels. This has the effect of stepping the mass of the tower back from the corner of Railway and Help Streets over the podium. On the Southeast corner the façade pops out from levels 26 to 43 to accommodate the larger floor plate required by the change from primarily 2 bedroom units to 3 bedroom units. It also wraps up and over concealing the plant room and lift overruns creating a sculptural roof feature integrated into the massing of the building as per the DCP and precinct Masterplan requirements. These elements serve to layer the façade providing three-dimensionality and breaking down the massing. They also serve to create a marker at the corner of Railway and Help Streets in accordance with the requirements of the DCP and precinct Masterplan.

iii. THE VERTICAL FACES WITH STAGGERED OPENINGS

The façade is horizontally and vertically modulated in accordance with the DCP. The solid elements on the façade are vertically modulated with staggered windows creating a dynamic textured fabric. This element establishes a contrast with the horizontal modulation created by the slab edges and balcony upstands resulting in vibrant and highly articulated facades.

iv. THE BALCONIES

The balconies to the tower are visually defined by the slab edges, upstands and glass balustrades. Together with the solid vertical elements these define the form of the tower. The balconies are modulated by an interlocking composition of solids and voids using slab edges and solid upstands. The balconies are generous in area and depth providing in effect external rooms to each apartment. The shutters to the North, West and Northeast corner also provide significant privacy, sun and wind control.. They also serve to animate the facades while still providing for excellent views out of the building.

Balconies on the south eastern and southern facades feature glass screens in order to meet Railcorp requirements and provide resident amenity.

v. THE ROOF

The building occupies an important position both as a natural gateway into the centre of Chatswood and as a prominent addition to the highly visible skyline of Chatswood. The façade steps out on the southeast corner wrapping up and over the roof concealing the plant room and lift overruns. This creates a distinct sculptural feature integrated into the massing of the building as per the requirements of the DCP and precinct Masterplan. This also acts as a marker at the corner of Railway and Help Streets signifying its role in the urban fabric.

4.0 COMPONENTS OF THE DEVELOPMENT

4.1 The Tower

The proposal is for a single tower structure comprising ground floor and 42 floor levels above including roof plant podium levels. There will also be 7 levels of basement car parking.

The tower will sit on a 4 storey podium base, which will address Railway and Help Street. It will also form the built edge to the new public park. The tower will act to overlook and provide surveillance to the park. The entrance to the residential building lobby at ground floor is adjacent to the park, providing 24 hour activation.

The residential tower rises above the podium, set back with a different geometry as per the DCP. The shape of the residential tower is generated by the response to view

opportunities and a desire to maximize solar access to the apartments. There are three typical residential floor plates which provide a variety of apartment types and sizes. These are expressed three dimensionally by stepping out portions of the building. This combined with the site generated shape provide for a dynamic building form. The use of staggered fenestration on the solid elements, moveable screens and varied upstands further enhances the sculptural qualities providing variety and interest to the facades.

The building footprint occupies 920m² of site area enabling 3933m² of open space on the site of which 3371m² is public open space.

4.2 Public Open Space

As required by Pacific Place Masterplan, Public Open Space is to be provided in the form of three distinct areas. These are:

- The new public space on the east side of the Railway Enclosure structure referred to as the Eastern Plaza which includes vertical screening of the Railway Enclosure Wall with planting.
- The Upper Plaza located on top of the RES which has been designed as a Discovery Garden and will have an interesting composition of colours and textures when viewed from above by the surrounding Pacific Place buildings.
- The Western Plaza to the west of the Railway Enclosure Structure including elevated grass planes and vertical screening of the Railway Enclosure Wall with planting. The area will become a meandering set of spaces with many intimate places to gather, rest, sit and eat lunch.

The public open space will be on the title of 7 Railway Street with easements in place for public access. The maintenance costs and management of the spaces will be borne by 7 Railway Street.

4.3 Communal Private Open Space

Communal private open space will be created to the west side of the tower on top of the Railway Enclosure Structure. It will be accessed from level 5 by both stairs and an open wheelchair platform and include a BBQ and landscaped area. There is also an indoor swimming pool and gym on ground level that forms part of the communal facilities.

These facilities will provide the foundations for creating community interaction between residents within the development.

4.4 Car Parking

Car parking, as outlined in the traffic report accompanying this submission, will be accommodated in 395 spaces in 7-basement car parking floors below ground. Access and egress to and from the car parks will be by ramp off Railway Street.

The loading bay, visitor cars, retail and commercial car spaces will be on Basement Level 1 separated from the residential car parking by a security gate. There will also be a security gate at the main access to the ramp at street level.

All residents car spaces in the residential car park will be allocated to specific residential apartments and will include allocation of space for adaptable car spaces, bicycle storage and residents storage. Visitor parking will be provided and will be shared with the commercial parking during peak periods of use. Plant room and other ancillary spaces will also be incorporated in the basement levels.

The car parking numbers proposed in the basement are less than the number of car parking spaces allowable under the Willoughby Council DCP. For more detail on parking provisions and numbers refer to the Traffic Report.

5.0 USES

LEVEL	USE OF SPACE
BASEMENT LEVEL 1 – 7	CARPARKING SERVICE BAY
LEVEL1 / GROUND FLOOR	RESIDENTIAL ENTRY LOBBY RESIDENTIAL COMMUAL AREAS PLANT COMMERCIAL LOBBY RETAIL
LEVEL 2-4	COMMERCIAL
LEVEL 5-42	RESIDENTIAL APARTMENTS
LEVEL 43 + mezzanine	PLANTROOM

SUMMARY OF RESIDENTIAL ACCOMODATION:

Unit Type	No. of dwelling	Percentage
1BED	75	25%
2BED	129	42%
3BED	100	33%
Total Dwellings	304	100%

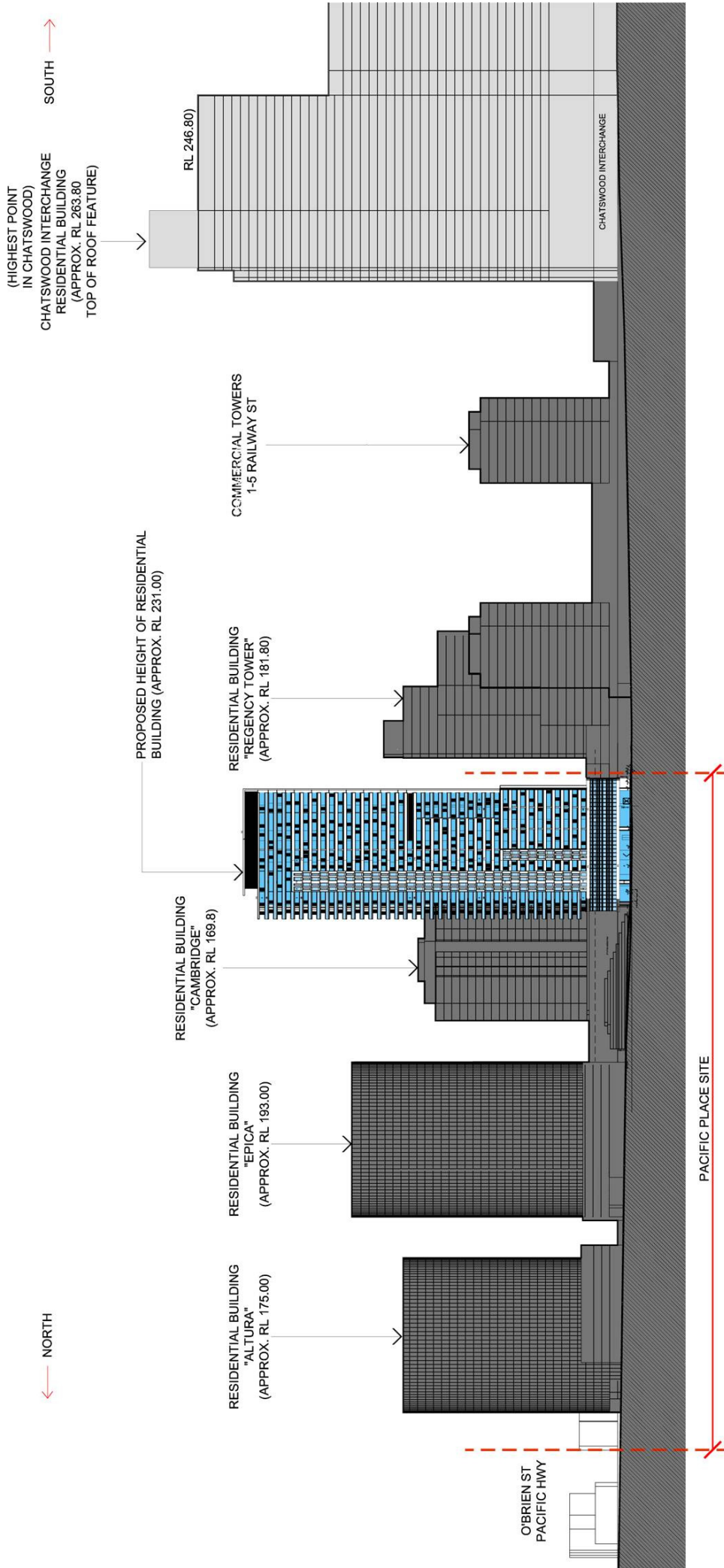
6.0 HEIGHT

The highest part of the proposed development including the roof element is at RL 231.0 AHD. All plant rooms terminate at RL 231.0 AHD. The scale of the building responds to its location adjacent to the rail corridor and in the Chatswood CBD. The height is appropriate for its urban surrounds.. Mirvac has undertaken extensive shadow analysis to determine the potential overshadowing impacts of the proposal on the Victoria Avenue Mall. The analysis was undertaken between the critical period of 11.30am and 2pm on the winter solstice (the critical period identified by Council in the Draft Willoughby DCP) and found that the proposed development would generally cast the same shadow across the Mall when compared to the approved commercial development for the site. The analysis also revealed that much of the shadow cast by both the approved commercial development and the proposed development would fall within the shadow cast by other buildings adjacent to or closer to the Mall than the proposed residential tower" or the previously approved proposal.

The building design serves to transition in height from the Altura building located near Pacific Highway, to the Zenith Towers and Epica, then 7 Railway Street with the final transition in height being the highest point in the Chatswood CBD skyline, which will be the approved highrise buildings over the Chatswood Interchange at RL 246.8 AHD. In addition the scale and sitting of the proposed building will articulate the defining spine created by the railway. **(See figures 6 & 7).**



Figure 6. Building Heights



← NORTH

Figure 7 - Elevation

The architectural roof feature extends to a maximum height of RL 231.0 AHD. This forms a strong identifiable element which marks the Railway Street and Help Street corner contributing to the skyline of the Chatswood CBD.

For more detail see the height section of the planning report.

7.0 ESD

Both active and passive ESD principals have been integrated into the design of the building. One of the most important ESD components of building design is the passive performance of the envelope. The proposed building has been shaped to maximize its solar exposure during the winter months in a high density urban environment and to minimize south facing apartments.

Only 3% of total apartments are south facing while SEPP 65 allows 10% overall. Slab overhangs to the North, East and West, sliding louvered screens to the West, Northwest and Northeast all contribute to a high degree of protection from the sun in summer months. Punched openings in the solid Southern wall maintain the integrity of the passive design. Double glazing and sun hoods are also provided to the commercial levels.

The active components of the design include; solar panels to provide solar boosted hot water, water sensitive urban design, storm water harvesting for toilet flushing and irrigation, lockers and showers to encourage bicycle transport, areas for recycling, water saving fixtures, energy efficient lighting, common facilities and gardens to facilitate community within the development in addition to full BASIX and Part J Compliance. For more details on ESD measures see BASIX Assessment, Wind/Solar Access Report and Landscaping Report.

8.0 EXTERNAL FINISHES

It is intended that the solid elements of the building including balcony upstands are a cool white. This colour has been chosen to enhance the contrast when viewed against the glass of the balconies and staggered window openings. It will also articulate the forms by the creation of shadow which will act as a second shade on the facades. This will compliment the complex massing and enhance the textural qualities of the openings allowing for an elegant yet dynamic architectural expression. The balustrades and screens will be a silver toned colour.

Samples and finishes boards are provided with this submission.

9.0 CONCLUSION

The proposed building for 7 Railway Street has been designed to respond to the opportunities presented by both the site and program. The composition of elements, combined with energy efficient design, create a successful coherent building

appropriate to this important location within the CBD of Chatswood. 7 Railway Street is conceived as a gateway building in its urban response with the form addressing the corner of Railway and Help Streets. The height of the building also serves to act as a transitioning element to the taller towers approved for the Chatswood Interchange site. The massing and façade treatments relate to the changes in floorplate and use.

There is a clear differentiation between commercial and residential uses. The Commercial podium is aligned to the street creating a clearly defined edge. The ground floor and public open spaces have been designed to work together to ensure activation of the street and through site link via the tunnel under the RES. The corner location of the retail shop and commercial entry off Railway Street encourages pedestrian activity and forms a natural pathway to and from the train station.

The residential tower rises above the podium, set back in accordance with the DCP further articulating the street wall and defining the urban space. The shape of the residential tower is generated by the response to view opportunities and a desire to maximize solar access to the apartments ensuring amenity for the residents.

There are three typical residential floor plates which provide a variety of apartment types and sizes. These are expressed three dimensionally by stepping and projecting portions of the building. This, combined with the site generated shape provide for a dynamic articulated building form. The use of staggered fenestration on the solid elements, moveable screens and varied upstands further enhances the sculptural qualities providing variety and interest.

The proposed building has a highly articulated sculptural form. It provides an urban marker, transitions scale, is site responsive, incorporates passive and active ESD features, is mixed use and activates the ground plane by drawing people across Railway and Help Streets. It creates high quality public domain with the new open space to the West, East and on top of the RES. It also provides a high degree of amenity for occupants and variety of apartment types and sizes to encourage demographic diversity.

This proposal for the mixed use building at 7 Railway Street will:

- Provide 81% of the site as open space;
- provide 69% of the site as publically accessible open space;
- build on only 19 % of the total site area;

The proposal will make a positive contribution to both the life and built form of the surrounding area and complete the Pacific Place Precinct.