URBAN DESIGN STUDY

Part 62 and 64-66 PACIFIC HIGHWAY, ROSEVILLE

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1.1 PROJECT SUMMARY

PBD Architects has been engaged on behalf of Hyecorp Property Group and the Roseville Memorial Club to provide an Urban Design Study in support of a Planning Proposal for Part 62 and 64-66 Pacific Highway, Roseville.

The purpose of this document is to provide analysis of the urban context, current and future planning objectives for the site and investigate the scale, envelope and characteristics of a potential built-form.

The built-form proposal, based on the urban analysis undertaken by PBD Architects and City Plan Services, has led to a building envelope which is generally in keeping with the desired future context and ADG principles of design.

1.1 SITE LOCATION AND STATISTICS

The site is located at Part 62 and 64-66 Pacific Highway, Roseville. The site currently contains the Roseville Memorial Club (the Club) and a small portion of the Roseville Memorial Park allotment.

Adjacent to the site is Roseville Memorial Park. There is a long-standing connection between the Club and Roseville Memorial Park. The Park's ceremonial / commemorative role preceeds the establishment of the Club building itself.

The area surrounding the Site is typically of modest scale multi-residential and single detached dwellings to the west, mixed-use buildings to the north along the Pacific Highway and apartment buildings to the south along the Pacific Highway and also along Maclaurin Parade.

The site is approximately 100 metres walking distance from Roseville Railway Station. It is highly accessible to nearby services and social infrastructure.

The broad objective of this proposal is to establish the appropriate scale of development in the Roseville Local Centre along the Pacific Highway and determine the appropriate scale for development on the subject site, consistent with Council's objective of making this a "Landmark" Building marking the Roseville Local Centre and the southern entry to the Ku-ring-gai Municipality as a whole.

LOCATION	Part 62 and 64-66 Pacific Highway, Roseville
SITE AREA	1375 sqm (approx)
FRONTAGES	Pacific Highway, Larkin Lane & Memorial Park

Figure 1.1 Site Location

1.3 SITE OPPORTUNITIES

This proposal explores the opportunities and constraints of the site and context,

These include:

- Council supports the development of the subject site as a southern gateway to the Roseville Local Centre and the Ku-ring-gai Municipality as a whole.
- The site has three significant frontages - Pacific Highway, Memorial Park and Larkin Lane, maximising residential amenities
- The local centre has not significantly developed in the timeframe of the current planning controls
- Appeal to the prominence of the site and the opportunity to provide a sound architectural solution for this highly accessible development site

1.4 CONTEXT

The site is located at the southern extent of the Roseville Local Centre with the following relationship to significant urban infrastructure:

- Immediately adjacent to the Pacific Highway
- Approximately 100m south of Roseville Railway Station
- An integral component of the Roseville Local Centre
- Approximately 450m west of Roseville College
- Approximately 1km west of Roseville Public School
- Approximately 4km north of Royal North Shore Hospital

Figure 1.2 Context

1.5 ADJACENT SITES

The site is bounded by the Pacific Highway to the east, Roseville Memorial Park to the south, Larkin Lane to the west and mixed-use/shop-top housing to the north. The sites immediately to the north of the subject site, as well as those extending along the opposite side of the Pacific Highway to the east, have been included in the Built-Form concept analysis later in this study. The purpose of their inclusion in the analysis is to confirm that the development of the subject site is considered within a framework for the long-term redevolopment of the Roseville Local Centre.

PLANNING PROPOSAL SITE

KEY CONTEXT SITES

ROSEVILLE MEMORIAL PARK

Figure 1.3 Key Adjacent Sites

2.1 GREATER SYDNEY REGION PLAN - A METROPOLIS OF THREE CITIES

Under the plan, Roseville is significant in the following key areas:

- It is located in the Eastern Harbour City which is projected / proposed to provide approximately 44% of additional dwellings in Sydney between 2016 and 2036
- It forms part of the "Eastern Economic Corridor"
- It is immediately north of the "Strategic Centre" of Chatswood
- An important local rail station along the Northern Rail Line adjacent to the Pacific Highway. This provides for the interchange between Rail and Bus networks.

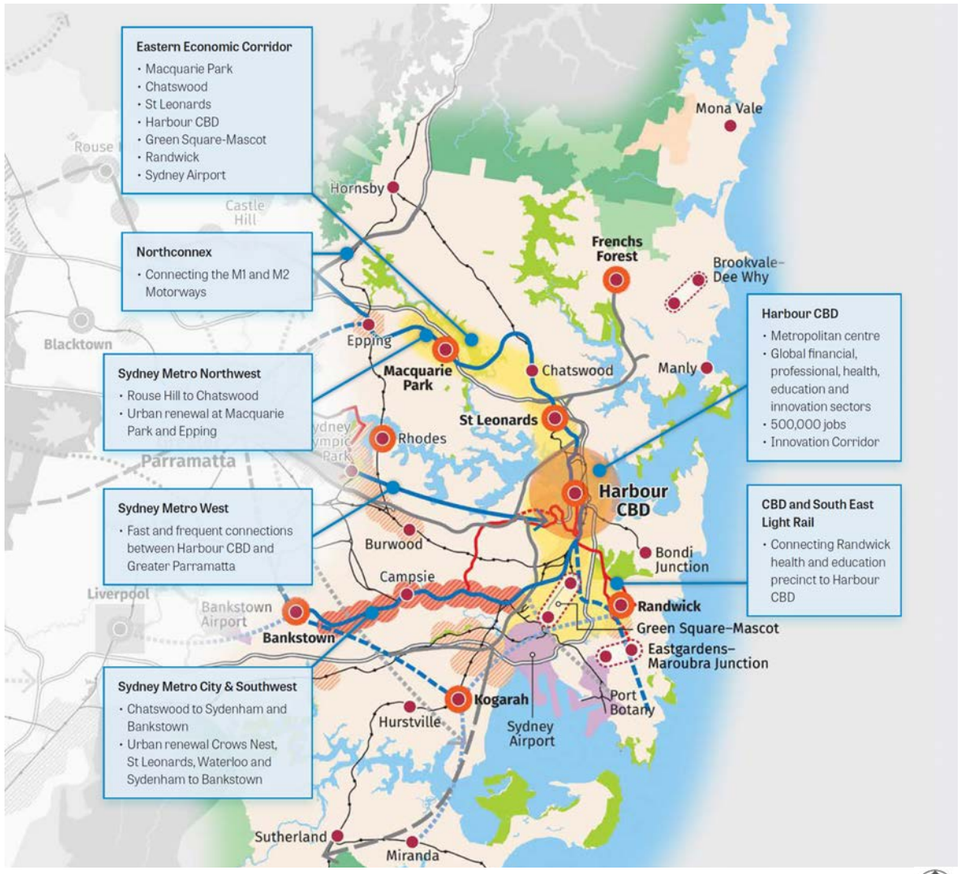


Figure 2.3 Eastern Harbour City (Source: A Metropolis of Three Cities)

2.2 NORTH DISTRICT PLAN

Under the plan, Roseville is significant in the following key areas:

The North District Plan identifies the following key statistics for the growth of this important Sydney Region:

- Additional 92,000 dwellings in the district by 2036, representing an increase of over 20% on 2016 levels
- Ku-ring-gai municipality to deliver 4,000 additional dwellings by 2021. This is the third highest in the District behind Ryde and Hornsby.
- Increase employment from 24,700 jobs (2016) to between 31,000 and 33,000 jobs by 2036

"Local centres are a focal point of neighbourhoods and where they include public transport and transport interchanges, they are an important part of a 30-minute city."

Local Centres "provide essential access to day-to-day goods and services close to where people live." Furthermore, "to deliver the 20-year strategic housing target, councils should recognise opportunities for long-term housing supply associated with city-shaping transport corridors."...

Under the plan, Council "...will need to consider which centres:

- will be appropriate to accommodate additional housing as part of their housing strategy
- will need to grow to provide for the required goods and services of the community
- may also need to grow to deliver other roles for the community, such as recreational, cultural and community hubs."

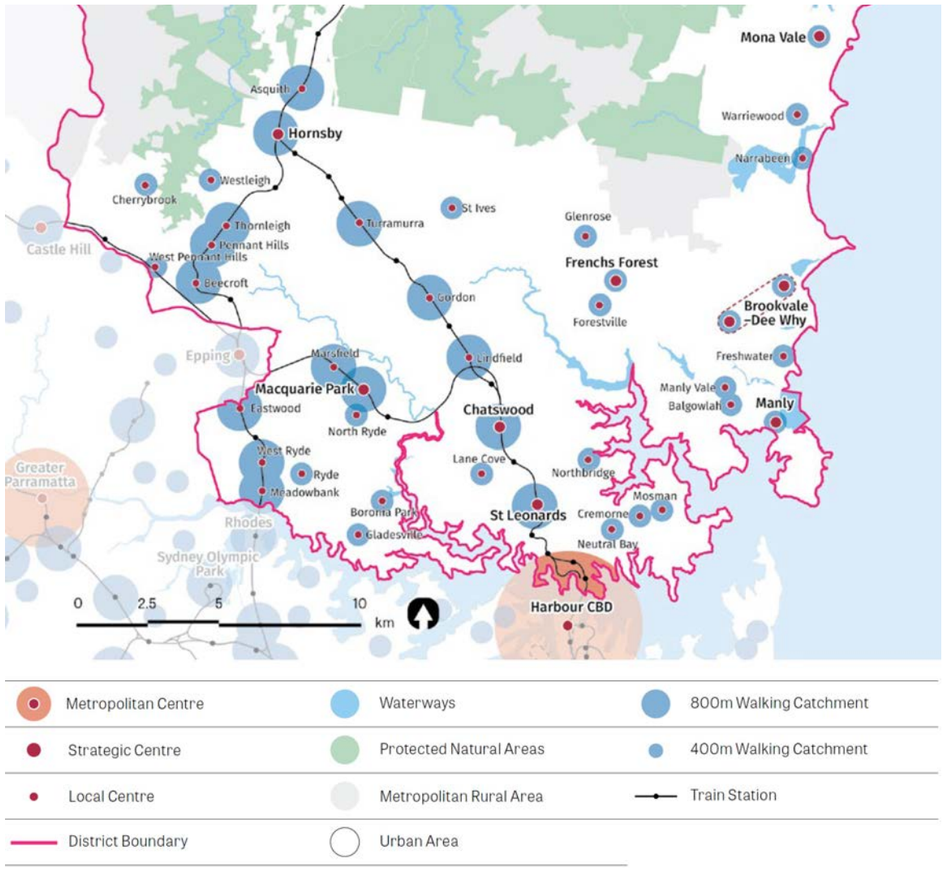


Figure 2.4 District Walking Catchments (Source: North District Plan)

3.1 EXISTING LEP CONTROLS

Under Ku-ring-gai LEP (Local Centres) 2012, development on the site is subject to the below controls.

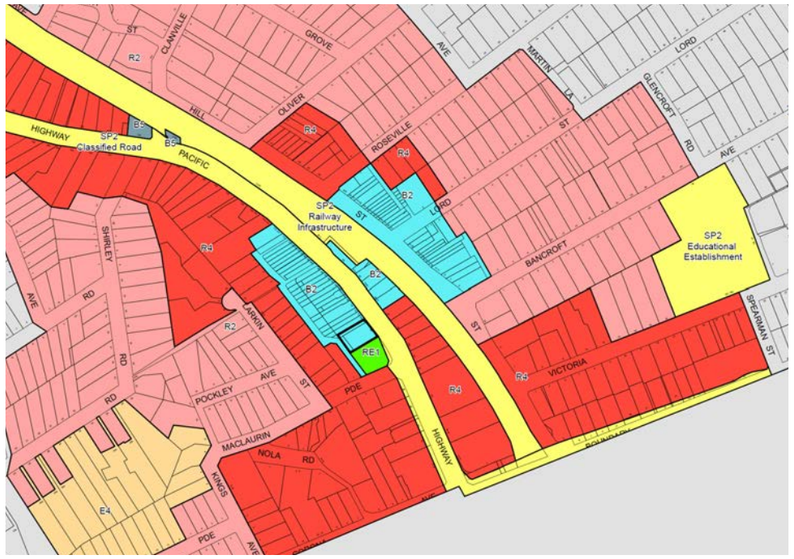


Figure 3.1 Zoning Map (Source: Ku-ring-gai LEP (Local Centres) 2012)

Zoning:

B2 - Local Centre

Figure 3.2 Floor Space Ratio Map (Source: Ku-ring-gai LEP (Local Centres) 2012)

Maximum FSR:

T1- 2.0:1
U1- 2.8:1

Figure 3.3 Heights Map (Source: Ku-ring-gai LEP (Local Centres) 2012)

Maximum Height:

N - 14.5m
Q - 20.5m

Figure 3.4 Heritage Map (Source: Ku-ring-gai LEP (Local Centres) 2012)

Heritage:

N/A

3.2 KU-RING-GAI LOCAL CENTRES DCP - ROSEVILLE CONTROLS

Under the DCP, development on the site is proposed to be subject to the below controls.

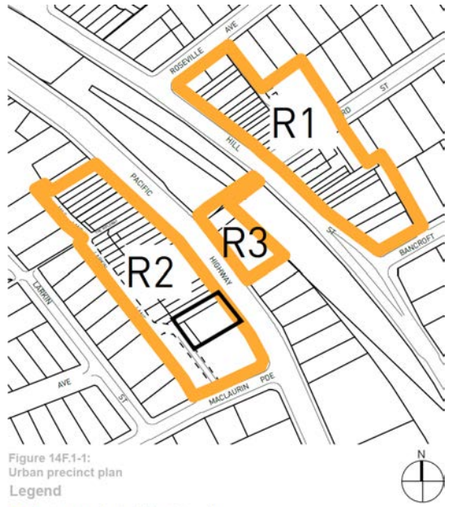


Figure 3.5 Urban Precinct Map
(Source: Ku-ring-gai Local Centres DCP - Roseville)

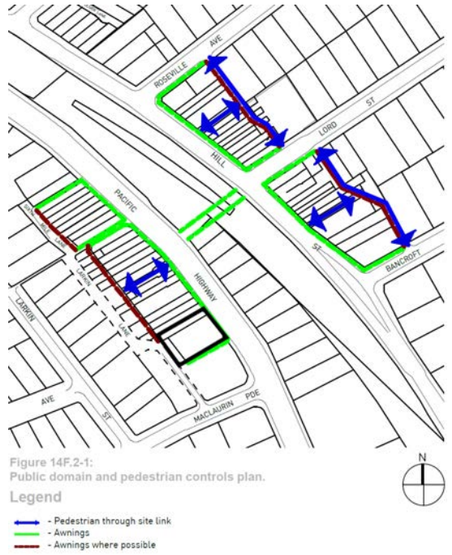


Figure 3.6 Public Domain
(Source: Ku-ring-gai Local Centres DCP - Roseville)

Figure 3.7 Key Community Infrastructure
(Source: Ku-ring-gai Local Centres DCP - Roseville)

6 Embellishment of the public domain areas and footpaths on the Pacific Highway and Hill Street including underground power lines, new lighting, high quality paving and furniture.

7 Upgrade of existing pedestrian lane ways including Sixth Mile Lane and the Rifleway.

8 Embellishment of Roseville Memorial Park to urban park standard.

Figure 3.8 Setbacks Plan
(Source: Ku-ring-gai Local Centres DCP - Roseville)

Figure 3.9 Built Form Controls
(Source: Ku-ring-gai Local Centres DCP - Roseville)

4.1 CONTEXT

North of the site:
- Local Centre retail strip with shop-top housing

East of the site:
- Pacific Highway
- Former Service station (O'brien Glass Outlet)
- Variety of apartment buildings of various ages

South of the site:
- Memorial Park
- Maclaurin Parade
- Apartment buildings on the opposite side of Maclaurin Parade

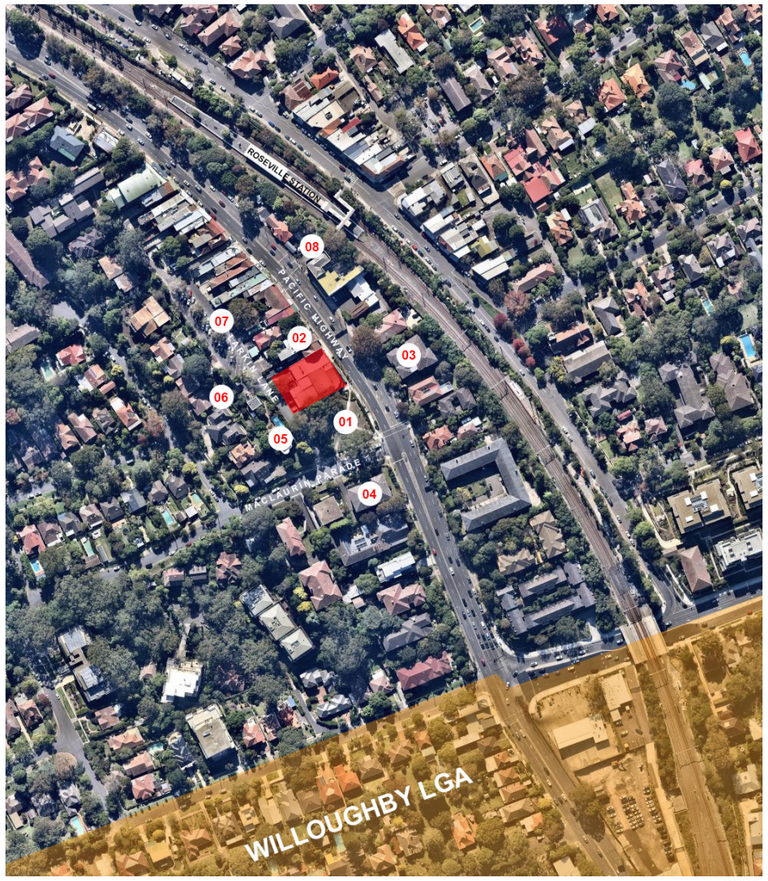


Figure 4.1 Context Map

Figure 4.2 - 01 - Memorial Park

Figure 4.3 - 02 - Local Centre Commercial & Shop-Top Housing

Figure 4.4 - 03 - 69-71 Pacific Highway

Figure 4.5 - 03 - 41-67 Pacific Highway

Figure 4.6 - 04 - 36 Pacific Highway

Figure 4.7 - 05 - 1 Maclaurin Parade

4.1 CONTEXT (CONTINUED)

West of the site:
- Larkin Lane
- Heritage Item at 1 Maclaurin Parade (Rear garden, garage & studio)
- Various low-scale apartment buildings

Roseville Station:
- Heritage listed station buildings and adjacent retail buildings
- Important transport interchange and central focus of local centre

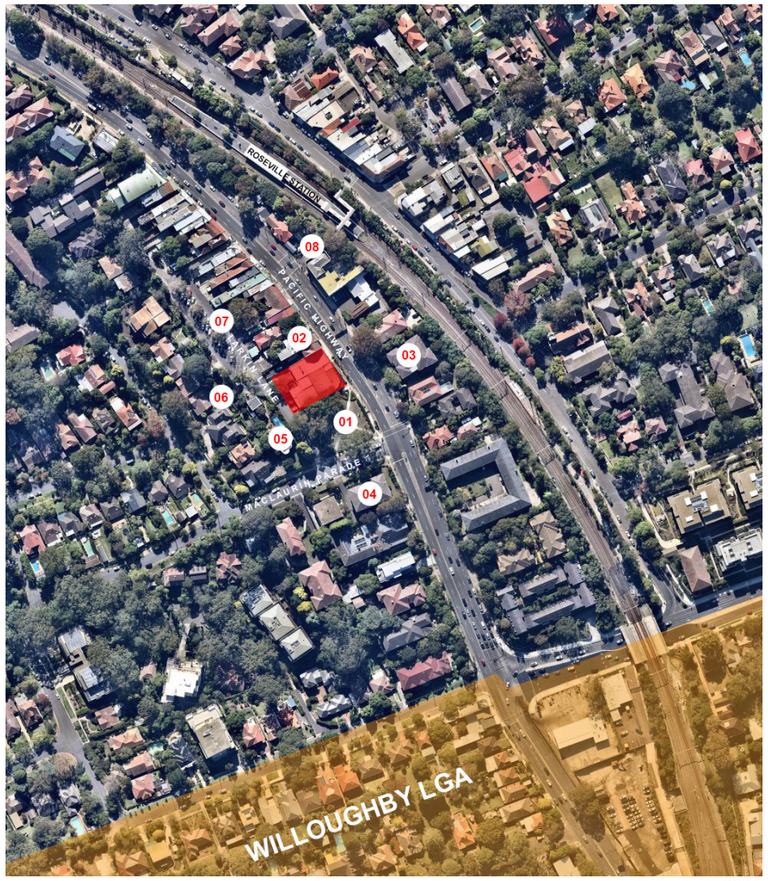


Figure 4.8 Context Map

Figure 4.9 - 05 - Larkin Lane - Rear of 1 Maclaurin Parade

Figure 4.10 - 06 - Larkin Lane - Rear of apartments

Figure 4.11 - 07 - Larkin Lane - Rear of shops

Figure 4.12 - 08 - Roseville Station entrance at Pacific Highway

4.2 TRANSPORT

The site is ideally located to take advantage of Public Transport. Located adjacent to the Pacific Highway there are numerous Bus routes available from bus stops on both sides of the road within less than 150m. There are also significant routes running along Victoria Street to the west of the train line. There are bus stops on either side of Hill Street within approximately 250m of the site

At a distance of approximately 100m, the site is virtually on the doorstep of Roseville Railway Station. Roseville Station is just one station north of Chatswood Station which is one of the primary interchange stations of Sydney's rail network and will have increased significance into the future as the Sydney Metro network is rolled out. The Sydney Metro Northwest is currently projected to open in the first half of 2019.

In addition to the public transport changes associated with the Sydney Metro, the opening of the NorthConnex motorway connection between the M2 and the M1, also anticipated in 2019, will also represent a significant change to transport in the region. NorthConnex will provide a vital missing link in the motorway network which will likley remove significant traffic from the Pacific Highway. While the Pacific Highway will continue to be the main arterial road being used by residents of the upper north shore, those travelling to or from outside the metropolitan area will most likely use the motorway network.

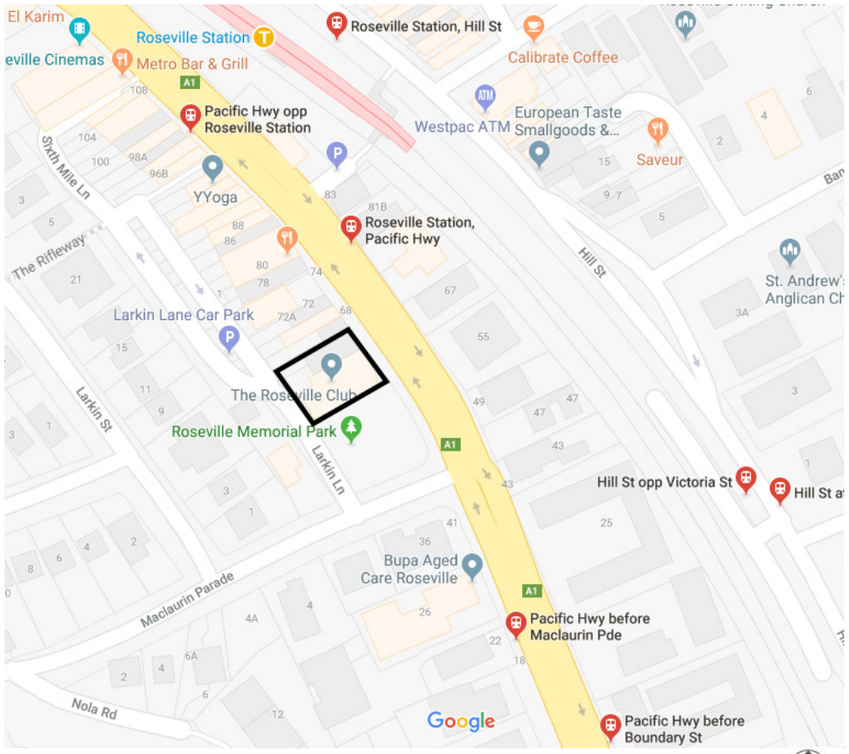


Figure 4.13 Bus Stop Map

Figure 4.14 Rail Network Map (Source: Sydney Trains)

4.3 CYCLEWAYS & PEDESTRIANS

In addition to access to public transport, the site is also closely connected to Ku-ring-gai Council's Bicycle Network (Figure 4.15). The below extract from Council's map clearly indicates that there are cycle routes extending from the Roseville Local Centre in all directions. The location of the site within the Local Centre makes it perfectly suited to promoting bicycle use.

Pedestrian accessibility is assured with relatively flat footpaths around all street frontages. The footpath to the Pacific Highway provides a safe route to the north, in the direction of the station where there are traffic lights providing a safe crossing environment. The station bridge also provides a safe and direct pedestrian connection to the eastern side of the train line where the Roseville Local Centre continues.

The site is within the Local Centre providing essential services. The further growth of the Roseville Local Centre would contribute to the further enhancement of services for the community.

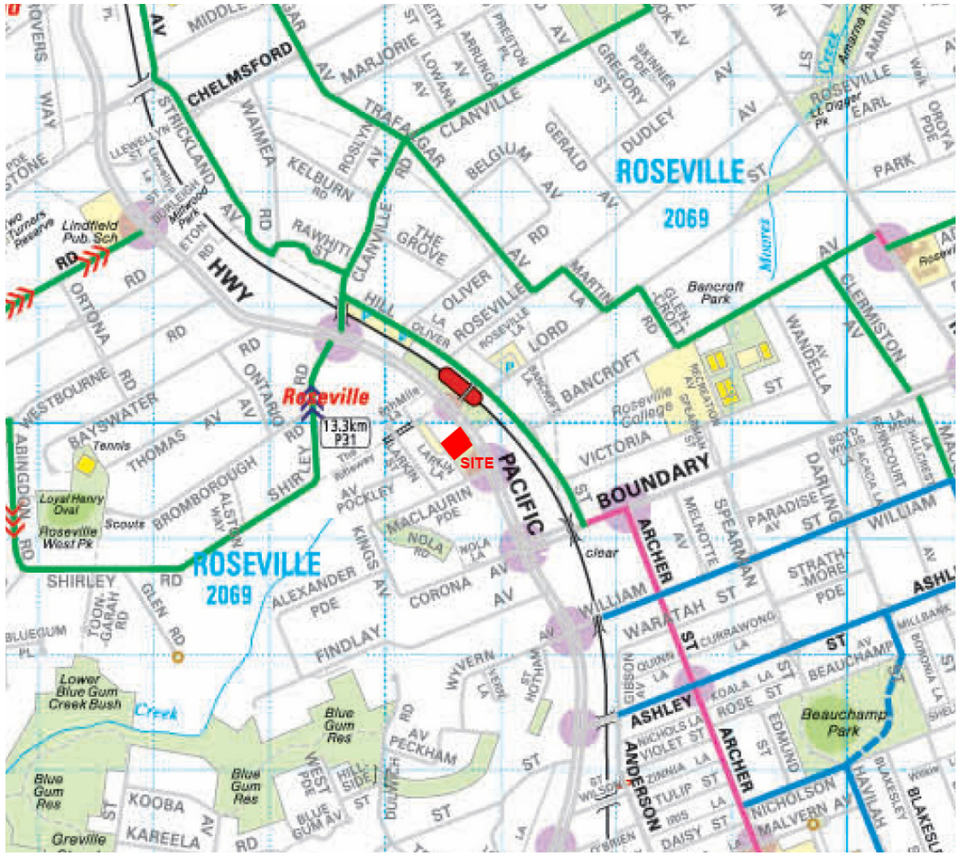


Figure 4.15 Ku-ring-gai Cycleways Map (Source: Ku-ring-gai Council)

Figure 4.16 Significant pedestrian routes from the site

4.4 TOPOGRAPHY

The existing site is largely flat along the street frontages with only a slight fall along the frontage to Roseville Memorial Park. The Survey extract below indicates the immediate topography around the site.

The site is located in an area of Roseville that is effectively on the ridge line with significant falls to the residential area to the west and gentler falls on the other side of the train line towards the east. The land also falls away significantly to the south along the Pacific Highway, but is relatively flat for several hundred metres to the north before slowly descending towards Lindfield further along the Pacific Highway.

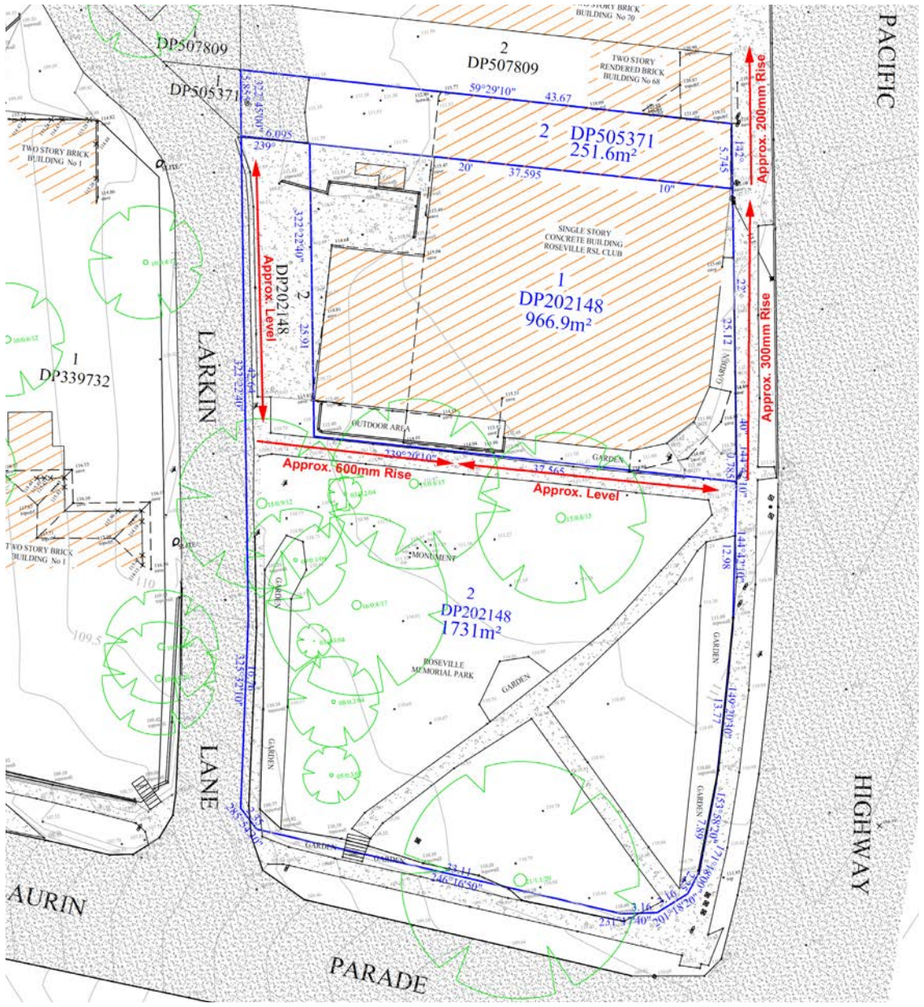


Figure 4.17 Survey Extract (Source: Detailed Site Survey - Hammond Smeallie & Co. Pty. Ltd.)

4.5 TRAFFIC

The site is bounded by the Pacific Highway and Larkin Lane. Vehicular access to the site is currently from Larkin Lane. Given the intensity of traffic on the Pacific Highway in this area, it is anticipated that vehicular access will continue to be via Larkin Lane avoiding queing impacts on the Pacific Highway.

Please refer to the Traffic Report prepared by Colston Budd Rogers & Kafes Pty. Ltd.which provides analysis of the parking and traffic flow impacts of the proposals contained in this Urban Design Study.

Figure 4.18 Larkin Lane Parking Area for existing Roseville RSL Club (Source: Google Street-view)

4.6 VIEWS TO AND FROM THE SITE

The site is in an good location for views. Given its location adjacent to Roseville Memorial Park, the site has views to the south from all levels. With a building rising above the predominant scale of development, it is likely that views towards the south, east and west will be aveilable from the upper levels.

A significant aspect of the proposal, and Council's desired future character, is that a building on this site should provide a "Landmark" that is visible from the southern approach into the Local Centre. Providing an appropriate scale to this "Landmark" is necessary to achieve the desired effect. The open park to the south provides good views to the building to assist the presence of the structure

Figure 4.19 Views to and from the site

4.7 FUTURE CONTEXT

In analysing the future potential of the subject site we must consider both the existing character and scale of development in the area, as well as the likely future scale of the context as well. As highlighted in the introduction to this Urban Design Study, the sites immediately to the north and on the opposite side of the Pacific Highway are essential context to be considered for the future development of the Roseville Local Centre.

Roseville Memorial Park to the south of the subject site is also critically important. The Park currently provides a limited focus for the existing Roseville Memorial Club, however, there is little other urban engagement with the Park. Given its location just 120m from Roseville Station, and the immediate adjacency to the Local Centre retail precinct, Roseville Memorial Park is currently only partially connected to the Local Centre. A future Local Centre should engage more substantially with this significant, positive element of the urban fabric.

The following Built-Form Study will consider not only the appropriate future scale of development in these areas but also the potential future extent of the Local Centre zoning. The extent of the Local Centre will be a matter for Council to consider into the future for LEP updates, however, we believe there should be a significant transition towards engaging the Local Centre more directly with Roseville Memorial Park.

Figure 4.20 Existing Built Form

Figure 4.21 Existing Built Form with additional current LEP control massing in yellow

4.8 PACIFIC HIGHWAY / LARKIN LANE LOCAL CENTRE

As identified above, the existing and future development of the Pacific Highway within the Roseville Local Centre will be significant components of this Urban Design Study. The appropriate development of the subject site and the retail strip along the Pacific Highway can have a significant positive impact on the rejuvenation of the area.

This Urban Design Study proposes to investigate the appropriate scale and extent that the Local Centre along the Pacific Highway should take.

The images to the right provide a brief overview of the existing character and scale of the current Pacific Highway / Larkin Lane commercial precinct. The analysis of the existing development scale and density, completed by City Plan Services, further identifies critical aspects of this context.

Figure 4.22 - Pacific Highway View 1

Figure 4.23 - Pacific Highway View 2

Figure 4.24 - Pacific Highway View 3

Figure 4.25 - Pacific Highway View 4

Figure 4.26 - Larkin Lane View 1

Figure 4.27 - Larkin Lane View 2

4.9 ROSEVILLE MEMORIAL PARK

As discussed above, Roseville Memorial Park is a significant component of the existing and future context. It not only has a significant recreational value for the local community, but also has an historical link to the subject site by virtue of the shared history with the Roseville Memorial Club.

Prior to the establishment of the Roseville Memorial Club building, the Club members gathered in Roseville Memorial Park to pay their respects and mark significant anniversaries such as Anzac Day and Remembrance Day. The Roseville Memorial Club site was established adjacent to Roseville Memorial Park to maintain the link to this important site for the Club.

Within the context of this Urban Design Study, Roseville Memorial Park is seen as a pivotal element in the evolution of the Roseville Local Centre.

Figure 4.28 - Memorial Park View 1

Figure 4.29 - Memorial Park View 2

Figure 4.30 - Memorial Park View 3

Figure 4.31 - Memorial Park View 4

Figure 4.32 - Memorial Park View 5

Figure 4.33 - Memorial Park View 6

5.1 EXISTING (AS-BUILT) FSR ANALYSIS

As part of this Urban Design Study PBD Architects have looked at the existing LEP controls for the Roseville Local Centre with respect to the growth and rejuvination of the area.

Given the current ageing state of the Local Centre buildings there is an opportunity for many of the existing sites to be suitable for redevelopment. However, if there aren't substantial opportunites for financial return available for developers, even with amalgamation of sites, it is highly unlikely that rejuvination of the area will occur.

The data on the following pages reveals that much of the existing building stock already reaches or exceeds the maximum FSR control under the current LEP. It is inevitable that with no gain in FSR available for most sites, they are not prime sites for redevelopment in any significant manner. This prevents the rejuvination of the Local Centre as is desired under the Local Centres DCP.

Under this Urban Design Study, we propose that the FSR and corresponding height controls need to be reconsidered to allow for feasible uplift that will promote the positive rejuvination of two key zones within the Local Centre:

- The Pacific Highway / Larkin Lane commercial/mixed-use strip
- The Pacific Highway Eastern strip from the station south to the Maclaurin Parade intersection (inclusive)

The subject site, at the southern extent of the first zone above, is inevitably tied to the uplift of this area. As an identified 'Landmark' building with an anticipated increase in scale relative to the main frontages, this building must have an increased scale proportionally to the adjacent properties to achieve the 'Landmark' impact.

Additionally, the uplift in scale will allow for the feasible rejuvination of the Roseville Memorial Club which is unable to redevelop without the support of a sound financial case for the apartment building above it.

Pacific Highway	Photo	Name of Business	Storeys	Use	LEP Existing Controls (Height (m) / FSR n:1)	Current Height/ Potential (m) (Assumption Ground to 1st Floor 3.6 – Upper Floors 3.1)	Comments
68-72		68- Absolute Relaxation	2-3	Commercial GF UF Unknown	14.5 (N) / 2.0 (T1)	4 Storey max.	Capacity for 2 more storeys. Potential for increase of FSR (current FSR approximately 0.6:1)
		70- Roseville Physiotherapy	2-3	Commercial GF UF Unknown	14.5 (N)/ 2.0 (T1)	4 Storey max.	Capacity for 1-2 more storeys. Potential for increase of FSR (current FSR approximately 1.3:1)
		72- Vacant	2-3	Vacant	14.5 (N)/ 2.0 (T1)	4 Storey max.	Capacity for 1-2 more storeys. Potential for increase of FSR (current FSR approximately 0.8:1)
74-80		74-76- Encompass Health Care	1	Commercial GF UF Unknown	11.5 (L)/ 1.0 (N)	3 Storey max.	Capacity for 2 more storeys. Potential for increase of FSR (current FSR approximately 0.4:1)
		78/78A- VACANT	2-3	Vacant (GF) Sydney Child Development Centre (UF)	11.5 (L)/ 1.0 (N)	3 Storey max.	Capacity for 1 more storey. Marginal to no capacity for increase to FSR (current FSR approximately 0.9:1)

Figure 5.1a - Existing FSR Analysis (Source: City Plan Services)

5.1 EXISTING (AS-BUILT) FSR ANALYSIS (CONTINUED)

Pacific Highway	Photo	Name of Business	Storeys	Use	LEP Existing Controls (Height (m) / FSR n:1)	Current Height/ Potential (m) (Assumption Ground to 1st Floor 3.6 – Upper Floors 3.1)	Comments
80-84a		80- Rashmin 82 – Polymet 82a- Roseville Dental Practice (upper floor) 84 – ESA 84a – Impression Framing	2-3	Commercial GF Commercial UF Commercial GF Commercial GF Commercial GF It is unknown what the upper level of these properties are used for.	11.5 (L)/ 1.0 (N)	3 Storey max.	The existing building is over 80-84 Pacific Hwy. Capacity for 1 more storey. Capacity to increase FSR (current FSR approximately 0.6:1)
86- 90		86 – A.C.K. Pharmacy 88 – Ramsden Jewellers 90 – Sudu Hair	2 2 2	Commercial GF Commercial GF Commercial GF	11.5 (L)/ 1.0 (N) 11.5 (L)/ 1.0 (N) 11.5 (L)/ 1.0 (N)	3 Storey max.	Capacity for 1 more storey. Minor to no capacity to increase FSR (current FSR approximately 0.8:1) Capacity for 1 more storey. No capacity to increase FSR (current FSR approximately 1.6:1) Capacity for 1 more storey. No capacity to increase FSR (current FSR approximately 1.2:1)

Figure 5.1b - Existing FSR Analysis (Source: City Plan Services)

5.1 EXISTING (AS-BUILT) FSR ANALYSIS (CONTINUED)

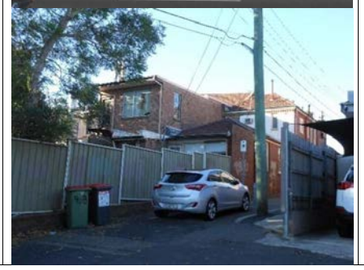
Pacific Highway	Photo	Name of Business	Storeys	Use	LEP Existing Controls (Height (m) / FSR n:1)	Current Height/ Potential (m) (Assumption Ground to 1st Floor 3.6 – Upper Floors 3.1)	Comments
92- 94		92 – Sky bar	2-3	Commercial GF	11.5 (L)/ 1.0 (N)	3 Storey max.	Minor capacity for 1 more storey. No capacity to increase FSR (current FSR approximately 1.4:1)
		94 - Peppercorn Restaurant (GF) YYoga (UF)	2-3	Commercial GF and UF	11.5 (L)/ 1.0 (N)		Minor capacity for 1 more storey. No capacity to increase FSR (current FSR approximately 1.3:1- excluding 1 Larkin Lane area)
96		96- Roseville Fine Dentistry	2	Commercial GF and UF	11.5 (L)/ 1.0 (N)	3 Storey max.	Capacity for 1 more storey No capacity to increase FSR (current FSR approximately 1.35:1)
		96A - Angel Hair	1-2		11.5 (L)/ 1.0 (N)		Capacity for 1-2 more storeys Minor capacity to increase FSR (current FSR approximately 0.7:1)

Figure 5.1c - Existing FSR Analysis (Source: City Plan Services)

5.1 EXISTING (AS-BUILT) FSR ANALYSIS (CONTINUED)

Pacific Highway	Photo	Name of Business	Storeys	Use	LEP Existing Controls (Height (m) / FSR n:1)	Current Height/ Potential (m) (Assumption Ground to 1st Floor 3.6 – Upper Floors 3.1)	Comments
98-100		98 – Bridal Originals	2-3	Commercial GF	11.5 (L)/ 1.0 (N)	3 Storey max.	Capacity for 1 more storey. Minor to no capacity to increase FSR (current FSR approximately 0.8:1)
		100- Burger Bites 100a- Organic Sceuticals (upper floor)	2-3	Commercial GF and UF	11.5 (L)/ 1.0 (N)		Capacity for 1 more storey. Minor to no capacity to increase FSR (current FSR approximately 0.8:1)
102-104		102 – Castlight	2	Commercial GF	11.5 (L)/ 1.0 (N)	3 Storey max.	Capacity for 1 more storey. Minor to no capacity to increase FSR (current FSR approximately 0.9:1)
		104 – Roseville Rose	2-3	Commercial GF	11.5 (L)/ 1.0 (N)		Capacity for 1 more storey. No capacity to increase FSR (current FSR approximately 1.2:1)

Figure 5.1d - Existing FSR Analysis (Source: City Plan Services)

5.1 EXISTING (AS-BUILT) FSR ANALYSIS (CONTINUED)

Pacific Highway	Photo	Name of Business	Storeys	Use	LEP Existing Controls (Height (m) / FSR n:1)	Current Height/ Potential (m) (Assumption Ground to 1st Floor 3.6 – Upper Floors 3.1)	Comments
106-108		106- House of Kitchens	2	Commercial GF	11.5 (L)/ 1.0 (N)	3 Storey max.	Capacity for 1 more storey. No capacity to increase FSR (current FSR approximately 1.1:1)
		108 – Basil and Bedlam (restaurant)	2	Commercial GF	11.5 (L)/ 1.0 (N)		Capacity for 1 more storey. No capacity to increase FSR (current FSR approximately 1.6:1)
110		110 – Metro Bar and Grill	2	Commercial GF	11.5 (L)/ 1.0 (N)	3 Storey max.	Capacity for 1 more storey. Minor to no capacity to increase FSR (current FSR approximately 0.9:1)
							

Figure 5.1e - Existing FSR Analysis (Source: City Plan Services)

5.1 EXISTING (AS-BUILT) FSR ANALYSIS (CONTINUED)

Pacific Highway	Photo	Name of Business	Storeys	Use	LEP Existing Controls (Height (m) / FSR n:1)	Current Height/ Potential (m) (Assumption Ground to 1st Floor 3.6 – Upper Floors 3.1)	Comments
112-116	 	112 – Roseville Theatre	3	Commercial GF	11.5 (L)/ 1.0 (N)	3 Storey max.	No capacity for an extra storey. No capacity to increase FSR (current FSR approximately 1.3:1)
126-132		126- El Karim 130 – Pizza Olla 132 – Belmont Medical Practice	2 2 2	Commercial GF Commercial GF Commercial GF	11.5 (L) / 0.85 (K) 11.5 (L) / 0.85 (K) 11.5 (L) / 0.85 (K)	3 Storey max.	Capacity for 1 storey. No capacity to increase FSR (current FSR approximately 1:1)
		89 – Roseville Café	1	Commercial	9.5 (J)/ 0.5 (L)	2-3 Storey max.	Capacity for 1 more storey. Minor to no capacity for additional FSR (current FSR approximately 0.4:1)
81-83		81 – Windows in Profile	2	Commercial	14.5 (N) /2.0 (T1)	4 Storey max.	Capacity for 2 more storeys. Capacity to increase FSR (current FSR

Figure 5.1f - Existing FSR Analysis (Source: City Plan Services)

5.1 EXISTING (AS-BUILT) FSR ANALYSIS (CONTINUED)

Pacific Highway	Photo	Name of Business	Storeys	Use	LEP Existing Controls (Height (m) / FSR n:1)	Current Height/ Potential (m) (Assumption Ground to 1st Floor 3.6 – Upper Floors 3.1)	Comments
69-71		69-71 – O'Brien's	1	Commercial GF	14.5 (N)/ 0.85 (K)	Max 4 Storey	Capacity for 3 more storeys. Capacity for increase of FSR (current FSR approximately 0.2:1 to 0.4:1)
55-67		55 67	3 2-3	Residential Residential	14.5 (N)/ 0.85 (K) 14.5 (N)/ 0.85 (K)	Max 4 Storey Max 4 Storey	Capacity for 1-2 more Storeys. Minor to no capacity for increase of FSR (current FSR approximately 0.8:1+) Capacity for 1-2 more Storeys. No capacity for increase of FSR (current FSR approximately 1:1)
49		49	2	Residential	14.5 (N)/ 0.85 (K)	Max 4 Storey	Capacity for 2 more Storeys. No capacity for increase of FSR (current FSR approximately 0.8:1)
36		36	3	Residential	14.5 (N)/ 0.85 (K)	Max 4 Storey	Capacity for 1 more Storey. No capacity for increase of FSR (current FSR approximately 1.2:1)

Note: The current FSR for each site is indicative only, and has been established via a desktop analysis.

Figure 5.1g - Existing FSR Analysis (Source: City Plan Services)

5.1 EXISTING (AS-BUILT) FSR ANALYSIS (CONTINUED)

As can be seen in the data in Table 5.1 and sumarised in the maps below, for many sites in the survey area there is little opportunity to increase the size of development. For those that do have some opportunity to increase FSR, that opportunity is often minimal.

It is clear that changes to the FSR and Height controls are needed to influence genuine rejuvination and uplift in this part of the Roseville Local Centre.

Figure 5.2 - Existing Building Indicative FSR Map (Source: City Plan Services)

Figure 5.3 - Existing Building Height/Storeys Map (Source: City Plan Services)

5.2 MEMORIAL PARK

As identified previously, Roseville Memorial Park is seen as a pivotal element in the evolution of the Roseville Local Centre. The Park is currently addressed by just one building, the Roseville Memorial Club. While the existing Club has a number of windows facing the Park, it does not engage with the Park in a significant manner. The development of the Roseville memorial Club to positively engage with the Roseville Memorial Park forms a major part of the Built-Form Concept in the following sections.

In addition to the Club bounding the Park on the north side, Roseville Memorial Park is bounded by three streets, the Pacific Highway, Maclaurin Parade and Larkin Lane. Although the streets themselves could be seen as barriers to the direct engagement of other buildings with the Park, this does not need to be the case. We believe the positive design of buildings facing the Park could substantially improve the relationship of these buildings with the Park which could also allow the Park to become a more significant place that provides a focal point for Roseville.

The diagram to the right demonstrates the anticipated sites that could positively address Roseville Memorial Park.

Figure 5.4 - Frontages to address Memorial Park

5.3 EXTENT OF LOCAL CENTRE WITH ACTIVE FRONTAGES

In support of the above concept of Roseville Memorial Park, we propose that Council consider the future zoning of the properties on the east side of the Pacific Highway. The area that we believe should be considered for Local Centre (B2) zoning extends from Roseville Train Station south to the intersection at Maclaurin Parade, including the lot facing the intersection.

In addition to rezoning we would suggest that Council consider amendments to the Local Centres DCP in relation to Roseville to extend the active frontage to the Maclaurin Parade intersection. This would be consisitent with the rezoning and would provide for a positive, active address to Roseville Memorial Park. This key strategic rezoning would cement the Park as an active and engaged component of the Roseville Local Centre.

This Urban Design Study also reveals an opportunity for a northern 'Landmark' at the northern extent of this strip of Local Centre development. An uplift in scale at this point would not only mark the Roseville Station entrance, it would also mark the Local Centre from the northern approach. This would be an appropriate counterpoint to the way in which the Memorial Club building is proposed to mark the southern approach.

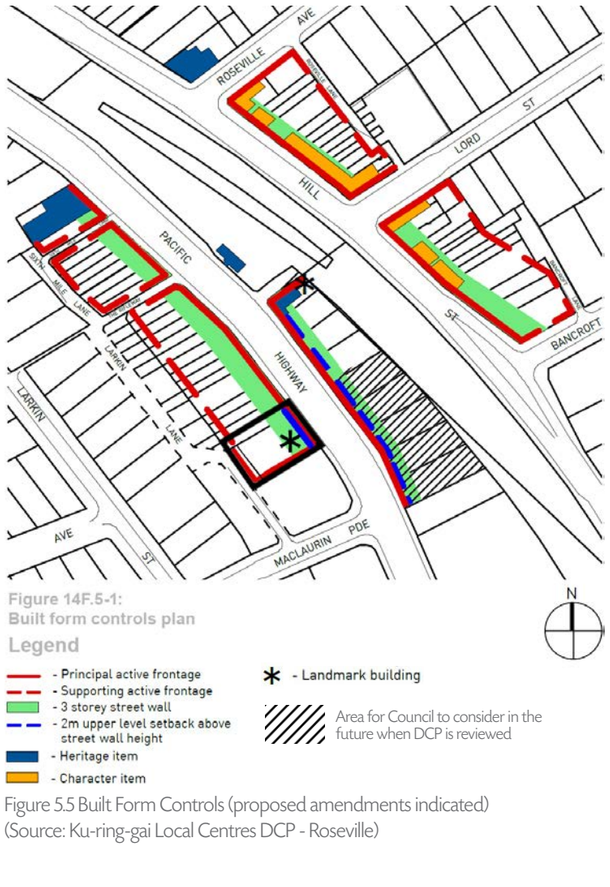


Figure 5.5 Built Form Controls (proposed amendments indicated) (Source: Ku-ring-gai Local Centres DCP - Roseville)

Figure 5.6 Indicative future character and scale for extended Local Centre on eastern side of the Pacific Highway

5.4 INCREASED MAXIMUM FSR & HEIGHT CONTROLS

As identified in section 5.1 above, the existing LEP controls are not leading to the rejuvination of the Local Centre. This appears to be largely as a result of the current controls providing inadequate incentive to encourage development with feasible returns for developers.

Having identified that there is an opportunity to extend the Local Centre (B2) zoning along the eastern side of the Pacific Highway, we also propose that there is a future opportunity to amend the LEP controls for the Local Centre along the west side of the Pacific Highway. This would provide the uplift necessary to encourage long overdue regeneration of the precinct.

By increasing maximum allowable heights along with increasing the maximum FSR, the footprints of future development can be reduced. This will provide opportunities for increased landscaping and increased building separation which should ultimately result in better outcomes for the community.

It should be noted that there is a land dedication zone along the Larkin Lane frontages, and Council also desire the provision of connections through from the Pacific Highway to Larkin Lane. it is essential that these properties are provided with adequate height controls to promote the improved level of development that Council is seeking.

Figure 5.7 Courtyard opportunities with increased maximum height controls

Figure 5.8 Potential Built-Form Volumes Under LEP Controls for FSR & Heights

Figure 5.9 Potential Built-Form Volumes with increased LEP Controls for FSR & Heights

5.5 INDICATIVE PACIFIC HIGHWAY CROSS-SECTIONS

The below indicative sections demonstrate the scale and relationships that increased building heights could create for the Pacific Highway frontages.

The potential street wall scale provides an approriate proportion for the public realm. Furthermore, the street wall extending along the eastern side of the Pacific Highway addressing Roseville Memorial Park provides a substantial frontage to the Park. This extends the impact of the active frontage across the Pacific Highway. A diminutive frontage would not have the same impact.

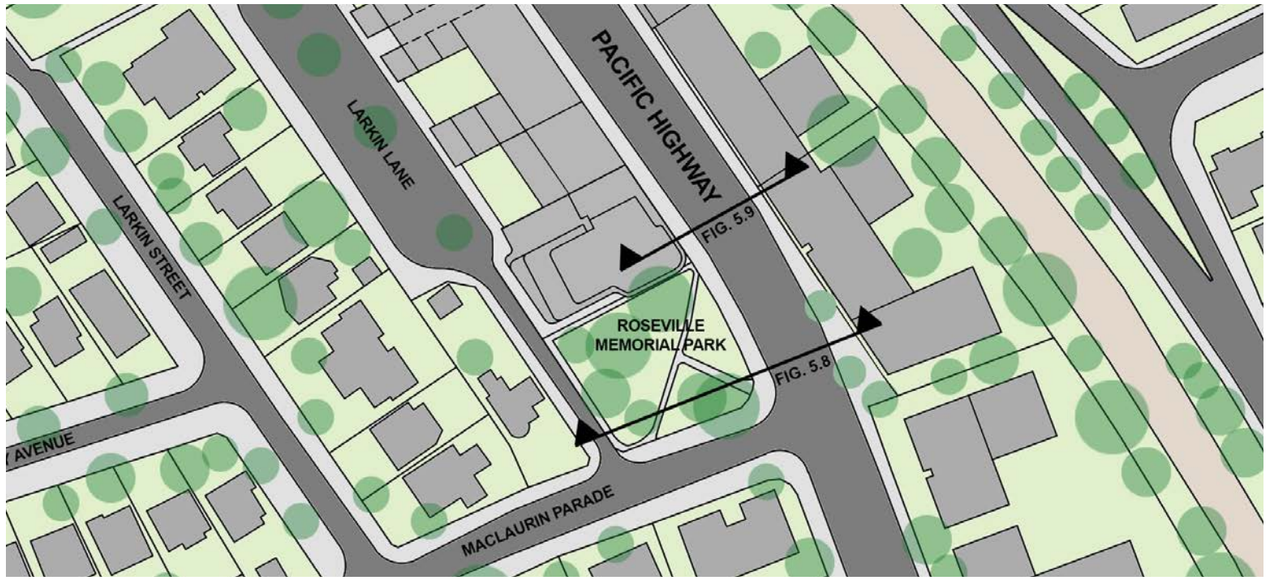


Figure 5.10 Reference Map of Local Centre

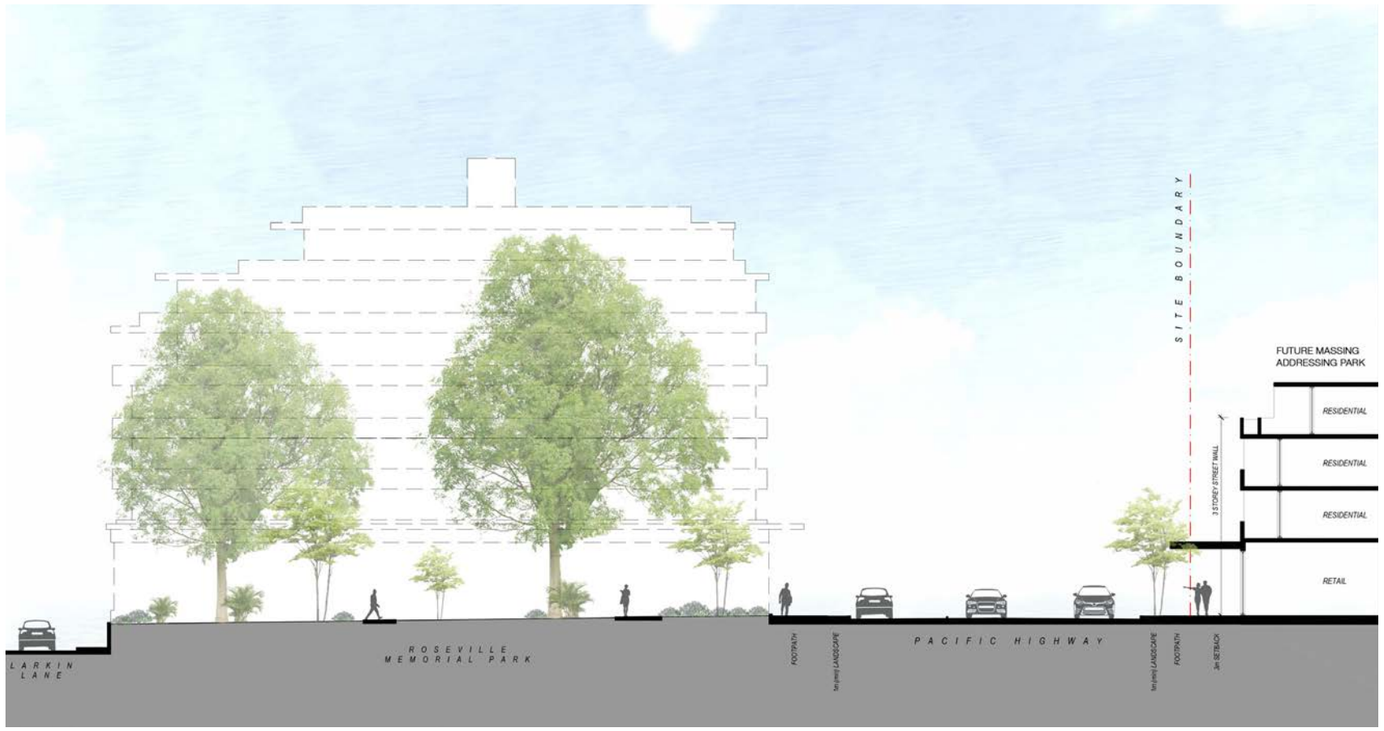


Figure 5.11 Indicative Section through Roseville Memorial Park and Pacific Highway (Roseville Memorial Club in Elevation)

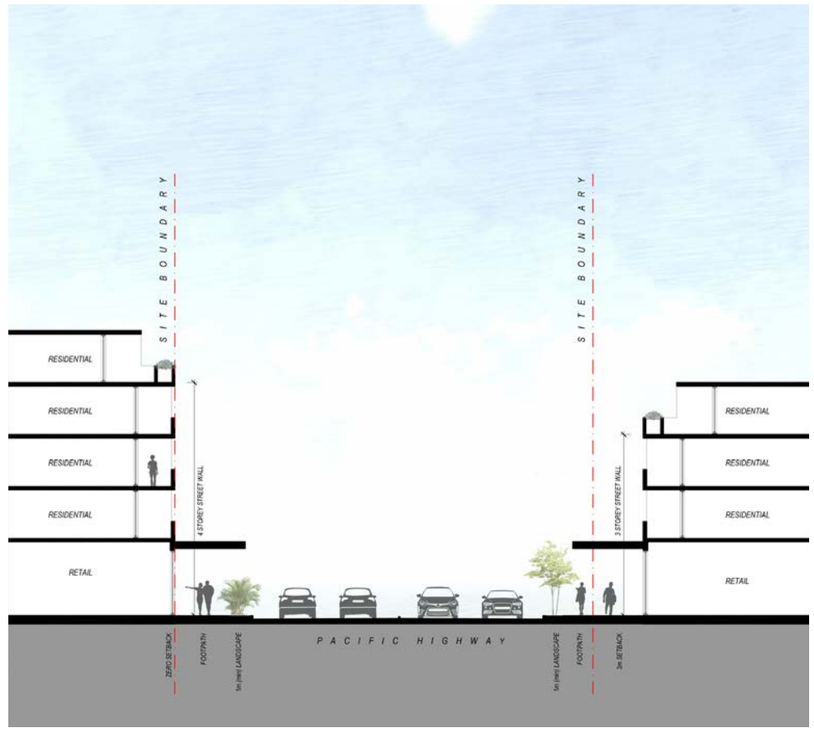


Figure 5.12 Indicative Section through Pacific Highway Local Centre

6.1 INDICATIVE FLOOR PLATES

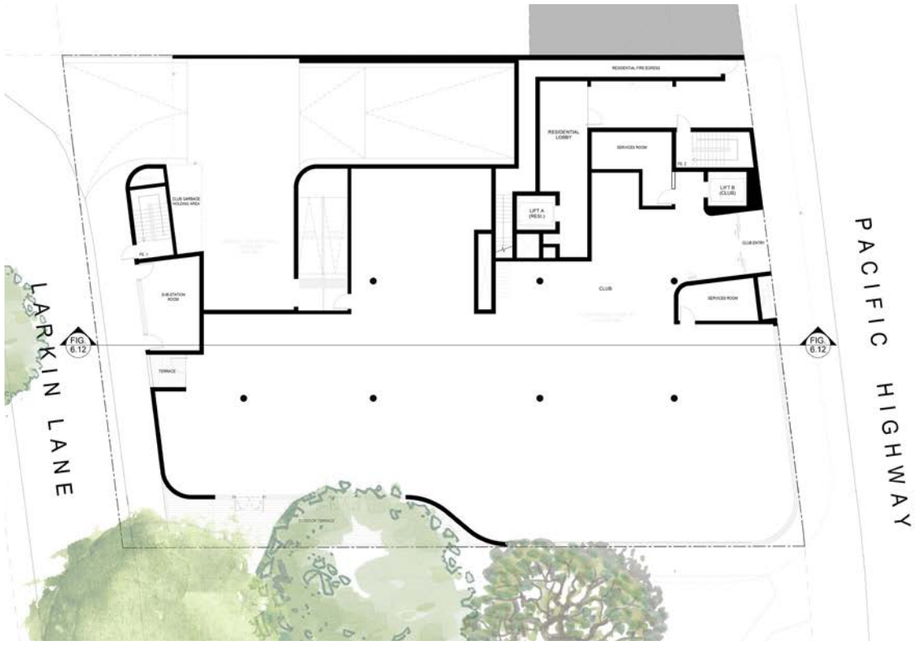


Figure 6.1 Ground Floor Plate

Figure 6.2 Level 1 Floor Plate

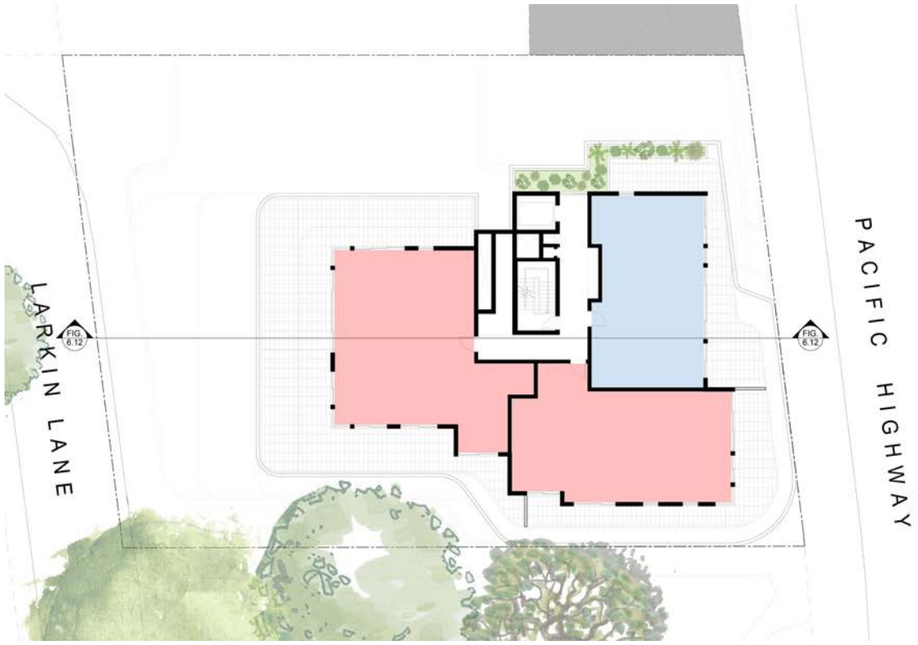


Figure 6.3 Level 6 Floor Plate

INDICATIVE DEVELOPMENT INFORMATION

UNIT MIX - 40 UNITS				
Level	**Bed: 1**	**Bed: 2**	**Bed: 3**	**Total**
GF (Club)	0	0	0	0
LEVEL 1	2	5	1	8
LEVEL 2	2	5	1	8
LEVEL 3	2	5	1	8
LEVEL 4	2	3	2	7
LEVEL 5	3	1	2	6
LEVEL 6	0	1	2	3
LEVEL 7	0	0	0	0
TOTAL	11	20	9	40
	28%	50%	23%	100%

Site Area	1,375 sqm
GFA	4,125 sqm
FSR	3.0:1
BUILDING HEIGHT	26.5m

SCALE 1:400

6.2 INDICATIVE BUILDING SECTION

Figure 6.12 Section

SCALE 1:400

7.1 BUILT-FORM CONCEPT IN EXISTING AND FUTURE CONTEXT

Figure 7.1 Existing Roseville Local Centre

Figure 7.2 Proposed Built-Form in Existing Roseville Local Centre

Figure 7.3 Proposed Built-Form in Future Roseville Local Centre

Figure 7.4 Existing Roseville Local Centre

Figure 7.5 Proposed Built-Form in Existing Roseville Local Centre

Figure 7.6 Proposed Built-Form in Future Roseville Local Centre

8.1 SHADOW DIAGRAMS - EXISTING CONTEXT PERMISSABLE ENVELOPE

The shadow diagrams to the right and on the following page indicate the additional impact that would result from a DCP compliant building envelope under this Planning Proposal. These impacts are shown relative to the existing context.

Figure 8.1 Shadows - June 21, 9am

Figure 8.2 Shadows - June 21, 10am

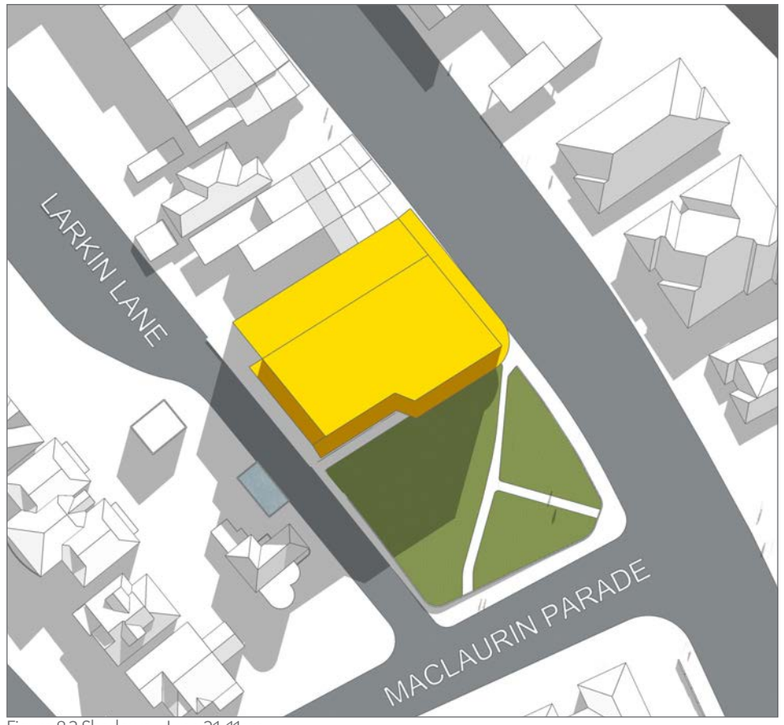


Figure 8.3 Shadows - June 21, 11am

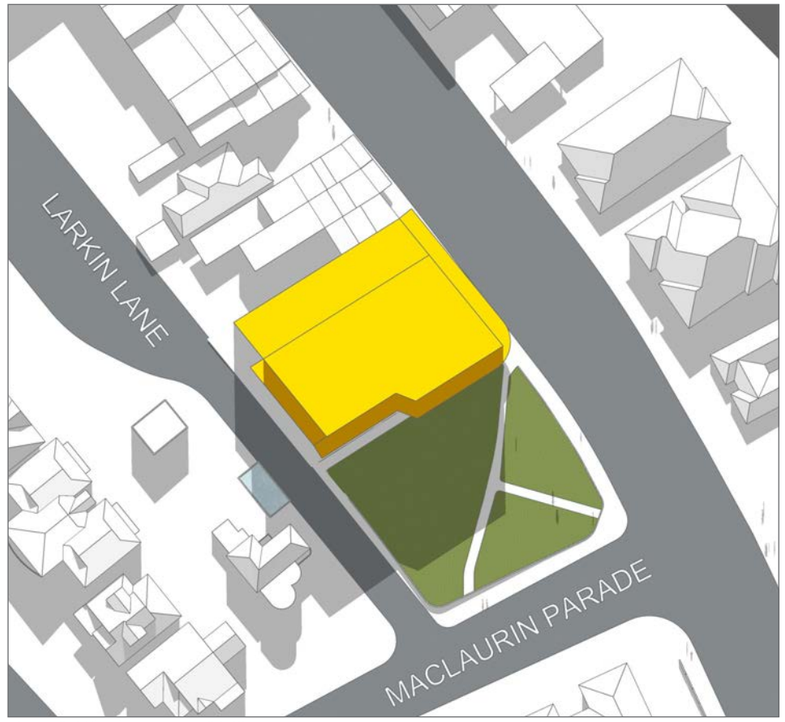


Figure 8.4 Shadows - June 21, 12pm

8.1 SHADOW DIAGRAMS - EXISTING CONTEXT PERMISSABLE ENVELOPE (CONTINUED)

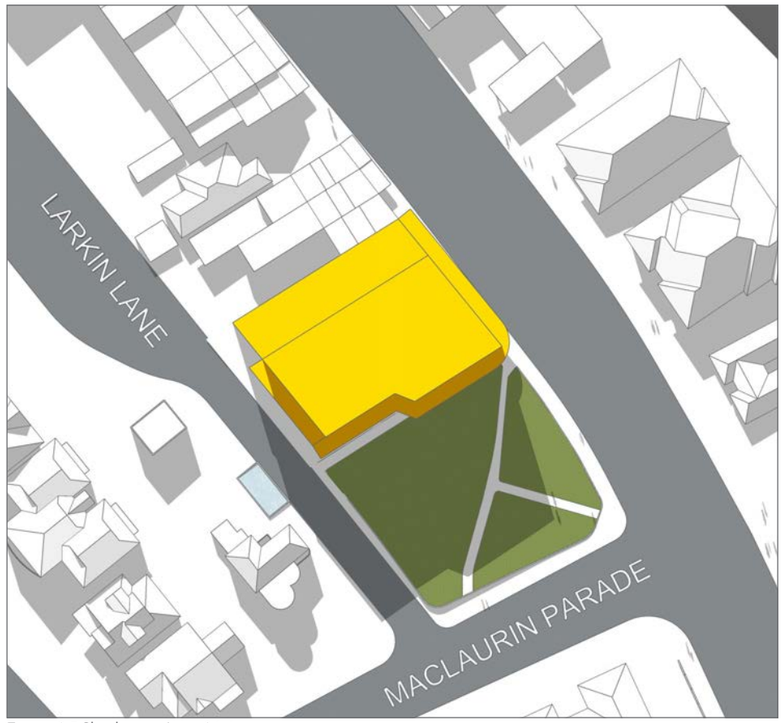


Figure 8.5 Shadows - June 21, 1pm

Figure 8.6 Shadows - June 21, 2pm

Figure 8.7 Shadows - June 21, 3pm

8.2 SHADOW DIAGRAMS - EXISTING CONTEXT PERMISSABLE ENVELOPE VS. PROPOSED HEIGHT

The shadow diagrams to the right and on the following page indicate the additional impact that would result from the increased height and DCP compliant envelope under this Planning Proposal. These impacts are shown relative to the existing context and the proposed building envelope.

As can be seen in all diagrams, at all times during mid-winter, the additional impact is very limited and would not result in unacceptable impacts. The property at No. 1 Maclaurin Parade would continue to retain good solar access from late morning and throughout the entire afternoon

The relatively modest scale of development in the Roseville Local Centre, results in good solar "sharing". Furthermore, the subject site is separated from other development on three sides by Larkin Lane to the west, the Pacific Highway to the east and Roseville Memorial Park to the south. This significantly reduces the potential for overshadowing impacts resulting from development on this site.

Relative to the Development Application which has already been submitted to Council for assessment, the increased scale proposed under this Planning Proposal is minimal. This is clearly demonstrated in the diagrams to the right and on the following page.

Impact from proposed increase in height

Figure 8.1 Shadows - June 21, 9am

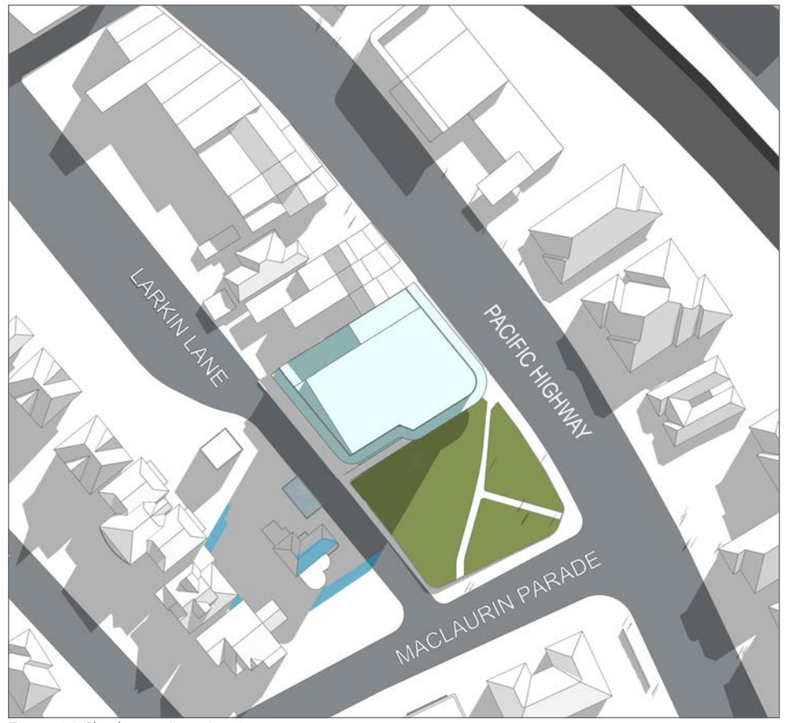


Figure 8.2 Shadows - June 21, 10am

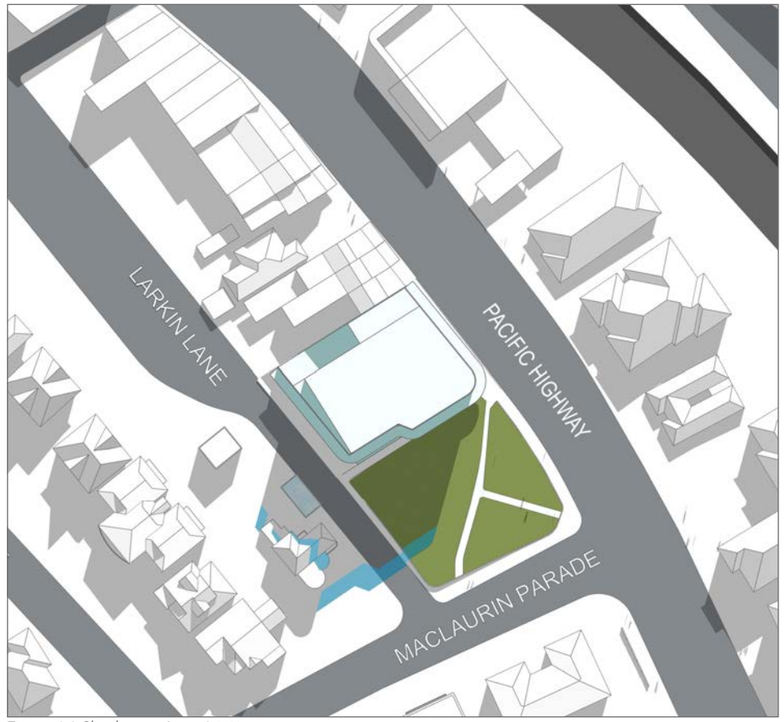


Figure 8.3 Shadows - June 21, 11am

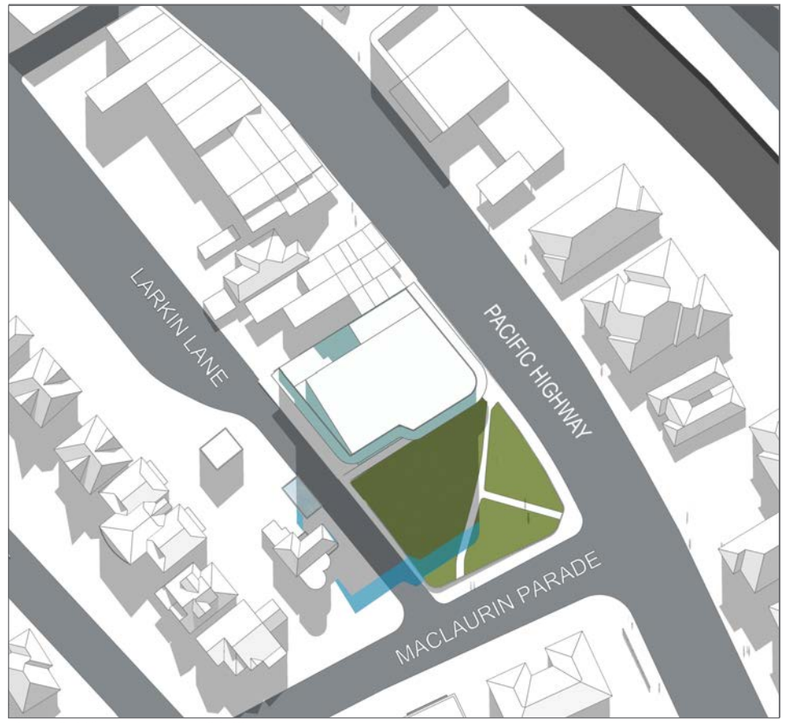


Figure 8.4 Shadows - June 21, 12pm

8.2 SHADOW DIAGRAMS - EXISTING CONTEXT PERMISSABLE ENVELOPE VS. PROPOSED HEIGHT (CONTINUED)

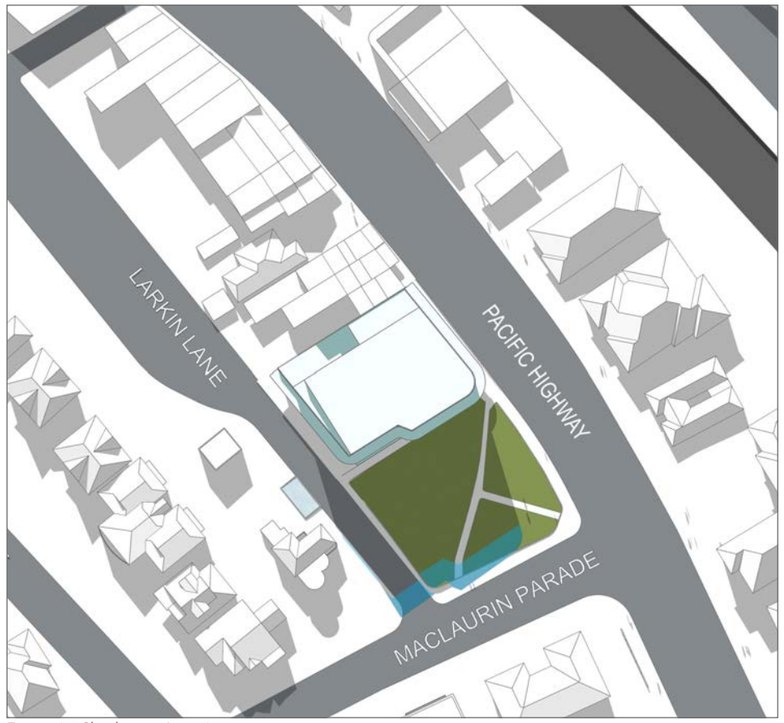


Figure 8.5 Shadows - June 21, 1pm

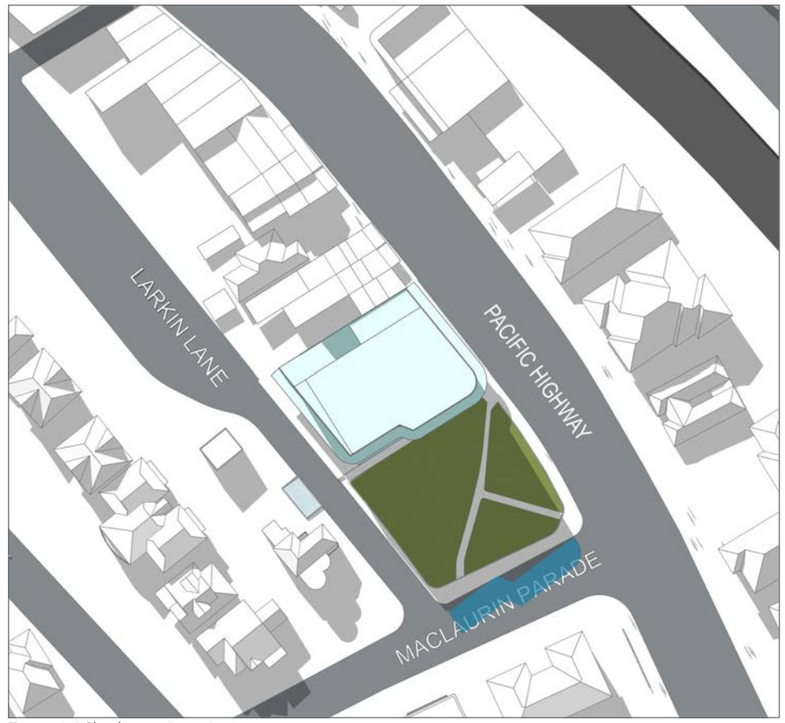


Figure 8.6 Shadows - June 21, 2pm

Figure 8.7 Shadows - June 21, 3pm

Impact from proposed increase in height

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8.3 SHADOW DIAGRAMS - FUTURE CONTEXT PERMISSABLE ENVELOPE VS. PROPOSED HEIGHT

The shadow diagrams to the right and on the following page indicate the additional impact that would result from the increased height and DCP compliant envelope under this Planning Proposal. These impacts are shown relative to the existing context and the proposed building envelope.

As can be seen in the diagrams, the proposed changes to the future massing along the Pacific Highway will only have impacts around 9am. After this time the increased overshadowing will only impact on the Larkin Lane car park area. Therefore the increased height to the Local Centre will not have adverse impacts on the locality.

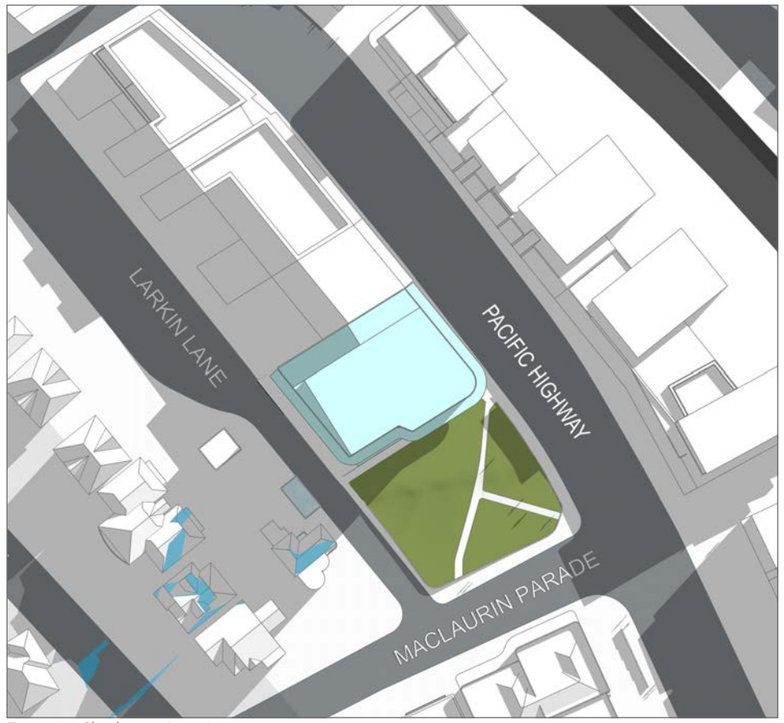

Figure 8.8 Shadows - June 21, 9am

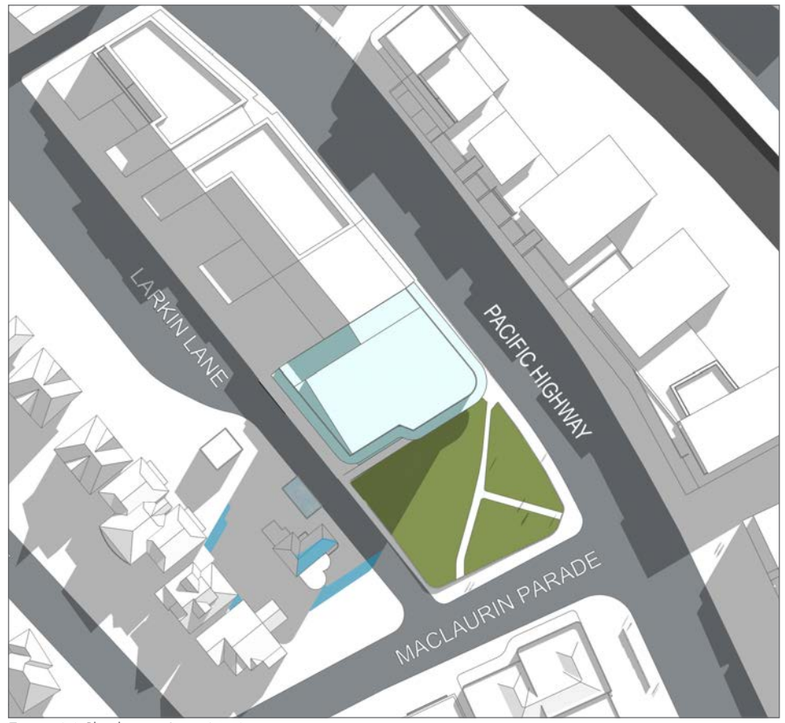

Figure 8.9 Shadows - June 21, 10am

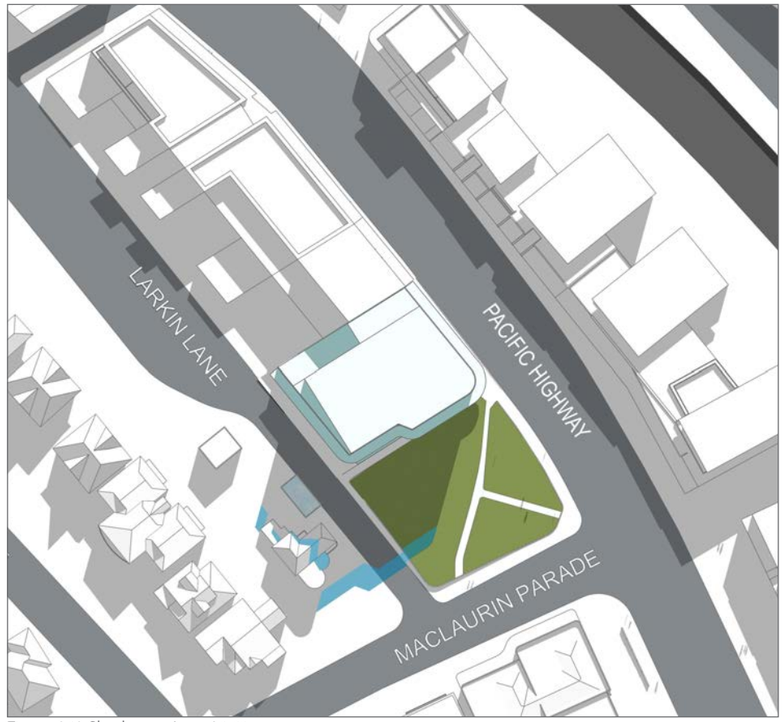

Figure 8.10 Shadows - June 21, 11am

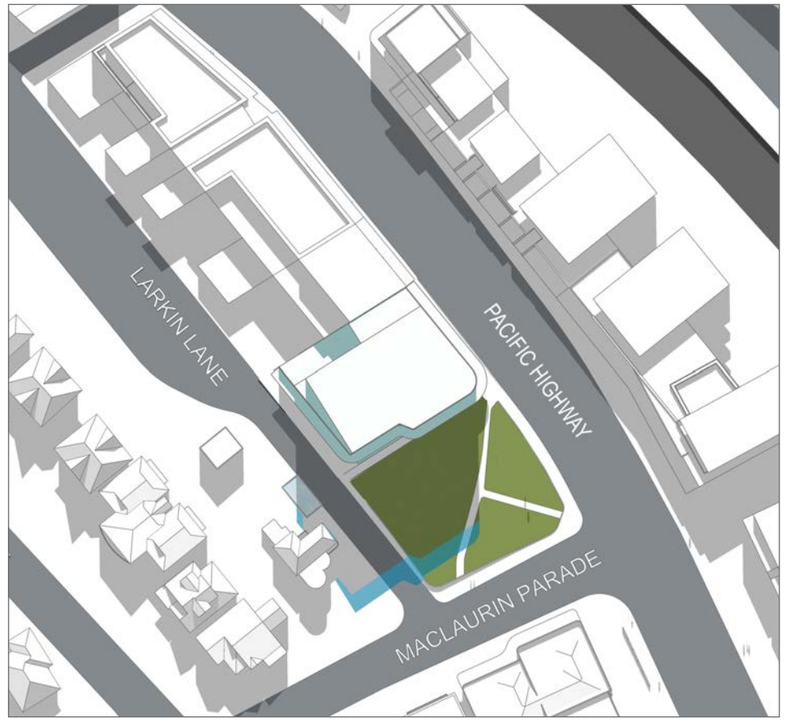

Figure 8.11 Shadows - June 21, 12pm

Impact from proposed increase in height

8.3 SHADOW DIAGRAMS - FUTURE CONTEXT PERMISSABLE ENVELOPE VS. PROPOSED HEIGHT (CONTINUED)

Figure 8.12 Shadows - June 21, 1pm

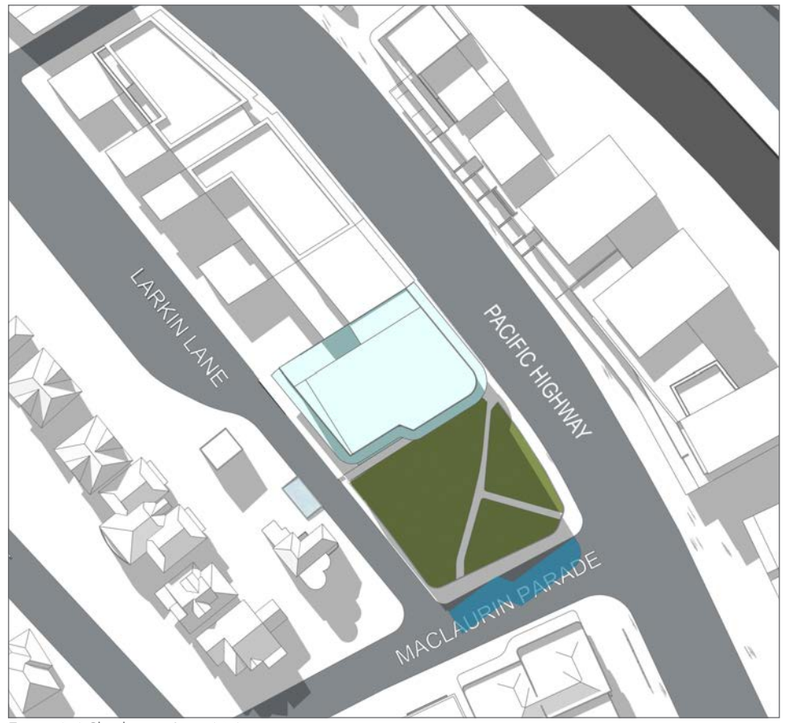

Figure 8.13 Shadows - June 21, 2pm

Figure 8.14 Shadows - June 21, 3pm

Impact from proposed increase in height

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8.3 SUN-EYE VIEWS - EXISTING CONTEXT

The sun-eye views to the right and on the following page indicate the proposed Built Form that would result from the increased height and ADG compliant envelope under this Planning Proposal. These impacts are shown relative to the existing context.

As can be seen in all diagrams, the proposed indicative building will receive good solar access to the majority of apartments. The solar access table provided in the following section (8.3) indicates the specific solar access to each apartment in the indicative building.

In addition to the solar access demonstrated for the proposed building envelope, these images further reinforce that the impacts of overshadowing on adjacent properties are not unreasonable.

Proposed Envelope

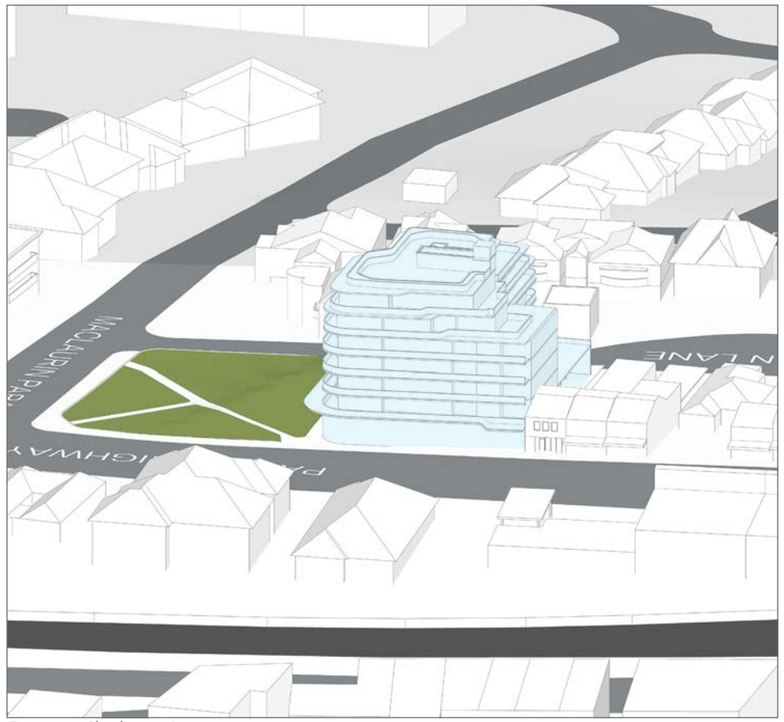

Figure 8.11 Shadows - June 21, 9am

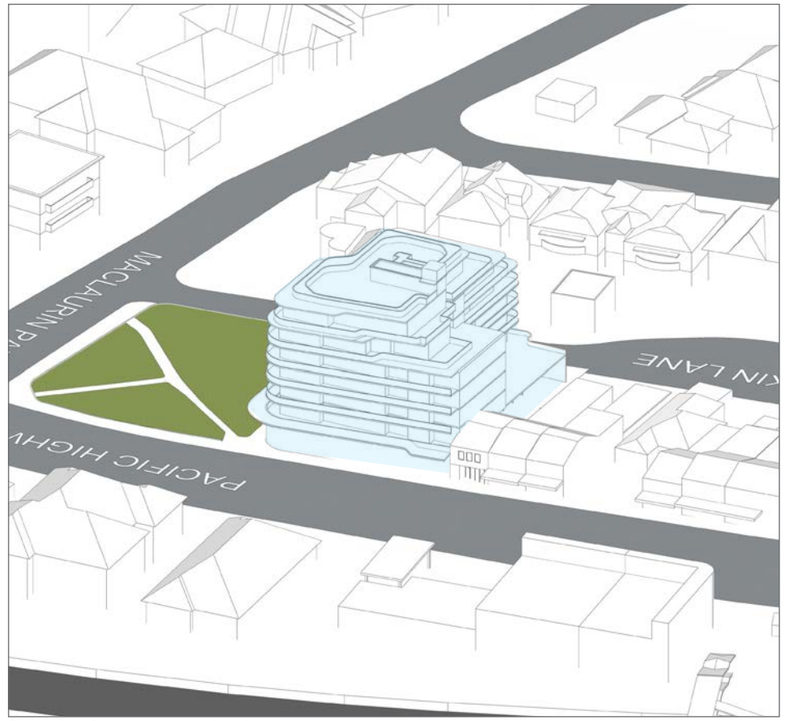

Figure 8.12 Shadows - June 21, 10am

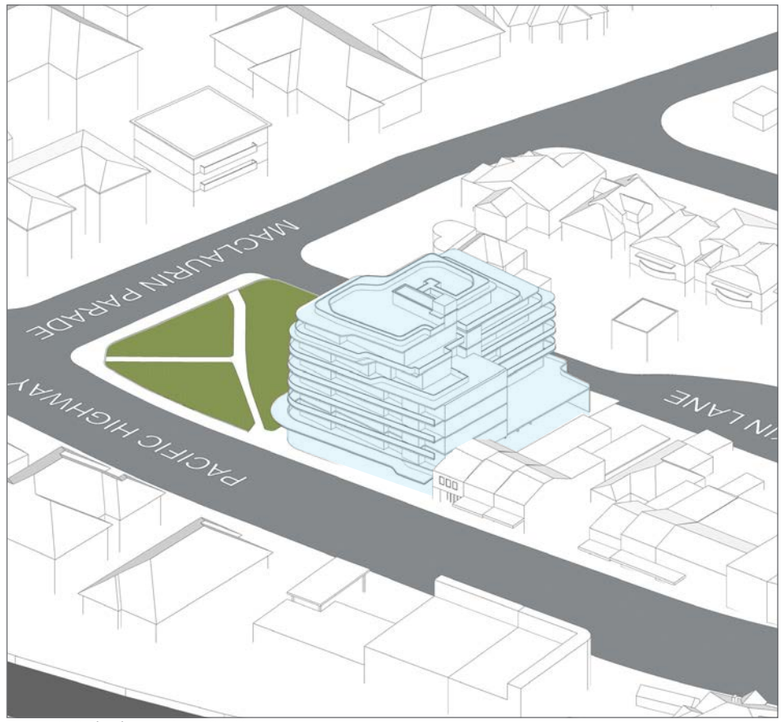

Figure 8.13 Shadows - June 21, 11am

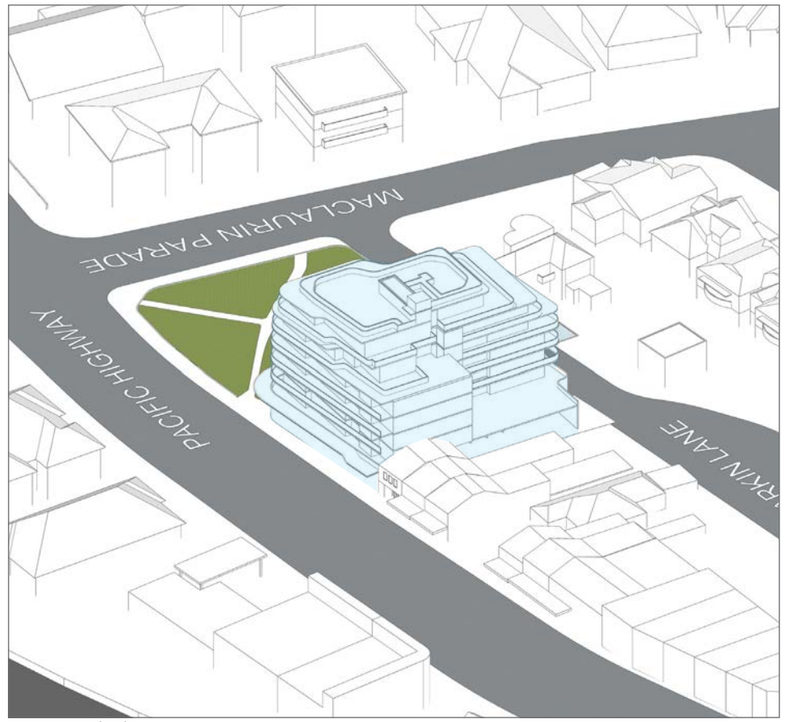

Figure 8.14 Shadows - June 21, 12pm

8.3 SUN-EYE VIEWS - EXISTING CONTEXT (CONTINUED)

64-66 Pacific Highway, Roseville
SOLAR COMPLIANCE CHECK

HRS	900	1000	1100	1200	1300	1400	1500	TOTAL
L1								
1.01				Y	Y	Y	Y	3
1.02			Y	Y	Y	Y	Y	4
1.03								0
1.04								0
1.05	Y	Y	Y	Y				3
1.06	Y	Y	Y	Y				3
1.07	Y	Y	Y					2
1.08	Y	Y	Y					2

HRS	900	1000	1100	1200	1300	1400	1500	TOTAL
L2								
2.01			Y	Y	Y	Y	Y	4
2.02		Y	Y	Y	Y	Y	Y	5
2.03								0
2.04								0
2.05	Y	Y	Y					2
2.06	Y	Y	Y	Y				3
2.07	Y	Y	Y					2
2.08	Y	Y	Y	Y				3

HRS	900	1000	1100	1200	1300	1400	1500	TOTAL
L3								
3.01			Y	Y	Y	Y	Y	4
3.02		Y	Y	Y	Y	Y	Y	5
3.03								0
3.04								0
3.05	Y	Y	Y					2
3.06	Y	Y	Y	Y				3
3.07	Y	Y	Y	Y				3
3.08	Y	Y	Y	Y				3

HRS	900	1000	1100	1200	1300	1400	1500	TOTAL
L4								
4.01			Y	Y	Y	Y	Y	4
4.02		Y	Y	Y	Y	Y	Y	5
4.03								0
4.04	Y	Y	Y	Y				3
4.05	Y	Y	Y	Y				3
4.06	Y	Y	Y	Y				3
4.07	Y	Y	Y	Y				3

HRS	900	1000	1100	1200	1300	1400	1500	TOTAL
L5								
5.01		Y	Y	Y	Y	Y	Y	5
5.02		Y	Y	Y	Y	Y	Y	5
5.03								0
5.04	Y	Y	Y					2
5.05	Y	Y	Y					2
5.06	Y	Y	Y	Y				3

HRS	900	1000	1100	1200	1300	1400	1500	TOTAL
L6								
6.01		Y	Y	Y	Y	Y	Y	5
6.02	Y	Y	Y	Y				3
6.03	Y	Y	Y	Y	Y			4

Solar Access
No Solar Access
Compliant
Non-Compliant

UNITS COMPLIANT	32
TOTAL UNITS	40
PERCENTAGE	80%

Figure 8.15 Solar Access Table

Proposed Envelope

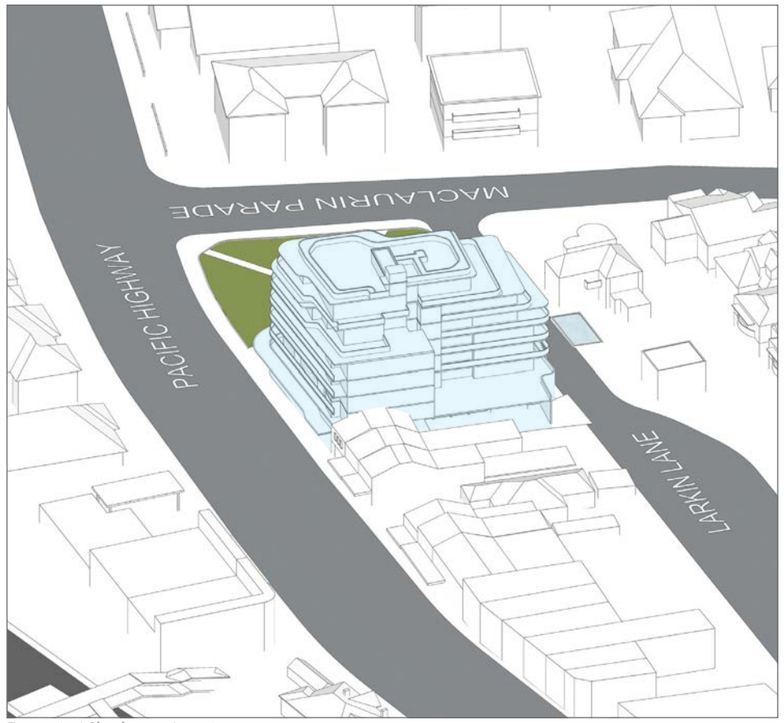

Figure 8.16 Shadows - June 21, 1pm

Figure 8.17 Shadows - June 21, 2pm

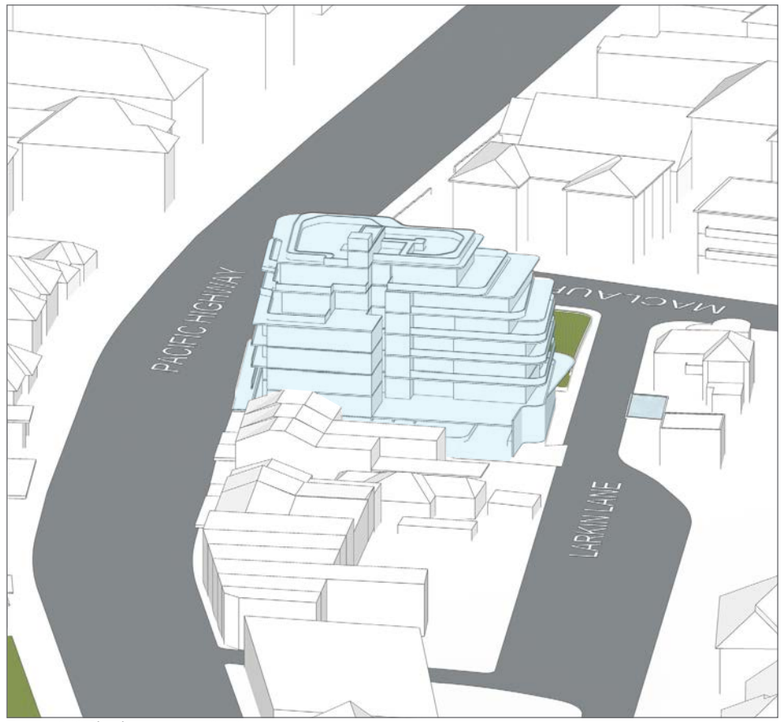

Figure 8.18 Shadows - June 21, 3pm

8.4 SUN-EYE VIEWS - FUTURE CONTEXT

The sun-eye views to the right and on the following page indicate the proposed Built Form that would result from the increased height and ADG compliant envelope under this Planning Proposal. These impacts are shown relative to the future context.

As can be seen in all diagrams, the proposed future buildings along the Pacific Highway will not significantly impact on the solar access available to apartments in the proposed building envelope and that they will not advesrsely impact on the neighbouring sites.

Proposed Envelope

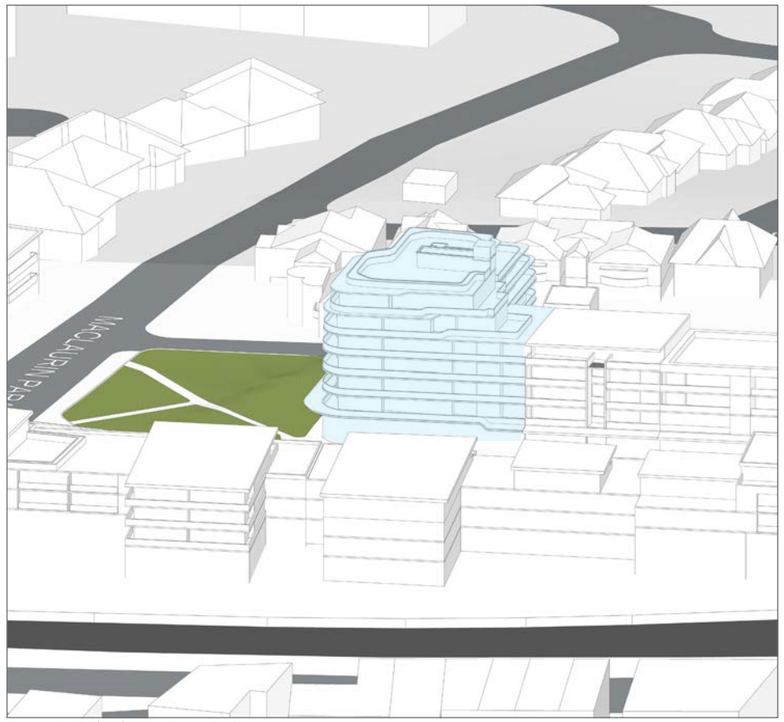

Figure 8.19 Shadows - June 21, 9am

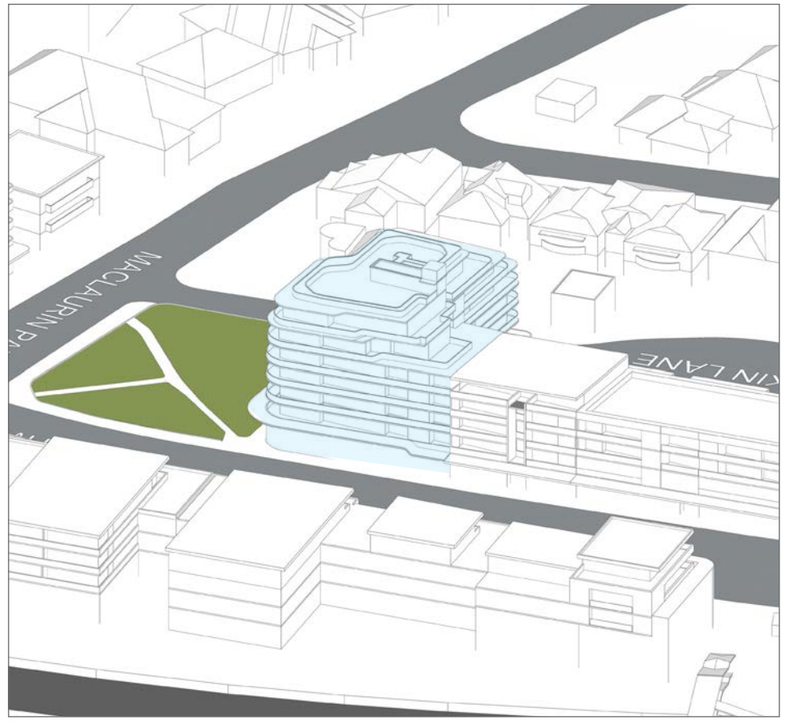

Figure 8.20 Shadows - June 21, 10am

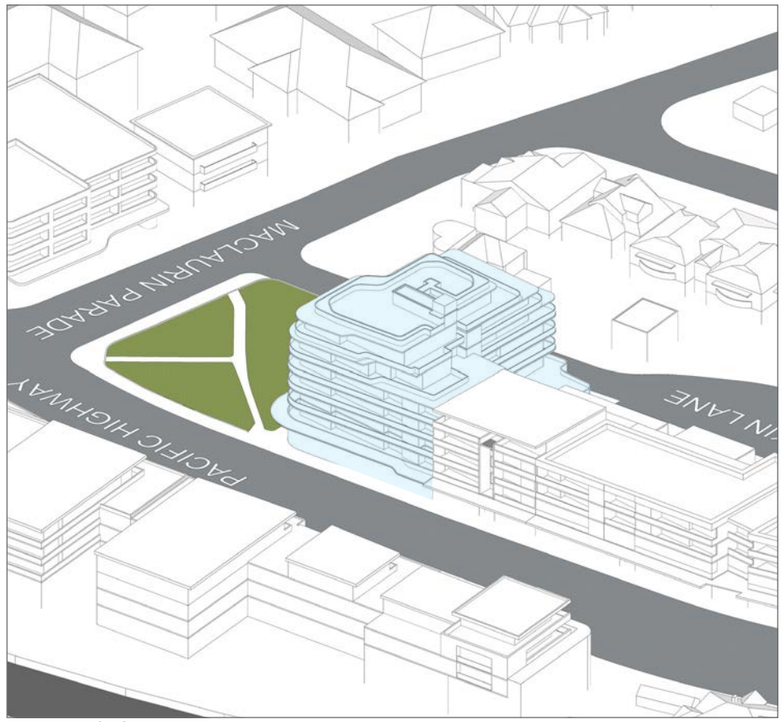

Figure 8.21 Shadows - June 21, 11am

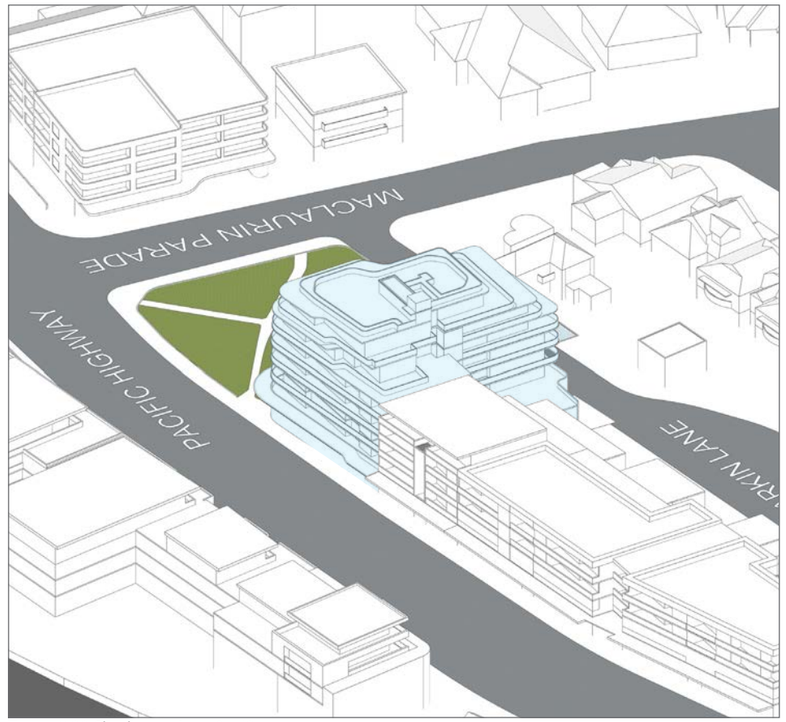

Figure 8.22 Shadows - June 21, 12pm

8.4 SUN-EYE VIEWS - FUTURE CONTEXT (CONTINUED)

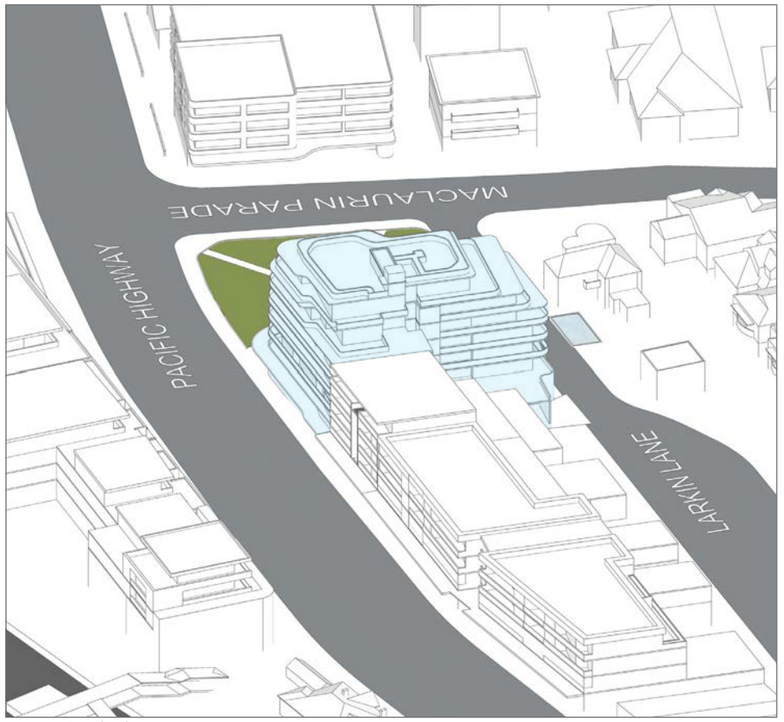

Figure 8.23 Shadows - June 21, 1pm

Figure 8.24 Shadows - June 21, 2pm

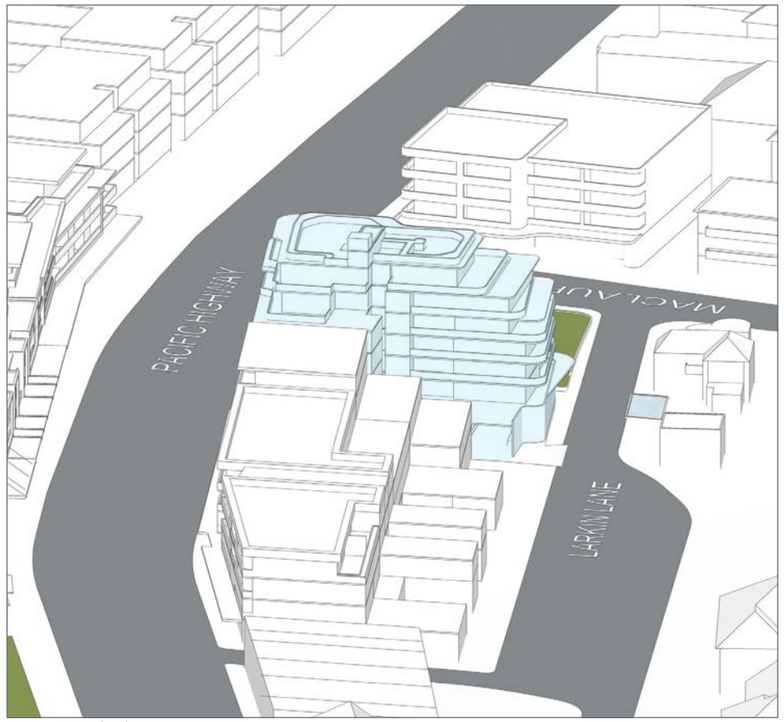

Figure 8.25 Shadows - June 21, 3pm

Proposed Envelope

9.1 VIEWS - EXISTING CONTEXT

The Images to the right provide an impression of the proposed built-form in the existing context.

Figure 9.1 North direction street view from Pacific Highway

Figure 9.2 South direction street view from Pacific Highway

9.2 VIEWS - FUTURE CONTEXT

The images to the right provide an impression of the proposed built-form in the anticipated future context.

Figure 9.3 North direction street view from Pacific Highway

Figure 9.4 South direction street view from Pacific Highway

9.2 VIEWS - FUTURE CONTEXT

The images to the right provide an impression of the proposed built-form in the anticipated future context.

Figure 9.5 View to Roseville Memorial Park and Proposed Building from east side of Pacific Highway

Figure 9.6 South direction street view from Pacific Highway facing Roseville Station entrance and proposed 'Northern Landmark'

10.1 COMPLIANCE CHECKLIST

OBJECTIVE	DESIGN CRITERIA		PROPOSED	COMMENT
Part 3 - Siting the Development				
3A **Site Analysis**	**Objective 3A-1** Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and the relationship to the surrounding context		**Complies**	Built-form considers neighbouring buildings with adequate setbacks where required.
3B **Orientation**	**Objective 3B-1** Building types and layouts respond to the street and site while optimizing solar access within the development		**Complies**	The orientation of the built-form maximizes solar access wherever possible.
	Objective 3B-2 Overshadowing of neighbouring properties is minimized during mid-winter		**Complies**	Strategic building setbacks and built-form minimises overshadowing impact on neighbouring properties.
3C **Public Domain Interface**	**Objective 3C-1** Transition between private and public domain is achieved without compromising safety and security		**Complies**	Apartments are secure from the street and are accessed through a central lobby.
	Objective 3C-2 Amenity of the public domain is retained and enhanced		**Complies**	Mailboxes and services are located on the ground level.
3D **Communal and Public Open Space**	**Objective 3D-1** And adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	1. Communal open space has a minimum area equal to 25% of the site 2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21st June (mid-winter)	**Complies** **Complies**	Required – 343.8 sqm, Proposed 353 sqm Communal area is located on unobstructed roof terrace achieving more than 2 hours direct sun light.
	Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting		**Complies**	Communal open space provides a BBQ area and associated seating, paved areas, wide passive seating areas and landscaping on all sides.
	Objective 3D-3 Communal open space is designed to maximize safety		**Complies**	Residential communal open space is private and accessed via lift or stairs. Only tenants have access to this area and will require swipe key access.
	Objective 3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood		**Complies**	Planter boxes surrounding the roof terrace provide buffer between adjoining properties.
3E **Deep Soil Zone**	**Objective 3E-1** Deep soil zone provides areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality	Deep soil zones are to meet the following minimum requirements: **Site Area** / **Min. Dimensions** / **Deep Soil Zone (% of the site area)** Less than 650m² / - / 7% 650m² - 1500m² / 3m / 7% Greater than 1500m² / 6m / 7% Greater than 1500m² with significant tree cover / 6m / 7%	**Satisfactory**	The development site is within Roseville town centre and located next to the memorial park. The proposed development maintains the existing site conditions which doesn't contain any deep soil. Ground floor tenancy remains as the use of a Club.

10.1 COMPLIANCE CHECKLIST (CONTINUED)

OBJECTIVE	DESIGN CRITERIA	PROPOSED	COMMENT
Part 3 - Siting the Development			
3F **Visual Privacy**	**Objective 3F-1** Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy. *Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room.*	**Satisfactory**	Provided adequate building separations, with windows and doors of habitable spaces are orientated towards the internal courtyard, park or the street to avoid direct sight lines between units and adjoining buildings. Privacy screens along the street and park facing units provide additional privacy between the public and private open space. With Larkin Lane as an existing laneway that acts as separation buffer between the proposed building and neighbouring buildings, the 3m setback provided for the first three levels of apartments along the laneway is considered sufficient due to the lower density/height residential zoning area across it. Further, the adjoining heritage item is
			unlikely to be redeveloped and currently remains achieving at least minimum 3 hours solar. Hence, the proposed setback is considered reasonable and acceptable without causing any visual privacy impact and overshadowing.
	Objective 3F-2 Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.	**Complies**	Façade articulations, landscaping and external screens are multi-purposed in providing separation whilst enhancing living environments.
3G **Pedestrian Access and Entries**	**Objective 3G-1** Building entries and pedestrian access connects to and addresses the public domain	**Complies**	Pedestrian entry from street frontage for residential units and the club in separated secured door. Secured access is also available via the basement levels.
	Objective 3G-2 Access, entries and pathways are accessible and easy to identify	**Complies**	A strong break in front façade and articulation on a pedestrian scale indicates street entrances.
	Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations	**N/A**	

Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:

Building Height	Habitable rooms and balconies	Non-habitable rooms
Up to 12m (4 storeys)	6m	3m
Up to 25m (5-8 storeys)	9m	4.5m
Over to 25m (9+ storeys)	12m	6m

10.1 COMPLIANCE CHECKLIST (CONTINUED)

OBJECTIVE	DESIGN CRITERIA		PROPOSED	COMMENT
Part 3 - Siting the Development				
3H **Vehicle Access**	**Objective 3H-1** Vehicle access points are designed and located to achieve safety, minimize conflicts between pedestrians and vehicles and create high quality streetscapes.		**Complies**	The vehicle access point has been designed to provide a better street presentation and is integrated with the building. Driveway is located away from pedestrian entry points and has minimal impact on street frontage.
3J **Bicycle and Car Parking**	**Objective 3J-1** Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	For development in the following locations: • On sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; or • On land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use of equivalent in a nominated regional centre	**Complies**	Traffic report will be submitted with Planning Proposal. 50.5 spaces required and **58 provided** = 47 residential, 6 visitor spaces, 5 for the club and 1 car wash bay.
		The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less. The car parking needs for a development must be provided off street.		
	Objective 3J-2 Parking and facilities are provided for other modes of transport		**Complies**	Bicycle racks and motorcycle parking are provided
	Objective 3J-3 Car park design and access is safe and secure		**Complies**	Secure basement car park with lift access to all residential levels.
	Objective 3J-4 Visual and environmental impacts of underground car parking are minimised		**Complies**	
	Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised		**Complies**	No on-grade parking provided
	Objective 3J-6 Visual and environmental impacts of above ground enclosed parking are minimised		**Complies**	No above ground parking provided

10.1 COMPLIANCE CHECKLIST (CONTINUED)

OBJECTIVE	DESIGN CRITERIA		PROPOSED	COMMENT
Part 4 – Designing the Building				
4A Solar and Daylight Access	**Objective 4A-1** To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.	1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours of direct sunlight between 9am and 3pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	**Complies**	32/40 apartments = 80**%** Receive at least min 2hr direct sunlight to living rooms and private open space.
		2. In all other areas, living rooms and private open spaces of at least **70%** of apartments in a building receive a minimum of 3 hours direct sunlight between 9am and 3pm at mid-winter	**N/A**	
		3. A maximum of **15%** of apartments in a building receive no direct sunlight between 9am and 3pm mid winter.	**On Merit**	8/40 apartments = **20%** (3 southwestern corner units with view access to the park) Single facing southern units 5/40 apartments = 12**%**
	Objective 4A-2 Daylight access is maximized where sunlight is limited		**Complies**	Full height balcony windows/ doors to maximize daylight access.
	Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months		**Complies**	Awnings/overhangs and external screens assist with diffusing glare and providing shade.
4B Natural Ventilation	**Objective 4B-1** All habitable rooms are naturally ventilated		**Complies**	
	Objective 4B-2 The layout and design of single aspect apartments maximizes natural ventilation		**Complies**	
	Objective 4B-3 The number of apartments with natural cross ventilation is maximized to create a comfortable indoor environment for residents	1. At least **60%** of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed	**Complies**	24 Apartments achieve cross ventilation. Deemed to comply at 60**%**
		2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	**Complies**	

10.1 COMPLIANCE CHECKLIST (CONTINUED)

OBJECTIVE	DESIGN CRITERIA	PROPOSED	COMMENT
Part 4 – Designing the Building			
4C Ceiling Heights	**Objective 4C-1** Ceiling height achieves sufficient natural ventilation and daylight access	Measured from finished floor level to finished ceiling level, minimum ceiling heights are: **Minimum ceiling height for apartment and mixed use buildings** Habitable Rooms: 2.7m Non-Habitable: 2.4m For 2 Storey Apartments: 2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area Attic Spaces: 1.8m at edge of room with a 30 degree minimum ceiling slope If located in mixed use areas: 3.3m for ground and first floor to promote future flexibility	**Complies**	Ceiling heights proposed are consistent with ADG recommendations: - 2.7 habitable - 2.4 non-habitable 3040 mm floor to floor provided assuming 200mm thick slab, 30mm for flooring and 110 for ceiling – 2700. Services to be maintained in non-habitable spaces to maximise ceiling heights in habitable areas.
	Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms		**Complies**	Habitable rooms are located directly adjacent openings and private open spaces where ceiling is maximized. Bulkheads are minimised where possible and services occupy ceiling spaces of non-habitable rooms to prevent unnecessary reduced ceiling heights.
	Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building		**Complies**	Provided more than 4m of ceiling height at ground floor to allow flexibility in future conversion of occupancy use.
4D Apartment Size and Layout	**Objective 4D-1** The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	1. Apartments are required to have the following minimum internal areas: Studio: 35m^2 1 bedroom: 50m^2 2 bedroom: 70m^2 3 bedroom: 90m^2 The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m^{2}each. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m^{2}each	**Complies**	All apartments comply with minimum internal areas
		2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	**Complies**	All habitable room have a minimum glass area of 10% of the floor area of the room.
	Objective 4D-2 Environmental performance of the apartment is maximised	1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	**Complies**	All habitable room depths are less than 2.5x the ceiling height
		2. In open plan layouts (where the living, dining	**Complies**	Window to kitchen dimension in open

10.1 COMPLIANCE CHECKLIST (CONTINUED)

<table>
<tr><th>OBJECTIVE</th><th>DESIGN CRITERIA</th><th>PROPOSED</th><th>COMMENT</th></tr>
<tr><td colspan="4">Part 4 – Designing the Building</td></tr>
<tr><td></td><td></td><td>and kitchen are combined) the maximum habitable room depth is 8m from a window</td><td></td><td>plan living ranges between 4m to 6m</td></tr>
<tr><td></td><td>Objective 4D-3
Apartment layouts are designed to accommodate a variety of household activities and needs</td><td>1. Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)
2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)
3. Living rooms or combined living/dining rooms have a minimum width of:
• 3.6m for studio and 1 bedroom apartments
• 4m for 2 & 3 bedroom apartments
4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</td><td>Complies
Complies
Complies
Complies</td><td>Master bedrooms range from 3.2 x 3.6m (13.8 sqm) to 3.3 x 3.1 (10.8 sqm)
Other bedrooms range from 3.5 x 3.5m (13.4 sqm) to 3.3 x 3.1m (10.8 sqm)
Living spaces to all 2 & 3 bedroom apartments have minimum width of 4.0m
Living spaces to all 1 bedroom apartments have minimum width of 3.8m</td></tr>
<tr><td>4E
Private Open Space and Balconies</td><td>Objective 4E-1
Apartments provide appropriately sized private open space and balconies to enhance residential amenity</td><td>1. All apartments are required to have primary balconies as follows:
<table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio Apartments</td><td>4m^2</td><td>-</td></tr><tr><td>1 Bedroom Apartments</td><td>8m^2</td><td>2m</td></tr><tr><td>2 Bedroom Apartments</td><td>10m^2</td><td>2m</td></tr><tr><td>3+ Bedroom Apartments</td><td>12m^2</td><td>2.4m</td></tr></table></td><td>Complies</td><td>All balconies in this development comply with the minimum depth of 2m and relevant minimum areas.</td></tr>
<tr><td></td><td></td><td>The minimum balcony depth to be counted as contributing to the balcony area is 1m
2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m</td><td>Complies</td><td></td></tr>
<tr><td></td><td>Objective 4E-2
Primary private open space and balconies are appropriately located to enhance liveability for residents</td><td>Complies</td><td>Private open space is directly to a living space, orientated to allow for maximized solar access and ventilation</td></tr>
<tr><td></td><td>Objective 4E-3
Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</td><td>Complies</td><td>Balconies and private open spaces is integrated with the building form and facade</td></tr>
<tr><td></td><td>Objective 4E-4
Private open space and balcony design maximises safety</td><td>Complies</td><td>Apartments are located above street level eliminating direct access from the street. Balustrades and screening provide additional protection.</td></tr>
</table>

10.1 COMPLIANCE CHECKLIST (CONTINUED)

OBJECTIVE	DESIGN CRITERIA	PROPOSED	COMMENT
Part 4 – Designing the Building			
4F Common Circulation and Spaces	**Objective 4F-1** Common circulation spaces achieve good amenity and properly service the number of apartments	1. The maximum number of apartments off a circulation core on a single level is eight 2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	**Complies** **N/A**	One (1) lift provided for a maximum of 8 apartments on a single level.
	Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents		**Complies**	Centralized lift lobby encourages social interaction and provides amenity for doing so.
4G Storage	**Objective 4G-1** Adequate, well designed storage is provided in each apartment	In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: **Dwelling Type** / **Storage Size Volume** Studio apartments: $4m^2$ 1 bedroom apartments: $6m^2$ 2 bedroom apartments: $8m^2$ 3+ bedroom apartments: $10m^2$	**Complies**	All apartments provided the storage requirement for each apartment. Refer to storage diagram and unit schedule on architectural drawings.
		At least 50% of the required storage is to be located within the apartment	**Satisfactory**	70% of apartments have at least 50% of the required storage within unit. However, each apartment complies with total minimum storage with storage cages provided in basement.
	Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments		**Complies**	Additional storage where provided is directly accessed on basement levels.
4H Acoustic Privacy	**Objective 4H-1** Noise transfer is minimised through the siting of buildings and building layout		**Complies**	Where possible planting, circulation and non-habitable rooms are located to buffer external noise sources.
	Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments		**Complies**	Appropriate acoustic measure will be undertaken at CC stage. Provisions have been made for wall thicknesses and floor to floor heights for construction methodology.
4J Noise and Pollution	**Objective 4J-1** In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings		**Complies**	Habitable rooms are generally setback from external noise of Pacific Highway & Roseville Memorial Park through balconies, landscaping and screens.
	Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission		**Complies**	Solid balustrades on balconies, screens and landscaping are provided to assist in diffusing noise transmission.

10.1 COMPLIANCE CHECKLIST (CONTINUED)

OBJECTIVE	DESIGN CRITERIA	PROPOSED	COMMENT
Part 4 – Designing the Building			
4K Apartment Mix	**Objective 4K-1** A range of apartment types and sizes is provided to cater for different household types now and into the future	**Complies**	A mix of 1, 2 and 3 bedroom apartments spread over the residential floors
	Objective 4K-2 The apartment mix is distributed to suitable locations within the building	**Complies**	A mix of 1, 2 and 3 bedroom apartments spread over the residential floors
4L Ground Floor Apartments	**Objective 4L-1** Street frontage activity is maximised where ground floor apartments are located	**N/A**	Commercial space (RSL club) located on ground level.
	Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents	**N/A**	
4M Facades	**Objective 4M-1** Building facades provide visual interest along the street while respecting the character of the local area	**Complies**	The facades have been carefully designed with a mix of material palette. Linear bands and metal cladding details create a visually interacting façade whilst responding to the character of the local area.
	Objective 4M-2 Building functions are expressed by the facade	**Complies**	Residential entry clearly identified via different treatment in the façade (i.e. awing height & materials).
4N Roof Design	**Objective 4N-1** Roof treatments are integrated into the building design and positively respond to the street	**Complies**	The top floor is setback behind the levels below, reducing the visual impact to the street. Planter boxes and green roofs assist in softening the roof edge.
	Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised	**Complies**	Communal open area at the top level with BBQ area encourage the use of the roof terrace.
	Objective 4N-3 Roof design incorporates sustainability features	**Complies**	Roof extends awning over windows and doors to habitable spaces to control sunlight during summer.
4O Landscape Design	**Objective 4O-1** Landscape design is viable and sustainable	**Complies**	Landscaping and native plant selection provides shading and privacy and contributes to the local climate. Selection of native and low water usage trees reduce water usage and maintenance.
	Objective 4O-2 Landscape design contributes to the streetscape and amenity	**Complies**	Where possible, landscaping has been included to provide amenity and streetscape.

10.1 COMPLIANCE CHECKLIST (CONTINUED)

OBJECTIVE	DESIGN CRITERIA	PROPOSED	COMMENT
Part 4 – Designing the Building			
4P Planting on Structures	**Objective 4P-1** Appropriate soil profiles are provided	**Complies**	Refer to Landscape Consultant detail
	Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance	**Complies**	Refer to Landscape Consultant detail
	Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	**Complies**	Refer to Landscape Consultant detail
4Q Universal Design	**Objective 4Q-1** Universal design features are included in apartment design to promote flexible housing for all community members	**Complies**	Apartments are open plan in design providing a free-flowing living quality with generous open space for occupant flexibility.
	Objective 4Q-2 A variety of apartments with adaptable designs are provided	**Complies**	6 of 40 apartments are designed to platinum level to meet council requirements (15% of all dwellings)
	Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	**Complies**	All apartments have open plan living allowing flexibility on the use.
4R Adaptive Reuse	**Objective 4R-1** New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place	**N/A**	Brand new development
	Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse	**N/A**	Brand new development
4S Mixed Use	**Objective 4S-1** Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	**Complies**	The street and park frontage of the club level is proposed to have glazing panels visually opening up for connection and activation. Awning will provide protection from rain and sunlight.
	Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	**Complies**	Keyed entry required to residential development.
4T Awnings and Signage	**Objective 4T-1** Awnings are well located and complement and integrate with the building design	**Complies**	Awning over entry helps define the entry location and adds visual interest in the street scape.
	Objective 4T-2 Signage responds to the context and desired streetscape character	**Complies**	Signage integrated into entry porticoes.

10.1 COMPLIANCE CHECKLIST (CONTINUED)

OBJECTIVE	DESIGN CRITERIA	PROPOSED	COMMENT
Part 4 – Designing the Building			
4U Energy Efficiency	**Objective 4U-1** Development incorporates passive environmental design	**Complies**	Adequate light and ventilation to all habitable rooms
	Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	**Complies**	BASIX assessment submitted with the development application
	Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation	**Complies**	Apartments designed with appropriate depths, ceiling heights and planning to promote airflow and natural ventilation.
4V Water Management and Conservation	**Objective 4V-1** Potable water use is minimised	**Complies**	Water reducing fixtures and low water usage landscaping implemented
	Objective 4V-2 Urban storm-water is treated on site before being discharged to receiving waters	**Complies**	Refer to hydraulic engineer's reports and drawings
	Objective 4V-3 Flood management systems are integrated into site design	**Complies**	Refer to hydraulic engineer's reports and drawings
4W Waste Management	**Objective 4W-1** Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	**Complies**	Waste storage is located at basement 1 within the development.
	Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	**Complies**	Waste management document will be submitted with Development Application by "Elephants Foot"
4X Building Maintenance	**Objective 4X-1** Building design detail provides protection from weathering	**Complies**	Material proposed are robust and hard weathering minimizing maintenance. Building detailing will provide protections to opening and control leaching etc.
	Objective 4X-2 Systems and access enable ease of maintenance	**Complies**	Generally, maintenance of the building can be directly accessed via individual unit, internal lobbies or back of house facilities.
	Objective 4X-3 Material selection reduces on-going maintenance costs	**Complies**	Natural and resilient material selection of rendered concrete, powder coated aluminium extrusion and metal cladding reduces on-going maintenance.

11.1 POTENTIAL LEP CONTROLS

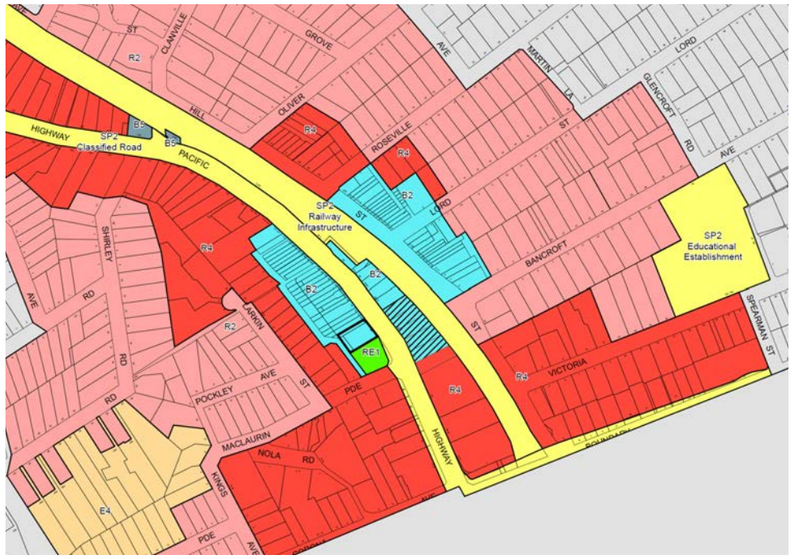

Figure 11.1 Zoning Map - Proposed

Zoning:

B2 - Local Centre

Hatch indicates area for Council to consider in the future when LEP is reviewed

Figure 11.2 Floor Space Ratio Map - Proposed

Figure 11.3 Heights Map - Proposed

Maximum Height:

T - 26.5m

Hatch indicates area for Council to consider in the future when LEP is reviewed

11.2 PROPOSED DCP CONTROLS

Figure 11.4 Plan

RL 138.1 max. building height (1 storey)
RL 132.9 max. building height (2 storeys)
RL 126.7 max. building height (3 storeys)
RL 116.1 max. building height (1 storeys)

Vehicular access location
Datum (RL 111.6)
Subject site boundary

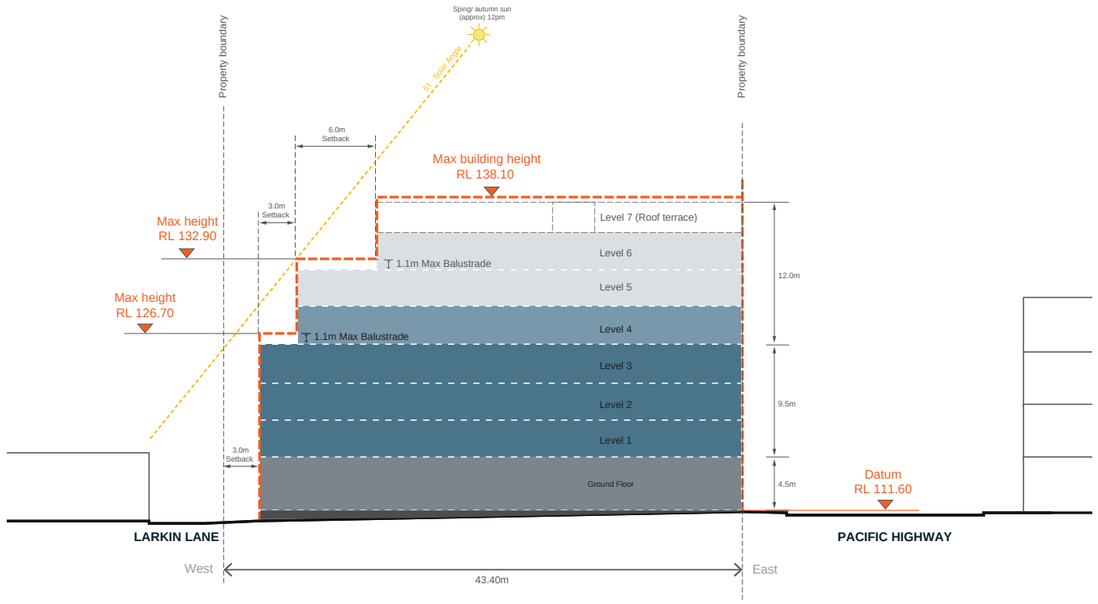

Figure 11.5 Section AA

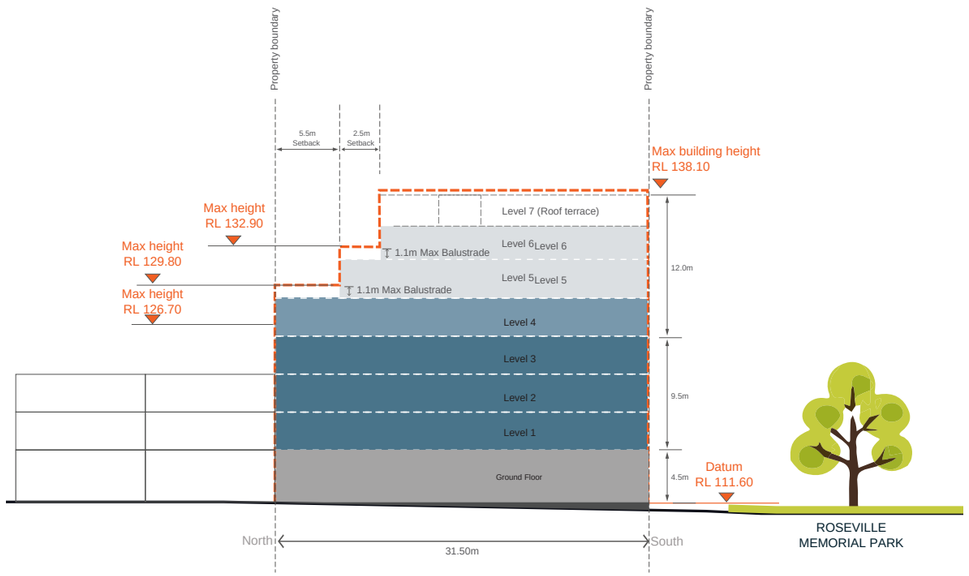

Figure 11.6 Section BB

12.1 PROPOSED FUTURE DCP CONTROLS

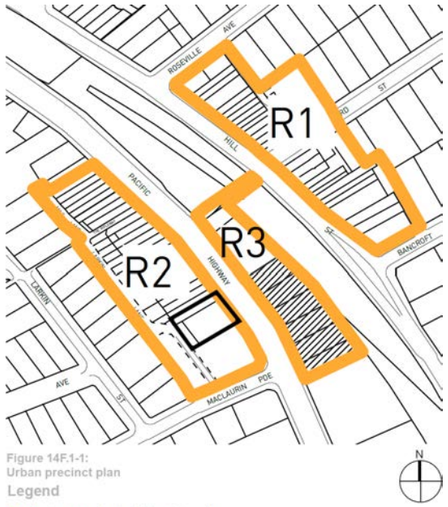

Figure 11.4 Urban Precinct Map
(Source: Ku-ring-gai Local Centres DCP - Roseville)

Figure 11.5 Public Domain
(Source: Ku-ring-gai Local Centres DCP - Roseville)

Figure 11.6 Key Community Infrastructure
(Source: Ku-ring-gai Local Centres DCP - Roseville)

6 Embellishment of the public domain areas and footpaths on the Pacific Highway and Hill Street including underground power lines, new lighting, high quality paving and furniture.

7 Upgrade of existing pedestrian lane ways including Sixth Mile Lane and the Rifleway.

8 Embellishment of Roseville Memorial Park to urban park standard.

Figure 11.7 Built Form Controls
(Source: Ku-ring-gai Local Centres DCP - Roseville)

Hatch indicates area for Council to consider in the future when DCP is reviewed















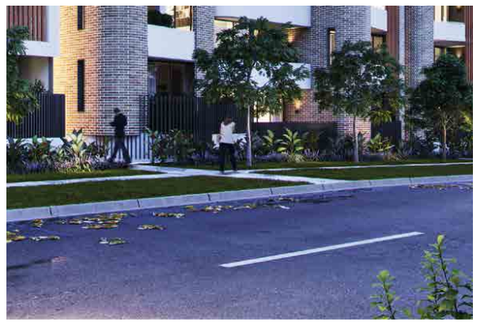


PBD | ARCHITECTS





PROFILE | OUR PRACTICE

PBD Architects and Project Managers is a multi-disciplined Design/ Development Management practice committed to creating buildings that meet objectives of the project brief and adhere to the highest Architectural standard.

With the experience and delivery capability to take projects through from inception to completion PBD are often engaged to prepare initial feasibility studies on raw sites generating both a design concept and financial plan for building procurement.

The practice has established links to a network of clients ranging from individual investors, local development companies and major international listed development corporations. These relationships have seen PBD Architects & Project Managers, manage the interests of international clients for potential projects in the vicinity of $350mil.

PROFILE | OUR PEOPLE

Experience within the PBD team stems from all facets of the construction industry including Design/ Architecture, Project/ Development Management, Contract Administration and Technical Support. This combined knowledge ensures a holistic approach to design and building procurement.

Design, cost and program are key commercial elements in what the team at PBD Architects and Project Managers consider an “integrated design process” where limitations of a project should be posed by the site and not its designer.

We are committed to providing an honest, reliable and personalized service in which meeting the financial and management goals of our clients become our primary concern.