

MARCH 2010

Site Built Form Review

29-31 SECOND AVE



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01

INTRODUCTION

1.1 OVERVIEW / PURPOSE OF THE REPORT

Cox Richardson has been asked by Blacktown City Council to review the development application with regards to the built form of a residential development at 29-31 Second Avenue, located to the north of the Blacktown CBD.

In reviewing the impact of built form, the particular issues include the impact on the surrounding public domain, private domain, as well as on the residents within the development itself.

Potential public domain impacts include:

- Streetscape – What sort of streets are envisaged in this Precinct? Should there be strongly defined edges or landscaped setbacks? Is the predominant form a low street edge with buildings beyond or towers in open space? What sort of solar access should be expected at street level? Achieving a reasonable level of building separation will be essential to achieve an attractive streetscape and amenity.
- Overshadowing of public open space and other public areas – key open spaces need to receive sufficient solar access for both residents and workers to use
- Other environmental impacts such as wind (not addressed in this report) will need to be addressed by others.

Potential private domain impacts include:

- Overshadowing of private open space and other residential buildings (or future buildings)
- Privacy between the proposed building and adjoining (or future buildings)

A number of assumptions and standards have been applied in the review of the proposal. This includes:

- General compliance with the 10 principles and the rules of thumb set out in SEPP 65, particularly context, solar access, privacy and building separation. These standards are already referred to in Council's DCP 2006
- Requiring that 50% of public open space should enjoy a minimum of 3 hours of solar access between 11am and 3 pm in mid winter. This standard is already referred to in Council's DCP 2006
- Car parking, traffic capacity and other technical issues have not been addressed in this study.

From this, the report comments on the following:

1. How the proposal complies with the general built form and overshadowing standards and the assumptions noted above.
2. General compliance with the rules of thumb of SEPP 65

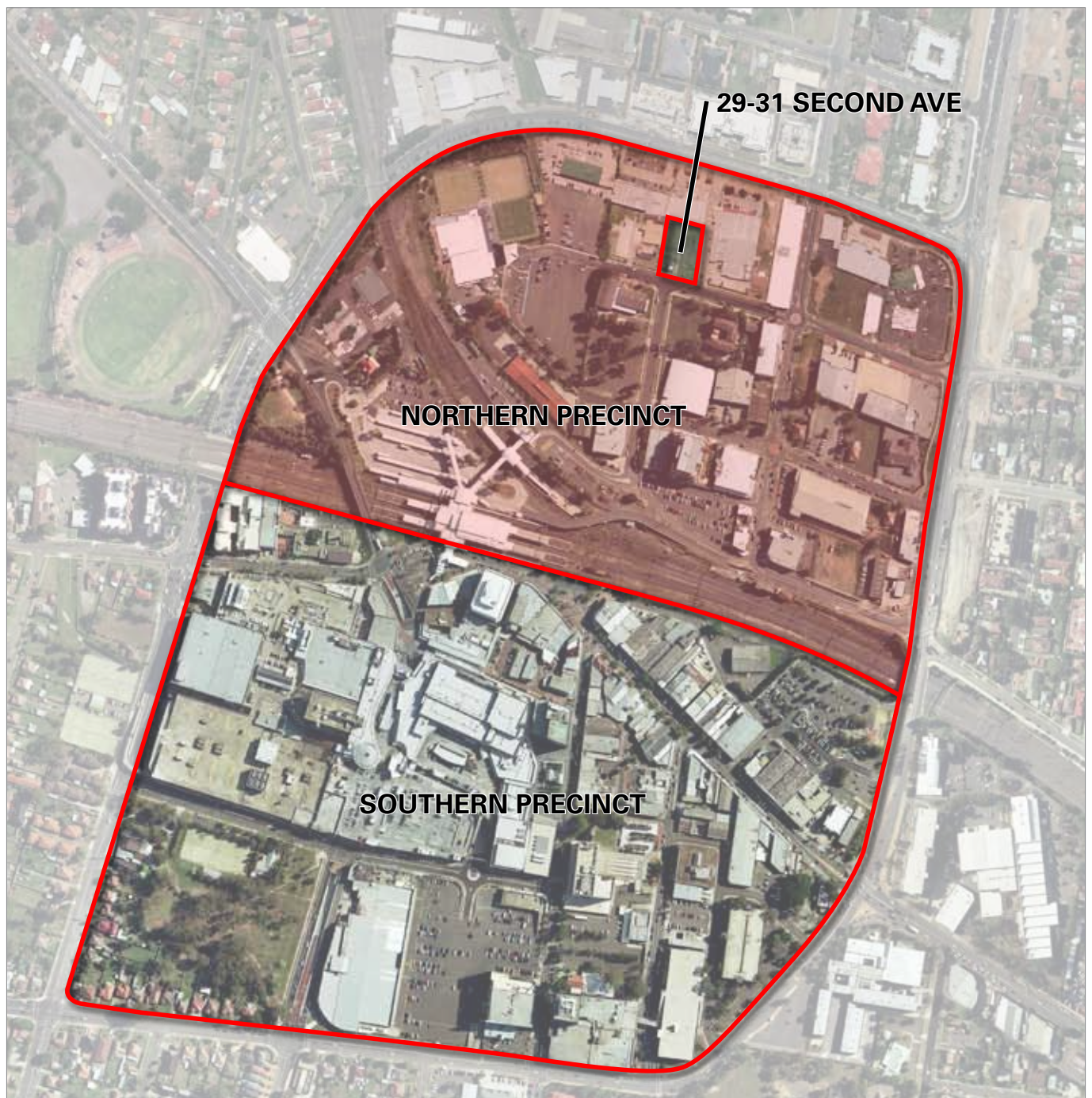


Figure 1 - Precincts of Blacktown's CBD - 29-31 Second Ave Highlighted

02

CONTEXT AND LAND USE

2.1 CBD CONTEXT

Blacktown CBD is one of the few centres with such a large employment potential. It is well located near a rail station and includes employment zones on the north and south sides of the rail line, as well as a large retail precinct. To the immediate north of the CBD there is also the potential for additional employment lands. Alpha Park on the south west edge of the CBD also provides a generous open space within walking distance.

There is also a large open space area including the showground and Francis Park to the north west.

It is important that the Centre is developed so that it may grow to Regional City status and achieve its employment and housing targets.



Figure 2 - The Structure of Blacktown - Key Land Uses and Landmarks

2.2 OPEN AND CIVIC SPACES

The CBD includes the following key open and civic spaces:

- The showground and Francis Park to the north west of the CBD
- Alpha Park to the south west. Note that Council is consolidating the park by acquiring sites on the west and south edges of the park
- The civic plaza adjacent to the library on Flushcombe Road

- The "village green" adjacent to the Civic Centre
- A plaza associated with the shopping centre south of the rail station
- A public park is also proposed for council owned land in the Northside Precinct

In addition to these spaces, there is significant parkland and recreational facilities located within 500m to the east of the CBD.



Figure 3 - CBD Open and Civic Spaces

03

BUILT FORM

3.1 STREETScape

In principle, buildings in the private domain should contribute positively to the public domain, especially with regards to creating streets that are comfortable in scale and provide good pedestrian amenity. Amenity includes solar access and safety.

In the case of the Northside precinct, there is likely to be a significant change in scale over time as the precinct has the capacity for redevelopment being so close to transport and being within the City Centre area.

It is recommended that built form controls here should achieve a well scaled streetscape as well as accommodating future development. One solution would be to require the following:

- Active uses at ground level
- No residential uses at ground level
- Low rise podiums that create an appropriate scale to the street with well defined edges. Minimal or zero setbacks would be appropriate
- Loading and other facilities to be consolidated away from the entry
- The street edge to be generally defined by a podium of no more than 2 - 3 storeys – a more detailed study would be required to resolve this
- Any development above the podium to be setback by at least three metres to the street

3.2 BUILDING SEPARATION / SETBACKS

SEPP 65 sets out building separation principles rather than setbacks.

In principle the SEPP requires that building separation be adequate to admit a reasonable amount of light to habitable areas. As the buildings increase in height, so does building separation. This also contributes to achieving privacy and view sharing. The table below indicates the extent required by SEPP 65.

SEPP 65, Part 01 local context (p28) set out the following rules of thumb:

HEIGHT	SEPARATION	ASSUMED SETBACK
4 Storeys or less		
Between habitable rooms	12m	6m
Between habitable + non-habitable	9m	4.5m
Between non-habitable	6m	3m
5 – 8 Storeys		
Between habitable rooms	18m	9m
Between habitable + non-habitable	13m	6.5m
Between non-habitable	9m	4.5m
9 Storeys +		
Between habitable rooms	24m	12m
Between habitable + non-habitable	18m	9m
Between non-habitable	12m	6m

With regards to building setbacks, it is generally assumed that adjoining sites should 'share' the separation between buildings. This would mean that a typical setback would be 50% of the required separation, unless the site adjoins a street or open space, where streetscape principles would be applied. Figure 5 indicates the impact of applying SEPP 65 literally on the 29-31 Second Ave site.

From the analysis carried out as part of this study (refer to the building separation studies in this section as well as the Background Studies in Section 5), it would appear that:

- For a site to accommodate a viable SEPP 65 compliant, 20-storey residential building wholly within its boundaries, a site width of approximately 45 metres is required. This would allow a 22 metre wide building comprised of say 18 metres in depth + 4 metres in balconies.

- The subject site is some 36 metres in width
- The adjoining sites are approximately 50 – 55 metres in width
- More generally within the northern portion of the precinct lots range in width from 20 to 60 metres. In compliance with the current DCP, it is assumed that lots less than 30 metres in width are to be consolidated to deliver wider development sites.

From the section study carried out of the proposed site and immediate adjoining sites (illustrated in Figure 6), each of these sites could potentially accommodate a 22 metre wide residential building of 20 storeys, with a separation of 24 metres between buildings. All buildings would sit within the overall stepping SEPP 65 envelope. From an urban design perspective tall thin buildings would be preferable to stepped buildings.

The current proposed residential tower is some 27 metres in width, although this varies as the building is curved. Note also that the adjoining towers are located asymmetrically within their sites to allow all three sites to accommodate 22 metre wide buildings.

An acceptable cumulate built form outcome could therefore be achieved by reducing the proposed tower in width and assuming that buildings of 22 metres maximum width would be located on adjoining sites.

This principle could also be applied to the other sites within the northern edge of the Northside precinct. A simple built form plan could be developed to ensure that this valuable inner city area is efficiently developed with a high quality built form outcome.

Actual building height recommendations are set out below in Section 3.3 as they are determined by maintaining a good level of solar access to public open space.

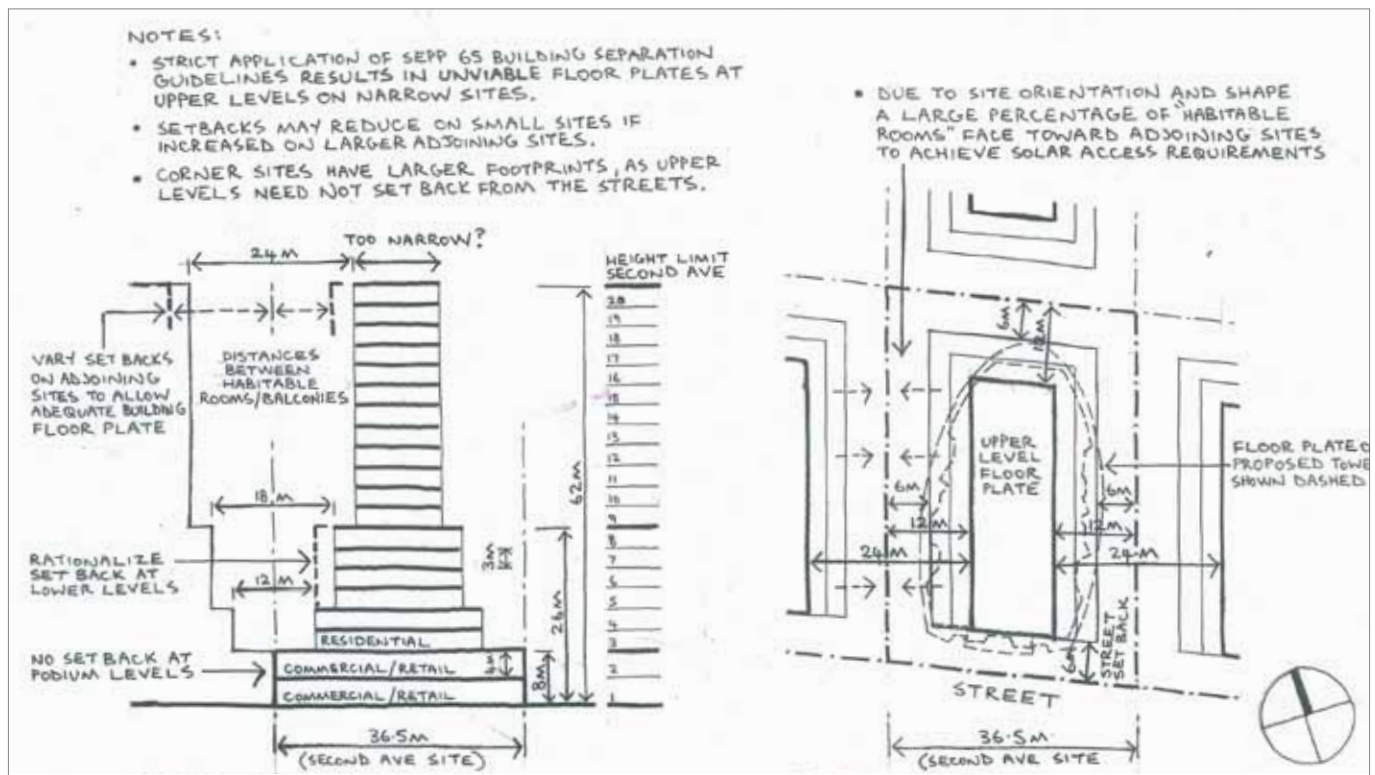


Figure 4 - SEPP 65 Compliant Building Separation Study

Figure 6 illustrates the SEPP 65 compliant building envelopes for 29-31 Second Ave and the two adjacent sites.

As shown in black, adhering to the SEPP 65 building separation guidelines on the 29-31 Second Avenue site results in a narrow and inefficient building envelope.

However, as shown in red, if setbacks are applied collectively across the three sites, rather than on a site-by-site basis, the resulting building envelope on 29-31 Second Avenue and the adjacent sites, achieves a much more efficient residential tower width of 22m (with 4m allowed for balconies) rather than a stepped building.

In order to achieve an effective mix of uses and to provide an active non-residential street edge. It is proposed that SEPP 65 controls for setbacks be applied to the residential tower on a 'height above podium' basis, rather than as 'height above ground level'. This would achieve the intended mixture of uses within the precinct without detracting from either residential yields or public amenity.

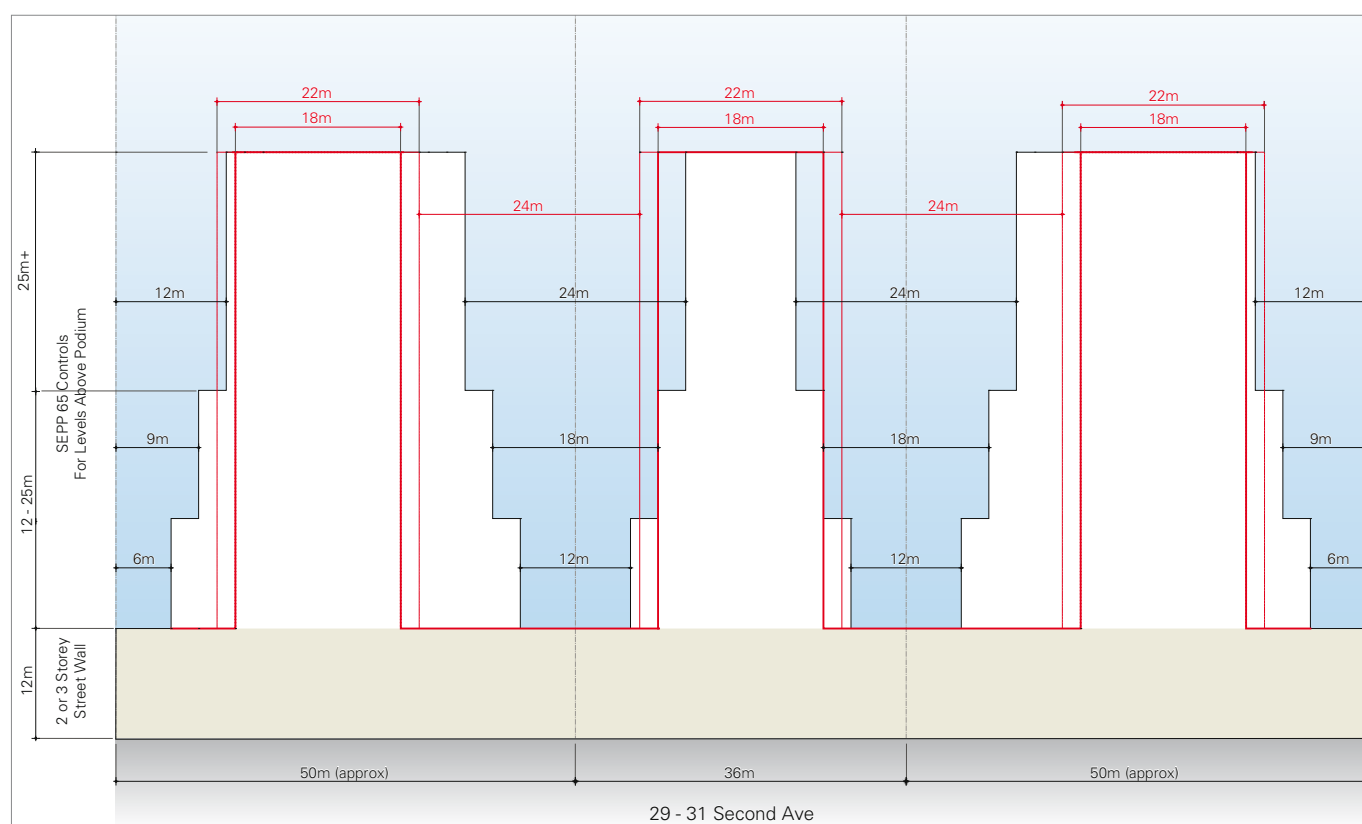


Figure 5 - Alternative Building Separation Study

3.3 OVERSHADOWING OF OPEN SPACE

The provision of suitable open space within the Northside Precinct of the Blacktown CBD will make the precinct more attractive as a place to live, work and recreate. It is important that solar access of the proposed parks within the precinct is protected so that, as per the Blacktown DCP, shadows cast by adjacent developments allow at least 50% of the park to be in full sunshine between the hours of 11am and 3pm.

The background study documented in Chapter 5 demonstrates the overshadowing of the proposed parks as a result of a number of development scenarios.

Individually, the proposal for 29-31 Second Avenue currently satisfies the required solar access for the parks (as shown by Figure 6).

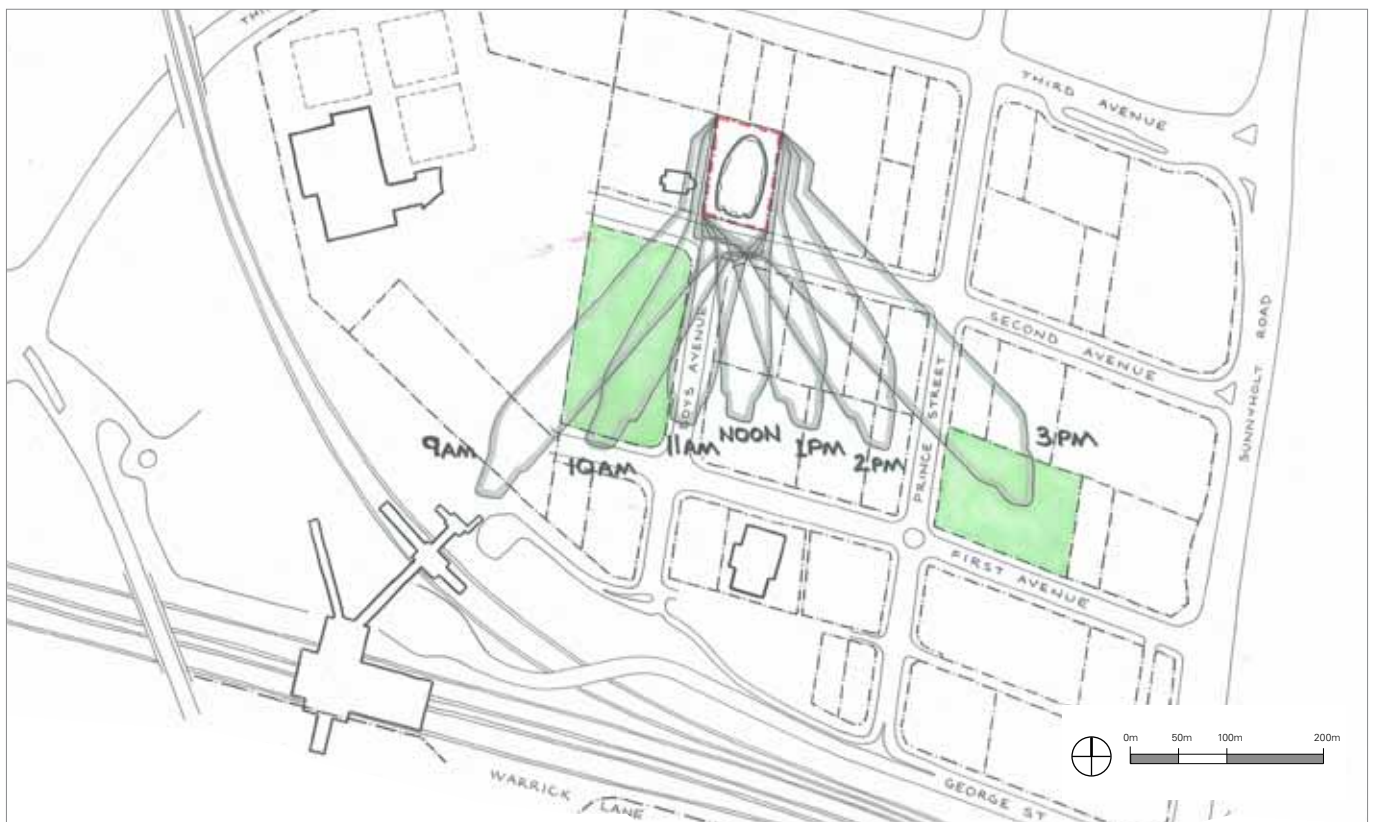


Figure 6 - 29-31 Second Ave - Overshadowing Diagram - June 21

04

SEPP 65 COMPLIANCE

4.1 BUILDING SEPARATION

For information regarding building separation please refer to section 3.2.

4.2 SOLAR ACCESS

- SEPP 65 GUIDELINE: 70% of apartments are required to receive about 3 hours of winter sunlight between 9am and 3pm.
- COMPLIANCE: Approx 105 apartments = 63% (similar the applicant's SEE noting that 105 apartments comply)

4.3 SOUTHERLY ASPECT

- SEPP 65 GUIDELINE: a maximum 10% of apartments to have a single aspect to the south
- COMPLIANCE: 9 apartments = 5.4%

4.4 NATURAL CROSS VENTILATION

- SEPP 65 GUIDELINE: 60% of apartments to be naturally cross-ventilated
- COMPLIANCE: 71 apartments = 42.3% (the applicants SEE argues that the design of balconies, blade walls and glazing create "areas of varying pressure leading to a natural flow of

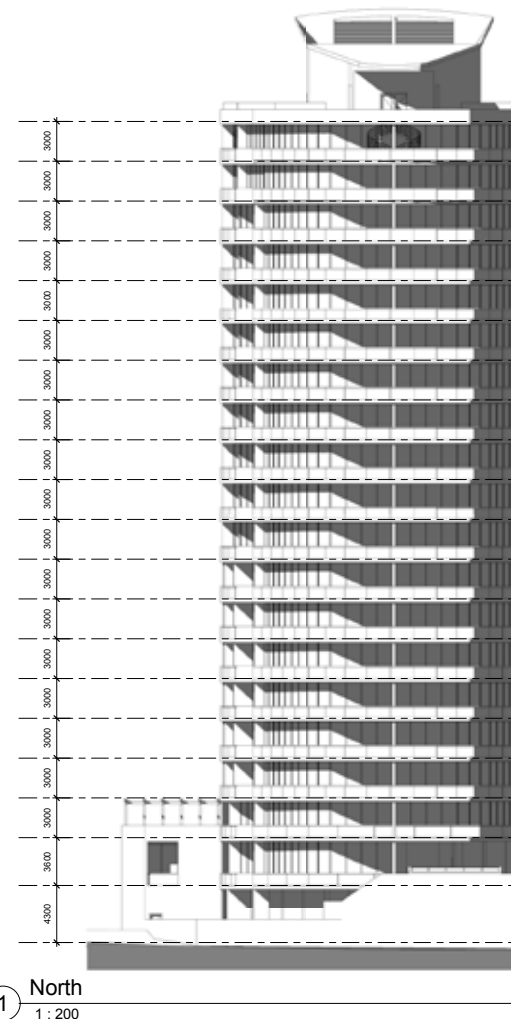
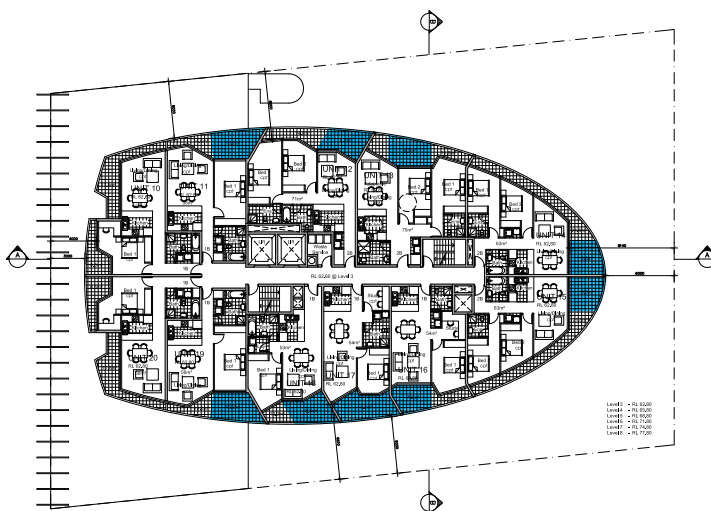
air")

4.5 COMMON OPEN SPACE

- SEPP 65 GUIDELINE: 25% to 30% of site.
- COMPLIANCE: Appears not to comply. The matter is argued at length in a "Letter of additional Information" provided in response to council's concerns. Concerns could be raised about the nature of the separated "communal roof decks" which appear to have access via plant areas.

4.6 CORES / CORRIDORS

- SEPP 65 GUIDELINE: Entry to a maximum of 8 apartments per core/corridor. Natural light to lobbies and corridors
- COMPLIANCE: 15 of the 19 levels of apartments have either 9 or 11 apartments per core/corridor. Compounding this is the lack of natural light to any of the lift lobbies or corridors on apartment levels above the second floor.



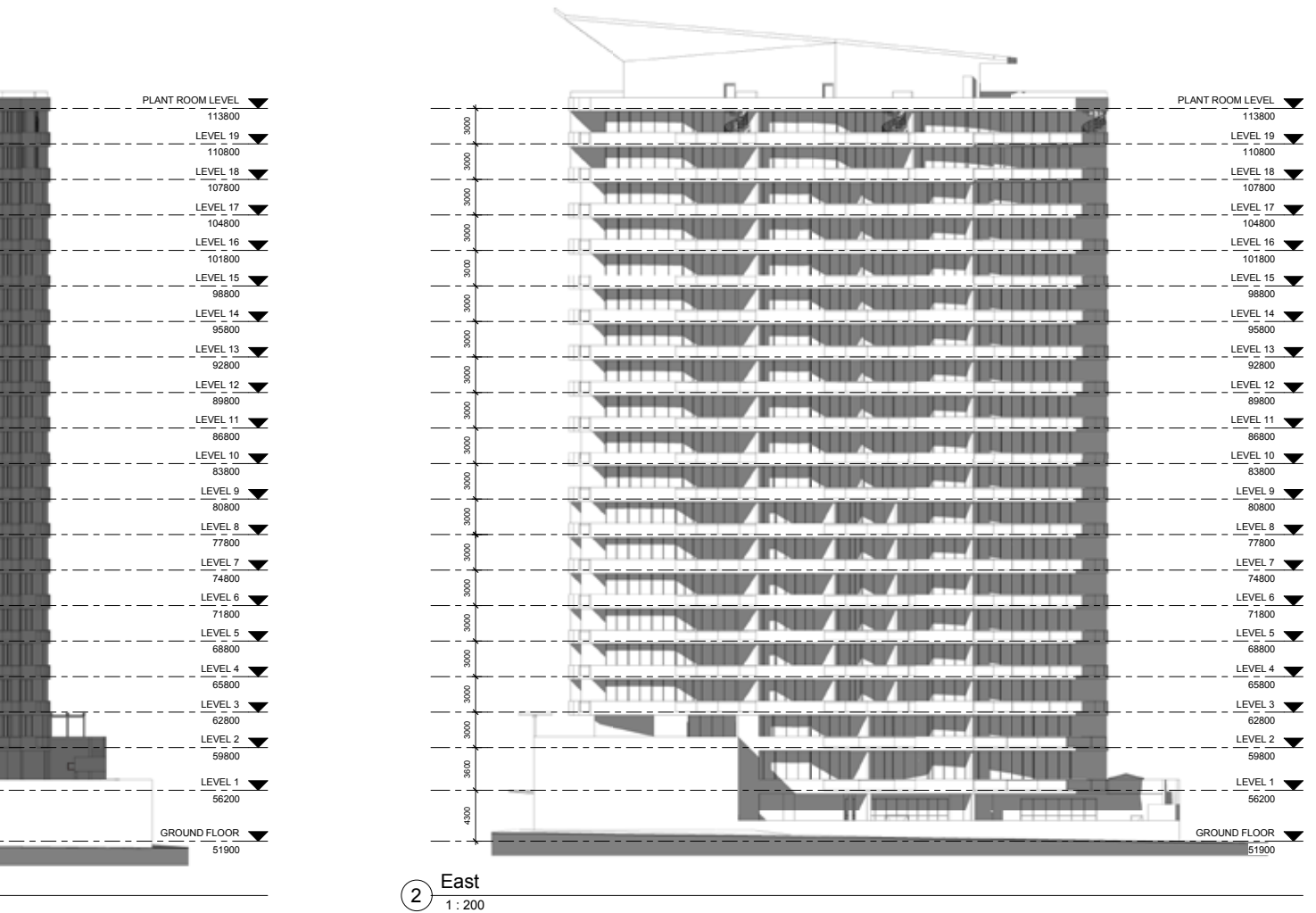


Figure 7 - 29-31 Second Ave - Proposed Floorplan and Elevations

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CONCLUSIONS

5.1 BUILT FORM AND SETBACKS

The overall building height is considered reasonable as it does not result in the overshadowing of 50% of a public open space between the hours nominated in this report.

The proposed building is an over development of the site. Increased setbacks at the upper levels are recommended, which are less than the SEPP65 'rule of thumb', as this site is narrower than its neighbours and it is demonstrated that each site could accommodate reasonable development and comply with SEPP65.

5.2 OVERSHADOWING

As noted in Section 5.1, the proposed development on 29-31 Second Avenue is not unreasonable with regards to overshadowing.



