

## **Michael Calabro Pty Ltd**

Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.

### **13-17 Metro Parade, Mawson Lakes**

361/L020/20

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**OVERVIEW**

<b>Application No</b>	361/L020/20
<b>Unique ID/KNET ID</b>	2020/08950/01
<b>Applicant</b>	Michael Calabro Pty Ltd
<b>Proposal</b>	Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.
<b>Subject Land</b>	13-17 Metro Parade, Mawson Lakes
<b>Zone/Policy Area</b>	Urban Core Zone (Core Area)
<b>Relevant Authority</b>	State Planning Commission, Schedule 10 Part 20 (called in by the State Co-Coordinator General)
<b>Lodgement Date</b>	16 April 2020
<b>Council</b>	City of Salisbury
<b>Development Plan</b>	Salisbury (City) Development Plan – Consolidated 4 April 2019
<b>Type of Development</b>	Merit
<b>Public Notification</b>	Category 2
<b>Representations</b>	18 valid reps
<b>Referral Agencies</b>	City of Salisbury, Government Architect (Non-mandatory)
<b>Report Author</b>	Elysse Kuhar, Senior Planning Officer
<b>RECOMMENDATION</b>	Development Plan Consent subject to conditions

**EXECUTIVE SUMMARY**

The applicant is seeking Development Plan Consent for the construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.

The proposal is a merit, Category 2 form of development. The application was referred to the Government Architect as a non-mandatory referral due to the applicant's choice to voluntarily engage in the pre-lodgement service and their early involvement in the project.

Amended plans were lodged in response to comments from the Government Architect, Council and representations received during the public notification period.

While it is noted that some aspects of the application do not fully meet relevant Development Plan policy, it is considered to be sufficiently consistent to grant Development Plan Consent subject to reserve matters and conditions.

**ASSESSMENT REPORT**

**I. BACKGROUND**

**I.1 Strategic Context**

The Mawson Lakes DPA Part 1 was approved in 2016 and rezoned the previously existing Multi-Function Polis Zone that covered Mawson Lakes and established a new policy framework to guide future development. Specifically, this introduced the Urban Core Zone, with identification of a 'core' and 'transition' area to guide density outcomes sought within the zone.



## **1.2 Pre-Lodgement Process**

Prior to the State Coordinator-General's decision to appoint the State Commission Assessment Panel (SCAP) as the relevant authority and at the behest of Council, the proponent voluntarily engaged in Design Review sessions offered by the Department of Planning, Transport and Infrastructure (DPTI).

The original scheme went to Design Review in October 2019. As a result of feedback from both Council and the Design Review Panel the proponent engaged a new architect and developed a new scheme to respond to majority of the concerns raised.

The revised scheme was presented at a second Design Review in February 2020. In response to feedback received in the Design Review the following amendments were made prior to lodgement:

- Raised the height of the brick podium
- Raised the height of the parapet on the south-eastern element of the building
- Increased the solid to void ratio of the ground level perimeter walls
- Installed three sets of French doors on the north-eastern side of the internal courtyard and three sets of French doors on the southern side of the internal courtyard
- Shifted the communal/breakout spaces on Levels 1-10 to the outer edges of the proposed building
- Grouped the communal/breakout spaces on levels 2-4 together (as with those on levels 5-7, & also 8-10)
- Deleted the balconies on the north-western side of level 1 to soften the interface to the neighbouring properties north-west of the site, and minimise potential for overlooking
- Deleted the footbridge connecting the proposed building to the proponents existing facility in order to draw students down to the ground level.

## **1.3 Public Realm Works (not forming part of the assessment)**

The applicant has proposed a number of public realm works in their documentation, including planting of trees in the verge and removal of existing street trees.

These works are outside of the Development Assessment process and subject to separate approvals with Council. The applicant has noted that they are prepared to enter into an infrastructure agreement which captures those activities and works in the public realm.

## **2. DESCRIPTION OF PROPOSAL**

Application details are contained in the ATTACHMENTS.

The application is for the construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.

The proposed building will contain, amongst other things:

- Two retail tenancies which will be leased to third parties
- A publicly accessible food court which will form part of, and be owned and operated by, the student accommodation facility
- 405 beds across 228 rooms, including 51 one-bed rooms and 177 two-bed rooms
- A room with two beds for the manager of the student accommodation facility
- Gymnasium, fitness studio, library and games rooms, staff and meeting rooms on level 1. All of which are ancillary and subservient features of the student accommodation facility.

A summary of the proposal is as follows:

<b>Land Use Description</b>	Student accommodation with ground level retail tenancies
<b>Building Height</b>	12 Storeys, 39m
<b>Description of levels</b>	<p><b>Basement:</b> 73 car parking spaces, 73 bicycle parking spaces</p> <p><b>Ground level:</b> 2 retail tenancies (185m<sub>2</sub>), 2 food tenancies (213m<sub>2</sub>), food court, student accommodation reception and waiting area, 14 car parking spaces, 10 visitor bicycle parking spaces, waste storage and loading.</p> <p><b>Level 1:</b> student accommodation, gym, Pilates room, library, staff room, meeting room, breakout area</p> <p><b>Levels 2-10:</b> Student accommodation, communal breakout area</p> <p><b>Level 11:</b> Student accommodation, manager's apartment, roof terrace and plant.</p>
<b>Apartment floor area (excluding balconies)</b>	<p><b>1 bed:</b> 38-46m<sub>2</sub></p> <p><b>2 bed:</b> 60-64m<sub>2</sub></p>
<b>Site Access</b>	Metro Parade and Capital Street
<b>Car and Bicycle Parking</b>	<p>73 car parking spaces, 14 visitor parking spaces</p> <p>73 bicycle parking spaces, 10 visitor bicycle parking spaces</p>
<b>Encroachments</b>	Cantilevered canopies at entrances
<b>Staging</b>	N/A

### 3. SITE AND LOCALITY

#### 3.1 Site Description

The site consistent of 1 allotment, described as follows:

Lot No	Street	Suburb	Hundred	Title Reference
Lot 535 in DP 74134	Metro Parade	Mawson Lakes	-	CT 5987/807

The subject site is located on the north-west corner of the T-junction of Capital Street and Metro Parade, Mawson Lakes.

The subject site is irregular in shape and has a frontage of 78.51m to Capital Street on its north-eastern and eastern sides, a combined frontage of 68.3m to Metro Parade on its southern and south-western sides, and a site area of 2556m<sub>2</sub>.

The subject site is vacant and devoid of trees, with only a transformer located on the land. It is currently used as a pedestrian short cut between Garden Terrace and the adjacent Capital Street Shopping Centre. There are no existing crossovers to the subject site.

#### 3.2 Locality

The locality is characterised by predominantly multi-storey mixed-use buildings as follows:

- The site is adjoined on its western side by two 3-storey mixed-use buildings and 2-storey mixed-use building.
- There is a 2-storey, mixed-use building on the north-eastern (opposite) corner of the T-junction of Capital Street and Metro Parade
- There is a 4-storey student accommodation facility (owned by the proponent) on the north-eastern (opposite) side of Capital Street
- The Capital Street Shopping Centre is located directly opposite the site
- There is an integrated service station complex on the north-eastern (opposite) side of Capital Street
- There is a 4-storey mixed-use building on the eastern corner of Central Link and Metro Parade

- There is a 9-storey building under construction on the north-western corner of the T-junction of Main Street and Metro Parade
- There is a 4-storey Quest Serviced Apartment building on the south-western corner of the T-junction of Main Street and Metro Parade
- There are two 3-storey residential flat buildings on the southern (opposite) side of Metro Parade
- There is a 4-storey mixed-use building on the south-western corner of the T-junction of Garden Terrace and Metro Parade

Capital Street and Metro Parade are sealed, two-way public roads, which fall under the care and control of Council. No parking is permitted along the north-eastern or eastern sides of the subject site. There are indented parking bays along the southern and south-western sides of the subject site (parking is permitted for up to 2 hours between 8am and 6pm on weekdays, with no restrictions outside of these times).

The Mawson Lakes interchange is located less than 400m to the north-west of the subject site and the University of South Australia's Mawson Lakes Campus is located less than 500m to the south-east of the subject site.

**Figure 1 – Location Map**



#### **4. COUNCIL COMMENTS – CITY OF SALISBURY**

Referral responses are contained in the ATTACHMENTS.

While Council broadly supported a number of aspects of the proposal, concerns regarding canopies, the entry foyer, ground floor height, location of ground floor tenancies, building height, external appearance, communal spaces, private open space, overlooking, access, parking, wind and landscaping were raised in their referral comments.

The applicant has responded to Councils comments, this response can be found in the ATTACHMENTS.

It is noted that due to time constraints, the Council were not able to make a response to all of the technical matters addressed in the applicant's response to their initial comments.

#### **5. GOVERNMENT ARCHITECT COMMENTS**

Referral responses are contained in the ATTACHMENTS.

The Government Architect is a non-mandatory referral. DPTI requested advice from the Government Architect due to their early involvement in the pre-lodgement process.

The Government Architect supports a high density student accommodation development on the subject site and the aspiration for the development to promote increased population and positively contribute to the activation of the locality, offering in principle support to the application.

However, the Government Architect was not yet convinced by the lack of direct access between the entry/lift foyer and the food court and highlighted opportunities for further refinement of the built form composition.

To ensure the most successful design outcome, the Government Architect recommends provision of the following:

- A high quality of external materials, including materials for the landscaped and public realm areas, supported by the provision of a materials sample board
- Additional information that demonstrates how the proposed soft landscape elements will be sustained and maintained.

It is recommended that conditions or reserve matters to this effect be attached to any consent granted this proposal.

The applicant's response to the Government Architects comments is in the ATTACHMENTS. While much of the applicants response to the referral comments spoke to changes that were made during the pre-lodgement process and prior to lodgement of the application (references to the letter from the Government Architect dated March 4), the applicant has addressed the points raised above, along with composition of the proposed building and a link between the entry foyer and the food court. This is discussed in the assessment below.

While the Government Architect did not update her initial referral comments, she supported the following amendments:

- Provision of an extra parking space in the basement car park
- Provision of a 1.5m glass wind screen to the southern alfresco area
- Privacy screens to the first and second floor windows along the western boundary
- Additional double doors proposed to provide access to the first floor terrace areas.

## 6. PUBLIC NOTIFICATION

The application was notified as a Category 2 development pursuant to the procedural matters of the Urban Core Zone as the proposed development was not listed as Category 1. Public notification was undertaken (by directly contacting adjoining owners and occupiers of the land) and 18 valid representations were received.

<b>Representor ID</b>	<b>Issue</b>
<i>R1</i>	<i>Opposes</i>
<i>R2</i>	<i>Opposes</i>
<i>R3</i>	<i>Opposes</i>
<i>R4</i>	<i>Opposes</i>
<i>R5</i>	<i>Supports with some concerns</i>
<i>R6</i>	<i>Opposes</i>
<i>R7</i>	<i>Opposes</i>
<i>R8</i>	<b><i>Invalid representation – not an adjoining neighbour for Cat 2</i></b>
<i>R9</i>	<i>Opposes</i>
<i>R10</i>	<i>Opposes</i>
<i>R11</i>	<i>Opposes</i>
<i>R12</i>	<i>Opposes</i>
<i>R13</i>	<i>Opposes</i>
<i>R14</i>	<i>Opposes</i>
<i>R15</i>	<i>Opposes</i>
<i>R16</i>	<b><i>Invalid – received after end date of public notification</i></b>
<i>R17</i>	<i>Opposes</i>
<i>R18</i>	<i>Opposes</i>
<i>R19</i>	<i>Opposes</i>
<i>R20</i>	<i>Opposes</i>
<i>R21-32</i>	<b><i>Invalid – received after end date of public notification</i></b>



Figure 2 – Representation Map



Key concerns raised by representors include, but are not limited to:

- Building height
- Building bulk and scale
- Overshadowing
- Insufficient car parking
- Traffic impacts
- Noise and nuisance behaviour
- Impact on rental potential for other properties in Mawson Lakes
- Dumping of hard rubbish, general littering and odour from waste
- Impact on existing views
- Appropriateness of the proposed land uses in the locality
- Proximity to Parafield Airport

It is noted that some of the concerns raised do not fall within the ambit of a planning assessment (i.e. funding of the proposed development, rental security), therefore please refer to ATTACHMENT 5 for detailed representations.

14 representations were also received by the State Commission Assessment Panel, but were either assessed as being invalid (in accordance with the Development Regulations) or received after the close date.

A copy of the applicant's response to representations is contained in ATTACHMENT 6c.

## 7. POLICY OVERVIEW

The subject site is within the Urban Core Zone as described within the Salisbury (City) Development Plan Consolidated 4 April 2019.

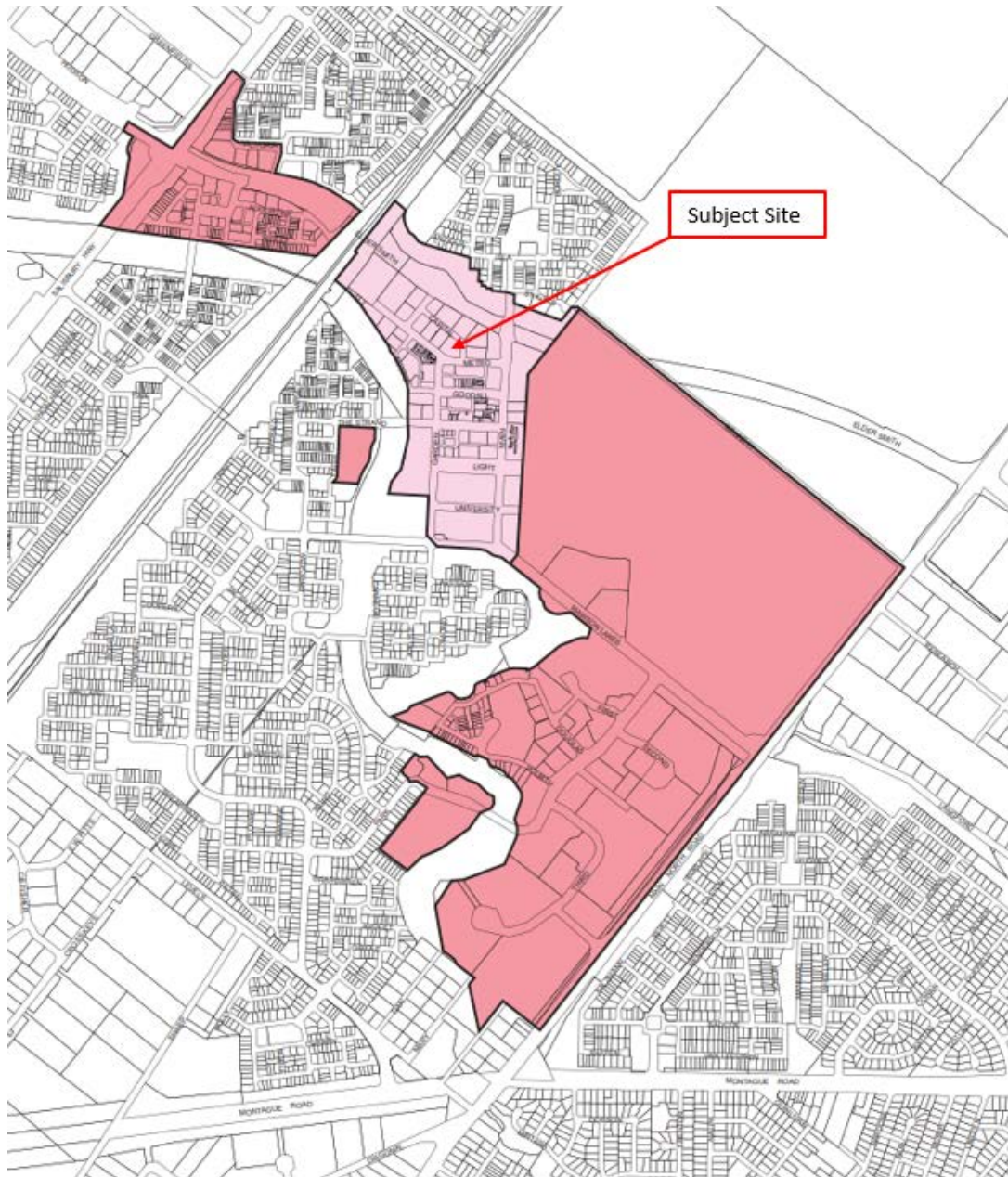
Relevant planning policies are contained in ATTACHMENT 8 and summarised below.

Figure 3 – Zoning Map





Map



 Core Area  
 Transition Area

Scale 1:15000  0 metres 400 800

## 7.1 Zone

The Urban Core Zone will function primarily as a District Centre that supports housing at medium and high densities with a range of dwelling types conveniently located in proximity to high frequency public transport services, recreation, commercial, shop, office and other mixed use activities.

Medium and high density housing, primarily in the form of row dwellings, residential flat buildings and mixed use buildings will be developed in the zone.

The Core Area will provide the greatest intensity of land use and activity in the zone with a mix of residential, commercial and employment generating activities integrated with adjacent transit stops.

Student accommodation is strongly encouraged in the Core Area to assist in delivering an overall mix of residential activity in the area.

## 7.2 Council Wide

Council wide provisions provide general guidance regarding design and appearance, multi-storey development, transport and access, environmental factors and interface between land uses.

## 7.3 Overlays

### 7.3.1 Airport Building Heights

The subject site is within Zone D of the Airport Building Heights overlay, all structures exceeding 45m above existing ground level require a referral to the Commonwealth Secretary for the Department of Transport and Regional Services. The proposed building does not exceed 45m above existing ground level and therefore does not trigger this referral.

## 8. PLANNING ASSESSMENT

The application has been assessed against the relevant provisions of the Salisbury (City) Development Plan, which are contained in the Attachments.

### 8.1 Quantitative Provisions

	Development Plan Guideline	Proposed	Guideline Achieved	Comment
<b>Building Height</b>	10 Storeys and up to 40.5m (plus 2 storeys and under 8m for incentives)	12 storeys and 39m above ground	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	See section 8.3 below
<b>Car Parking</b>	Non-res – 3/100m <sup>2</sup> GLA = 14  Res – 0.75/dwelling (plus 20% reduction for incentives)  No quantitative guidelines for student accommodation	14 at grade and 73 in basement – Total 87	YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/>	See section 8.10.3 below
<b>Bicycle Parking</b>	Shop - 1/300m <sup>2</sup> GLA, plus 1/600m <sup>2</sup> GLA visitor –  Residential – 1/4 dwellings plus 1/10 dwellings visitor	73 in basement 10 at ground level = 83 in total	YES <input type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/>	See section 8.10.4 below

	No quantitative guidelines for student accommodation			
<b>Setback from Primary Road</b>	No minimum		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	See section 8.4 below
<b>Setback from Secondary Road</b>	0.9m		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	See section 8.4 below
<b>Side Setback</b>	No minimum		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PARTIAL <input type="checkbox"/>	See section 8.4 below

## 8.2 Land Use and Character

The Urban Core Zone will function primarily as a District Centre that supports housing at medium and high densities with a range of dwelling types conveniently located in proximity to high frequency public transport services, recreation, commercial, shop, office and other mixed use activities.

Medium and high density housing, primarily in the form of row dwellings, residential flat buildings and mixed use buildings will be developed in the zone.

The Core Area will provide the greatest intensity of land use and activity in the zone with a mix of residential, commercial and employment generating activities integrated with adjacent transit stops.

Student accommodation is strongly encouraged in the Core Area to assist in delivering an overall mix of residential activity in the area.

The Government Architect has indicated support for a high density student accommodation development on the subject site and the aspiration for the development to promote increased population and positively contribute to the activation of the locality, offering in principle support to the application.

Similarly, Council noted that the proposed development is consistent with the objectives for high density development as it is in close proximity to the Mawson Lakes rail interchange, adjacent to local shops, and in close walking distance to the UniSA Mawson Lakes Campus; and student accommodation and shops are envisaged uses in the zone.

A number of representors raised concerns with the land uses proposed, namely student accommodation and the food court, and their appropriateness on the subject site.

The applicant noted in their response that both shops and student accommodation are specifically listed as envisaged uses within the Urban Core Zone that will provide employment opportunities and will contribute to the public realm as sought by council wide and zone provisions, with the student accommodation facility being supervised at all times.

While it is noted that there have been concerns raised by representors regarding the proposed land uses, student accommodation and shops are clearly envisaged in the Urban Core Zone. This aspect of the proposal is considered to be acceptable.

## 8.3 Building Height

The Desired Character of the zone provides that the Core Area will provide the greatest intensity of land use and activity in the zone with a mix of residential, commercial and employment generating activities integrated with adjacent public transit stop(s).

Urban Core Zone Principle of Development Control 23 seeks a maximum height of 10 storeys and up to 40.5m, with incentives for potential additional height provided by Principle of Development Control 27. Specific to this site are:

Form of development	Additional building height above maximum allowed height in the zone	Car parking Reduction (rounded to the nearest whole number)
Site of development located within 200 metres of a fixed public transport stop		30 per cent
The development includes undercroft parking with access from a road located to the side or rear of the site	1 storey	10 per cent
A building including non-residential development on the ground floor (or first two floors) with residential development on the floors above	1 storey	10 per cent except on land shown on <i>Overlay Map(s)</i> - <i>Strategic Transport Routes</i>
A building including a rooftop garden that occupies a minimum 25 per cent of the building footprint area	1 storey	
Maximum accumulated allowance	For buildings 5 storeys or less - 1 storey (and less than 4) metres additional building height.  For buildings of 6 storeys or more - 2 storeys (and less than 8 metres) additional building height	30 per cent

The combined effect of these policies would allow for a maximum building height of 12 storeys and up to 47.49m on the subject site.

At its tallest point, the proposed building is 12 storeys and 39m, which, given the above, meets Development Plan policy for maximum building height.

The Government Architect supports the proposed building height in principle however notes that the building will present as a built form of significant scale within the existing surrounding context.

Council similarly notes that while the proposed height and scale of the building is not fundamentally in conflict with the Urban Core Zone, the building will be significantly taller and larger than other buildings in the locality and in Mawson Lakes more broadly.

All of the representations received identified building height as a concern, particularly with regard to the prevailing building heights in the locality.

In their response to representations the applicant identified that the proposed building is 1.5m below the maximum building height (or 9.49m below the maximum building height applying incentive policy), and 6m below the 'Airport Building Height' prescribed for zone D, further noting that where a proposed development falls within one of the primary purposes of the zone, the fact that it will constitute a first intrusion of that type of development does not constitute a planning justification for refusal.

While it is noted that the proposed building will be significantly taller than the surrounding development this aspect of the proposal is within the maximum building height sought by the Development Plan.

## 8.4 Setbacks

Urban Core Zone Principles of Development Control 24, 25 and 26 seek the following minimum setbacks in the Core Area:

- Minimum setback from the primary road frontage – no minimum
- Minimum setback from side boundaries – no minimum
- Minimum setback from secondary road frontage – 0.9m
- Minimum setback from rear allotment boundary – 3m when land not in a different zone

Given that the rear of the site is technically a secondary road frontage, the north-western boundary is considered to be a side boundary.

Where a building is sited on or close to a side boundary, the side boundary wall should be sited and limited in length and height to minimise visual impact and overshadowing.

The proposed development has a setback from the primary street frontage (Metro Parade) of 6.1m, a setback from the secondary street/rear (Capital Street) of 5.4m and abuts the side boundary. Above ground level, setbacks are as follows:

### Level 1

- Up to 5.5m from Capital Street
- Up to 4.8m from Metro Parade
- Up to 3m from the side boundary

### Level 2-10

- Up to 1.9m from Metro Parade and Capital Street
- 3m from the side boundary

### Level 11

- Up to 11.7m from Capital Street
- Up to 1.9m from Metro Parade
- Not less than 3m from the side boundary

A fibre cement wall of up to 6.5m will need to be constructed along the north-western boundary of the site as it is required to ensure the proposal complies with the relevant requirements of the *Environment Protection (Noise) Policy 2007* and to shield occupants of the neighbouring residences from noise associated with the at-grade car park and waste enclosures.

Setbacks were not raised by any of the representors during the public notification period, nor by any of the referral bodies.

The proposed development meets the relevant setbacks sought for the Urban Core Zone.

## 8.5 Design and Appearance

### 8.5.1 Bulk and Scale

Council wide policies regarding bulk and scale generally seek that the overall form of buildings is sympathetic to the scale of development in the locality and with the context of its setting with regard to shape, size, materials and colour.

Buildings should be designed to reduce their visual bulk and provide visual interest through elements such as articulation, colour and detailing, small vertical and horizontal components, design and placing of windows and variations to facades.



The Planning Report for the proposed development states:

*“The architectural expression of the proposed building is characterised by a series of solid wall sections that are clad in contrasting fibre cement panels. The external appearance of these panels has been enhanced through the use of glazed vertical recesses and horizontal rebates or bands, the latter of which serve to accentuate the width of the proposed building whilst reducing its apparent height.*

*The glazed reveals at the end of the corridors on Levels 1 through to 11 also serve to temper the mass of the proposed building by breaking it up into discrete elements and casting shadows across various surfaces”.*

The Government Architect raised some concern with the scale of the building in the surrounding context, identifying an opportunity for further refinement of the built form composition, including an increase in the podium height to achieve an improved relationship with the surrounding buildings, and the provision of further height differentiations of the main built form to achieve additional articulation and break down of the apparent bulk and scale of the building. Council mirrored this view in their comments.

The applicant, in their response, advised that they were reluctant to make any further changes to the composition of the proposed building, citing the use of fibre panels, glazing, vertical recesses and horizontal rebates to accentuate the width of the building and reduce the apparent height; glazed reveals at the end of corridors to temper the mass of the building; and use of brick and glass at ground level to provide a balanced base and introduce ‘fine grain’ elements in the streetscape.

A number of representors also raised concern with the scale of the building in the surrounding context, noting this was mostly with regard to the proposed height of the building.

While the proposed building incorporates design elements intended to reduce the apparent bulk of the building, it is considered that it will present a significant bulk and scale in the locality. While this is not ideal, it is acknowledged that the Urban Core Zone specifically contemplates buildings of this height within the Core Area and envisages student accommodation developments which typically have a built form not dissimilar to the proposed building.

### **8.5.2 Materiality**

Council wide provisions regarding materiality generally seek that buildings, landscaping, paving and signage have a co-ordinated appearance with permanently fixed external screening designed and coloured to complement the buildings external materials and roof plants forming an integral part of the building design in relation to external materials and finishes.

Materials proposed for the development include:

- Articulated fibre cement cladding (white)
- Flat fibre cement cladding (light grey)
- Brick (‘Bowral Blue’)
- Rendered masonry (dark bronze or similar)
- Powder-coated aluminium and metal (dark bronze or similar)
- Clear glass

The proposed building’s plant and equipment will be stored within an enclosure on Level 11, and therefore concealed.

The Government Architect supports the proposed tactile materiality of the podium element, as brickwork provides a fine grain character to the building at street level also stating that *“the light weight cladding system is critical to ensure delivery of a high quality outcome cognisant of a landmark development”*. However, has recommended the provision of a materials sample board to ensure high quality of materials. It is recommended that a reserve matter seeking this be attached to any consent granted this proposal.

The materiality, along with the hard and soft landscaping, of the proposed development is considered to have a co-ordinated appearance. The proposal generally meets relevant provisions regarding materiality. This aspect of the proposal is considered to be acceptable. A reserve matter seeking a materials sample board has been recommended for attachment to any consent granted this application, in line with comments from the Government Architect.

## **8.6 Public Realm**

The desired character statement of the Urban Core Zone seeks that development contribute positively to the quality of the public realm. In core areas, the ground and first floors of buildings should have minimum ceiling heights of 4.5m to allow for adaptation to a range of land uses including shops, office and residential without the need for significant change to the building.

Council wide, medium and high rise development, provisions generally seek that development provide outdoor seating, landscaping and covered walkways where possible, and establish links with the public realm. Buildings should achieve a human scale at ground level through the use of elements such as canopies, with separate entrances for residential and non-residential uses that are oriented toward the street and clearly identifiable.

The ground floor level will have a floor to floor height of 4.5m and a floor to ceiling height of 3.4m. A cantilevered canopy is to be installed above each entrance to the food court on the ground level. Majority of the ground floor levels perimeter walls will be fitted with clear glass in order to activate street level and allow for passive surveillance to occur.

The main entrance to the proposed building will be oriented towards the bend in Capital Street, with the cantilevered canopies helping to identify the entrances to the food court and provide shelter from the elements. The Student accommodation facility, retail tenancies and food court will have separate access points.

An outdoor dining area is situated between the food court and the verge fronting Metro Parade, with the cantilevered canopies and brick colonnades combining to create a human scale at ground level that provides shelter from the elements.

Both Council and the Government Architect in their referral comments raised some concern that there was no link between the entry foyer and the food court. The applicant has advised that they do not wish to link the entry foyer and food court together due to potential safety concerns with allowing general public to access the foyer entry via the food court; provision of weather protection via the brick colonnades and podium; multiple existing access points to the food court; and counter-productivity to providing activation at the ground floor level.

Council also raised concerns with the ground floor ceiling height, referring to Urban Core Zone Principle of Development Control 21 that seeks a 4.5m height. The applicant, while noting the ceiling height is 3.4m at ground level, maintains the view that it still satisfies the intent of the clause as it can, and will, be used exclusively for non-residential purposes.

While the proposal does not meet the Development Plan policy regarding ground floor ceiling height, it is considered that the intent of this policy is to ensure that the ground level of buildings can appropriately facilitate non-residential uses, which it does. Further, many elements of the proposal are considered to contribute to the public realm and activate the street frontage, with a fine-grain, human-scale at ground level and contributing to passive surveillance of the public realm.

## **8.7 Internal amenity**

The Development Plan does not provide specific guidance for student accommodation with regard to internal amenity. Residential development generally should have adequate separation between habitable room windows and balconies from other buildings, ensure a short range visual outlook to public or communal space, maximise the use of natural light and ventilation and ensure a maximum distance of 8m from habitable rooms to a window providing natural light.



The proposed development has been specifically designed for student occupation, as such the apartments reflect a reduced internal floor plate, typical of a development of this nature. The provision of the central core/light well enables the 'internal' rooms to overlook the internal courtyard, while the 'external' rooms have views to the public realm.

All beds and living areas will be within 8m of an openable window, reducing the need for artificial lighting and mechanical heating and cooling.

The proposal includes a range of indoor and outdoor communal areas to meet the social, education and cultural needs of the student residents. There are 10 internal communal spaces/break out areas located throughout the development, providing a variety of spaces for the students to interact.

The Government Architect strongly supports the inclusion of internal communal spaces on each residential floor in addition to the consolidated communal facilities on the first floor and the location of the communal spaces to the outer edges of the building to optimise solar access and improve the development's opportunity to engage with the surrounding environment through activated street frontages. The provision of natural outlook and natural ventilation to habitable rooms is also supported. While the quality of daylight for inner facing units on the lower floor levels is compromised, the Government Architect acknowledges that the internal layouts of the residential units are generally rational and practical.

Council in their comments questioned the access to the external terrace at level 1. The applicant has amended their plans to reflect this. Council also noted that the rooms are not served with any private open space. While this would not be ideal in a typical residential development, for safety reasons, private open space is often not provided in student accommodation facilities.

Council encouraged the applicant to ensure that the windows belonging to the communal spaces on Levels 1-10 were openable. The applicant has amended their plans accordingly.

This aspect of the proposal is considered to be acceptable.

## **8.8 Communal Open Spaces**

Council wide Medium and High Rise Development Principle of Development Control 19 seeks that communal open space be located to maximise solar access, be accessible to all users, contribute to visual privacy between apartments and create a pleasant outlook.

The proposed internal courtyard and rooftop terrace provide a combined 545m<sup>2</sup> of communal open space that will be accessible to students and the student accommodation facility employees.

The applicant has noted that although the courtyard will receive a lesser amount of natural light, particularly during autumn, winter and spring, the primary purpose of the space is to provide natural light and ventilation, and a pleasant outlook to the 'internal' rooms. It is further noted that this space is secondary to the rooftop terrace and also supplemented by 10 internal breakout spaces.

As discussed in section 8.7 above, Council had queried access to the Level 1 terraces, which the applicant has since addressed.

The Government Architect supports the inclusion of a centrally located communal open space and, while noting the limited solar access, acknowledges the purpose of the void as an effective daylight source for internal facing rooms. The Government Architect also supports the inclusion of communal space on the rooftop.

This aspect of the proposal meets relevant Development Plan policy and is considered to be acceptable.

## **8.9 Landscaping**

Council wide policies regarding landscaping generally seek that the amenity of land and development be enhanced with appropriate planting and other landscaping works, using locally indigenous plant species where possible.

The applicant has provided the following details regarding landscaping:

- Potted plants are to be installed within the confines of the outdoor dining area
- Potted plants are to be installed in, and around, the lobby on the ground floor level
- The internal courtyard will feature 16 trees and an assortment of raised planter beds with integrated seating
- Raised planter beds will be installed along the outer edges of the outdoor terraces on Level 1
- Potted plants are to be installed within each of the communal/breakout spaces
- A cantilevered planter bed with cascading plants will be installed along the outer edge of each of the communal/breakout spaces
- The rooftop terrace will feature an assortment of potted plants
- A creeper will be trained to sprawl across the top of the canopy which has been designed to cover approximately half of the rooftop terrace area
- All plants are to be irrigated year-round.

It is noted that the internal courtyard will not receive full sun during the winter months and restricted sun during summer with a comparable environment to a tight city street with trees receiving reflected sun from the façade glazing. As such, the applicant has selected trees for this environment.

Council raised some concern with the proposed use of olive trees and *Ficus macrocarpa hillii* in the landscaping of the proposed development. The applicant has advised that the proposed olive trees will be sterile and therefore not bear fruit, however, is prepared to replace them with bay leaf trees if Council is concerned. Further, the 'flash' variety of *Ficus macrocarpa hillii* has been specifically chosen as it is a smaller, less invasive variety. The planters within the internal courtyard will also be completely waterproofed and sealed, minimising the chance for wayward roots.

The Government Architect, in her referral comments, sought additional information that demonstrates how the proposed soft landscape elements will be sustained and maintained.

The applicant provided the following details regarding landscaping:

- the Applicant intends to engage a maintenance contractor;
- the contractor's tools and products will be kept in the 'linen and cleaning store' on Level 1, as the bulk of the contractor's work will revolve around the internal courtyard on, and the terraces located around the perimeter of, Level 1;
- the contractor will be able to safely and conveniently access the internal courtyard and the perimeter and rooftop terraces from inside of the building;
- all of the organic matter collected from the landscaped areas will be taken down by lift to the waste enclosure on the south-eastern side of the aisle associated with the at-grade car park; and
- all of the planter beds will be fitted with automated irrigation.

The Government Architect's comments still stand as stated above.

While the proposal is generally considered to meet relevant Development Plan policy regarding landscaping, further detail regarding a detailed ongoing maintenance strategy for the landscaping has been requested. The State Commission Assessment Panel may be of a mind to attach reserve matter seeking a landscape management plan to any consent granted this proposal.

### **8.10 Overlooking and Overshadowing**

The desired character statement for the Urban Core Zone states that as development intensifies, overlooking, overshadowing and noise impacts will be moderated through good design and noise attenuation techniques. While Zone Principle of Development Control provides guidance regarding overshadowing of adjacent properties for buildings over three storeys, this does not apply in the Core Area.

Council wide provisions generally seek that the design and location of buildings should enable direct winter sunlight into adjacent dwellings and private open space and minimise direct overlooking of habitable rooms and open spaces of dwellings.

Shadow diagrams provided with the application show that the directly adjacent properties to the north-west will not be effected by overshadowing. Properties to the south across Metro Parade at 16-18 Metro Parade will encounter overshadowing between 9am-2pm, while properties located at 6-14 Metro Parade will encounter overshadowing between 12pm-3pm, during the winter solstice. No overshadowing will be encountered during the summer solstice.

Overlooking and overshadowing were raised by a number of the representors during the public notification period, with Council mirroring some concern for overlooking to the second floor bedroom windows of the neighbouring north-western properties. Plans were amended to include privacy screening to the Level 1 and 2 windows to the north-western façade in order to minimise direct overlooking of the adjacent properties private open space areas.

While there is some overshadowing of properties to the south across Metro Parade, the proposed development meets Development Plan policies regarding overshadowing and overlooking.

### **8.11 Noise Emissions**

Council wide provisions generally seek that development be located and designed to minimise adverse impact and conflict between land uses, protect community health and amenity from adverse impact of development, not cause unreasonable noise interference and include noise attenuation measures that achieve the relevant *Environment Protection (Noise) Policy* criteria.

Sonus has undertaken an Environmental Noise Assessment for the proposed development. This assessment considered: patrons in outdoor areas, on-site vehicle movements, general car park activity, truck loading activity, mechanical plant and rubbish collection.

The assessment found that the predicted noise levels from the proposed development will achieve the relevant requirements of the *Environment Protection (Noise) Policy* subject to implementation of the treatments recommended in the report, comprising:

- Specific wall and roof constructions
- Installation of acoustic absorption within the car park
- Restricting the times of deliveries
- Restricting the times of retail activities
- Ensuring that delivery vehicles do not idle and refrigeration units do not operate while unloading
- Selecting mechanical plant and treatment to achieve the recommended design noise levels
- Restricting the times for rubbish collection

A number of representors raised concerns with noise and nuisance behaviour, concerned that students will generate an appreciable amount of noise, particularly during 'party season'. The applicant has advised that the student accommodation facility will be supervised at all times and also takes responsibility for providing a tranquil environment for the students in order to maximise concentration, further stating that the student accommodation facility on the north-eastern (opposite) side of Capital Street, which is owned and operated by the applicant, has been operating for some time without receiving noise-related complaints. Finally, the applicant has noted that domestic noise is a matter for the South Australian Police to deal with.

It is considered that the proposed development has been designed to achieve the relevant requirements of the *Environment Protection (Noise) Policy* and meets Development Plan provisions regarding noise emissions. It is recommended that a condition requiring the applicant to integrate the recommendations of the Environmental Noise Assessment be attached to any consent granted this application.

## **8.12 Views**

Council wide Design and Appearance provisions seek that building form should not unreasonably restrict existing views available from neighbouring properties and public spaces.

A number of representors raised concern regarding the loss of views to the Adelaide Hills as a result of the proposed development.

The applicant, in their response to representations, noted that *“the views...are borrowed across land that remains in private ownership, and is entitled to be developed in accordance with the objectives and desired character of the Urban Core Zone.* Further noting that the proposed building does not exceed the maximum building height of the zone.

Noting that policy in the zone explicitly contemplates the proposed land use and, with incentive policy, building heights of up to 12 stories, it is considered that the proposal generally meets relevant Development Plan policy regarding views.

## **8.13 Traffic Impact, Access and Parking**

### **8.13.1 Traffic Impact and Access**

Council wide policy generally seeks that development provide safe and convenient access for all anticipated modes of transport including cycling, walking, public and community transport and motor vehicles; and is designed to provide convenient access for people with a disability. Development should make sufficient provision on-site for the loading, unloading and turning of all traffic likely to be generated and avoid unreasonable interference with the flow of traffic on adjoining roads.

The proposed development will have three new access points, two located side-by-side on Capital Street and one on Metro Parade.

Both the access point on Metro Parade and the easternmost access point on Capital Street have been designed to only allow standard passenger vehicles and waste collection vehicles of up to 11m in length to be driven into the at-grade car park via Metro Parade and out via Capital Street. A turn path of an 11m refuse collection vehicle accessing the service area was included in the Traffic and Parking Report prepared by CIRQA on behalf of the applicant.

The westernmost access point on Capital Street has been designed to allow only standard passenger vehicles to be driven into, and out of, the basement simultaneously.

The Traffic and Parking Report concluded that the proposed development is forecast to generate in the order of 52 am and 88 pm peak hour trips which would be readily accommodated at the sites proposed access points and the broader road network having minimal impact upon the operation of associated intersections.

Council raised no concern regarding traffic impact on the surrounding road network, however, raised the following matters regarding access in their referral comments:

- The [CIRQA] report does not...appear to take account of the location of the proposed access in reference to the existing access serving the Capital Street shopping centre and apartments, located directly opposite the site on the northern side of Capital Street.
- Location of the on-way ground floor access on the Metro Parade bend and close to the Garden Terrace intersection is not a desired outcome...however, it is recognised that this access is limited to entry only and the site configuration is such that alternate locations may not be available to service the site
- Unclear whether the proposed entrance will meet sight distance requirements to a commercial access point...recommend further clarification

CIRQA prepared supplementary advice in response to concerns regarding access raised in Council's referral comments. This advice:

- notes the close proximity of the proposed Capital Street access to existing access of the Capital Street shopping Centre, however, clarifies that this meets relevant Australian Standards for Access Driveways and Sightlines.
- Notes that the Metro Parade access is restricted to ingress only movements, with a forecast 33 vehicle ingress movements during peak and would likely result in a queue of 2m (less than one vehicle) and would not block or restrict movements at Metro Parade/Garden Terrace intersection.
- Notes that the relevant Australian Standard does not identify sight distance requirements for ingress only access points, however, considers there would be adequate sight distance provided as part of the road's design.

A number of representors raised concerns with traffic congestion and restriction of access to the at-grade car park during waste collection. The applicant, in their response to representors, referred to the advice provided in the Traffic and Parking Report prepared by CIRQA, re-iterating that waste collection will take place either before the food court opens or after the food court closes, minimising the potential for queuing along Metro Parade.

Detailed Council referral comments, representations and responses from the applicant can be found in the ATTACHMENTS.

The proposed development has been designed to cater for forward movements of all anticipated modes of transport, including on-site areas for deliveries and servicing, and collection of waste. While some concerns regarding the proposed access points have been raised by Council, it is considered that the development will meet relevant Australian Standards for Access Driveways and Sightlines. Noting that a number of representations were made regarding potential traffic congestion, these concerns were not mirrored by either the Government Architect or Council. On balance, this aspect of the proposal is considered to be acceptable.

### **8.13.2 Car Parking**

Council wide policies generally seek that parking areas are sealed and line marked and sited and designed to facilitate safe pedestrian movement and vehicle interaction, minimising the number of vehicle access points and avoid the necessity for backing onto public roads.

The Urban Core Zone Principles of Development Control 28 and 29 provides specific policy regarding car parking requirements:

Except where incentives apply, vehicle parking should be provided at the following rates:

<b>Form of development</b>	<b>Minimum number of parking spaces</b>
Residential development	0.75 per dwelling
shops	3 per 100 square metres of gross leasable floor area
Tourist accommodation	1 space for every 4 bedrooms up to 100 bedrooms plus 1 additional parking space for every 5 bedrooms over 100 bedrooms
All other non-residential development	3 per 100 square metres of gross leasable floor area at ground floor level plus 1.5 additional parking spaces for every 100 square metres of gross leasable floor area above ground floor level

A lesser parking rate may be applied where justified based on local circumstances, for example where:

- (a) the proposed development is adjacent to a designated pedestrian and/or cycling path
- (b) the proposed development is in convenient walking distance to readily accessible and frequent public transport
- (c) convenient on-street car parking is readily available
- (d) the proposed development is on or adjacent to the site of a heritage place which hinders the provision of on-site parking
- (e) there is the opportunity to exploit shared car parking areas between uses based upon compatible hours of peak operation
- (f) suitable arrangements are made for any parking shortfall to be met elsewhere or by other means
- (g) for studio apartments, student accommodation, affordable housing, retirement villages or aged persons' accommodation.

Incentive policy provides for further reductions in car parking numbers where the development includes non-residential uses at ground floor with residential uses above.

Car parking should generally not be provided at-grade.

A total of 87 line-marked on-site car parking spaces are proposed. All 73 of the spaces within the basement will be for the exclusive use of the students and the student accommodation facilities employees. All of the 14 spaces provided within the at-grade car park will be accessible to the prospective tenants of retail tenancies and food outlets, and to the general public.

Based on the zone provisions, the non-residential component would generate a theoretical demand for 14 spaces. However, there is no specific guidance for student accommodation, as they are not considered 'dwellings'. If you were to apply this figure to the number of rooms there would be a demand for 171 spaces.

A Traffic and Parking Report, prepared by CIRQA, notes that student populations in high-density accommodation typically have significantly lower levels of car ownership than typical residential developments due to:

- Higher proportions of overseas students
- Shorter durations of stay
- Proximity of student accommodation to key destinations within close walking distance (such as the associated university campus)
- Reduced level of trips associated with other purposes

Little vehicle parking information relating to student accommodation in metropolitan Adelaide is available due to such developments typically providing no on-site parking. The Traffic and Parking Report notes the following rates applicable in other states:

- City of Melbourne – 0.1 spaces per bed for units located within 500m of a tertiary institution
- NSW Government – 0.2 spaces per room in an accessible area

Using the above, the proposed development would generate a theoretical demand of between 41 and 46 parking spaces.

The Traffic and Parking Report concludes that the provision of 86 parking spaces (including the 14 at-grade parking spaces dedicated to the non-residential component of the proposal) will easily accommodate peak parking demands.

A number of representors raised concern that the proposal would provide insufficient car parking.

Council raised some concern with the proposed on-site parking numbers. While acknowledging that the Urban Core Zone contemplates a lesser parking rate based on local circumstances, and the report provided by CIRQA, stated that the adaptability of the building to accommodate alternative uses should be considered in the event that the market for student accommodation declines.

The applicant in response noted that if the market for student accommodation were to decline, the building could be adapted to tourist accommodation and would then have an oversupply of car parking based on Development Plan provisions.

While the Development Plan does not provide specific parking requirements for student accommodation and the proposal does not meet residential car parking requirements sought in the zone, it is reasonable to consider that student accommodation would likely have significantly lower demand than typical residential development. Further to this, the Urban Core Zone explicitly contemplates a lesser car parking rate based on local circumstances. In the absence of a parking rate specific to the proposed use, and considering the proposed provision of bicycle parking, on a fine balance this aspect of the proposal is considered to be acceptable.

### **8.13.3 Bicycle Parking**

Transport and access Principles of Development Control 16 and 19 in the Council Wide section seek that buildings provide access for cyclists and encourage cycling by incorporating end of trip facilities, signage indicating the location of bicycle facilities and secure bicycle parking facilities.

Table Sal/3 – off Street Bicycle Parking Requirements seeks that the residential component of a multi-storey building provide:

- 1 bicycle parking space for every 4 dwellings
- 1 visitor bicycle parking space for every 10 dwellings;

Further, it seeks that shops provide:

- 1 bicycle parking space for every 300m<sup>2</sup> of gross leasable floor area
- 1 visitor bicycle parking space for every 600m<sup>2</sup> of gross leasable floor area.

There is no specific guidance for student accommodation.

A total of 77 bicycle parking spaces are proposed, with 72 at basement level across 3 separate bike storage enclosures and 10 visitor bicycle parks provided by 5 stainless steel rails recessed into the podium at ground level, each capable of accommodation 2 bicycles.

The combined gross leasable floor area for the food court is 398m<sup>2</sup>, which against Development Plan policy, would require a total of 3 bicycle parking spaces (2 plus 1 visitor space). While there is no specific guidance for student accommodation, if you were to apply the 'dwelling' figure to the number of rooms proposed, it would result in a theoretical requirement of 80 bicycle parking spaces (57 plus 23 visitor spaces). This would be a total of 83 spaces.

While it is acknowledged that there is no specific car parking requirement for student accommodation, the proposal would meet development plan requirements for dwellings. This aspect of the proposal is considered to be acceptable.

## **8.14 Environmental Factors**

### **8.14.1 Crime Prevention**

The Development Plan generally seeks development to integrate and attempt to facilitate natural passive surveillance, clear lines of sight and appropriate lighting within the design of the building to reduce potential crime.



The proposed development utilises extensive glazing along the Metro Parade and Capital Street façades at ground level, ensuring there are views in and out of the building providing opportunities for passive surveillance. The Student Accommodation reception desk is located with clear sight to Capital Street, lift core, stairwell and secure lobby.

It is also noted that the Metro Parade outdoor dining area and retail frontage to Capital Street and 400 plus students should provide a level of activity and passive surveillance for the immediate locality.

The proposed development demonstrates appropriate crime prevention consideration and design initiative that generally satisfies the Crime Prevention policy provision in the Development Plan.

#### **8.14.2 Waste Management**

Council wide provisions regarding waste generally seek that development provide an appropriately sized, dedicated area for the on-site collection and sorting of recyclable materials and refuse, with separate storage areas for commercial/retail and residential uses.

Two waste storage enclosures will be provided on-site. The south-eastern enclosure has been designed to accommodate the requisite type and number of bins for the student accommodation component (3 x 1100L bins for putrescibles, 3 x 1100L bins for recyclables and 2 x 660L bins for organics). This enclosure will also incorporate a dedicated bin cleaning area.

The north-western enclosure has been designed to accommodate the requisite type and number of bins for the retail tenancies and food court (3 x 1100L bins for putrescibles, 5 x 240L bins for recyclables and 6 x 660L bins for organics).

Levels 1-11 will have their own communal waste room which are to be fitted with two waste chutes (one for putrescibles and one for recyclables) and designed to accommodate several plastic bins for cardboard or organic matter.

All forms of waste are proposed to be collected by a private contractor up to but not exceeding three times per week, taking up to 10 minutes to complete. Waste collection is to take place before the food court opens or after it closes as the private contractor will need to temporarily block the aisle associated with the at-grade car park.

Neither Council nor the Government Architect raised concerns regarding waste, however, a number of representors raised concern with visibility of the waste enclosures and hard waste storage.

The applicant, in their response to representations, has advised that neither of the waste enclosures will be oriented to, or visible from, Capital Street or Metro Parade. Further, the waste enclosure on the south-eastern side of the aisle associated with the at-grade car park has been designed to accommodate hard rubbish from time to time.

The proposed development meets the relevant Development Provisions regarding waste management, this aspect of the proposal is considered to be acceptable

#### **8.14.3 Stormwater**

While there is limited policy guidance regarding stormwater in the Development Plan, Council had in their referral comments, recommended the attachment of a reserved matter requiring the lodgement of a stormwater management plan.

The applicant has consulted with Council on their requirements and since lodged a stormwater management plan.

This aspect of the proposal is considered to be acceptable.

#### 8.14.4 Energy Efficiency

The Energy Efficiency policies and objectives generally seek that developments be compatible with long term sustainability of the environment and minimise consumption of non-renewal resources and utilities.

While Council have noted that external shade devices are not proposed, the applicant has advised that the building has been designed to satisfy the requirements of the National Construction Code.

The proposed development generally displays an appropriate level of intent to design an energy efficient development. It is noting that the development will satisfy the relevant Building Code standards to achieve the prescribed energy efficiency as required by the BCA.

#### 8.14.5 Wind Analysis

Council wide policy regarding wind tunnelling generally seeks that development of 21m or more in building height be designed to minimise the risk of wind tunnelling effects on adjacent streets by incorporating elements such as a podium at the base of a tall tower or substantial verandas.

Vipac prepared a Wind Impact Assessment on behalf of the applicant. The assessment is summarised as follows:

- The proposed development would be expected to generate wind conditions in the ground level footpath areas within the walking comfort criterion
- The proposed development would be expected to generate wind conditions in the main building entrance areas within the standing comfort criterion
- The proposed development would be expected to generate wind conditions in the alfresco dining area exceeding the sitting comfort criterion. Recommend incorporating some landscaping or screening to help shield this area from adverse winds.
- The proposal Level 1 terraces and courtyard would be expected to have wind levels within the recommended walking comfort criterion. Many areas would also be expected to meet the more stringent standing or sitting comfort criterion.
- The proposed rooftop communal terrace would be expected to have wind conditions exceeding the recommended walking criterion. Recommend landscaping or high balustrades be incorporated on the perimeter of the terrace to help improve wind conditions in this area.

The proposed development incorporates a 1.5m high, clear glass balustrade along the perimeter of the outdoor dining area and a 1.8m high, clear glass balustrade along the perimeter of the rooftop garden.

One representation raised concern regarding post construction wind conditions. In their response to representations the applicant noted that the Wind Impact Assessment found that *"the proposal would not generate significant adverse wind conditions in the adjacent foot paths"* and that *"the building entrances are expected to be within the recommended standing comfort criterion"*.

This aspect of the proposal is considered to be acceptable.

#### 8.15 Signage

No signage is proposed as part of the application.

#### 8.16 Staging

No staging is proposed as part of the application.

## 9. CONCLUSION

The proposed land uses are consistent with the zone's envisaged uses.

The proposal does not exceed quantitative policy guidance with regard to height, setbacks or bicycle parking, noting that there is limited guidance on car parking requirements for student accommodation. It is considered that requiring the proposed development to meet general 'dwelling' car parking requirements would be remiss when read in conjunction with incentive policy and policy contemplating lesser parking rates in the Urban Corridor Zone.

While some concerns have been raised by Council, the Government Architect and representations received during the public notification period regarding bulk and scale of the building in the context of the locality, it is acknowledged that the zone contemplates buildings of up to 12 storeys in the Core Area and specifically envisages Student Accommodation, which are typically larger scale buildings.

On balance, and noting some inconsistencies with Development Plan policy, Development Plan Consent is recommended subject to the attachment of reserve matters and conditions.

## 10. RECOMMENDATION

It is recommended that the State Commission Assessment Panel:

- 1) RESOLVE that the proposed development is NOT seriously at variance with the policies in the Development Plan.
- 2) RESOLVE that the State Commission Assessment Panel is satisfied that the proposal generally accords with the related Objectives and Principles of Development Control of the Salisbury (City) Development Plan.
- 3) RESOLVE to grant Development Plan Consent (and Land Division Consent) to the proposal by Michael Calabro Pty Ltd for Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking at 13-17 Metro Parade, Mawson Lakes subject to the following reserved matters and conditions of consent.

## RESERVED MATTERS

1. Pursuant to Section 33(3) of the *Development Act 1993*, the following matters shall be reserved for further assessment, to the satisfaction of the State Planning Commission, prior to the granting of Development Approval:

1.1 The applicant shall submit a final detailed schedule of external materials and finishes, in consultation with the Government Architect to the reasonable satisfaction of the State Planning Commission.

*Reason: To ensure the development is constructed with high quality materials and finishes.*

## PLANNING CONDITIONS

1. That except where minor amendments may be required by other relevant Acts, or by conditions imposed by this application, the development shall be established in strict accordance with the details and following plans submitted in Development Application No -361/L020/20.

*Reason: to ensure the development is constructed in accordance with endorsed plans and application details.*

2. All vehicle parks, driveways and vehicle entry and manoeuvring areas shall be designed and constructed in accordance with Australian Standards (AS/NZS 2890.1:2004 and AS/NZS 2890.6:2009) and be constructed, drained and paved with bitumen, concrete or paving bricks in accordance with sound engineering practice and appropriately line marked to the reasonable satisfaction of the State Planning Commission prior to the occupation or use of the development.

*Reason: to ensure off-street car parking facilities are designed to adhere to the necessary standards.*

3. All areas subject to use by commercial vehicles shall be designed in accordance with AS 2890.2 – 2002.  
*Reason: To ensure access and manoeuvring for commercial vehicles is provided on the site in a manner that is safe and convenient.*
4. All bicycle parks shall be designed and constructed in accordance with Australian Standard 2890.3-2015.  
*Reason: to ensure bicycle parking facilities are designed to adhere to the necessary standards.*
5. All car parking areas, driveways and vehicle manoeuvring areas shall be maintained at all times to the reasonable satisfaction of the State Planning Commission.
6. All materials and goods shall be loaded and unloaded within the boundaries of the subject land.  
*Reason: To ensure that vehicles associated with the development do not cause disruption or danger to vehicles on public roads.*
7. All loading and unloading, parking and manoeuvring areas shall be designed and constructed to ensure that all vehicles can safely enter and exit the subject land in a forward direction.  
*Reason: To ensure that vehicles associated with the development do not cause disruption or danger to vehicles on public roads.*
8. All access points, car parking and vehicle manoeuvring areas shall be of an all-weather surface and must be maintained in a good condition at all times.
9. Except where otherwise approved, no materials, goods or containers shall be stored in the designated car parking areas or driveways at any time.  
*Reason: To ensure the car parking areas are always available for the purpose they are designed. Further, that the site be maintained in a clean and tidy state.*
10. Landscaping shown on the approved plans shall be established prior to the operation of the development and shall be maintained and nurtured at all times with any diseased or dying plants being replaced.  
*Reason: To ensure the site is landscaped so as to enhance the visual and environmental amenity of the locality and internal amenity for occupants and users.*
11. A watering system shall be installed at the time landscaping is established and operated so that all plants receive sufficient water to ensure their survival and growth.  
*Reason: To ensure the ongoing survival and growth of landscaping.*
12. The finished floor level of all ground level entries and similar arcaded areas accessible to pedestrians shall match that of the existing footpath, unless otherwise agreed to by the City of Salisbury in writing.  
*Reason: To ensure disability access is achieved and to ensure adjustment to the footpath levels is not required.*
13. All external lighting on the site shall be designed and constructed to conform to Australian Standard (AS 4282-1997).  
*Reason: to ensure external lighting does not introduce undue potential for hazards to users of the adjacent road network in accordance with the necessary standard.*
14. All stormwater design and construction shall be in accordance with Australian Standard AS/NZS 3500.3:2015 (Part 3) to ensure that stormwater does not adversely affect any adjoining property or public road.  
*Reason: to ensure stormwater infrastructure is designed and constructed to minimise potential for flood risk to adjoining property or public roads associated with stormwater runoff in accordance with the necessary standard.*

15. Vehicle deliveries, linen collection, garbage collection and similar like vehicle movements shall only occur as follows:
- a) On Sundays and public holidays, between the hours of 9am and 7pm;
  - b) On any other day, between the hours of 7am and 7pm.
- Reason: To minimise land use conflict.*
16. The acoustic attenuation measures recommended in the Environmental Noise Assessment, dated April 2020 by Sonus, shall be fully incorporated into the building rules documentation to the reasonable satisfaction of the State Planning Commission. Such acoustic measures shall be made operational prior to the occupation or use of the development.
- Reason: to ensure the development achieves an appropriate standard of acoustic performance.*
17. The development will comply with noise level criteria specified in Environmental Protection (Noise) Policy 2007 (under the Environmental Protection Act). This includes noise from roof-level plant and equipment and the air-conditioning units with consideration given to the adjacent properties. Noise attenuation devices and visual screening will be implemented as necessary.
- Reason: to ensure the development does not cause unreasonable nuisance or loss of amenity in the locality.*
18. The recommendations in the Wind Impact Report, dated 30 March 2020 by Vipac Engineers & Scientists, shall be fully incorporated into the building rules documentation to the reasonable satisfaction of the State Planning Commission. Such wind attenuation measures shall be made operational prior to the occupation or use of the development.
- Reason: to ensure the development does not cause unreasonable wind impact in the locality.*

#### **ADVISORY NOTES**

- a. This Development Plan Consent will expire after 12 months from the date of this Notification, unless final Development Approval from Council has been received within that period or this Consent has been extended by the State Commission Assessment Panel.
- b. The applicant is also advised that any act or work authorised or required by this Notification must be substantially commenced within 1 year of the final Development Approval issued by Council and substantially completed within 3 years of the date of final Development Approval issued by Council, unless that Development Approval is extended by the Council.
- c. The applicant has a right of appeal against the conditions which have been imposed on this Development Plan Consent. Such an appeal must be lodged at the Environment, Resources and Development Court within two months from the day of receiving this notice or such longer time as the Court may allow. The applicant is asked to contact the Court if wishing to appeal. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide, (telephone number 8204 0289).
- d. The Environment Protection (Noise) Policy 2007 requires any person who is undertaking an activity, or is an occupier of land to take all reasonable and practicable measures to meet indicative noise factors for different land use categories. The policy creates offences that can result in on-the spot fines or legal proceedings. EPA information sheets, guidelines documents, codes of practice, technical bulletins etc can be accessed on the following website: <http://www.epa.sa.gov.au>.
- e. Due consideration should be given to the residential context of the subject site. In particular, consideration should be given to management of noise associated with patron behaviour, vehicle movements etc outside of normal operating business hours.
- f. Any proposed works with the public realm adjacent to the site, including the installation of street furniture, bicycle parking infrastructure and planting of street trees shall be undertaken in consultation with the City of Salisbury Council.
- g. Except where otherwise shown on the Approved Plans, signage does not form part of this Development Plan Consent. Advertising displays or signage shall not be erected or displayed upon the site unless Development Approval has been obtained or where the signage is exempt from Development Approval.

- h. All encroachments over Council land are subject to an Authorisation Agreement between the developer and Council, and shall be an ongoing agreement or as long as the encroachment exists. The Authorisation Agreement must be signed before the encroachment exists. An initial Permit Preparation Fee of \$918 is payable after which an annual fee will be charged. This annual fee will commence at \$565 and shall increase by CPI annually. It is the developer's responsibility to advise of any change of ownership if this occurs so a new agreement can be prepared for the new property owners, should the property be sold. The developer should also be aware that it is their responsibility to advise the new owners of their responsibility in regard to Authorisation and ensure a new agreement is entered into.
- i. The applicant is reminded of its general environmental duty, as required by Section 25 of the Environmental Protection Act 1993, to take all reasonable and practicable measures to ensure that the activities on the whole site, including during construction, do not pollute the environment in a way which causes or may cause environmental harm.
- j. EPA information sheets, guidelines documents, codes of practice, technical bulletins etc. can be accessed on the following web site: <http://www.epa.sa.gov.au>.
- k. Construction must be carried out so that it complies with the Construction Noise provisions of Part 6, Division 1 of the Environment Protection (Noise) Policy 2007 and the provisions of the Local Nuisance and Litter Control Act 2016. Under the Local Nuisance and Litter Control Act 2016, construction noise is declared to constitute a local nuisance as follows:  
*The noise has travelled from the location of the construction activity to neighbouring premises –  
On any Sunday or public holiday; or  
After 7pm or before 7am on any other day.*
- l. Building sites can be major contributors of suspended solids, concrete wash, building materials and wastes, to stormwater and, potentially receiving waters, if there are inappropriate management practices. Construction work and site preparation must be undertaken in a manner that does not allow the escape of soil, sediment or other pollutants by wind or water to the stormwater system at levels that breach the EPA's Environment Protection (Water Quality) Policy 2003.
- m. Tenancy fit-out applications are required for all individual tenancies and shall be approved pursuant to the Development Act 1993 or Planning, Development and Infrastructure Act 2016. Further, the following requirements apply to the development from an environmental health perspective:
- The structure and design of any food premises must be constructed in accordance with the Food Act 2001 and Food Safety Standard 3.2.3;
  - Any high risk manufactured water systems which may include cooling water systems shall be installed and maintained in accordance with the South Australian Public Health (Legionella) Regulations 2013;
- n. All Council, utility or state-agency maintained infrastructure (ie. roads, kerbs, drains, crossovers, footpaths etc.) that are demolished, altered, removed or damaged during the construction of the development shall be reinstated to Council, utility or state agency specifications. All costs associated with these works shall be met by the proponent.
- o. Approval for the construction methodology of the proposed building may be required from the Secretary for the Commonwealth Department of Infrastructure and Regional Development, in accordance with the Airports Act 1996 and the Airports (Protection of Airspace) Regulations 1996. The applicant may be required to comply with Regulation 94 of the Civil Aviation Regulations 1988 and should contact CASA on 131 757 for advice in relation to this Regulation.



**Elysse Kuhar**  
**SENIOR PLANNING OFFICER**  
**DEVELOPMENT DIVISION**  
**DEPARTMENT OF PLANNING, TRANSPORT and INFRASTRUCTURE**

# STUDENT ACCOMODATION

ADDRESS:

LOT 535  
13-17 METRO PARADE  
MAWSON LAKES SA

PREPARED FOR:

**M.CALABRO**

JOB NO:

19009

DATE:

09.06.2020

REVISION:

Planning Application [A2]



ENZO CAROSCIO ARCHITECTURE & DESIGN  
70 Halifax Street Adelaide SA 5000  
Telephone +61 8 8155 6063  
enzocaroscio.com



STUDENT ACCOMODATION  
SITE LOCATION +  
CONTEXT PLAN





# STUDENT ACCOMODATION SITE ANALYSIS





# STUDENT ACCOMODATION SITE CONTEXT PHOTOS



SOUTH-EAST CORNER VIEW



LOOKING NORTH-EAST



LOOKING SOUTH-WEST



VIEW DOWN METRO PARADE (WEST)



VIEW DOWN METRO PARADE (EAST)



VIEW DOWN CAPITAL STREET



VIEW LOOKING SOUTH



VIEW OF EXISTING TRANSFORMER



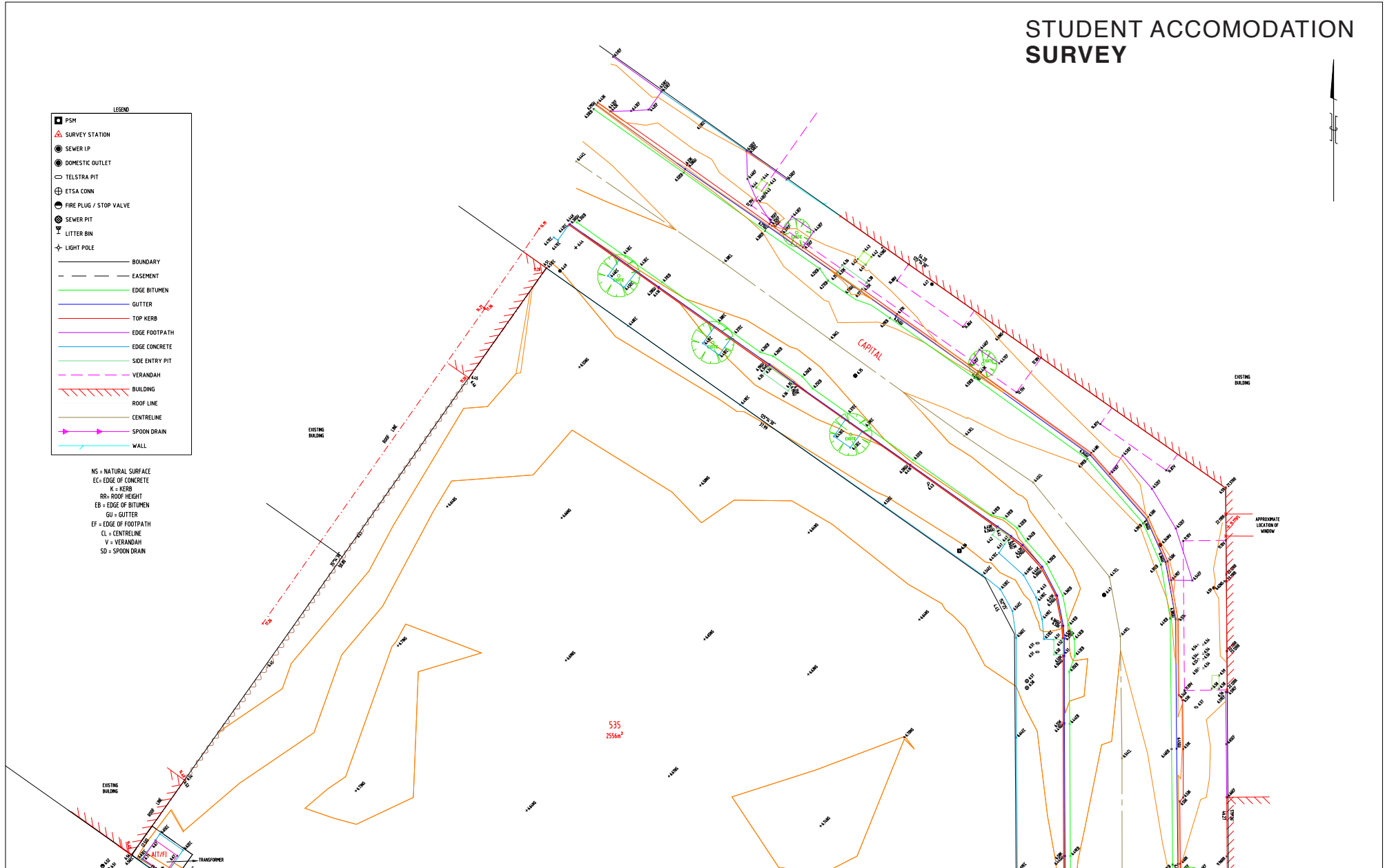
VIEW NORTH

# STUDENT ACCOMODATION SURVEY



LEGEND	
	PSM
	SURVEY STATION
	SEWER IP
	DOMESTIC OUTLET
	TELSTRA PIT
	ETSA CONN
	FIRE PLUG / STOP VALVE
	SEWER PIT
	LITTER BIN
	LIGHT POLE
	BOUNDARY
	EASEMENT
	EDGE BITUMEN
	GUTTER
	TOP KERB
	EDGE FOOTPATH
	EDGE CONCRETE
	SIDE ENTRY PIT
	VERANDAH
	BUILDING
	ROOF LINE
	CENTRELINE
	SPOON DRAIN
	WALL

NS = NATURAL SURFACE  
 EC = EDGE OF CONCRETE  
 K = KERB  
 RR = ROOF HEIGHT  
 EB = EDGE OF BITUMEN  
 GU = GUTTER  
 EF = EDGE OF FOOTPATH  
 CL = CENTRELINE  
 V = VERANDAH  
 SD = SPOON DRAIN



WEBER FRANKIW SURVEYORS



100 Main Road, Mt Pleasant, Queensland, Australia 4111  
 Phone: (07) 3200 1000  
 Fax: (07) 3200 1001  
 Email: info@weberfrankiw.com.au  
 www.weberfrankiw.com.au

REVISION	DATE	APPROVED
A	16/03/20	AC
B	07/08/19	AN

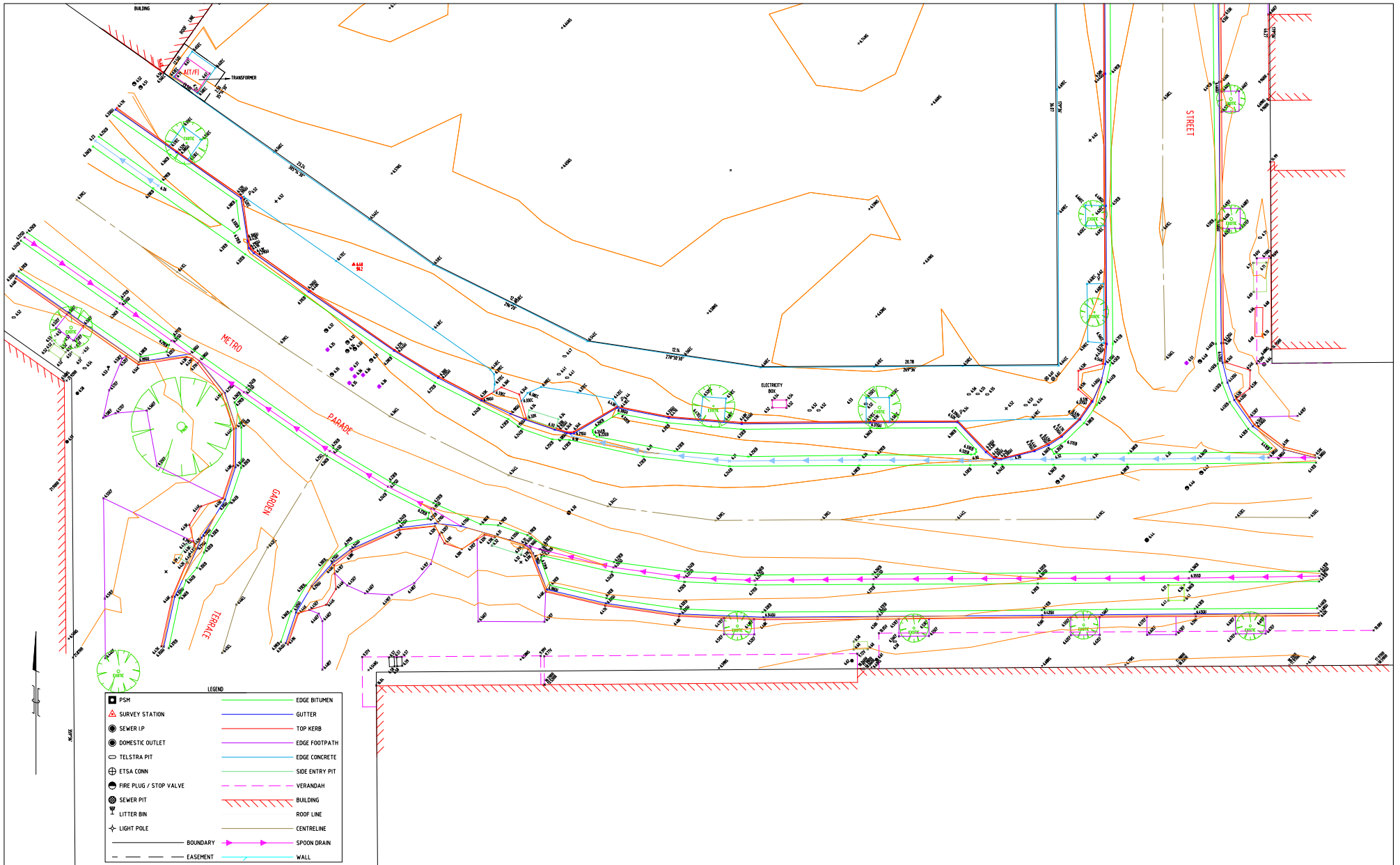
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 CONTOUR INTERVAL OF 0.100m  
 DATUM: MGA 2020 SCALE FACTOR 1.00019  
 BOUNDARY OVERLAY ONLY. NO MARKS PLACED ON SITE

SURVEY	AC	DATE
APPROVED	AC	16/03/2020
APPROVED	AC	18/03/2020

DETAIL AND CONTOUR SURVEY  
 ALLOTMENT 535 DP74134  
 13-17 METRO PARADE  
 MAWSON LAKES



JOB NO.	8000
CAD REF.	8000m
SHEET	1
REV	B



**LEGEND**

PSM	EDGE BITUMEN
SURVEY STATION	GUTTER
SEWER IP	TOP KERB
DOMESTIC OUTLET	EDGE FOOTPATH
TELSTRA PIT	EDGE CONCRETE
ETSA CONN	SIDE ENTRY PIT
FIRE PLUG / STOP VALVE	VERANDAH
SEWER PIT	BUILDING
LITTER BIN	ROOF LINE
LIGHT POLE	CENTRELINE
BOUNDARY	SPOON DRAIN
EASEMENT	WALL

NS = NATURAL SURFACE  
 EC = EDGE OF CONCRETE  
 K = KERB  
 RH = ROOF HEIGHT  
 EB = EDGE OF BITUMEN  
 GU = GUTTER  
 EF = EDGE OF FOOTPATH  
 CL = CENTRELINE  
 V = VERANDAH  
 SD = SPOON DRAIN

**WEBER FRANKIW SURVEYORS**  
 Land and Engineering Surveyors  
 Land Division Contractors

100 Main Road, Mt Pleasant, South Australia 5111  
 Telephone: 08 8333 8888  
 Email: info@weberfrankiw.com.au  
 www.weberfrankiw.com.au

REVISION	DATE	APPROVED
D		
E		
F		
G		
H		
A	16/03/20	AC
B	07/08/19	AN
EXTRA DETAIL INFORMATION		
DETAIL SURVEY		

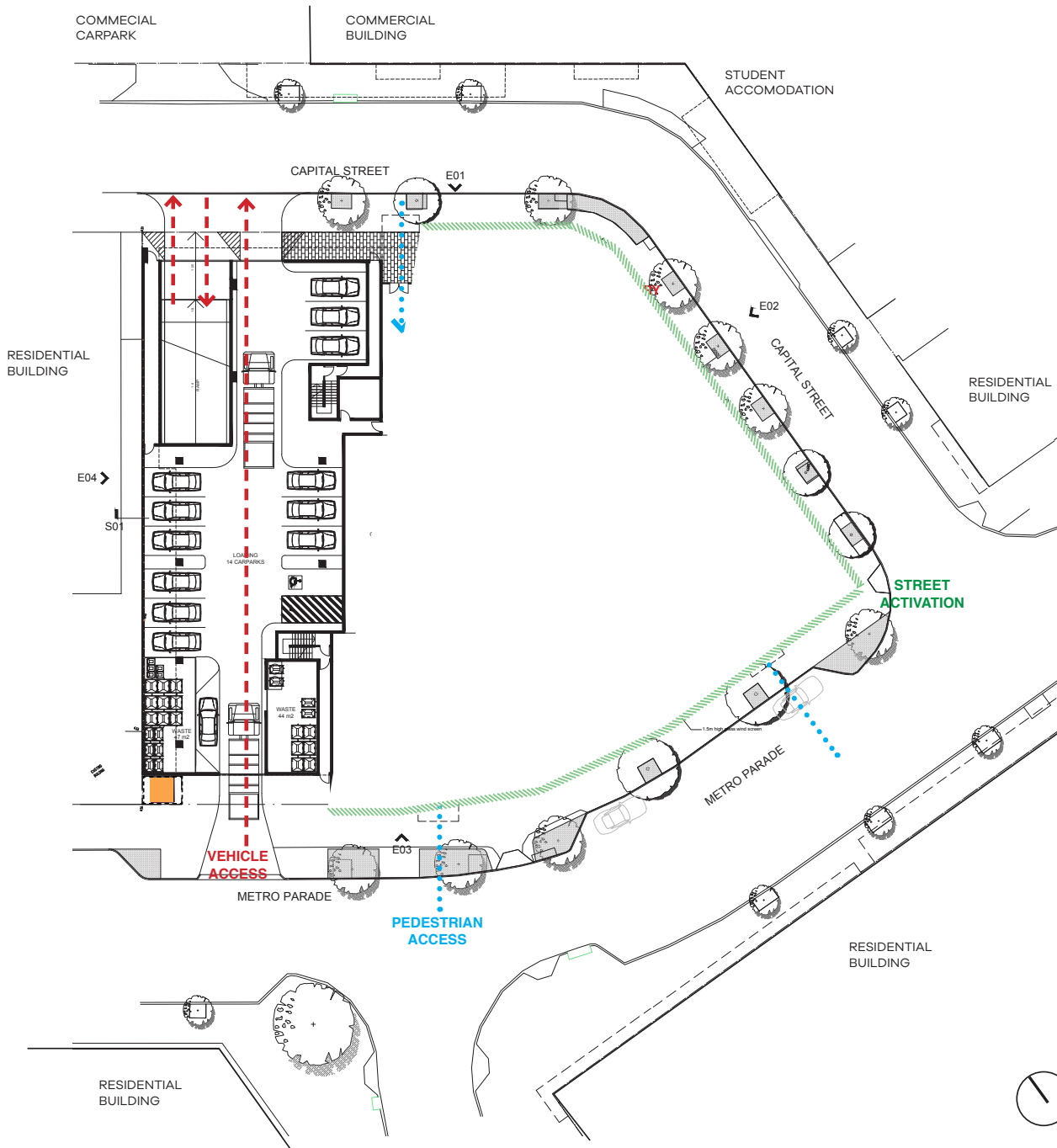
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 DATUM: MGA 2020 SCALE FACTOR 1.00019  
 BOUNDARY OVERLAY ONLY. NO MARKS PLACED ON SITE

SURVEY	AC	DATE	16/03/2020
APPROVED	AC	DATE	18/03/2020

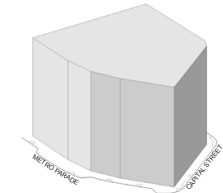
**DETAIL AND CONTOUR SURVEY**  
 ALLOTMENT 535 DP74134  
 13-17 METRO PARADE  
 MAWSON LAKES

JOB NO.	8000
CAD REF.	8000cm
SHEET	2
REV	B

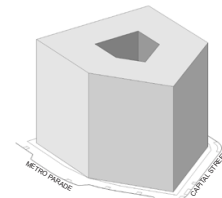
# STUDENT ACCOMODATION SITE DESIGN DIAGRAM



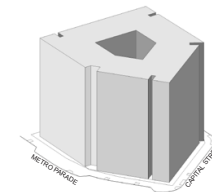
## CONCEPT DIAGRAMS



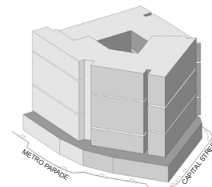
ADDRESSING STREET FRONTAGES



CREATING ATRIUM FOR LIGHT + VENTILATION



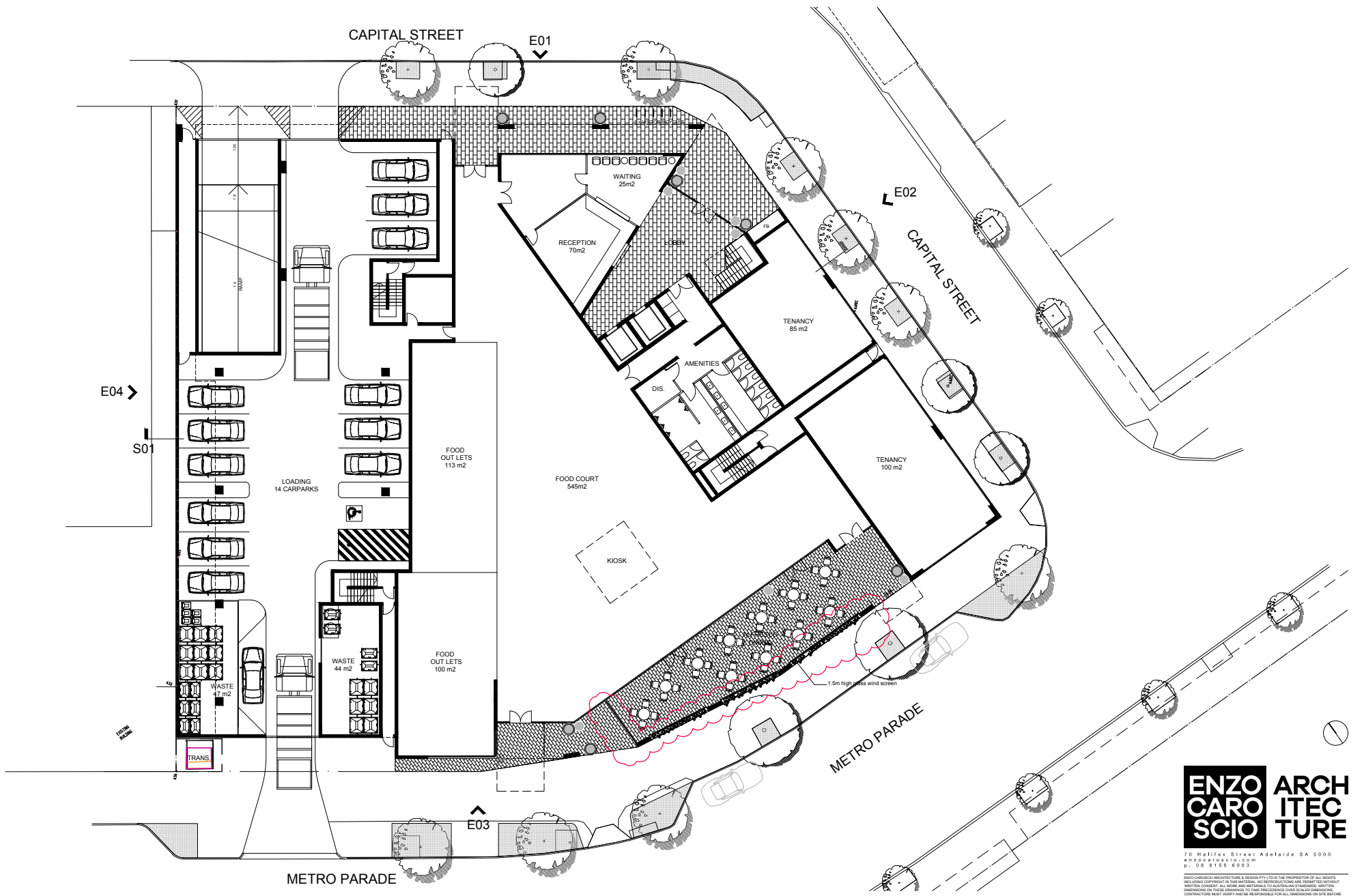
VERTICAL BREAKS TO BUILDING FORM TO CREATE STREET ARTICULATION AND LIGHT INTO COMMON AREAS



HORIZONTAL ARTICULATION TO SCALE BUILDING FORM AND CREATE ARTICULATED FACADES





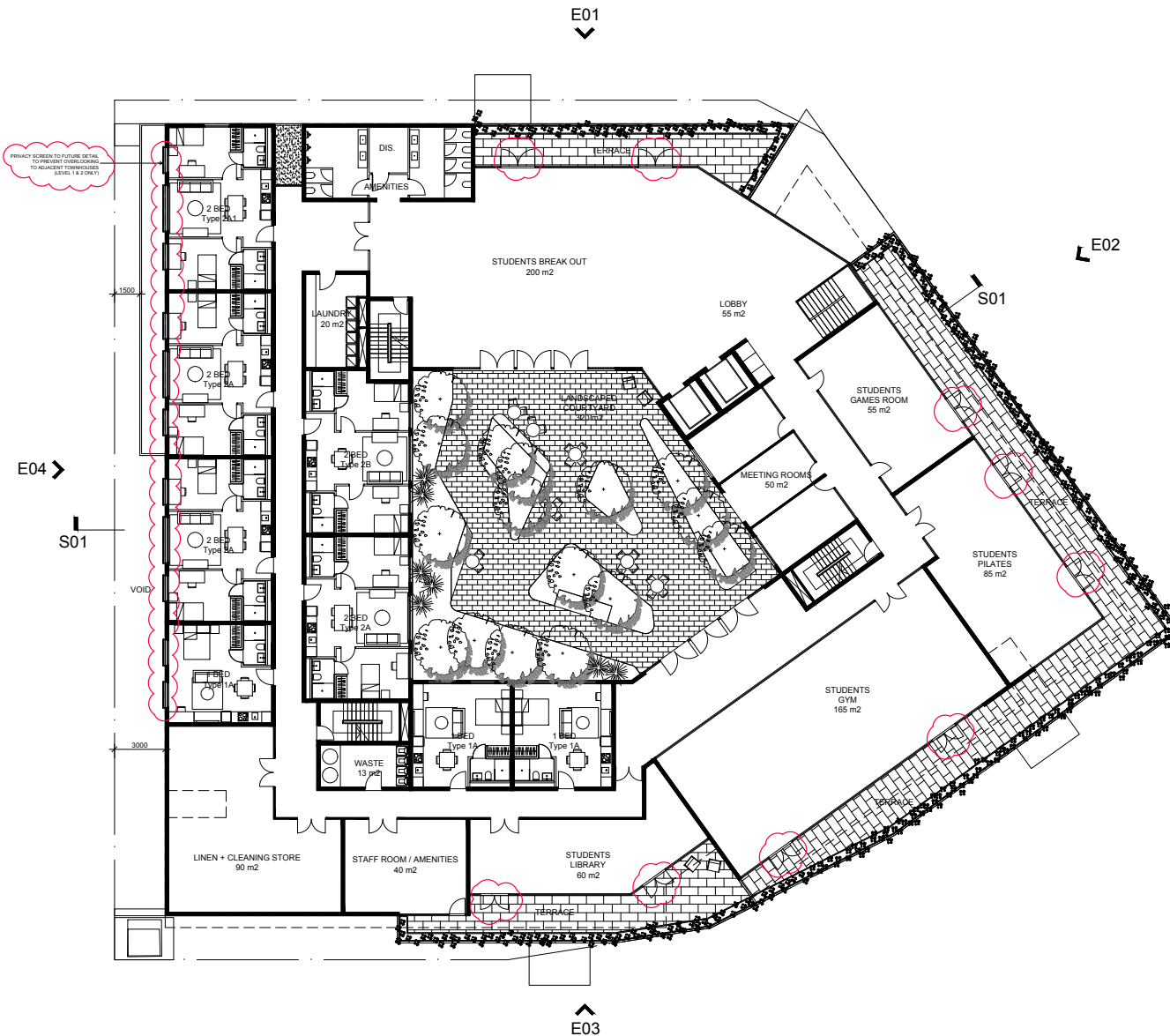


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0 1 2 5 10m  
 DATE 09.06.20 SCALE 1:250 @ A3 PROJECT NO. 19009 DRAWING NO. A2.01[A2]

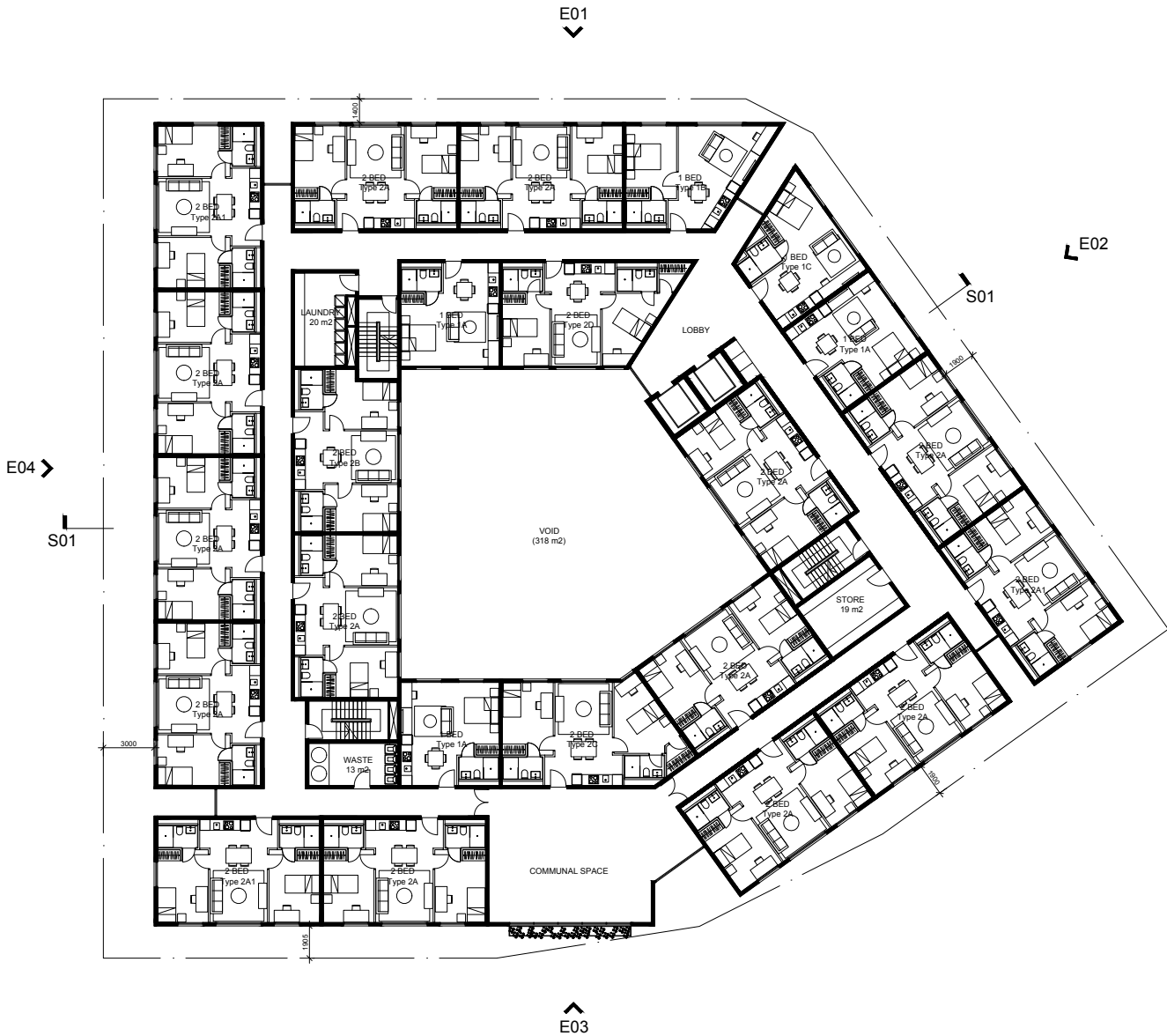


PRIVACY SCREEN TO FUTURE DETAIL  
 REFERRED TO ADJACENT TOWNHOUSES  
 LEVEL 1 & 2 (04/23)



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CLIENT  
M.CALABRO

PROJECT  
STUDENT ACCOMMODATION - LOT 535  
13-17 METRO PARADE MAWSON LAKES

DRAWING  
LEVEL 2 - 4

DATE  
08.04.20

SCALE  
1:250 @ A3

PROJECT NO  
19009

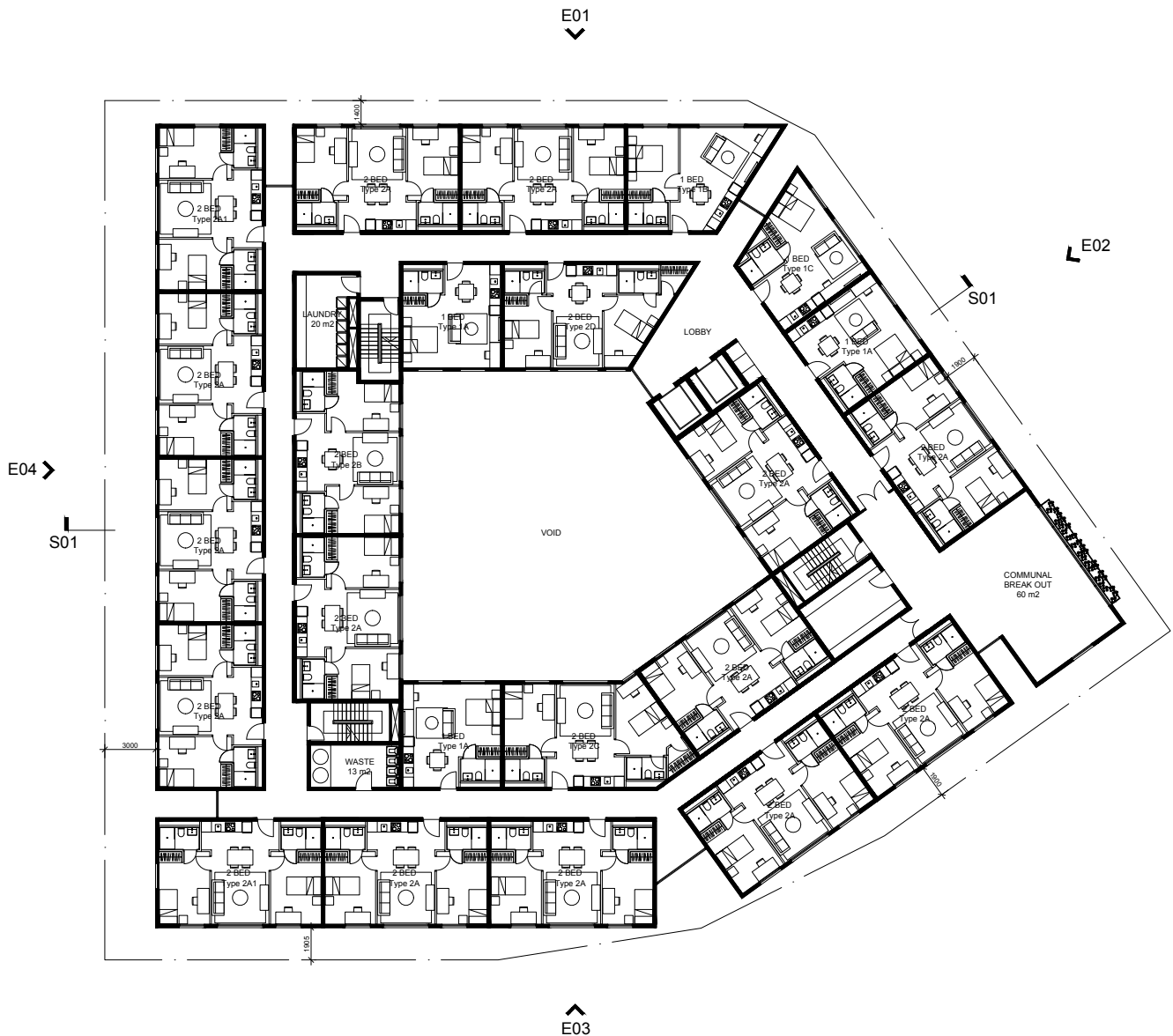
DRAWING NO  
A2.04[A1]

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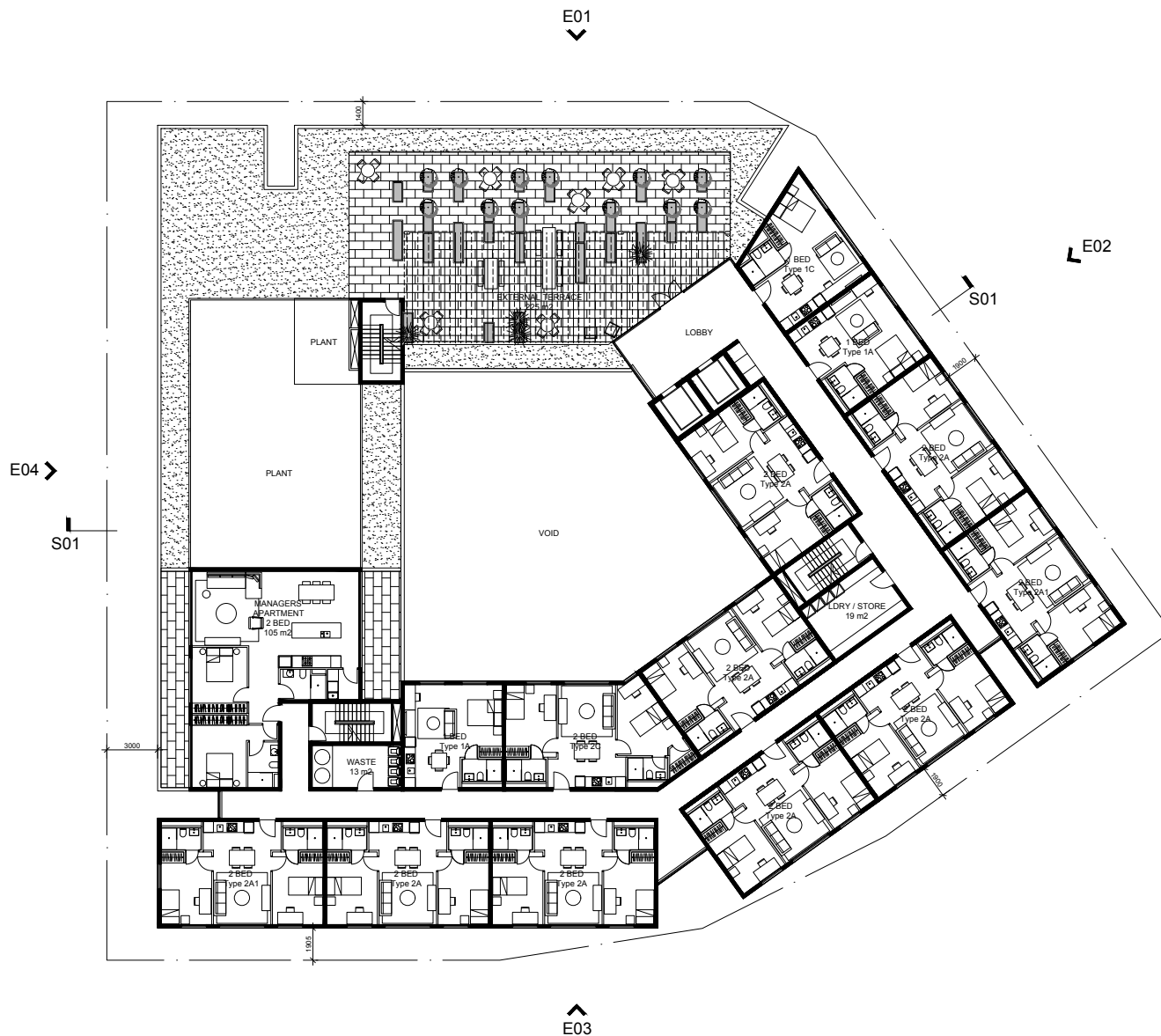
PRELIMINARY

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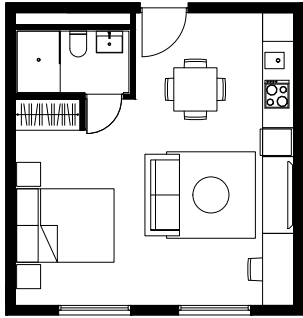




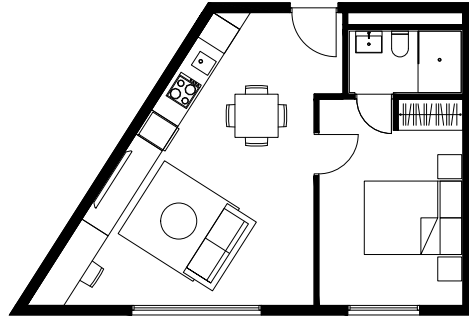
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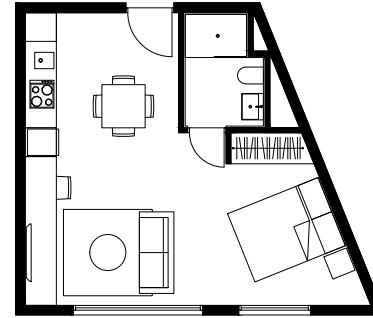
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1 BED - Type 1A  
38 m2  
No. x 31



1 BED - Type 1B  
46 m2  
No. x 9

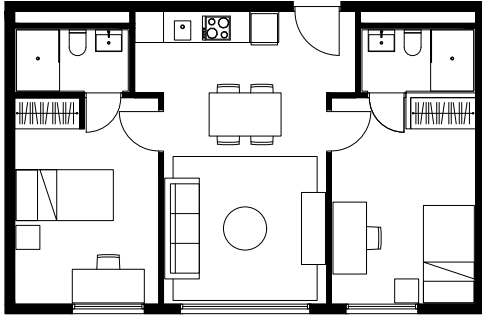


1 BED - Type 1C  
39 m2  
No. x 9

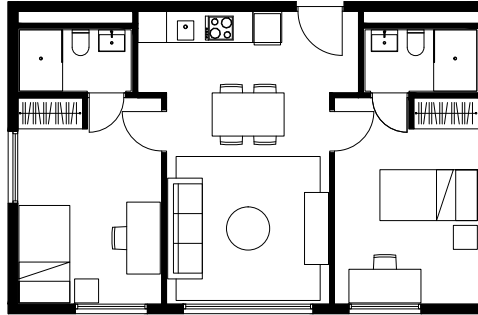
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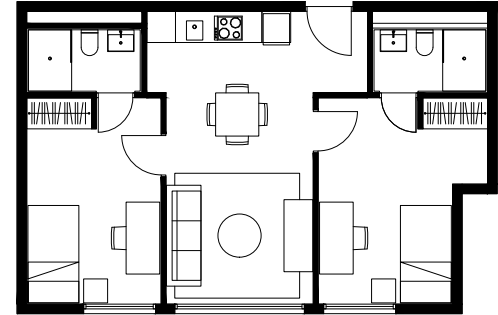
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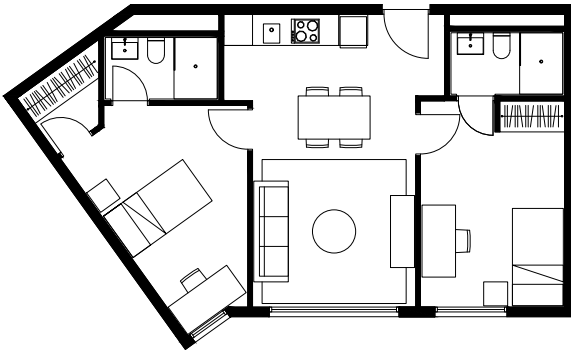
2 BED - Type 2A  
62 m2  
No. x 127



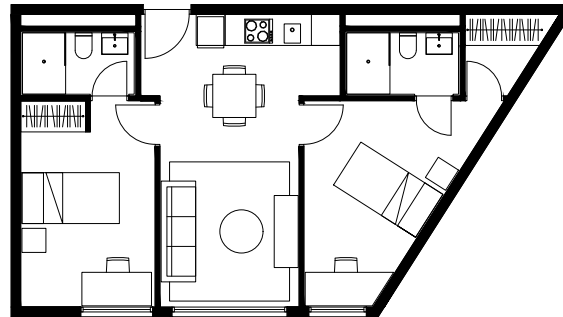
2 BED - Type 2A1  
62 m2  
No. x 30



2 BED - Type 2B  
60 m2  
No. x 10



2 BED - Type 2C  
64 m2  
No. x 10



2 BED - Type 2D  
60 m2  
No. x 1



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#1203 FLOOR 12  
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- FINISHES LEGEND:
1. Fiber Cement cladding (Type 1)
  2. Fiber Cement cladding (Type 2)
  3. Brick
  4. Aluminum framed windows
  5. Aluminum panel
  6. Clear glazing to shop-front
  7. Metal arbor
  8. Metal cladding
  9. Metal loading dock door
  10. Metal planter box
  11. Metal window surround
  12. Metal entry canopy
  13. Rendered + painted wall

CAPITAL STREET

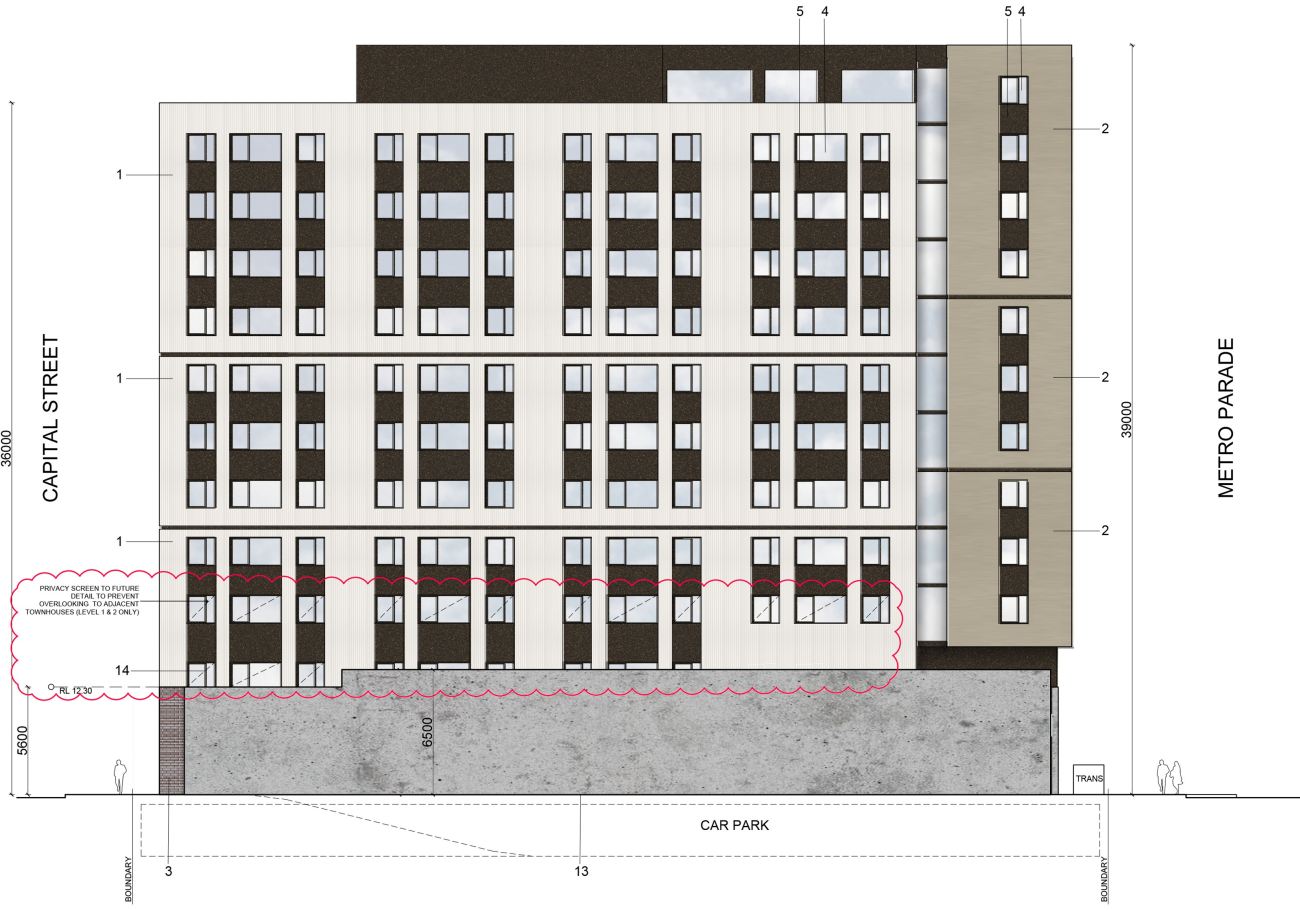


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ROOF  
 RL 44.70  
 L11  
 RL 41.70  
 L10  
 RL 38.70  
 L9  
 RL 35.70  
 L8  
 RL 32.70  
 L7  
 RL 29.70  
 L6  
 RL 26.70  
 L5  
 RL 23.70  
 L4  
 RL 20.70  
 L3  
 RL 17.70  
 L2  
 RL 14.70  
 L1  
 RL 11.20  
 GR FL  
 RL 6.70  
 BASEMENT  
 RL 3.50



- FINISHES LEGEND:
1. Fibre Cement cladding (Type 1)
  2. Fibre Cement cladding (Type 2)
  3. Brick
  4. Aluminum framed windows
  5. Aluminum panel
  6. Clear glazing to shop-front
  7. Metal arbor
  8. Metal cladding
  9. Metal loading dock door
  10. Metal planter box
  11. Metal window surround
  12. Metal entry canopy
  13. Rendered + painted wall
  14. Privacy window screen

CAPITAL STREET

METRO PARADE

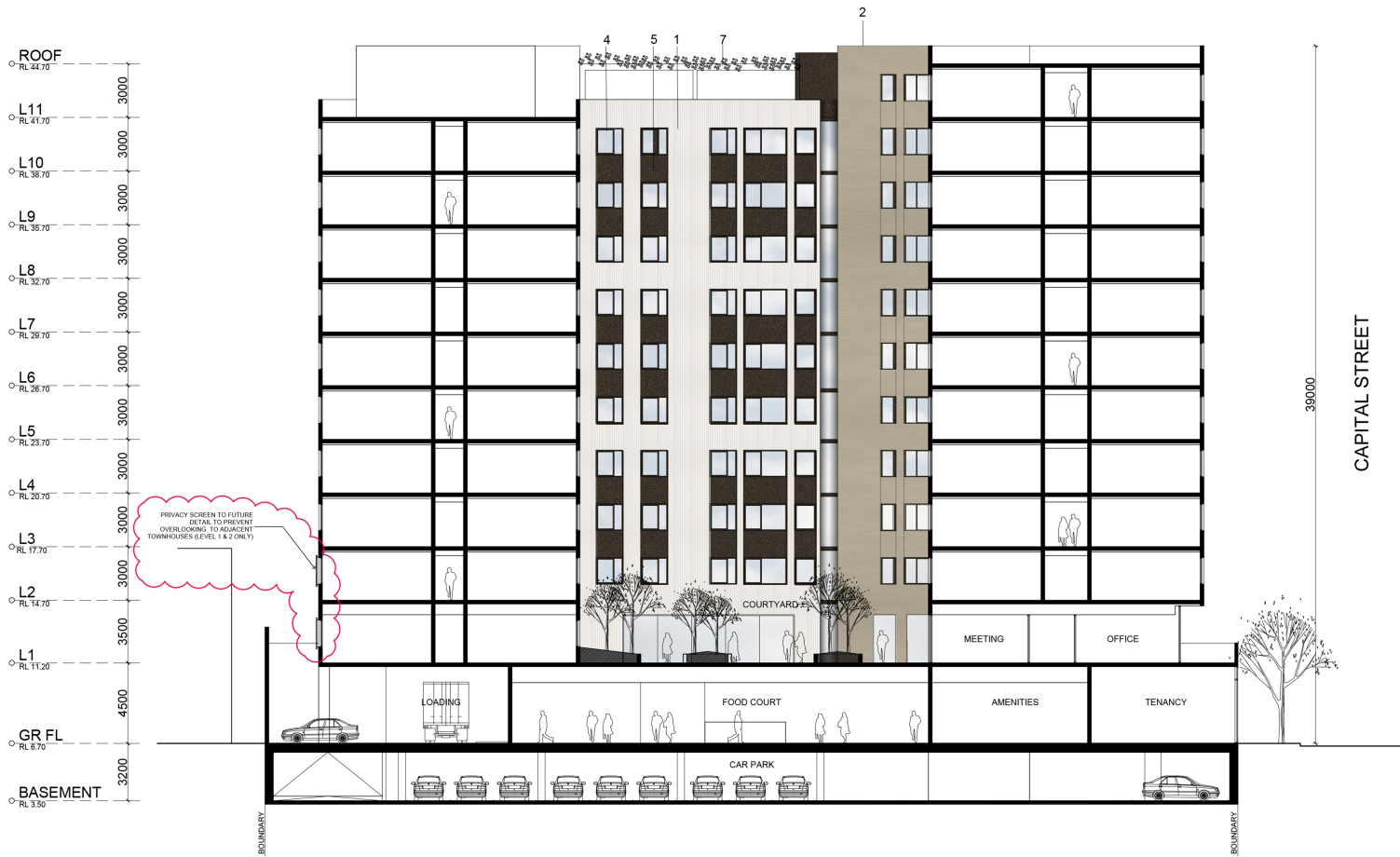
CAR PARK

TRANS

PRIVACY SCREEN TO FUTURE  
 DETAIL TO PREVENT  
 OVERLOOKING TO ADJACENT  
 TOWNHOUSES (LEVEL 1 & 2 ONLY)

**ENZO CARO SCIO ARCHITECTURE**  
 70 Halifax Street Adelaide SA 5000  
 e n z o a r c h i t e c t . c o m  
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 COMMENCING ANY WORK OR DEFERRING TO SHOP DRAWINGS.



- FINISHES LEGEND:
1. Fibre Cement cladding (Type 1)
  2. Fibre Cement cladding (Type 2)
  3. Brick
  4. Aluminum framed windows
  5. Aluminum panel
  6. Clear glazing to shop-front
  7. Metal arbor
  8. Metal cladding
  9. Metal loading dock door
  10. Metal planter box
  11. Metal window surround
  12. Metal entry canopy
  13. Rendered + painted wall
  14. Privacy window screen

# STUDENT ACCOMODATION MATERIALS BOARD



## EXTERNAL MATERIAL FINISHES

1. **FIBRE CEMENT CLADDING (TYPE 1)**  
ARTICULATED (WHITE)
2. **FIBRE CEMENT CLADDING (TYPE 2)**  
FLAT (LIGHT GREY)
3. **BRICK**  
(BOWRAL BLUE)
4. **ALUMINIUM FRAMED WINDOWS**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
5. **ALUMINIUM PANEL**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
6. **CLEAR GLAZED SHOPFRONT**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
7. **METAL ARBOR**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
8. **METAL CLADDING**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
9. **METAL LOADING DOCK DOOR**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
10. **METAL PLANTER BOX**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
11. **METAL WINDOW SURROUND**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
12. **METAL ENTRY CANOPY**  
(POWDER-COAT DARK BRONZE OR SIMILAR)
13. **RENDERED + PAINTED WALL**  
(DARK BRONZE)
14. **EXTERNAL PAVING**

**STUDENT ACCOMODATION  
MODEL VIEWS**



**AERIAL VIEW - NORTH EAST**



**AERIAL VIEW - SOUTH WEST**



**STUDENT ACCOMODATION  
MODEL VIEWS**



**AERIAL VIEW - NORTH WEST**



**AERIAL VIEW - SOUTH EAST**

**STUDENT ACCOMODATION  
MODEL VIEWS**



**VIEW 01**



**VIEW 02**



**STUDENT ACCOMODATION  
MODEL VIEWS**



**VIEW 03**



**VIEW 04**

**STUDENT ACCOMODATION  
MAIN ENTRY PERSPECTIVE**

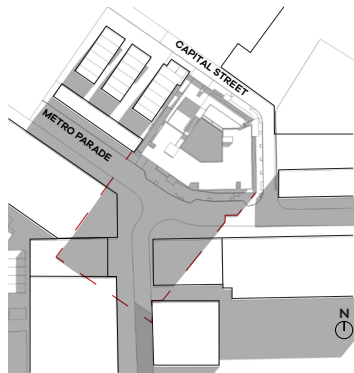




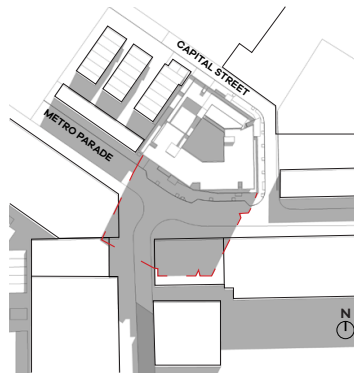
# STUDENT ACCOMODATION PODIUM PERSPECTIVE



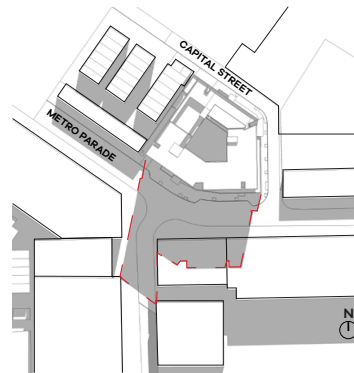
# STUDENT ACCOMODATION SHADOW STUDIES - WINTER SOLSTICE



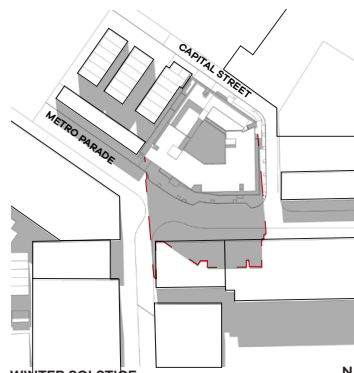
WINTER SOLSTICE  
JUNE 21 - 9AM



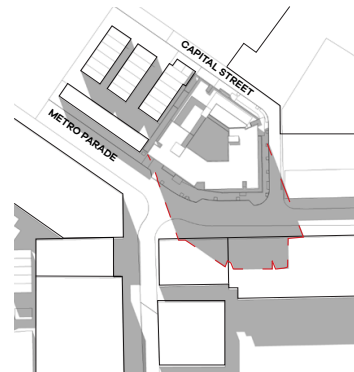
WINTER SOLSTICE  
JUNE 21 - 10AM



WINTER SOLSTICE  
JUNE 21 - 10AM



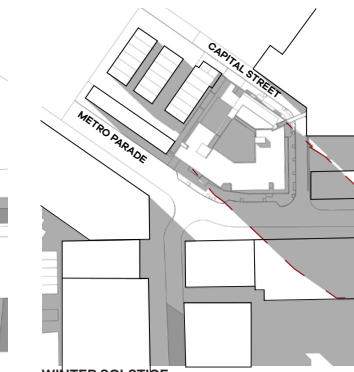
WINTER SOLSTICE  
JUNE 21 - 12PM



WINTER SOLSTICE  
JUNE 21 - 1PM

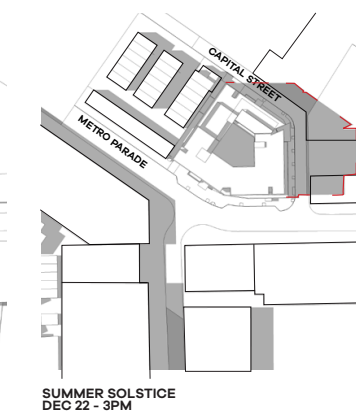
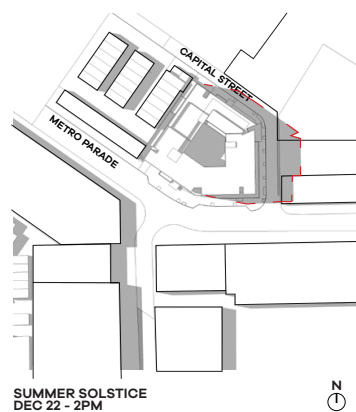
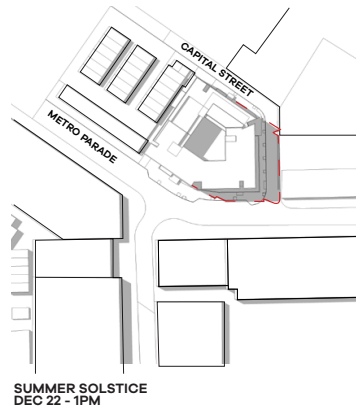
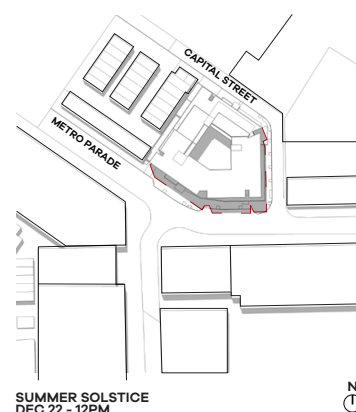
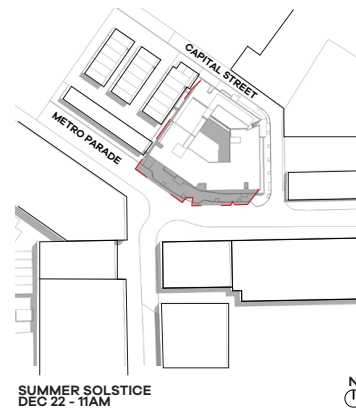
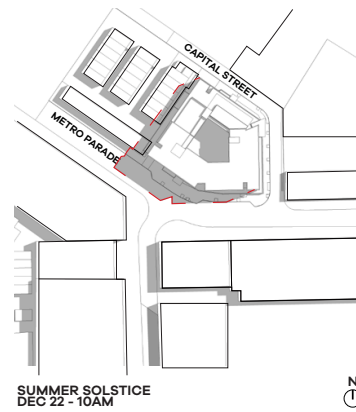
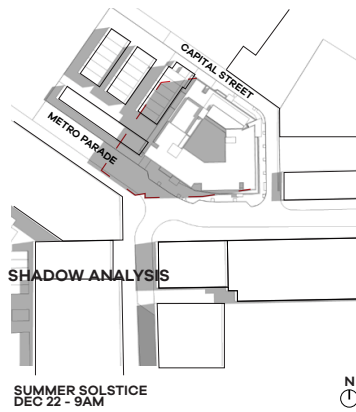


WINTER SOLSTICE  
JUNE 21 - 2PM



WINTER SOLSTICE  
JUNE 21 - 3PM

# STUDENT ACCOMODATION SHADOW STUDIES - SUMMER SOLSTICE



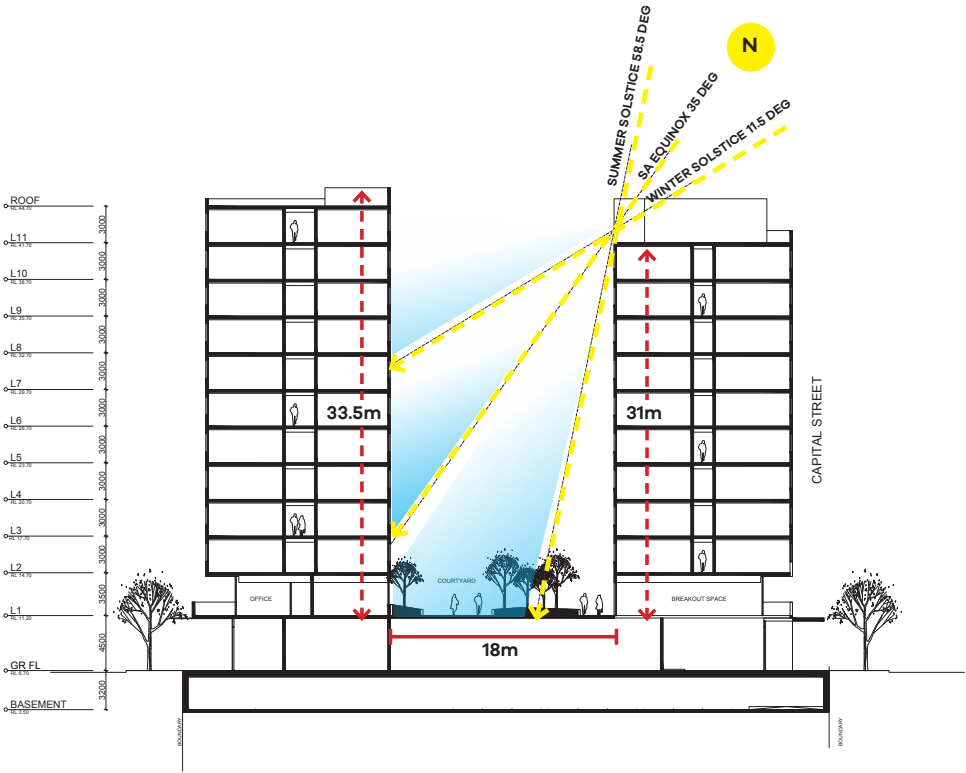


# STUDENT ACCOMODATION DIAGRAMS IN RESPONSE TO ODASA DESIGN REVIEW

## COURTYARD PROPOTION + DAYLIGHT ANALYSIS



COURTYARD ANALYSIS - PIRIE STREET PROPORTION COMPARISON



COURTYARD ANALYSIS - NORTH/SOUTH SECTION DIAGRAM



# STUDENT ACCOMODATION DIAGRAMS IN RESPONSE TO ODASA DESIGN REVIEW

## FACADE ARTICULATION



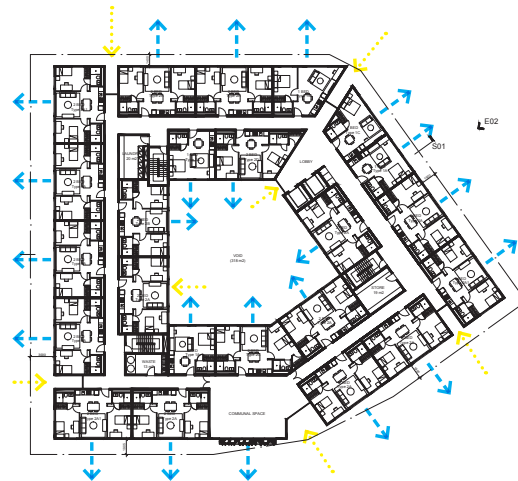
**FACADE ARTICULATION**  
Facade forms are broken up to reduce bulk and scale

Tonal colour shifts  
reduce bulk and scale



Single level brick podium  
element at pedestrian interface

## SETBACKS, LIGHT + VENTILATION



**TYPICAL FLOOR PLAN**

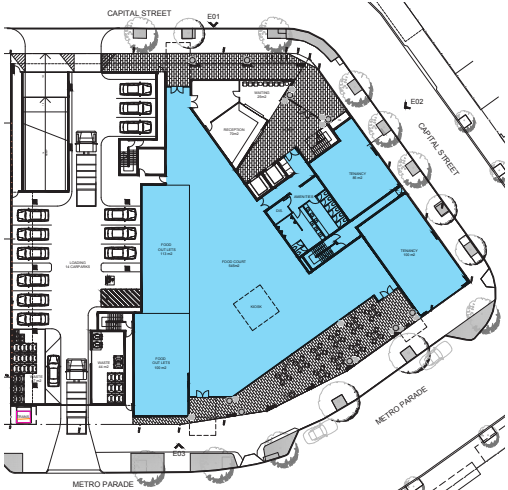


**SECTION DETAIL**

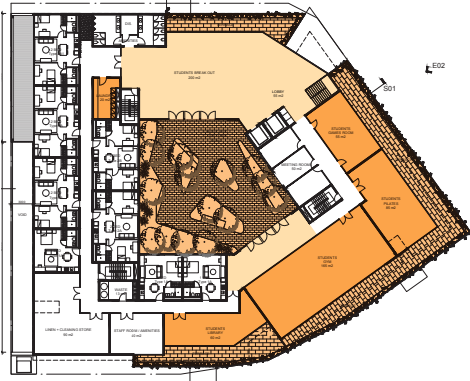
# STUDENT ACCOMODATION DIAGRAMS IN RESPONSE TO ODASA DESIGN REVIEW

## AMENITY + DESIGN OF COMMON AREAS

- COMMERCIAL TENANCY / F&B OFFERING
- STUDENT AMENITY
- COMMON AREAS (Internal)
- COMMON AREAS (External)



GROUND FLOOR



LEVEL 1



LEVEL 4



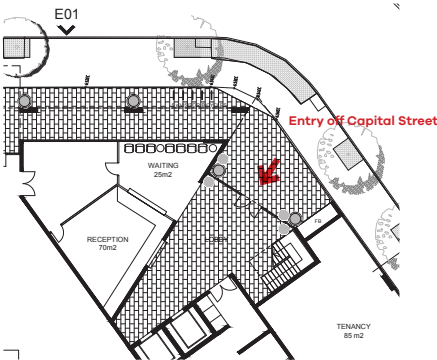
LEVEL 10



LEVEL 11

# STUDENT ACCOMODATION DIAGRAMS IN RESPONSE TO ODASA DESIGN REVIEW

## ARRIVAL POINT + CIRCULATION



LOBBY PLAN



TYPICAL LEVEL - CIRCULATION PATHS

Orange square icon: CIRCULATION PATHWAYS

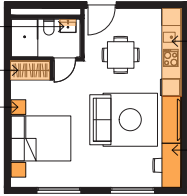
## STORAGE



2 BED - Type 2A  
62 m2  
No. x 127

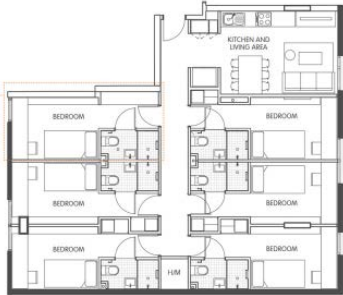
### SUPPLIED STORAGE

- Orange square icon: Storage
- Dark orange square icon: Loose furniture storage

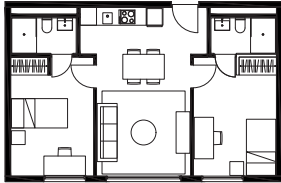
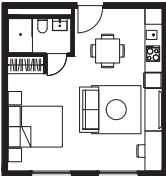


1 BED - Type 1A  
38 m2  
No. x 31

## ADAPTABILITY



EXAMPLE OF A TYPICAL STUDENT ACCOMMODATION ROOM LAYOUT



PROPOSED STUDENT ACCOMMODATION ROOM LAYOUT  
Proposed layouts be converted into future serviced hotel rooms



# **PLANNING REPORT**

## **12 STOREY STUDENT ACCOMMODATION BUILDING**

13 – 17 METRO PARADE, MAWSON LAKES

Prepared for:  
**Michael Calabro Pty Ltd**

Date:  
**22.04.2020**

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- APPENDIX 2. LANDSCAPING CONCEPT*
- APPENDIX 3. ACOUSTIC REPORT*
- APPENDIX 4. TRAFFIC AND PARKING REPORT*
- APPENDIX 5. WASTE MANAGEMENT PLAN*
- APPENDIX 6. WIND IMPACT ASSESSMENT*
- APPENDIX 7. THE INITIAL SCHEME*
- APPENDIX 8. FEEDBACK FROM THE FIRST DESIGN REVIEW SESSION*
- APPENDIX 9. FEEDBACK FROM THE SECOND DESIGN REVIEW SESSION*
- APPENDIX 10. LETTER FROM THE STATE COORDINATOR – GENERAL*

## 1. INTRODUCTION

This planning report relates to a proposal by Michael Calabro Pty Ltd ('the Applicant') to construct a 12 storey student accommodation building at 13 – 17 Metro Parade, Mawson Lakes ('the site').

The proposed building has been designed to accommodate a basement car park, an at-grade car park, a publicly accessible food court, two retail tenancies, 405 beds, and various student services and amenities.

In preparing this planning report, we have:

- inspected the site and its surroundings;
- identified, and reviewed, what we consider to be the relevant provisions of the Salisbury Council Development Plan ('the Development Plan');
- met with the Department of Planning, Transport and Infrastructure on one occasion;
- voluntarily met with, and presented the proposal to, the City of Salisbury ('the Council') and the Office for Design and Architecture South Australia ('ODASA') on two occasions;
- examined the compendium of architectural drawings at Appendix 1 and the landscaping concept at Appendix 2;
- reviewed, and summarised the key findings of, the acoustic report at Appendix 3, the traffic and parking report at Appendix 4, the waste management plan at Appendix 5 and the wind impact assessment at Appendix 6; and
- had regard to the Development Act, 1993 and to the Development Regulations, 2008.

This planning report contains our description of the site, its surroundings and the proposal, and our assessment of the proposal against what we consider to be the most relevant provisions of the Development Plan.

## 2. BACKGROUND

### 2.1 The Key Driver

This proposal is of critical importance to the State's economic prosperity and will serve to stimulate the local economy by bridging the alarming gap with respect to the supply of, and the demand for, purpose-built student accommodation.

As it stands, there are approximately 38,000 international students enrolled in South Australia yet only 5,419 beds are available within purpose-built student accommodation. Indeed, many of the students who study at the University of South Australia's Mawson Lakes Campus reside within the confines of the Central Business District ('the CBD') and are forced to commute to Mawson Lakes on a daily basis simply because the Area is bereft of suitable accommodation.

In July last year (2019), Jones Lang LaSalle was commissioned by the State Government to undertake a supply and demand analysis. According to that analysis:

- there are 4,590 beds in the CBD but only 300 in Mawson Lakes (212 of which belong to the Applicant's existing facility on the north-eastern (opposite) side of Capital Street);
- this figure (4,590 beds) is expected to increase to 8,205 beds by the end of 2022; and
- there are 11.2 full-time students per bed in the Mawson Lakes Area.

It is abundantly clear, therefore, that there is a significant shortage of, and a demonstrated need for, purpose-built student accommodation, particularly within the Mawson Lakes Area.

### 2.2 ODASA

Prior to the State Coordinator – General's decision to appoint the SCAP as the relevant authority and at the behest of the Council, the Applicant voluntarily agreed to embark upon the design review process with ODASA.

The initial scheme (see Appendix 7 for more detail), which was tabled at the first design review session on October 22, 2019, was met with a fair degree of resistance from both the Council and ODASA.

Based upon the feedback from the first design review session (see Appendix 8 for more detail), the Applicant resolved to engage the services of a registered architect and to address most, if not all, of the valid design-related concerns that were collectively raised.

The revised scheme (being the scheme that is now before the SCAP) was then presented to, and received far more favourably by, ODASA on February 19, 2020.

In direct response to the feedback from the second design review session (see Appendix 9 for more detail), the Applicant has instructed their architect to:

- raise the height of the brick podium;
- raise the parapet height of the proposed building's south-eastern element;
- increase the solid to void ratio of the ground floor level's perimeter walls;
- install three sets of French doors on the north-eastern side of the internal courtyard and three sets of French doors on the southern side of the internal courtyard;
- shift the communal/breakout spaces on Levels 1 through to 10 to the outer edges of the proposed building;
- group the communal/breakout spaces on Levels 2, 3 and 4 together (the same can also be said for the communal/breakout spaces and Levels 5, 6 and 7, and on Levels 8, 9 and 10);

- delete the balconies on the north-western side of Level 1 to soften the interface between the proposed building and the neighbouring residences to the north-west of the site, and to minimise the opportunity for overlooking to occur; and
- delete the footbridge connecting the proposed building and the Applicant's existing facility together in order to draw the students down to the ground floor level of the proposed building.

These amendments are captured across the compendium of architectural drawings at Appendix 1.

### 3. THE SITE

The site is located on the north-western corner of the T - junction of Capital Street and Metro Parade, and consists of one allotment only. The allotment to which we refer:

- has a combined frontage of 78.51 metres to Capital Street on its north-eastern and eastern sides, a combined frontage of 68.30 metres to Metro Parade on its southern and south-western sides, and an overall area of 2,556 square metres or thereabouts;
- is irregular in shape;
- is presently vacant, devoid of trees (regulated or otherwise) and used by pedestrians as a convenient shortcut between Garden Terrace and the adjacent Capital Street Shopping Centre;
- accommodates a transformer on the land marked 'A(T/F)' on Deposited Plan 74134; and
- does not, for whatever reason, come equipped with any crossovers to Capital Street or Metro Parade.

Whilst inspecting the site and its surroundings, we noticed, amongst other things, that:

- the site is adjoined, on its north-western side, by:
  - » what appear to be two, three storey, mixed-use buildings which are accessible via Capital Street and combine to accommodate more than a dozen dwellings; and
  - » a two storey, mixed-use building which is oriented to, and accessible via, Metro Parade;
- there is a two storey, mixed-use building on the north-eastern (opposite) corner of the T - junction of Capital Street and Metro Parade;
- there is a four storey, purpose-built student accommodation facility on the north-eastern (opposite) side of Capital Street (this facility is owned and operated by the Applicant, and contains a total of 212 beds, all of which are presently occupied);
- the Capital Street Shopping Centre is also located directly opposite the site;
- there is, on the north-eastern (opposite) side of Capital Street, between the Capital Street Shopping Centre and Central Link, an integrated service station complex;
- there is a four storey, mixed-use building on the eastern corner of Central Link and Metro Parade;
- there is a nine storey building which remains under construction on the north-western corner of the T - junction of Main Street and Metro Parade;
- there is a four storey, serviced apartment building which is operated by Quest on the south-western corner of the T - junction of Main Street and Metro Parade;
- there are two and three storey residential flat buildings on the on southern (opposite) side of Metro Parade, between Exhibition Lane to the east, Paddington Lane to the south and Garden Terrace to the west;
- there is a four storey, mixed-use building on the south-western corner of the T - junction of Garden Terrace and Metro Parade;
- Capital Street and Metro Parade are sealed, two-way public roads which fall under the care and control of the Council;
- no parking is permitted along the north-eastern or eastern sides of the site;
- there are indented parking bays along the southern and south-western sides of the site (parking is permitted within these bays for up to two hours at a time between 8:00 am and 6:00 pm on weekdays - outside of these times, no parking restrictions apply);



- the Mawson Lakes Interchange is located less than 400 metres to the north-west of the site; and
- the University of South Australia's Mawson Lakes Campus is located less than 500 metres to the south-east of the site.

The site and its surroundings are shown in Figure 3.1 below.

**Figure 3.1: The Locality**



## 4. THE PROPOSAL

The Applicant seeks development plan consent ('consent') from the SCAP to construct a 12 storey student accommodation building on the site. The proposal is accurately depicted across the compendium of architectural drawings at Appendix 1. It is also summarised below.

### 4.1 Land Use Mix

The proposed building will contain, amongst other things:

- two retail tenancies which will be let to third parties;
- a publicly accessible food court which will form part of, and be owned and operated by, the student accommodation facility;
- 405 beds across 228 student accommodation rooms ('rooms'), including 51, one-bed rooms and 177, two-bed rooms; and
- a room with two beds for the manager of the student accommodation facility.

Table 4.1 below provides a succinct breakdown of the various room types.

**Table 4.1: Breakdown of Room Types**

Room Type	Beds	Floor Area	Quantity
1A	One	38 square metres	32
1B	One	46 square metres	9
1C	One	39 square metres	10
2A	Two	62 square metres	121
2A1	Two	62 square metres	27
2B	Two	60 square metres	10
2C	Two	60 square metres	10
2D	Two	60 square metres	9
Manager's Room	Two	105 square metres	One

The gymnasium, fitness studio, library and games, staff and meeting rooms on Level 1 are all ancillary and subservient features of the student accommodation facility.

### 4.2 Internal Configuration

#### 4.2.1 Basement

The basement will contain:

- 73 line-marked car parking spaces, two of which will be set aside at all times for people with a disability and positioned as close as practicable to the lift shafts; and
- three storage enclosures which will combine to accommodate a total of 72 bicycles.

The basement will not be accessible to the general public, as the Applicant is committed to providing the safest possible environment for their students and employees.

#### 4.2.2 Ground Floor Level

The ground floor level will contain:

- a lobby, reception and waiting room;
- two retail tenancies with a combined gross leasable floor area of 185 square metres;
- a food court which will:
  - » be open to the general public;
  - » be accessible and visible from both Capital Street and Metro Parade in order to capture as much foot traffic as possible; and
  - » feature two alcoves for multiple food outlets, an outdoor dining area along the edge of Metro Parade and an amenities block;
- an at-grade car park which has been designed to accommodate 14 line-marked car parking spaces, one of which will be set aside at all times for people with a disability; and
- two waste enclosures, one on each side of the aisle associated with the at-grade car park.

The at-grade car park, unlike the basement, will be accessible to the general public and is not, under any circumstances, to be used by the students or any of the student accommodation facility's employees.

#### 4.2.3 Level 1

Level 1 will contain:

- eight rooms, including three, one-bed rooms and five, two-bed rooms;
- an internal courtyard courtesy of the central core/lightwell that has been incorporated into the overall design of the proposed building to ensure that the 'internal' rooms receive access to natural light and ventilation, and have a satisfactory short-range outlook (this courtyard will be accessible to all of the students, not just to those residing on this particular level);
- a lobby which features two lift shafts and forms part of a large breakout space for the students;
- a gymnasium and fitness studio, neither of which will be let to third parties or accessible to the general public;
- a library;
- a games room, a staff room and three meeting rooms;
- three outdoor terraces which have been designed to overlook and activate the surrounding road network;
- a communal laundry;
- a communal waste room fitted with two waste chutes (one for putrescibles and one for recyclables), and several plastic bins for cardboard and organic matter;
- a store for linen and cleaning materials;
- an amenities block; and
- four staircases.

#### 4.2.4 Levels 2, 3 and 4

Levels 2, 3 and 4 will each contain:

- 23 rooms, including five, one-bed rooms and 18, two-bed rooms;
- a communal/breakout space oriented to, and visible from, Metro Parade;
- a communal laundry;
- a communal waste room fitted with two waste chutes (one for putrescibles and one for recyclables), and several plastic bins for cardboard and organic matter;
- a store;
- a lobby featuring two lift shafts; and
- three staircases.

The internal layout of these three levels will be identical.

#### 4.2.5 Levels 5, 6 and 7

Levels 5, 6 and 7 will each contain:

- 23 rooms, including three, one-bed rooms and 20, two-bed rooms;
- a communal/breakout space oriented to, and visible from, Capital Street and Metro Parade;
- a communal laundry;
- a communal waste room fitted with two waste chutes (one for putrescibles and one for recyclables), and several plastic bins for cardboard and organic matter;
- a store;
- a lobby which features two lift shafts; and
- three staircases.

The internal layout of these three levels will be identical.

#### 4.2.6 Levels 8, 9 and 10

Levels 8, 9 and 10 will each contain:

- 23 rooms, including five, one-bed rooms and 18, two-bed rooms;
- a communal/breakout space oriented to, and visible from, Capital Street;
- a communal laundry;
- a communal waste room fitted with two waste chutes (one for putrescibles and one for recyclables), and several plastic bins for cardboard and organic matter;
- a store;
- a lobby which features two lift shafts; and
- three staircases.

The internal layout of these three levels will be identical.

#### 4.2.7 Level 11

Level 11 will contain:

- 14 rooms, including three, one-bed rooms and 11, two-bed rooms, one of which will be set aside at all times for the manager of the student accommodation facility;
- a rooftop terrace on the northern side of the central core/lightwell which will be partially sheltered from the elements (this terrace will be accessible to all of the students, not just to those residing on this particular level);
- an enclosed area for the proposed building’s plant and equipment;
- a communal laundry which will also be able to be used for storage purposes;
- a communal waste room fitted with two waste chutes (one for putrescibles and one for recyclables), and several plastic bins for cardboard and organic matter;
- a lobby which features two lift shafts; and
- three staircases.

#### 4.3 Floor to Ceiling Heights

The proposed floor to ceiling heights are summarised in Table 4.2 below.

**Table 4.2: Floor to Ceiling Heights**

Level	Floor to Ceiling Heights
Basement	2.7 metres
Ground Floor Level	3.4 metres
Levels 1 - 11	2.5 to 2.7 metres

#### 4.4 Floor to Floor Heights

The proposed floor to floor heights are summarised in Table 4.3 below.

**Table 4.3: Floor to Floor Heights**

Level	Floor to Floor Heights
Basement	3.2 metres
Ground Floor Level	4.5 metres
Level 1	3.5 metres
Levels 2 - 11	3.0 metres

#### 4.5 Building Height

The proposed building will range from 11 storeys and 36 metres to 12 storeys and 39 metres in height.



#### 4.6 Siting

The ground floor level will:

- be set back up to 5.4 metres from Capital Street;
- be set back up to 6.1 metres from Metro Parade; and
- abut the north-western (side) boundary of the site.

Level 1 will be set back:

- up to 5.5 metres from Capital Street;
- up to 4.8 metres from Metro Parade; and
- 3.0 metres from the north-western (side) boundary of the site.

Levels 2 through to 10 will be set back:

- up to 1.9 metres from Capital Street and Metro Parade; and
- 3.0 metres from the north-western (side) boundary of the site.

Level 11 will be set back:

- up to 11.7 metres from Capital Street;
- up to 1.9 metres from Metro Parade; and
- not less than 3.0 metres from the north-western (side) boundary of the site.

#### 4.7 External Materials

The Applicant has selected a handful of contemporary yet durable materials.

These materials, which are shown on the digital board at Appendix 1, include, but are not necessarily limited to:

- articulated fibre cement cladding (white);
- flat fibre cement cladding (light grey);
- brick ('Bowral Blue');
- rendered masonry (dark bronze or similar);
- powder-coated aluminium and metal (dark bronze or similar); and
- clear glass.

#### 4.8 Access

There will be three new access points, including two located side-by-side on Capital Street and one on Metro Parade.

The access point on Metro Parade has been designed to only allow standard passenger vehicles and waste collection vehicles of up to 11 metres in length to be driven into the at-grade car park via Metro Parade.

The easternmost access point on Capital Street has been designed to only allow standard passenger vehicles and waste collection vehicles of up to 11 metres in length to be driven out of the at-grade car park via Capital Street.

The westernmost access point on Capital Street has been designed to allow standard passenger vehicles to be driven into, and out of, the basement simultaneously.

The proposed access arrangements will culminate in the removal of two 'street trees' however, the removal of these trees will be offset by the planting of five new trees around the perimeter of the site. See Section 4.14 for more detail.

#### **4.9 Bicycle Parking**

There will be a total of 82 bicycle parking spaces within the confines of the site. For clarity, we have, for the purpose of providing this calculation, taken into account all three of the storage enclosures within the basement, as well as the five stainless steel rails between the recessed podium and Capital Street, each of which will be capable of accommodating two bicycles at any one time.

#### **4.10 Car Parking**

There will be a total of 87 line-marked car parking spaces within the confines of the site.

All 73 of the spaces within the basement will be for the exclusive use of the students and the student accommodation facility's employees.

All 14 of the spaces within the at-grade car park will be accessible to the prospective tenants of the retail tenancies and food outlets, and to the general public.

#### **4.11 Stormwater**

In the event that the proposal is consented to, the Applicant is prepared to accept the imposition of a condition which requires a stormwater management plan to be furnished and subsequently endorsed prior to development approval being issued.

#### **4.12 Waste**

The waste management plan at Appendix 5 shows, amongst other things, that:

- there will be two waste enclosures;
- the waste enclosure on the south-eastern side of the aisle associated with the at-grade car park has been designed to accommodate the requisite type and number of bins for the 'student accommodation' component (three, 1,100 litre bins for putrescibles, three, 1,100 litre bins for recyclables and two, 660 litre bins for organics);
- the waste enclosure on the north-western (opposite) side of the aisle associated with the at-grade car park has been designed to accommodate the requisite type and number of bins for the retail tenancies and food court on the ground floor level (three, 1,100 litre bins for putrescibles, five, 240 litre bins for recyclables and six, 660 litre bins for organics);
- each level above the ground floor level (Levels 1 through to 11) will have its own communal waste room;
- the communal waste rooms on Levels 1 through to 11 will be fitted with two waste chutes (one for putrescibles and one for recyclables), and designed to accommodate several plastic bins for cardboard and organic matter;
- all forms of waste will be collected by a private contractor and up to, but not exceeding, three times per week;

- the waste collection process is likely to take up to, but not exceeding, 10 minutes to complete; and
- the waste collection process will take place before the food court opens or after the food court closes, as the private contractor will need to temporarily block the aisle associated with the at-grade car park.

#### 4.13 Landscaping

The landscaping concept at Appendix 2 shows, amongst other things, that:

- potted plants will be installed within the confines of the outdoor dining area;
- potted plants will also be installed in, and around, the lobby on the ground floor level;
- the internal courtyard will feature 16 new trees and an assortment of raised planter beds with integrated seating;
- raised planter beds will be installed along the outer edges of the outdoor terraces on Level 1;
- potted plants will be installed within each of the communal/breakout spaces;
- a cantilevered planter bed with cascading plants will be installed along the outer edge of each communal/breakout space;
- the rooftop terrace will feature an assortment of potted plants; and
- a creeper will be trained to sprawl across the top of the canopy which has been designed to cover approximately half of the area of the rooftop terrace.

It is also clear from Page 15 of the landscaping concept at Appendix 2 that:

- the internal courtyard “*will not receive full sun during the winter months and restricted sun during summer*”;
- the environment within the internal courtyard “*will be comparable to a tight city street with trees also receiving reflected sun and light from the façade glazing*”;
- all of the trees that have been carefully selected for this environment “*will grow more upright (in search of light), with a lighter more [sic] transparent canopy*”; and
- all of the plants will be irrigated year-round.

#### 4.14 Public Realm

The Applicant intends to enhance the aesthetic appeal of the public realm by planting, at their expense, three trees (to be chosen in conjunction with the Council) along Capital Street and two trees (to be chosen in conjunction with the Council) along Metro Parade. The indicative location of each tree is shown on Page 6 of the landscaping concept at Appendix 2.

The Applicant also intends to improve the pedestrian experience along Capital Street and Metro Parade by installing a cantilevered canopy above each entrance to the food court on the ground floor level.

#### 4.15 Signage

No signage is proposed as part of this development application.

#### 4.16 Staging

No staging is proposed or required either.

## **5. PROCEDURAL MATTERS**

### **5.1 The Relevant Authority**

The SCAP was appointed as the relevant authority on December 17, 2019.

The letter from the State Coordinator – General at Appendix 10 attests to this.

### **5.2 The Relevant Version of the Salisbury Council Development Plan**

The relevant version of the Development Plan for procedural and assessment purposes was consolidated on April 4, 2019.

The site, under this version of the Development Plan, is located in the Core Area of the Urban Core Zone ('the Zone').

### **5.3 Form of Development**

According to the Procedural Matters Section of the Zone, the proposal involves a form of development that is neither complying nor non-complying. It must, therefore, be assessed and determined on its merits by the SCAP in its capacity as the relevant authority.

### **5.4 Category of Development**

According to the Procedural Matters Section of the Zone, the proposal involves a Category 2 form of development.

### **5.5 Statutory Referrals**

The development application to which the proposal relates need not be referred to the Commonwealth Secretary for the Department of Transport and Regional Services, as the proposed building will not exceed 45 metres in height (see Zone D on Overlay Map Sal/47 – Development Constraints).

## 6. ASSESSMENT

Our assessment of the proposal is set out below.

Please note that we have not assessed the proposal against any of the density, private open space or domestic storage provisions, as they relate to ‘dwellings’ and the rooms within the proposed building are not ‘dwellings’, as they are not self-contained residences.

### 6.1 Land Use

The proposal is entirely appropriate from a land use perspective. We say this for several reasons.

First, the Desired Character Statement (‘the DCS’) for the Zone advises, in part, that *“student and aged accommodation, serviced apartments and affordable housing are also strongly encouraged in the Core Area to assist in delivering an overall mix of residential activity in this area.”*

(Our underlining for emphasis)

Second, shops, like the retail tenancies and food outlets on the ground floor level, are envisaged within the Zone. Principle 1 of the Zone quite clearly attests to this.

Third, the retail tenancies, the food outlets and, to a lesser extent, the student accommodation facility itself will generate employment opportunities within the Cora Area, as sought by the DCS for the Zone.

Fourth, the retail tenancies and food court on the ground floor level will be *“high pedestrian generators”* and combine to *“provide opportunities for multi-purpose trips”*, as sought by Principle 5 of the Zone.

Fifth, the food court on the ground floor level will act as a social hub for communal activity, as sought by the DCS for the Zone.

The spatial arrangement of the proposed uses is also consistent with Principle 3 of the ‘Medium and High Rise Development’ Module.

For clarity, this provision advises that *“mixed use development should incorporate active uses such as shops and cafés at ground level and contribute towards activation of the public realm.”*

### 6.2 Building Height

Principle 23 of the Zone provides guidance with respect to the height of the proposed building. It advises that:

**23** Except where airport building height restrictions prevail, building heights (excluding any rooftop locate [sic] mechanical plant or equipment) should be consistent with the following parameters:

Designated area	Minimum building height	Maximum building height
Core Area	4 storeys	10 storeys and up to 40.5 metres
Transition Area	No minimum	4 storeys and up to 16.5 metres

Principle 23 of the Zone must be read together with Principle 27 of the Zone in order to determine the maximum building height for this particular site, as the latter offers various incentives that allow for this height to be increased.



For clarity, Principle 27 of the Zone advises that:

- 27 Where a minimum of 3 hours [sic] sunlight access on 21 June to habitable rooms and open space of dwellings in adjoining zones can be maintained, the following incentives apply to development:

Form of development	Additional building height above maximum allowed height in the zone	Car parking Reduction (rounded to the nearest whole number)
Development which includes more than 15 per cent of dwellings as affordable housing	1 storey	30 per cent
Site of development located within 200 metres of a fixed public transport stop		30 per cent
The development includes undercroft parking with access from a road located to the side of rear of the site	1 storey	10 per cent
A building including non-residential development on the ground floor (or first two floors) with residential development on the floors above	1 storey	10 per cent except on land shown on Overlay Map(s) - Strategic Transport Routes
A building including a child care facility	1 storey	
A building including a rooftop garden that occupies a minimum of 25 percent of the building footprint area	1 storey	
Sympathetic redevelopment of a local or State heritage place that retains the item and its appearance to the street		30 per cent
Maximum accumulated allowance	For buildings 5 storeys or less - 1 storey (and less than 4) metres additional building height For buildings of 6 storeys or more - 2 storeys (and less than 8 metres) additional building height	30 per cent

According to Principle 27 of the Zone, the maximum building height for this particular site can be increased from 10 storeys and up to 40.5 metres to 12 storeys and up to 48.49 metres because:

- all of the adjacent dwellings are also located in the Core Area of the Urban Core Zone;
- the proposed building will come equipped with a basement car park and the access point associated with the basement car park will be located as close as practicable to the north-western (rear) boundary of the site;
- the ground floor level will be used exclusively for commercial/non-residential purposes; and
- all of the rooms will be located above the ground floor level.

Against this background, we note that the proposed building, when measured from the top of the tallest parapet to the finished ground level directly below, will sit:

- 1.5 metres below the maximum height that has been prescribed for this site (that is if the SCAP elects not to apply the incentives);
- 9.49 metres below the maximum height that has been prescribed for this site (that is if the SCAP elects to apply the incentives); and
- 6.0 metres below the 'Airport Building Height'.

We also note that the Government Architect advised the Applicant by letter dated March 4, 2020 that *“in principle, I support the proposed building height as it is consistent with the envisaged character of the area.”*

### 6.3 Siting

Principle 24 of the Zone provides guidance with respect to the distance between the proposed building and Capital Street, the latter of which we have classed as the site’s primary road frontage, as the lobby on the ground floor level is oriented to, and accessible from, Capital Street. It advises that:

**24 Buildings (excluding verandas, porticos and the like) should be set back from the primary road frontage in accordance with the following parameters:**

Designated area	Minimum setback from the primary road frontage
Core Area	No minimum
Transition Area	2 metres or as defined on the relevant Concept Plan

The proposed building includes a single storey podium which, for the most part, abuts Capital Street, as permitted by Principle 24 of the Zone. Some recessed areas have, however, been incorporated behind brick colonnades to enhance the architectural expression of the podium whilst providing additional shelter from the elements. The levels above the podium have been set back from Capital Street to temper the overall mass of the proposed building.

Principle 26 of the Zone provides guidance with respect to the distance between the proposed building and Metro Parade, the latter of which we have classed as the site’s secondary road frontage. It advises, in part, that:

**26 Buildings (excluding verandas, porticos and the like) should be set back in accordance with the following parameters:**

Setback parameter	Value
Minimum setback from secondary road frontage	0.9 metres

The podium will, for the most part, be set back further than the recommended distance from Metro Parade, as the Applicant seeks to enliven this public road by creating an outdoor dining area between the food court and the abutting verge.

Principle 26 of the Zone also provides guidance with respect to the distance between the proposed building and north-western boundary of the site. It advises, in part, that:

**26 Buildings (excluding verandas, porticos and the like) should be set back in accordance with the following parameters:**

Setback parameter	Value
Minimum setback from the rear allotment boundary	<p>4 metres where the subject land directly abuts an allotment of a different zone</p> <p>3 metres in all other cases, except where development abuts the wall of an existing or simultaneously constructed building on the adjoining land</p>

Levels 1 through to 11 will all be set back not less than 3.0 metres from the north-western boundary of the site, as sought by Principle 26 of the Zone.

Whilst a thick, fibre cement wall of up to, but not exceeding, 6.5 metres in height will need to be constructed along the north-western boundary of the site, we do not consider the siting or the height of this wall to present any insurmountable issues on the basis that:

- this particular boundary is presently abutted by one and two storey buildings; and
- this wall is, for those reasons that are outlined within the acoustic report at Appendix 3, required to ensure that the proposal complies with the relevant requirements of the Environment Protection (Noise) Policy, 2007 and, more importantly, to shield the occupants of the neighbouring residences to the north-west of the site from the noises associated with the at-grade car park and waste enclosures, as sought by Principles 1, 2 and 7 of the 'Interface between Land Uses' Module.

## 6.4 Ground Floor Level

Objective 4 and Principle 12 of the Zone provide guidance with respect to the ground floor level.

The former calls for *"mixed use development integrated with a high quality public realm that promotes walking, cycling, public transport patronage and positive social interaction."*

The latter advises that:

**12 In Core Areas:**

- the ground and first floors of buildings should be built to dimensions including a minimum ceiling height of 4.5 metres to allow for adaptation to a range of land uses including shops, office and residential without the need for significant change to the building;**
- a minimum of 50 per cent of the ground floor primary frontage of buildings should be visually permeable, transparent or clear glazed to promote active street frontages and maximise passive surveillance.**

The outdoor dining area on the south-eastern side of the food court will facilitate social interaction whilst the planting of additional 'street trees' within the confines of the abutting verges will contribute to the creation of a high-quality public realm, as sought by Objective 4 of the Zone. Indeed, the removal of the footbridge from the proposal will also draw more students from the adjacent facility down to the ground floor level which, in turn, will activate the surrounding road network and increase passive surveillance within the immediate vicinity of the site, as well as retail sales.

The ground floor level will have a floor to floor height of 4.5 metres and a floor to ceiling height of 3.4 metres. Be that as it may, we are of the view that the ground floor level, in its current configuration, satisfies the intent of Clause (a), as it can, and will, be used exclusively for commercial purposes.

The overwhelming majority of the ground floor level's perimeter walls will be fitted with clear glass in order to activate the surrounding road network and allow for passive surveillance to occur, as sought by Clause (b).

Principle 6 of the 'Medium and High Rise Development' Module also provides guidance with respect to the ground floor level. It advises that:

- 6 Entrances to multi-storey buildings should:**
- (a) be oriented towards the street;**
  - (b) be clearly identifiable;**
  - (c) provide shelter, a sense of personal address and transitional space around the entry;**
  - (d) provide separate access for residential and non-residential land uses.**

The main entrance to the proposed building (the lobby on the ground floor level) will be oriented towards the bend in Capital Street, as sought by Clause (a).

The cantilevered canopies will help to identify the entrances to the food court and provide shelter from the elements, as sought by Clauses (b) and (c).

The student accommodation facility, the retail tenancies and the food court will all have separate access points, as sought by Clause (d).

## 6.5 Amenity

Principle 10 of the 'Medium and High Rise Development' Module provides guidance with respect to amenity. It advises, in part, that:

- 10 Residential buildings (or the residential floors of mixed use buildings) should:**
- (b) ensure living rooms have, at a minimum, a satisfactory short range visual outlook to public or communal space.**

The rooms on Levels 1 through to 11 are extremely generous in terms of their size and offer a degree of amenity that is above and beyond what is typically offered to students in the CBD.

The provision of a central core/lightwell means that the 'external' rooms will overlook the public realm whilst the 'internal' rooms will overlook the internal courtyard on level 1, as sought by Clause (b).

Principles 21 and 22 of the 'Medium and High Rise Development' Module also provide guidance with respect to amenity. They advise that:

- 21 Development should maximise the use of natural sunlight and ventilation in living areas and private open spaces to reduce the need for artificial lighting and mechanical heating and cooling.**
- 22 Development should ensure that the maximum distance from a living room, dining room, bedroom or kitchen to a window providing natural light and ventilation is no more than 8 metres.**

All of the beds and living areas will be well within 8.0 metres of an openable window which means that the need for artificial lighting, and mechanical cooling and heating will be minimised, as sought by Principles 21 and 22 of the 'Medium and High Rise Development' Module.

## 6.6 Communal Open Spaces

Principle 19 of the 'Medium and High Rise Development' Module provides guidance with respect to the communal open spaces. It advises that:

- 19 Communal open space should be located to:**
- (a) maximise solar access;**
  - (b) be accessible to all users;**
  - (c) contribute to visual privacy between apartments; and**
  - (d) create a pleasant outlook.**

The proposed building will contain 545 square metres of communal open space in the form of an internal courtyard and a rooftop terrace.

The internal courtyard and rooftop terrace will be accessible to all of the students, as well as the student accommodation facility's employees, as sought by Clause (b).

The rooftop terrace will, as sought by Clause (a), receive an abundance of natural light given that it is located directly atop Level 10 and to the north of Level 11.

Although the internal courtyard will receive a lesser amount of natural light, particularly during the autumn, winter and spring months, it is important to keep in mind that:

- the primary purpose of this space is to provide natural light and ventilation to all of the 'internal' rooms, and to ensure that the occupants of these rooms have a pleasant outlook, as sought by Clause (d);
- this space is secondary to the rooftop terrace and supplemented by another 10 communal/breakout spaces across levels 1 through to 10; and
- this space is most likely to be used during the summer months and the cross-section at Appendix 1 demonstrates that sunlight will reach the surface during this period of the year.

## 6.7 Design and Appearance

The DCS for the Zone provides guidance with respect to the design and appearance of the proposed building.

It advises, in part, that "*development in the zone [sic] will achieve high quality urban design.*"

It also advises, in part, that "*development will contribute positively to the quality of the public realm by articulating buildings with canopies, modelled façades and balconies that make use of light and shade, and by providing architectural detail. Solid material will be balanced with glazed areas, and plant and service equipment will be enclosed and out of view from the street and neighbouring sites.*"

The architectural expression of the proposed building is characterised by a series of solid wall sections that are clad in contrasting fibre cement panels. The external appearance of these panels has been enhanced through the use of glazed vertical recesses and horizontal rebates or bands, the latter of which serve to accentuate the width of the proposed building whilst reducing its apparent height.

The glazed reveals at the end of the corridors on Levels 1 through to 11 also serve to temper the mass of the proposed building by breaking it up into discrete elements and casting shadows across various surfaces.



The use of brick and glass at the ground floor level will give the proposed building a strong but balanced base. It will also introduce a 'fine grain' element to both streetscapes.

The proposed building's plant and equipment will be stored within the confines of an enclosure on Level 11 and, therefore, concealed from the public realm.

Principle 4 of the 'Medium and High Rise Development' Module also provides guidance with respect to the design and appearance of the proposed building. It advises, in part, that:

- 4 Buildings should:**
- (a) **achieve a human scale at ground level through the use of elements such as canopies, verandas or building projections;**
  - (b) **provide shelter over the footpath where minimal setbacks are desirable.**

The cantilevered canopies and brick colonnades will combine to create a human scale at ground level and provide shelter from the elements, as sought by Clauses (a) and (b).

### 6.8 Overshadowing

Principle 13 of the Zone provides guidance with respect to overshadowing. It advises that:

- 13 Except in Core Areas, development of three or more storeys in height should ensure that:**
- (a) **north-facing windows to habitable rooms of existing dwelling(s) on the same allotment, and on adjacent allotments, receive at least 3 hours of direct sunlight over a portion of their surface between 9:00 am and 3:00 pm on 21 June;**
  - (b) **ground level open space of existing buildings receives direct sunlight for a minimum of 2 hours between 9:00 am and 3:00 pm on 21 June to at least the smaller of the following:**
    - (i) **half of the existing ground level open space;**
    - (ii) **35 square metres of the existing ground level open space (with at least one of the area's dimensions measuring 2.5 metres).**

(Our underlining for emphasis)

Principle 13 of the Zone does not apply to the proposal, as all of the adjacent properties are located in the Core Area as well. Figure 6.1 below attests to this.

**Figure 6.1: The Core Area**



With that said, the shadow studies at Appendix 1 demonstrate that the proposed building will not, between the hours of 9:00 am and 3:00 pm on the winter solstice, cast a single shadow over the habitable room windows or private open spaces associated with the neighbouring dwellings to the north-west of the site.

## 6.9 Access

Principles 22 and 23 of the ‘Transportation and Access’ Module provide guidance with respect to the proposed access arrangements. They advise that:

- 22 Development should have direct access from an all weather public road.**
- 23 Development should be provided with safe and convenient access which:**
- (a) avoids unreasonable interference with the flow of traffic on adjoining roads;**
  - (b) provides appropriate separation distances from existing roads or level crossings;**
  - (c) accommodates the type and volume of traffic likely to be generated by the development or land use and minimises induced traffic through over-provision;**
  - (d) is sited and designed to minimise any adverse impacts on the occupants of and visitors to neighbouring properties.**

The basement will be accessible via Capital Street and the at-grade car park will be accessible via Metro Parade. Capital Street and Metro Parade are both sealed public roads, as sought by Principle 22 of the ‘Transportation and Access’ Module.

The access points have been configured in a manner that will negate the need for vehicles to be reversed onto Capital Street or Metro Parade, as sought by Principle 23, Clause (a) of the ‘Transportation and Access’ Module.

The traffic and parking report at Appendix 4 indicates that the traffic associated with this development (in the order of 52 trips during the morning peak hour and 88 trips during the evening peak hour) will *“be readily accommodated at the site’s proposed access points”* and *“have minimal [sic] impact upon the operation of associated intersections”*, as sought by Principle 23, Clause (c) of the ‘Transportation and Access’ Module.

## 6.10 Bicycle Parking

Mr Thomas Wilson of Cirqa, a qualified and independent traffic engineer, was instructed by the Applicant to determine whether or not there will be enough on-site bicycle parking.

Whilst Mr Wilson’s findings are disclosed at Appendix 4, we wish to highlight that:

- the retail tenancies and food outlets on the ground floor level combine to generate a theoretical demand for five on-site bicycle parking spaces, including two spaces for employees and three spaces for visitors;
- the prospective tenants and their customers will have access to twice the recommended number of on-site bicycle parking spaces, as the stainless steel rails between the recessed portion of the podium and Capital Street will be capable of accommodating up to 10 bicycles at any one time;
- the relevant version of the Development Plan does not prescribe a theoretical rate for student accommodation;

- the basement will contain one bicycle parking space for every 5.63 rooms within the proposed building (this compares rather favourably to the recently approved student accommodation facility at 29 Twin Street in the City which, according to Mr Wilson, was designed to provide one on-site bicycle parking space for every 24.3 rooms); and
- the provision of 72 bicycle parking spaces within the confines of the basement will encourage the students to use an alternate and sustainable mode of transport, as sought by the DCS for the Zone.

## 6.11 Car Parking

Principle 28 of the Zone provides guidance with respect to the provision of on-site car parking. It advises that:

**28 Except where incentives apply, vehicle parking should be provided at the following rates:**

Form of development	Minimum number of parking spaces
Residential development	0.75 per dwelling
Shops	3 per 100 square metres of gross leasable floor area
Tourist accommodation	1 space for every 4 bedrooms up to 100 bedrooms plus 1 additional parking space for every 5 bedrooms over 100 bedrooms
All other non-residential development	3 per 100 square metres of gross leasable floor area at ground floor level plus 1.5 additional parking spaces for every 100 square metres of gross leasable floor area above ground floor level

Mr Wilson was also instructed by the Applicant to determine whether or not there will be enough on-site car parking.

Whilst Mr Wilson’s findings are disclosed at Appendix 4, we wish to highlight that:

- the ‘commercial’ or ‘non-residential’ component generates a theoretical demand for 14 spaces;
- the theoretical demand generated by the ‘commercial’ or ‘non-residential’ component will be catered for by the at-grade car park, as it has been designed to accommodate 14 spaces;
- the ‘student accommodation’ component does not, in our opinion, generate a theoretical demand for on-site car parking, as the rooms within the proposed building are not ‘dwellings’;
- if one were to incorrectly apply a rate of 0.75 spaces per room, then the ‘student accommodation’ component would generate a theoretical demand for 171 spaces;
- a rate of 0.75 spaces per room is considered by Mr Wilson “to be highly conservative and its application to the subject proposal would result in a significant overprovision of parking spaces”;
- Principle 29 of the Zone advises, in part, that “a lesser parking rate may be applied (for student accommodation) where justified based on local circumstances”;

- a lesser parking rate can and should be applied according to Mr Wilson because:
  - » “the subject site is located within 400 m [sic] walking distance of the Mawson Lakes Interchange and 200 m [sic] from Main Street (from which locations, high-frequency public transport services operate)”;
  - » “the subject site is located within 300 m [sic] walking distance from the University of South Australia’s Mawson Lakes Campus”;
  - » “the site has extensive bicycle parking provisions located throughout (well above that required by Council’s Development Plan)”;
  - » “footpaths (accommodating both pedestrian and bicycle movements) are provided on both sides of Metro Parade and Capital Street immediately adjacent the site, providing connectivity to the boarder footpath network”;
  - » “the proposed development is considered to be appropriate for supporting shared parking arrangements”; and
  - » “on-street parking is provided on Metro Parade, Capital Street and numerous other roads within close vicinity to the subject site”;
- based on relevant literature and empirical data from similar facilities, such as the Applicant’s adjacent facility which features 212 beds but no on-site car parking spaces for its students, the ‘student accommodation’ component generates a theoretical demand for up to, but not exceeding, 46 spaces; and
- the basement has been designed to accommodate 73 spaces which means that there will be a theoretical surplus of 27 spaces for the ‘student accommodation’ component.

In the extremely unlikely event that the student accommodation facility fails and the proposed building has to be used to provide serviced accommodation for tourists, it is also clear from the traffic and parking report at Appendix 4 that there will continue to be a theoretical surplus of spaces within the basement.

The proposed building has, therefore, been future-proofed, as sought by Principle 20 of the ‘Medium and High Rise Development’ Module.

## 6.12 Waste

Principles 29 to 32 of the ‘Medium and High Rise Development’ Module provide guidance with respect to the management of waste. They advise that:

- 29 Development should provide a dedicated area for the on-site collection and sorting of recyclable materials and refuse.**
- 30 A separate waste storage area should be provided for commercial/retail and residential uses.**
- 31 Development with a gross floor area of 2000 square metres or more should provide for the communal storage and management of waste.**
- 32 Loading facilities should be located at the rear of the development.**

The waste chutes on Levels 1 through to 11 will allow putrescibles and recyclables to be sorted and deposited within the enclosure on the south-eastern side of the aisle associated with the at-grade car park, as sought by Principle 29 of the ‘Medium and High Rise Development’ Module.

A separate enclosure for all of the waste generated by the retail tenancies and food outlets on the ground floor level will be created on the north-western (opposite) side of the aisle associated with the at-grade car park, as sought by Principle 30 of the ‘Medium and High Rise Development’ Module.

Both of the aforementioned enclosures will be communal in nature, as sought by Principle 31 of the 'Medium and High Rise Development' Module.

The waste collection process will take place at the rear of the site and behind the active uses that are oriented to Capital Street and Metro Parade, as sought by Principle 32 of the 'Medium and High Rise Development' Module.

### 6.13 Wind

Principle 27 of the 'Medium and High Rise Development' Module provides guidance with respect to wind. It advises that:

- 27 Development of 5 or more storeys, or 21 metres or more in building height (excluding the rooftop location of mechanical plant and equipment), should be designed to minimise the risk of wind tunnelling effects on adjacent streets by adopting one or more of the following:**
- (a) a podium at the base of a tall tower and aligned with the street to deflect wind away from the street;**
  - (b) substantial verandas around a building to deflect downward travelling wind flows over pedestrian areas;**
  - (c) the placement of buildings and use of setbacks to deflect the wind at ground level.**

Ms Sophie Lamande of Vipac was instructed by the Applicant to assess and report on the wind-related effects of the proposal. According to Ms Lamande:

- *“it is expected that the proposal would not generate significant adverse wind conditions in [sic] the adjacent footpaths”;*
- *“the building entrances are expected to be within the recommended standing comfort criterion”;*
- *“the alfresco dining area is expected to have wind levels exceeding the recommended sitting comfort criterion”;* and
- *“the roof top terrace would be expected to have high wind conditions exceeding the recommended walking comfort criterion”.*

In order to address these exceedances, the Applicant has taken Ms Lamande's recommendations on board and subsequently resolved to install a 1.5 metre high, clear glass balustrade along the perimeter of the outdoor dining area and a 1.8 metre high, clear glass balustrade along the perimeter of the rooftop garden.



## 7. CONCLUSION

We have concluded from our assessment of the proposal that it is deserving of consent.

In support of our conclusion, we wish to highlight that:

- the proposed mix of uses is entirely appropriate for the Core Area;
- the siting and height of the proposed building will combine to highlight and reinforce this corner site as a landmark or focal point, as sought by Principle 7 of the 'Medium and High Rise Development' Module;
- the ground floor level has been designed to activate the surrounding road network, and to enhance the pedestrian environment and experience;
- the students will be afforded a high degree of amenity courtesy of the generous room sizes, and the provision of natural light, ventilation and communal open spaces, the latter of which are supplemented by numerous breakout spaces;
- the external appearance of the proposed building will make a positive contribution to the public realm;
- the proposed building will not, between the hours of 9:00 am and 3:00 pm on the winter solstice, cast a single shadow across the habitable room windows or private open spaces associated with the neighbouring residences to the north-west of the site;
- the proposal has been designed to comply with the relevant requirements of the Environment Protection (Noise) Policy, 2007;
- the proposed access arrangements have been reviewed, and subsequently endorsed, by a qualified and independent traffic engineer;
- more than the recommended number of on-site bicycle parking spaces will be provided;
- the theoretical demand generated by the 'commercial' or 'non-residential' component will be catered for by the at-grade car park;
- there will be a theoretical surplus of 27 spaces within the confines of the basement;
- the traffic associated with this development is unlikely to have an adverse effect on the ongoing operation of the surrounding road network;
- waste will be stored, and disposed of, in an environmentally sound manner; and
- appropriate measures have been taken to minimise the wind-related effects of the proposal.

**APPENDIX 1. COMPENDIUM OF ARCHITECTURAL DRAWINGS**

**APPENDIX 2. LANDSCAPING CONCEPT**

**APPENDIX 3. ACOUSTIC REPORT**

**APPENDIX 4. TRAFFIC AND PARKING REPORT**

**APPENDIX 5. WASTE MANAGEMENT PLAN**



**APPENDIX 6. WIND IMPACT ASSESSMENT**

## **APPENDIX 7. THE INITIAL SCHEME**

**APPENDIX 8. FEEDBACK FROM THE FIRST DESIGN REVIEW SESSION**

**APPENDIX 9. FEEDBACK FROM THE SECOND DESIGN REVIEW SESSION**

**APPENDIX 10. LETTER FROM THE STATE COORDINATOR – GENERAL**

# Mawson Lakes Student Accommodation

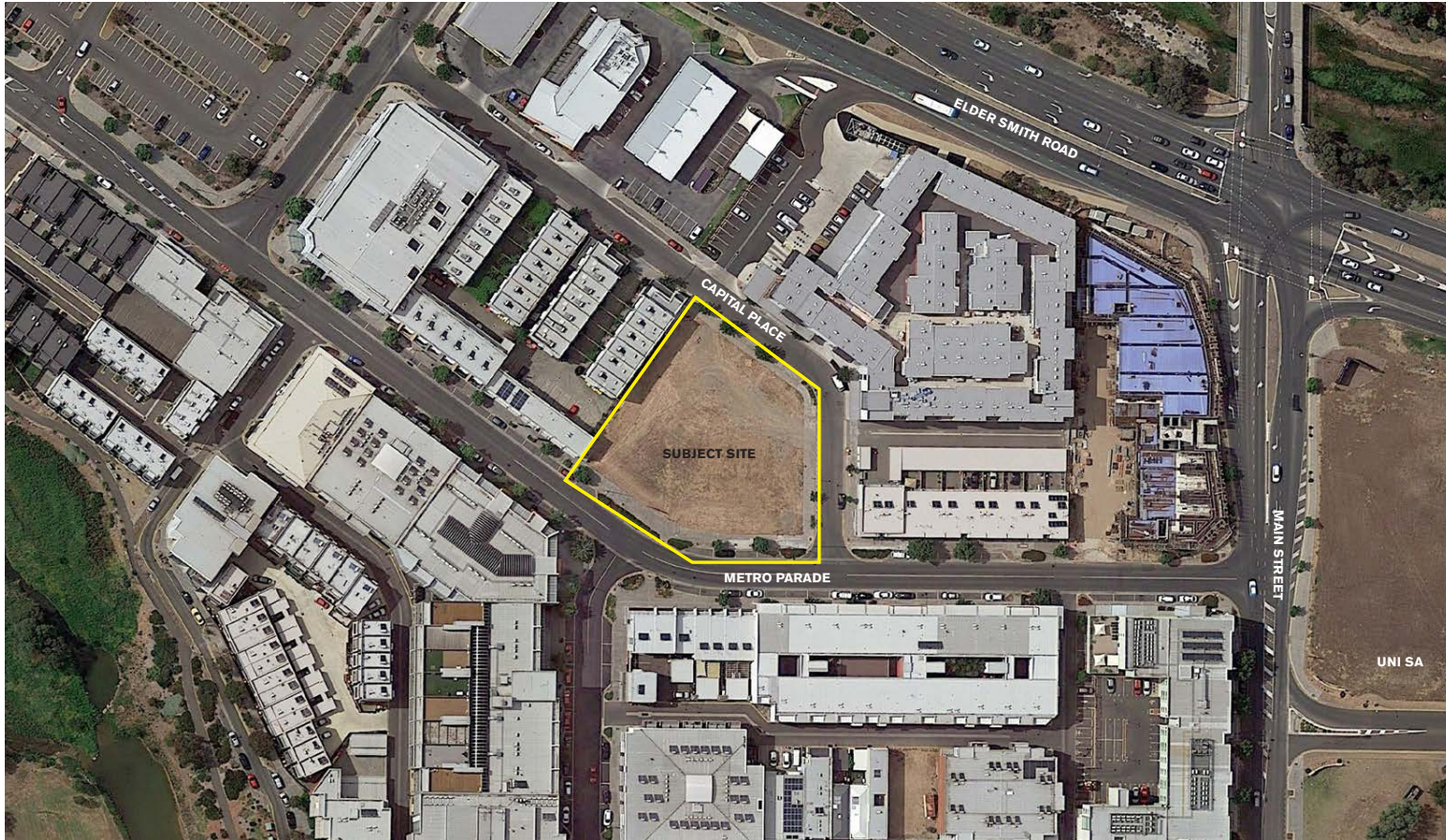
PROJECT	13-17 METRO PARADE, MAWSON LAKES
REF NO.	20.005
CLIENT	MICHAEL CALABRO
ARCHITECT	ENZO CAROSCIO ARCHITECTS
DATE	17.06.2020
ISSUE	PLANNING APPLICATION V2



**LANDSKÅP**  
Urban Design & Landscape Architecture



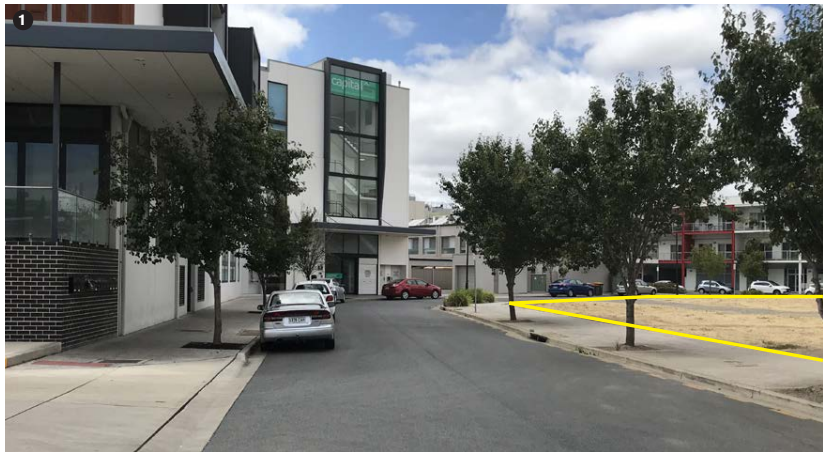
SITE CONTEXT	
EXISTING SITE	
SITE CONSIDERATIONS	
GROUND FLOOR PLAN	
LEVEL 1 COURTYARD PLAN	
LEVEL 3 TYPICAL COMMON AREA	
LEVEL 11 ROOFTOP PLAN	
SECTION	
CHARACTER - LEVEL 1	
CHARACTER - LEVEL 11	
MATERIALS + ELEMENTS	
PLANTING	
TREE PLANTING	



Subject Site



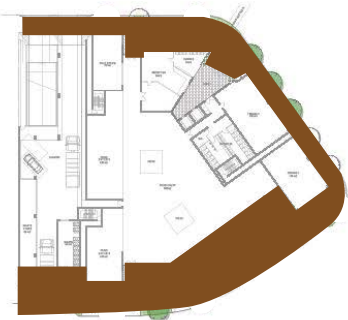




- ① Looking east along Capital Street
- ② Looking west across the site from Capital Street
- ③ Looking down Garden Terrace from site
- ④ Existing Metro Parade footpath



**GROUND FLOOR**



- Existing streetscape has some established tree planting.
- 3 trees are required to be removed for the proposed development.
- Opportunity for new infill tree planting, in discussion with Council.

**LEVEL 1 COURTYARD**



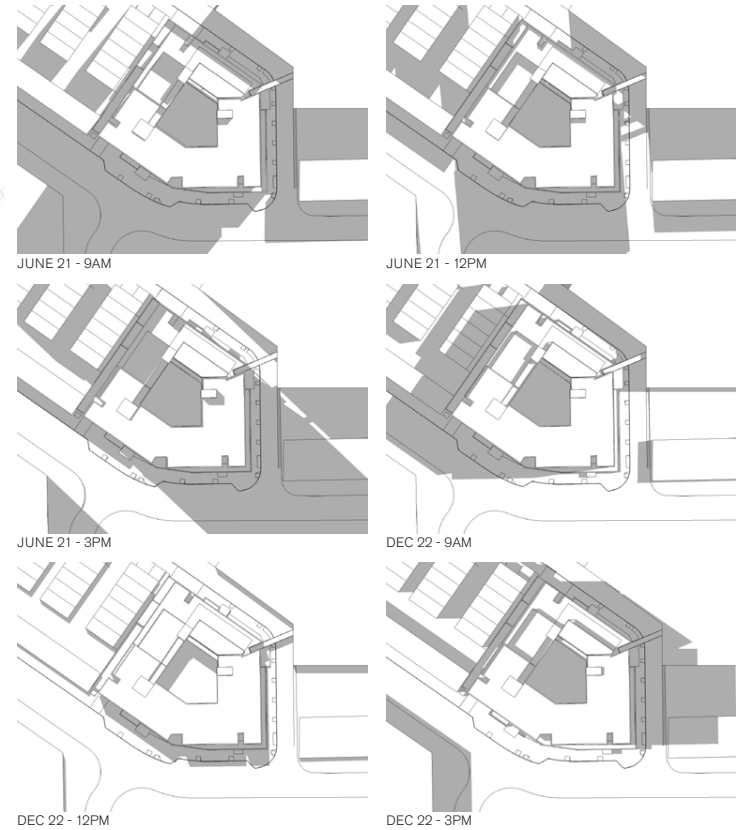
- External podium terraces provide a good opportunity for building softening with continuous green edge.
- The internal courtyard will provide an important green core for student recreational use as well as visual amenity for internal facing apartments.
- Plants and trees selected for the courtyard must respond to the artificial conditions, including light and soil. Refer shading diagrams to the right.

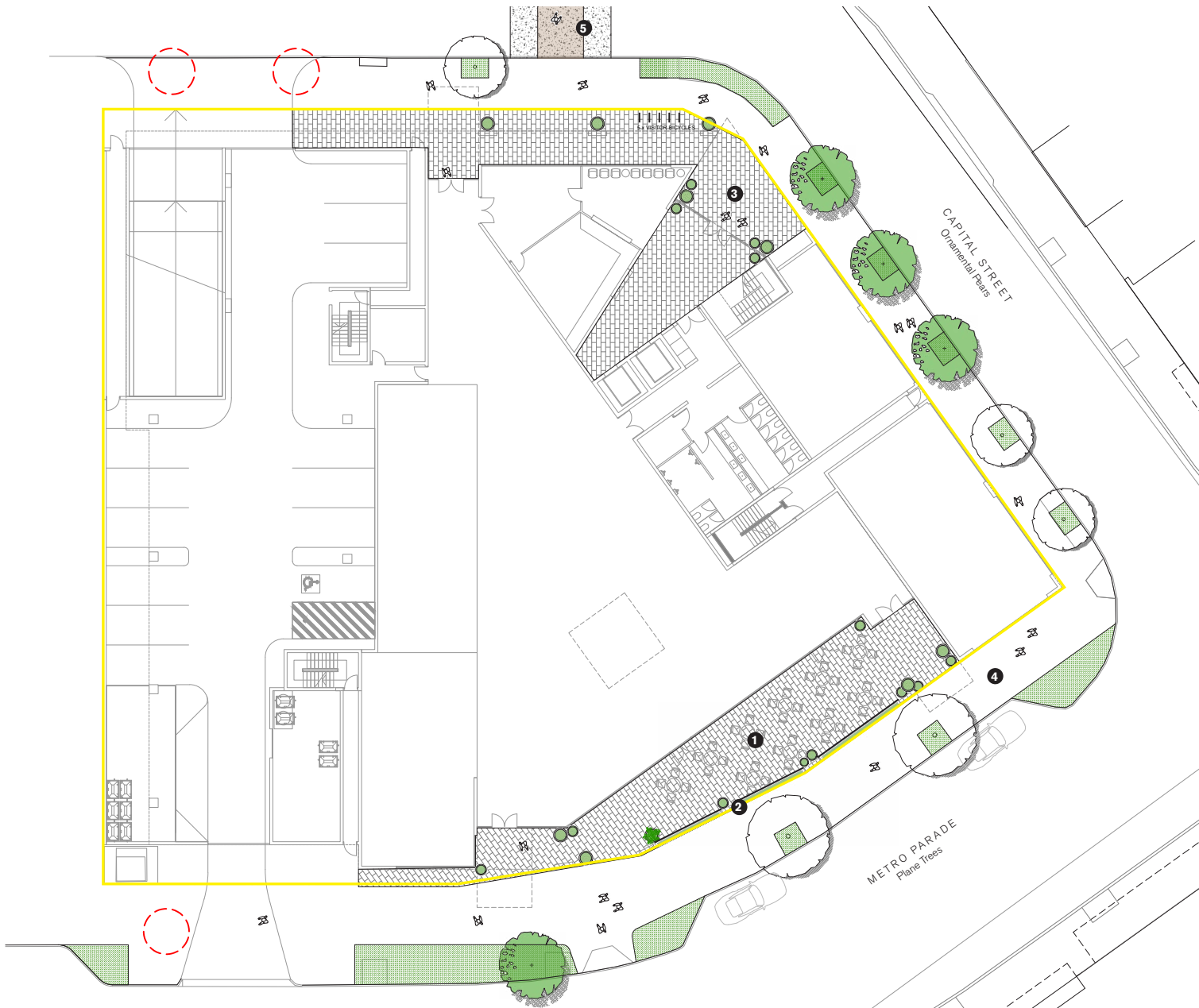
**LEVEL 11 ROOF TERRACE**



- The terrace provides unobstructed north facing views.
- The rooftop is an important recreational area for students to gather and socialise.

**SHADING DIAGRAMS**












**ALL WORKS SHOWN BEYOND THE PROPERTY BOUNDARY ARE SUBJECT TO FINAL DISCUSSIONS WITH COUNCIL. NEW TREES SHOWN ARE BASED ON FEEDBACK TO DATE WITH COUNCIL. REFER INFRASTRUCTURE AGREEMENT.**

- Property Boundary
- Existing street tree
- Existing street tree for removal
- Proposed street tree
- Garden bed
- Pots
- 1** Alfresco area with bluestone paving
- 2** 1.5m high glazed screen to alfresco area with planter in front
- 3** Entry foyer + lobby
- 4** Existing in situ concrete footpath
- 5** Possible raised pedestrian crossing with alternate pavement treatment – subject to discussions with Council

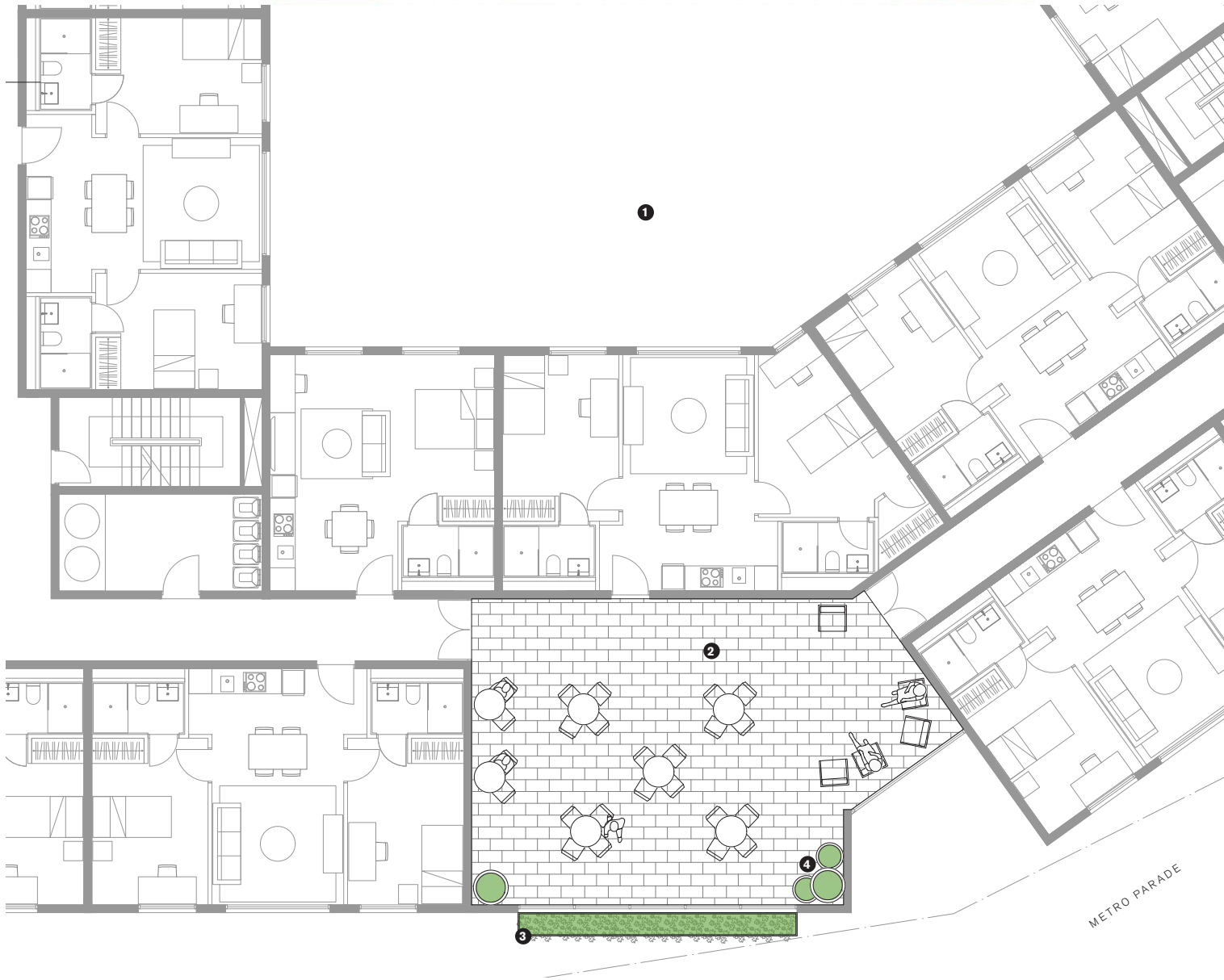







-  New tree
-  Garden bed
-  Pots
-  External terrace paving
-  1m high planter to entire podium edge
-  Raised planters with integrated seating
-  Planted buffer to residences







-  New tree
-  Garden bed
-  Pots
- 1** Level 1 courtyard below
- 2** Stone Paving
- 3** External planter with trailing plants

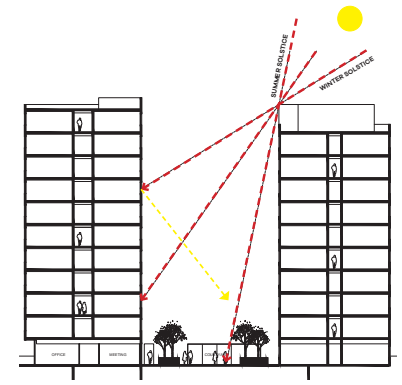


CAPITAL STREET

1400

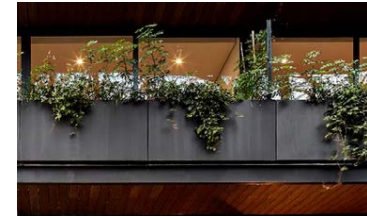


-  Olive trees
-  Modular GRC planters  
600 x 600 x varied length
- 1** Shelter above with Virginia Creeper growing from planters below
- 2** BBQ and bench
- 3** Balustrade to edge of paving
- 4** Flexible furniture
- 5** Bluestone paving on pedestals
- 6** Gravel paving

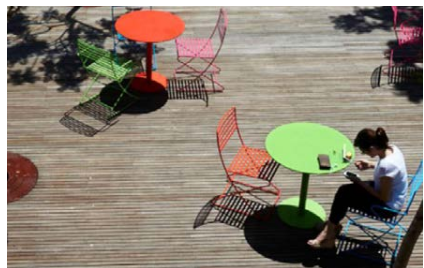


SOLAR ACCESS DIAGRAM

- 1** Built in planter with raised mound to back edge creating buffer to residences.
- 2** Central planter
- 3** Flexible and fixed seating areas
- 4** 1m buffer meeting rooms
- 5** Tree planting









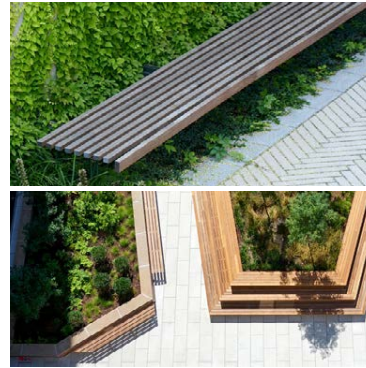
**BLUESTONE PAVING**

- Ground floor public realm
- Large format
- Honed finish
- Laid on slab



**RAISED PLANTERS**

- Fabricated steel, modular GRC (glass reinforced concrete) planters or brick. Subject to budget.
- Site assembled or constructed and sealed.
- Minimum 500mm high.



**TIMBER SEATS**

- Class 1 seasoned hardwood seating integrated with built in planters.



**FIXED POTS**

- GRC (glass reinforced concrete), using modular sizes for efficiency.
- Site assembled.
- Terrace planters to be minimum 1000mm high.



**FREESTANDING POTS**

- A collection of large GRC pots to soften the ground floor and entry lobbies.





#### PLANTING REQUIREMENTS

1. Plants have been selected based on sun, soil and water requirements.
2. All plants will be raised planters or pots that have automatic irrigation.
3. Courtyard plants are based on a shady environment.
4. Podium terrace plants are intended to trail over balcony.



#### COURTYARD

- *Aspidistra elatior*
- *Alocasia* (Elephant Ears)
- *Alocasia brisbanensis*
- *Asparagus aethiopicus* (foxtail fern)
- *Agave attenuata*
- *Monstera deliciosa*
- *Dichondra repens*
- *Dicksonia antarctica* (tree fern)
- *Ficus lyrata* (fiddle leaf fig)
- *Blechnum Silver Lady*
- *Liriope evergreen giant*
- *Pachysandra terminalis*
- *Polypodium vulgare*
- *Philodendron Xanadu*
- *Trachelospermum 'Flat Mat'*
- *Viola hederacea*



#### PODIUM TERRACE

- *Asparagus aethiopicus* (foxtail fern)
- *Rosmarinus officinalis prostratus*
- *Senecio serpens*
- *Dichondra silver falls*
- *Monstera deliciosa* (south side only)
- *Drosanthemum hispidum*



#### ROOFTOP

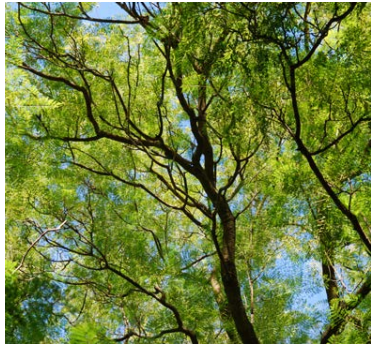
- *Aloe sea urchin*
- *Aloe mighty coral*
- *Aloe 'bush baby yellow'*
- *Aloe 'outback orange'*
- *Cassula arborescens*
- *Cotyledon 'silver waves'*
- *Euphorbia ammak*
- *Pennisetum nafray*
- *Senecio serpens*
- *Zamia furfuracea*
- *Rosmarinus officinalis 'Prostratus'*
- *Sansevieria erythraeae*
- *Crassula max cook*



#### GROUND FLOOR POTS

- *Asparagus aethiopicus* (foxtail fern)
- *Agave little shark*
- *Monstera deliciosa*
- *Philodendron Xanadu*
- *Olea Europea*
- *Euphorbia trigona*
- *Sansevieria trifasciata*
- *Zamia furfuracea*
- *Dichondra silver falls*





## CONSIDERATIONS

1. As per the shading diagrams, it is noted that the level 1 courtyard will not receive full sun during the winter months and restricted sun during summer. It will receive full sun during peak summer in the middle of the day.
2. The environment will be comparable to a tight city street with trees also receiving reflected sun and light from the facade glazing.
3. All trees planted in this type of environment will grow more upright (in search of sunlight), with a lighter more transparent canopy. This type of growth is anticipated and encouraged.
4. Trees to have a minimum of 600mm deep topsoil, with a minimum volume of approximately 5m<sup>3</sup> per tree. Soil volume is considered more important than depth in these conditions.
5. All trees and plants within property boundary to be irrigated year round.

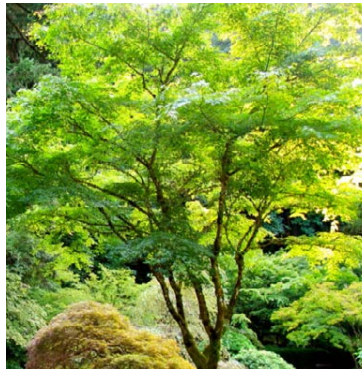
### POSSIBLE COURTYARD SPECIES



*Ficus microcarpa hillii*, Hills Fig 'Flash'  
Evergreen tree suited to forest environments



*Betula nigra*, Birch 'dura heat'  
Most drought tolerant Birch



*Acer palmatum*, Japanese Maple  
Showy tree with autumn colour that tolerates shade



*Dicksonia antarctica*, Fern Tree  
Shade loving tree fern

### POSSIBLE ROOFTOP SPECIES



*Olea europaea*, Olive  
Upright, semi-fruitless variety



*Plumeria obtusa*, Frangipani  
Ornamental, white flowers





**PROPOSED STUDENT ACCOMMODATION  
13-17 METRO PARADE, MAWSON LAKES**

TRAFFIC AND PARKING REPORT



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## DOCUMENT CONTROL

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Traffic and Parking Report

Project number: 20005

Client: Michael Calabro Pty Ltd

Client contact: Michael Calabro

Version	Date	Details/status	Prepared by	Approved by
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V1.1	02 Apr 2020	Update plans	TAW	BNW

### CIRQA Pty Ltd

ABN 12 681 029 983

PO Box 144, Glenside SA 5065

150 Halifax Street, Adelaide SA 5000

(08) 7078 1801

[www.cirqa.com.au](http://www.cirqa.com.au)

## **1. INTRODUCTION**

CIRQA has been engaged to provide design and assessment advice for a proposed mixed-use student accommodation building at 13-17 Metro Parade, Mawson Lakes. Specifically, CIRQA has provided advice in respect to traffic and parking aspects of the proposal.

This report provides a review of the subject site, the proposed development, its access and parking provisions and the associated traffic impact on the adjacent road network. The traffic and parking assessments have been based upon plans prepared by Enzo Caroscio Architecture (drawing no. 19009-A2.00 to A2.12, dated 25 March 2020, refer Appendix A).

## **2. BACKGROUND**

### **2.1 SUBJECT SITE**

The subject site is located on the north-western corner of the Metro Parade/Capital Street intersection, Mawson Lakes. The site is bound by Capital Street to the north and east, Metro Parade to the south and mixed-use development (commercial and residential) to the west. The City of Salisbury's Development Plan identifies that the site is located within an Urban Core Zone.

It should be noted that the Capital Street Shopping Centre is located on the north-eastern side of Capital Street (immediately adjacent the site) and UniSA's Mawson Lakes Campus is located east of the site (within 300 m walking distance). The Mawson Lakes Interchange (train and bus services) is located north-west of the site and the Mawson Lakes town centre immediately south (both within 400 m walking distance).

The subject site is currently vacant. Vehicle access is not currently provided to the subject site.

### **2.2 ADJACENT ROAD NETWORK**

Metro Parade is a local road under the care and control of the City of Salisbury. Adjacent the site, Metro Parade comprises a single traffic lane in each direction, with indented parallel parking on both sides (restricted to two-hours from 8:00 am to 6:00 pm, Monday to Friday). A 50 km/h speed limit applies on Metro Parade.

Capital Street is a local road under the care and control of the City of Salisbury. Adjacent the site, Capital Street comprises an 8.0 m wide carriageway (approximate) facilitating two-way traffic movements. On-street parking (parallel) is permitted on the northern and eastern sides of Capital Street (unrestricted), while parking is only permitted on the southern and western sides



outside of 'No Stopping' restrictions (restrictions apply from 6:00 am to 6:00 pm every day). A default urban speed limit of 50 km/h applies on Capital Street.

Figure 1 illustrates the location of the subject site and associated access with respect to the adjacent road network.



*Figure 1 – Location of the subject site and existing access with respect to the adjacent road network*

### **2.3 WALKING AND CYCLING**

Sealed footpaths are provided on both sides of Metro Parade and Capital Street directly adjacent the site. The footpaths connect to the broader footpath network providing connectivity to the adjacent Capital Street Shopping Centre, Mawson Lakes Interchange, UniSA Mawson Lakes Campus and Mawson Lakes town centre.



Bicycle movements are accommodated on the adjacent road network under a standard shared arrangement. Bicycle movements are also permitted on the adjacent footpath network. On-street bicycle lanes are provided on Elder Smith Road, approximately 80 m north of the site.

## **2.4 PUBLIC TRANSPORT**

Frequent public transport services operate within close vicinity to the subject site, with 'Go Zone' bus stops and the Mawson Lakes Interchange (bus and railway services) located within 400 m of the subject site. Services operating from these locations include:

- **Bus Services**
  - Route 222, 501 – Mawson Interchange to City;
  - Route 224, 224F, 224X – Elizabeth Interchange to City;
  - Route 225 – Salisbury Interchange to Gepps Cross;
  - Route 225F, 225X – Salisbury Interchange to City;
  - Route 411 – Salisbury to Mawson Interchange;
  - Route 411B – Salisbury Interchange to Mawson Interchange;
  - Route 411U – Salisbury to UniSA Mawson Lakes Campus;
  - Route 482 (school service) – Elizabeth Interchange to Roma Mitchell Secondary College;
  - Route 565 – Mawson Interchange to Ingle Farm;
  - Route 566 – Mawson Interchange to Golden Grove Interchange; and
  - Route GA1 – City to Salisbury.
- **Train Services**
  - Route GAW – Gawler to City;
  - Route GAWC – Gawler Central to City; and
  - Route SALIS – Salisbury to City.

## **3. PROPOSED DEVELOPMENT**

### **3.1 LAND USE AND YIELD**

The proposed development comprises the construction of a multi-storey mixed-use building at 13-17 Metro Parade, Mawson Lakes. Specifically, the proposal will comprise the following components:

- 227 student accommodation 'clusters' (comprising of 405 individual beds);
- 220 m<sup>2</sup> of retail tenancy floor area;
- 213 m<sup>2</sup> of food outlets floor area plus a 20 m<sup>2</sup> kiosk;

- 250 m<sup>2</sup> of student gym and Pilates floor area (for student use only);
- 60 m<sup>2</sup> of student library (for student use only);
- 55 m<sup>2</sup> of student games room (for student use only);
- 50 m<sup>2</sup> of meeting rooms (for student use only); and
- additional ancillary lobby and back-of-house/service areas associated with the student housing and common/public tenancy areas associated with the overall development.

### **3.2 ACCESS AND PARKING DESIGN**

The site will be serviced by a basement parking area comprising 72 parking spaces (two of which will be reserved exclusively for use by people with disabilities), with a further 14 spaces provided at-grade (i.e. 86 parking spaces will be provided on-site in total).

In addition, 72 secure bicycle parking spaces will be provided within the basement parking area, with an additional 10 spaces provided at-grade adjacent the site (i.e. 82 bicycle parking spaces will be provided in total).

The proposed parking areas shall comply with the requirements of the Australian/New Zealand Standard for “*Parking Facilities Part 1: Off-street car parking*” (AS/NZS 2890.1:2004) and the Australian/New Zealand Standard for “*Parking Facilities Part 6: Off-street parking for people with disabilities*” (AS/NZS 2890.6:2009) in that:

- regular (at-grade) parking spaces shall be 2.6 m wide and 5.4 m long;
- disabled parking spaces shall be 2.4 m wide and 5.4 m long (with an adjacent shared space of the same dimension);
- two-way parking aisles shall be at least 5.8 m wide;
- one-way parking aisles shall be at least 3.0 m wide;
- a 1.0 m end-of-aisle extension shall be provided beyond the last parking space in a blind aisle;
- a turn-around bay shall be provided at the end of a blind parking aisle (where required);
- 0.3 m clearance shall be provided to all objects greater than 0.15 m in height; and
- pedestrian sightlines shall be provided at the site’s access point at the property boundary.

Vehicle access to the proposed development will be provided via three crossovers, namely:

- an ingress only on Metro Parade;
- an egress only on Capital Street; and
- a two-way access on Capital Street (providing vehicle access to the basement parking area).

It should be noted that the two crossovers on Capital Street will be located side-by-side. However, given the anticipated number of movements and good inter-visibility between the two access points will be provided, such an arrangement is considered acceptable.

Furthermore, the site's Metro Parade ingress is (technically) located within the 'prohibited access location' area identified by AS/NZS 2890.1:2004. This is due to the property boundary adjacent the western side of Garden Terrace being 'irregular'. However, on approach to Metro Parade (from Garden Terrace), Garden Terrace curves to the right to intersect Metro Parade perpendicular to the carriageway. If consideration was given to the location of the intersection (rather than the property boundary), in excess of 6.0 m separation would be provided between the intersection's tangent point and the proposed ingress. Accordingly, it is considered that the proposed ingress location satisfies the intent of the Standard and will provide adequate separation from the adjacent intersection. Additionally, this access is associated with one-way (in only) movements for the small at-grade car park and service area which will be infrequent. As such, the risk of conflict occurring adjacent the access is significantly reduced when compared to a two-way access.

### **3.3 REFUSE COLLECTION**

Refuse collection is proposed to occur on-site within a dedicated service area. The service area has been designed to accommodate commercial vehicles up to 11.0 m in length (such as a typical refuse collection vehicle). Deliveries to the site will also be undertaken within the service area (by a mix of smaller commercial vehicles and regular commercial vans).

As noted above, vehicle access to the service area will be provided via an ingress only on Metro Parade and an egress only on Capital Street and will operate with a one-way traffic flow. Accordingly, all vehicles will be able to enter and exit the site in a forward direction. A turn path of an 11.0 m refuse collection vehicle accessing the service area is attached in Appendix B.

## 4. PARKING ASSESSMENT

### 4.1 PROPOSED USE CAR PARKING

The City of Salisbury's Development Plan (Urban Core Zone, Principle of Development Control (PDC) 28) identifies the following vehicle parking provisions relevant to development on the subject site:

- **Residential Development** – 0.75 spaces per dwelling;
- **Shops** – 3 spaces per 100 m<sup>2</sup> of gross leasable floor area; and
- **All other Non-Residential Development** – 3 spaces per 100 m<sup>2</sup> of gross leasable floor area PLUS 1.5 additional parking spaces per 100 m<sup>2</sup> of gross leasable floor area above ground level (it should be noted that the gym and Pilates areas have been excluded from the calculation as they are ancillary to the student housing and will not attract additional parking demand).

On the basis of the above parking rates, the proposed development would have a theoretical requirement for 185 parking spaces to be provided on-site (14 spaces associated with the non-residential component and 171 spaces associated with the student accommodation). For the non-residential component, the associated parking requirement can be accommodated within the at-grade area (14 spaces).

However, student populations in high-density student accommodation (and particularly multi-level accommodation such as the proposed development) typically have significantly lower levels of car ownership than typical residential developments. This is due to a number of factors, including (but not limited to):

- higher proportions of overseas students (less likely to have an Australian Driver's Licence, lower levels of need to travel to visit family/friends outside of locality etc.);
- shorter durations of stay within student accommodation compared to typical residential dwellings (lower likelihood of car purchases). It is understood that students typically have an average stay of 26 to 52 weeks (medium term) compared to that of residents in typical high-density dwellings being in excess of 52 weeks (long term);
- proximity of student housing to key destinations within close walking distances such as the associated university campus as well as supporting retail services and public transport options; and
- reduced level of trips associated with other purposes (i.e. travel to/from a dependent's/child's school).

Accordingly, adoption of the above 'residential development' parking rate is considered to be highly conservative and its application to the subject proposal would result in a significant overprovision of parking spaces for the proposed student accommodation component of the development.

Furthermore, it is also noted that Council's Development Plan (Urban Core Zone PDC 29) identifies that:

*"A lesser parking rate may be applied where justified based on local circumstances, for example where:*

- (a) the proposed development is adjacent to a designed pedestrian and/or cycling path*
- (b) the proposed development is in convenience walking distance to readily accessible and frequent public transport*
- (c) convenient on-street car parking readily available*
- (d) the proposed development is on or adjacent to the site of a heritage place which hinders the provision of on-site parking*
- (e) there is the opportunity to exploit shared parking areas between uses based upon compatible hours of peak operation*
- (f) suitable arrangements are made for any parking shortfall to be met elsewhere or by other means*
- (g) for studio apartments, student accommodation, affordable housing, retirement villages or aged persons' accommodation."* (my emphasis)

The subject site satisfies numerous examples identified by Urban Core Zone PDC 29 in that:

- the primary component of the proposed development is 'student accommodation';
- the subject site is located within 400 m walking distance of the Mawson Lakes Interchange and 200 m from Main Street (from which locations, high-frequency public transport services operate);
- the site is located within 300 m walking distance from the University of South Australia's Mawson Lakes Campus;
- the site has extensive bicycle parking provisions located throughout (well above that required by Council's Development Plan as identified in Section 4.2);
- footpaths (accommodating both pedestrian and bicycle movements) are provided on both sides of Metro Parade and Capital Street immediately adjacent the site, providing connectivity to the broader footpath network;

- the proposed development contains a variety of development uses (i.e. retail, restaurant etc.). Accordingly, the proposed development is considered to be appropriate for supporting shared parking arrangements; and
- on-street parking is provided on Metro Parade, Capital Street and numerous other roads within close vicinity to the subject site.

Application of a reduced rate for student accommodation is therefore clearly contemplated and supported by the provisions of the Development Plan.

In order to identify an appropriate student accommodation parking rate, various local and interstate literature has been referenced. It should be noted that little vehicle parking information relating to student accommodation in metropolitan Adelaide is available due to such developments typically providing no on-site vehicle parking provisions. This is due to their location in relation to University campuses, retail centres and public transport services. Examples of approved developments within South Australia providing no on-site student accommodation vehicle parking include:

- Capital Student Stays – 8 Capital Street, Mawson Lakes (mixed-use development);
- Urbanest North Terrace – 228-231 North Terrace, Adelaide (standalone development);
- West Franklin - 54-58 Elizabeth Street, Adelaide (standalone development);
- The Adelaidean – 27 Frome Street, Adelaide (mixed-use development); and
- Kent Town Student Village – 22 Wakefield Street, Kent Town (standalone development).

Of particular relevance, Capital Student Stays forms part of the adjacent Capital Street Shopping Centre (located immediately northeast of the subject site). While a total of 158 parking spaces are provided on the subject site, no parking spaces have been allocated to the student accommodation component of the development. This was supported by GTA Consultants and approved by the former Development Assessment Commission (now the State Commission Assessment Panel) given the site's locality to UniSA's Mawson Lakes campus and the nearby Mawson Lakes Interchange.

With regard to interstate literature, available information from NSW and Victoria has been referenced. Specifically, the following 'student accommodation' or 'boarding houses' parking rates have been identified as applicable to the proposed development:



- **City of Melbourne**
  - 0.1 spaces per bed for units located within 500 m of a tertiary institution; and
- **NSW Government**
  - 0.2 spaces per room ('cluster') in an accessible area.

On the basis of the above, the student accommodation component would require between 41 and 46 parking spaces to satisfy the City of Melbourne's and NSW Government's respective parking requirements.

Finally, it should also be noted that GTA Consultants have undertaken a number of parking surveys at student accommodation facilities located in typical metropolitan areas throughout Australia. The surveys indicate an average peak parking demand of 0.13 spaces per unit ('cluster'). Taking this into consideration, the student accommodation component of the proposed development is forecast to have a demand for in the order of 30 parking spaces.

Taking into account the 14 non-residential parking spaces required by Council's Development Plan, the proposed development would have a total parking requirement for between 44 and 60 parking spaces. Given that 86 parking spaces will be provided on-site, it is considered that parking provisions will be easily accommodate peak parking demands.

#### **4.2 ALTERNATIVE USE CAR PARKING**

It is understood that concern has been raised by The Office for Design and Architecture SA (ODASA) regarding the future viability of the proposed student accommodation units and the resultant parking demands which may be associated with alternate uses. In the event that the units become unviable (due to a drop in student accommodation demand), the applicant has advised that the most likely alternative use of the development to student accommodation units would be its conversion to service apartments (tourist accommodation). Should this occur, the change of use would require a separate development application and detailed parking considerations would be assessed at that time. Nevertheless, consideration has been given to such a scenario to ensure flexibility for the proposed development.

The City of Salisbury's Development Plan identifies a vehicle parking rate of "1 space for every 4 bedrooms up to 100 bedrooms plus 1 additional parking space for ever 5 bedrooms over 100 bedrooms" as applicable to tourist accommodation. On this basis, the 227 accommodation units (405 bedrooms) would have a theoretical requirement for 86 parking spaces. Taking into consideration the 14 non-residential parking spaces, the site would have a theoretical requirement for 100 parking spaces (a shortfall of 14 spaces).

However, this assessment assumes that the peak parking demands of the serviced apartments (tourist accommodation) and the non-residential uses would occur simultaneously. In reality, this is highly unlikely to occur as the peak parking demand associated with tourist accommodation typically occurs at night (while the peak parking demand associated with retail occurs during the day).

In support of this, surveys undertaken by MFY at Liberty Towers Glenelg identified that the peak daytime parking demand equates to approximately 0.175 spaces per accommodation unit. The survey findings were submitted to the Environment, Resources and Development (ERD) Court as evidence and were accepted as an appropriate design demand rate for serviced apartment (tourist accommodation) uses.

On this basis, it is forecast that the peak daytime parking demand associated with the serviced apartments (tourist accommodation) would be in the order of 40 parking spaces. When consideration is given to the peak demand of the non-residential uses (14 spaces) and the changed use (to serviced apartments), the subject development would have a theoretical requirement for 54 parking spaces. Such a requirement would be readily accommodated on-site within the proposed parking provision.

With regard to the peak night-time parking demand, the proposed non-residential uses are anticipated to generate negligible demands. This is due to typical retail trading periods occurring during the daytime (i.e. such businesses typically close at 5:00 to 5:30 pm). However, it is noted that a small demand may be generated early evening/at night by the proposed food outlets. Such parking demands would be required to be accommodated on-street should such a scenario occur. It is anticipated that adequate capacity would be available on-street during such times, given that the on-street parking demands associated with other surrounding businesses would be negligible.

Having said this, it should be reiterated that the above situation would only occur if the proposed student accommodation units were to be converted to serviced apartments at a later date. As noted above, such a scenario (or any other change in land use) would require that a separate development application be submitted, at which point an assessment of the existing parking requirements would likely be undertaken.

For the purposes of the subject development application, adequate parking will be provided on-site to satisfy the requirements of the student accommodation units and non-residential components (whilst allowing flexibility within the site for an alternative land use in the future, if desired).

### 4.3 BICYCLE PARKING

The City of Salisbury's Development Plan identifies the following bicycle parking rates relevant to the proposed development:

- **Shop** (*retail and food outlets*)
  - Employee – 1 space per 300 m<sup>2</sup> of gross leasable floor area;
  - Visitor – 1 space per 600 m<sup>2</sup> of gross leasable floor area;

On the basis of the above rates, the proposed retail and food outlet uses would have a theoretical requirement for two employee and three visitor parking spaces.

With regard to the student accommodation component, Council's Development Plan does not identify an applicable bicycle parking requirement. A review of recent student accommodation developments approved and/or constructed throughout metropolitan Adelaide has identified the following bicycle parking provisions:

- Urbanest North Terrace - 228-231 North Terrace, Adelaide
  - 505 'room clusters' (689 beds) and 42 bicycle parking spaces;
  - 1 bicycle space per 12.02 'room clusters' or 1 space per 16.40 beds;
- Urbanest Bank Street - 12 Bank Street, Adelaide
  - 503 'room clusters' and 24 bicycle parking spaces;
  - 1 bicycle space per 20.96 'room clusters';
- Hines Property - 29 Twin Street, Adelaide
  - 168 'room clusters' (510 beds) and 21 bicycle parking spaces;
  - 1 bicycle space per 8.00 'room clusters' or 1 space per 24.28 beds

Taking into consideration the retail, food outlet and office uses, the proposed development will provide 77 bicycle parking spaces for use by the student accommodation component. This equates to a rate of 1 bicycle space per 2.94 'room clusters' or 1 bicycle space per 5.25 beds. Such a provision is more than double that of the student accommodation developments identified above.

Furthermore, GTA Consultants provided advice as part of the Urbanest North Terrace development. The report submitted as part of the development application identified that a bicycle parking rate of 1 space per 38.6 beds is sufficient to satisfy the average bicycle parking demand of high-rise student accommodation developments reviewed across Australia.

Given that the proposed development will provide bicycle parking spaces in excess of that provided in similar metropolitan Adelaide developments as well as in excess of that identifies as appropriate (on average) across Australia, the site's provision of 82 bicycle parking spaces is considered more than satisfactory to meet anticipated bicycle parking demands.

## 5. TRAFFIC ASSESSMENT

### 5.1 TRAFFIC GENERATION

The NSW Roads and Maritime Services' *"Guide to Traffic Generating Developments"* (the RMS Guide), and its subsequent updates, identifies the following traffic generation rates applicable to the proposed development:

- **Restaurant** – 5.0 peak hour trips per 100 m<sup>2</sup> of floor area.

The RMS Guide also identifies a peak hour (Thursday) traffic generation of 12.3 peak hour trips per 100 m<sup>2</sup> of gross leasable floor area for shopping centres with a total floor area between 0 and 10,000 m<sup>2</sup>. However, such a rate is not considered to be appropriate for application to the subject proposal. In reality, it would be expected that the shop components (gym, shop, tenancy and post office) would generate in the order of 7.5 to 9.0 peak hour trips per 100 m<sup>2</sup> of floor area. Such rates have recently been adopted (and accepted) for similar scale retail shops throughout metropolitan Adelaide.

It should also be noted that the am peak hour generation of 'shops' is typically 50% of that associated with the pm peak hour. As such, rates of 4.5 am and 9.0 pm trips per 100 m<sup>2</sup> have conservatively been adopted for this assessment.

On the basis of the above rates, it is forecast that the proposed non-residential component of the development will generate in the order of 22 am and 33 pm peak hour trips.

With regard to the 'student accommodation' component, little information is available in regard to traffic generation. This is (again) due to 'student accommodation' developments typically providing little or no parking on-site (thereby generating minimal traffic between the site and the adjacent road network).

However, a literature review of available research has identified that a traffic generation study investigating applicable rates for student accommodation units was undertaken by Spack Consulting. The study involved the collection of data at six 'typical' student accommodation buildings and determination of an appropriate traffic generation rate based upon units, beds and parking spaces.

The study found a strong correlation between the number of units ('clusters') in a student accommodation building and the number of trips recorded at the development's access. Accordingly, the traffic generation rates identified by the study (and the respective student-traffic forecast to be generated by the proposed development) are illustrated in Table 1.

*Table 1 – Student accommodation traffic generation rates surveyed by Spack Consulting*

Measure	Quantity	AM Rate	AM Trips	PM Rate	PM Trips
Clusters	227	0.13 trips per cluster	30	0.24 trips per cluster	55
Beds	405	0.07 trips per bed	29	0.13 trips per bed	53
Spaces	46	0.13 trips per space	6	0.27 trips per space	13

In order to provide a conservative assessment (and given the strong correlation), 30 am and 55 pm peak hour trips have been assumed to be generated by the student accommodation component of the proposed development.

Taking into account the traffic generated by the non-residential component, the proposed development is forecast to generate in the order of 52 am and 88 pm peak hour trips.

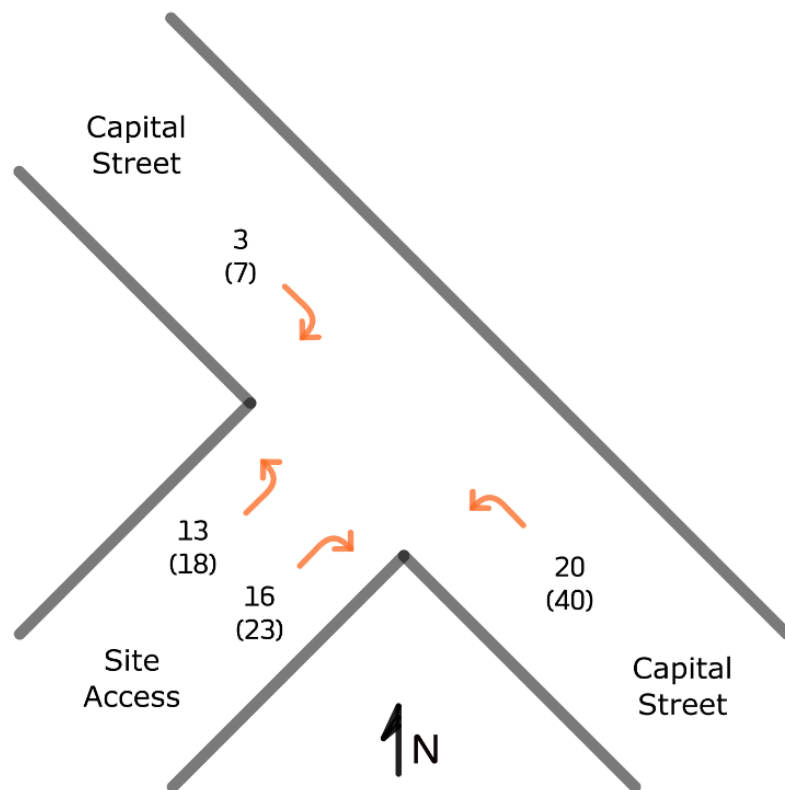
## 5.2 TRAFFIC DISTRIBUTION & IMPACT

In order to determine the proposed development's potential impact on the adjacent road network, the following assumptions have been adopted:

- **North** – 15% of movements will be to/from the north;
- **East** – 30% of movements will be to/from the east;
- **South** – 50% of movements will be to/from the south;
- **West** – 5% of movements will be to/from the west;
- **Restaurant** – 50% of movements will enter and 50% of movements will exit the site during both the am and pm peak hours;
- **Office** – 80% of movements will enter and 20% of movements will exit the site during the am peak hour (vice versa during the pm peak hour);
- **Retail** – 50% of movements will enter and 50% of movements will exit the site during both the am and pm peak hours; and
- **Student Accommodation** – 40% will enter and 60% will exit the site during the am peak hour, and 55% will enter and 45% will exit the site during the pm peak hour.

It should be noted that the above peak hour movement splits for student accommodation were recorded and determined by Spack Consulting. Movement splits utilised for other site uses are commonly adopted and accepted throughout metropolitan Adelaide and are considered appropriate for application to the proposed development.

Based upon the above distribution, turning movements have been determined at the site's access. In order to provide a conservative assessment, it has been assumed that all vehicle movements will occur via the site's two-way basement access. Figure 2 illustrates the turning movements conservatively forecast at the site's basement access during the am (pm) peak hours.



*Figure 2 – Forecast turning movements at the site's basement access during the am (pm) peak hours*

As illustrated in Figure 2, the peak hour turning movements conservatively forecast at the site's access are low. Such volumes would be readily accommodated at the access with minimal impact upon the operation of Capital Street.

Beyond the site's Capital Street access, traffic volumes associated with the proposed development would dissipate on the broader road network.



Accordingly, the number of development-associated vehicle movements on any one turning movement at a nearby intersection would be low and would not detrimentally impact upon an intersection's performance or operation.

## **6. SUMMARY**

The proposal comprises the construction of a multi-story mixed-use building (comprising student accommodation, retail, office and restaurant tenancies) at 13-17 Metro Parade, Mawson Lakes. The site will be serviced by a total of 86 vehicle and 82 bicycle parking spaces provided within a basement parking and service area.

Vehicle access to the site will be provided via a two-way crossover on Capital Street (basement access), an ingress only Metro Parade (service area entry) and an egress only on Capital Street (service area exit). Pedestrian and bicycle access will be provided via the site's frontages to Capital Street and Metro Parade.

With regard to parking, student accommodation units generate lower demands than typical residential buildings. Notably, the application of a lower parking rate for student housing is contemplated and supported by the Development Plan. Given that student accommodation parking literature relevant to South Australia is unavailable, rates commonly used in Victoria and NSW have been adopted.

Taking these parking rates into consideration as well as parking rates identified within Council's Development as applicable to the non-residential components, the proposed development would have a theoretical requirement for 44 to 60 parking spaces. As 86 spaces will be provided throughout the site, the requirement will be satisfied.

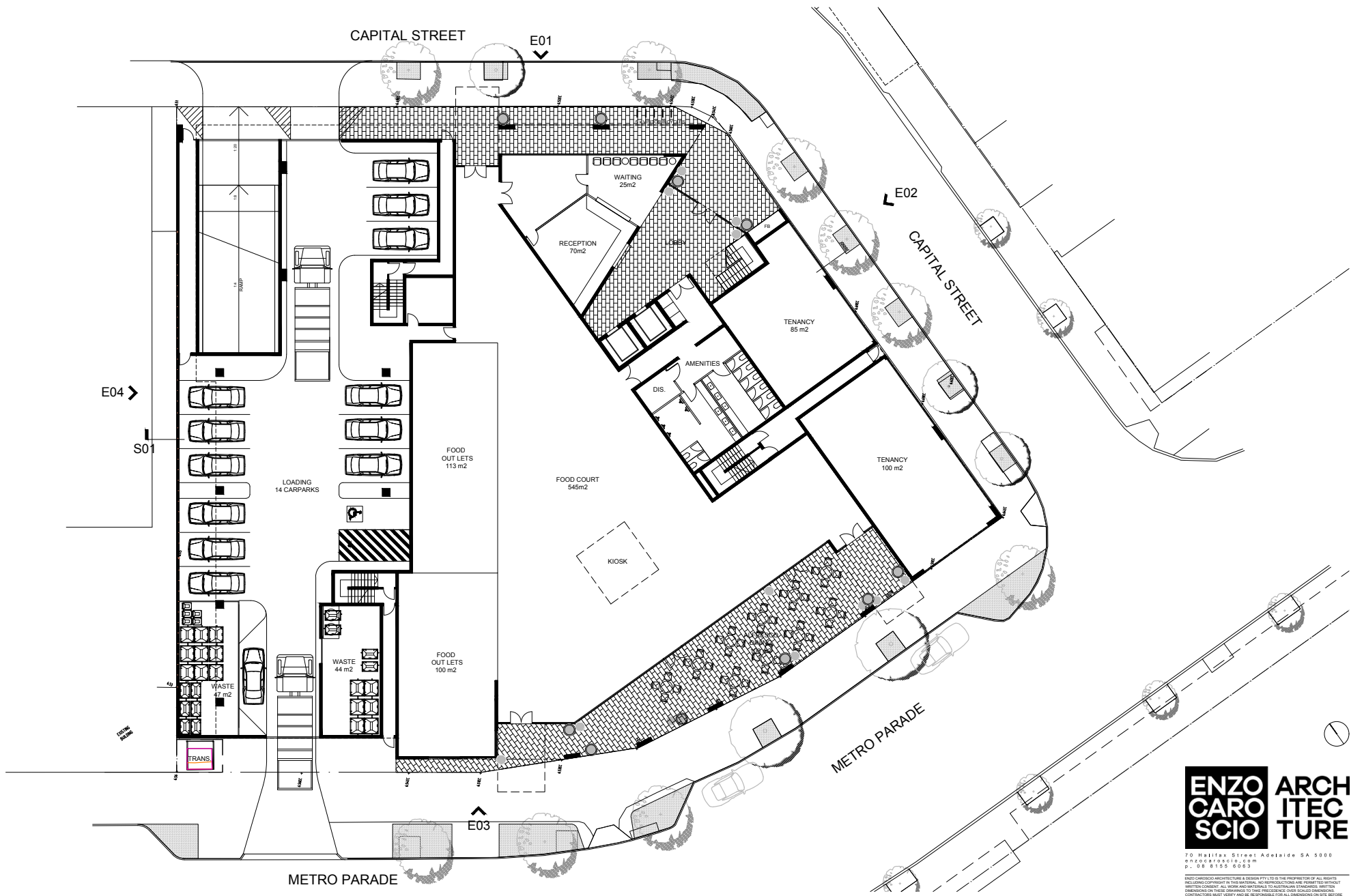
The proposed development will provide a total of 82 bicycle parking spaces throughout the site. Such provisions exceed the requirements of Council's Development Plan and that of typical student accommodation demands.

With regard to traffic, the proposed development is forecast to generate in the order of 52 am and 88 pm peak hour trips. Such movements will be readily accommodated at the site's proposed access points.

Vehicle movements associated with the proposed development will be distributed to the broader road network via Capital Street, Metro Parade and Central Link. Such movements will be readily accommodated on the broader road network and will have minimal impact upon the operation of associated intersections.

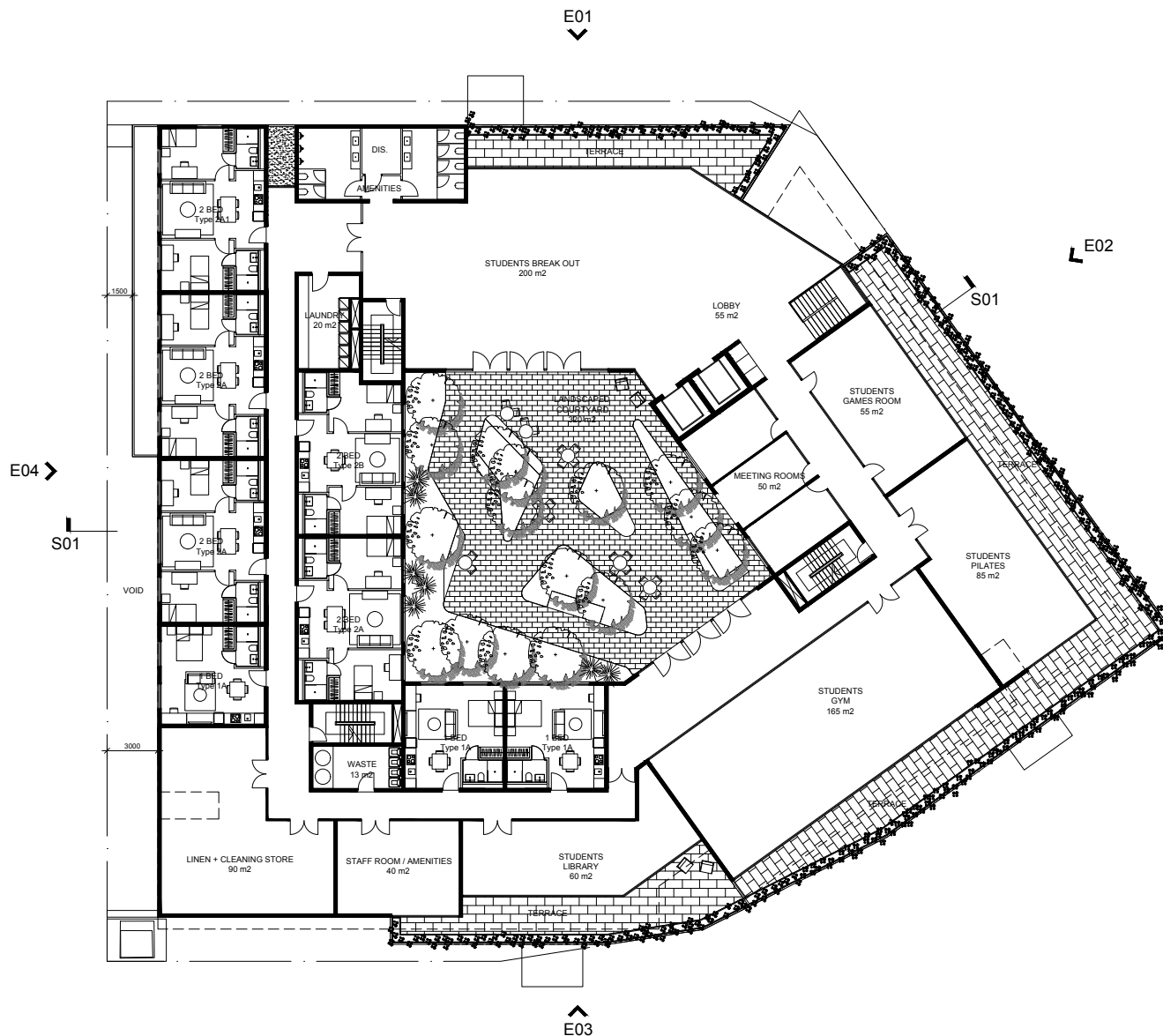
**APPENDIX A**  
**ENZO CAROSCIO ARCHITECTURE PLANS**  
**DATED 25 MARCH 2020**





**ENZO CARO SCIO ARCHITECTURE**  
 70 Halifax Street Adelaide SA 5000  
 P 08 8155 6000  
 F 08 8155 6003

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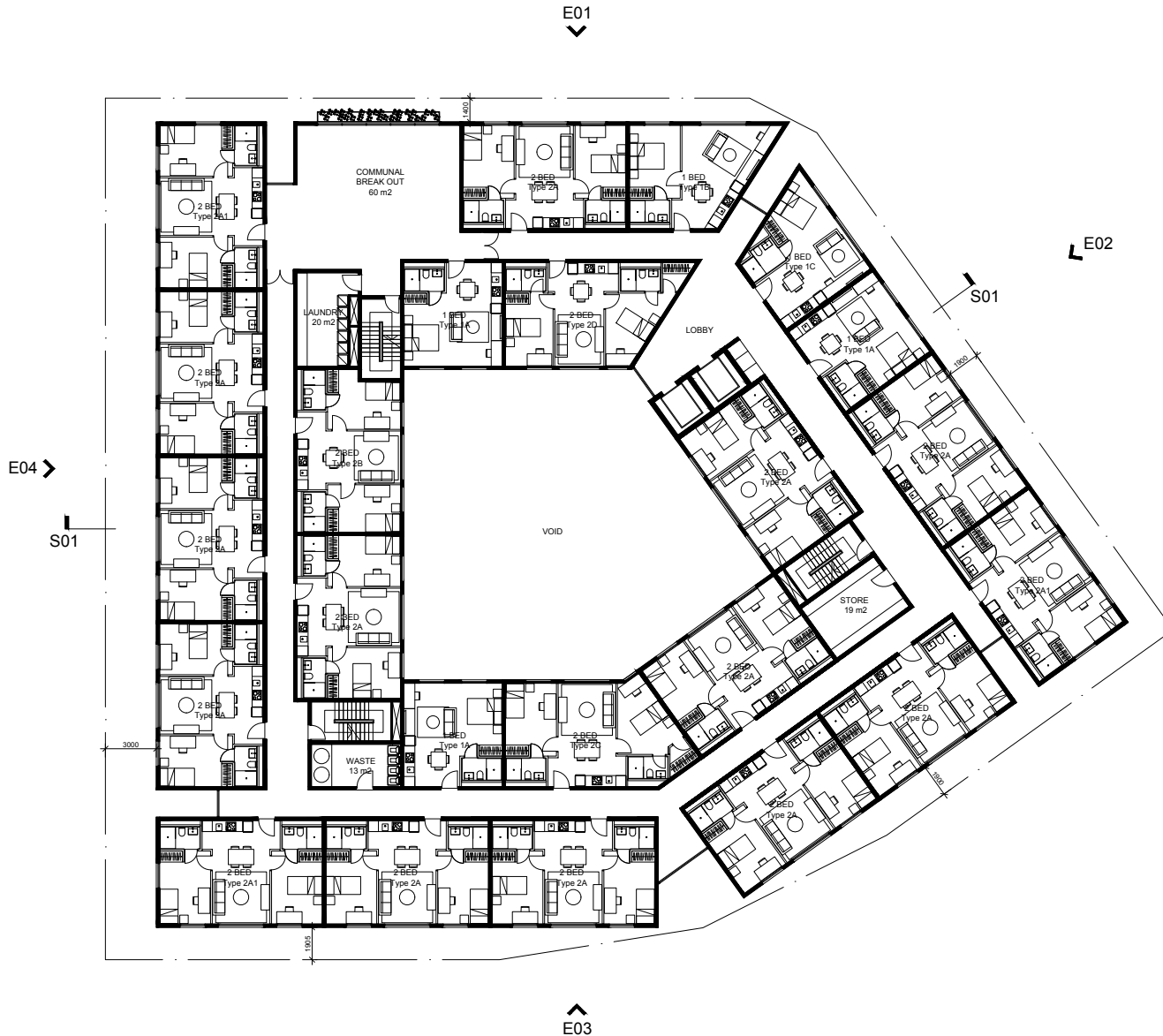
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 P: 08 8155 6033

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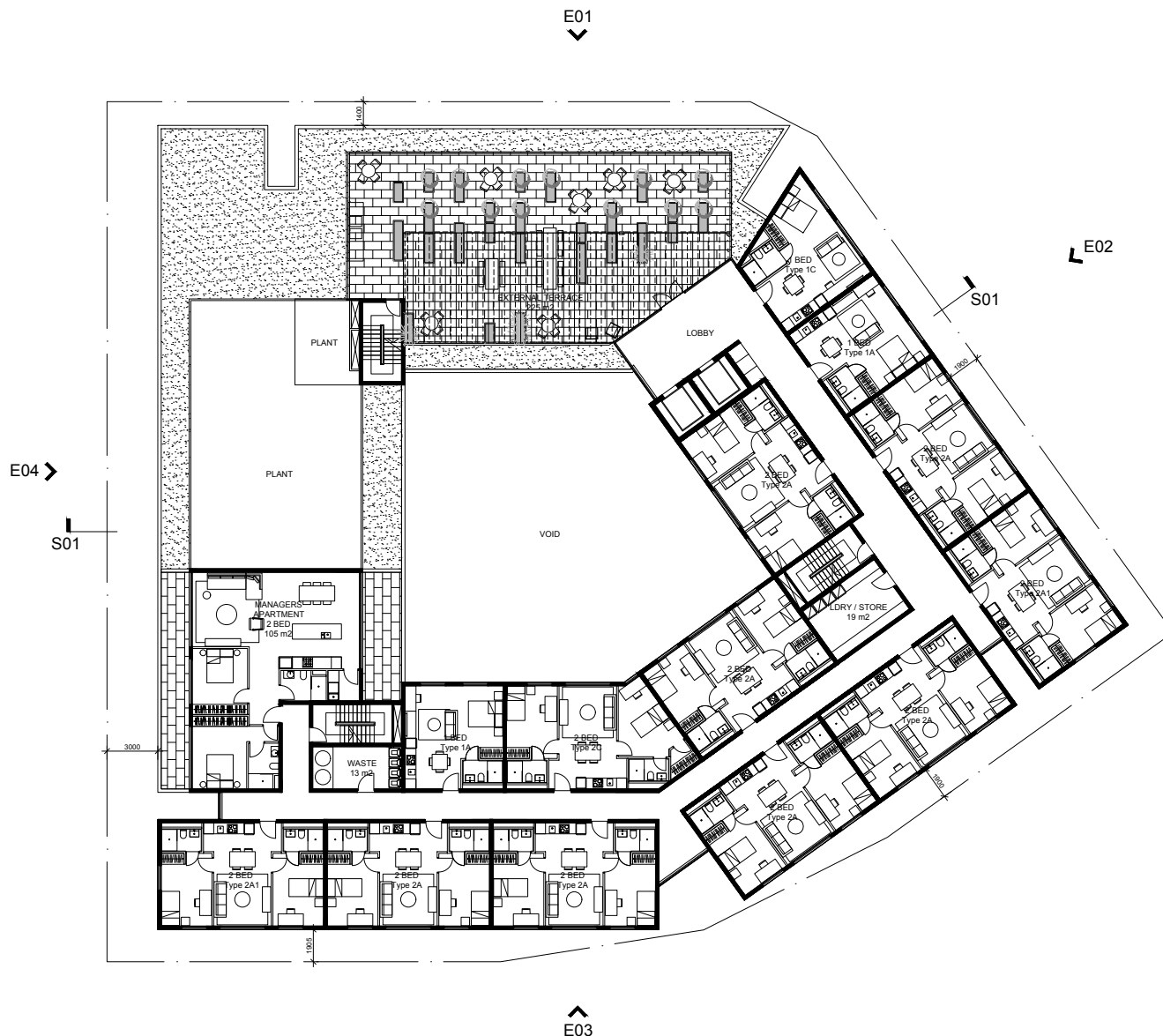


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 #ENZOARCHITECTURE  
 p. 08 8155 0063

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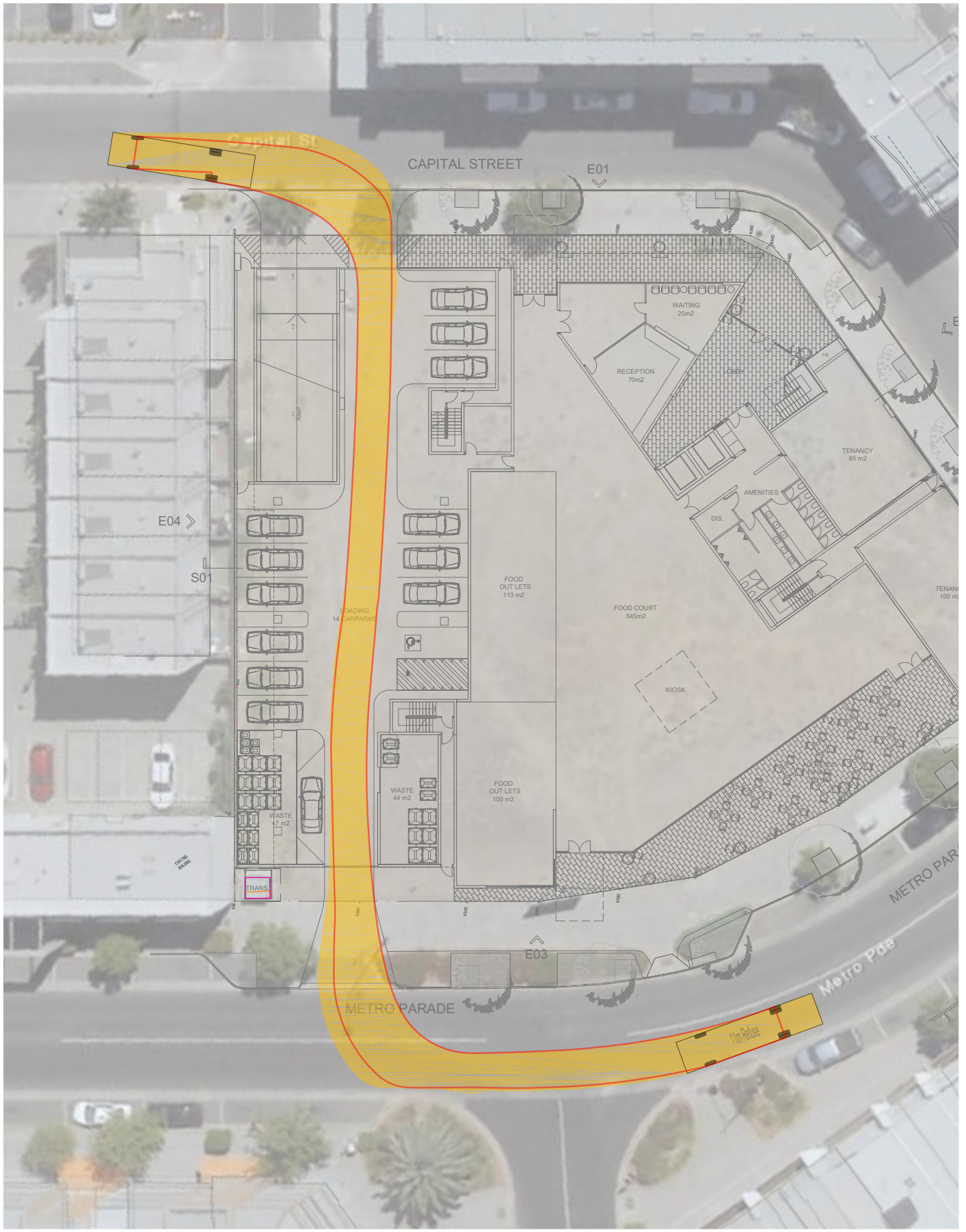
**ENZO CARO SCIO ARCHITECTURE**

70 Halifax Street Adelaide SA 5000  
 enzo@carosciio.com  
 P. 08 8155 0033

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# **APPENDIX B**

## **TURN PATH OF 11.0 M REFUSE VEHICLE**



ABN: 12 681 029 983 | PO Box 144, Glenside SA 5065 | E: info@cirqa.com.au

DRAWING AMENDMENTS

REV	DATE	DESCRIPTION	DWN	CHK
A	12/02/2020	DESIGN REVIEW	TAW	BNW
B	27/02/2020	FOR SUBMISSION	TAW	BNW

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STUDENT ACCOMMODATION

13-17 METRO PARADE, MAWSON LAKES  
11.0 m REFUSE COLLECTION VEHICLE

PROJECT # 20005 SHEET # 02\_SH01

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13 – 17 Metro Parade

## Waste Management Plan

Date: 7 April 2020

Prepared for:

Michael Calabro Pty Ltd

---



Colby Phillips Advisory Pty Ltd

Level 1, 60 Hindmarsh Square  
Adelaide, SA 5000

<i>Rev.</i>	<i>Date</i>	<i>Description</i>	<i>Doc No./Name</i>	<i>Originator</i>	<i>Approved</i>
0	17Feb2020	Amended Site Plan	WMP	JPH	
1	18Feb2020	Amended Site Plan	WMP	JPH	
2	07Apr2020	Amended Site Plan	WMP	JPH	

Distribution List

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## 1 INTRODUCTION

This document presents a waste management plan (WMP) for the proposed student accommodation complex in Mawson Lakes, South Australia (the “Development”). The Development is a combination of Student Accommodation with supporting Commercial tenancies. The Project Proponent is Michael Calabro Pty Ltd and the architect is Enzo Caroscio Architecture.

The WMP explains how the Development can manage waste effectively to achieve regulatory requirements and desired design and operating objectives, including those recommended by the South Australian Better Practice Guide (State Guideline) (Zero Waste SA, 2014) and Council expectations for waste management in this type of development. The WMP should be read in conjunction with other planning approval documentation for the Development referenced herein.

## 2 DEVELOPMENT DESCRIPTION

The Development is at 13 -17 Metro Parade in Mawson Lakes, in the City of Salisbury (Council). Per plans provided (Drawing A2.01-04, dated 25 Mar 2020, the Development is a twelve (12) -storey building on a ca. 2,557m<sup>2</sup> site. Table 2-1 (page 4) gives the proposed Development Metrics. In summary, the Development would comprise:

- *Student Accommodation*
  - *49 x 1-bedroom apartments.*
  - *178 x 2-bedroom apartments*
  - *A manager's apartment (2-bedrooms)*
- *Proposed / Potential Commercial Tenancies –*
  - *Reception / Waiting (95 m<sup>2</sup>)*
  - *Food Court (858 m<sup>2</sup>)*
  - *Tenancy 1 – (Light café assumed) (85 m<sup>2</sup>)*
  - *Tenancy 2 – (Dry Retail assumed) (100 m<sup>2</sup>)*
  - *Staff Amenities / Office (40 m<sup>2</sup>)*
  - *Student Library (60 m<sup>2</sup>)*
  - *Students Games Room (55 m<sup>2</sup>)*
  - *Meeting rooms (150 m<sup>2</sup>)*
  - *Gym and Pilates rooms (250 m<sup>2</sup>)*

The retail profile will only be determined when the building is complete and becomes operational. It is anticipated that one of the tenancies will be a light café. Table 2-1 below includes the recommended Waste Resource Generation Rate (WRGR) classification (for each land use) based on the State Guideline (Zero Waste SA, 2014), which are used for estimation of waste and recycling volumes to assess waste storage required for the site.

The waste resource generation rates for the Student Accommodations are based on the proponent's advice (having operated a comparable development across the road) and Colby Phillips Advisory's experience of similar developments in South Australia.

**Table 2-1** Summary of land uses for the Development, their WRGR Description(s) and relevant Development Metric(s). Retail and Commercial tenancies are preliminary assumed uses

Land Use	Description	Site Location	Land Use Type	Dev. Metric(s)	
Residential	Student Apartments	Levels 1-11	High Density Residential Dwelling	407*	Rooms
	Open Space		Showroom	110	m2 GFA
	Breakout Area		Showroom	540	m2 GFA
Commercial (Ground)	Reception / Waiting	Ground Level	Showroom	95	m2 GFA
	Food Outlets / Food Court		Light Café**	858	m2 GFA
	Tenancy 1		Light Café***	85	m2 GFA
	Tenancy 2		Retail > 100m2	100	m2 GFA
Commercial (Level 1)	Staff Amenities / Office	Level 1	Office	40	m2 GFA
	Student Library		Office	60	m2 GFA
	Students Games Room		Office	55	m2 GFA
	Meeting Rooms		Showroom	150	m2 GFA
	Gym / Pilates		Showroom	250	m2 GFA
	Breakout / Lobby		Showroom	315	m2 GFA
Basement	Carpark	Basement	Showroom	100#	m2 GFA

\* Includes 405 student apartments plus 2-bedroom manager's apartment.

\*\* Derated Café WRGRs from State Guideline: 65% activated area, General waste = -30%, Recycling = -30%, Food Waste = - 50%

\*\*\* Derated Café WRGRs from State Guideline: 75% activated area, General waste = -30%, Recycling = -30%, Food Waste = - 50%

# Space Allowance

### 3 STAKEHOLDER ENGAGEMENT

The Proponents of this Development operate an existing student accommodation across the road from the proposed location. The Development is targeted at the same clientele as the existing development. Upon consultation with the proponents, the waste generation rates have been adjusted to reflect their real-world experience.

The existing accommodation has 220 bedrooms. The site generates a total of 4,400 to 5,500L of waste (General Waste, Recycling, Food Waste combined) per week. The South Australian Guidelines forecast 14,300L of waste per week for High Density Residential Dwellings including Student Accommodation.

On this basis, the waste generation values for accommodation provided in Table 4-2 have been de-rated to 60% of the Guideline values overall. This retains a conservative value that future-proofs for potential change in use in the future.

The Proponent has had problems with blocked chutes in the existing site. The chutes are standard 600mm chutes, but have a kink to align the chutes over the bins (not visible from the bin room or chute room). The Proponent has requested larger chutes in the new design to reduce blocking of the chutes. This has been reflected in the architect's drawings. Final chute dimensions would be selected in consultation with suppliers and the building operator.

### 4 DESIGN ASSUMPTIONS

#### 4.1 Waste & Recycling Service Provision

Table 4-1 outlines the recommended waste services by land use per Table 2-1. The different waste service classifications listed in Table 4-1 are explained below.

- **Routine Services** – These require on-site waste storage and routine and regular collections, and would include services for general waste, cardboard, dry (comingled) recyclables and food waste.
- **At-call services** – These involve non-frequent collections, such as Hard waste and are organised and provided on an as-needed basis.
- **Maintenance services** – Some waste items (e.g. lighting in common areas or commercial tenancies, sanitary waste in public/common toilets) would be removed and disposed of (off-site) by the contractor providing the related maintenance service (and hence on-site waste storage is not usually needed or provided).
- **External Services** – These are where waste items (e.g. printer cartridges, batteries, lighting) that can be dropped off by tenants at external locations (e.g. Officeworks, waste depot) (and thus, separate on-site waste storage is not usually needed or provided).

All services for retail tenancies will be provided by private or commercial service providers.

## 4.2 Waste & Recycling Volumes

Table 4-2 estimates expected waste and recycling volumes for the Development (in Litres/week).

- WRGRs (in the State Guideline) do not exist for sanitary, lighting, printer cartridge or battery waste.
  - Volumes of these waste items, however, are relatively small, and thus, have not been estimated.
- The student apartments WRGRs are based on real world data provided by the Proponents based on a similar development across the road. This data has been extrapolated and used in conjunction with Colby Phillips Advisory's experience of similar developments in South Australia.
- The Food Court tenancy WRGRs are derated Café / Restaurant WRGRs (to reflect the fact a Food Court is not a full-service restaurant, which the WRGRs in the State Guidelines are based on - refer to Table note).
- The WRGRs for Recycling and General Waste in the commercial tenancies are based on published data and consultant experience to reflect likely volumes generated for different recyclable items.



**Table 4-1** Expected or recommended waste & recycling services for the Development

Service Type	Residential			Commercial (Ground)			Commercial (Level 1)					Basement
	Student Apartments	Open Space	Breakout Area	Reception / Waiting	Food Outlets / Food Court	Tenancies	Staff Amenities / Office	Student Library	Students Games Room	Meeting Rooms	Gym / Pilates	Carpark
<i>Routine (regularly scheduled)</i>	General Waste Recycling Food Organics	General Waste	General Waste Recycling	General Waste Recycling Cardboard	General Waste Recycling Cardboard Food Organics Recycled deposit containers (OPTION) Cooking Oil (OPTION)	General Waste Recycling Cardboard	General Waste Recycling	General Waste Recycling	General Waste Recycling	General Waste Recycling Food Organics	General Waste Recycling	General Waste
<i>At-call (as needed)</i>	<ul style="list-style-type: none"> <li>· Hard/E-waste</li> <li>· Printer Cartridges</li> <li>· Batteries</li> </ul>											
<i>Maintenance (waste removed by contractor)</i>	<ul style="list-style-type: none"> <li>· Sanitary (in-room or public toilets)</li> <li>· Lighting (where applicable)</li> </ul>											
<i>External (by tenant off-site)</i>	Not applicable											

Estimated waste & recycling volumes (Litres/week) for Development. *Greyed out, N/A – Not Applicable; NE – Not estimated*

Table 4-2: Estimated waste and recycling volumes (Litres/week) for Development. Greyed out, N/A – Not Applicable

Waste/ Recycling Service	Residential			Commercial (Ground)					Commercial (Level 1)					Basement	
	Student Apartments *	Open Space	Breakout	Reception / Waiting	Post Office	Food Outlets / Food Court #	Tenancy 1 ##	Tenancy 2	Staff Amenities / Office	Student Library	Students Games Room	Meeting Rooms	Gym / Pilates	Breakout Area	Carpark
	L/week	L/week	L/week	L/week	L/week	L/week	L/week	L/week	L/week	L/week	L/week	L/week	L/week	L/week	L/week
General Waste	6,105	229	1,125	198	0	8,198	937	441	70	105	96	446	744	656	298
Dry Comingled Recycling	5,088	58	284	50	0	4,646	469	420	60	90	83	105	175	165	70
Recycled Deposit Container						878	167								
Food / Garden Organics	3,053					7,808	893								
Hard waste	814		95	17	0	98	11	18	7	11	10	26	44	55	
E-waste	204		9	2	0	10	1	2	1	1	1	3	4	6	
Lighting waste	Not estimated														
Printer Cartridges/B atteries	Not estimated														
Sanitary	Not estimated														
<b>TOTAL</b>	<b>15,263</b>	<b>287</b>	<b>1,512</b>	<b>266</b>	<b>0</b>	<b>21,637</b>	<b>2,478</b>	<b>880</b>	<b>138</b>	<b>207</b>	<b>189</b>	<b>580</b>	<b>967</b>	<b>882</b>	<b>368</b>

\* Modified High Density Residential Dwelling WRGR for Student Apartments to reflect the real-world experience from an existing site. The waste generation values have been de-rated to 60% of the Guideline values overall.

# Modified Café / Restaurant WRGR to reflect the fact it is a food court and not a full-service restaurant: General waste WRGR de-rated by 30%, recycling/cardboard by 30%, and food waste by 50%. 65% activated area assumed.

## Modified Café / Restaurant WRGR to reflect the fact it is a Light café and not a full-service restaurant: General waste WRGR de-rated by 30%, recycling/cardboard by 30%, and food waste by 50%. 75% activated area assumed.

## 5 WASTE MANAGEMENT SYSTEM

### 5.1 Waste Storage Area(s)

Table 5-1 below gives a schedule of recommended bin storage for Routine Services. A potential configuration for the waste storage area is illustrated in Figure 5-4 (page 14). This figure demonstrates that adequate space is provided in the waste storage area to meet the waste management requirements.

The waste storage area will isolate the commercial waste from residential waste – see Figure 5-4.

#### 1) Residential Waste:

- Each level (1 to 11) would include a waste room (see Figure 5-5, page 11) containing:
  - General waste and recycling chutes
  - 1x 140L Organic/Food waste MGB
  - 2x 140L Bulky cardboard MGBs
  - 1x 140L CDL (10c container deposit) MGB (If desired).
- Residents will access waste rooms on each level to dispose of their waste.
- Waste chutes will feed into skip bins located in the Ground Level residential waste room.
  - We recommend that waste chutes have a small deflection at ground level to reduce the speed at which waste enters the skips – see Figure 5-4. This can be confirmed during detailed design in consultation with the equipment suppliers
- Cleaners could access the Ground Level residential waste room via a roller door to dispose of waste collected from the MGBs in the waste rooms located on Levels 1 to 11.
- The Ground Level residential waste area includes a bin wash (multi-purposed with bin storage).

#### 2) Commercial Waste:

- The commercial waste storage area will be co-located at Ground Level. It will be situated along the Western fence (to separate residential and commercial wastes).
- This area backs onto existing residential properties. A roofed structure over this area should be considered to mitigate odour and noise issues. If the driveway remains open at Metro Parade and Capital Street, then this may provide suitable natural ventilation.

The main Ground Level bin storage area and a standard waste/chute room found on each level are shown in Figure 5-4 and Figure 5-5 respectively. They are described further below.

Table 5-1 (page 10) gives a schedule of recommended bin storages at the Ground Level waste area (based on estimated waste volumes in Table 4-2) and includes for each land use and service:

- Waste volumes
- Number and type of bins;
- Collection frequency (expected or proposed).

*Table 5-1: Waste storage and bin schedule for Routine Services, included collection frequency and collection service provider. The type and size of bins for some commercial services may be refined in consultation with the commercial waste contractor when the building becomes operational.*

Waste Storage Area(s)	Location	Routine Service	Estimated Waste/Recycling Volumes (L/wk)	Collection Frequency (Events/wk)	Max. Bins/Items Stored & Collected (per Event)		
					No.	Size (L)	Type
Residential	Ground Level Residential Waste Room	General Waste	7,459	3	3	1,100	Skip
		Dry Comingled Recycling	5,429	3	3	1,100	Skip
		Food / Garden Organics	3,053	3	2	660	Skip
Commercial	Ground Level Commercial Waste Rooms	General Waste	12,189	3	5	1,100	Skip
		Dry Comingled Recycling	6,332	3	3	1,100	Skip
		Recycled Deposit Container	1,046	1	5	240	MGB
		Food / Garden Organics	8,700	3	6	660	Skip

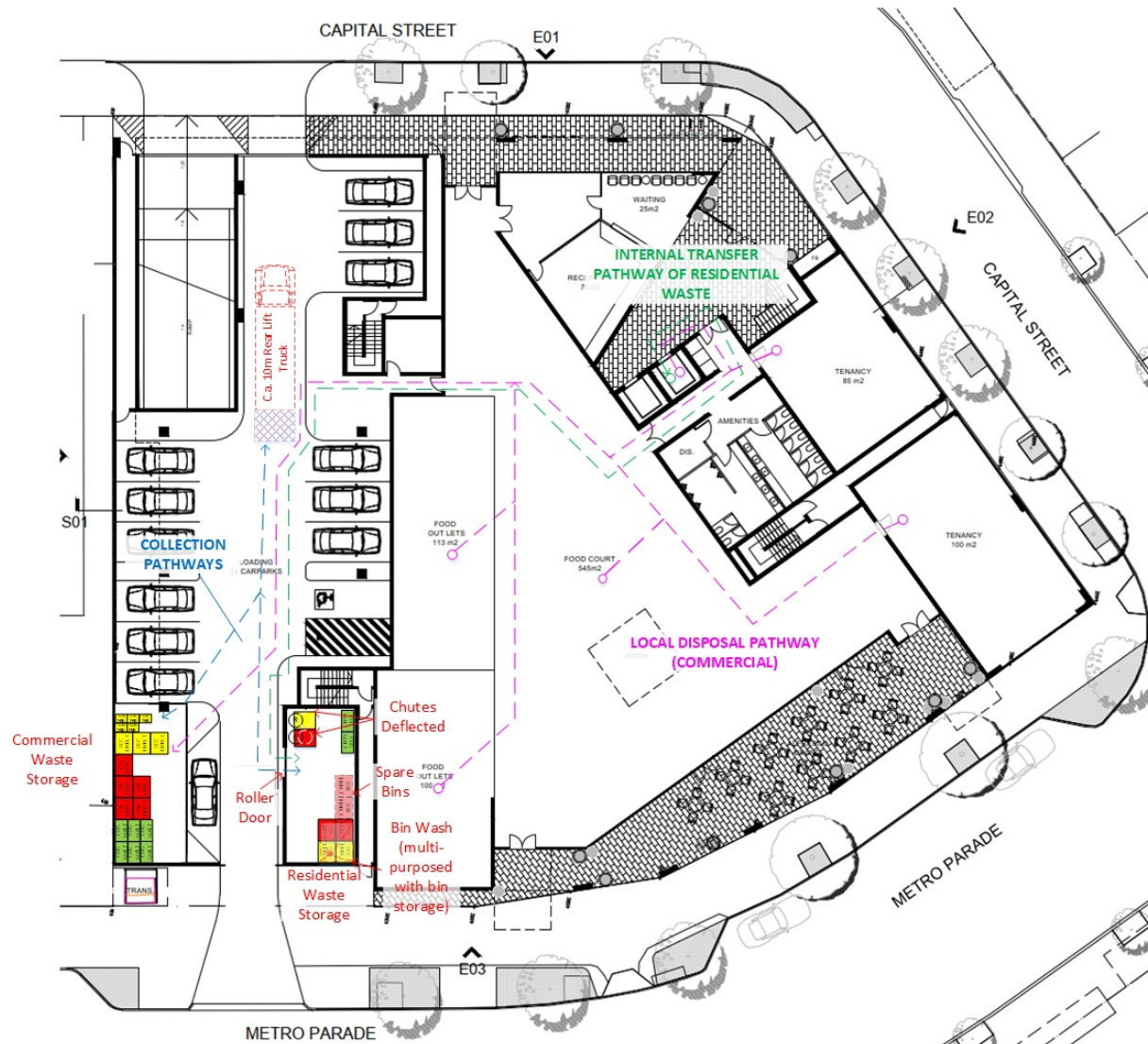


Figure 5-1 Ground floor layout showing disposal pathways and waste storage area. Red = GW, Yellow = Recycling / CDL bins, Green = Organics / Food Waste.



Figure 5-2: Level 1 layout showing disposal paths and waste room. Yellow = 140L CDL Bin, Blue = 140L Bulky cardboard bin, Green = Organics/Food Waste





Figure 5-3: Typical Apartment level layout showing disposal paths and waste room. Yellow = 140L CDL Bin, Blue = 140L Bulky cardboard bin, Green = Organics/Food Waste.

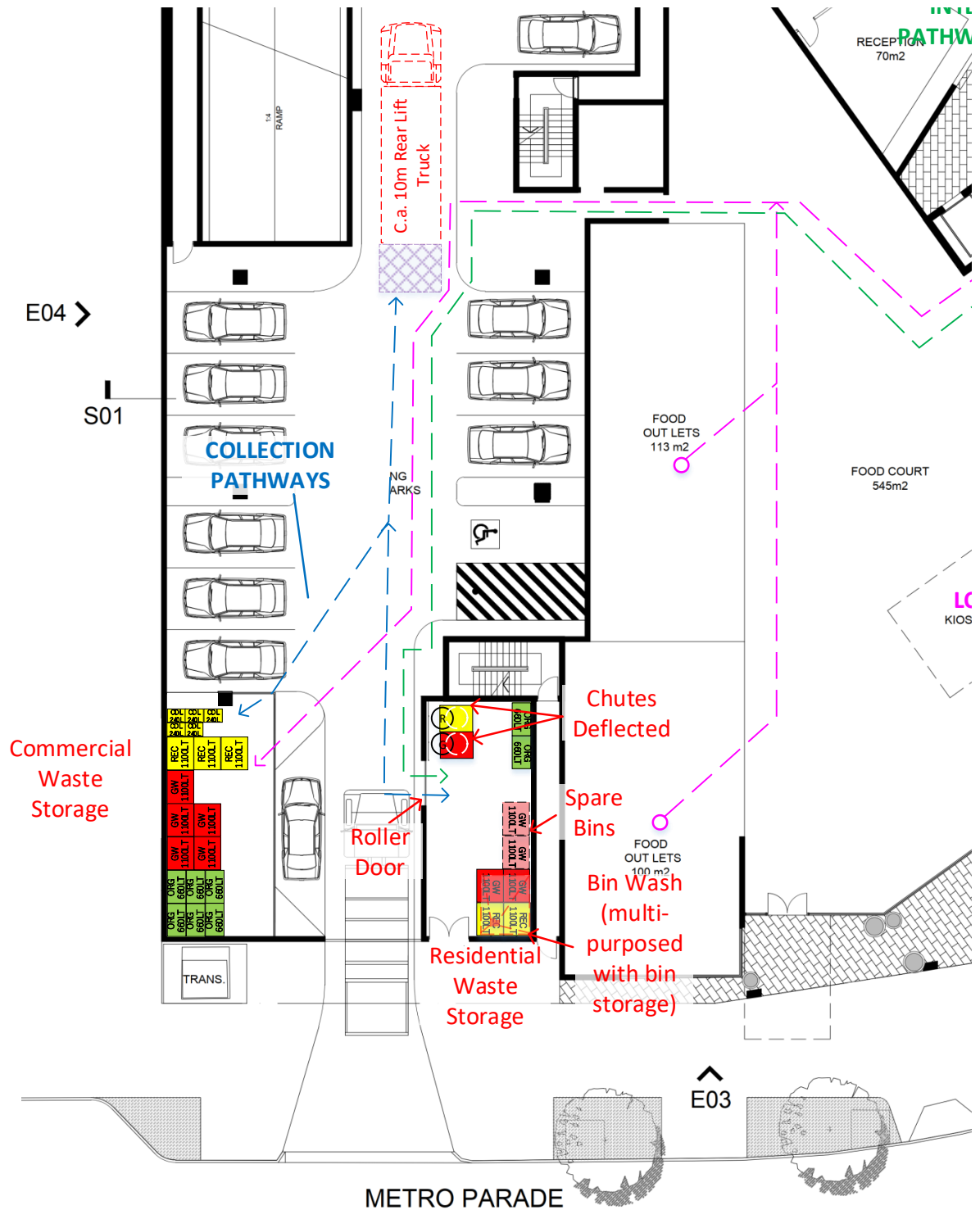


Figure 5-4: Ground Level Waste Area (Note for chutes: Black solid line = penetration of chute through ceiling, white dashed line = chute opening).

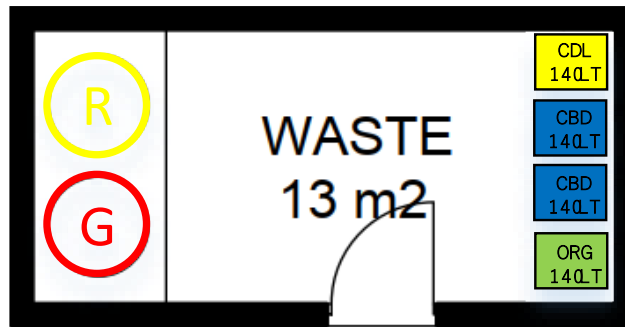


Figure 5-5: Chute/Waste room on Apartment levels.

## 5.2 Student Accommodation

Apartments will use a shared skip bin system for general waste, recycling, and organic waste. There is a waste room on each floor that residents can access with disposal chutes for general waste and recycling. The chutes will dispense directly into skip bins in the Ground Level residential waste room as shown in Figure 5-4. MGBs will be provided in the waste rooms at each Level (1 to 11) for Food/Organic waste, bulky cardboard and Container deposits (if desired).

### 5.2.1 User Storage

Residents would be provided suitable kitchen bins with handles to enable easy carriage to waste/chute room for disposal, e.g.

- a) General waste bin - 10- 20L in size (bag lined)
- b) Co-mingled recycling waste bin - 20-30L in size
- c) Food organics bin - Kitchen food waste caddy, ca. 6L in size



(a)



(b)

Figure 5-6- Examples of suitable waste and recycling kitchen bins: (a) General waste & recycling in pull-out drawer; and (b): Bench-top food waste kitchen caddy with handles

### 5.2.2 Local Disposal

The residents would carry their waste to the waste/chute room located on Levels 1 to 11. This area will have dedicated waste chutes for general waste and co-mingled recycling. The building design as presented allows adequate space for a dual-chute system. 900mm diameter chutes are currently shown in building drawings. Standard chutes for a 12 storey building are ca. 600mm diameter. During detailed design the desirable diameter can be selected. Note that few Australian companies can provide chutes larger than 600mm, but that these can be modified to any size up to 1,000mm if blockages are of concern. 900mm chutes will have a very high cost (around 50% higher than standard) due to costs of transport and handling. Chutes around 700 to 750mm could provide an economical option that might still reduce blockages entirely.

The chutes will dispense directly into skip bins at Ground Level. Management would be responsible for rotating these skip bins once full.

The waste rooms on each floor will also contain MGBs for:

- Bulky cardboard
- Food / Organic Waste
- Container deposits (if desired).

The waste from these bins will be transferred to the Ground Level waste room by cleaning staff via corridors and lift.

The chute rooms should have suitable floor treatments such as tiling or linoleum, which wrap up the walls to contain liquid spills and facilitate easy cleaning.

The waste storage area on the ground floor should be screened from view and transfer pathways should be free of steps, grades  $\leq 1:10$ , with appropriate hard /even surfaces, and wide enough to accommodate the types of bins being transferred.

### 5.2.3 Presentation

Skip bin presentation is not required as they would be collected directly from the waste storage area by the private contractor.

### 5.2.4 Collection

- Would be by Private Rear-lift truck which will park temporarily within the development as shown in Figure 5-4 on page 14.
- The Private Contractor would temporarily park, collect bins from waste storage area, empty them and finally replace them in the waste storage area.
- Collections would be up to three times per week for General Waste, Recycling and Organics.
- The time required to lift bins could be up to 10 minutes for each service.

### 5.3 Commercial / Food Court

The commercial tenancies will use a shared skip bin system for general waste, recycling, organic waste and container deposits. Staff and Cleaners will transfer waste from user disposal points to the Commercial side of the Ground Level waste area as shown in Figure 5-1 and Figure 5-2.

#### 5.3.1 User Storage

##### 1) Food court:

- Public bin stations would be located through the food-court to allow patrons to dispose of any waste – see Figure 5-7. This may include general waste, recycling, and container deposit bins.
- These public place bins would be inspected regularly by Centre staff and if sufficiently full (e.g.  $\geq 50\%$ ) would be emptied.
- Rubbish in bags would be removed from these bins and transferred to the commercial waste storage area at Ground Level.



Figure 5-7 Example of public place general waste and recycling bins

##### 2) Commercial Tenants:

- Tenancies would have bins located in-tenancy for disposal of their waste and recycling.
- The types and size of bins would be decided during tenancy fit-out as they depend on type of commercial activity and services elected by the tenants.

#### 5.3.2 Local Disposal

Staff will transfer waste from within the commercial tenancies directly to the commercial side of the waste storage area at Ground Level – see Figure 5-1 and Figure 5-2.

#### 5.3.3 Presentation

Skip bin presentation is not required as they would be collected directly from the waste storage area by the private contractor.

#### 5.3.4 Collection

- Would be by Private Rear-lift truck which will park temporarily within the development as shown in Figure 5-4 on page 14.
- The Private Contractor would temporarily park, collect bins from waste storage area, empty them and finally replace them in the waste storage area.
- Collections would be up to three times per week for General Waste, Recycling and Organics.
- Collections of the container deposits would be weekly
- The time required to lift bins could be up to 10 minutes for each service.

### 5.4 At-call services

#### 5.4.1 Hard/E-waste

##### 1) Residential:

- Management (on residents' behalf) should inquire with Council regarding whether these residents can access the Council hard waste collection when the building becomes operational, including establishing suitable arrangements and a (kerbside or on-site) presentation location for the service.
- If a Council service is not available, management would facilitate private hard waste collection services for residents.
  - This would involve at-call hard waste collection by a private contractor.
  - Where appropriate and arranged by management, a temporary hard waste storage/presentation area could be set up in a car park or other spare area at Ground Level to support these services.
  - The waste contractor would use the Loading area to deliver hard waste collection services.

##### 2) Commercial: Would organise their own hard waste collection using a private contractor.

- The private contractor(s) delivering these services would use the Loading bay area for collection access.

### 5.5 Waste Chute Design

Installation of waste chutes in the Apartment Building will conform to Building Code of Australia (BCA) requirements, including acoustic insulation to minimise noise impacts during operation, and provide for access by water and electrical services required for operation and maintenance (including cleaning) of the chutes.

The waste chutes will include an extraction fan, so the system can operate under negative pressure, and in-situ cleaning system to keep tube surfaces clean. Fans should be sized to aid ventilation in chute rooms. Consider if fans are sufficient for the Ground Floor bin room, or if additional ventilation is required.

Design should consider including level monitoring / alarms for bins in service.

Easy access should be provided to chute lockout mechanisms.



Angles of deflectors (if included to reduce waste discharge speed) selected to minimise risk of blockages.

No bin changer or compactor has been proposed. Based on the Proponent's relevant operating experience, bins will need to be changed out (slightly) less than once per day. This is acceptable to the Proponent as the site will be staffed 7-days per week.

The chute discharge area (at Ground Level) will require suitable hard surfaces and installation of drains (to sewer) and grading of floors to capture wash water at the chute discharge points (from periodic chute cleaning). Floor treatments should wrap up the walls so liquid spills can be contained and easily cleaned.

The waste chutes will be subject to a regular inspection and maintenance schedule to ensure reliable operation.

## 5.6 Maintenance Services

Waste would be generated by some maintenance services or activities in the building and commercial tenancies at the site (e.g. lighting, repair work, cleaning of commercial toilets, etc.). These maintenance-generated waste materials would be handled and disposed of by the contractor undertaking these services. [Dedicated on-site storage for these waste materials is therefore not needed.]

## 5.7 External

Tenants would be able to dispose of smaller waste items, such as printer cartridges, batteries and lighting, to publicly available external drop off points (e.g. supermarkets, Office works, telco retail stores, etc.), which accept these materials.

The Building User Manual(s) for tenants at the Development will include advice on external drop-off points for these waste items, which may include reference to Council advice available at their Web site.

## 5.8 Bin cleaning

A dedicated on-site bin cleaning area would be provided in the residential waste storage area at Ground Level – see Figure 5-4 (page 14).

- The location of the bin wash may be adjusted to suit the plumbing layout
- This bin wash area would require grading to a sewer drain with basket screen to remove gross solids, tiles or epoxy coating to water-proof adjacent walls and flooring, standard cold-water supply faucet and commercial-grade electrical power supply (if pressure washer system is to be used), plus bunds and screens for use during bin wash events.
- Bin washing activity for commercial tenants (if necessary) would be managed by the Building/Facilities Manager.
- Bin washing would be timed to occur immediately after bins are emptied.
- Bin washing could be facilitated with a mechanical lifting device such as that shown in Figure 5-8.



Figure 5-8 Mechanical bin washer Source: [emoveit.com.au](http://emoveit.com.au)

## 5.9 Transfer pathways

There are a range of transfer pathways for the waste systems at the Development, as shown in Figure 5-1, Figure 5-2 and Figure 5-3. The following is provided as a guide for sizing and designing these transfer pathways.

- *Transfer pathways –*
  - *User disposal – less than 30m and free of steps, no grades greater than 1:15, and cater for mobility impaired users.*
  - *Local disposal points to central storage – enough width to accommodate relevant bins or waste loads being transferred, free of steps, no grades greater than 1:12*
  - *Collection – less than 30m with no steps or grades greater than 1:10*
- *Corridor widths –*
  - *240L MGBs or smaller bins / loads – min. 1,000 mm (1,200mm preferred)*
  - *1,100L skip skips and/or other waste loads – min. 1,500mm (1,600mm preferred)*
- *Doors –*
  - *Local disposal access – 800mm*
  - *Transfer pathways– Appropriate to the size of bin to be transported, e.g.*
    - *240L MGB (or smaller) – min. 800mm*
    - *1,100L skip – min 1,400mm*
- *Floors – Hard surfaces where bins and skips are to be carted*

Based on current plans, these requirements for transfer pathways in the Development appear to be satisfied. All relevant transfer pathways should be reviewed and confirmed at detailed design stage to ensure they are appropriate.

## 5.10 Collection & Traffic Issues

### 5.10.1.1 Collection Point & Events

The waste collection point for the Development introduced above is reiterated below.

- All collections are made by parking in the loading bay on-site as per Figure 5-1.
- Collection will be completed within 10-15 minutes per service

5.10.1.2 *Traffic Issues*

Access to the Loading Bay is via Metro Parade. Swept path analysis has been carried out by the traffic engineer to ensure safe access into the loading bay and through to Capital Street (forward entry / forward exit).

Refer to the Traffic Report by Traffic Engineer for additional discussion of collection truck access to the Development.

5.11 **Management & Communication Responsibilities**

Table 5-2 summarises the responsibilities of different parties / stakeholders for proposed waste management and operational activities at the Development. In summary, the Building / Facilities Manager would manage the waste system, including ensuring that good waste management outcomes by tenants were achieved.

**Table 5-2** Management & operational responsibilities for the waste systems at the Development

Activity	Responsible party
<i>Local Disposal &amp; External Disposal</i>	Tenants
<i>Waste Storage Areas, Hard Waste, Hygiene, Odour Management &amp; Cleaning</i>	Building maintenance staff
<i>Collection services – Waste &amp; Recycling</i>	Commercial / Private Contractor(s)
<i>Management</i>	Building Manager
<i>Education, Training &amp; Engagement (tenants)</i>	Building Manager

5.11.1 Implementation & Communication

The following should be put in place

- **Formal agreement for commercial property operators** – Obligations for the commercial tenants to properly access, operate and use the waste systems would be written into any tenancy agreement
- **Site Management System / Manual** – Advice and instructions on waste management and using the waste systems should be provided for tenants, including contact information for further information, questions and issues.
- **Tenant Induction** – Should include guidance on how to correctly use waste /recycling bins as well as the site approach to waste and recycling.
- **Clear signage** – At all disposal points. To reflect the target clientele (short-term international guests), signs should be in multiple languages with photographic guides.
- **Emergency Response or Site Management Plan(s)** – Should include response measures (or contingencies) for:
  - Waste collection services suspended or not available;
  - Incorrect use by tenants of the waste systems;

- Illegal dumping on-site; and
- Poor waste management outcomes (including cleanliness, odour and/or low diversion).

### 5.12 Other Waste System Design or Management Issues

The following would be considered and/or implemented for waste systems at the Development. More details for some of these items can be resolved at detailed design stage with the waste contractor and/or Council.

- 1) **Bins** – These would comply with Australian Standard for Mobile Waste Containers (AS 4213).
- 2) **Signage** –
  - Appropriate signage in all Local Disposal and Waste Storage Areas should be used to ensure correct disposal of waste and recycling.
  - This signage should conform to the signage requirements of Council and/or the State Guideline (Zero Waste SA, 2014).  
Signs should be in multiple languages and include photos for guidance.
- 3) **Vermin, hygiene & odour management (inc. ventilation)**
  - **Inspection & Cleaning** –
    - An inspection and cleaning regime would be developed and implemented by the Building / Facilities Manager for waste systems at the Development, including ensuring that surfaces and floors around disposal areas, transfer pathways and waste storage areas are kept clean and hygienic and free of loose waste and recycling materials.
      - *Where putrescible general waste or food waste is being stored, Local Disposal and Waste Storage areas should be graded to a sewer drain with tiling or epoxy coating to floors and adjacent walls to waterproof the area and for cleaning.*
  - **Odour Control** –
    - All Waste Storage Areas –
      - *Where putrescible general waste or food waste is being stored, consider mechanical ventilation for control of odours if natural ventilation is insufficient.*
      - *The ventilation would extract to atmosphere, to prevent odour build up.*
      - *The extraction vent discharge location would be selected to avoid impact on tenants and/or neighbours.*
      - *It should be a requirement for food waste bins in Waste Storage areas that lids are closed after use.*
- 4) **Access & security** –
  - All Waste Storage Areas in the Building should be secure and only accessible by key or fob or access code.
    - *This key or fob or access codes would be provided to tenants, property management staff and/or waste contractor(s) collecting from these areas.*

- 
- *CCTV is recommended to monitor waste disposal practices in all Waste Storage Areas.*

## **6 REFERENCES**

Zero Waste SA. (2014). South Australian Better Practice Guide – Waste Management in Residential or Mixed Use Developments.

Mawson Lakes Student

Accommodation

Environmental Noise Assessment

April 2020

S6442C4

sonus.

**Contact: Jason Turner**

Associate

Phone: +61 (0) 410 920 122

Email: [jturner@sonus.com.au](mailto:jturner@sonus.com.au)

[www.sonus.com.au](http://www.sonus.com.au)



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Environmental Noise Assessment

**Document Reference** : S6442C4

**Date** : April 2020

**Author** : Brent Poland

**Reviewer** : Jason Turner, MAAS

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## 1 INTRODUCTION

An environmental noise assessment has been made of the proposed Mawson Lakes Student Accommodation building to be located at 13-17 Metro Parade, Mawson Lakes.

The development comprises a mixed use building with:

- Basement and ground floor carparking and loading;
- Ground floor and level 1 retail and commercial uses;
- Level 1 through Level 11 accommodation; and
- Rooftop plant and terrace.

The development is to be located amongst other similar activities in the area with commercial and residential land uses on the opposite side of Capital Street and Metro Parade, and an existing apartment building immediately adjacent to the northwest of the subject site. The closest noise sensitive locations and the proposed development are shown and labelled in Appendix A.

The assessment considers noise levels at noise sensitive locations from activity associated with the proposed facility. Specifically, the following noise sources have been considered:

- Patrons in outdoor areas;
- On-site vehicle movements;
- General car park activity;
- Truck loading activity;
- Mechanical Plant; and
- Rubbish collection.

The assessment has been based on:

- *ENZO CAROSCIO ARCHITECTURE & DESIGN* drawings set for the project titled “MAWSON LAKES STUDENT ACCOMMODATION”, reference “19009” including drawings “A2.00” and “A3.20”, issued 11 March 2020;
- Site inspection and noise measurements taken at the site on 26 March 2020; and
- Previous noise measurements and procurement of data from similar sites for patrons in outdoor areas, car parking activity, loading activity, and mechanical plant.

## 2 CRITERIA

### 2.1 Development Plan

The proposed development and all nearby residences are located within the *Urban Core Zone* of the *Salisbury Council Development Plan*<sup>1</sup> (the **Development Plan**). The Development Plan has been reviewed and the following provisions are considered relevant to the noise assessment:

#### **Zone Section – Urban Core Zone**

*Objective 2* Development within a mixed use environment that is compatible with surrounding development and which does not unreasonably compromise the amenity of the zone or any adjoining residential zone.

*PDC 7* Except in Core Areas where a higher intensity of development is envisaged, non-residential development should comprise uses that:  
(c) do not detrimentally impact on the amenity of nearby residents.

#### **General Section – Interface between Land Uses**

*Objective 1* Development located and designed to minimise adverse impact and conflict between land uses.

*Objective 2* Protect community health and amenity from adverse impacts of development.

*Objective 3* Protect desired land uses from the encroachment of incompatible development.

*PDC 1* Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:  
(b) noise

*PDC 2* Development should be designed and sited to minimise negative impact on existing and potential future land uses desired in the locality.

*PDC 6* Non-residential development on land abutting a residential zone should be designed to minimise noise impacts to achieve adequate levels of compatibility between existing and proposed uses.

#### **Noise Generating Activities**

*PDC 7* Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant Environment Protection (Noise) Policy criteria when assessed at the nearest existing noise sensitive premises

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<sup>1</sup> Consolidated – 4 April 2019.

## 2.2 Environment Protection (Noise) Policy 2007

Interface between Land Uses PDC 7 references the *Environment Protection (Noise) Policy 2007* (the **Policy**), which provides goal noise levels to be achieved at residences from general activity at a site and specific provisions for other activity such as rubbish collection.

The Policy is based on the World Health Organisation Guidelines to prevent annoyance, sleep disturbance and unreasonable interference on the amenity of an area. Therefore, compliance with the Policy is considered to be sufficient to satisfy all provisions of the Development Plan relating to environmental noise.

### Patron, Vehicle, and Loading Activity

The Policy provides goal noise levels to be achieved at residences based on the relevant principally promoted land uses in the Development Plan. Based on the land uses and the “development” nature of the project, the following goal noise levels are provided by the Policy to be achieved at residences:

- An average ( $L_{eq}$ ) noise level of 52 dB(A) during the daytime (between 7:00am and 10:00pm); and
- An average ( $L_{eq}$ ) noise level of 45 dB(A) at night (before 7:00am or after 10:00pm).

When measuring or predicting noise levels for comparison with the Policy, adjustments may be made to the average goal noise levels for each “annoying” characteristic of tone, impulse, low frequency, and modulation of the noise source. The characteristic must be dominant in the existing acoustic environment and therefore the application of a penalty varies depending on the assessment location, time of day, the noise source being assessed, and the predicted noise level. The application of penalties is discussed further in the Assessment section of this report.

### Rubbish Collection

The Policy deals with rubbish collection by effectively limiting the hours to the least sensitive period of the day. Division 3 of the Policy requires rubbish collection to only occur between the hours of 9:00am and 7:00pm on Sundays or public holidays, and between 7:00am and 7:00pm on any other day, except where it can be shown that the maximum ( $L_{max}$ ) noise level from such activity is less than 60 dB(A).

### 3 ASSESSMENT

#### 3.1 Noise Sources

The noise levels at the nearby residences from the proposed site activity have been predicted based on a range of previous noise measurements and observations at similar facilities. These include:

- Patrons dining and conversing in outdoor areas;
- car park activity such as people talking as they vacate or approach their vehicles, the opening and closing of vehicle doors, vehicles starting, vehicles idling, and vehicles moving into and accelerating away from their park position;
- general vehicle movements on site;
- truck loading activity including general movement and manual unloading; and,
- mechanical plant serving the building.

Sound power levels for the above activities are provided in Appendix B.

#### 3.2 Operational Assumptions

The predictions of noise from use of the facility have also been based on the following operational assumptions for the level of activity in any 15-minute<sup>2</sup> period during the:

- Day (between 7:00am and 10:00pm):
  - 15 patrons within the alfresco dining area fronting Metro Parade;
  - 20 people using the rooftop terrace;
  - 72 vehicle movements (one per car park) through the site using the basement carpark and associated general carpark activity
  - 14 vehicle movements (one per car park) through the site using the ground floor carpark and associated general carpark activity;
  - a single refrigerated delivery truck driving into the site, being manually unloaded and driving out of the site in a forward direction;
  - continuous operation of mechanical plant within the designated roof area;

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<sup>2</sup> Default assessment period of the Policy.



- Night (before 7:00am or after 10:00pm):
  - 20 people using the rooftop terrace area;
  - 36 vehicle movements through the site using the basement carpark and associated general carpark activity
  - 7 vehicle movements through the site using the ground floor carpark and associated general carpark activity;
  - continuous operation of mechanical plant within the designated roof area.

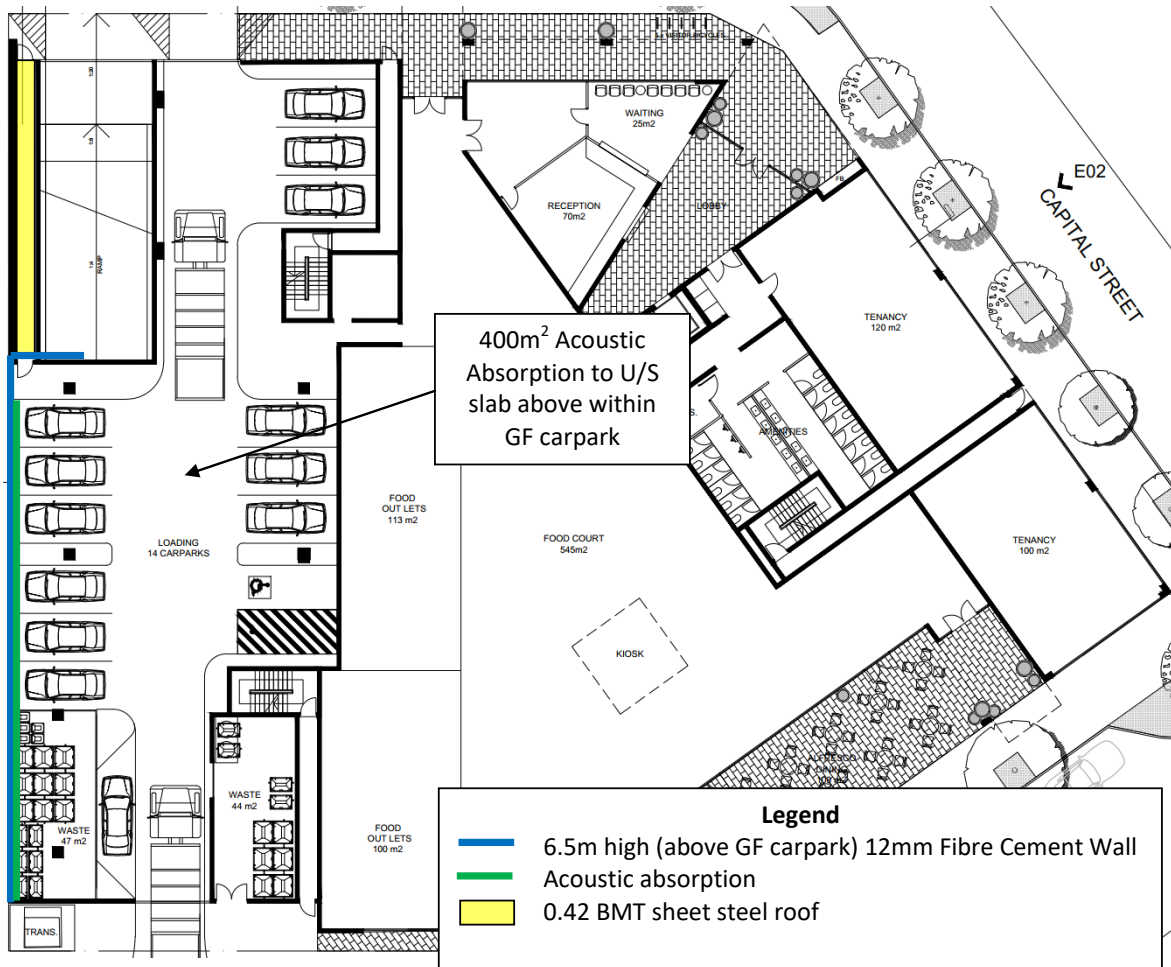
### 3.3 Recommendations

#### Patron, Vehicle and Loading Activity

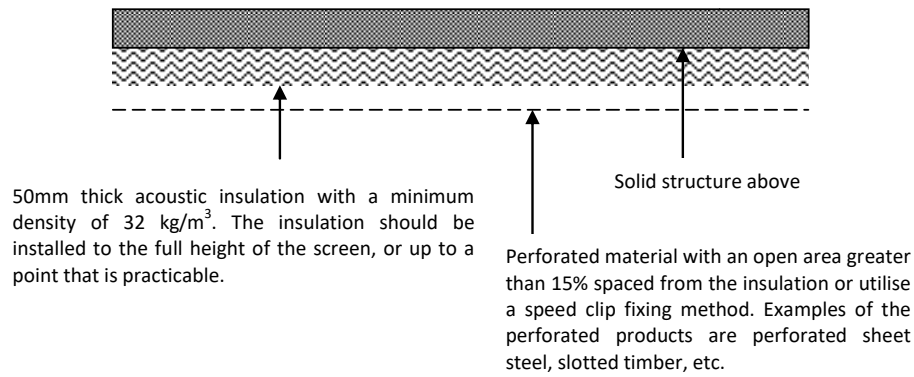
Based on the above, the following acoustic treatments are recommended:

- Construct the proposed northeastern boundary wall (shown in **BLUE** in Figure 1) from a minimum of 12mm thick fibre cement sheet (or acoustic equivalent which includes any material with the same or greater surface density in  $\text{kg/m}^2$ ). The wall should achieve a minimum height of **6.5m** above the carpark ground level for the extent shown. Ensure the barrier is sealed airtight at all junctions, including at the joins to the ground, and return join to the main building.
- Install acoustic absorption material to the underside of the slab within the ground floor carpark. The absorption material should be installed to a minimum surface area of  $400\text{m}^2$ , and the boundary wall for the full practicable extent shown in **GREEN**. The absorption material can be 50mm thick polyester insulation with a minimum density of  $32\text{kg/m}^3$ , or a proprietary weatherproof product with an “NRC” rating of 0.8 or greater (“Stratocell Whisper” or similar). Absorption should be installed to the slab in accordance with Figure 2.
- Construct a roof (as proposed) over open portion of the ground level carpark for the extent shown in Figure 1 as **YELLOW**. The roof should be constructed from a minimum of 0.42 BMT sheet steel (or acoustic equivalent which includes any material with the same or greater surface density in  $\text{kg/m}^2$ ). The roof should join airtight with the building.
- Restrict all deliveries to between the hours of 7:00am to 10:00pm.
- Restrict all retail trading hours to between the hours of 7:00am to 10:00pm.
- Ensure the delivery vehicles do not idle and any refrigeration units are turned off while unloading.

Figure 1: Recommended Treatment Measures



**Figure 2: Ceiling/wall absorption construction detail.**



### Mechanical Plant

As is typical at the development application stage, the proposed mechanical plant units have not yet been designed or selected. Therefore, an allowance has been made for mechanical plant within the proposed area on the roof the building using an indicative selection. This selection has been based on previous noise measurements and procurement of data at similar facilities. The assessed mechanical plant units comprise twenty air conditioning units with a sound power level of 74 dB(A) each.

Based on the predictions, design noise levels of no more than 36 dB(A) at any nearby residence will ensure the goal noise levels of the Policy are achieved when considered with other noise sources at the facility. Acoustic treatment measures likely to be required in order to achieve the goal noise levels of the Policy include

- Incorporate a proprietary in-line attenuator to the discharge side of any significant exhaust fans; and
- Locate mechanical plant away from the roof edge such that there is no direct line of sight from the windows of adjacent residences to an item of plant.

These specific measures should be reviewed during the detailed design phase of the project, once final equipment selections have been made.

Rubbish Collection

In order for rubbish collection to achieve goals of the *Environment Protection (Noise) Policy 2007*, the hours of collection should be restricted to that of Division 3 of the Policy. That is, only between the hours of 9:00am and 7:00pm on a Sunday or public holiday, and 7:00am and 7:00pm on any other day.

**3.4 Predicted Noise Levels**

With the inclusion of the acoustic treatments described above and the assumed level of activity at the site, the predicted average ( $L_{eq}$ ) noise levels from the patron, vehicle, and loading activity are as shown in Table 1. Table 1 indicates that the goal noise levels of the Policy will be achieved at all nearby residences.

**Table 1:** Predicted average ( $L_{eq}$ ) noise levels.

Time	Prediction	Criteria
Day	52 dB(A)	52 dB(A)
Night	45 dB(A)	45 dB(A)

A penalty has not been considered warranted at residences which are separated from the subject site by an intermediate road on the basis that the noise from the subject site will be of similar character to activity which already exists in the current environment. Noise from retail activity, people passing on the sidewalk, and vehicle movement on public roads will occur at closer distances to residences than any of the proposed activity at the subject site.

A penalty for modulating noise character has been considered warranted at residences immediately northeast of the subject site on the basis that these residences will be shielded from activity in the surrounding environment by the proposed building. This penalty has been included in the prediction in the table above where relevant.

#### 4 CONCLUSION

An environmental noise assessment has been made of the proposed Mawson Lakes Student Accommodation building to be located at 13-17 Metro Parade, Mawson Lakes.

The assessment considers noise at the surrounding residences from patrons, on-site vehicle movements, general car park activity, truck loading activity, mechanical plant, and rubbish collection.

The predicted noise levels from the development will achieve the relevant requirements of the *Environment Protection (Noise) Policy 2007* subject to the implementation of the treatments recommended in this report, comprising;

- specific wall and roof constructions;
- installation of acoustic absorption within the carpark;
- restricting the times of deliveries;
- restricting the times of retail activities;
- ensuring that delivery vehicles do not idle and refrigeration units do not operate while unloading;
- selecting mechanical plant and treatment to achieve the recommended design noise levels; and
- restricting the times for rubbish collection.

It is therefore considered that the facility has been designed to *minimise adverse impacts, avoid unreasonable interference on amenity, and will not detrimentally affect the locality by way of noise*, thereby achieving the relevant provisions of the Development Plan related to environmental noise.

APPENDIX A

Figure 3: Site Locality and Nearby Residences.





**APPENDIX B**

*Table 2: Noise Level Data.*

Equipment/Activity		Noise Level
Patrons	Within outdoor areas	75 dB(A) SWL
Car park activity	General activity	83 dB(A) SWL
	Idling car	75 dB(A) SWL
	Moving car	82 dB(A) SWL
Delivery activity	Truck movement - forward	97 dB(A) SWL
	Truck Unloading	86 dB(A) SWL
	Truck refrigeration unit	91 dB(A) SWL
Mechanical Plant	Air conditioning unit	74 dB(A) SWL



**Vipac Engineers and Scientists Limited**

279 Normanby Rd, Port Melbourne, VIC 3207, Australia

Private Bag 16, Port Melbourne, VIC 3207, Australia

t. +61 3 9647 9700 | f. +61 3 9646 4370 | e. melbourne@vipac.com.au

w. www.vipac.com.au | A.B.N. 33 005 453 627 | A.C.N. 005 453 627

## **Vipac Engineers & Scientists**

GMC Developments Pty Ltd

**Lot 535, 13-17 Metro Parade, Maswon Lakes -  
Student Accommodation**

**Wind Impact Assessment**

30N-20-0008-TRP-6771880-1

30 March 2020



Report Title: Wind Impact Assessment Job Title: Lot 535, 13-17 Metro Parade, Maswon Lakes		
<b>DOCUMENT NO:</b> 30N-20-0008-TRP-6771880-1 <b>PREPARED FOR:</b> GMC Developments Pty Ltd 70 Halifax Street Adelaide , 5000, <b>CONTACT:</b> Kate Russo <b>Tel:</b> (08) 8155 6063 <b>Fax:</b>	<b>REPORT CODE:</b> TRP <b>PREPARED BY:</b> Vipac Engineers and Scientists Limited 279 Normanby Rd, Port Melbourne, VIC 3207, Australia <b>Tel:</b> +61 3 9647 9700 <b>Fax:</b> +61 3 9646 4370	
<b>PREPARED BY:</b> Author:  Sophie Lamande Wind Group Leader		Date: 30 Mar 2020
<b>REVIEWED BY:</b> Reviewer:  Zhuyun Xu Senior Wind Consultant		Date: 30 Mar 2020
<b>AUTHORISED BY:</b>  Sophie Lamande Wind Group Leader		Date: 30 Mar 2020
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30 March 2020



## EXECUTIVE SUMMARY

**GMC Developments Pty Ltd** commissioned Vipac Engineers and Scientists Pty Ltd to prepare a statement of wind effects for the proposed development at Lot 535, 13-17 Metro Parade, Maswon Lakes. This appraisal is based on Vipac's experience as a wind-engineering consultancy.

Drawings of the proposed development were supplied to Vipac by Enzo Caroscio Architecture in March 2020, as described in Appendix C of this report.

The findings of this study can be summarised as follows:

### **With the proposed design:**

- The proposed development would be expected to generate wind conditions in the ground level footpath areas within the walking comfort criterion.
- The proposed development would be expected to generate wind conditions in the main building entrance areas within the standing comfort criterion.
- The proposed development would be expected to generate wind conditions in the alfresco dining area exceeding the sitting comfort criterion. We recommend incorporating some landscaping or screening to help shield this area from adverse winds.
- The proposed Level 1 terraces and courtyard would be expected to have wind levels within the recommended walking comfort criterion. Many areas would also be expected to meet the more stringent standing or sitting comfort criteria.
- The proposed rooftop communal terrace would be expected to have wind conditions exceeding the recommended walking criterion. We recommend landscaping or high balustrades be incorporated on the perimeter of the terrace to help improve wind conditions in this area.

As a general statement, educating occupants about wind conditions at open terrace/balcony areas during high-wind events and fixing loose, lightweight furniture on the terrace are highly recommended.

The assessments provided in this report have been made based on experience of similar situations in Australia and around the world. As with any opinion, it is possible that an assessment of wind effects based on experience and without experimental validation may not account for all complex flow scenarios in the vicinity. Vipac recommends a wind tunnel test be conducted in the detailed design phase to verify the predictions and determine appropriate wind control measures.



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# 1 INTRODUCTION

Vipac Engineers and Scientists has been commissioned by **GMC Developments Pty Ltd** to carry out an assessment of the pedestrian wind effects at the ground level and open terraces of the proposed student accommodation development at Lot 535, 13-17 Metro Parade, Maswon Lakes.

Strong winds in pedestrian areas are frequently encountered in central business districts of cities around the world; including Melbourne, Sydney and Brisbane. Wind characteristics such as the mean speed, turbulence and ambient temperature determine the extent of disturbance to users of pedestrian areas. These disturbances can cause both comfort and safety problems and require careful consideration to mitigate successfully.

The proposed development has an irregular plan and is 11 storeys high, approximately 39 m from street level (Figure 1). The site is bounded by Capital Street to the Northeast and East; Metro Parade to the South and Southwest, and the existing developments to the northwest. A satellite image of the proposed development site is shown in Figure 2.

This report details the opinion of Vipac as an experienced wind engineering consultancy regarding the wind effects in ground level footpath areas adjacent to the proposal. No wind tunnel testing has been carried out for the proposal at this stage. Vipac has carried out wind tunnel studies on a large number of developments of similar shape and having similar exposure to that of the proposed. These serve as a valid reference for the prediction of wind effects. Empirical data for typical buildings in boundary layer flows has also been used to estimate the likely wind conditions on the ground level areas of the proposed development [2] & [3].

Drawings of the proposed development were supplied to Vipac by **Enzo Carascio Architecture** in March 2020. A list of drawings supplied is provided in Appendix C of this report.



Figure 1: Elevation of the proposed development (Capital Street)



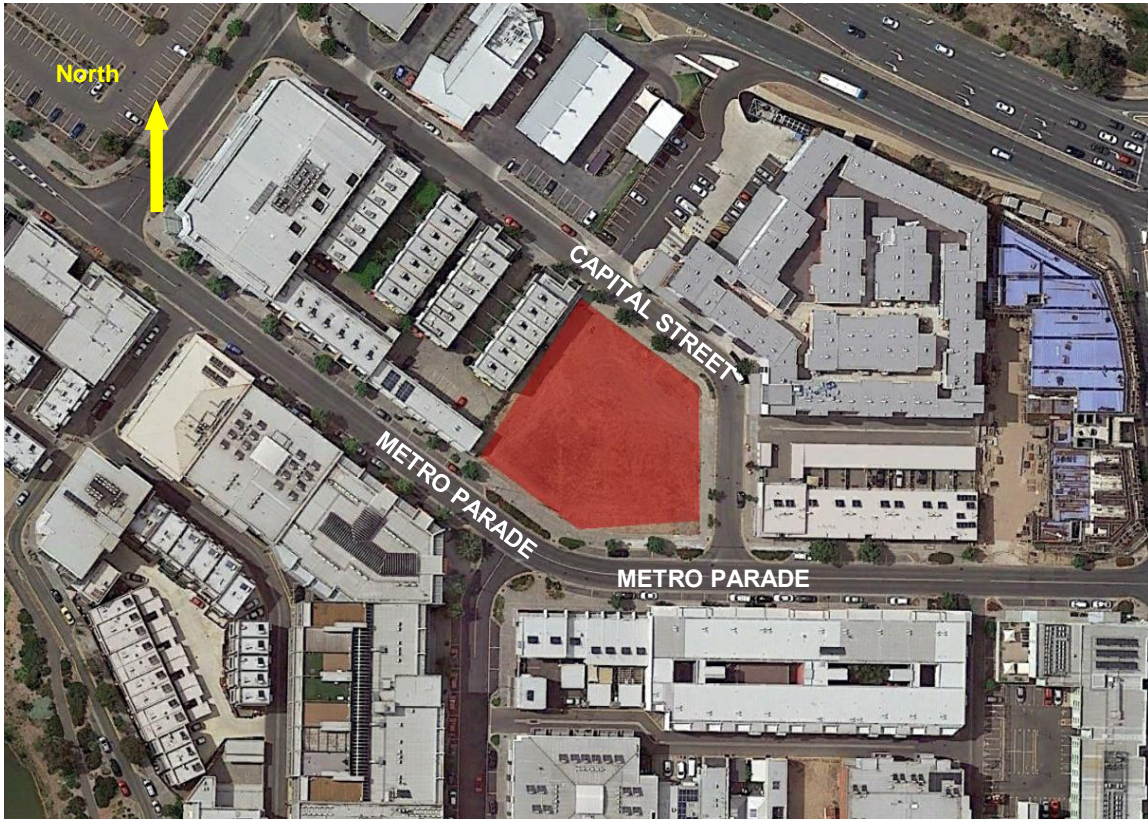


Figure 2: Aerial view of the proposed development site.



## 2 ANALYSIS APPROACH

In assessing whether a proposed development is likely to generate adverse wind conditions in ground level footpath areas, Vipac has considered five main points:

- The exposure of the proposed development to wind
- The regional wind climate
- The geometry and orientation of the proposed development
- The interaction of flows with adjacent developments
- The assessment criteria, determined by the intended use of the areas affected by wind flows generated or augmented by the proposed development.

The pedestrian wind comfort at specific locations of ground level footpath areas may be assessed by predicting the worst annual 3-second wind gust expected at that location. The location may be deemed generally acceptable for its intended use if the annual 3-second gust is within the threshold values noted in Section 2.5. Where Vipac predicts that a location would not meet its appropriate comfort criterion, the use of wind control devices and/or local building geometry modifications to achieve the desired comfort rating may be recommended.



## 2.1 SITE EXPOSURE

The proposed development is located in a suburban area, surrounded by suburban housing in most directions, with the Parafield airport to the northeast. A satellite image of the site surroundings within a 2.5 km radius is shown in Figure 3.

Considering the immediate surroundings and terrain, the site of the proposed development is assumed to be within Terrain Category 2 for wind directions 20° to 90° and Terrain Category 3 for all other directions (Figure 3).

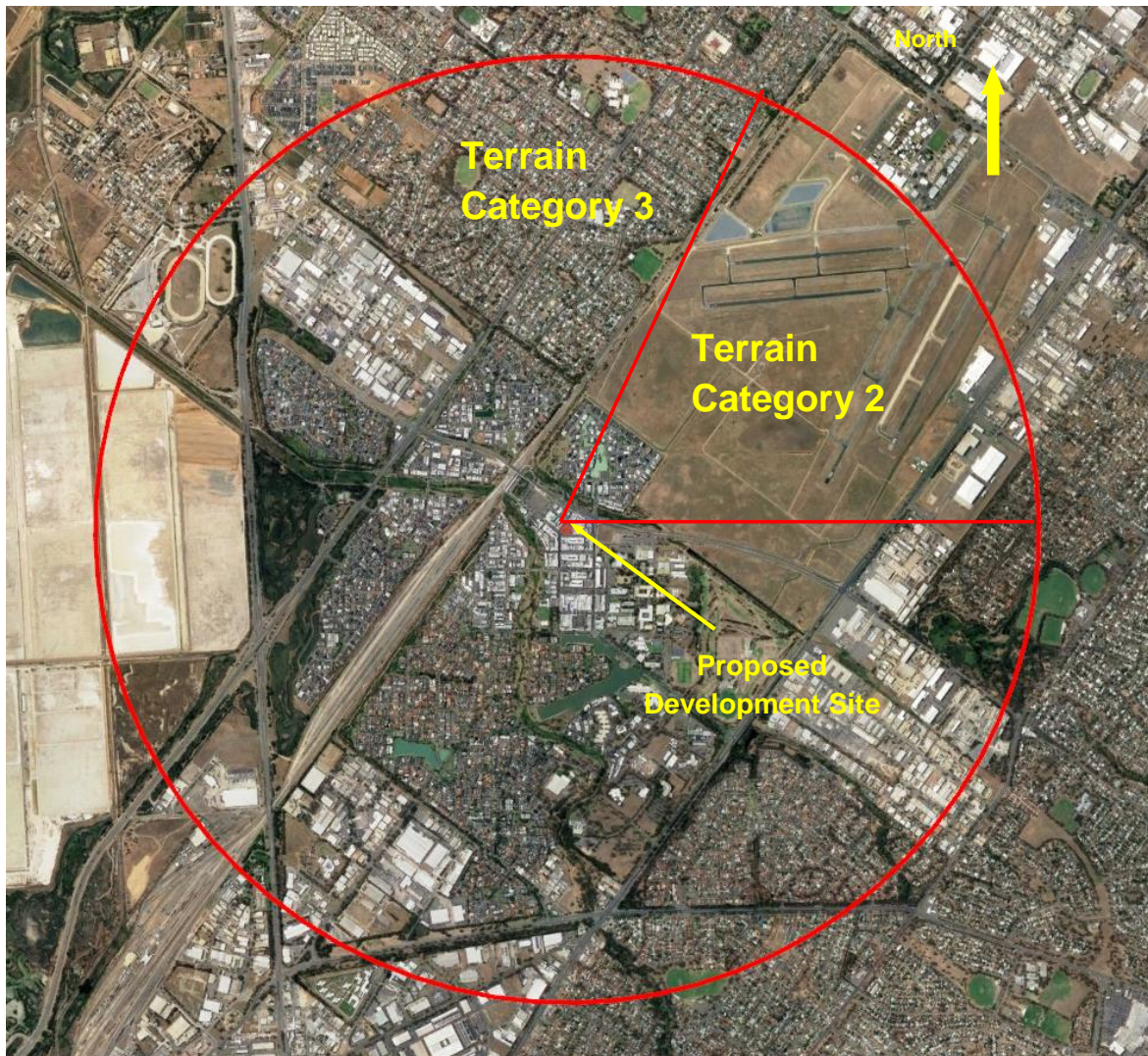
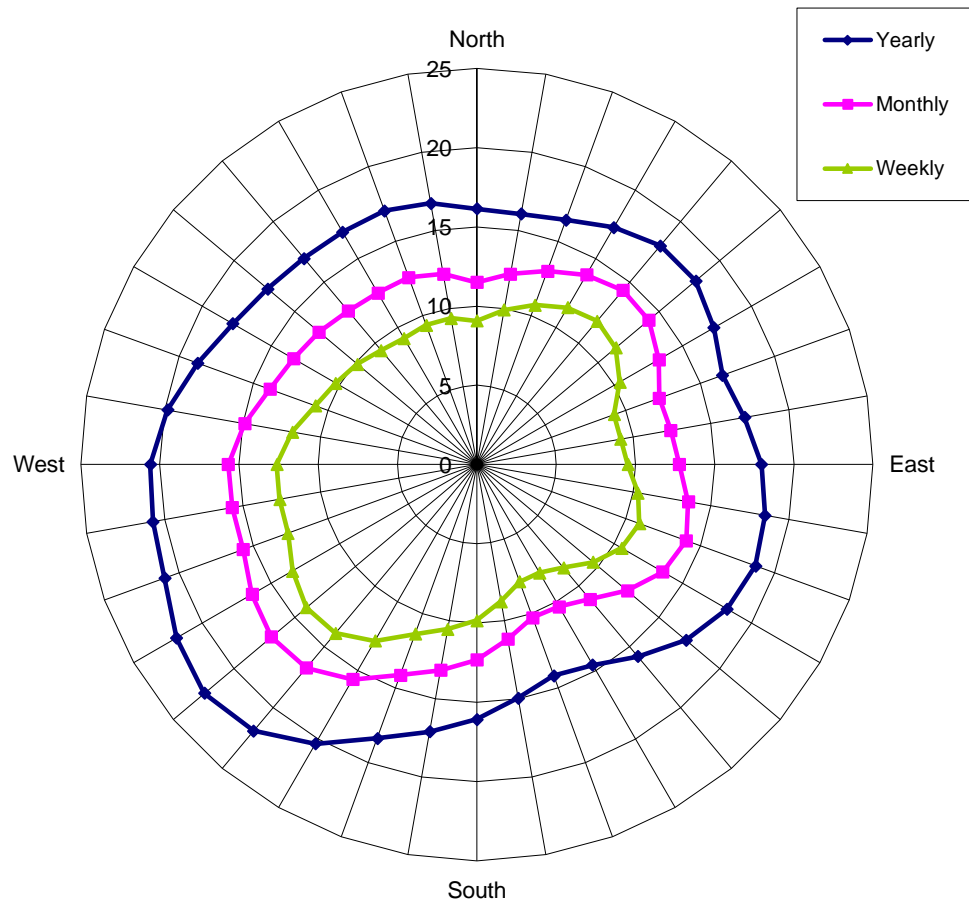


Figure 3: Assumed terrain roughness for wind speed estimation.

## 2.2 REGIONAL WIND CLIMATE

The mean and gust wind speeds have been recorded in the **Parafield Airport** for over 30 years. This data has been analysed and the directional probability distribution of wind speeds have been determined. The directional distribution of hourly mean wind speed at the gradient height ( $\approx 500\text{m}$ ), with a probability of occurring once per year (i.e. 1 year return period), one month and one week is shown in Figure 7. The wind data at this free stream height are common to all nearby sites and may be used as a reference to assess wind conditions at the site. Figure 7 indicates that the stronger winds can be expected from the south-westerly sector followed by south east and northeast directions.

**Hourly mean wind speed at 500 m at Parafield Airport, m/s**



*Figure 7: Directional Distribution of Annual Return Period Maximum Mean Hourly Wind Velocities (m/s) at gradient height of 500m at **Parafield Airport**.*

### 2.3 BUILDING GEOMETRY AND ORIENTATION

The proposed development has an irregular plan and is 11 storeys from street level. The site is bounded by Capital Street to the Northeast and East; Metro Parade to the South and Southwest, and the existing developments to the northwest.

The plan dimension of the proposed development is approximately 50 m x 60 m, as shown in Figure 4.

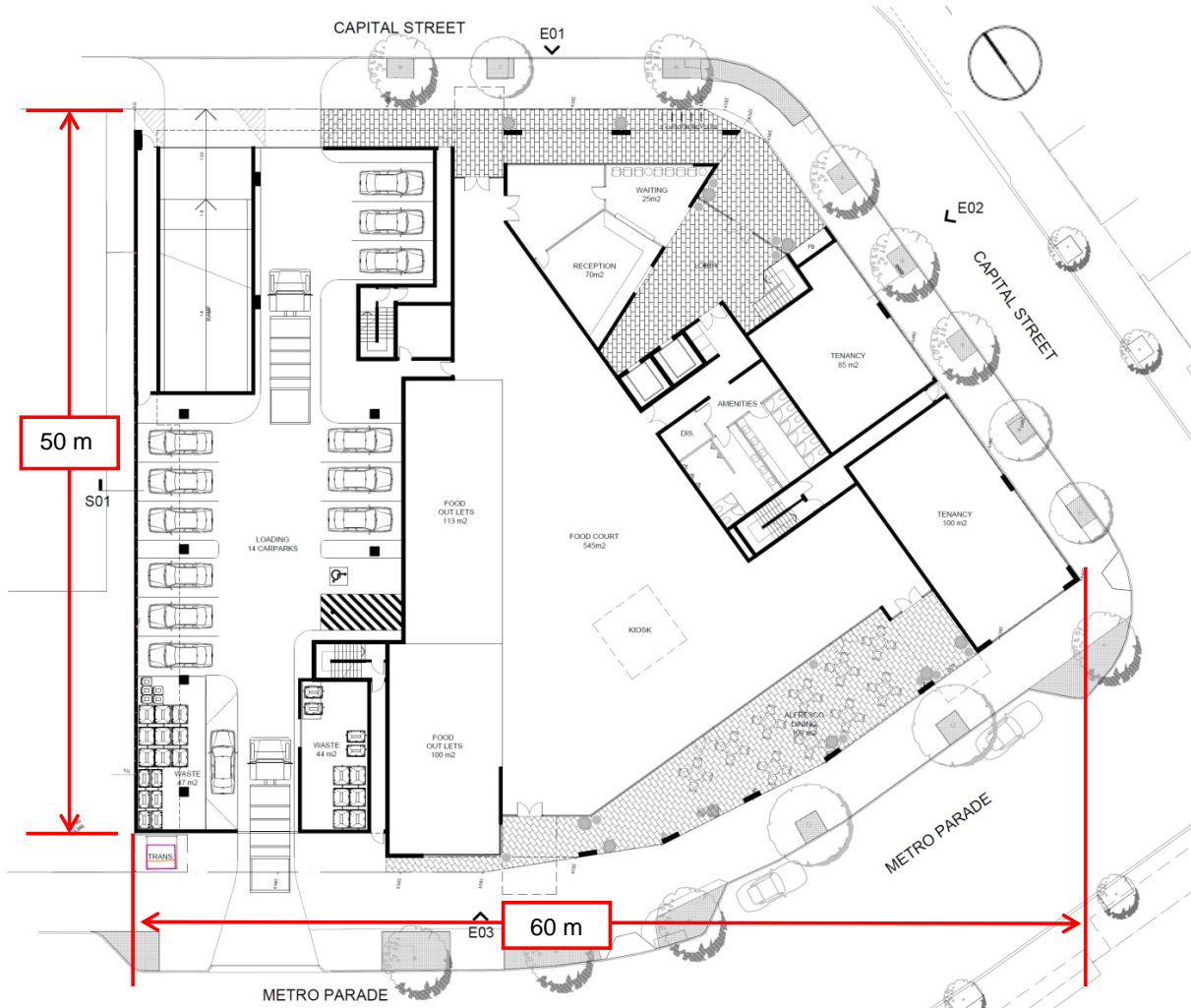


Figure 4: Ground level plan of the proposed development showing the approximate dimensions.



## 2.4 FLOW INTERACTIONS WITH ADJACENT DEVELOPMENTS

The immediately adjacent developments are shown in Figure 5. There are low rise buildings ranging from 1-5 storeys surrounding the proposed development.

From the wind climate, the south-westerly winds are the strongest. The resultant wind flows from this direction are expected to possess high mean velocities. The northerly winds will create downwash flows and affect the footpath and entrances on Metro Parade in particular. These winds also affect the wind environment for the Level 1 and rooftop terraces.

The NE and ESE winds are also strong and the footpaths on Capital Street and the communal terraces will be exposed to winds from these directions.



Figure 5: Immediately adjacent surroundings and their approximate heights in floors (F).

## 2.5 ASSESSMENT CRITERIA

With some consensus of international opinion, pedestrian wind comfort is rated according to the suitability of certain activities at a site in relation to the expected annual peak 3-second gust velocity at that location for each wind direction. Each of the major areas around the site are characterised by the annual maximum gust wind speeds. Most patrons may consider a site generally unacceptable for its intended use if it were probable that during one annual wind event, a peak 3-second gust occurs which exceeds the established comfort threshold velocity. If that threshold is exceeded once per year then it is also likely that during moderate winds, noticeably unpleasant wind conditions may result, and the windiness of the location may be voted as unacceptable.

The threshold gust velocity criteria are:

*Table 1: Gust Velocity Criteria - Recommended Wind Speeds for Comfort and Safety*

Annual Maximum Gust Speed	Result on Perceived Pedestrian Comfort
>23m/s	Unsafe (frail pedestrians knocked over)
<20m/s	Acceptable for <b>fast walking</b> (waterfront or particular walking areas)
<16m/s	Acceptable for <b>walking</b> (steady steps for most pedestrians)
<13m/s	Acceptable for <b>standing</b> (window shopping, vehicle drop off, queuing)
<11m/s	Acceptable for <b>sitting</b> (outdoor cafés, gardens, park benches)

In a similar manner, a set of hourly mean velocity criteria with a 0.1% probability of occurrence are also applicable to ground level areas in and adjacent to the proposed Development. An area should be within both the relevant mean and gust limits in order to satisfy the particular human comfort and safety criteria in question.

The threshold mean velocity criteria are:

*Table 2: Mean Velocity Criteria - Recommended Wind Speeds for Comfort and Safety*

Mean wind speed exceeded 0.1% of the time	Result on Perceived Pedestrian Comfort
>15m/s	Unsafe (frail pedestrians knocked over)
<13m/s	Acceptable for <b>fast walking</b> (waterfront or particular walking areas)
<10m/s	Acceptable for <b>walking</b> (steady steps for most pedestrians)
<7m/s	Acceptable for <b>standing</b> (window shopping, vehicle drop off, queuing)
<5m/s	Acceptable for <b>sitting</b> (outdoor cafés, gardens, park benches)

The Beaufort Scale is an empirical measure that related the wind speed to observed conditions on the land and sea. Table 3 describes the categories of the Beaufort Scale. The comparison between these observed conditions and the comfort criteria described above can be found in Table 4.



Table 3: Beaufort Scale - empirical measure relating wind speed to observed conditions on land

Beaufort Number	Descriptive Term	Wind Speed at 1.75 m height (m/s)	Specification for Estimating Speed
0	Calm	0-0.1	
1	Light Air	0.1-1.0	No noticeable wind
2	Light Breeze	1.1-2.3	Wind felt on face
3	Gentle Breeze	2.4-3.8	Hair disturbed, clothing flaps, newspapers difficult to read
4	Moderate Breeze	3.9-5.5	Raises dust and loose paper; hair disarranged
5	Fresh Breeze	5.6-7.5	Force of wind felt on body, danger of stumbling when entering a windy zone
6	Strong Breeze	7.6-9.7	Umbrellas used with difficulty, hair blown straight, difficult to walk steadily, sideways wind force about equal to forwards wind force, wind noise on ears unpleasant
7	Near Gale	9.8-12.0	Inconvenience felt when walking
8	Gale	12.1-14.5	Generally impedes progress, great difficulty with balance in gusts
9	Strong Gale	14.6-17.1	People blown over

Table 4: Comparison between Mean comfort criteria and the observed conditions

Comfort Criteria	Beaufort Scale Equivalent
Safety	9 – Strong Gale
Walking	5 – Fresh Breeze
Standing	4-5 – Moderate to Fresh Breeze
Sitting	<4 – Moderate Breeze

### 2.5.1 USE OF ADJACENT PEDESTRIAN OCCUPIED AREAS & RECOMMENDED COMFORT CRITERIA

The following table lists the specific areas adjacent to the proposed development and the corresponding recommended criteria.

*Table 5: Recommended application of criteria*

Area	Specific location	Recommended Criteria
Public Footpaths, Access ways	Capital Street and Metro Parade (Figure 6)	Walking
Main Building entrances/lobbies	At various locations around the building (Figure 6)	Standing
Communal terraces	Internal Courtyard on Level 1; Terraces on Level 1 and Level 11	Walking (Refer to discussion below)

### 2.5.2 TERRACE / BALCONY AND ROOFTOP AREAS RECOMMENDED CRITERION DISCUSSION

Terrace/balconies are located throughout the proposal. Vipac recommends as a minimum that balcony/rooftop terrace areas meet the criterion for walking since:

- these areas are not public spaces;
- the use of these areas is optional;
- many similar developments around Australia experience wind conditions on balconies and elevated deck areas in the vicinity of the criterion for walking.

However, it should be noted that meeting the walking criterion on elevated recreation areas will be no guarantee that occupants will find wind conditions in these areas acceptable at all times.

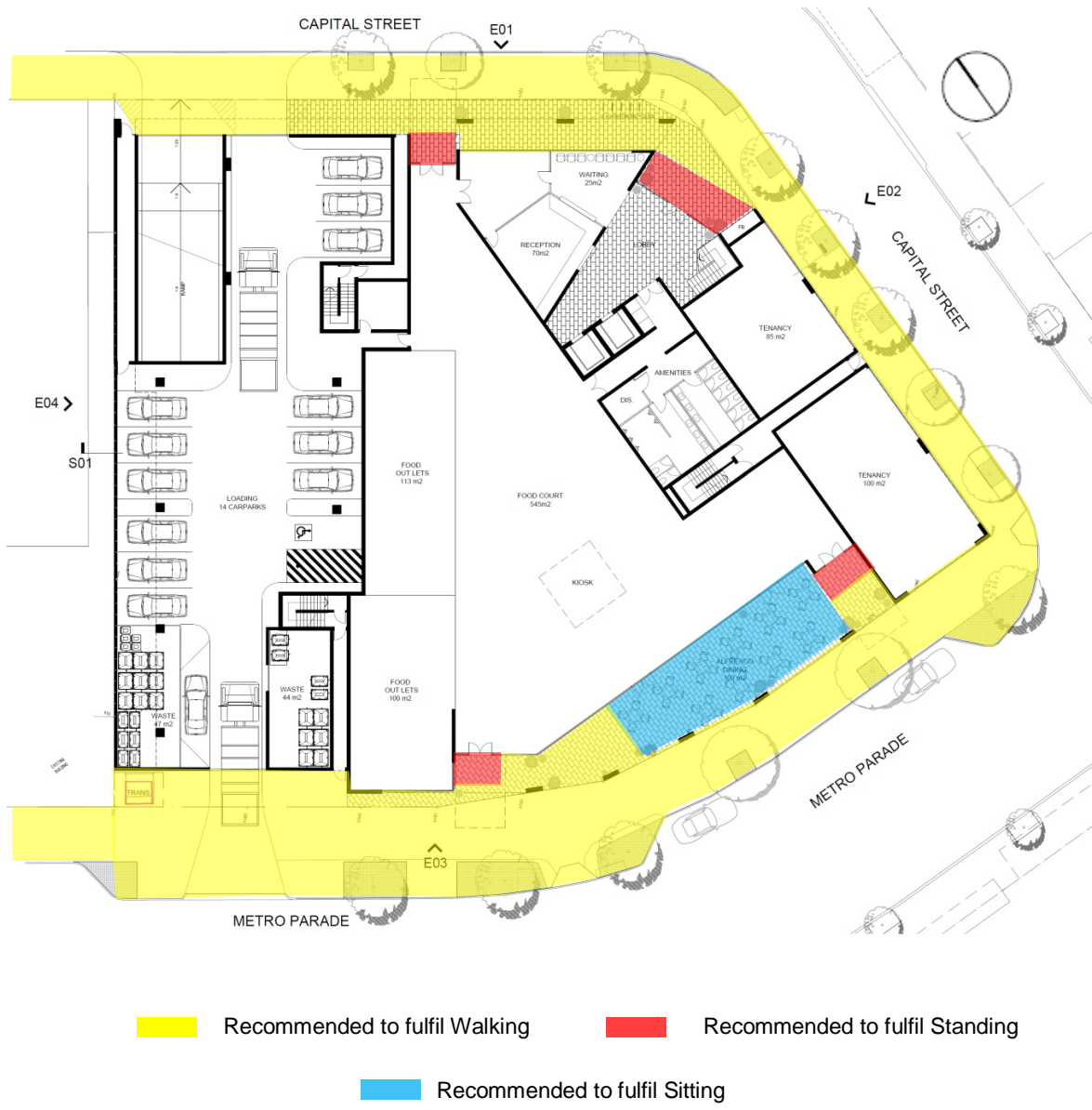


Figure 6: Schematic plan view of the ground floor with recommended wind criteria overlaid

### **3 PEDESTRIAN LEVEL WIND EFFECTS**

#### **3.1 DISCUSSION**

##### **Ground Floor**

The site of the proposal is relatively exposed to winds from all directions, particularly the southwest and east which are expected to generate corner acceleration effects at the corner of Capital St and Metro Pde. However, it is not expected that wind levels will exceed the recommended comfort criteria for walking on the ground level footpaths with the proposed design.

The building entrances are located away from building corners and are setback within the envelope of the building. As such, all entrances are expected to meet the recommended standing comfort criterion.

The alfresco dining area located on the southern side of the development is exposed to south-westerly winds and is expected to have wind environment exceeding the recommended sitting comfort criterion. Recommendations have been made in this regard in the following section.

##### **Level 1 Terraces and Courtyard**

The Level 1 terraces are located on all sides of the development and are exposed to winds from all directions. However, considering the exposure and size of the terraces, we expect that these areas will be within the recommended walking comfort criterion.

The courtyard is well shielded by the building and incorporates landscaping that will assist to provide additional shelter from adverse winds. We expected wind conditions will be well within the recommended walking criterion and will likely meet the more stringent standing or sitting comfort criteria.

##### **Rooftop Terrace**

The rooftop terrace is exposed to winds from the northerly, easterly and north-westerly directions, which are all expected to possess high velocities. We expect that with the proposed design, wind conditions may exceed the recommended walking comfort criterion. Recommendations have been made in this regard in the following section.

### 3.2 RECOMMENDATIONS

After careful consideration of the areas at the base of the proposal, Vipac predicts that some changes to existing wind conditions in adjacent ground level areas may occur as a result of the proposed development. However, it is expected that the proposal would not generate significant adverse wind conditions in the adjacent footpaths. Additionally, the building entrances are expected to be within the recommended standing comfort criterion.

However, the alfresco dining area is expected to have wind levels exceeding the recommended sitting comfort criterion. We recommend incorporating wind screens or landscaping around the perimeter of the seating area to shield this space from adverse winds and create a wind environment comfortable for sitting, as shown in Figure 7.

Additionally, the roof top terrace would be expected to have high wind conditions exceeding the recommended walking comfort criterion. We recommend incorporating 1.8 m high balustrades or porous windscreens or landscaping (Figure 8).

Furthermore, as a general statement, educating occupants about wind conditions at open terrace/balcony areas during high-wind events and fixing loose, lightweight furniture on the terrace are highly recommended.

It should be noted that this study is based on experience only and has not utilised any experimental data for the analysis. Vipac recommends wind tunnel testing be undertaken to verify these predictions and assess any wind control treatments in the detailed design phase.



Figure 7: Schematic plan view of the ground floor with recommended wind control measures





Figure 8: Schematic plan view of the roof terrace with recommended wind control measures

## 4 CONCLUSIONS

An appraisal of the likely wind conditions at the pedestrian ground level, and terraces of the proposed development at Lot 535, 13-17 Metro Parade, Maswon Lakes has been made.

Vipac has carefully considered the form and exposure of the proposal, nominated criteria for various public areas according to their function and referred to past experience to produce our opinion of likely wind conditions.

The findings of this study can be summarised as follows:

### **With the proposed design:**

- The proposed development would be expected to generate wind conditions in the ground level footpath areas within the walking comfort criterion.
- The proposed development would be expected to generate wind conditions in the main building entrance areas within the standing comfort criterion.
- The proposed development would be expected to generate wind conditions in the alfresco dining area exceeding the sitting comfort criterion. We recommend incorporating some landscaping or screening to help shield this area from adverse winds.
- The proposed Level 1 terraces and courtyard would be expected to have wind levels within the recommended walking comfort criterion. Many areas would also be expected to meet the more stringent standing or sitting comfort criteria.
- The proposed rooftop communal terrace would be expected to have wind conditions exceeding the recommended walking criterion. We recommend landscaping or high balustrades be incorporated on the perimeter of the terrace to help improve wind conditions in this area.

As a general statement, educating occupants about wind conditions at open terrace/balcony areas during high-wind events and fixing loose, lightweight furniture on the terrace are highly recommended.

The assessments provided in this report have been made based on experience of similar situations in Melbourne and around the world. As with any opinion, it is possible that an assessment of wind effects based on experience and without experimental validation may not account for all complex flow scenarios in the vicinity. Vipac recommends a wind tunnel test be conducted in the detailed design phase to verify the predictions and determine appropriate wind control measures.

*This Report has been Prepared*

*For*

*GMC Developments Pty Ltd*

*By*

*VIPAC ENGINEERS & SCIENTISTS LTD.*

## Appendix A: ENVIRONMENTAL WIND EFFECTS

### Atmospheric Boundary Layer

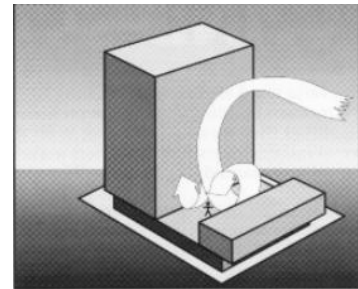
As wind flows over the earth it encounters various roughness elements and terrain such as water, forests, houses and buildings. To varying degrees, these elements reduce the mean wind speed at low elevations and increase air turbulence. The wind above these obstructions travels with unattenuated velocity, driven by atmospheric pressure gradients. The resultant increase in wind speed with height above ground is known as a wind velocity profile. When this wind profile encounters a tall building, some of the fast moving wind at upper elevations is diverted down to ground level resulting in local adverse wind effects.

The terminology used to describe the wind flow patterns around the proposed Development is based on the aerodynamic mechanism, direction and nature of the wind flow.

**Downwash** – refers to a flow of air down the exposed face of a tower. A tall tower can deflect a fast moving wind at higher elevations downwards.

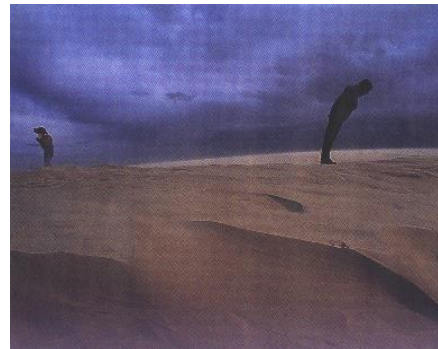
**Corner Accelerations** – when wind flows around the corner of a building it tends to accelerate in a similar manner to airflow over the top of an aeroplane wing.

**Flow separation** – when wind flowing along a surface suddenly detaches from that surface and the resultant energy dissipation produces increased turbulence in the flow. Flow separation at a building corner or at a solid screen can result in gusty conditions.



**Flow channelling** – the well-known “street canyon” effect occurs when a large volume of air is funnelled through a constricted pathway. To maintain flow continuity the wind must speed up as it passes through the constriction. Examples of this might occur between two towers, in a narrowing street or under a bridge.

**Direct Exposure** – a location with little upstream shielding for a wind direction of interest. The location will be exposed to the unabated mean wind and gust velocity. Piers and open water frontage may have such exposure.





## Appendix B: REFERENCES

- [1] *Structural Design Actions, Part 2: Wind Actions*, Australian/New Zealand Standard 1170.2:2011
- [2] *Wind Effects on Structures* E. Simiu, R Scanlan, Publisher: Wiley-Interscience
- [3] *Architectural Aerodynamics* R. Aynsley, W. Melbourne, B. Vickery, Publisher: Applied Science Publishers



## Appendix C: DRAWING LIST

Drawings Received: Dec 2019

NUMBER	NAME	DATE
A2.00	Basement 1 Plan	25/03/2020
A2.01	Ground Floor Plan	25/03/2020
A2.02	Level 1 Plan	25/03/2020
A2.03	Level 2	25/03/2020
A2.04	Level 2 - 4	25/03/2020
A2.05	Level 4	25/03/2020
A2.06	Level 5	25/03/2020
A2.07	Level 5 - 7	25/03/2020
A2.08	Level 7	25/03/2020
A2.09	Level 8 - 10	25/03/2020
A2.10	Level 9	25/03/2020
A2.11	Level 10	25/03/2020
A2.12	Level 11	25/03/2020
A3.00	Elevation 01 – Capital Street	25/03/2020
A3.01	Elevation 02 – Capital Street	25/03/2020
A3.02	Elevation 03 – Metro Parade	25/03/2020
A3.03	Elevation 04	25/03/2020
A3.10	Section 01	25/03/2020



## STORMWATER MANAGEMENT REPORT

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Mawson Lakes Student Accommodation, Metro Parade Mawson Lakes

DRAFT

Prepared by:

**PT Design** ABN 35 008 116 916  
141 – 149 Ifould Street, ADELAIDE SA 5000  
Tel: (08) 8412 4300

Project No: 21782  
Revision: 00  
Date of Issue: 25/06/2020



## STORMWATER REPORT

SITE: Proposed Student Accommodation  
13-17 Metro Parade  
Mawson Lakes

DATE OF ISSUE: 25/06/2020

PROJECT #: 21782

CLIENT: Michael Calabro Pty Ltd

### Scope of Works

In preparation of the Stormwater Management Plan the following items require consideration and comment by this office:

- Effect of the proposed development on the existing stormwater infrastructure.
- Preparation of a preliminary stormwater drainage plan incorporating the proposed method of disposing stormwater runoff from the site as a result of the proposed development.

### Proposed Development

The proposed development is located at 13-17 Metro Parade (on the corner of Capital Street), Mawson Lakes. The development involves commercial construction of a new multi-storey student accommodation complex, with fully enclosed car park facilities, as well as areas of external paving.

The site for the proposed works measures approximately 2556m<sup>2</sup> and is currently vacant land.

The existing Council stormwater infrastructure directly abutting the boundary of this site is sufficient to support the proposed stormwater runoff.

### **Council Requirements**

The following items are based on correspondence with Sam Kenny and Aaron Curtis of City of Salisbury:

- As the site is to be covered by roof, measures ensuring no stormwater borne pollutants are discharged into Council's drainage system shall not be required.
- The site is well serviced by adjacent underground stormwater infrastructure, which is capable of receiving 100-year ARI runoff from the site. Therefore, no stormwater detention shall be required for this development.
- Provision for freeboard between the kerb and entrance to the basement parking is to be accommodated (i.e. footpath transitions to match localised lift across the verge). This shall be addressed during detailed design.
- Council has confirmed that connecting to the existing SEPs directly abutting this site is acceptable.

### **Stormwater Management Recommendations**

It is the recommendation of this office that the items requested by Council be undertaken for the proposed development.

Ground stormwater shall be directed to sumps and grates, determined by pavement gradients, before being discharged to existing SEPs directly abutting the site

All roof stormwater shall be discharged to existing SEPs directly abutting the site. Details pending finalised roof layout and downpipe locations.

Groundwater collected in spoon drains and grated inlet point on in the basement shall be discharged from site via a pre-packaged pump station.

Refer to Civil drawings 21782-C01 and 21782-C02 for further details.

**Report Summary**

It is the opinion of this office that the implementation of the above recommendations will allow the proposed development to comply with these Stormwater Management Objectives once detailed design has been completed.

Further information will be required to finalise the detailed stormwater design. This includes finalised architectural plans, detailing features such as roof structure and downpipe locations.

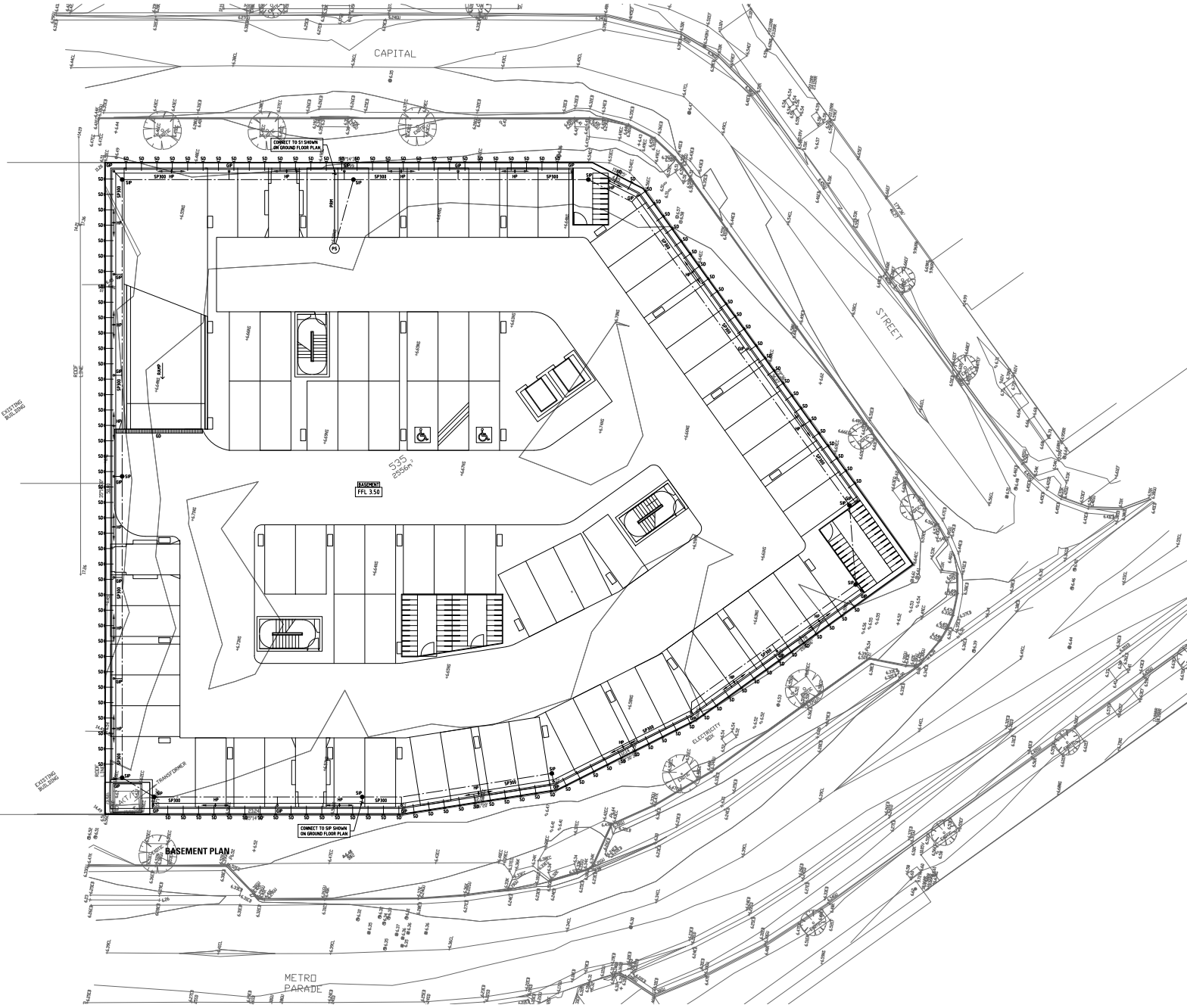
Please contact the undersigned if you wish to discuss any aspect of this report.

**PT Design PTY LTD**



Mark Butler  
Civil Designer

DRAFT



- LEGEND**
- STORMWATER PIPE TO FUTURE DETAILS
  - S1 STORMWATER SUMP TO FUTURE DETAILS
  - S10 STORMWATER SUMP TO FUTURE DETAILS
  - SP SITE INSPECTION POINT
  - GP 150# GRATED INLET POINT
  - GP GRATED INLET POINT
  - 150# DRAIN
  - SP300 300 WIDE SHOWN DRAIN FORMED IN SLAB
  - HP HIGH POINT
  - SEP SIDE ENTRY FIT
  - GO GRATED DRAIN
  - PS PRE-PACKAGED PUMP STATION TO PUMP MAIN CIRCULATES DETAILS  
PUMP RATE - 50 LPM
  - PSM PUMP ROOM MAIN
  - DESIGN LEVEL  
BY DRAIN  
BY POINT
  - GRADE LINE
  - DIRECTION OF SURFACE FALL
  - PAVING TO FUTURE DETAILS
  - PAVING TO FUTURE DETAILS
  - PAVING MATCH STYLE SHOWN INDICATIVELY

**NOTE:**  
PIPE SIZES AND LOCATIONS SHOWN INDICATIVE.

**PUMP NOTES:**  
PUMP SHALL BE DUAL PUMP. THE PUMP CONTROLS SHALL BE SET UP TO ALLOW AUTOMATIC PUMP OPERATION AT EACH START IN THE EVENT THAT A PUMP FAILS TO OPERATE WITHIN THE ALLOWED TIME FRAME. THE OTHER PUMP SHALL BE ACTIVATED AND A VISIBLE ALARM INITIATED IN THE EVENT THAT BOTH PUMPS FAIL TO OPERATE. AN AUDIBLE ALARM SHALL BE INSTALLED TO PROVIDE BACK-UP POWER SUPPLY IN CASE OF POWER FAILURE.

**NOTE:**  
DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS AS A PACKAGED OFFER. ALL LEVELS SHALL BE CHECKED ON SITE PRIOR TO CONSTRUCTION. SHOULD ANY DISCREPANCY OCCUR THE CONTRACTOR SHALL CONTACT THE OFFICE IMMEDIATELY FOR FURTHER INSTRUCTION.

**CONTRACTOR NOTES:**  
COVER LEVELS GIVEN FOR FITS ARE MINIMUM ONLY. COVER LEVELS SHALL MATCH FINISHED PAVING LEVELS. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING LOCATIONS OF ALL UNDERGROUND SERVICES PRIOR TO COMMENCING ANY EXCAVATION WORK. ANY DAMAGE CAUSED TO ANY SERVICES SHALL BE REPORTED IMMEDIATELY TO THE SUPERINTENDENT. SHALL BE REPAIRED BY THE APPROPRIATE AUTHORITIES. ALL COSTS ASSOCIATED WITH REPAIRS SHALL BE AT THE CONTRACTOR'S COSTING. PLEASE CALL BEFORE YOU DIG (1300) FOR ASSISTANCE.

DATE	DESCRIPTION

**Design**  
structural • civil • engineers

Project No: 21782-002  
Date: 13/06/2023

Drawn by	MB	Checked	MB
Approved		Date	JUN 20
Scale		Sheet	3 of 3

**PROPOSED STUDENT ACCOMMODATION 13-17 METRO PARADE MAWSON LAKES**

Prepared by  
**MICHAEL CALABRO PTY LTD**

Discipline  
**STORMWATER MANAGEMENT PLAN**

Drawing Number  
**21782-002**





File No:  
2019/11432/02

7 May 2020

Ref No:  
15456077

Gabrielle McMahon  
A/Team Leader – Inner Metro Development Assessment  
Strategic Development Assessment  
Planning and Land Use Services  
Department of Planning, Transport and Infrastructure  
Level 5, 50 Flinders Street  
Adelaide SA 5000

[gabrielle.mcmahon@sa.gov.au](mailto:gabrielle.mcmahon@sa.gov.au)

For the attention of the State Commission Assessment Panel

## **13-17 Metro Parade, Mawson Lakes**

Further to the referral 361/L020/20 received 23 April 2020 pertaining to the development application at the above address and in my capacity as a non-mandatory referral in the State Commission Assessment Panel (SCAP), I would like to provide the following comments informed by the Design Review process for your consideration.

Prior to the SCAP being appointed as the determining authority by the State Coordinator General (SCG), a proposal was presented to the Design Review panel in order to assist the City of Salisbury through the provision of informal design advice. Since the SCAP was appointed as the determining authority, the project team engaged with the pre-lodgement process and attended one Design Review session. For a second Design Review session, a new design team was engaged and significant design amendments were made addressing fundamental concerns raised at the first review session. A pre-lodgement agreement was not reached in advance of lodgement.

In principle, I support a high density student accommodation development on the subject site. I also acknowledge and support the project team's aspiration for the development to promote increased population and positively contribute to the activation of the locality. I am pleased to offer my in principle support to the planning application.

Level 1  
26-28 Leigh Street  
Adelaide SA 5000

GPO Box 1533  
Adelaide SA 5001

DX 171

T- +61(0)8 8402 1884  
E- [odasa@sa.gov.au](mailto:odasa@sa.gov.au)

The subject site is located at the corner of Metro Parade and Capital Street, Mawson Lakes. The currently vacant site is irregular in shape with the majority of the site boundaries fronting public roads, with the exception of the north west boundary that adjoins a group of three storey townhouses and a two storey commercial building. Metro Parade connects the Mawson Interchange to the west and the UniSA Mawson Lakes campus to the east. It comprises single lane vehicular traffic each way and formalised on-street parallel parking bays on both sides of the road. The existing built form context of Metro Parade predominantly comprises two to four storey mixed use buildings with a residential focus and ground floor commercial offerings. Capital Street is a secondary roadway without formalised lanes, and provides rear access to the commercial properties fronting Elder Smith





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15456077

Road. To the north east of the project site across Capital Street, a four storey building exists with a raised ground floor Foodland supermarket tenancy and student accommodation levels above. To the north west of the subject site, a number of three storey townhouse buildings present to Capital Street and a four storey apartment building is located on the corner of Capital Street and Central Link. To the east of the site, a dead end private lane exists between the existing student accommodation building to the north and the two storey mixed use building presenting to Metro Parade.

The proposal is for a student accommodation building with the ground and first floors dedicated to the associated communal use spaces for resident students. The food court and retail tenancies on the ground floor are also accessible to the public. The proposal includes one level of basement car parking. The overall above ground building height is approximately 39 metres (12 storeys), which is generally consistent with the maximum development height for the site as envisaged by the Development Plan.

The building includes a single storey podium form that is built to the north west and east boundaries. Along the north east and south boundaries, the podium includes recessed areas behind the brick colonnades. The podium walls located at the north west section of the site, associated with back of house functions, are set back approximately 2.5 metres from the boundaries. Above the podium, the building is set back three metres from the north west boundary that adjoins the residential properties. Setbacks on other boundaries vary between 1.4 and 1.9 metres. An approximately six metres tall solid wall is proposed along the north western boundary, with the view to providing an acoustic barrier for the adjoining properties. Above the ground floor, the residential units are located around a large 11 storey tall void above the central courtyard on the first floor. On the top floor (level 11), communal open space and service plant area are proposed to the northern corner of the floor with the view to improving solar access for the central void and providing a minor height definition in the otherwise singular built form.

In principle, I support the proposed building height as it is consistent with the envisaged character of the area. However, the building will present as a built form of significant scale within the existing surrounding context. As such, in my opinion, the built form composition should be carefully considered to address interface and streetscape impacts. To that end, I support the removal of the terrace spaces to the first floor accommodation units along the north west boundary, with the view to minimise potential overlooking. In my opinion, an opportunity exists to refine the built form composition, including an increase of the building podium height to achieve an improved relationship with the surrounding buildings, and the provision of further height differentiations of the main built form to achieve additional built form articulation and break down the apparent bulk and scale of the building.

The ground level is comprised of a variety of commercial and student service functions, with the view to providing active frontages to Metro Parade and Capital Street, which I strongly support. I also support the level thresholds between the development and the surrounding ground level, providing a seamless transition between the development and the footpaths. The main pedestrian entry for the resident students is proposed at the north east corner of the site. Acknowledging the security requirements for the students, I am yet to be convinced by the lack of direct access between the entry/lift foyer and the food court. In my opinion, the physical and visual link to the food court area should be optimised to ensure convenience and encourage activation at ground level. Along the north western

Level 1  
26-28 Leigh Street  
Adelaide SA 5000

GPO Box 1533  
Adelaide SA 5001

DX 171

T- +61(0)8 8402 1884  
E- odasa@sa.gov.au



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boundary, one way service access for loading and refuse collection is proposed to be entered from Metro Parade and exiting to Capital Street. The driveway also provides access to 14 at grade car parking spaces. A dual lane driveway and ramp to the basement car parking area is proposed adjacent the service driveway from Capital Street. I strongly support the inclusion of a basement car parking floor. I defer comments regarding the project's traffic impacts on the local network to the specialist consultant and the relevant authority.

On the first floor, a large landscaped courtyard is located at the centre of the floor plate, adjacent an open plan communal breakout space to the north. The courtyard is open to the sky, creating an 11 storey tall central void. I support the inclusion of a centrally located communal open space, supported by a landscape strategy. I also support the engagement of a landscape architect to ensure the success of natural landscape elements in this particular micro environment. While the solar access to the enclosed courtyard is limited due to the depth of the void above, I recognise the purpose of the void as an effective daylight source for internally located residential units. I also support the inclusion of an additional communal open space on the rooftop, as in my opinion, any opportunity to provide access to sun light and natural ventilation is welcomed in this otherwise highly enclosed environment.

I strongly support the inclusion of internal communal spaces on each residential floor in addition to the consolidated communal facilities on the first floor. I support the location of the communal spaces to the outer edges of the building to optimise solar access and improve the development's opportunity to engage with the surrounding environment through activated street frontages. I also acknowledge that the larger fenestrations and landscaping elements in the projecting planter boxes provide additional facade articulation on the street elevations. However in my opinion, an opportunity exists for greater distinction in architectural expression of these glazed panel sections, with the view to further articulate and break down the scale of the building facades.

I support the provision of outlook and natural ventilation to all habitable rooms. While the quality of daylight for inner facing units on lower floor levels is compromised, I acknowledge that the internal layouts of the residential units are generally rational and practical. I support the inclusion of full height glazing panels to the lift lobbies and corridors, which afford natural light and outlook into the communal circulation spaces, while providing built form articulation on the external facades. I also strongly support the reconfiguration of the second floor, which removes the previously proposed future air bridge that connected the proposal with the existing student accommodation development across Capital Street, potentially reducing activation at street level.

Level 1  
26-28 Leigh Street  
Adelaide SA 5000

GPO Box 1533  
Adelaide SA 5001

DX 171

T- +61(0)8 8402 1884  
E- odasa@sa.gov.au

Above the single storey brick podium, the architectural expression of the building is characterised by a series of solid wall sections articulated by the full height glazed vertical recesses. The alternate wall sections are clad in pre-finished fibre cement cladding panels in contrasting colours and textures. I support the proposed tactile materiality of the podium element, as brickwork provides a fine grain character to the building at the street level. I also strongly support the increased widths of the brick columns and brick wall sections, as the changes have resulted in an enhanced solidity and vertical connectivity of the podium form. The building is likely to remain highly visible due to its height within the surrounding locality of medium scale buildings. As such, the detailing of the light weight cladding system is critical to ensure delivery of a high quality outcome cognisant of a landmark development. In addition, the ongoing success of the soft landscape elements proposed at the top



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of the podium and outside the communal space windows form a critical part of the overall architectural expression. To that end, I recommend continued engagement of the current architect and landscape architect through the next phases of design development, documentation and construction to ensure full delivery of the design intent.

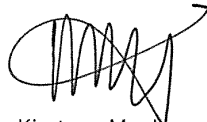
The proposal includes the covered recessed areas behind colonnade columns on the ground floor along the north and south frontages, accommodating bicycle parking and alfresco dining areas. I recommend engagement with the City of Salisbury regarding the development of the public realm areas, with the view to achieving a mutually appropriate seamless outcome that positively contributes to activation of the street and improves pedestrian safety and amenity. This includes the potential raised pedestrian crossing over Capital Street, as indicated in the landscape plan.

The proposal includes extensive greening elements at raised levels, including the landscaped courtyard and rooftop terrace, which are essential in providing a high level of residential amenity for the students. I recommend provision of additional information that demonstrates the technical measures required to sustain and maintain the proposed vegetation and ensure delivery of the design intent.

To ensure the most successful design outcome is achieved, the State Commission Assessment Panel may like to consider particular aspects of the project, which would benefit from protection as part of the planning permission, such as:

- A high quality of external materials, including the materials for the landscaped and public realm areas, supported by the provision of a materials sample board.
- Provision of additional information that demonstrates how the proposed soft landscape elements will be sustained and maintained.

Yours sincerely



Kirsteen Mackay  
South Australian Government Architect

Level 1  
26-28 Leigh Street  
Adelaide SA 5000

GPO Box 1533  
Adelaide SA 5001

DX 171

T- +61(0)8 8402 1884  
E- [odasa@sa.gov.au](mailto:odasa@sa.gov.au)

cc:

Aya Shirai-Doull

ODASA

[aya.shirai-doull@sa.gov.au](mailto:aya.shirai-doull@sa.gov.au)



## Kuhar, Elysse (DPTI)

---

**From:** Shirai-Doull, Aya (DPTI)  
**Sent:** Thursday, 30 July 2020 5:24 PM  
**To:** Kuhar, Elysse (DPTI)  
**Cc:** Chan, Belinda (DPTI)  
**Subject:** 13-17 Metro Parade, Mawson Lakes 361/L020/20 - response to GA

**ProfileOnSend:** 1

Elysse,

This email is in response to the letter by Future Urban (Response to GA, dated 1 July 2020) and the amended drawings, forwarded on 30 July 2020.

The letter was provided in response to the Government Architect's referral comments dated 7 May 2020.

The following changes have been identified on the amended drawings.

- Basement car parking numbers revised from 72 to 73 spaces.
- 1.5 metre high glass wind screen proposed to the southern alfresco area.
- Privacy screens proposed to the first and second floor windows along the western boundary.
- Additional double doors proposed to provide access to the first floor terrace areas.

I welcome the additional measures proposed to minimise overlooking along the western boundary. I have no additional comments regarding the other amendments.

Kind regards,

### **Aya Shirai-Doull**

Senior Design Advisor

Office for Design + Architecture SA

Planning and Land Use Services

Department of Planning, Transport and Infrastructure

T 08 8402 1853 (internal 21853) • E [aya.shirai-doull@sa.gov.au](mailto:aya.shirai-doull@sa.gov.au)

Level 1, 26-28 Leigh Street, Adelaide SA 5000 • GPO Box 1533 Adelaide SA 5001 • DX 171 • [www.dpti.sa.gov.au](http://www.dpti.sa.gov.au)



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*We acknowledge and respect Aboriginal peoples as South Australia's first peoples and nations, we recognise Aboriginal peoples as traditional owners and occupants of land and waters in South Australia and that their spiritual, social, cultural and economic practices come from their traditional lands and waters; and they maintain their cultural and heritage beliefs, languages and laws which are of ongoing importance. We pay our respects to their ancestors and to their Elders.*

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City of Salisbury  
ABN 82 615 416 895

34 Church Street  
PO Box 8  
Salisbury SA 5108  
Australia

Telephone 08 8406 8222  
Facsimile 08 8281 5466  
city@salisbury.sa.gov.au

www.salisbury.sa.gov.au

22 May 2020

Ms Elysse Kuhar  
Senior Planning Officer  
State Commission Assessment Panel  
GPO Box 1815  
ADELAIDE SA 5001

[scapadmin@sa.gov.au](mailto:scapadmin@sa.gov.au)

Dear Ms Kuhar,

**Applicant:** Michael Calabro Pty Ltd  
**Application No:** 361/605/2020/S49  
**Subject Site:** 13-17 Metro Parade, Mawson Lakes SA 5095  
**Proposed Development:** Twelve Storey Student Accommodation

Thank you for providing opportunity for council to make comment on the above-mentioned development application. This letter sets out our views in relation to the proposal, focusing on key issues. Please note however that this letter does not purport to be a comprehensive assessment of the proposal against the provisions of the Development Plan, as Council is not the relevant authority for this application. The expectation is that SCAP, as the relevant authority, will undertake that more detailed development assessment process.

Council broadly supports the intent of a high density student accommodation development on the subject site that will increase population in this locality and activate the precinct. The building is of significant height and scale, being 12 storeys and incorporating some 228 apartments. The proposed height and scale of this development is not fundamentally in conflict with the Urban Core Zone but in context of this building being significantly taller and larger than other buildings in the locality and within Mawson Lakes more broadly, the standard of appearance must be high given this will be the most visually dominant building in Mawson Lakes.

There are elements of the design which we consider should be further refined. In particular, the building has significant bulk and scale and is somewhat institutional in appearance. Further articulation and treatments should be adopted to reduce the bulk and flat facade. The quality and durability of the materials and finishes should be carefully scrutinised to ensure the building is robust and able to age harmoniously with its surrounds.

We also have some concern in respect to the adequacy of car parking to support adaption of the building, should the market for student accommodation decline.

The proposed development will involve significant extent of works within the public realm and it is considered appropriate that the developer enter into an infrastructure agreement with Council to address all proposed works within the public realm. For example, it will be critical to ensure matching of levels in the transition between the public and private realm, and that there is a suitable transition between the quality of the public realm and private realm.

This agreement should also extend to traffic management, temporary road closures, tree planting, encroachments and cranes that might be required during the construction phase.

Our detailed comments are provided below under headings:

#### Proposed Development

The proposed development is for a 12 storey student accommodation building with associated communal spaces for student residents and retail tenancies and publicly accessible food court on the ground floor. Public car parking is provided at ground level and basement parking is provided for student residents and staff. The overall building height is 39m.

#### Development Plan

The site is located within the Urban Core Zone and Core Area of the Salisbury Council Development Plan consolidated 4 April 2019 (refer Zone Map Sal/47). Objective 1 of the Urban Core Zone seeks "*A mixed use zone accommodating a mix of employment generating land uses and medium to high density residential development in close proximity to a high frequency public transport corridor*". The proposed development is consistent with this Objective in that it achieves a high density development in close proximity to the Mawson Lakes rail interchange, is adjacent to local shops and within short walk of the UniSA Mawson Lakes Campus. Student accommodation and shops are also envisaged forms of development in the Zone.

#### Design and Appearance

The surrounding locality is characterised by buildings of two to four storeys in height, typically with commercial or retail uses at ground and first floor levels and residential apartments above. There is an eight storey building under construction on the corner of Main Street and Metro Parade. While this building, if completed, will have a certain prominence; the proposed building will present as a landmark within the landscape of Mawson Lakes as the tallest building in the area, and will be highly visible. High quality architectural and urban design should therefore be sought and encouraged. Design should incorporate material selections that ensure longevity of the built form.

The building design includes a podium level above level one that incorporates brick and glass elements. The recesses at this level provide opportunities for pedestrian shade and shelter and are supported. The ground level design is considered to provide a positive street appeal and appropriate human scale and incorporates materials such as brick that is robust.

While the building has many positive elements such as vertical modular design and associated recesses to break up the mass of the building, as well as incorporation of external planter boxes adjacent the internal communal spaces; the overall building appearance has a significant bulk. It is recommended that this aspect of the design be further considered and addressed through increased articulation and treatments that provide visual interest and reduce the bulk and flat façade. It is also noted that external shade devices are not proposed. The incorporation of balconies and shade devices, in particular to the northern, eastern and western facades are encouraged.



While the building height exceeds the maximum number of storeys anticipated within the Urban Core Zone, the total height of the building is within the overall height limit as expressed in metres in the Development Plan, and is therefore considered to be appropriate if other elements of the built form are addressed. The proposed ground floor ceiling height at 3.4m is lower than envisaged within the zone however and higher ceiling levels may be appropriate to enable flexibility and future adaptation of the building.

The proposed building setbacks are generally consistent with existing built form within the area and are considered appropriate. The ground floor of the building is proposed to be built to the eastern side boundary with a solid boundary wall up to 6.5m in height. The height of this wall appears to be in direct response to recommendations of the environmental noise assessment provided by Sonus and from an acoustic perspective is considered appropriate. This wall abuts a mixed use development that includes three storey residential townhouses directly facing this wall. It is noted that within the Core Area of the Urban Core Zone side boundary walls are anticipated and are common within the surrounding locality. Visual impact of this solid blank wall will be significant however when viewed from the adjoining property and should be considered.

The upper levels of the proposed building are setback at a distance of 3m from the western boundary of the site which should serve to minimise the visual impact to the adjoining residential properties. The adjacent townhouses have car parking and entry at ground level with living areas on the first floor and bedrooms on the second floor. East facing walls of these townhouses are setback 2m from the boundary meaning there is a 5m separation to the proposed building levels above ground floor. While the boundary wall will minimise direct overlooking to the first floor windows there is potential for overlooking into the second floor bedroom windows from west facing apartments. Overlooking from the lower level apartments should therefore also be further considered.

### Public Realm

The proposed development includes covered recessed areas along the northern and southern frontages of the building. While external canopies and awnings are not proposed, as mentioned above, these recessed areas create shade and shelter for pedestrians as well as direct connection to the public realm and key pedestrian routes.

The main entry to the residential accommodation is at the north eastern corner of the site from Capital Street. This entry is separated from the public food court and hence connection through the building is somewhat limited. This aspect should be reviewed. The retail tenancies are also oriented to the eastern side of the building to Capital Street. Pedestrian movements within the area are predominantly along Metro Parade. As such it is recommended the applicant consider relocating the retail uses to the southern side of the building of the Metro Parade frontage to improve their exposure.

It is noted that the ground floor outdoor dining area adjacent the southern side of the building will largely be deprived of direct sunlight during the day. This may reduce the outdoor dining appeal of this space during the cooler months and it is therefore suggested that this area may be better located on the eastern side of the building.

Pedestrian entries to the building are covered by awnings that partially overhang the Council verge and pedestrian path. This is encouraged by the Urban Core Zone. The applicant should be aware that the construction over the road reserve will require an authorisation under Section 221 of the *Local Government Act 1999*.

The proposed vehicle access from Metro Parade, impacts upon existing infrastructure including; an existing light column that will need to be relocated at the developers cost, indented carparking and an established street tree. The extent of works required by this development within the public realm is significant and it is considered appropriate that the developer enter into an infrastructure agreement with Council to address all proposed works within the public realm. This should also extend to incorporate any traffic management, temporary road closures and cranes that might be required during the construction phase.

The proposed vehicle access to the basement level will need to consider how the basement level will be protected from water entering from the road. It is desired that a rise in level of 300mm is achieved from the invert of the water table (ie. gutter of kerb) to the boundary before ramping down. It is likely that the adjacent footpath will need to be lifted to achieve appropriate transition, whilst still meeting relevant standards in relation to gradient and cross-fall. In respect to ground floor areas of the building, the finished floor level should be designed to match in with the footpath level at the boundary to ensure that disability access is achieved.

Verge landscaping is included in the proposal and the design has shown the location of the existing and new trees to be accommodated in reference to the built form. We broadly support the intent to provide a well developed landscape proposal within the verge, however, some of the proposed street tree installations will not be able to proceed as they conflict with existing above ground assets such as street lighting etc. The location of underground services should also be considered when locating new street trees. In this respect, we support further discussions between developer and Council's Parks and Open Space Team in respect to the final landscape concept and this detail should be addressed within the infrastructure agreement. We also note the proposed access points will impact upon three street trees (one in Metro Parade and two in Capital Street). These trees will be required to be removed at cost to the developer. Separate correspondence regarding this matter will be sent by Council to the applicant.

The landscape documentation identifies a 1.5m glazed screen to the outdoor dining area on Metro Parade. It is suggested that this be modified to have a plinth base in order to minimise ground splash onto the glass, so as to not detract from the street amenity and reduce maintenance and cleaning requirements. There may be opportunity for landscape planters to be established at the street level.

#### *Car Parking and Vehicle Access*

The proposed development includes 228 student accommodation apartments, one apartment for the managers of the building, two retail tenancies and a food court. Principle of Development Control 28 of the Urban Core Zone prescribes that vehicle parking should be provided at the following rates:

- Residential Development - 0.75 per dwelling
- Shops - 3 per 100 square metres of gross leasable area.

The proposed development therefore generates an onsite car parking requirement of 185 spaces for the dwellings and 13 spaces for the shops under the Development Plan standards.

The basement car parking level accommodates 72 car parking spaces that will be restricted to private access for the student accommodation. An additional 14 spaces are provided at ground level. If the basement level is available solely for the use of the student accommodation, then 0.32 car parking spaces are provided per apartment, which equates to less than half the required car parking rate for this element of the development. The 14 spaces at ground level satisfies the car parking rate in respect to the shops.

It is noted that Principle of Development Control 29 of the Urban Core Zone does explicitly contemplate a lesser car parking rate based on local circumstances, including for development in the form of student accommodation and where the development is located in convenient walking distance to public transport. While the Cirqa Traffic and Parking Report supports the number of car parking spaces provided on the basis that demand for carparking is reduced for student accommodation uses, the adaptability of this building to accommodate alternative uses should be considered in the event the market for student accommodation declines. Council's assessment of on-street car parking demand in this precinct has found that demand is high and there is a significant shortfall in availability of car parking. The consequence of not providing adequate car parking within the site is that there will be significant further shortfall in availability of car parking for all users and this is expected to exacerbate conditions for existing users in the locality. In this regard, we support provision of additional car parking within the site.

Vehicle access to the site is provided from Metro Parade by way of ingress only and from Capital Street by way of egress only from the ground level and two way access to the basement level. The Cirqa traffic assessment advises the location of the two crossovers to Capital Street being side by side is acceptable. The report does not however appear to take account of the location of the proposed access in reference to the existing access serving the Capital Street shopping centre and apartments, located directly opposite the site on the northern side of Capital Street. The suitability of this access in context of its location should be further assessed by Cirqa.

Locating the one-way ground floor access on the Metro Parade bend and close to the Garden Terrace intersection is not a desired outcome, as traffic waiting to turn into the site and from associated queuing may block the intersection, however, it is recognised that this access is limited to entry only and the site configuration is such that alternate locations may not be available to service the site. It is unclear whether the proposed entrance will meet the sight distance requirements to a commercial access point and it is recommended that further clarification be sought regarding the suitability of this entrance and if there are further design treatments available to ameliorate conflict.

### Residential Amenity

The internal layout and design includes communal spaces on each floor. These spaces are located at the edge of the building to provide for solar access and views which is generally supported. These areas are however enclosed with glass panels and as such it is recommended that the applicant further consider the external appearance of these sections to provide improved amenity outcome. For example, is there an opportunity for these to be open air (or openable window walls) and be further opened up internally to create open spaces that are linked between the external walls and the internal central courtyard. This design change could improve airflow, provide a sense of the outside to the internal spaces and provide opportunity for additional interest to the external façade.

While it is appreciated that the proposal incorporates communal spaces on each floor, the student apartments are not served with any areas of private open space. In the General Section, "*Medium and High Rise Development*" of the Development Plan, Principle of Development Control 16 contemplates that studios do not require private open space, however, where apartments have one or more bedrooms, private open space is desired of 8 square metres for one bedroom apartments and 11 square metres for two bedroom apartments respectively. We appreciate the developer wishes to avoid open air balconies due to the risks that balconies may present to student living, however, there may be opportunity to incorporate a limited number of balconies in appropriate locations to complement the communal areas and to further articulate the façade.



It is unclear from the floor plan of level one how access to the external terrace is provided, noting that doorways to this space do not appear to be shown. On some of the other floors, it is noted that entrance doorways to individual apartments are in some cases located directly opposite one another. It is suggested that this element be further reviewed to ensure there is adequate offset between entrances to improve privacy. One suitable option to address this is to inset the door from the corridor. Sectional views of the proposal indicate that internal windows to corridors are clear glass. How privacy is to be addressed should be clarified.

The northern roof terrace will be exposed throughout summer with the north/north-westerly winds that Salisbury experiences. In summer this area may not be an inviting open space. In addition, as the roof terrace is open to the internal void there is potential for the winds to be funnelled down to the internal courtyard but this could be mitigated if the landscape internally is able to reach some height up the void. The roof top terrace may also provide opportunity for a community garden using some of the proposed planters.

### Environmental Health

Any cooling towers for the building will need to be licensed with Council pursuant to the *SA Public Health Act 2011*.

All food businesses must be registered with Council and must comply with the *Food Act 2001* and Food Safety Standards. All mechanical ventilation systems used in the food businesses and through-out the building must be installed in a manner that they do not cause odour or noise nuisance to adjoining owners or tenants. Any ductwork required to facilitate mechanical ventilation should have regard to its location and be integrated into the architectural design of the building, to ensure it does not result in an adverse visual outcome.

### Landscape Design

With respect to plant species the proposed use of Olive trees is not appropriate and should be reviewed. It is suggested that *Geijera parviflora*, *Backhousia citriodora* or *Laurus nobilis* 'Miles Choice' be considered as an alternative. Further, the use of *Ficus macrocarpa hillii* in the courtyards is not supported as this species has an aggressive root system. The following are considered to be appropriate alternatives:

- *Cyathea australis* be considered with the tree species listed for the Courtyard;
- *Convolvulus erubescens* or *Convolvulus remotus*, *Leucophyta brownii*, *Juniperus conferta* or similar be considered as inclusions for the Podium Terrace.

Further consideration of the plant choices is recommended and the proponent is encouraged to contact Council's Parks and Open Space Assets Team for further advice regarding appropriate planting types. Recognising that there are a number of elements to the landscape proposal and that the success of the proposed landscaping will have an important bearing on the final success of this development, it is considered appropriate that the landscape plan be reserved for further consideration and shall be subject to approval by the SCAP in consultation with Council.

### Conclusion

We thank you for the opportunity to make comment on the application, we wish to express our desire to present to the SCAP in the event the application is subject to final consideration by the Commission.

Should you require any assistance or further advice about any matter referred to above, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'C. Zafiropoulos', with a long horizontal flourish extending to the right.

**Chris Zafiropoulos**

Manager – Development Services

Phone: 08 8406 8222

Email: [development@salisbury.sa.gov.au](mailto:development@salisbury.sa.gov.au)

**Kuhar, Elysse (DPTI)**

---

**From:** Sarah Clarksmith <clarksmiths87@gmail.com>  
**Sent:** Monday, 18 May 2020 6:12 PM  
**To:** DPTI:scapreps

To whom it may concern  
Please find attached form for development application for 13-17 Metro Parade Mawson lakes.

We strongly object this application. 12 stories is excessive and intrusive to the surrounding buildings. More importantly there is already an over supply of apartments in Mawson Lakes making it difficult to secure tenants for current property owners.

Offering such a large quantity of student accomodation eliminates a major demographic for property owners already struggling to tenant apartments in the area.

Kind regards  
Sarah



South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2

Applicant: Michael Calabro Pty Ltd  
Development Number: 361/L020/20  
Nature of Development: Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
Development Type: Merit  
Zone / Policy Area: Urban Core Zone  
Subject Land: 13-17 Metro Parade, Mawson Lake  
Contact Officer: Elyse Kuhar  
Phone Number: 7109 7072  
Close Date: 5 June 2020

My Name: SARAH MACDONALD My phone number: 0432 055 843  
(CLARK SMITH)

Primary method(s) of contact: Email: clarksmiths87@gmail.com  
Postal Address: 12 WALKER COURT Postcode: 5085  
ENFIELD SA

**You may be contacted via your nominated PRIMARY METHOD(S) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

- My interests are:  
(please tick one)
- owner of local property
  - occupier of local property
  - a representative of a company/other organisation affected by the proposal
  - a private citizen

The address of the property affected is:

6-14 METRO PARADE MAWSON LAKES Postcode 5095

- My interests are:  
(please tick one)
- I support the development
  - I support the development with some concerns
  - I oppose the development

The specific aspects of the application to which I make comment on are: 12 STORES IS TOO HIGH FOR THE AREA. OVER SUPPLY OF ACCOMMODATION WILL HAVE A NEGATIVE IMPACT ON CURRENT RENTALS WHICH IS ALREADY STRUGGLING

- I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

- By:  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

Signature: [Signature]  
Date: 18.5.20

Return Address: The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
Email: [scapreprs@sa.gov.au](mailto:scapreprs@sa.gov.au)

South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2

Applicant: Michael Calabro Pty Ltd  
Development Number: 361/L020/20  
Nature of Development: Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
Development Type: Merit  
Zone / Policy Area: Urban Core Zone  
Subject Land: 13-17 Metro Parade, Mawson Lake  
Contact Officer: Elyse Kuhar  
Phone Number: 7109 7072  
Close Date: 5 June 2020

My Name: Andrew Miegel My phone number: +852 619727 99

Primary method(s) of contact:  Email: andymiegel@hotmail.com  
(Preferred)  Postal Address: 7 COLORADO AVENUE Postcode: 5038  
 Address: PLYMPTON S.A.

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

My interests are: (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

The address of the property affected is:

403/42-48 GARDEN TERRACE, MAWSON LAKES Postcode 5095

My interests are: (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

The specific aspects of the application to which I make comment on are: I am concerned at the height of this building compared to surrounding buildings. It will be 4 to 6 times the height of its neighbours, which will block the views of the Adelaide hills & cast shadows over many properties. I believe a building of this height will destroy the community feel in mawson lakes.

I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

By:  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

Signature: Andrew Miegel

Date: 19<sup>th</sup> MAY 2020

Return Address: The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
Email: [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)



**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elyse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

**My Name:** Jan Greenwood **My phone number:** 0406715471

**Primary method(s) of contact:** **Email:** \_\_\_\_\_  
**Postal Address:** 4 Pampas Court **Postcode:** 5000  
Uyange SA

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

**My interests are:** (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

**The address of the property affected is:** 6-14 Metro Parade, Mawson Lakes **Postcode:** 5095  
6-14 Metro Pde

**My interests are:** (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

**The specific aspects of the application to which I make comment on are:** 12 storeys -  
should be in keeping with surrounding  
properties, 3 storeys maximum.

**I:** (please tick one)  
 wish to be heard in support of my submission  
 do not wish to be heard in support of my submission (Please tick one)

**By:** (please tick one)  
 appearing personally  
 being represented by the following person (Please tick one)

**Signature:** Jan Greenwood  
**Date:** 20.5.20

South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2



**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

My Name: Sasha Bow My phone number: 0401 755 881

**Primary method(s) of contact:** Email: Sashb-29@hotmail.com  
Postal Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

**My interests are:** (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

The address of the property affected is: Appt. 220. 6-14  
Metro pde. Mawson Lakes Postcode \_\_\_\_\_

**My interests are:** (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

The specific aspects of the application to which I make comment on are:  
The proposed height of the development.

**I:** (please tick one)  
 wish to be heard in support of my submission  
 do not wish to be heard in support of my submission (Please tick one)

**By:** (please tick one)  
 appearing personally  
 being represented by the following person (Please tick one)

Signature: Sasha Bow  
Date: 23/05/2020



South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2

Applicant: Michael Calabro Pty Ltd  
Development Number: 361/L020/20  
Nature of Development: Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
Development Type: Merit  
Zone / Policy Area: Urban Core Zone  
Subject Land: 13-17 Metro Parade, Mawson Lake  
Contact Officer: Elysse Kuhar  
Phone Number: 7109 7072  
Close Date: 5 June 2020

My Name: Katherine Yip My phone number: 0479101455

Primary method(s) of contact: Email: \_\_\_\_\_  
Postal Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

- My interests are: (please tick one)
- owner of local property
  - occupier of local property
  - a representative of a company/other organisation affected by the proposal
  - a private citizen

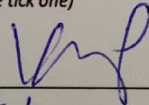
The address of the property affected is: \_\_\_\_\_  
Postcode: \_\_\_\_\_

- My interests are: (please tick one)
- I support the development
  - I support the development with some concerns
  - I oppose the development

The specific aspects of the application to which I make comment on are: Concerns re lack of street parking & sufficient financials to finish the development. Basically worry it'll end up like the one at the intersection of Metro Rd & Main Street.

- I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

- By:  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

Signature:   
Date: 29/05/2020

## Kuhar, Elysse (DPTI)

---

**From:** Shayna Parker <admin2@beststrata.com.au>  
**Sent:** Friday, 29 May 2020 1:08 PM  
**To:** DPTI:scapreps  
**Subject:** 27585 - Neighbouring Development (361/L020/20)  
**Attachments:** 27585.pdf

Good Afternoon,

RE: Community Corporation No 27585 Inc  
5-11 Metro Parade, Mawson Lakes

We are the Body Corporate Manager of the above Corporation. We received the attached letter, dated 14/05/2020, advising the Corporation of a neighbouring development. I have attempted to complete the form on page 2 (unable to sign due to pdf program).

The following concerns have been raised by the Corporation.

- **Parking:** "I foresee we will face more issue after this is built as there will be about 400+ beds in this building and the parking provided will not be sufficient; hence more off street parking and more people stopping in front or on our driveway since the primary entrance for it is right in front of the driveway." "Missed bin collection due to too many cars parked on capital street and collection truck could not access the bins."
- **Traffic:** "Capital street will be more congested which will affect us driving in and out."
- **Noise:** "Noise at night during party season.")
- **Impact on Corporation's Driveway:** "People gathering at the entrance of the driveway." "Cars stopping right in front of the driveway blocking the entrance or parking on the driveway while waiting for their friends."
- **Hygiene:** "Rubbish especially cigarette buds being thrown from their balcony to our driveway (this may not happen to the new plan but there may be more people hanging around the area as it's an open space)." "With food court included in the plan, is this going to be more dumping or hygiene issue?"
- **Overall Enjoyment:** "This enormous building will block out a lot of sunlight and airflow for us too."

Kindest regards,

**Shayna Parker**

Administration Assistant



**Best Strata Pty Ltd** | Unit 2, 188 Fullarton Road. Dulwich SA 5065

**Tel** 08 8431 2287 | **Fax** 08 8311 5225 | **Mob** 0477 000 394

**Email** [info@beststrata.com.au](mailto:info@beststrata.com.au)

**Web** [www.beststrata.com.au](http://www.beststrata.com.au)







Our Ref: 2020/08950/01

14 May 2020

Level 5, 50 Flinders Street  
Adelaide SA 5000

GPO Box 1815  
Adelaide SA 5001

Telephone: 08 7109 7060  
ABN 92 366 288 135

<http://www.saplanningcommission.sa.gov.au/scap>

Community Corporation No 27585 Inc  
C/- Best Strata  
PO Box 3229  
FULLARTON SA 5063

**Applicant:** Michael Calabro Pty Ltd  
**Application Number:** 361/L020/20  
**Proposed Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Subject Land:** 13-17 Metro Parade, Mawson Lakes

As an adjoining owner/person potentially affected by the above development application, you are invited to view details of the application and make comment.

The application may be examined during normal business hours at the office of the State Commission Assessment Panel (SCAP), Level 5, 50 Flinders Street, Adelaide and at the office of Council. The application documentation is also available on the SCAP website [https://www.saplanningportal.sa.gov.au/public\\_notices](https://www.saplanningportal.sa.gov.au/public_notices).

If you wish to comment on the application please complete the attached form. This must reach the Secretary, State Commission Assessment Panel, GPO BOX 1815, Adelaide SA 5001 by no later than **Close of Business** 5 June 2020 May 2020.

You may be given an opportunity to appear before the SCAP to further explain your views. You will be contacted should a hearing be arranged.

If you have any questions relating to this matter, please contact Elysse Kuhar of this office by telephone on 7109 7072 or email [elysse.kuhar@sa.gov.au](mailto:elysse.kuhar@sa.gov.au).

Yours sincerely

**Elysse Kuhar**  
**Senior Planning Officer**  
*as delegate of the*  
**STATE COMMISSION ASSESSMENT PANEL**

**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

**My Name:** Best Strata - Shayna Parker **My phone number:** 0477 000 394

**Primary method(s) of contact:** **Email:** admin2@beststrata.com.au  
**Postal Address:** PO Box 229, Fullarton 5063 **Postcode:** 5065  
2/188 Fullarton Road, Dulwich

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

**My interests are:**  
*(please tick one)*

owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

**The address of the property affected is:**

5-11 Metro Parade, Mawson Lakes **Postcode** 5095

**My interests are:**  
*(please tick one)*

I support the development  
 I support the development with some concerns  
 I oppose the development

**The specific aspects of the application to which I make comment on are:** Refer to email

**I:**  wish to be heard in support of my submission  
*(please tick one)*  do not wish to be heard in support of my submission  
*(Please tick one)*

**By:**  appearing personally  
*(please tick one)*  being represented by the following person  
*(Please tick one)*

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Return Address:** The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
**Email:** [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)

### **Why have I received this notice?**

The role of the State Commission Assessment Panel (SCAP) is to independently assess and determine specified kinds of development applications in South Australia in accordance with the *Development Act 1993*.

Some types of development application require public notification. This is determined by the relevant Development Plan and Schedule 9 of the *Development Regulations 2008*. Development applications fall into one of the following categories:

- **Category 1:** No public notification
- **Category 2:** Notice of the application to be given to an owner/occupier of adjacent land to where the development is proposed. A person contacted in this way has the right to make a written representation to the SCAP. Representations from those with a right to be heard must be taken into consideration by SCAP when assessing the development application.
- **Category 3:** Written notice of the application to be given to an owner/occupier of adjacent land to where the development is proposed and to any owner/occupier of land which the SCAP believes would be directly affected to a significant degree if the development were to proceed. Notice by newspaper advertisement to be given to the general public.

### **What is a valid representation?**

Your representation must be made within the public notification period as described upon the notice you have received. Pursuant to the *Development Act 1993*, this period is 10 business days from the date notice is given.

Your representation must be signed, dated, set out the reasons for the representation and include your full name and address contact details.

### **What can I comment on?**

It is important to be mindful that your representation should avoid raising matters that are not relevant to the planning assessment of the application. A planning assessment can only have regard to the relevant provisions of the Development Plan. A representation can raise issues both in support and in opposition to a development.

You can access the relevant Development Plan here: <https://www.sa.gov.au/topics/planning-and-property/development-plans>

### **What happens next?**

All valid representations received through either a Category 2 or Category 3 process are forwarded to the applicant for a response and taken into consideration by a Planning Officer from the Department of Planning, Transport and Infrastructure in preparing their assessment.

Pursuant to the *Freedom of Information Act 1991* and *Development Act 1993* any information provided may become part of a public document and may be published as an attachment to the Planning Officer's report.



**STATE  
COMMISSION  
ASSESSMENT  
PANEL**

A COMMITTEE OF THE STATE PLANNING COMMISSION

If you have indicated that you wish to be heard you may receive an invitation to appear personally before the SCAP, or be represented by counsel, solicitor or agent. This invitation must give five (5) business days notice of the meeting but, dependent on other issues to be assessed, this meeting may not occur for an indefinite period of time after your representation is made. Unfortunately, the meeting time and date cannot be adjusted to accommodate all attendees.

If you have not indicated that you wish to be heard in support of your submission, you will not receive any further correspondence on this matter until a decision is made.

**What is a SCAP meeting?**

SCAP meetings are generally held on the second and fourth Thursdays of each month in the Kardi Munaintya meeting room on the ground floor at 50 Flinders Street, Adelaide.

The SCAP will be assessing the development application against the relevant Council Development Plan. To assist, an assessment report will be prepared by a Planning Officer from the Department of Planning, Transport and Infrastructure. This report is publicly available from [https://www.saplanningcommission.sa.gov.au/scap/agendas\\_minutes](https://www.saplanningcommission.sa.gov.au/scap/agendas_minutes) on the Monday afternoon prior to the meeting. This report will include a copy of your representation.

Representors wishing to be heard will be given the opportunity to make a short (5 minute maximum) verbal presentation to the SCAP. Please note that Representors are only provided with the opportunity to make a verbal presentation at the initial hearing of an application. At this meeting, the SCAP may also hear comments from the applicant, relevant agencies, and Council.

**How do I know what decision is made?**

You will be able to ascertain the outcome of the SCAP's deliberation when the meeting minutes are made available on the SCAP website on the afternoon of the day after a meeting.

Once a decision is made by the SCAP, valid representors will be sent a copy of the Decision Notification Form which includes any conditions relevant to the application.

*Note: Dependent on the assessment process for the application, and if no Representors indicate that they wish to be heard, a decision may be made by a Delegate of the SCAP without the application being heard at a SCAP meeting.*

**Appeal rights**

If the proposal is a Category 3 application, then you can appeal a decision made by the SCAP if you have made a valid representation

Such an appeal must be lodged at the Environment, Resources and Development Court fifteen (15) business days from the date of decision. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide (telephone number 8204 0300).

Representors do not have a right of appeal in relation to Category 2 development applications.



STATE  
COMMISSION  
ASSESSMENT  
PANEL

A COMMITTEE OF THE STATE PLANNING COMMISSION

**For more information**

Contact the SCAP Secretariat on:

Telephone: 1800 752 664 (Select Option 4)

Direct: 7109 7061

E-mail: [scapadmin@sa.gov.au](mailto:scapadmin@sa.gov.au)

Postal: GPO Box 1815, Adelaide SA 5001

Street: Level 5, 50 Flinders Street, Adelaide SA 5000

Website: <https://www.saplanningcommission.sa.gov.au/scap>

**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

My Name: AJ BODEROFF My phone number: 0430650350

**Primary method(s) of contact:** Email: ~~allenjk@gmail.com~~ allenjk@gmail.com  
Postal Address: 4/6-14 Metro Pde Postcode: 5095  
MAWSON LAKES

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

**My interests are:** (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

**The address of the property affected is:**  
4/6-14 Metro Pde Mawson Lakes Postcode 5095

**My interests are:** (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

**The specific aspects of the application to which I make comment on are:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**I:** (please tick one)  
 wish to be heard in support of my submission  
 do not wish to be heard in support of my submission (Please tick one)

**By:** (please tick one)  
 appearing personally  
 being represented by the following person (Please tick one)

**Signature:** \_\_\_\_\_  
**Date:** 29/5/2020

**Return Address:** The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
**Email:** [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)



South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2

Applicant: Michael Calabro Pty Ltd  
Development Number: 361/L020/20  
Nature of Development: Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
Development Type: Merit  
Zone / Policy Area: Urban Core Zone  
Subject Land: 13-17 Metro Parade, Mawson Lake  
Contact Officer: Elysse Kuhar  
Phone Number: 7109 7072  
Close Date: 5 June 2020

My Name: Vivian Trinh My phone number: \_\_\_\_\_

Primary method(s) of contact: Email: viviantrinh@hotmail.com  
Postal Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

My interests are: (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

The address of the property affected is: 5-11 Metro Pde Mawson Lakes SA  
Postcode 5095

My interests are: (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

The specific aspects of the application to which I make comment on are: A construction of a 12 storey building is too high compare to other properties in Mawson Lakes. Overseas students are also taking up a lot of car park spaces as they park their cars in the area. We have experience a lot of problems not getting the rubbish collected by Council each week as the student parks their car on the side of road making it difficult for garbage truck to collect the rubbish weekly.

I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission (Please tick one)

By:  appearing personally  
(please tick one)  being represented by the following person (Please tick one)

Signature: [Signature]  
Date: 22/5/20



Level 5, 50 Flinders Street  
Adelaide SA 5000

GPO Box 1815  
Adelaide SA 5001

Telephone: 08 7109 7060  
ABN 92 366 288 135

<http://www.saplanningcommission.sa.gov.au/scap>

Our Ref: 2020/08950/01

14 May 2020

Community Corporation No 27585 Inc  
C/- Best Strata  
PO Box 3229  
FULLARTON SA 5063

**Applicant:** Michael Calabro Pty Ltd  
**Application Number:** 361/L020/20  
**Proposed Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Subject Land:** 13-17 Metro Parade, Mawson Lakes

As an adjoining owner/person potentially affected by the above development application, you are invited to view details of the application and make comment.

The application may be examined during normal business hours at the office of the State Commission Assessment Panel (SCAP), Level 5, 50 Flinders Street, Adelaide and at the office of Council. The application documentation is also available on the SCAP website [https://www.saplanningportal.sa.gov.au/public\\_notices](https://www.saplanningportal.sa.gov.au/public_notices).

If you wish to comment on the application please complete the attached form. This must reach the Secretary, State Commission Assessment Panel, GPO BOX 1815, Adelaide SA 5001 by no later than **Close of Business** 5 June 2020 May 2020.

You may be given an opportunity to appear before the SCAP to further explain your views. You will be contacted should a hearing be arranged.

If you have any questions relating to this matter, please contact Elyse Kuhar of this office by telephone on 7109 7072 or email [elyse.kuhar@sa.gov.au](mailto:elyse.kuhar@sa.gov.au).

Yours sincerely

**Elyse Kuhar**  
**Senior Planning Officer**  
*as delegate of the*  
**STATE COMMISSION ASSESSMENT PANEL**

**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

My Name: Glenn FRANCIS My phone number: 0414392592

**Primary method(s) of contact:** Email: glenn@ilha.com.au  
Postal Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

**My interests are:**  
(please tick one)

- owner of local property
- occupier of local property
- a representative of a company/other organisation affected by the proposal
- a private citizen

**The address of the property affected is:** 11D Metro Parade Mawson Lake Postcode 5095

**My interests are:**  
(please tick one)

- I support the development
- I support the development with some concerns
- I oppose the development

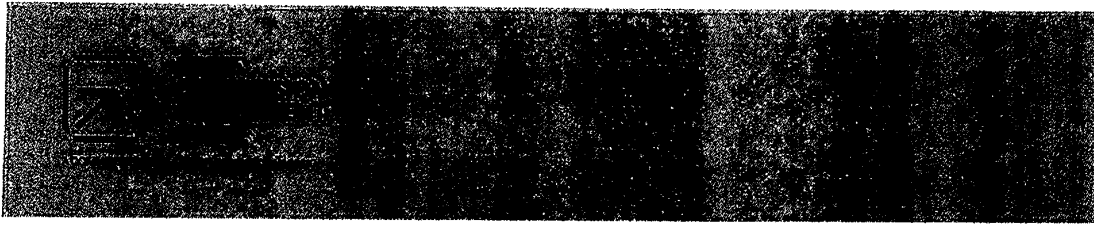
**The specific aspects of the application to which I make comment on are:** Shadowing issues / noise issues / parking issues / rubbish issues

**I:**  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

**By:**  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

**Signature:** [Signature]  
**Date:** 30/5/2020

**Return Address:** The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
**Email:** [scapreprs@sa.gov.au](mailto:scapreprs@sa.gov.au)



#### **Why have I received this notice?**

The role of the State Commission Assessment Panel (SCAP) is to independently assess and determine specified kinds of development applications in South Australia in accordance with the *Development Act 1993*.

Some types of development application require public notification. This is determined by the relevant Development Plan and Schedule 9 of the *Development Regulations 2008*. Development applications fall into one of the following categories:

- **Category 1:** No public notification
- **Category 2:** Notice of the application to be given to an owner/occupier of adjacent land to where the development is proposed. A person contacted in this way has the right to make a written representation to the SCAP. Representations from those with a right to be heard must be taken into consideration by SCAP when assessing the development application.
- **Category 3:** Written notice of the application to be given to an owner/occupier of adjacent land to where the development is proposed and to any owner/occupier of land which the SCAP believes would be directly affected to a significant degree if the development were to proceed. Notice by newspaper advertisement to be given to the general public.

#### **What is a valid representation?**

Your representation must be made within the public notification period as described upon the notice you have received. Pursuant to the *Development Act 1993*, this period is 10 business days from the date notice is given.

Your representation must be signed, dated, set out the reasons for the representation and include your full name and address contact details.

#### **What can I comment on?**

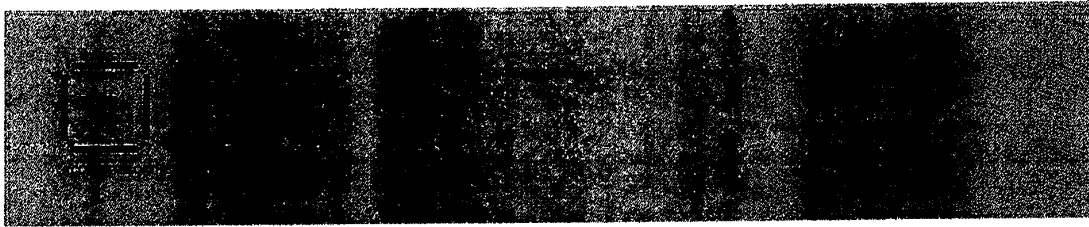
It is important to be mindful that your representation should avoid raising matters that are not relevant to the planning assessment of the application. A planning assessment can only have regard to the relevant provisions of the Development Plan. A representation can raise issues both in support and in opposition to a development.

You can access the relevant Development Plan here: <https://www.sa.gov.au/topics/planning-and-property/development-plans>

#### **What happens next?**

All valid representations received through either a Category 2 or Category 3 process are forwarded to the applicant for a response and taken into consideration by a Planning Officer from the Department of Planning, Transport and Infrastructure in preparing their assessment.

Pursuant to the *Freedom of Information Act 1991* and *Development Act 1993* any information provided may become part of a public document and may be published as an attachment to the Planning Officer's report.



If you have indicated that you wish to be heard you may receive an invitation to appear personally before the SCAP, or be represented by counsel, solicitor or agent. This invitation must give five (5) business days notice of the meeting but, dependent on other issues to be assessed, this meeting may not occur for an indefinite period of time after your representation is made. Unfortunately, the meeting time and date cannot be adjusted to accommodate all attendees.

If you have not indicated that you wish to be heard in support of your submission, you will not receive any further correspondence on this matter until a decision is made.

**What is a SCAP meeting?**

SCAP meetings are generally held on the second and fourth Thursdays of each month in the Kardi Munintya meeting room on the ground floor at 50 Flinders Street, Adelaide.

The SCAP will be assessing the development application against the relevant Council Development Plan. To assist, an assessment report will be prepared by a Planning Officer from the Department of Planning, Transport and Infrastructure. This report is publicly available from <https://www.saplanningcommission.sa.gov.au/scap/agendas/minutes> on the Monday afternoon prior to the meeting. This report will include a copy of your representation.

Representors wishing to be heard will be given the opportunity to make a short (5 minute maximum) verbal presentation to the SCAP. Please note that Representors are only provided with the opportunity to make a verbal presentation at the initial hearing of an application. At this meeting, the SCAP may also hear comments from the applicant, relevant agencies, and Council.

**How do I know what decision is made?**

You will be able to ascertain the outcome of the SCAP's deliberation when the meeting minutes are made available on the SCAP website on the afternoon of the day after a meeting.

Once a decision is made by the SCAP, valid representors will be sent a copy of the Decision Notification Form which includes any conditions relevant to the application.

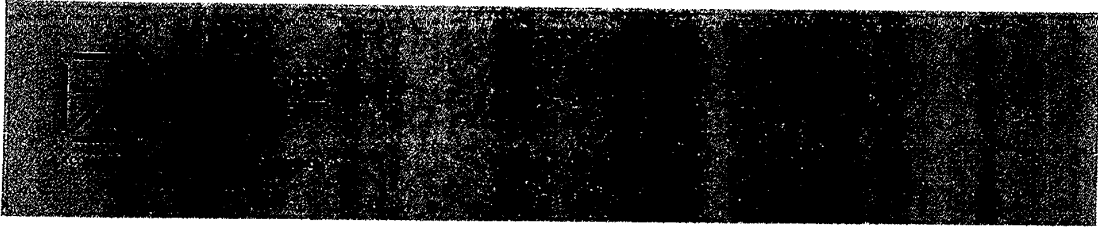
*Note: Dependent on the assessment process for the application, and if no Representors indicate that they wish to be heard, a decision may be made by a Delegate of the SCAP without the application being heard at a SCAP meeting.*

**Appeal rights**

If the proposal is a Category 3 application, then you can appeal a decision made by the SCAP if you have made a valid representation

Such an appeal must be lodged at the Environment, Resources and Development Court fifteen (15) business days from the date of decision. The Court is located in the Sir Samuel Way Building, Victoria Square, Adelaide (telephone number 8204 0300).

Representors do not have a right of appeal in relation to Category 2 development applications.



**For more information**

Contact the SCAP Secretariat on:

Telephone: 1800 752 664 (Select Option 4)

Direct: 7109 7061

E-mail: [scapadmin@sa.gov.au](mailto:scapadmin@sa.gov.au)

Postal: GPO Box 1815, Adelaide SA 5001

Street: Level 5, 50 Flinders Street, Adelaide SA 5000

Website: <https://www.saplanningcommission.sa.gov.au/scap>





**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

**My Name:** Jade Falco **My phone number:** 0401 313 045

**Primary method(s) of contact:** Email: jade\_falco@outlook.com  
Postal Address: 17 Tongariro street Postcode: 5125  
GREENWITH

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

**My interests are:**  
(please tick one)  owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

**The address of the property affected is:**


101/20-24 Metro Parade, Mawson Lakes Postcode 5095

**My interests are:**  
(please tick one)  I support the development  
 I support the development with some concerns  
 I oppose the development

**The specific aspects of the application to which I make comment on are:** Insufficient car parking, leading to further congestion in surrounding streets, the building will block sunlight to sections of our apartment building and having such a large building will impact on rental potential for other properties in Mawson Lakes.

**I:**  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

**By:**  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

**Signature:** 

**Date:** 02/06/2020

**Return Address:** The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
**Email:** [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)

**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

**My Name:** Kylie Hall **My phone number:** 0415867246

**Primary method(s) of contact:** **Email:** safaira13@hotmail.com  
**Postal Address:** 0204 6-14 Metro Pde **Postcode:** 5095  
Mawson Lakes

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

**My interests are:** (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

**The address of the property affected is:**

0204 6-14 Metro Pde Mawson Lakes **Postcode** 5095

**My interests are:** (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

**The specific aspects of the application to which I make comment on are:** The buiding has too many storeys.  
Asper the Playford development plan pg 60, 10E. A 12 storey building will dominate the surrounding buildings  
pg 58, objectives 3. Roads aren't sufficient for the increased traffic  
pg 62, section 23. Insufficient parking for size of building  
Also concerned about the building sinking, and the flow on effect for my home.

**I:** (please tick one)  
 wish to be heard in support of my submission  
 do not wish to be heard in support of my submission (Please tick one)

**By:** (please tick one)  
 appearing personally  
 being represented by the following person (Please tick one)

**Signature:** KHall

**Date:** 3-6-2020

**Return Address:** The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
**Email:** [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)



South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2

Applicant: Michael Calabro Pty Ltd  
Development Number: 361/L020/20  
Nature of Development: Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
Development Type: Merit  
Zone / Policy Area: Urban Core Zone  
Subject Land: 13-17 Metro Parade, Mawson Lake  
Contact Officer: Elysse Kuhar  
Phone Number: 7109 7072  
Close Date: 5 June 2020

My Name: Vasiliki Tsimopoulos My phone number: 0422094330

Primary method(s) of contact: Email: Vicki\_tsimopoulos@hotmail.com  
Postal Address: 299 Kentish road, Bibaringa B Postcode: 5118

**You may be contacted via your nominated PRIMARY METHOD(S) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

My interests are:  
(please tick one)

- owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

The address of the property affected is:

Unit 7 16/18 metro parade, Mawson lakes Postcode 5095

My interests are:  
(please tick one)

- I support the development  
 I support the development with some concerns  
 I oppose the development

The specific aspects of the application to which I make comment on are:

objection of 12 storey building.

I:  wish to be heard in support of my submission

(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

By:  appearing personally

(please tick one)  being represented by the following person  
(Please tick one)

Signature: V. Tsimopoulos

Date: 31/06/2020

Return Address: The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
Email: [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)

**Kuhar, Elyse (DPTI)**

---

**From:** Vikram Kenjle <v\_kenjle@yahoo.com>  
**Sent:** Wednesday, 3 June 2020 4:03 PM  
**To:** DPTI:scapreps  
**Subject:** DA 361/L020/20 - Objection Letter from HMH Apartments' Management Committee (Mawson Lakes)  
**Attachments:** SCAP DA 361 L020 20 \_HMH Committee Objection Letter\_.pdf

Dear Elysee Kuhar,  
Thank you for providing us the opportunity to provide our feedback regarding DA 361/L020/20; the proposed development of a new 12 storey student accommodation facility 13 - 17 Metro Parade, Mawson Lakes.

I am submitting this consultation letter on behalf of HMH Apartments' Management Committee (42-48 Garden Terrace, Mawson Lakes), requesting to you to please review the concerns we have raised in the attached letter (by email only) before finalising your decision regarding this proposed development.

I would appreciate if you could please confirm receiving our letter prior to the consultation deadline of Friday 5th June 2020.

your sincerely,

Vikram Kenjle

(on behalf of HMH Apartments' Management Committee)



**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

**My Name:** Management Committee of HMH Apartments located at 42-48 Garden Terrace, Mawson Lakes

**Primary method(s) of contact:** Email: Please see attached letter for contact emails of members included in this letter

Postal Address: \_\_\_\_\_ Postcode: \_\_\_\_\_

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

**My interests are:**  
*(please tick one)*

owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

**The address of the property affected is:**

42-48 Garden Terrace, Mawson Lakes \_\_\_\_\_ Postcode 5095

**My interests are:**  
*(please tick one)*

I support the development  
 I support the development with some concerns  
 I oppose the development

**The specific aspects of the application to which I make comment are:** Please see attached letter (3 pages) with listed concerns

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**I:**  wish to be heard in support of my submission  
*(please tick one)*  do not wish to be heard in support of my submission  
*(Please tick one)*

**By:**  appearing personally  
*(please tick one)*  being represented by the following person  
*(Please tick one)*

**Signature:** Vikram Kenjle (on behalf of the HMH Management Committee)

**Date:** 03 June 2020

**Return Address:** The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
**Email:** [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)



HMH Management Committee  
Apartment Complex, 42-48 Garden Terrace  
Mawson Lakes SA 5095

To,  
Elysse Kuhar,  
Senior Planning Officer,  
State Commission Assessment Panel (SCAP)

Date: 03 June 2020

By email only

**Ref: DA 361/L020/20 (Michael Calabro Pty Ltd) – Construction of a 12 storey student accommodation building at 13-17 Metro Parade, Mawson Lakes SA 5095**

Dear Elysse,

As the Management Committee, representing owners of residential units within the apartment complex (circa 45 units) located at 42- 48 Garden Terrace within Mawson Lakes, we would like to bring to your attention the following concerns we have with regards to the proposed DA 361/L020/20; Construction of a new 12 storey student accommodation building, less than 50 meters from our apartment block.

Our primary concerns include:

- 1) **Traffic:** It is a well-documented fact that residents in Mawson Lakes already experience over-crowding of vehicular traffic and bottleneck issues on a daily basis, especially at the T-junction between Metro Parade and Garden Terrace. The bottleneck issues are prevalent during both morning and evening peak times, when residents and non-residents of Mawson Lakes are either driving to drop off or pick up their children from the Mawson Lakes Primary School, or going to the Park & Ride at the Mawson Lakes Interchange.

The narrow single lane roads of Metro Parade and Garden Terrace were never designed to accommodate the high volume density seen within the last decade, and by proposing to add a new circa 400 bed student accommodation building right at the heart of this problem is not only going to severely further exacerbate the daily lives of surrounding residents. The lifestyle and experience offered to high fee paying overseas students (primary target audience of such developments) would also suffer due to this daily nuisance.

**2) Building Design:**

- **Noise and unnecessary exposure:** Mawson lakes is a relatively young suburb filled with hard working professionals, many with young children. The residents have already seen rising levels of crime, theft, noise pollution from small aircrafts (sometimes up to 11pm at night) and drunk and disorderly behaviour, all of which is impacting the quality of lives of residents and their young children. By bringing in the proposed student accommodation,

we believe our young children will be further exposed to noise and nuisance behaviour commonly associated with high density university student accommodation. Since this proposed development will be within 50m of quiet residential apartment blocks, will the developer guarantee that the building will be designed with high levels of acoustic insulation to keep their noise from coming out?

The Acoustic Report (developed by Sonus) included in the DA, doesn't seem to answer this question, as it seems to be based on unrealistic density and patron numbers especially during peak times.

Also a key assumption in the report is unfathomable - page 11 of the Sonus report – “A *penalty has not been considered warranted at residences which are separated from the subject site by an intermediate road on the basis that the noise from the subject site will be of similar character to activity which already exists in the current environment*”

So if the consultants are assuming that the day & night time activities of surrounding quiet families with young children are similar to that of 400 odd University students within close proximity of each other, we would highly encourage the consultants to revisit their assumption or provide documented evidence to support such a bold assumption.

High density student accommodation, similar to the ones seen in the Adelaide CBD, are notoriously built to barely satisfy the minimum requirements of NCC standards, especially acoustic insulation levels, to achieve maximum business profitability. We have no objection to this business model as it may be working really well within the Adelaide CBD, where the accommodation facilities are typically surround by offices which have working hours opposite to the activities within the student accommodation.

However bringing this business model to a quiet residential area with young children, and then heavily underestimating traffic and noise levels, and proposing that such a development is for the common good of the community is stretching it a bit too far.

- **Car parking ratio:** The proposed ratio of 73 car park spaces for exclusive use of 405 students in the building seems severely insufficient, especially in an era post COVID19 pandemic, where there is added risk from using public transport for the foreseeable future or at least until a vaccine is developed. Given families of high fee paying overseas students (primary target audience of the development) often share these concerns, it is highly advisable to review the extremely low car park ratio of nearly 1:6 which may have been developed from pre-COVID era.

If more students end up purchasing cars, they are only going to increase the parking issues in already narrow streets, or then use the park-and-ride for night time parking, which will inconvenience morning commuters wishing to catch a train / bus.

- **Building shadows:** Very few buildings in Mawson Lakes are over 5 – 6 storey tall. This height restriction has not only enabled to maintain visual uniformity of this beautiful and highly desired suburb within the Northern Part of Adelaide, but also minimise shading impacts of one building over another.

The Winter Solistice Shadow studies presented within the DA clearly show major shading issues on a daily basis for multiple hours throughout winter periods for many residents diagonally opposite the proposed 12 storey building. How is this fair on these residents?

Overall we understand that the University of South Australia (UniSA) located within Mawson Lakes, is a large contributor to the local economy of South Australia and is seen a major attraction for the northern suburban communities.

UniSA is also most likely going to be the major beneficiary from the proposed 400 bed student accommodation located so close to its campus. If successful, it may also quickly become one of the main attractions which may be used by UniSA's marketing team to promote the University to potential overseas students wishing to come and study in Adelaide.

The proposed application does seem to fulfill this identified gap with regards to the number of dedicated student accommodation facilities available within the northern suburbs.

However, the proposed location of the development site is not without major disruption and nuisance to the surrounding community on a daily basis.

Perhaps the applicant in conjunction with UniSA, local and State Government could identify a more suitable land parcel within UniSA's own Mawson Lakes campus, closer to the Main North Road (Arterial Road) for easy entry / exit, which will not only support the applicant and its major beneficiary, but also minimise disruption to the local community, especially those around the infamous T-Junction of Metro Parade and Garden Terrace.

We strongly encourage SCAP to please review and address our concerns before making your decision regarding DA 361/L020/20.

Thank you.

Yours sincerely,

Vikram Kenjle

On behalf of the HMH Apartment Management Committee Members:

Mr. Vikram Kenjle	v_kenjle@yahoo.com
Mr. Nicholas Rutherford	n.a.rutherford@gmail.com
Ms. Thi Le	leydy005@aol.com
Mr. Socratis Tsapaliaris	soctsap@gmail.com
Ms. Karina Sek	karina.sek@vodafone.com.au
Ms. Deborah Joy Turk	Debturk@bigpond.com

## Kuhar, Elysse (DPTI)

---

**From:** Martin Ward <ward\_martin@hotmail.com>  
**Sent:** Friday, 5 June 2020 3:44 PM  
**To:** Kuhar, Elysse (DPTI); DPTI:State Commission Assessment Panel; DPTI:scapreps  
**Subject:** Category 2 notification objection re 361/L020/20  
**Attachments:** Category 2 objection cover sheet MWard.pdf; Cat2 reply5620 re361L02020 MWard.pdf

Thank you for the Category 2 notification concerning the proposed development at 13-17 Metro Parade, Mawson Lakes.

My wife and I wish to object to this proposed development and wish to attend and be heard at the meeting.

I attach the Representation cover sheet as requested, plus our detailed objection submission.

We look forward to your confirmation of the hearing date and attendance arrangements.

Thanks in anticipation.

Martin Ward

Sent from [Mail](#) for Windows 10

**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

My Name: MARTIN WARD My phone number: 0481 520 448

**Primary method(s) of contact:** Email: ward\_martin@hotmail.com  
Postal Address: c/- LJ Hooker - Salisbury Unit 7/74 Park Tee, SALISBURY Postcode: 5108

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

My interests are: (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

The address of the property affected is: Apartment 101, 6 Metro Parade, MAWSON LAKES Postcode \_\_\_\_\_

My interests are: (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

The specific aspects of the application to which I make comment on are: height, scale, impact on amenity of adjacent southern properties which rely on northern light in their living areas and private open space, plus other factors, nine items in total.

I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

By:  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

Signature: 

Date: 4 JUNE 2020

Objection to proposed development number 361/L020/20 by applicant Michael Calabro Pty Ltd  
 Regarding: 12 storey student accommodation building at 13-17 Metro Parade, Mawson Lakes



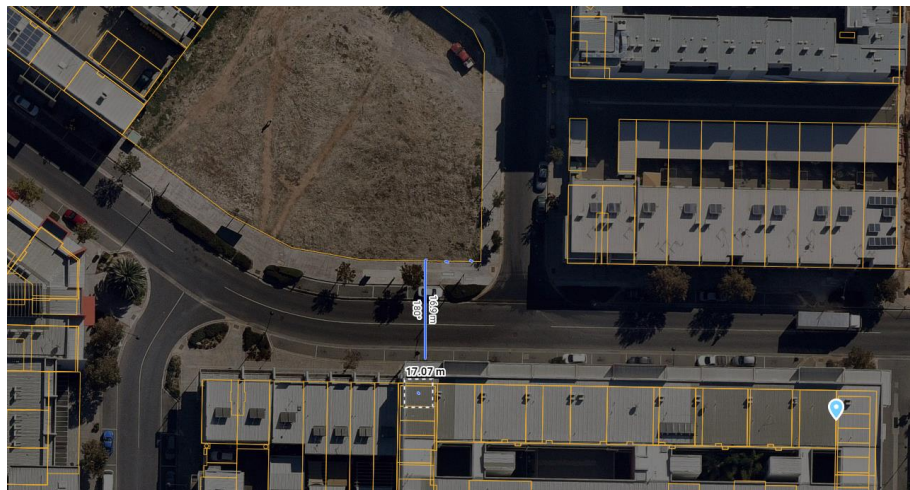
Figure 1 subject site location

We the owners of an apartment within 6 -10 Metro Parade, Mawson Lakes ('adjacent properties') strongly object to this proposed development for the detailed reasons noted below.

## 1 Excessive overshadowing

- 1.1 The aerial image in Figure 2 below illustrates it is a mere 17 metres from the front façade of this building to the northern roof edge and the private outdoor space balconies of our Aqua apartment at 6-10 Metro Parade, as shown by blue line .

Figure 2 subject site distance 17 metres from aqua apartment building



- 1.2 The front bedroom, and open plan kitchen, dining area and living area all rely entirely on northern light from the front of the building. There are no side or other windows in these locations. The private open space is the full width front balcony which has a north facing bedroom window and full width patio doors allowing northern light to the living area, dining area and kitchen. The documentation demonstrates that **shadowing to the roof of the Aqua apartments building will occur from 10am in winter impacting on the environmental performance of the building and rendering the private open space balconies in shadow and detrimentally impacting on their amenity and usage.**



1.3 **The Urban Core Zone Desired Character statement requires ‘as development intensifies, overlooking, overshadowing and noise impacts will be moderated through good design’ it is evident that good design including setting back upper levels of the buildings southern wing and reducing the height of the building on the southern wing would have moderated the extent of overshadowing but this has not been done.** The current proposal fails to achieve the Urban Core Zone desired character and is contrary to the current City of Salisbury Development Plan and the previous development conditions on which existing developments and purchasers relied.

1.4 The overshadowing from the subject site will reduce the solar gain of adjacent properties and is in turn likely to create ideal breeding conditions for **legionella bacteria** within the barely heated solar hot water system tanks creating a significant health hazard.

1.5 The Capital Street view in figure 3 below illustrates the shadow cast by this 4 storey building in Capital Street. This indicates clearly that a 12 storey building will for most of the year entirely overshadow the adjacent 3 storey properties on the south side of Metro Parade denying sunlight to living areas and rendering their private open space, solar panels and solar hot water systems largely unusable and ineffective.

**Figure 3** Capital Street on north west side of subject site in deep shadow from 4 storey building



## 2 Excessive height

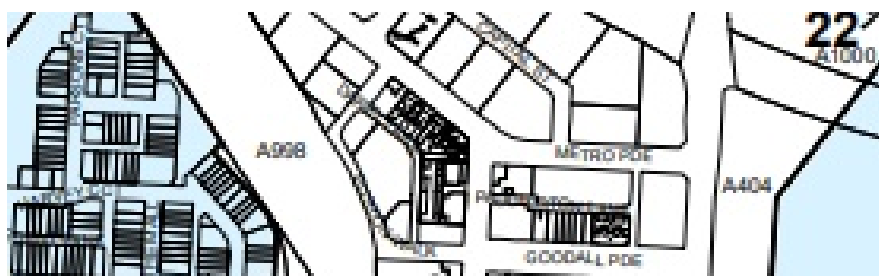
2.1 The adjacent properties were developed with advice from the City of Salisbury that Zone and policy area MFPLEV applied. **The nature and character of Mawson Lakes was specifically determined to be limited in height to medium rise**, in particular Mawson Central Development Principles also clearly stated that **‘11.1.3 buildings will be predominantly between two to four stories in height**. It further stated in respect to overshadowing/access to sunlight that **‘The taller elements (3<sup>rd</sup> and 4<sup>th</sup> storeys) of buildings are not encouraged on the rear half of allotments on the south side of main**

**and secondary streets.'** Which clearly applied to Metro Parade, with two storey maximum building height envisaged on the southern Metro Parade side of this allotment.

2.2 The current City of Salisbury Development Plan Policy area 22 includes Metro Parade as shown in figure 4; this requires objectives:

- 1 A residential policy area comprising a range of low and medium-density dwellings,
- 3 Development that .....reflects good residential design principles.
- 4 Development that meets accepted best practice principles in environmental design.
- 5 Development that is compatible with existing and forecast noise nuisance from aircraft operations at Parafield Airport.
- 6 Development that contributes to the desired character of the policy area

**Figure 4** policy area 22 includes Metro Parade



2.3 It is further clarified that the DESIRED CHARACTER for this policy area 22 will be comprised primarily of low density residential development with sections of medium density housing in areas which have good access to essential services and are located in close proximity to centres, shops, public transport or major employment nodes, or adjacent to areas of public open space. Medium density housing will be in the form of smaller detached dwellings, semi-detached dwellings, row dwellings, residential flat buildings and group dwellings. Residential development within the policy area will range in height from 1 to 3 storeys, or 3 to 4 storeys where it is in the form of medium....

2.4 All other buildings within the established streetscape are between 2 and 4 levels. Notwithstanding the provisions of the zone, a building of this height and scale is considered to be contrary to the established scale and pattern of development within the immediate and surrounding streetscape and arguably, a building of this scale and intensity would be more appropriate along Main Street.

2.5 The proposal for a 12 storey building is contrary to the existing character and building heights in this location. **The fact that the revised zone now allows a greater height does not mean this is appropriate in all instances as the ERD court has noted. We consider the excessive building height, its poor overall design and its failure to moderate and transition height to avoid adverse impacts on adjacent properties means this proposal should be rejected.**

### 3 Excessive density far exceeding 150 dwellings per hectare

- 3.1 DESIRED CHARACTER 'This zone will function primarily as a District Centre that supports housing at medium and high densities and a range of dwelling types which are conveniently located in proximity to high frequency public transport services, recreation, commercial, shop, office and other mixed use activities. Development within this zone will result in significant employment generating activity (this development does not) closely aligned to nearby public transport infrastructure and services. Medium and high density housing, primarily in the form of row dwellings, residential flat buildings and mixed use buildings, will be developed in the zone.
- 3.2 Overall, the zone is intended to achieve an average net residential site density of 150 dwellings per hectare. With 405 students accommodated, the proposal is a gross overdevelopment of the site, its density, height and massing is inconsistent with and not compatible with surrounding development. The lack of good design and failure to setback facades and building articulation is not consistent with the desired Development that contributes to the desired character of the zone.
- 3.3 The Urban Core Zone objectives provide that 'Development within a mixed use environment' is to be 'compatible with surrounding development' and should not 'unreasonably compromise the amenity of the zone or any adjoining residential zone'. It is clear that the proposed development represents a fundamental shift from the existing amenity by substantially increasing the density, substantially departing from the existing height and massing. This fundamental shift will compromise the amenity of the street and adversely impact on both the existing streetscape and the desired character of this location.
- 3.4 The inclusion of a foodcourt within this residential street is also contrary to the desired character of this location when in reality there are plenty of food outlets specifically located in the shopping streets adjacent and south of this location and on the university campus.

## 4 Wind impacts excessive, hazardous and damaging

- 4.1 The proposed development has a flat, largely uninterrupted façade on the southern face of the building where upper levels protrude out over the second level podium and allow winds to downdraft onto the street. There is no canopy to stop these wind impacts.

Principle 27 of the 'Medium and High Rise Development' Module provides guidance with respect to wind. It advises that:

- 27 Development of 5 or more storeys, or 21 metres or more in building height (excluding the rooftop location of mechanical plant and equipment), should be designed to minimise the risk of wind tunnelling effects on adjacent streets by adopting one or more of the following:**
- (a) a podium at the base of a tall tower and aligned with the street to deflect wind away from the street;
  - (b) substantial verandas around a building to deflect downward travelling wind flows over pedestrian areas;
  - (c) the placement of buildings and use of setbacks to deflect the wind at ground level.

- 4.2 **The development proposed of 12 storeys is double and triple the height of existing buildings in Mawson Lakes and has minimal design details to moderate wind impacts.** I note the Vipac assessment does not address the wind impacts on adjacent properties. More detailed and objective assessment of wind impact is required. The level ground at Parafield Airport being in close proximity to this proposed development site is likely to enable unhindered wind travel to the site and therefore amplify wind impacts.

- 4.3 Metro Parade is a principal pedestrian route to the train station and to the Foodland supermarket, chemist and other retail outlets beside Capital Place. **The excessive height and the failure to address wind downdraft in their design will adversely impact on the many pedestrian users of Metro Parade** and may deter pedestrian users attending the retail premises which in turn would adversely impact on retail employment, contrary to the desired development outcomes for this zone.

- 4.4 This proposal fails to adequately address requirements for even a five storey building as detailed in Principle 27 let alone the higher standard of design provision required for a 12 storey dwelling. It is simply a gross overdevelopment of the site with barely a token regard for the impact on adjacent properties and pedestrians.

## 5 Inadequate car parking

- 5.1 **The proposed car parking is inadequate.** Many students desire and expect to have cars, so adequate car parking provision to avoid adverse impacts on adjoining streets is essential. Also wind impacts may limit cycling and walking in this vicinity for student residents. Cycle parking provision is also poorly located reducing the likelihood of use. This scale of development would normally have a clear requirement for 185 parking spaces to be provided on-site. But with 405 students in residence there should be at least 101 parking place provision for students plus additional visitor parking.

## 6 Waste management access and egress poor and hazardous.

6.1 The site's Metro Parade ingress is located within the 'prohibited access location' area identified by AS/NZS 2890.1:2004. The close proximity of the site access to the existing T junction of Garden Terrace with Metro Parade is likely to create additional accidents especially due to the poor design and conflicts within the access area. As shown in figure 5 and figure 6 below there is a congested bin and parking area with bins on both sides of the access lane with no separation from adjacent parked vehicles. Vehicles reversing out of the parking spaces are likely to be turning or reversing into the lane at the same time as vehicles, including large refuse vehicles, are quickly crossing Metro Parade into the access lane to avoid oncoming traffic on Metro Parade. The potential for accidents at the access lane and Metro Parade at this location appears to be high due to poor design and traffic conflicts.

6.2 The garbage truck collecting from both sides of the access lane will promptly stop and effectively block access to the ground level car park forcing cars entering the access lane to stop partially on Metro Parade, blocking this significant road and creating a traffic hazard close to the T junction.

**Figure 5** Congested access lane with parking spaces adjacent bin storage and collection area.

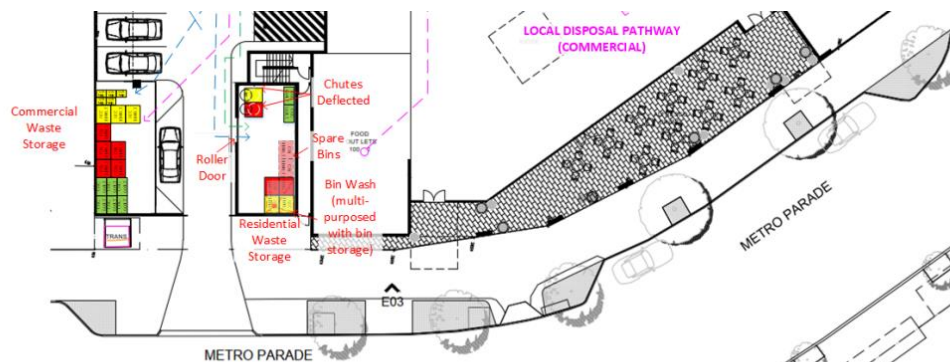
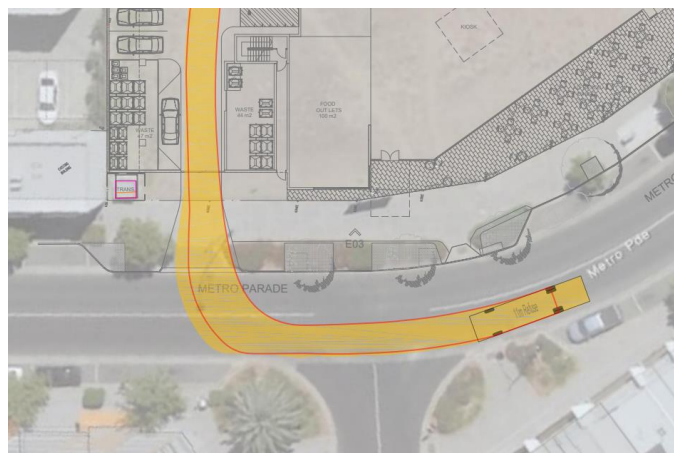


Diagram layout showing disposal pathways and waste storage area. Red = GW, Yellow = Recycling / CDL bins, Green = Organics / Food Waste.

**Figure 6** Garbage truck route crossing oncoming traffic lane near T junction into bin storage area.



- 6.3 The high occupant turnover of this substantial development will inevitably lead to problems in managing waste control. There are existing problems in this area when new residents move in and unpack new appliance boxes and also dump shopping trolleys in Metro parade. There needs to be a dedicated hard storage area for obsolete desks and furniture items no longer required by departing students to enable collection without spillage onto the street.
- 6.4 We are concerned that the bin area appears to be in part open to the elements and combined with the proposed gross over development of this site would result in a substantial increase in smells and odours emanating from the bin area, plus noise from vehicles and roller doors in close proximity to existing residents private open space and front balconies.
- 6.5 The overall design of the bin storage and collection area and its highly visible location close to the T junction is likely to result in a smelly accident prone eyesore not in keeping with the intended Policy area 22 outcome of good residential design, best practice principles in environmental design and development that contributes to the desired character of the policy 22 area.

## 7 Excessive traffic volume with poor access and egress from the site, plus increased pollution

7.1 The proponents advise that:

In order to determine the proposed development's potential impact on the adjacent road network, the following assumptions have been adopted:

- **North** – 15% of movements will be to/from the north;
- **East** – 30% of movements will be to/from the east;
- **South** – 50% of movements will be to/from the south;
- **West** – 5% of movements will be to/from the west;

7.2 The 50% movements to/from this site will increase traffic volume on Metro Parade and the likelihood of traffic accidents at the poorly located and designed access road and T junction. This will be both hazardous to existing traffic and detrimental to existing residents enjoyment of private open space balconies affected by increased pollution.

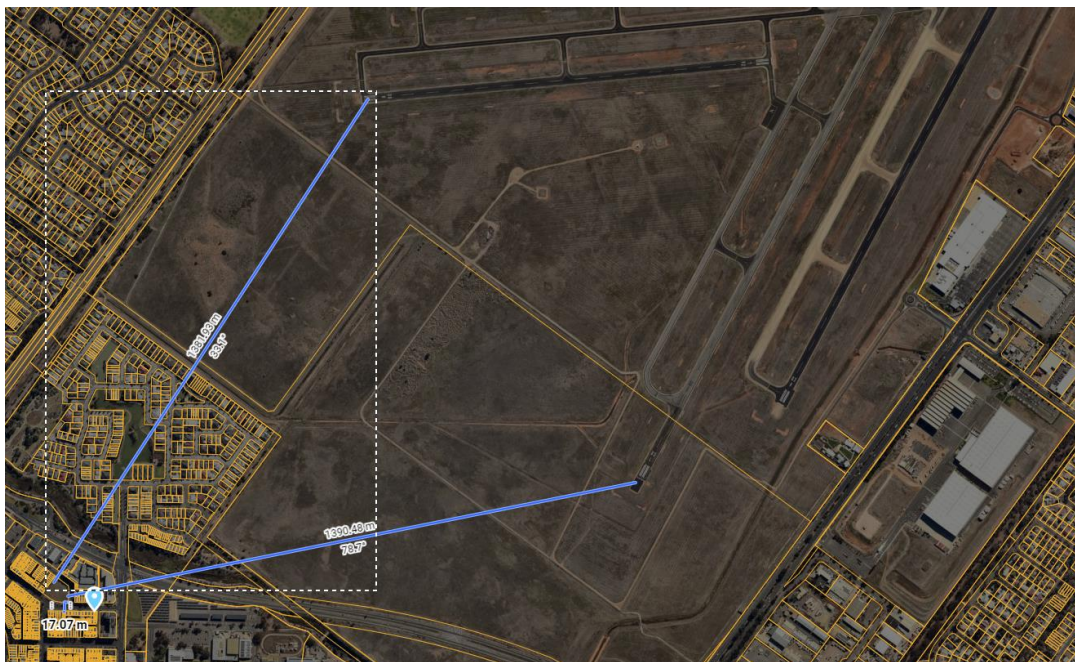
## 8 Proximity to Parafield Airport

8.1 This development is in close proximity to the Airfield (Parafield) Zone as identified in map Sal47. Existing buildings on Metro Parade have required a permit for work on roofs due to their proximity to Parafield Airport. This is considered to be an important aviation facility for South Australia and incorporates a world-class aviation training facility.

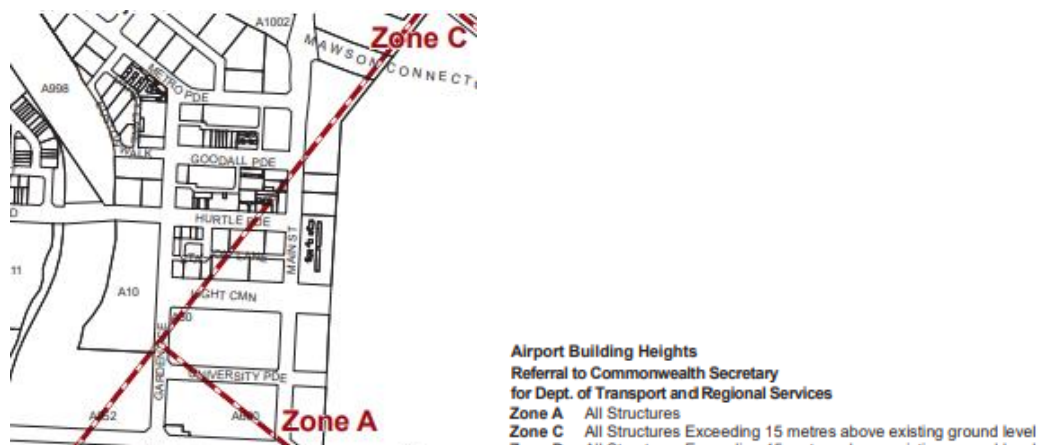


8.2 Trainee pilots should not have a hazard placed in close proximity to their runways and flight paths. The height and wind impacts of this proposed development may impact and affect safety for trainee pilots and so local residents. The development site is actually less than 1400 metres from two of the Parafield airport runways, as shown in Figure 7.

**Figure 7** Parafield Airport runways located less than 1400 metres from proposed 12 storey building.



**Figure 8** Extract from City of Salisbury Development Plan map Sal47 showing airport zones



8.3 According to MAP Sal47, it appears the Metro Parade development site is less than 200 metres from Zone A and is located in Zone C, not in zone D. Existing buildings on Metro Parade have required permits for cranes to place air-conditioning equipment on roofs.

**8.4 It is highly recommended that this proposed development is referred to the Commonwealth Secretary for Department of Transport and Regional Services.**

## 9 Conclusion

- 9.1 When you look past the pretty pictures of façade treatment and the various consultants attempts to paper over the evident failings, to examine this proposal in detail, it is actually a very unsatisfactory design outcome due to trying to squeeze onto this site an excessive quantum of development not appropriate to the site area.
- 9.2 The desire to maximise yield has sacrificed good design and ignored adverse impacts on adjacent properties and neglected to achieve the Urban Core Zone objectives, in particular failing badly to provide
- **2** Development within a mixed use environment that is compatible with surrounding development and which does not unreasonably compromise the amenity of the zone or any adjoining residential zone.
  - **7** Development that contributes to the desired character of the zone.
- 9.3 There is no question that the proposed development would result in excessive overshadowing and that little attempt has been made in the proposal submitted to address this. The Planning and Design Code does not give licence to the applicant to ignore the significant adverse impacts on the amenity of the adjacent Aqua apartments. The Urban Core Zone Desired Character Statement specifically requires that *‘As development intensifies, overlooking, overshadowing and noise impacts will be moderated through good design and noise attenuation techniques’*. There were clear design opportunities to address this by setting back and or, but preferably also, reducing the height of the southern wing. These changes would not have compromised the achievement of the intensity of use and the density of development for the core area and zone. But these opportunities for good design were not submitted.
- 9.4 There is no doubt that wind impacts will be significant and hazardous but yet again the development proposed fails to utilise the good design opportunities in PDC 27 as noted at 4.1 above. The proposed development has a flat, largely uninterrupted façade on the southern face of the building where upper levels protrude out over the second level podium and allow winds to downdraft onto the street. There is no canopy to stop these wind impacts.
- 9.5 The access lane and bin storage area is an extremely poor design outcome and location with inherent problems as detailed above.
- 9.6 Overall this poor design of development would be a blight on Metro Parade, not an asset. It would be unquestionably detrimental and not consistent with the quality of development which has preceded it or which is the Urban Core Zone Desired Character.

**We the owners of apartment at 6-10 Metro Parade, Mawson Lakes strongly object to this proposed development for the detailed reasons noted above and request the development proposal is rejected to prompt the developer to significantly amend then re-submit their design.**

**Martin Ward and Elizabeth Ward**

5 June 2020

South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2



**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

My Name: Sally Foster My phone number: 0401 386 395

**Primary method(s) of contact:** Email: Sallyfost@gmail.com  
Postal Address: Unit 114/111 David Street Richmond Vic Postcode: 3121

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

**My interests are:** (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

**The address of the property affected is:**

20 Metro Parade, Mawson Lakes Postcode \_\_\_\_\_

**My interests are:** (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

**The specific aspects of the application to which I make comment on are:** The building is way too high and will look ugly and block the sun from our property. This type of height looks weird in suburb developments and can look like Council Housing. Dont block sun from other buildings.

**I:** (please tick one)  
 wish to be heard in support of my submission  
 do not wish to be heard in support of my submission (Please tick one)

**By:** (please tick one)  
 appearing personally  
 being represented by the following person (Please tick one)

**Signature:** S Foster

**Date:** 26/5/20



South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2



**Applicant:** Michael Calabro Pty Ltd  
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**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

My Name: Misun Kim My phone number: 01403 410 025

**Primary method(s) of contact:** Email: trangjoo@hotmail.com  
Postal Address: Unit 2 24 Kelvin Rd Postcode: 5042  
Bedford Park SA

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

- My interests are:** (please tick one)
- owner of local property
  - occupier of local property
  - a representative of a company/other organisation affected by the proposal
  - a private citizen

**The address of the property affected is:**

7A Metro Parade, Mawson Lake, SA Postcode 5095

- My interests are:** (please tick one)
- I support the development
  - I support the development with some concerns
  - I oppose the development

**The specific aspects of the application to which I make comment on are:** 1. Parking - the building will not provide enough parking as it has more than 400 beds. 2. Traffic - Capital Street will be more congested. 3. Noise - at night during party season. 3. Impact on Corporation's Driveway - Cars stopping right in front of driveway blocking the entrance. 4. Overall enjoyment - the building will block out a lot of sunlight and airflow to us too.

I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

By:  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

Signature: [Signature]  
Date: 03.06.2020

**Return Address:** The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
**Email:** [scapreps@sa.gov.au](mailto:scapreps@sa.gov.au)

South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2



**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elysse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

My Name: Brain Bev Deeks My phone number: 0421812848

Primary method(s) of contact: Email: Exhaustedtwo@hotmail.com  
Postal Address: 309/42-48 Garden Tce. Mawson Lakes Postcode: 5095

You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.

My interests are:  
(please tick one)

- owner of local property
- occupier of local property
- a representative of a company/other organisation affected by the proposal
- a private citizen

The address of the property affected is:

309/42-48 Garden Tce. Mawson Lakes Postcode 5095

My interests are:  
(please tick one)

- I support the development
- I support the development with some concerns
- I oppose the development

The specific aspects of the application to which I make comment on are:

Apart from this building being totally out of character with all the other M.L. buildings at 12 stories opposed to 5 being normal it will create an eyesore + a public nuisance with parking. It will create an urban ghetto out of this end of M.L. Streets are already full with present apartment parking and restaurants and train commuters. You dont live here

- I:  wish to be heard in support of my submission  
(please tick one)  do not wish to be heard in support of my submission  
(Please tick one)

- By:  appearing personally  
(please tick one)  being represented by the following person  
(Please tick one)

Signature: B. Deeks

Date: 22/05/2020

**South Australian  
DEVELOPMENT ACT, 1993  
REPRESENTATION ON APPLICATION – CATEGORY 2**

**Applicant:** Michael Calabro Pty Ltd  
**Development Number:** 361/L020/20  
**Nature of Development:** Construction of a 12 storey building comprising 11 levels of student accommodation, ground level retail tenancies and at grade and basement car parking.  
**Development Type:** Merit  
**Zone / Policy Area:** Urban Core Zone  
**Subject Land:** 13-17 Metro Parade, Mawson Lake  
**Contact Officer:** Elyse Kuhar  
**Phone Number:** 7109 7072  
**Close Date:** 5 June 2020

My Name: P J CURTIS AND J N GUILFOYLE My phone number: 043 888 5083

**Primary method(s) of contact:** Email: peter.84@live.com.au  
Postal Address: 14 BRISTOL STREET Postcode: 5048  
DOVER GARDENS

**You may be contacted via your nominated PRIMARY METHOD(s) OF CONTACT if you indicate below that you wish to be heard by the State Commission Assessment Panel in support of your submission.**

**My interests are:** (please tick one)  
 owner of local property  
 occupier of local property  
 a representative of a company/other organisation affected by the proposal  
 a private citizen

**The address of the property affected is:**  
202 / 6 METRO PARADE MAWSON LAKES SA Postcode 5095

**My interests are:** (please tick one)  
 I support the development  
 I support the development with some concerns  
 I oppose the development

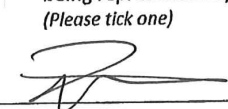
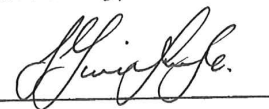
**The specific aspects of the application to which I make comment on are:** It will restrict existing views, Overshadowing, blocking winter sunlight, windows of habitable rooms, upper-level private balconies that provide primary open space for dwelling. And impede visual privacy.

**I:** (please tick one)  
 wish to be heard in support of my submission  
 do not wish to be heard in support of my submission (Please tick one)

**By:** (please tick one)  
 appearing personally  
 being represented by the following person (Please tick one)

**Signature:**

**Date:**

19/5/2020

**Return Address:** The Secretary, State Commission Assessment Panel, GPO Box 1815, Adelaide, SA 5001 /or  
**Email:** [scapreprs@sa.gov.au](mailto:scapreprs@sa.gov.au)



July 1, 2020

Ms Elysse Kuhar  
Senior Planning Officer – Inner Metro Development Assessment  
Planning and Land Use Services  
Department of Planning, Transport and Infrastructure  
By email: [elysse.kuhar@sa.gov.au](mailto:elysse.kuhar@sa.gov.au)



Level 1, 74 Pirie Street  
GPO Box 2403  
Adelaide SA 5001  
PH: 08 8221 5511  
W: [www.futureurban.com.au](http://www.futureurban.com.au)  
E: [info@futureurban.com.au](mailto:info@futureurban.com.au)  
ABN: 34 452 110 398

Dear Elysse,

## **RE: DEVELOPMENT APPLICATION 361/L020/20**

We have been instructed by the Applicant, Michael Calabro Pty Ltd, to respond to the Government Architect's letters dated March 4 and May 7, 2020.

Prior to doing so, we wish to point out that the Government Architect has acknowledged and commended "*the significant shift in the design approach since the presentation of the previous scheme*" and provided her in-principle support for the overall height of the proposed building and the development itself.

Our response is set out below.

### **Communal Spaces**

The Government Architect advised, by letter dated March 4, that she is "*concerned that the inward location of the communal spaces limits the development's opportunities to engage with the surrounding environment through activated street frontages*".

To address this concern, the Applicant instructed their Architect to:

- shift the communal spaces on Levels 2, 3 and 4 to the outer edge of the proposed building and to stack these spaces directly on top of one another (Drawing A2.04[A1] attests to this);
- shift the communal spaces on Levels 5, 6 and 7 to the outer edge of the proposed building and to stack these spaces directly on top of one another (Drawing A2.07[A1] attests to this); and
- shift the communal spaces on Levels 8, 9 and 10 to the outer edge of the proposed building and to stack these spaces directly on top of one another (Drawing A2.10[A1] attests to this).

These changes have further enhanced the architectural expression of the proposed building, facilitated greater opportunities for passive surveillance and allowed for the communal spaces to be naturally ventilated. Further, it is clear from the Government Architect's letter dated May 7 that this concern has since been resolved.

## Entry Foyer

The Government Architect has advised, by letter dated May 7, that she is “*yet to be convinced by the lack of direct access between the entry/lift foyer and the food court*”.

The Applicant would prefer not to connect the entry foyer and food court together for several reasons.

Firstly, the Applicant is committed to providing a safe and secure environment for the prospective students of the proposed building and cannot, therefore, allow the general public to access the entry foyer via the food court.

Secondly, the recess between the brick colonnades and the podium will allow the prospective students of the proposed building to access the food court without being subjected to any inclement weather.

Thirdly, the food court will, in its current form, be accessible via both Capital Street and Metro Parade. There will not, therefore, be a shortage of options as far as access is concerned.

Lastly, the provision of an internal or direct link if you like between the entry foyer and food court would be counterproductive to the Government Architect’s push to “*activate the ground floor and improve connectivity with the surrounding sites and amenities*”, as it would minimise the need for the prospective students of the proposed building to leave the site.

## External Appearance

The Government Architect has advised, by letter dated May 7, that “*an opportunity exists to refine the built form composition*”.

The Applicant is reluctant to make any further changes to the composition of the proposed building because:

- its architectural expression is presently characterised by a series of solid wall sections that are clad in contrasting fibre cement panels;
- the external appearance of these panels has been enhanced through the use of glazed vertical recesses and horizontal rebates or bands if you like, the latter of which serve to accentuate the width of the proposed building whilst reducing its apparent height;
- the glazed reveals at the end of the corridors on Levels 1 through to 11 also serve to temper the mass of the proposed building by breaking it up into discrete elements and casting shadows across various surfaces; and
- the use of brick and glass at the ground floor level will give the proposed building a strong but balanced base, and introduce a ‘fine grain’ element to both streetscapes.

## Footbridge

The Government Architect advised, by letter dated March 4, that she does “*not support the provision of an elevated bridge link*”.

To be clear, a footbridge connecting the proposed building and the Applicant’s existing student accommodation facility on the opposite side of Capital Street together is not proposed as part of Development Application 361/L020/20.

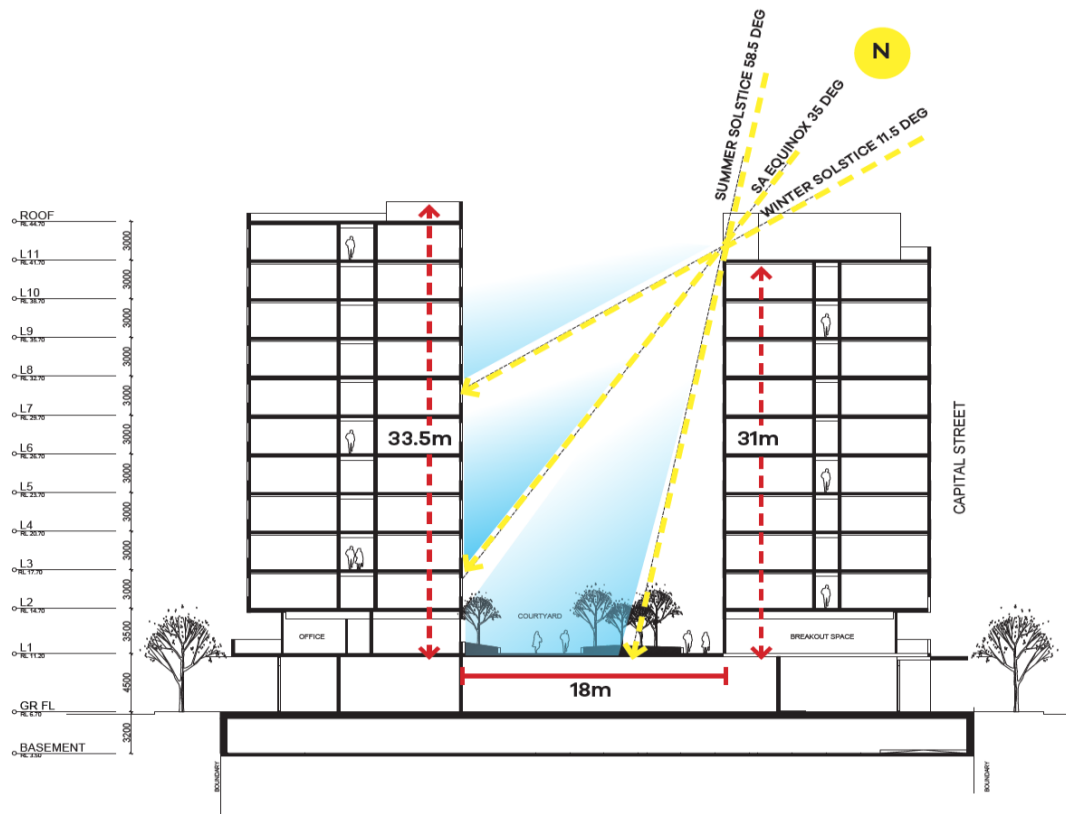
## Internal Courtyard

The Government Architect advised, by letter dated March 4, that “the amenity and usability of the courtyard is compromised due to limited solar access” and encouraged the Applicant to explore “opportunities to increase the size of the courtyard and the void where possible”.

Although the internal courtyard will receive a limited amount of sunlight, particularly during the months of autumn, winter and spring, it is important to keep in mind that:

- the primary purpose of this space is to provide natural light and ventilation to all of the ‘internal’ rooms, and to ensure that the prospective occupants of these rooms have a pleasant outlook, as sought by Clause (d) of Principle 19 of the ‘Medium and High Rise Development’ Module;
- this space is secondary to the rooftop terrace and supplemented by another 10 communal/breakout spaces across Levels 1 through to 10; and
- this space is most likely to be used during the months of summer and Figure 1 below clearly demonstrates that sunlight will reach its surface during this period of the year.

**Figure 1: Cross-Section of the Internal Courtyard**



**COURTYARD ANALYSIS - NORTH/SOUTH SECTION DIAGRAM**

Indeed, it now appears that this issue has also been resolved, as the Government Architect has gone on to advise, by letter dated May 7, that:

*“Whilst the solar access to the enclosed courtyard is limited due to the depth of the void above, I recognise the purpose of the void as an effective daylight source for the internally located residential units. I also support the inclusion of an additional communal open space on the rooftop as, in my opinion, any opportunity to provide access to sun light and natural ventilation is welcomed in this otherwise highly enclosed environment.”*

## **Interface**

The Government Architect encouraged the Applicant, by letter dated March 4, to explore *“opportunities to increase separation from the adjoining townhouses along the north western [sic] boundary to minimise detrimental interface impacts”*.

Levels 1 through to 11 will all be set back not less than the recommended distance (3.0 metres) from the north-western boundary of the site.

Notwithstanding this, the Applicant has also recently resolved to remove those balconies on the north-western side of Level 1 and to fit all of the windows on the north-western side of Levels 1 and 2 which are not concealed by the proposed boundary wall with privacy screens in order to prevent reciprocal overlooking.

Whilst a thick, fibre cement wall of up to, but not exceeding, 6.5 metres in height will need to be constructed along the north-western boundary of the site, we do not consider the siting or the height of this wall to present any insurmountable issues on the basis that:

- this particular boundary is presently abutted by one and two storey buildings;
- the proposed building will not, between the hours of 9:00 am and 3:00 pm on the winter solstice, cast a single shadow over the habitable room windows, private open spaces or solar panels associated with the neighbouring residences to the north-west of the site; and
- this wall is, for those reasons that are outlined within the acoustic report, required to ensure that this development complies with the relevant requirements of the Environment Protection (Noise) Policy, 2007 and, more importantly, to shield the occupants of the neighbouring residences to the north-west of the site from the noises associated with the at-grade car park and waste enclosures, as sought by Principles 1, 2 and 7 of the 'Interface between Land Uses' Module.

## Landscaping

The Government Architect has, by letter dated May 7, called for the Applicant to demonstrate *“how the proposed soft landscape elements will be sustained and maintained”*.

Simply put:

- the Applicant intends to engage a maintenance contractor;
- the contractor’s tools and products will be kept in the ‘linen and cleaning store’ on Level 1, as the bulk of the contractor’s work will revolve around the internal courtyard on, and the terraces located around the perimeter of, Level 1;
- the contractor will be able to safely and conveniently access the internal courtyard and the perimeter and rooftop terraces from inside of the building;
- all of the organic matter collected from the landscaped areas will be taken down by lift to the waste enclosure on the south-eastern side of the aisle associated with the at-grade car park; and
- all of the planter beds will be fitted with automated irrigation.

## Podium

The Government Architect advised, by letter dated March 4, that *“the architectural expression of the podium as the base of a building should be strengthened through increased solidity”*.

To address this advice, the Applicant instructed their Architect to marginally increase the solid to void ratio of the podium, as Principle 12, Clause (b) of the Urban Core Zone calls for not less than half of the podium to be visually permeable, and the retail tenancies on the ground floor level require a reasonable degree of commercial exposure in order to survive let alone thrive.

The Government Architect also called, by letter dated March 4, for an *“increase of the podium height to achieve an improved relationship with the surrounding buildings”*.

To address this suggestion, the Applicant also instructed their Architect to increase the height of the brick parapet to 5.6 metres.

## Traffic

The Government Architect called, by letter dated March 4, for the *“inclusion of wider site context information to demonstrate the successful management of the project’s traffic impacts on the local network”*.

Firstly, and with all due respect to the Government Architect, the likely effects of the proposed development on the surrounding road network surely falls outside of their remit.

Secondly, Mr Thomas Wilson, a qualified, experienced and independent traffic engineer, was instructed by the Applicant to determine whether or not this development is likely to have an adverse effect on the operation of the surrounding road network. Mr Wilson has since determined that:

- *“vehicle movements associated with the proposed development will be distributed to the broader road network via Capital Street, Metro Parade and Central Link”*; and
- *“such movements will be readily accommodated on the broader road network and will have minimal impact upon the operation of associated intersections”*.

Page 15 of Cirqa’s Traffic and Parking Report clearly attests to this.

## Summary

In summary, we take this opportunity to reiterate that the Applicant has voluntarily embarked upon, and actively participated in, the design review process to ensure that the form, scale and architectural expression of the proposed building is befitting of the landmark site upon which it is to be erected.

The proposed building has clearly benefited from this process and the various changes that have been made along the way will no doubt serve to deliver a high-quality outcome that is entirely consistent with the desired character of this mixed-use locality.

If you have any queries or concerns regarding our response, please do not hesitate to contact the writer.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Fabian Barone', with a stylized flourish at the end.

**Fabian Barone**  
Director



July 1, 2020

Ms Elysse Kuhar  
Senior Planning Officer – Inner Metro Development Assessment  
Planning and Land Use Services  
Department of Planning, Transport and Infrastructure  
By email: [elysse.kuhar@sa.gov.au](mailto:elysse.kuhar@sa.gov.au)



Level 1, 74 Pirie Street  
GPO Box 2403  
Adelaide SA 5001  
PH: 08 8221 5511  
W: [www.futureurban.com.au](http://www.futureurban.com.au)  
E: [info@futureurban.com.au](mailto:info@futureurban.com.au)  
ABN: 34 452 110 398

Dear Elysse,

## **RE: DEVELOPMENT APPLICATION 361/L020/20**

We have been instructed by the Applicant, Michael Calabro Pty Ltd, to respond to the City of Salisbury's ('the Council's') letter dated May 22, 2020.

Our response is set out below.

### **Canopies**

The Council has asserted that "*external canopies and awnings are not proposed.*"

We question how closely the Council has looked at the compendium of architectural drawings, as Drawing A2.01[A2] clearly shows that a cantilevered canopy will be positioned directly above both of the entrances to the publicly accessible food court.

### **Entry Foyer**

The Council has asserted that the entry foyer "*is separated from the public food court and hence connection through the building is somewhat limited.*"

The Applicant would prefer not to connect the entry foyer and food court together for several reasons.

Firstly, the Applicant is committed to providing a safe and secure environment for the prospective students of the proposed building and cannot, therefore, allow the general public to access the entry foyer via the food court.

Secondly, the recess between the brick colonnades and the podium will allow the prospective students of the proposed building to access the food court without being subjected to any inclement weather.

Thirdly, the food court will, in its current form, be accessible via both Capital Street and Metro Parade. There will not, therefore, be a shortage of options as far as access is concerned.

Lastly, the provision of an internal or direct link if you like between the entry foyer and food court would be counterproductive to the Government Architect's push to "*activate the ground floor and improve connectivity with the surrounding sites and amenities*", as it would minimise the need for the prospective students of the proposed building to leave the site.

## Ground Floor Level

The Council has asserted that “*the proposed ground floor ceiling height at 3.4m [sic] is lower than envisaged within the zone [sic]*” and that “*higher ceiling levels may be appropriate to enable flexibility and future adaptation of the building.*”

Whilst the ground floor level will have a floor to ceiling height of 3.4 metres, not 4.5 metres, as recommended by Principle of Development Control (‘Principle’) 12, Clause (a) of the Urban Core Zone (‘the Zone’), we remain of the view that this floor level, in its current configuration, satisfies the intent of Clause (a), as it can, and will, be used exclusively for non-residential purposes.

## Retail Tenancies and Outdoor Dining Area

The Council has encouraged the Applicant to swap the retail tenancies and outdoor dining area around.

The Applicant considered this prior to lodgement but ultimately decided against it because Metro Parade carries more foot traffic than Capital Street, and the provision of an outdoor dining area along Metro Parade will serve to activate this side of the road and encourage pedestrians to frequent the food court whilst shielding patrons from the traffic and supermarket loading dock associated with Capital Street.

The Council has also called for the glass balustrade along the perimeter of the outdoor dining area to be raised to accommodate a concrete plinth beneath directly beneath it.

To address this suggestion, the Applicant has instructed their Architect to install a series of planter boxes between the glass balustrades and Metro Parade.

## Building Height

It has been asserted by the Council that:

- “*the building height exceeds the maximum number of storeys anticipated within the Urban Core Zone*”; and
- “*the total height of the building is within the overall height limit as expressed in metres in the Development Plan, and [sic] is therefore considered to be appropriate.*”

We respectfully disagree with the first of these two assertions, as it is clear, at least in our mind, that Principle 27 of the Zone permits the maximum building height that has been prescribed for this site to be increased from 10 storeys and up to 40.5 metres to 12 storeys and up to 48.49 metres because:

- all of the adjacent dwellings are also located in the Core Area;
- the proposed building will come equipped with a basement car park and the access point associated with the basement car park will be located as close as practicable to the north-western (rear) boundary of the site;
- the ground floor level will be used exclusively for commercial/non-residential purposes; and
- all of the student accommodation rooms will be located above the ground floor level.

To this end, we remain of the view that the proposed building will, when measured from the top of the tallest parapet to the finished ground level directly below, sit:

- 1.5 metres below the maximum height that has been prescribed for this site (that is if the State Commission Assessment Panel ('the SCAP') elects not to apply the incentives);
- 9.49 metres below the maximum height that has been prescribed for this site (that is if the SCAP elects to apply the incentives); and
- 6.0 metres below the 'Airport Building Height'.

## External Appearance

The Council has called for "*increased articulation and treatments that provide visual interest and reduce the bulk and flat façades*" of the proposed building.

The Applicant has voluntarily embarked upon, and actively participated in, the design review process to ensure that the form, scale and architectural expression of the proposed building is befitting of the landmark site upon which it is to be erected.

The proposed building has clearly benefited from this process and the various changes that have been made along the way will no doubt serve to deliver a high-quality outcome that is entirely consistent with the desired character of this mixed-use locality.

The Applicant is reluctant to make any further changes to the composition of the proposed building because:

- its architectural expression is presently characterised by a series of solid wall sections that are clad in contrasting fibre cement panels;
- the external appearance of these panels has been enhanced through the use of glazed vertical recesses and horizontal rebates or bands if you like, the latter of which serve to accentuate the width of the proposed building whilst reducing its apparent height;
- the glazed reveals at the end of the corridors on Levels 1 through to 11 also serve to temper the mass of the proposed building by breaking it up into discrete elements and casting shadows across various surfaces; and
- the use of brick and glass at the ground floor level will give the proposed building a strong but balanced base, and introduce a 'fine grain' element to both streetscapes.

## External Materials

The Council has asserted that the Applicant should select materials "*that ensure longevity of the built form.*"

The materials selected by the Applicant have been scrutinised and subsequently endorsed by the Government Architect. Indeed, the Government Architect has advised by letter dated May 7, 2020 that "*I support the proposed tactile materiality of the podium element, as brickwork provides a fine grain character to the building at street level*" and that "*the light weight cladding system is critical to ensure delivery of a high quality outcome cognisant of a landmark development.*"

## Shade Devices

The Council has “*noted that external shade devices are not proposed.*”

There is no need for such devices to be affixed to the external walls of the proposed building, as the proposed building has been designed to satisfy the requirements of the National Construction Code.

## Communal Spaces

It has been asserted by the Council that “*it is unclear from the floor plan of level one how access to the external terrace is provided, noting that doorways to this space do not appear to be shown.*”

The doorways providing access to the communal terraces on Level 1 are now shown and clouded in red on Drawing A2.02[A2].

The Council has also encouraged the Applicant to ensure that the windows belonging to the communal spaces on Levels 1 through to 10 are openable.

The Applicant has since instructed their Architect to ensure that this level of detail is shown on the working drawings, as it was always their intention to naturally ventilate the communal spaces.

## Private Open Spaces

It has been asserted by the Council that “*in the General Section, ‘Medium and High Rise Development’ of the Development Plan, Principle of Development Control 16 contemplates that studios do not require private open space, however, where apartments have one or more bedrooms, private open space is desired of 8 square metres for one bedroom apartments and 11 square metres for two bedroom apartments respectively.*”

In order to dispel this assertion, it is instructive, at least in the first instance, to consider Principle 16 of the ‘Medium and High Rise Development’ Module. This provision advises that:

**16 Private open space should be provided for each dwelling in accordance with the following:**

Number of bedrooms	Minimum area of private open space
Studio (no separate bedroom)	No minimum
1 bedroom	8 square metres
2 bedrooms	11 square metres
3 bedrooms	15 square metres

(emphasis added)

This provision quite clearly does not apply to the proposed development because:

- it refers to dwellings, not to apartments or student accommodation rooms; and
- the rooms within the proposed building are not dwellings, as they are not self-contained (for example, the prospective occupant/s of each room will need to use the communal laundries in order to wash and dry their clothes).

Notwithstanding this, it remains important to note that:

- the proposed building will contain 545 square metres of communal open space in the form of an internal courtyard and a rooftop terrace;
- these spaces will be supplemented by another 10 communal/breakout spaces across Levels 1 through to 10; and
- the internal courtyard and rooftop terrace will be accessible to all of the students;
- the Applicant is extremely reluctant to incorporate any private balconies due to the inherent safety risks associated with them; and
- the provision of communal open spaces, as opposed to private open spaces, will encourage the students to socialise with one another.

## Visual Privacy

The Council has asserted that “*while the boundary wall will minimise direct overlooking to the first floor windows there is potential for overlooking into the second floor bedroom windows from the west facing apartments.*”

To address this issue and prevent reciprocal overlooking, the Applicant has since committed to fitting those windows on the north-western side of Levels 1 and 2 which are not concealed by the proposed boundary wall with privacy screens. Drawing A3.03[A2] attests to this.

## Access

Mr Thomas Wilson, a qualified, experienced and independent traffic engineer, has been instructed to respond to the Council's comments regarding the proposed access arrangements.

Mr Wilson's response is enclosed for your consideration.

## Parking

The Council has “*some concern in respect to the adequacy of car parking to support adaptation of the building, should the market for student accommodation decline.*”

Firstly, the student accommodation market is unlikely to decline any time soon given that there are 11.2 full-time students per bed in the Mawson lakes Area.

Secondly, Mr Wilson was instructed by the Applicant to determine, prior to lodgement, whether or not there will be enough on-site car parking now and into the future.

Whilst Mr Wilson’s findings are appended to our planning report, we take this opportunity to reiterate that:

- the ‘commercial’ or ‘non-residential’ component generates a theoretical demand for 14 spaces;
- the theoretical demand generated by the ‘commercial’ or ‘non-residential’ component will be catered for by the at-grade car park, as it has been designed to accommodate 14 spaces;
- the ‘student accommodation’ component does not, in our opinion, generate a theoretical demand for on-site car parking, as the rooms within the proposed building are not dwellings, as they are not self-contained;
- if one were to incorrectly apply a rate of 0.75 spaces per room, then the ‘student accommodation’ component would generate a theoretical demand for 171 spaces;
- a rate of 0.75 spaces per room is considered by Mr Wilson “*to be highly conservative and its application to the subject proposal would result in a significant overprovision of parking spaces*”;
- Principle 29 of the Zone advises, in part, that “*a lesser parking rate may be applied (for student accommodation) where justified based on local circumstances*”;
- a lesser parking rate can and should be applied according to Mr Wilson because:
  - » “*the subject site is located within 400 m [sic] walking distance of the Mawson Lakes Interchange and 200 m [sic] from Main Street (from which locations, high-frequency public transport services operate)*”;
  - » “*the subject site is located within 300 m [sic] walking distance from the University of South Australia’s Mawson Lakes Campus*”;
  - » “*the site has extensive bicycle parking provisions located throughout (well above that required by Council’s Development Plan)*”;
  - » “*footpaths (accommodating both pedestrian and bicycle movements) are provided on both sides of Metro Parade and Capital Street immediately adjacent the site, providing connectivity to the boarder footpath network*”;
  - » “*the proposed development is considered to be appropriate for supporting shared parking arrangements*”; and
  - » “*on-street parking is provided on Metro Parade, Capital Street and numerous other roads within close vicinity to the subject site*”;
- based on relevant literature and empirical data from similar facilities, such as the Applicant’s adjacent facility which features 212 beds but no on-site car parking spaces for its students, the ‘student accommodation’ component generates a theoretical demand for up to, but not exceeding, 46 spaces; and
- the basement has been designed to accommodate 73 spaces, not 72 spaces as has been suggested by the Council, which means that there will be a theoretical surplus of 27 spaces for the ‘student accommodation’ component.

In the extremely unlikely event that the student accommodation facility fails and the proposed building has to be used to provide serviced accommodation for tourists, it is also clear from Mr Wilson’s findings that there will continue to be a theoretical surplus of spaces within the basement.

The proposed building has, therefore, been future-proofed, as sought by Principle 20 of the ‘Medium and High Rise Development’ Module.



## Stormwater

The Applicant has engaged PT Design to prepare a stormwater management plan which addresses the Council's comments regarding runoff from the site and the potential for flooding within the basement.

The plan to which we refer will be forwarded to you upon completion.

## Wind

It has been asserted by the Council that *"the northern roof terrace will be exposed throughout summer with the north/north-westerly winds that Salisbury experiences."*

It is relatively clear from the wind impact assessment appended to our planning report that the wind conditions associated with the rooftop terrace will not exceed the 'walking comfort criterion' in the event that a 1.8 metre high balustrade is erected around its perimeter.

Figure 1 below now shows that a 1.8 metre high, clear glass balustrade will be erected around the perimeter of the rooftop terrace, as per Vipac's recommendation.

**Figure 1: Rooftop Terrace**



## Street Trees

The Council has advised that all three of the street trees which have been earmarked for removal will need to be removed at the Applicant's expense.

The Applicant has since received and paid the Council's tax invoice to facilitate the removal of these trees.

## Landscaping

It has been asserted by the Council that *"the proposed use of Olive trees is not appropriate and should be reviewed."*

The olive trees chosen by the Applicant's Landscape Architect are extremely robust and sterile – in other words, they will not bear any fruit throughout the course of the year. If the use of these trees on a private rooftop which will not be visible from the surrounding road network continues to be of concern to the Council, then the Applicant is prepared to replace them with bay leaf trees.

The Council has also advised that *"the use of Ficus macrocarpa hillii in the courtyards is not supported as this species has an aggressive root system."*

The Applicant's Landscape Architect has specified the 'flash' variety, which is a smaller, less invasive variety and commonly used around domestic pools with little to no issues. The planters within the internal courtyard will also be completely waterproofed and sealed, thus minimising the chance of there being any wayward roots.

## Infrastructure Agreement

The Council considers *"it appropriate that the developer enter into an infrastructure agreement with the Council to address all proposed works within the public realm."*

The Applicant is prepared to enter into an infrastructure agreement which captures those activities and works within the public realm.

## Summary

We remain of the view, despite some of the issues that have been raised by the Council, that the proposed development is deserving of development plan consent.

If you have any queries or concerns regarding our response to the Council's letter, please do not hesitate to contact the writer.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Fabian Barone', with a stylized flourish at the end.

**Fabian Barone**  
Director

July 3, 2020

Ms Elysse Kuhar  
Senior Planning Officer – Inner Metro Development Assessment  
Planning and Land Use Services  
Department of Planning, Transport and Infrastructure  
By email: [elysse.kuhar@sa.gov.au](mailto:elysse.kuhar@sa.gov.au)



Level 1, 74 Pirie Street  
GPO Box 2403  
Adelaide SA 5001  
PH: 08 8221 5511  
W: [www.futureurban.com.au](http://www.futureurban.com.au)  
E: [info@futureurban.com.au](mailto:info@futureurban.com.au)  
ABN: 34 452 110 398

Dear Elysse,

## RE: DEVELOPMENT APPLICATION 361/L020/20

We have been instructed by the Applicant, Michael Calabro Pty Ltd, to summarise and respond to the concerns that were raised during the public notification period.

Prior to doing so, we wish to highlight the following:

- 18 representations were submitted during the prescribed time for such purposes.
- It appears that:
  - » only one of the 18 representors reside within the locality of the site of the proposed development ('the site'); and
  - » the remainder of the representors own, but do not occupy, property within the locality of the site.
- None of the owners or occupiers of the neighbouring townhouses to the north-west of the site (at 19 – 21 Metro Parade, Mawson Lakes) have submitted a representation.
- All but of one the representors are unequivocally opposed to the proposed development.
- The site is located in the Core Area of the Urban Core Zone. So too for that matter are all of the representors' properties.
- The Desired Character Statement for the Urban Core Zone advises, in part, that:
  - » *"due to the scale and intensity of development, the zone [sic] will focus around a Core Area with a Transition Area adjoining neighbouring zones";* and
  - » *"the Core Area will provide the greatest intensity of land use and activity in the zone [sic] with a mix of residential, commercial and employment generating activities."*
- Commissioner Hodgson of the Environment, Resources and Development Court stated, as part of his judgement in relation to the matter of *Bond v City of Norwood, Payneham & St Peters [2007] SAERDC 56*, that:

*"Lanzilli Holdings and Papadopoulos are, in my view, authorities for the proposition that the amenity expectations of those who reside in zones within which commercial or residential activities are envisaged, or even on the periphery of a residential zone in close proximity to a commercial or industrial zone, cannot equate with those of residents in the heart of residential zones. Were that not to be the case, commercial and residential activities located in zones within which such uses were sanctioned could potentially be seriously restricted by the application of residential amenity standards having their origin in zones devoted solely to residential uses."*

Our response is set out overleaf.

## Mawson Lakes Policy Area 22

It has been asserted by one of the representors that the site is located in Mawson Lakes Policy Area 22.

With all due respect to this representor, it is clear from Zone Map Sa/47 of the Salisbury Council Development Plan ('the Development Plan') that the site is located wholly within the confines of the Urban Core Zone.

The site cannot, therefore, belong to Mawson Lakes Policy Area 22, as this Policy Area forms part of the Residential Zone, not the Urban Core Zone.

Any reference to the desired character or provisions of this Policy Area must, therefore, be disregarded.

## Land Use

One of the representors has urged the Applicant to "*identify a more suitable land parcel.*"

For the reasons that follow, we remain of the view that the proposed development is entirely appropriate from a land use perspective.

First, the Desired Character Statement for the Urban Core Zone advises, in part, that "*student and aged accommodation, serviced apartments and affordable housing are also strongly encouraged in the Core Area to assist in delivering an overall mix of residential activity in this area.*"

(emphasis added)

Second, shops, like the retail tenancies and food outlets on the ground floor level, are envisaged within the Core Area. Principle of Development Control ('Principle') 1 of the Urban Core Zone attests to this.

Third, the retail tenancies, the food outlets and, to a lesser extent, the student accommodation facility itself will generate employment opportunities within the Core Area, as sought by the Desired Character Statement for the Urban Core Zone.

Fourth, the retail tenancies and food court on the ground floor level will be "*high pedestrian generators*" and combine to "*provide opportunities for multi-purpose trips*", as sought by Principle 5 of the Urban Core Zone.

Fifth, the food court on the ground floor level will act as a social hub for communal activity, as sought by Principle 6 of the Urban Core Zone.

Sixth, the spatial arrangement of the proposed uses is consistent with Principle 3 of the 'Medium and High Rise Development' Module.

For clarity, this provision advises that "*mixed use development should incorporate active uses such as shops and cafés at ground level and contribute towards activation of the public realm.*"

Seventh, the site is located within 400 metres of the Mawson Lakes Interchange and the University of South Australia's Mawson Lakes Campus.

## Density

It has been asserted by one of the representors that the proposed development is too dense.

The density controls that have been prescribed for the Core Area (Principles 9 and 10 to be exact) do not apply to the proposed development, as none of the apartments within the proposed building will be self-contained. They cannot, therefore, be classed or assessed as 'dwellings'.

## Oversupply of Accommodation

It has been asserted by one of the representors that *"there is already an over supply [sic] of apartments in Mawson Lakes making it difficult to secure tenants for current property owners."*

Firstly, the proposed development involves the provision of beds within purpose-built student accommodation, not self-contained residences, such as those referred to by this representor.

Secondly, in July, 2019, Jones Lang LaSalle was commissioned by the State Government to undertake a supply and demand analysis of purpose-built student accommodation.

According to that analysis:

- there are approximately 38,000 international students enrolled in South Australia;
- there are 4,590 beds in the Central Business District but only 300 in Mawson Lakes (212 of which belong to the Applicant's existing facility on the north-eastern (opposite) side of Capital Street);
- this figure (4,590 beds) is expected to increase to 8,205 beds by the end of 2022; and
- there are 11.2 full-time students per bed within the Mawson Lakes Area.

It is abundantly clear, therefore, that there is a significant shortage of, and a demonstrated need for, purpose-built student accommodation, particularly within the Mawson Lakes Area.

## Food Court

It has been asserted by one of the representors that *"the inclusion of a foodcourt [sic] within this residential street is also contrary to the desired character of this location."*

We respectfully disagree with this assertion, as the Desired Character Statement for the Urban Core Zone calls for development, such as this, to *"be mixed both vertically and horizontally, with non-residential uses encouraged on the ground floor to create visual interest and invite personal interaction on street frontages."*

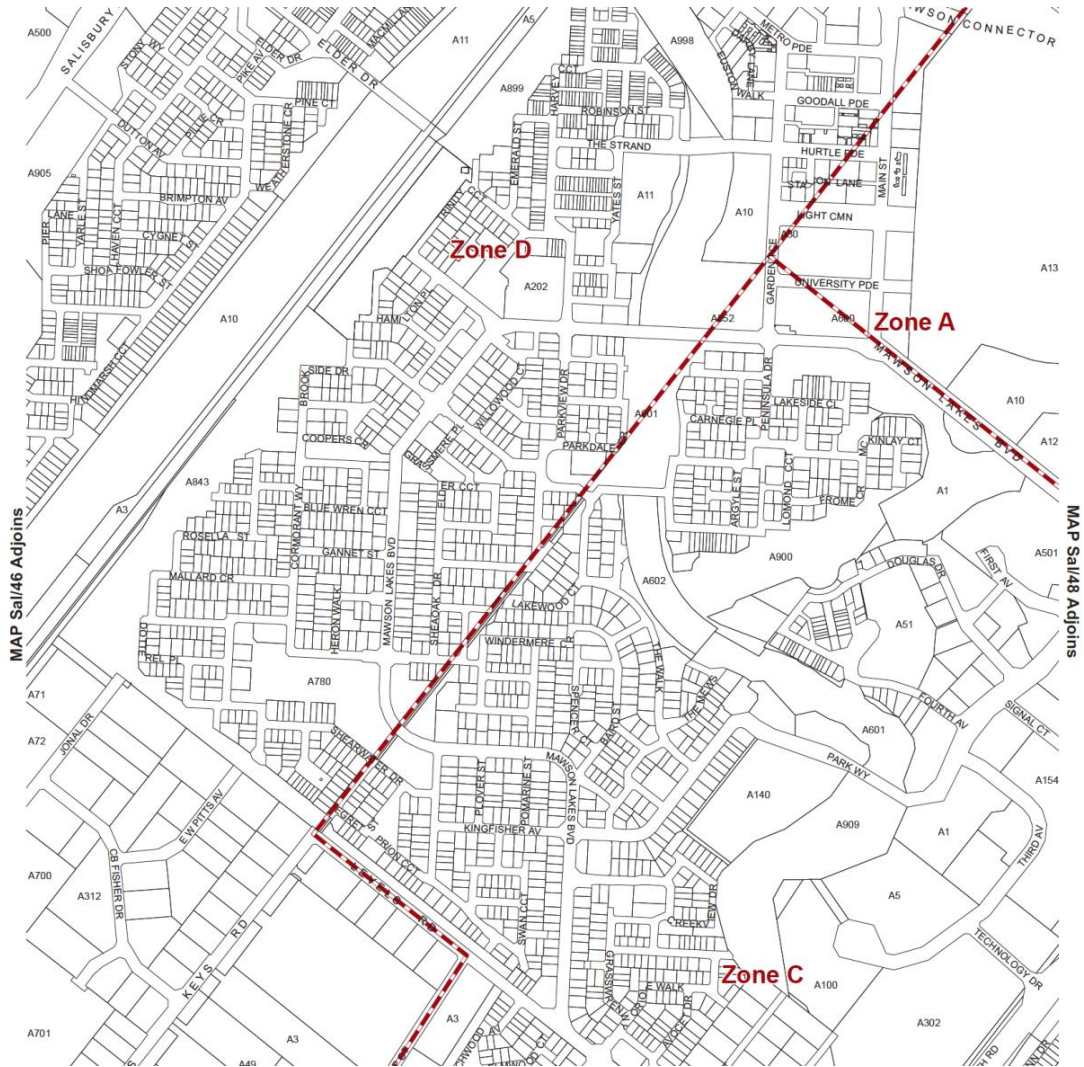
Indeed, the provision of a food court on the ground floor level allows for the creation of an outdoor dining area, the latter of which will serve to further activate Metro Parade.

## Aviation Hazard

It has been asserted by one of the representors that the site is located in 'Zone C', not 'Zone D', and that the proposed building should, therefore, be referred to the Commonwealth Secretary for the Department of Transport and Regional Services ('the Commonwealth Secretary').

With all due respect to this representor, it is clear from Overlay Map Sal/47 (Development Constraints) and Figure 1 overleaf that the site falls within the ambit of 'Zone D' which, put simply, means that the proposed building need not be referred to the Commonwealth Secretary, as it will not exceed 45 metres in height.

**Figure 1: Overlay Map Sal/47 (Development Constraints)**



**NOTE:** Airport Building Heights should be read in conjunction with concept plan map showing heights for Edinburgh Defence Airfield

**Airport Building Heights**  
Referral to Commonwealth Secretary for Dept. of Transport and Regional Services

- Zone A** All Structures
- Zone C** All Structures Exceeding 15 metres above existing ground level
- Zone D** All Structures Exceeding 45 metres above existing ground level



## Overlay Map Sal/47



## Building Height

It has been asserted by one of the representors that *“the building has too many storeys as per the Playford development plan.”*

Firstly, the site is located within the area of the City of Salisbury. The Playford Council Development Plan does not, therefore, have a role to play in the assessment of the proposed development.

Secondly, Principle 27 of the Urban Core Zone permits the maximum building height that has been prescribed for this site to be increased from 10 storeys and up to 40.5 metres to 12 storeys and up to 48.49 metres because:

- all of the adjacent dwellings are also located in the Core Area;
- the proposed building will come equipped with a basement car park and the access point associated with the basement car park will be located as close as practicable to the north-western (rear) boundary of the site;
- the ground floor level will be used exclusively for commercial/non-residential purposes; and
- all of the student accommodation rooms will be located above the ground floor level.

To this end, we remain of the view that the proposed building will, when measured from the top of the tallest parapet to the finished ground level directly below, sit:

- 1.5 metres below the maximum height that has been prescribed for this site (that is if the State Commission Assessment Panel (‘the SCAP’) elects not to apply the incentives);
- 9.49 metres below the maximum height that has been prescribed for this site (that is if the SCAP elects to apply the incentives); and
- 6.0 metres below the ‘Airport Building Height’ that has been prescribed for ‘Zone D’.

Thirdly, the Government Architect has advised, by letter dated May 7, 2020, that *“in principle, I support the proposed building height as it is consistent with the envisaged character of the area.”*

Finally, the Council has also advised, by letter dated May 22, 2020, that *“the total height of the building is within the overall height limit as expressed in metres in the Development Plan, and [sic] is therefore considered to be appropriate.”*

Notwithstanding the above, it is important to keep in mind the words of Commissioner Hamnett when assessing this particular aspect of the proposed development. To be exact, Commissioner Hamnett stated, as part of his judgement in relation to the matter of *Hackett v City of Mitcham (No1) [2012] SAERDC 48 (August 14, 2012)*, that:

*“Where a proposed development is of a type recognised by the objective of the zone as falling within one of the primary purposes of the zone, the fact that its approval will constitute a first intrusion of that type of development into the locality does not, of itself, constitute a planning justification for refusal.”*

## Overshadowing

It has been asserted by several of the representors that the proposed building will cast an unreasonable amount of shadow across the adjacent dwellings.

Principle 13 of the Urban Core Zone provides guidance with respect to ‘overshadowing’. It advises that:

- 13** **Except in Core Areas, development of three or more storeys in height should ensure that:**
- (a) **north-facing windows to habitable rooms of existing dwelling(s) on the same allotment, and on adjacent allotments, receive at least 3 hours of direct sunlight over a portion of their surface between 9:00 am and 3:00 pm on 21 June;**
  - (b) **ground level open space of existing buildings receives direct sunlight for a minimum of 2 hours between 9:00 am and 3:00 pm on 21 June to at least the smaller of the following:**
    - (i) **half of the existing ground level open space;**
    - (ii) **35 square metres of the existing ground level open space (with at least one of the area’s dimensions measuring 2.5 metres).**

(emphasis added)

Principle 13 of the Urban Core Zone does not apply to the proposed development, as all of the adjacent dwellings are located in the Core Area as well. Figure 2 below attests to this.

**Figure 2: The Core Area**



With that said, the shadow studies in your possession clearly demonstrate that:

- the proposed building will not, between the hours of 9:00 am and 3:00 pm on the winter solstice, cast a single shadow across the habitable room windows or private open spaces associated with the neighbouring dwellings to the north-west of the site;
- the proposed building will not, between the hours of 11:00 am and 3:00 pm on the winter solstice, cast a single shadow across the dwellings at 20 – 24 Metro Parade, Mawson Lakes;
- the proposed building will not, between the hours of 3:00 pm and 5:00 pm on the winter solstice, cast a single shadow across the dwellings at 16 – 18 Metro Parade, Mawson Lakes; and

- the proposed building will not, between the hours of 9:00 am and 3:00 pm on the summer solstice, cast a single shadow across the dwellings at 16 – 18 or 20 – 24 Metro Parade, Mawson Lakes.

## Loss of Views

A couple of the representors have asserted that the proposed building will restrict their views of the Adelaide Hills.

Firstly, the views to which these representors refer are borrowed across land that remains in private ownership, and is entitled to be developed in accordance with the objectives and desired character of the Urban Core Zone.

Secondly, the proposed building will not unreasonably restrict these views, as it has been appropriately sited and designed not to exceed the maximum height that has been prescribed for the site upon which it is to be erected.

## External Appearance

One of the representors has asserted that proposed building will be an 'eyesore'.

We respectfully disagree with this assertion because:

- the proposed building's architectural expression is presently characterised by a series of solid wall sections that are clad in contrasting fibre cement panels;
- the external appearance of these panels has been enhanced through the use of glazed vertical recesses and horizontal rebates or bands if you like, the latter of which serve to accentuate the width of the proposed building whilst reducing its apparent height;
- the glazed reveals at the end of the corridors on Levels 1 through to 11 also serve to temper the mass of the proposed building by breaking it up into discrete elements and casting shadows across various surfaces; and
- the use of brick and glass at the ground floor level will give the proposed building a strong but balanced base, and introduce a 'fine grain' element to both streetscapes.

As an aside, we wish to reiterate that the Applicant has voluntarily embarked upon, and actively participated in, the design review process to ensure that the form, scale and architectural expression of the proposed building is befitting of the landmark site upon which it is to be erected.

The proposed building has clearly benefited from this process and the various changes that have been made along the way will no doubt serve to deliver a high-quality outcome that is entirely consistent with the desired character of this mixed-use locality.

## Access and Traffic

One of the representors is concerned that the private contractor's waste collection vehicle will restrict access to the at-grade car park and, as a consequence, result in vehicles queuing along Metro Parade.

This representor need not be concerned, as the waste collection process will take place either before the food court opens or after the food court closes.

It has been asserted by a few of the representors that the surrounding road network will not be able to cope with the traffic that is likely to be generated by the proposed development.

Firstly, none of these representors have furnished any evidence or technical advice to substantiate this claim.

Secondly, Mr Thomas Wilson of Cirqa, a qualified, experienced and independent traffic engineer, was instructed by the Applicant to determine whether or not this development is likely to have an adverse effect on the operation of the surrounding road network. Mr Wilson has since determined that:

- “*vehicle movements associated with the proposed development will be distributed to the broader road network via Capital Street, Metro Parade and Central Link*”; and
- “*such movements will be readily accommodated on the broader road network and will have minimal impact upon the operation of associated intersections*”.

Page 15 of Cirqa’s Traffic and Parking Report clearly attests to this.

## **Parking**

It has been asserted by several representors that there will not be enough on-site car parking.

Firstly, none of these representors have furnished any evidence or technical advice to substantiate this claim.

Secondly, Mr Wilson was also instructed by the Applicant to determine, prior to lodgement, whether or not there will be enough on-site car parking now and into the future.

Whilst Mr Wilson’s findings were appended to our planning report, we take this opportunity to reiterate that:

- the ‘commercial’ or ‘non-residential’ component generates a theoretical demand for 14 spaces;
- the theoretical demand generated by the ‘commercial’ or ‘non-residential’ component will be catered for by the at-grade car park, as it has been designed to accommodate 14 spaces;
- the ‘student accommodation’ component does not, in our opinion, generate a theoretical demand for on-site car parking, as the rooms within the proposed building are not dwellings, as they are not self-contained;
- if one were to incorrectly apply a rate of 0.75 spaces per room, then the ‘student accommodation’ component would generate a theoretical demand for 171 spaces;
- a rate of 0.75 spaces per room is considered by Mr Wilson “*to be highly conservative and its application to the subject proposal would result in a significant overprovision of parking spaces*”;
- Principle 29 of the Urban Core Zone advises, in part, that “*a lesser parking rate may be applied (for student accommodation) where justified based on local circumstances*”;

- a lesser parking rate can and should be applied according to Mr Wilson because:
  - » “the subject site is located within 400 m [sic] walking distance of the Mawson Lakes Interchange and 200 m [sic] from Main Street (from which locations, high-frequency public transport services operate)”;
  - » “the subject site is located within 300 m [sic] walking distance from the University of South Australia’s Mawson Lakes Campus”;
  - » “the site has extensive bicycle parking provisions located throughout (well above that required by Council’s Development Plan)”;
  - » “footpaths (accommodating both pedestrian and bicycle movements) are provided on both sides of Metro Parade and Capital Street immediately adjacent the site, providing connectivity to the boarder footpath network”;
  - » “the proposed development is considered to be appropriate for supporting shared parking arrangements”; and
  - » “on-street parking is provided on Metro Parade, Capital Street and numerous other roads within close vicinity to the subject site”;
- based on relevant literature and empirical data from similar facilities, such as the Applicant’s adjacent facility which features 212 beds but no on-site car parking spaces for its students, the ‘student accommodation’ component generates a theoretical demand for up to, but not exceeding, 46 spaces; and
- the basement has been designed to accommodate 73 spaces, not 72 spaces as has been suggested by the Council, which means that there will be a theoretical surplus of 27 spaces for the ‘student accommodation’ component.

In the extremely unlikely event that the student accommodation facility fails and the proposed building has to be used to provide serviced accommodation for tourists, it is also clear from Mr Wilson’s findings that there will continue to be a theoretical surplus of spaces within the basement.

The proposed building has, therefore, been future-proofed, as sought by Principle 20 of the ‘Medium and High Rise Development’ Module.

## Waste Enclosures

It has been asserted by one of the representors that the waste enclosures will be highly visible from the public realm.

It is clear from Drawings A2.01[A2] and A3.02[A1] that neither of the waste enclosures will be oriented to, or visible from, Capital Street or Metro Parade.

## Hard Rubbish

One of the representors has queried where hard waste will be stored prior to collection.

The waste enclosure on the south-eastern side of the aisle associated with the at-grade car park has been designed to accommodate hard rubbish from time to time.

## Wind

It has been asserted by one of the representors that the wind conditions post-construction “*will adversely impact on the many pedestrian users of Metro Parade.*”

Firstly, this representor has not furnished any evidence of technical advice to substantiate their claim.

Secondly, the wind impact assessment carried out by Vipac Engineers and Scientists Pty Ltd concludes that “*the proposal would not generate significant adverse wind conditions in the adjacent footpaths*” and that “*the building entrances are expected to be within the recommended standing comfort criterion.*”

## Domestic Noise

A few of the representors are concerned that the students will generate an appreciable amount of noise, particularly during the so-called ‘party season’.

Firstly, the student accommodation facility will be supervised at all times, as the prospective operator takes their responsibility to each and every student seriously, and intends to create a tranquil environment in order to maximise concentration levels.

Secondly, the Applicant has, to the best of our knowledge, owned and operated the student accommodation facility on the north-eastern (opposite) side of Capital Street for some time without receiving any noise-related complaints.

Thirdly, domestic noise is a matter for the South Australian Police to deal with.

## Building Subsidence

One of the representors is concerned that the proposed building will eventually subside and affect the structural integrity of their dwelling.

Whilst this is not a relevant planning concern, it is important to note that the proposed building’s footing system will be designed by a structural engineer and must comply with the relevant requirements of the National Construction Code in order for building rules consent and development approval to be issued.

## Funding

One of the representors is concerned that the Applicant will not be able to finance the proposed development.

Whilst this is not a relevant planning concern, it is important to note that the Applicant has already secured an operator (Capital Student Stays), as well as access to the funding that is required to complete the proposed development.

Put simply, this is a ‘shovel ready’ project that is of economic significance to the State.



## **Summary**

We remain of the view, despite the concerns that have been raised by the representors, that the proposed development is deserving of development plan consent.

In the event that this matter must be presented to, and determined by, the SCAP, could you please confirm the particulars of the forthcoming hearing so that we may be on hand to represent the Applicant.

If, in the interim, you have any queries or concerns regarding the proposed development, please do not hesitate to contact the undersigned.

Yours sincerely



**Fabian Barone**  
Director

**Ref: 20005|TAW**

12 June 2020

Mr Fabian Barone  
Future Urban Pty Ltd  
GPO Box 2403  
ADELAIDE SA 5001

Dear Fabian,

**STUDENT ACCOMMODATION  
13-17 METRO PARADE, MAWSON LAKES  
DA 361/605/2020**

I refer to the proposed Student Accommodation at 13-17 Metro Parade, Mawson Lakes (Development Application No. 361/605/2020). As requested, I have reviewed the comments received from the City of Salisbury relating to vehicle access matters.

A traffic and parking report was previously prepared by CIRQA in relation to the development application (dated 2 April 2020). The previous report should be read in conjunction with the following responses.

*"The [CIRQA] report does not ... appear to take account of the location of the proposed access [on Capital Street] in reference to the existing access serving the Capital Street shopping centre and apartments, located directly opposite the site on the northern side of Capital Street. The suitability of this access in context of its location should be further assessed by Cirqa."*

As noted in CIRQA's report, the proposed development comprises an egress only and a two-way access on Capital Street. The egress only will accommodate egress movements associated with 14 at-grade parking spaces (used by customers associated with the non-residential component) while the two-way access will accommodate ingress and egress movements associated with 72 parking spaces (used by students associated with the student accommodation component).

The proposed Capital Street subject site access has been located such that sight distance to the nearby bend in Capital Street is maximised (Stopping Sight Distance (SSD) in excess of 45 m as per the requirements of the Australian/New Zealand Standard for "Parking Facilities – Part 1: Off-street car parking" (AS/NZS 2890.1:2004)

for a 50 km/h frontage speed). Should either of the proposed egress locations be located closer to the Capital Street bend, the SSD requirements of AS/NZS 2890.1:2004 would not be satisfied.

It is noted that the subject site's proposed Capital Street access points are located within close proximity to the Capital Street Shopping Centre's Capital Street access. However, the 'Prohibited Locations of Access Driveways' (Figure 3.1 of AS/NZS 2890.1:2004) does not apply to an access location relative to another access (only an access relative to an intersection). On this basis, the two proposed Capital Street access points are compliant with AS/NZS 2890.1:2004.

With regard to vehicle interaction between the subject and Capital Street access points, appropriate sightlines will be achieved between drivers exiting from both sites. The Australian Road Rules will apply to all users and, accordingly, define priorities for turning movements in this location (i.e. a driver turning left from one access will have priority over a driver turning right from the opposite access). Accordingly, it is considered that the location of the proposed access in relation to the Capital Street Shopping Centre access is appropriate.

Furthermore, CIRQA's report identifies that peak hour traffic volumes associated with the subject development will be low (in the order of 88 pm peak hour movements). Using information obtained from Capital Street Shopping Centre's Traffic Impact Assessment report (prepared by GTA consultants), a SIDRA Intersection analysis has been undertaken to ensure that the two access points can operate satisfactorily within close proximity to one another.

It should be reiterated that the analysis is conservative as it has been assumed that all traffic volumes associated with the proposed development will use a single access point. In reality, vehicle movements will be distributed between the site's three access points. Nonetheless, for the purposes of this assessment, a single access has been assumed. Key output from the SIDRA analysis is illustrated in Table 1.

The SIDRA analysis identified that the proposed access location will not detrimentally impact upon the operation of Capital Street or the Capital Street Shopping Centre access. Specifically, all turning movements will retain a Level of Service 'A', with 95<sup>th</sup> percentile queue lengths less than 1.8 m (less than one vehicle).

Accordingly, on the basis of the above and the SIDRA analysis, the proposed location of the subject site access points on Capital Street (in proximity to the Capital Street Shopping Centre access) is compliant with the relevant Australian Standards and is considered to be appropriate.

**Table 1 – SIDRA output of the subject site access, Capital Street and Capital St Shopping Centre access**

Turning Movement	Degree of Saturation (DoS)	Average Delay (s)	95 <sup>th</sup> %ile Queue (m)	Level of Service (LoS)
Capital St Shopping Centre (N) - Left turn	0.371	4.8	1.8	A
Capital St Shopping Centre (N) - Right turn	0.371	8.7	1.8	A
Capital Street (E) - Left turn	0.234	4.9	1.3	A
Capital Street (E) - Through	0.234	0.3	1.3	A
Capital Street (E) - Right turn	0.234	4.9	1.3	A
Subject Site (S) - Left turn	0.065	4.7	0.2	A
Subject Site (S) - Right turn	0.065	10.2	0.2	A
Capital Street (W) - Left turn	0.041	4.7	0.1	A
Capital Street (W) - Through	0.041	0.0	0.1	A
Capital Street (W) - Right turn	0.041	4.9	0.1	A

*“Locating the one-way ground floor access on the Metro Parade bend and close to the Garden Terrace intersection is not a desired outcome, as traffic waiting to turn into the site and from associated queuing may block the intersection, however, it is recognised that this access is limited to entry only and the site configuration is such that alternate locations may not be available to service the site.”*

The proposed access on Metro Parade is restricted to left-turn and right-turn ingress movements only (no egress movements are permitted). Furthermore, the access is positioned approximately 16.0 m from the Metro Parade/Garden Terrace intersection (centre to centre).

Based upon traffic generation rates adopted for the site’s non-residential component, it is forecast that in the order of 33 vehicles would use the ingress during the peak hour. Taking into consideration traffic volumes on Metro Parade (obtained from GTA Consultant’s Capital Shopping Centre report) and assuming that all vehicles entering the subject site do so via a right-turn from Metro Parade, SIDRA analyses indicate that the 95<sup>th</sup> percentile queue would be 2.0 m (less than one vehicle). Such a queue would not block or restrict movements at the Metro Parade/Garden Terrace intersection.

*"It is unclear whether the proposed entrance will meet the sight distance requirements to a commercial access point and it is recommended that further clarification be sought regarding the suitability of this entrance and if there are further design treatments available to ameliorate conflict."*

The Australian Standard for "Parking Facilities – Part 2: Off-street commercial vehicle facilities" (AS 2890.2:2018) does not identify sight distance requirements for ingress only access points (the requirements of the Standard apply only to egress movements). As noted above, the proposed Metro Parade access is an ingress only.

Furthermore, should a vehicle be stored on Metro Parade waiting to turn into the site, it is considered that adequate sight distance would be achieved along Metro Parade in line with those provided as part of the road's design (noting that numerous indented parking spaces, requiring a driver to reverse parallel park, are provided within the vicinity of the Metro Parade bend). Sight distances to stored vehicles will not be restricted by the construction of the building (given the proposed development will not protrude beyond the property boundary). On this basis, it is considered that sight lines will be maintained as per those accepted during the design of Metro Parade.

Please feel free to contact me on (08) 7078 1801 should you require any additional information.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Tom Wilson", written in a cursive style.

**THOMAS WILSON**

Senior Traffic & Transport Engineer | CIRQA Pty Ltd

## Urban Core Zone

Refer to the [Map Reference Tables](#) for a list of the maps that relate to this zone.

### OBJECTIVES

- 1 A mixed use zone accommodating a mix of employment generating land uses and medium to high density residential development in close proximity to a high frequency public transport corridor.
- 2 Development within a mixed use environment that is compatible with surrounding development and which does not unreasonably compromise the amenity of the zone or any adjoining residential zone.
- 3 Smaller dwellings, including innovative housing designs, located close to local services and public transport stops.
- 4 Mixed use development integrated with a high quality public realm that promotes walking, cycling, public transport patronage and positive social interaction.
- 5 A zone that provides a spatial separation, or transitions down, in scale and intensity to adjacent lower density residential zones.
- 6 Development that is compatible with existing and forecast noise nuisance from aircraft operations at Parafield Airport.
- 7 Development that contributes to the desired character of the zone.

### DESIRED CHARACTER

This zone will function primarily as a District Centre that supports housing at medium and high densities and a range of dwelling types which are conveniently located in proximity to high frequency public transport services, recreation, commercial, shop, office and other mixed use activities. Development within this zone will result in significant employment generating activity closely aligned to nearby public transport infrastructure and services.

Medium and high density housing, primarily in the form of row dwellings, residential flat buildings and mixed use buildings, will be developed in the zone. Overall, the zone is intended to achieve an average net residential site density of 150 dwellings per hectare.

Due to the scale and intensity of development, the zone will focus around a Core Area with a Transition Area adjoining neighbouring zones.

The Core Area will provide the greatest intensity of land use and activity in the zone with a mix of residential, commercial and employment generating activities integrated with adjacent public transit stop(s). Located within the Core Area is the **Main Shopping Policy Area 26**, which will provide the primary focus for convenience shopping, including supermarkets, and cultural and community services in the zone.

Development adjacent to a fixed transit stop will be mixed both vertically and horizontally, with non-residential uses encouraged on the ground floor to create visual interest and invite personal interaction on street frontages. The exterior storage or display of goods will not compromise pedestrian movement.

Student and aged accommodation, serviced apartments and affordable housing are also strongly encouraged in the Core Area to assist in delivering an overall mix of residential activity in this area.



The Transition Area will provide a buffer between the Core Area and adjacent residential areas / zones with development taking the form of high quality medium density housing and, subject to Airport building height restrictions, the combination of four storey townhouses/terraces/mews and residential flat buildings will provide a range of housing for a diverse community. There will be some provision for mixed use buildings, where it does not negatively impact on the predominant residential character of the area.

Development in the zone will achieve high quality urban design. Buildings will contribute to the provision of a coherent public realm by shaping the street space and, in particular, the physical and functional character of development fronting the key arterial road or public transport corridor.

As development intensifies, overlooking, overshadowing and noise impacts will be moderated through good design and noise attenuation techniques. Impacts on adjoining zones will also be addressed through appropriate building envelopes, transition of building heights, design and location of windows and balconies, and use of landscaping. Buildings will also be designed to maximise solar access within the development site. Installation of solar rooftops, green walls and other design initiatives is to be considered.

Development will contribute positively to the quality of the public realm by articulating buildings with canopies, modelled façades and balconies that make use of light and shade, and by providing architectural detail. Solid material will be balanced with glazed areas, and plant and service equipment will be enclosed and out of view from the street and neighbouring sites.

A proportion of the public open space will be sited away from the transit corridor to ensure that residents and workers have a quiet tranquil outdoor place to relax in.

Where appropriate, the range of setbacks provided in the zone to accommodate development fronting a primary and/or secondary road frontage will be critical in softening the continuous edge of new built form and provide a higher amenity streetscape and pedestrian environment which is shaded by street trees and other forms of mature vegetation.

Where appropriate, landscaping features including public art will be used in communal open space or public promenades to punctuate and identify spaces that may assist in establishing a sense of place within the zone for the enjoyment and benefit of users.

Wide footpaths with associated landscaping will be provided throughout the zone to encourage the development of active land uses at street level along key thoroughfares. Landscaping features, including public art, will be used to create high amenity spaces that establish a sense of place within the zone and promote community cohesion.

Cycling routes and pedestrian pathways, and high amenity public open space will create an attractive living environment. Public open space will include a range of forms and sizes including small pocket parks and formal plazas. Spaces will be designed as safe and attractive places for a range of community activities as well as water management. A proportion of the public open space will be sited away from the transit corridor to ensure that residents and workers have a quiet tranquil outdoor place to relax in.

On-site parking areas will be consolidated, shared and, where possible, not visible from the street or public spaces. Provision of bicycle facilities is to be encouraged, including at any future multi-deck car park at the Interchange.

Development within the policy area will include Water Sensitive Urban Design systems that maximise the harvest, treatment, storage and reuse of storm water and will be integrated throughout the area at the neighbourhood, street, site and building level. Harvested storm water will be used to improve the aesthetic and functional value of open spaces throughout the policy area, including public access ways and greenways. Properties within the policy area will be connected to the purple pipe water recycling system to maximise the capture and re-use of stormwater.

The Mawson Interchange provides integrated bus and passenger train interconnection, a drop off area for commuters and Park 'n' Ride facilities with car parking. As development in the area continues to expand and the population increases, more and more people are expected to make use of the Interchange. Development in the immediate vicinity of the Interchange will be designed and sited to cater for the increased patronage and while development overall will enhance the usage of the Interchange. The ground level car parking at the Interchange should become a future multi-deck car park with commercial and retail ground floor tenancies to improve the pedestrian linkages and activation.

## PRINCIPLES OF DEVELOPMENT CONTROL

### Land Use

- 1 The following types of development, or combination thereof, are envisaged in the zone:
  - affordable housing
  - aged persons accommodation
  - art gallery
  - community centre
  - communication dish
  - consulting room
  - dwelling
  - dwelling and office
  - educational establishment
  - emergency services
  - entertainment venue
  - hall
  - hospital
  - library
  - licensed premises
  - nursing home
  - office
  - office and dwelling
  - parking facility
  - petrol filling station
  - pre-school
  - public transport Interchange
  - recreation area
  - residential flat building
  - retirement village
  - shop or group of shops
  - supported accommodation
  - swimming pool
  - telecommunications facility
  - theatre
  - undercroft car parking.
  
- 2 The following additional types of development, or combination thereof, are envisaged within the Core Area of the zone, identified on [Concept Plan Map Sal/8 – Mawson Lakes Urban Core Zone](#):
  - advertisement
  - discount department store (located within the **Main Shopping Policy Area 26**)
  - hotel
  - indoor recreation centre
  - place of worship
  - tourist accommodation.
  - supermarket (located within the **Main Shopping Policy Area 26**).
  
- 3 Development listed as non-complying is generally inappropriate.
  
- 4 Core Areas, Transition Areas and other identified features should be developed in accordance with the relevant [Concept Plan Map Sal/8 – Mawson Lakes Urban Core Zone](#).
  
- 5 Core Areas should be developed to include a range of land uses that are high pedestrian generators, directly promote public transport use and provide opportunities for multi-purpose trips.
  
- 6 Core Areas should incorporate integrated public open spaces, sport and recreation facilities, and community areas that act as social hubs for communal activity.

- 7 Except in Core Areas where a higher intensity of development is envisaged, non-residential development should comprise uses that:
- (a) are of local or neighbourhood scale
  - (b) encourage walking to local shopping, community services and other activities
  - (c) do not detrimentally impact on the amenity of nearby residents.

### **Form and Character**

- 8 Development should be consistent with the desired character for the zone.
- 9 Residential development (other than residential development in mixed use buildings), should achieve a minimum net residential site density in accordance with the following:

Designated area	Minimum net residential site density
Core Area	150 dwellings per hectare net
Transition Area	70 dwellings per hectare net

- 10 Residential development in a mixed use building should achieve a minimum net residential site density of 60 dwellings per hectare.
- 11 In Transition Areas, development should provide a built form that provides the transition between an intense core of development and neighbouring lower intensity development.

### **Design and Appearance**

- 12 In Core Areas:
- (a) the ground and first floors of buildings should be built to dimensions including a minimum ceiling height of 4.5 metres to allow for adaptation to a range of land uses including shops, office and residential without the need for significant change to the building
  - (b) a minimum of 50 per cent of the ground floor primary frontage of buildings should be visually permeable, transparent or clear glazed to promote active street frontages and maximise passive surveillance.
- 13 Except in Core Areas, development of three or more storeys in height should ensure that:
- (a) north-facing windows to habitable rooms of existing dwelling(s) on the same allotment, and on adjacent allotments, receive at least 3 hours of direct sunlight over a portion of their surface between 9.00 am and 3.00 pm on 21 June
  - (b) ground level open space of existing buildings receives direct sunlight for a minimum of 2 hours between 9.00 am and 3.00 pm on 21 June to at least the smaller of the following:
    - (i) half of the existing ground level open space
    - (ii) 35 square metres of the existing ground level open space (with at least one of the area's dimensions measuring 2.5 metres).
- 14 Buildings should address public open space and defined pedestrian and cycle routes.
- 15 Masonry fences should be no more than 1.2 metres in height to maintain sight lines between buildings and the street and to improve safety through passive surveillance.
- 16 Buildings should predominantly provide vehicle access via a side street or rear lane access way.

- 17 Side streets and rear lane access ways should be designed to:
- (a) provide space between buildings that reduces building mass and creates a more interesting public realm
  - (b) achieve active frontages at a lower intensity than the primary street frontage.

### Ancillary Buildings and Services

- 18 Outbuildings and other ancillary buildings should be sited and designed to complement the external appearance of the main building and maintain or enhances the visual attractiveness of the locality.
- 19 All services should be located underground in such a way as to minimize their visual intrusion and any adverse effect on the desired natural character of the zone.
- 20 Microwave dishes, antennae, aerials and the like should be located to minimise their visual impact from public roads and public spaces.
- 21 Communication towers should be incorporated into the built form of the site or located at the rear of sites and away from public roads and public spaces where it can be demonstrated that this could not be achieved and be of a complementary form to that building.
- 22 Development within the policy area should only occur where it includes provision for all of the following:
- (a) a connection to the Recycled Water System to allow the water to be used for various uses, including garden watering and toilet flushing
  - (b) a common service trench capable of accommodating all of the infrastructure services required, including electricity, gas and telecommunications.

### Building Envelope

#### Building Height

- 23 Except where airport building height restrictions prevail, building heights (excluding any rooftop locate mechanical plant or equipment) should be consistent with the following parameters:

Designated area	Minimum building height	Maximum building height
Core Area	4 storeys	10 storeys and up to 40.5 metres
Transition Area	No minimum	4 storeys and up to 16.5 metres

#### Setbacks from the Primary Road Frontage

- 24 Buildings (excluding verandas, porticos and the like) should be set back from the primary road frontage in accordance with the following parameters:

Designated area	Minimum setback from the primary road frontage
Core Area	No minimum
Transition Area	2 metres or as defined on the relevant Concept Plan

#### Setbacks from side boundaries

- 25 Buildings (excluding verandas, porticos and the like) should be set back from side boundaries in accordance with the following parameters:

Designated area	Minimum setback from side boundaries
Core Area	No minimum
Transition Area	0.9 metres

### Other Setbacks

- 26 Buildings (excluding verandas, porticos and the like) should be set back in accordance with the following parameters:

Setback parameter	Value
Minimum setback from secondary road frontage	0.9 metres
Minimum setback from a rear access way	No minimum where the access way is 6.5 metres or more OR Where the access way is less than 6.5 metres in width, the distance equal to the additional width required to make the access way 6.5 metres or more, to provide adequate manoeuvrability for vehicles
Minimum setback from the rear allotment boundary	4 metres where the subject land directly abuts an allotment of a different zone  3 metres in all other cases, except where development abuts the wall of an existing or simultaneously constructed building on the adjoining land

### Incentives

- 27 Where a minimum of 3 hours sunlight access on 21 June to habitable rooms and open space of dwellings in adjoining zones can be maintained, the following incentives apply to development:

Form of development	Additional building height above maximum allowed height in the zone	Car parking Reduction (rounded to the nearest whole number)
Development which includes more than 15 per cent of dwellings as affordable housing	1 storey	30 per cent
Site of development located within 200 metres of a fixed public transport stop		30 per cent
The development includes undercroft parking with access from a road located to the side or rear of the site	1 storey	10 per cent
A building including non-residential development on the ground floor (or first two floors) with residential development on the floors above	1 storey	10 per cent except on land shown on <i>Overlay Map(s) - Strategic Transport Routes</i>
A building including a child care facility	1 storey	
A building including a rooftop garden that occupies a minimum 25 per cent of the building footprint area	1 storey	

Form of development	Additional building height above maximum allowed height in the zone	Car parking Reduction (rounded to the nearest whole number)
Sympathetic redevelopment of a local or State heritage place that retains the item and its appearance to the street		30 per cent
Maximum accumulated allowance	For buildings 5 storeys or less - 1 storey (and less than 4) metres additional building height.  For buildings of 6 storeys or more - 2 storeys (and less than 8 metres) additional building height	30 per cent

### Off Street Vehicle Parking

28 Except where incentives apply, vehicle parking should be provided at the following rates:

Form of development	Minimum number of parking spaces
Residential development	0.75 per dwelling
shops	3 per 100 square metres of gross leasable floor area
Tourist accommodation	1 space for every 4 bedrooms up to 100 bedrooms plus 1 additional parking space for every 5 bedrooms over 100 bedrooms
All other non-residential development	3 per 100 square metres of gross leasable floor area at ground floor level plus 1.5 additional parking spaces for every 100 square metres of gross leasable floor area above ground floor level

29 A lesser parking rate may be applied where justified based on local circumstances, for example where:

- (a) the proposed development is adjacent to a designated pedestrian and/or cycling path
- (b) the proposed development is in convenient walking distance to readily accessible and frequent public transport
- (c) convenient on-street car parking is readily available
- (d) the proposed development is on or adjacent to the site of a heritage place which hinders the provision of on-site parking
- (e) there is the opportunity to exploit shared car parking areas between uses based upon compatible hours of peak operation
- (f) suitable arrangements are made for any parking shortfall to be met elsewhere or by other means
- (g) for studio apartments, student accommodation, affordable housing, retirement villages or aged persons' accommodation.

30 Car parking should be provided in the form of basement level parking, undercroft parking or multi-level parking rather than 'at grade'.



31 Multi-deck car parks should take the appearance of a commercial building.

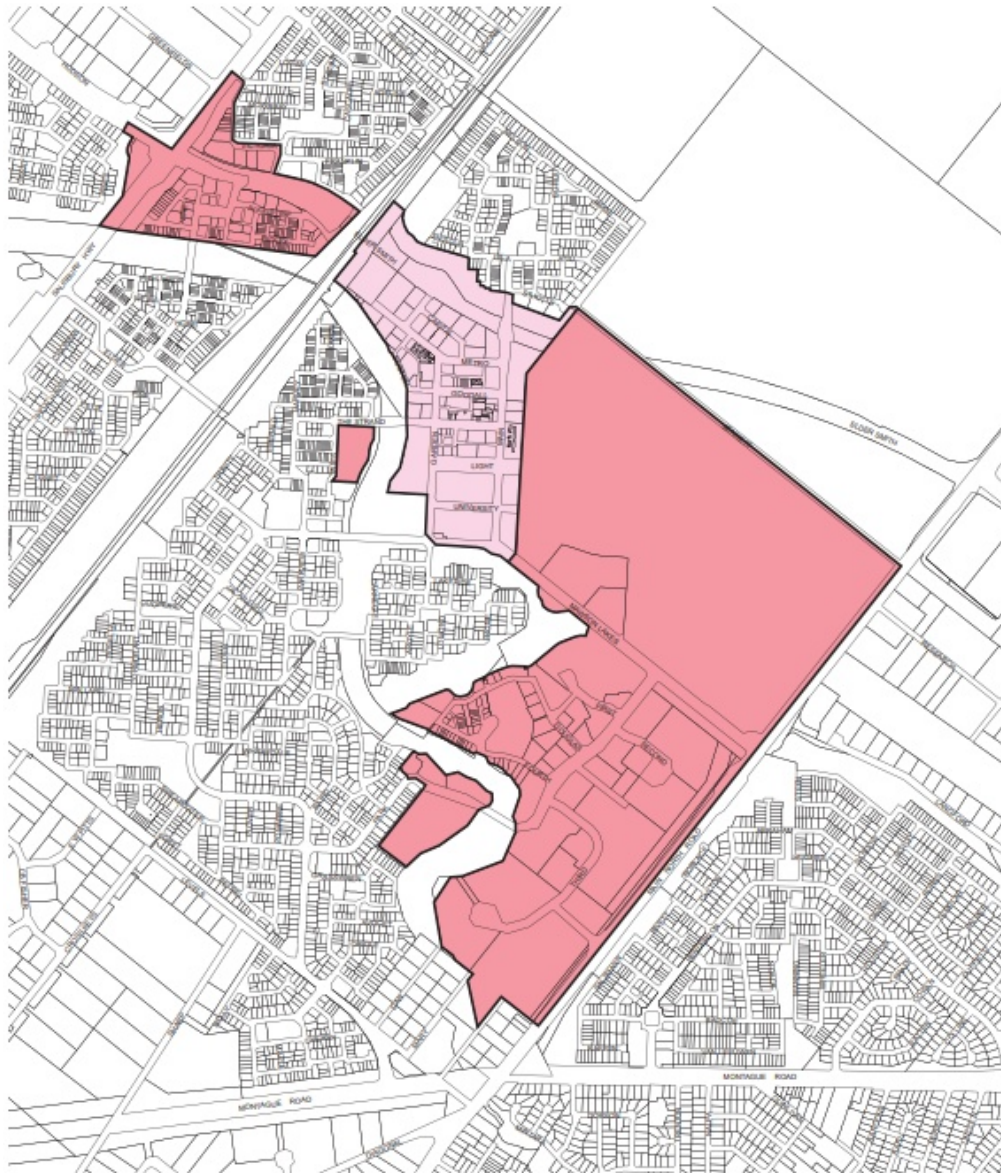
**Land Division**

32 A traditional street grid pattern should be reinforced in any comprehensive development of areas for mixed use activity to maintain clear sightlines and ensure maximum connectivity.

33 Wherever practicable, land division and site amalgamation should:

(a) create allotments that vary in size and are suitable for a variety of residential and commercial uses

(b) improve the level of integration associated with the design and layout of buildings, vehicle parking areas, access points and landscaping treatments.



- Core Area
- Transition Area

Scale 1:15000      0 metres      400      800



Area Boundary

# Concept Plan Map Sal/8

## MAWSON LAKES URBAN CORE ZONE

CITY OF SALISBURY

Consolidated - 4 April 2019

# Crime Prevention

## OBJECTIVES

- 1 A safe, secure, crime resistant environment where land uses are integrated and designed to facilitate community surveillance.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should be designed to maximise surveillance of public spaces through the incorporation of clear lines of sight, appropriate lighting and the use of visible permeable barriers wherever practicable.
- 2 Buildings should be designed to overlook public and communal streets and public open space to allow casual surveillance.
- 3 Development should provide a robust environment that is resistant to vandalism and graffiti.
- 4 Development should provide lighting in frequently used public spaces including those:
  - (a) along dedicated cyclist and pedestrian pathways, laneways and access routes
  - (b) around public facilities such as toilets, telephones, bus stops, seating, litter bins, automatic teller machines, taxi ranks and car parks.
- 5 Development, including car park facilities should incorporate signage and lighting that indicate the entrances and pathways to, from and within sites.
- 6 Landscaping should be used to assist in discouraging crime by:
  - (a) screen planting areas susceptible to vandalism
  - (b) planting trees or ground covers, rather than shrubs, alongside footpaths
  - (c) planting vegetation other than ground covers a minimum distance of two metres from footpaths to reduce concealment opportunities.
- 7 Site planning, buildings, fences, landscaping and other features should clearly differentiate public, communal and private areas.
- 8 Buildings should be designed to minimise and discourage access between roofs, balconies and windows of adjoining dwellings.
- 9 Public toilets should be located, sited and designed:
  - (a) to promote the visibility of people entering and exiting the facility (eg by avoiding recessed entrances and dense shrubbery that obstructs passive surveillance)
  - (b) near public and community transport links and pedestrian and cyclist networks to maximise visibility.
- 10 Development should avoid pedestrian entrapment spots and movement predictors (eg routes or paths that are predictable or unchangeable and offer no choice to pedestrians).

- 11 Development should be designed to maximise surveillance of open space, pedestrian routes, centres and residential areas by:
- (a) orienting the frontages and entrances of buildings towards the public street
  - (b) avoiding screens, high walls, carports and landscaping that obscure direct views to public areas
  - (c) placing the entrances of buildings opposite each other across a street, or group entrances of multiple dwelling developments onto a commonly visible area to provide maximum mutual surveillance
  - (d) arranging living areas, windows, access ways and balconies to overlook open space and recreation areas and provide observation points to all areas of a site, particularly entrances and car parks.

# Design and Appearance

## OBJECTIVES

- 1 Development of a high architectural standard that responds to and reinforces positive aspects of the local environment and built form.
- 2 Roads, open spaces, buildings and land uses laid out and linked so that they are easy to understand and navigate.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 The design of a building may be of a contemporary nature and exhibit an innovative style provided the overall form is sympathetic to the scale of development in the locality and with the context of its setting with regard to shape, size, materials and colour.
- 2 Buildings should be designed and sited to avoid creating extensive areas of uninterrupted walling facing areas exposed to public view.
- 3 Buildings should be designed to reduce their visual bulk and provide visual interest through design elements such as:
  - (a) articulation
  - (b) colour and detailing
  - (c) small vertical and horizontal components
  - (d) design and placing of windows
  - (e) variations to facades.
- 4 Where a building is sited on or close to a side boundary, the side boundary wall should be sited and limited in length and height to minimise:
  - (a) the visual impact of the building as viewed from adjoining properties
  - (b) overshadowing of adjoining properties and allow adequate sun light to neighbouring buildings.
- 5 Building form should not unreasonably restrict existing views available from neighbouring properties and public spaces.
- 6 Transportable buildings and buildings which are elevated on stumps, posts, piers, columns or the like, should have their suspended footings enclosed around the perimeter of the building with brickwork or timber, and the use of verandas, pergolas and other suitable architectural detailing to give the appearance of a permanent structure.
- 7 The external walls and roofs of buildings should not incorporate highly reflective materials which will result in glare to neighbouring properties or drivers.
- 8 Structures located on the roofs of buildings to house plant and equipment should form an integral part of the building design in relation to external finishes, shaping and colours.
- 9 Building design should emphasise pedestrian entry points to provide perceptible and direct access from public street frontages and vehicle parking areas.

- 10 Development should provide clearly recognisable links to adjoining areas and facilities.
- 11 Buildings, landscaping, paving and signage should have a co-ordinated appearance that maintains and enhances the visual attractiveness of the locality.
- 12 Buildings (other than ancillary buildings or group dwellings) should be designed so that their main façade faces the primary street frontage of the land on which they are situated.
- 13 Where applicable, development should incorporate verandas over footpaths to enhance the quality of the pedestrian environment.
- 14 Development should be designed and sited so that outdoor storage, loading and service areas are screened from public view by an appropriate combination of built form, solid fencing and/or landscaping.
- 15 Outdoor lighting should not result in light spillage on adjacent land.
- 16 Balconies should:
  - (a) be integrated with the overall architectural form and detail of the building
  - (b) be sited to face predominantly north, east or west to provide solar access
  - (c) have a minimum area of 2 square metres.

### **Development Adjacent Heritage Places**

- 17 The design of multi-storey buildings should not detract from the form and materials of adjacent State and local heritage places listed in [Table Sa/4 - State Heritage Places](#).
- 18 Development on land adjacent to a State or local heritage place, as listed in [Table Sa/4 - State Heritage Places](#) should be sited and designed to reinforce the historic character of the place and maintain its visual prominence.

### **Overshadowing**

- 19 The design and location of buildings should enable direct winter sunlight into adjacent dwellings and private open space and minimise the overshadowing of:
  - (a) windows of habitable rooms
  - (b) upper-level private balconies that provide the primary open space area for a dwelling
  - (c) solar collectors (such as solar hot water systems and photovoltaic cells).

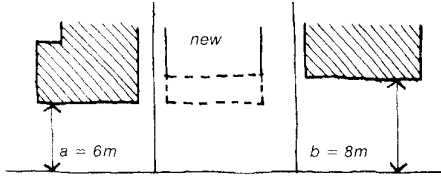
### **Visual Privacy**

- 20 Development should minimise direct overlooking of habitable rooms and private open spaces of dwellings through measures such as:
  - (a) off-setting the location of balconies and windows of habitable rooms with those of other buildings so that views are oblique rather than direct
  - (b) building setbacks from boundaries (including building boundary to boundary where appropriate) that interrupt views or that provide a spatial separation between balconies or windows of habitable rooms
  - (c) screening devices (including fencing, obscure glazing, screens, external ventilation blinds, window hoods and shutters) that are integrated into the building design and have minimal negative effect on residents' or neighbours' amenity.
- 21 Permanently fixed external screening devices should be designed and coloured to complement the associated building's external materials and finishes



**Building Setbacks from Road Boundaries**

- 22 The setback of buildings from public roads should:
- (a) be similar to, or compatible with, setbacks of buildings on adjoining land and other buildings in the locality
  - (b) contribute positively to the streetscape character of the locality
  - (c) not result in or contribute to a detrimental impact upon the function, appearance or character of the locality.
- 23 Except where specified in a particular zone, policy area or precinct, the main face of a building should be set back from the primary road frontage in accordance with the following table:

Setback difference between buildings on adjacent allotments	Setback of new building
Up to 2 metres	The same setback as one of the adjacent buildings, as illustrated below:  <p style="text-align: center;"><i>When <math>b - a \leq 2</math>, setback of new dwelling = a or b</i></p>
Greater than 2 metres	At least the average setback of the adjacent buildings.

- 24 Except where specified in a particular zone, policy area, or precinct, buildings and structures should be set back from road boundaries having regard to the requirements set out in [Table Sa/1 - Building Setbacks from Road Boundaries](#).
- 25 Except where specified in a zone, policy area or precinct, the setback of development from a secondary street frontage should reflect the setbacks of the adjoining buildings and other buildings in the locality.
- 26 Development likely to encroach within a road widening setback under the *Metropolitan Adelaide Road Widening Plan Act 1972* should be set back sufficiently from the boundary required for road widening.

# Energy Efficiency

## OBJECTIVES

- 1 Development designed and sited to conserve energy.
- 2 Development that provides for on-site power generation including photovoltaic cells and wind power.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should provide for efficient solar access to buildings and open space all year around.
- 2 Buildings should be sited and designed:
  - (a) to ensure adequate natural light and winter sunlight is available to the main activity areas of adjacent buildings
  - (b) so that open spaces associated with the main activity areas face north for exposure to winter sun.

## On-site Energy Generation

- 3 Development should facilitate the efficient use of photovoltaic cells and solar hot water systems by:
  - (a) taking into account overshadowing from neighbouring buildings
  - (b) designing roof orientation and pitches to maximise exposure to direct sunlight.
- 4 Public infrastructure and lighting, should be designed to generate and use renewable energy.

# Interface between Land Uses

## OBJECTIVES

- 1 Development located and designed to minimise adverse impact and conflict between land uses.
- 2 Protect community health and amenity from adverse impacts of development.
- 3 Protect desired land uses from the encroachment of incompatible development.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should not detrimentally affect the amenity of the locality or cause unreasonable interference through any of the following:
  - (a) the emission of effluent, odour, smoke, fumes, dust or other airborne pollutants
  - (b) noise
  - (c) vibration
  - (d) electrical interference
  - (e) light spill
  - (f) glare
  - (g) hours of operation
  - (h) traffic impacts.
- 2 Development should be sited and designed to minimise negative impacts on existing and potential future land uses desired in the locality.
- 3 Development adjacent to a **Residential Zone** should be designed to minimise overlooking and overshadowing of adjacent dwellings and private open space.
- 4 Residential development adjacent to non-residential zones and land uses should be located, designed and/or sited to protect residents from potential adverse impacts from non-residential activities.
- 5 Sensitive uses likely to conflict with the continuation of lawfully existing developments and land uses desired for the zone should be designed to minimise negative impacts.
- 6 Non-residential development on land abutting a residential zone should be designed to minimise noise impacts to achieve adequate levels of compatibility between existing and proposed uses.

## Noise Generating Activities

- 7 Development that emits noise (other than music noise) should include noise attenuation measures that achieve the relevant *Environment Protection (Noise) Policy* criteria when assessed at the nearest existing noise sensitive premises.
- 8 Development with the potential to emit significant noise (e.g. industry) should incorporate noise attenuation measures that prevent noise from causing unreasonable interference with the amenity of noise sensitive premises.

- 9 Outdoor areas (such as beer gardens or dining areas) associated with licensed premises should be designed or sited to minimise adverse noise impacts on adjacent existing or future noise sensitive development.
- 10 Development proposing music should include noise attenuation measures that achieve the following desired noise levels:

Noise level assessment location	Desired noise level
Adjacent existing <i>noise sensitive development</i> property boundary	Less than 8 dB above the level of background noise ( $L_{90,15min}$ ) in any octave band of the sound spectrum and Less than 5 dB(A) above the level of background noise ( $LA_{90,15min}$ ) for the overall (sum of all octave bands) A-weighted level
<i>Adjacent land</i> property boundary	Less than 65dB(Lin) at 63Hz and 70dB(Lin) in all other octave bands of the sound spectrum or Less than 8 dB above the level of background noise ( $L_{90,15min}$ ) in any octave band of the sound spectrum and 5 dB(A) overall (sum of all octave bands) A-weighted level

### Air Quality

- 11 Development with the potential to emit harmful or nuisance-generating air pollution should incorporate air pollution control measures to prevent harm to human health or unreasonable interference with the amenity of sensitive uses within the locality.
- 12 Chimneys or exhaust flues associated with commercial development (including cafes, restaurants and fast food outlets) should be designed to ensure they do not cause a nuisance or health concerns to nearby sensitive receivers by:
  - (a) incorporating appropriate treatment technology before exhaust emissions are released to the atmosphere
  - (b) ensuring that the location and design of chimneys or exhaust flues maximises dispersion and takes into account the location of nearby sensitive uses.

### Rural Interface

- 13 The potential for adverse impacts resulting from rural development should be minimised by:
  - (a) not locating horticulture or intensive animal keeping on land adjacent to townships
  - (b) maintaining an adequate separation between horticulture or intensive animal keeping and townships, other sensitive uses and, where desirable, other forms of primary production.
- 14 Traffic movement, spray drift, dust, noise, odour and the use of frost fans and gas guns associated with primary production should not lead to unreasonable impact on adjacent land uses.
- 15 Existing primary production and mineral extraction should not be prejudiced by the inappropriate encroachment of sensitive uses such as urban development.
- 16 Development that is adjacent to land used for primary production (within either the zone or adjacent zones) should include appropriate setbacks and vegetative plantings designed to minimise the potential impacts of chemical spray drift and other impacts associated with primary production.

- 17 New urban development should provide a buffer of at least 40 metres wide (inclusive of any fuel break, emergency vehicle access or road) separating urban and rural activities.
- 18 Development located within 300 metres of facilities for the handling, transportation and storage of bulk commodities should:
  - (a) not prejudice the continued operation of those facilities
  - (b) be located, designed and developed having regard to the potential environmental impact arising from the operation of such facilities and the potential extended hours of operation.

# Landscaping, Fences and Walls

## OBJECTIVES

- 1 The amenity of land and development enhanced with appropriate planting and other landscaping works, using locally indigenous plant species where possible.
- 2 Functional fences and walls that enhance the attractiveness of development.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should incorporate open space and landscaping and minimise hard paved surfaces in order to:
  - (a) complement built form and reduce the visual impact of larger buildings (eg taller and broader plantings against taller and bulkier building components)
  - (b) enhance the appearance of road frontages
  - (c) screen service yards, loading areas and outdoor storage areas
  - (d) minimise maintenance and watering requirements
  - (e) enhance and define outdoor spaces, including car parking areas
  - (f) maximise shade and shelter
  - (g) assist in climate control within and around buildings
  - (h) minimise heat absorption and reflection
  - (i) maintain privacy
  - (j) maximise stormwater re-use
  - (k) complement existing vegetation, including native vegetation
  - (l) contribute to the viability of ecosystems and species
  - (m) promote water and biodiversity conservation.
- 2 Landscaping should:
  - (a) include the planting of locally indigenous species where appropriate
  - (b) be oriented towards the street frontage
  - (c) result in the appropriate clearance from powerlines and other infrastructure being maintained.
- 3 Landscaping should not:
  - (a) unreasonably restrict solar access to adjoining development
  - (b) cause damage to buildings, paths and other landscaping from root invasion, soil disturbance or plant overcrowding



- (c) introduce pest plants
  - (d) increase the risk of bushfire
  - (e) remove opportunities for passive surveillance
  - (f) increase leaf fall in watercourses
  - (g) increase the risk of weed invasion
  - (h) obscure driver sight lines
  - (i) create a hazard for train or tram drivers by obscuring sight lines at crossovers.
- 4 Fences and walls, including retaining walls, should:
- (a) not result in damage to neighbouring trees
  - (b) be compatible with the associated development and with existing predominant, attractive fences and walls in the locality
  - (c) enable some visibility of buildings from and to the street to enhance safety and allow casual surveillance
  - (d) incorporate articulation or other detailing where there is a large expanse of wall facing the street
  - (e) assist in highlighting building entrances
  - (f) be sited and limited in height, to ensure adequate sight lines for motorists and pedestrians especially on corner sites
  - (g) in the case of side and rear boundaries, be of sufficient height to maintain privacy and/or security without adversely affecting the visual amenity or access to sunlight of adjoining land
  - (h) be constructed of non-flammable materials.

# Medium and High Rise Development (3 or More Storeys)

## OBJECTIVES

- 1 Medium and high rise development that provides housing choice and employment opportunities.
- 2 Residential development that provides a high standard of amenity and adaptability for a variety of accommodation and living needs.
- 3 Commercial, office and retail development that is designed to create a strong visual connection to the public realm and that contributes to the vitality of the locality.
- 4 Buildings designed and sited to be energy and water efficient.

## PRINCIPLES OF DEVELOPMENT CONTROL

### Site Configuration

- 1 Sites for multi-storey buildings should be of an appropriate location, size and shape to accommodate a functional and desirable mixed use or residential development.
- 2 Development should:
  - (a) clearly define spaces for pedestrians, utilities, services, parking and storage
  - (b) provide outdoor seating, landscaping and covered walkways where possible
  - (c) establish links with the public realm.
- 3 Mixed use development should incorporate active uses such as shops and cafes at ground level and contribute towards activation of the public realm.

### Design and Appearance

- 4 Buildings should:
  - (a) achieve a human scale at ground level through the use of elements such as canopies, verandas or building projections
  - (b) provide shelter over the footpath where minimal setbacks are desirable
  - (c) ensure walls on the boundary that are visible from public land are articulated and include visually interesting treatments to break up large blank facades.
- 5 The ground floor level of buildings (including the foyer areas of residential buildings) should be designed to enable surveillance from public land to the inside of the building at night.
- 6 Entrances to multi-storey buildings should:
  - (a) be oriented towards the street
  - (b) be clearly identifiable
  - (c) provide shelter, a sense of personal address and transitional space around the entry
  - (d) provide separate access for residential and non-residential land uses.

- 7 Corner sites should incorporate features to highlight and reinforce the corner as a landmark or focal point.

### **Visual Privacy**

- 8 The visual privacy of ground floor dwellings within multi-storey buildings should be protected through the use of design features such as the elevation of ground floors above street level, setbacks from street and the location of verandas, windows porticos or the like.
- 9 Balconies should be designed and sited to:
  - (a) minimise overlooking into the living areas and bedrooms of adjacent development; and
  - (b) promote the informal surveillance of ground level public areas.

### **Building Separation and Outlook**

- 10 Residential buildings (or the residential floors of mixed use buildings) should:
  - (a) have adequate separation between habitable room windows and balconies from other buildings, and other dwellings within the same building, to provide visual and acoustic privacy for dwelling occupants and allow the infiltration of daylight into interior and outdoor spaces
  - (b) ensure living rooms have, at a minimum, a satisfactory short range visual outlook to public or communal space.
- 11 Balcony design should comply with the following requirements:
  - (a) balconies and upper level private open space should be setback a minimum of 3.5 metres from the common boundary of adjoining sites
  - (b) where the site adjoins a laneway or walkway, balconies should not extend beyond the property boundary unless it can be demonstrated that reasonable visual and acoustic privacy is achieved.
- 12 Balconies should achieve a minimum clearance of:
  - (a) 2.5 metres above ground level where located above a footpath
  - (b) 4 metres where located above a roadway.

### **Dwelling Configuration**

- 13 Buildings should provide a variety of dwelling sizes and a range in the number of bedrooms per dwelling.
- 14 Dwellings with 3 or more bedrooms located on the ground floor of medium and high rise buildings should, where possible, have the windows of habitable rooms overlooking internal courtyard space or other public space.

### **Private and Communal Open Space**

- 15 Private open space for each dwelling part of a multi-storey development may be provided in the form of a courtyard, terrace, balcony, deck or roof terrace.

- 16 Private open space should be provided for each dwelling in accordance with the following:

Number of bedrooms	Minimum area of private open space
Studio (no separate bedroom)	No minimum
1 bedroom	8 square metres
2 bedrooms	11 square metres
3 bedrooms	15 square metres

- 17 Ground level or roof top private open space should have a minimum dimension of 3 metres and a minimum area of 24 square metres.
- 18 Areas of open space should be directly accessible from internal living areas and be of a size and dimension suitable for use by the occupants.
- 19 Communal open space should be located to:
- (a) maximise solar access
  - (b) be accessible to all users
  - (c) contribute to visual privacy between apartments; and
  - (d) create a pleasant outlook.

### **Adaptability**

- 20 Multi-storey buildings should include a variety of internal designs that will facilitate adaptive reuse.

### **Natural Ventilation and Sunlight**

- 21 Development should maximise the use of natural sunlight and ventilation in living areas and private open spaces to reduce the need for artificial lighting and mechanical heating and cooling.
- 22 Development should ensure that the maximum distance from a living room, dining room, bedroom or kitchen to a window providing natural light and ventilation is no more than 8 metres.

### **Noise Attenuation**

- 23 Residential development close to noise sources (e.g. major roads, established places of entertainment and centres of activity) should be designed to locate noise sensitive rooms and private open space away from noise sources, or be protected by appropriate shielding techniques.
- 24 Residential development should be configured and designed to minimise the transmission of sound between dwellings and, in particular, to protect bedrooms from possible noise intrusion.

### **Environmental**

- 25 Multi-storey buildings should:
- (a) minimise detrimental micro-climatic and solar access impacts on adjacent land or buildings, including effects of patterns of wind, temperature, daylight, sunlight, glare and shadow
  - (b) incorporate roof designs that enable the provision of rain water tanks (where they are not provided elsewhere), photovoltaic cells and other features that enhance sustainability.

- 26 Green roofs (which can be a substitute for private or communal open space provided they can be accessed by occupants of the building) are encouraged on all new residential, commercial or mixed use buildings.
- 27 Development of 5 or more storeys, or 21 metres or more in building height (excluding the rooftop location of mechanical plant and equipment), should be designed to minimise the risk of wind tunnelling effects on adjacent streets by adopting one or more of the following:
  - (a) a podium at the base of a tall tower and aligned with the street to deflect wind away from the street
  - (b) substantial verandas around a building to deflect downward travelling wind flows over pedestrian areas
  - (c) the placement of buildings and use of setbacks to deflect the wind at ground level.

### **Site Facilities and Storage**

- 28 Dwellings should provide a covered storage area of not less than 8 cubic metres in one or more of the following areas:
  - (a) in the dwelling (but not including a habitable room)
  - (b) in a garage, carport or outbuilding
  - (c) within an on-site communal facility.
- 29 Development should provide a dedicated area for the on-site collection and sorting of recyclable materials and refuse.
- 30 A separate waste storage area should be provided for commercial/retail and residential uses.
- 31 Development with a gross floor area of 2000 square metres or more should provide for the communal storage and management of waste.
- 32 Loading facilities should be located at the rear of the development.

# Orderly and Sustainable Development

## OBJECTIVES

- 1 Orderly and economical development that creates a safe, convenient and pleasant environment in which to live.
- 2 Development occurring in an orderly sequence and in a compact form to enable the efficient provision of public services and facilities.
- 3 Development that does not jeopardise the continuance of adjoining authorised land uses.
- 4 Development that does not prejudice the achievement of the provisions of the Development Plan.
- 5 Development abutting adjoining Council areas having regard to the policies of that Council's Development Plan.
- 6 Urban development contained within existing townships and settlements and located only in zones designated for such development.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should not prejudice the development of a zone for its intended purpose.
- 2 Land outside of townships and settlements should primarily be used for primary production and conservation purposes.
- 3 The economic base of the region should be expanded in a sustainable manner.
- 4 Urban development should form a compact extension to an existing built-up area.
- 5 Ribbon development should not occur along the coast, water frontages or arterial roads shown in *Overlay Maps - Transport*.
- 6 Development should be located and staged to achieve the economical provision of public services and infrastructure, and to maximise the use of existing services and infrastructure.
- 7 Where development is expected to impact upon the existing infrastructure network (including the transport network), development should demonstrate how the undue effect will be addressed.
- 8 Vacant or underutilised land should be developed in an efficient and co-ordinated manner to not prejudice the orderly development of adjacent land.



# Transportation and Access

## OBJECTIVES

- 1 A comprehensive, integrated, affordable and efficient air, rail, sea, road, cycle and pedestrian transport system that will:
  - (a) provide equitable access to a range of public, community and private transport services for all people
  - (b) ensure a high level of safety
  - (c) effectively support the economic development of the State
  - (d) have minimal negative environmental and social impacts
  - (e) maintain options for the introduction of suitable new transport technologies.
- 2 Development that:
  - (a) provides safe and efficient movement for all motorised and non-motorised transport modes
  - (b) ensures access for vehicles including emergency services, public infrastructure maintenance and commercial vehicles
  - (c) provides off street parking
  - (d) is appropriately located so that it supports and makes best use of existing transport facilities and networks.
- 3 A road hierarchy that promotes safe and efficient transportation in an integrated manner throughout the State.
- 4 Provision of safe, pleasant, accessible, integrated and permeable pedestrian and cycling networks.
- 5 Safe and convenient freight movement throughout the State.

## PRINCIPLES OF DEVELOPMENT CONTROL

### Land Use

- 1 Land uses arranged to support the efficient provision of sustainable transport networks and encourage their use.

### Movement Systems

- 2 Development should be integrated with existing transport networks, particularly major rail and road corridors as shown on *Location Maps* and *Overlay Maps - Transport*, and designed to minimise its potential impact on the functional performance of the transport networks.
- 3 Transport corridors should be sited and designed so as to not unreasonably interfere with the health and amenity of adjacent sensitive land uses.
- 4 Roads should be sited and designed to blend with the landscape and be in sympathy with the terrain.

- 5 Land uses that generate large numbers of visitors such as shopping centres and areas, places of employment, schools, hospitals and medium to high density residential uses should be located so that they can be serviced by existing transport networks and encourage walking and cycling.
- 6 Development generating high levels of traffic, such as schools, shopping centres and other retail areas, entertainment and sporting facilities, should incorporate passenger pick-up and set down areas. The design of such areas should ensure interference to existing traffic is minimised and give priority to pedestrians, cyclists and public and community transport users.
- 7 The location and design of public and community transport set-down and pick-up points should maximise safety and minimise the isolation and vulnerability of users.
- 8 Development should provide safe and convenient access for all anticipated modes of transport including cycling, walking, public and community transport, and motor vehicles.
- 9 Development at intersections, pedestrian and cycle crossings, and crossovers to allotments should maintain or enhance sightlines for motorists, cyclists and pedestrians to ensure safety for all road users and pedestrians.
- 10 Driveway crossovers affecting pedestrian footpaths should maintain the level of the footpath.
- 11 Development should discourage commercial and industrial vehicle movements through residential streets and adjacent other sensitive land uses such as schools.
- 12 Industrial/commercial vehicle movements should be separated from passenger vehicle car-parking areas.
- 13 Development should make sufficient provision on site for the loading, unloading and turning of all traffic likely to be generated.

### **Cycling and Walking**

- 14 Development should ensure that a permeable street and path network is established that encourages walking and cycling through the provision of safe, convenient and attractive routes with connections to adjoining streets, paths, open spaces, schools, public and community transport stops and activity centres.
- 15 Development should provide access, and accommodate multiple route options, for cyclists by enhancing and integrating with:
  - (a) open space networks, recreational trails, parks, reserves and recreation areas
  - (b) Adelaide's Metropolitan Open Space System.
- 16 Cycling and pedestrian networks should be designed to be permeable and facilitate direct and efficient passage to neighbouring networks and facilities.
- 17 New developments should give priority to and not compromise existing designated bicycle routes.
- 18 Where development coincides with, intersects or divides a proposed bicycle route or corridor, development should incorporate through-access for cyclists.
- 19 Developments should encourage and facilitate cycling as a mode of transport by incorporating end-of-journey facilities including:
  - (a) showers, changing facilities, and secure lockers
  - (b) signage indicating the location of bicycle facilities

- (c) secure bicycle parking facilities provided at the rate set out in [Table Sa/3 - Off Street Bicycle Parking Requirements](#).
- 20 Pedestrian facilities and networks should be designed and provided in accordance with relevant provisions of the *Australian Standards and Austroads Guide to Traffic Engineering Practice Part 13*.
- 21 Cycling facilities and networks should be designed and provided in accordance with the relevant provisions of the *Australian Standards and Austroads Guide to Traffic Engineering Practice Part 14*.

### **Access**

- 22 Development should have direct access from an all weather public road.
- 23 Development should be provided with safe and convenient access which:
  - (a) avoids unreasonable interference with the flow of traffic on adjoining roads
  - (b) provides appropriate separation distances from existing roads or level crossings
  - (c) accommodates the type and volume of traffic likely to be generated by the development or land use and minimises induced traffic through over-provision
  - (d) is sited and designed to minimise any adverse impacts on the occupants of and visitors to neighbouring properties.
- 24 Development should not restrict access to publicly owned land such as recreation areas.
- 25 The number of vehicle access points onto arterial roads shown on *Overlay Maps - Transport* should be minimised, and where possible access points should be:
  - (a) limited to local roads
  - (b) shared between developments.
- 26 The number of access points for cyclists and pedestrians onto all adjoining roads should be maximised.
- 27 Development with access from roads with existing or projected traffic volumes exceeding 6000 vehicles per day should be sited to avoid the need for vehicles to reverse on to or from the road.
- 28 Development with access from arterial roads or roads as shown on *Overlay Maps - Transport* should be sited to avoid the need for vehicles to reverse on to or from the road.
- 29 Driveways, access tracks and parking areas should be designed and constructed to:
  - (a) follow the natural contours of the land
  - (b) minimise excavation and/or fill
  - (c) minimise the potential for erosion from run-off
  - (d) avoid the removal of existing vegetation
  - (e) be consistent with *Australian Standard AS 2890 Parking facilities*.

### **Access for People with Disabilities**

- 30 Development should be sited and designed to provide convenient access for people with a disability.
- 31 Where appropriate and practical, development should provide for safe and convenient access to the coast and beaches for disabled persons.

## Vehicle Parking

- 32 Development should provide off-street vehicle parking and specifically marked disabled car parking places to meet anticipated demand in accordance with [Table Sal/2 - Off Street Vehicle Parking Requirements](#) or [Table Sal/2A - Off Street Vehicle Parking Requirements for Designated Areas](#) (whichever applies) unless an agreement is reached between the Council and the applicant for a reduced number of parking spaces where one of the following applies:
- (a) a financial contribution is paid into the Council Car Parking Funds specified by the Council, in accordance with the gazetted rate per car park associated with the 'Car Park Fund Areas' identified on [Concept Plan Map Sal/27 - Salisbury District Centre Car Park Fund Area](#), [Concept Plan Map Sal/29 - Ingle Farm District Centre Car Park Fund Area](#) and [Concept Plan Map Sal/32 - Mawson Lakes Town Centre Car Parking Fund Area](#)
  - (b) it can be demonstrated that fewer car parks would be required to meet the car parking needs associated with the development.
- 33 Development should be consistent with *Australian Standard AS 2890 Parking facilities*.
- 34 Vehicle parking areas should be sited and designed in a manner that will:
- (a) facilitate safe and convenient pedestrian linkages to the development and areas of significant activity or interest in the vicinity of the development
  - (b) include safe pedestrian and bicycle linkages that complement the overall pedestrian and cycling network
  - (c) not inhibit safe and convenient traffic circulation
  - (d) result in minimal conflict between customer and service vehicles
  - (e) avoid the necessity to use public roads when moving from one part of a parking area to another
  - (f) minimise the number of vehicle access points to public roads
  - (g) avoid the necessity for backing onto public roads
  - (h) where reasonably possible, provide the opportunity for shared use of car parking and integration of car parking areas with adjoining development to reduce the total extent of vehicle parking areas and the requirement for access points
  - (i) not dominate the character and appearance of a site when viewed from public roads and spaces
  - (j) provide landscaping that will shade and enhance the appearance of the vehicle parking areas.
- 35 Vehicle parking areas should be designed to reduce opportunities for crime by:
- (a) maximising the potential for passive surveillance by ensuring they can be overlooked from nearby buildings and roads
  - (b) incorporating walls and landscaping that do not obscure vehicles or provide potential hiding places
  - (c) being appropriately lit
  - (d) having clearly visible walkways.
- 36 Where parking areas are not obviously visible or navigated, signs indicating the location and availability of vehicle parking spaces associated with businesses should be displayed at locations readily visible to customers.

- 37 Parking areas that are likely to be used during non daylight hours should provide floodlit entrance and exit points and site lighting directed and shaded in a manner that will not cause nuisance to adjacent properties or users of the car park.
- 38 Parking areas should be sealed or paved in order to minimise dust and mud nuisance.
- 39 To assist with stormwater detention and reduce heat loads in summer, vehicle parking areas should include soft (living) landscaping.
- 40 Parking areas should be line-marked to indicate parking bays, movement aisles and direction of traffic flow.

### **Vehicle Parking for Residential Development**

- 41 On-site vehicle parking should be provided having regard to:
  - (a) the number, nature and size of proposed dwellings
  - (b) proximity to centre facilities, public and community transport within walking distance of the dwellings
  - (c) the anticipated mobility and transport requirements of the likely occupants, particularly groups such as aged persons.
- 42 Vehicle parking areas servicing more than one dwelling should be of a size and location to:
  - (a) serve users, including pedestrians, cyclists and motorists, efficiently, conveniently and safely
  - (b) provide adequate space for vehicles, including emergency service vehicles, to manoeuvre between the street and the parking area
  - (c) reinforce or contribute to attractive streetscapes.

### **Vehicle Parking for Mixed Use and Corridor Zones**

- 43 Loading areas and designated parking spaces for service vehicles should:
  - (a) be provided within the boundary of the site
  - (b) not be located in areas where there is parking provided for any other purpose.
- 44 Vehicle parking spaces and multi-level vehicle parking structures within buildings should:
  - (a) enhance active street frontages by providing land uses such as commercial, retail or other non-car park uses along ground floor street frontages
  - (b) complement the surrounding built form in terms of height, massing and scale
  - (c) incorporate facade treatments along major street frontages that are sufficiently enclosed and detailed to complement neighbouring buildings consistent with the desired character of the locality.
- 45 In mixed use buildings, the provision of vehicle parking may be reduced in number and shared where the operating hours of commercial activities complement the residential use of the site.

### **Undercroft and Below Ground Garaging and Parking of Vehicles**

- 46 Undercroft and below ground garaging of vehicles should only occur where envisaged in the relevant zone or policy area or precinct and ensure:
  - (a) the overall height and bulk of the undercroft structure does not adversely impact on streetscape character of the locality or the amenity of adjacent properties

- (b) vehicles can safely enter and exit from the site without compromising pedestrian or cyclist safety or causing conflict with other vehicles
  - (c) driveway gradients provide for safe and functional entry and exit
  - (d) driveways and adjacent walls, fencing and landscaping are designed to provide adequate sightlines from vehicles to pedestrians using the adjacent footpath
  - (e) openings to undercroft areas are integrated with the main building so as to minimise visual impact
  - (f) landscaping, mounding and/or fencing is incorporated to improve its presentation to the street and to adjacent properties
  - (g) the overall streetscape character of the locality is not adversely impaired (e.g. visual impact, building bulk, front setbacks relative to adjacent development).
- 47 In the case of undercroft and below ground car parks where cars are visible from public areas, adequate screening and landscaping should be provided.

# Waste

## OBJECTIVES

- 1 Development that, in order of priority, avoids the production of waste, minimises the production of waste, reuses waste, recycles waste for reuse, treats waste and disposes of waste in an environmentally sound manner.
- 2 Development that includes the treatment and management of solid and liquid waste to prevent undesired impacts on the environment including, soil, plant and animal biodiversity, human health and the amenity of the locality.

## PRINCIPLES OF DEVELOPMENT CONTROL

- 1 Development should be sited and designed to prevent or minimise the generation of waste (including wastewater) by applying the following waste management hierarchy in the order of priority as shown below:
  - (a) avoiding the production of waste
  - (b) minimising waste production
  - (c) reusing waste
  - (d) recycling waste
  - (e) recovering part of the waste for re-use
  - (f) treating waste to reduce the potentially degrading impacts
  - (g) disposing of waste in an environmentally sound manner.
- 2 The storage, treatment and disposal of waste materials from any development should be achieved without risk to health or impairment of the environment.
- 3 Development should avoid as far as practical, the discharge or deposit of waste (including wastewater) onto land or into any waters (including processes such as seepage, infiltration or carriage by wind, rain, sea spray, stormwater or by the rising of the water table).
- 4 Untreated waste should not be discharged to the environment, and in particular to any water body.
- 5 Development should include appropriately sized area to facilitate the storage of receptacles that will enable the efficient recycling of waste.
- 6 Development that involves the production and/or collection of waste and/or recyclable material should include designated collection and storage area(s) that are:
  - (a) screened and separated from adjoining areas
  - (b) located to avoid impacting on adjoining sensitive environments or land uses
  - (c) designed to ensure that wastes do not contaminate stormwater or enter the stormwater collection system
  - (d) located on an impervious sealed area graded to a collection point in order to minimise the movement of any solids or contamination of water



- (e) protected from wind and stormwater and sealed to prevent leakage and minimise the emission of odours
- (f) stored in such a manner that ensures that all waste is contained within the boundaries of the site until disposed of in an appropriate manner.

### **Wastewater**

- 7 The disposal of wastewater to land should only occur where methods of wastewater reduction and reuse are unable to remove the need for its disposal, and where its application to the land is environmentally sustainable.
- 8 Wastewater lagoons should not be sited in any of the following areas:
  - (a) within land subject to a 1-in-100 year average return interval flood event
  - (b) within 50 metres of the top of the bank of a watercourse
  - (c) within 500 metres of the coastal high water mark
  - (d) where the base of the lagoon would be below any seasonal water table.
- 9 Artificial wetland systems for the storage of treated wastewater, such as wastewater lagoons, should be:
  - (a) sufficiently separated from adjoining sensitive uses to minimise potential adverse odour impacts
  - (b) sited and designed to minimise potential public health risks arising from the breeding of mosquitoes.

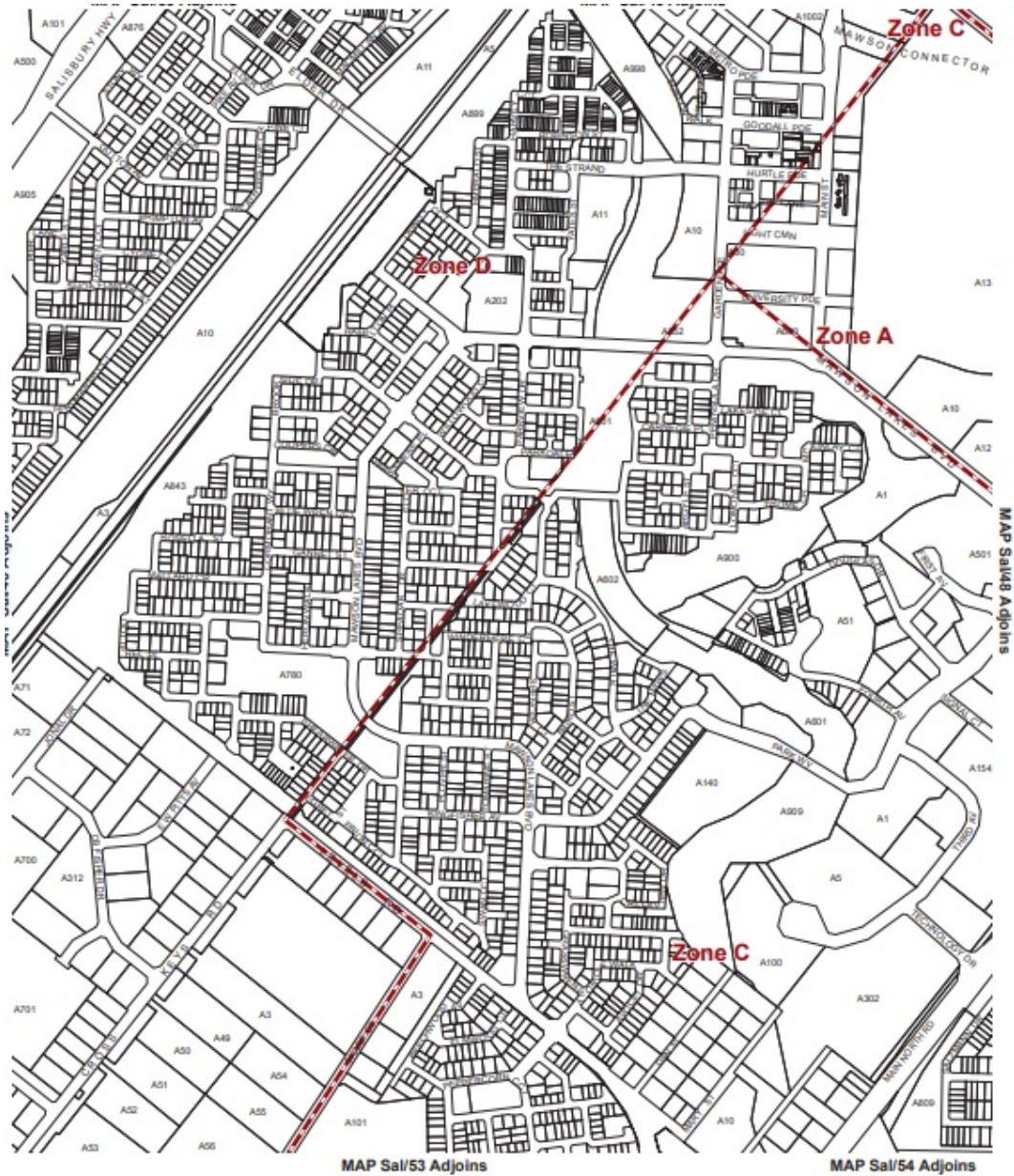
### **Waste Treatment Systems**

- 10 Development that produces any sewage or effluent should be connected to a waste treatment system that complies with (or can comply with) the relevant public and environmental health legislation applying to that type of system.
- 11 The methods for, and siting of, effluent and waste storage, treatment and disposal systems should minimise the potential for environmental harm and adverse impacts on:
  - (a) the quality of surface and groundwater resources
  - (b) public health
  - (c) the amenity of a locality
  - (d) sensitive land uses.
- 12 Waste treatment should only occur where the capacity of the treatment facility is sufficient to accommodate likely maximum daily demands including a contingency for unexpected high flows and breakdowns.
- 13 Any on-site wastewater treatment system/ re-use system or effluent drainage field should be located within the allotment of the development that it will service.
- 14 A dedicated on-site effluent disposal area should not include any areas to be used for, or could be reasonably foreseen to be used for, private outdoor open space, driveways, car parking or outbuildings.
- 15 The spreading or discharging of treated liquid or solid waste onto the ground should only occur where the disposal area consists of soil and vegetation that has the capacity to store and use the waste without contaminating soil or surface or ground water resources or damaging crops.

- 16 Stock slaughter works, poultry processors, saleyards, piggeries, cattle feedlots, milking sheds, milk processing works, fish processing works, wineries, distilleries, tanneries and fellmongeries, composting works, waste or recycling depots and concrete batching works should have a wastewater management system that is designed so as not to discharge wastes generated by the premises:
- (a) into any waters
  - (b) onto land in a place where it is reasonably likely to enter any waters by processes such as:
    - (i) seepage
    - (ii) infiltration
    - (iii) carriage by wind, rain, sea spray, or stormwater
    - (iv) the rising of the watertable.
- 17 Winery waste management systems should be designed to ensure:
- (a) surface runoff does not occur from the wastewater irrigation area at any time
  - (b) wastewater is not irrigated onto waterlogged areas, land within 50 metres of a creek, or swamp or domestic or stock water bore, or land subject to flooding, steeply sloping land, or rocky or highly permeable soil overlaying an unconfined aquifer
  - (c) wastewater is not irrigated over an area which is within 50 metres of any residence on neighbouring land or 10 metres of any type of publicly owned land
  - (d) wastewater is released using low trajectory low pressure sprinklers, drip irrigators or agricultural pipe, and is not sprayed more than 1.5 metres into the air or in fine droplets if there is a potential for the spread of diseases from the wastewater
  - (e) stormwater run-off from areas which are contaminated with grape or grape products is drained to winery waste management systems during vintage periods
  - (f) stormwater from roofs and clean hard paved surfaces is diverted away from winery waste management systems and disposed of in an environmentally sound manner or used for productive purposes

**Table Sa1/3 - Off Street Bicycle Parking Requirements**

<b>Form of development</b>	<b>Employee/resident (bicycle parking spaces)</b>	<b>Visitor/shopper (bicycle parking spaces)</b>
Residential component of multi-storey building/residential flat building	1 for every 4 dwellings	1 for every 10 dwellings
Office	1 for every 200 square metres of gross leasable floor area	2 plus 1 per 1000 square metres of gross leasable floor area
Shop	1 for every 300 square metres of gross leasable floor area	1 for every 600 square metres of gross leasable floor area
Tourist accommodation	1 for every 20 employees	2 for the first 40 rooms plus 1 for every additional 40 rooms



NOTE: Airport Building Heights should be read in conjunction with concept plan map showing heights for Edinburgh Defence Airfield

- Airport Building Heights**  
 Referral to Commonwealth Secretary  
 for Dept. of Transport and Regional Services
- Zone A All Structures
  - Zone C All Structures Exceeding 15 metres above existing ground level
  - Zone D All Structures Exceeding 45 metres above existing ground level



# Overlay Map Sal/47

## DEVELOPMENT CONSTRAINTS

Airport Building Heights