



MIDDLETON GRANGE TOWN CENTRE

URBAN DESIGN REPORT – October 2019

ARCHITECT
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1.0 INTRODUCTION

1.1 Subject Site

The subject site is located in the suburb of Middleton Grange to the west of the Westlink M7 (700m) and Cowpasture Road (500m). It is bounded by Southern Cross Avenue to the north, Middleton Grange Public School to the east, Fifteenth Avenue to the south and Kingsford Smith Avenue to the west. The site has been identified as the future town centre for the Middleton Grange suburb. The town centre will provide a mix of retail and commercial uses supported by residential and other employment generating uses.



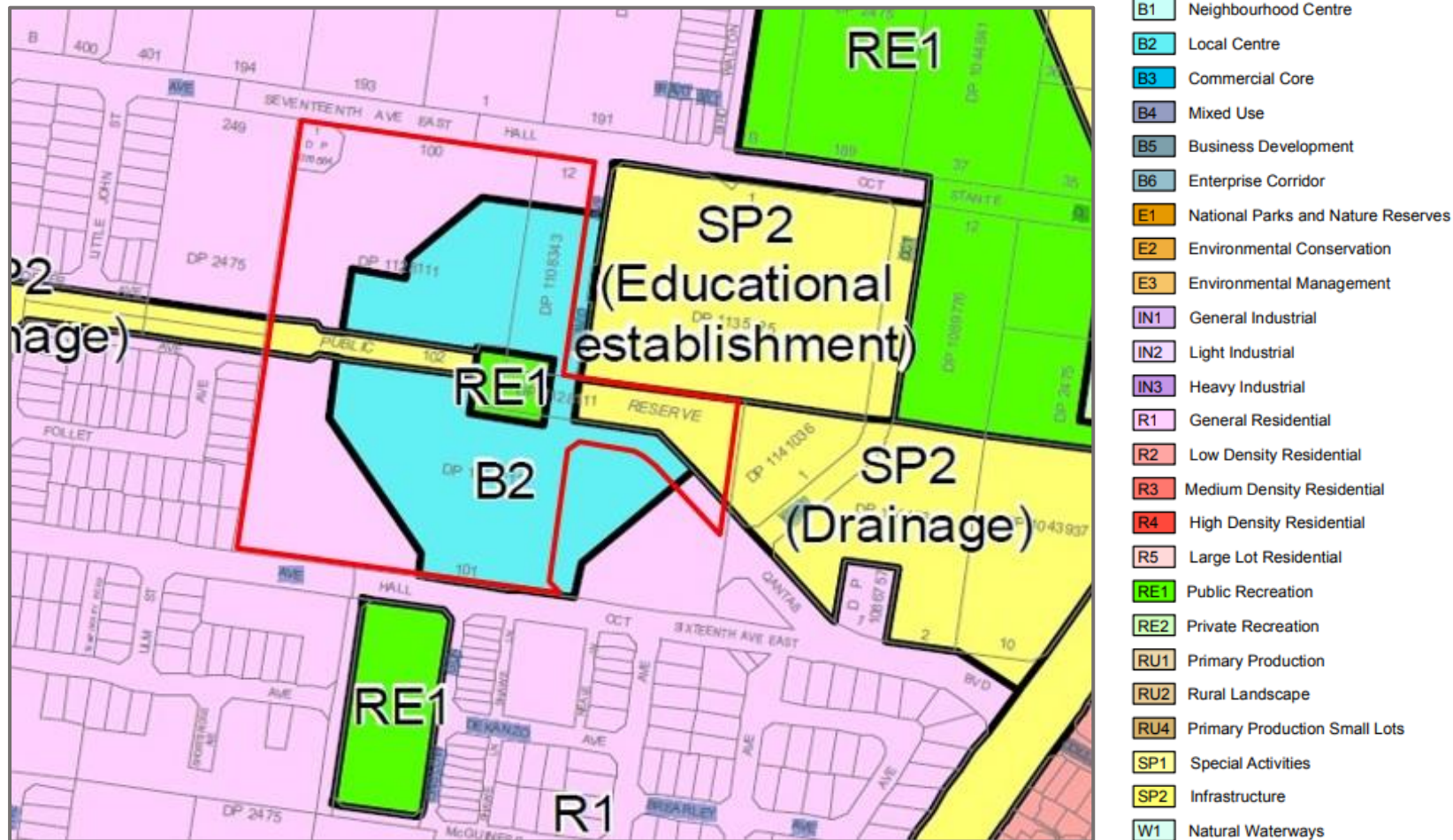
Subject Site

2.0 PLANNING FRAMEWORK

2.1 Liverpool LEP 2008

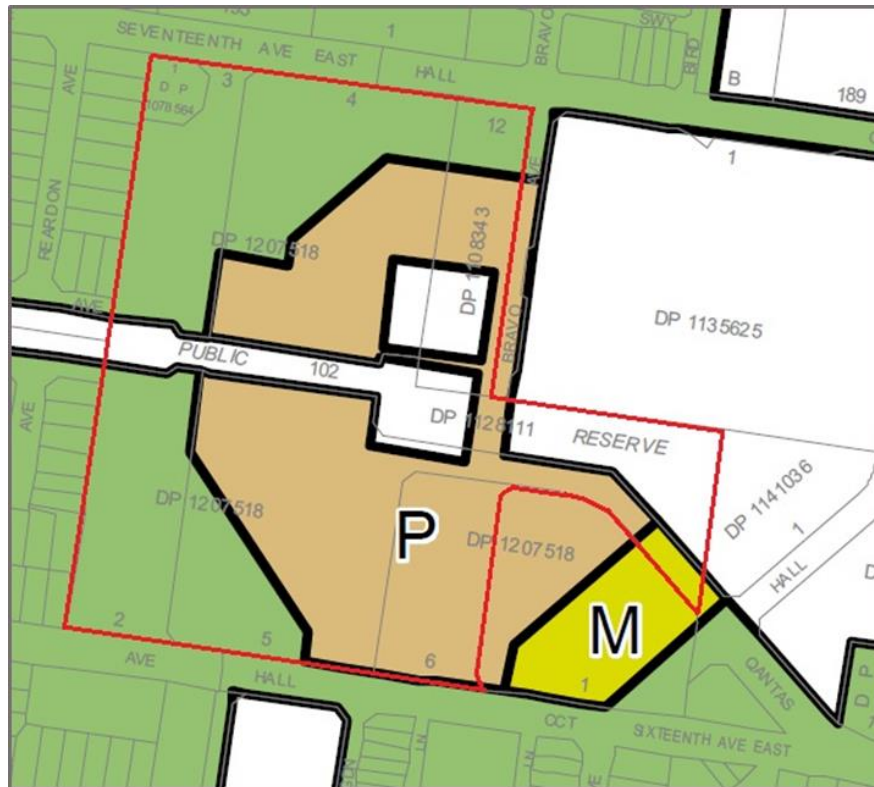
The Primary planning instrument applicable to the subject land is the Liverpool Local Environmental Plan 2008.

2.1.1 Land Zoning



The subject site is zoned part B2 Local Centre; R1 General Residential; RE1 Public Recreation and SP2 Drainage, as illustrated above.

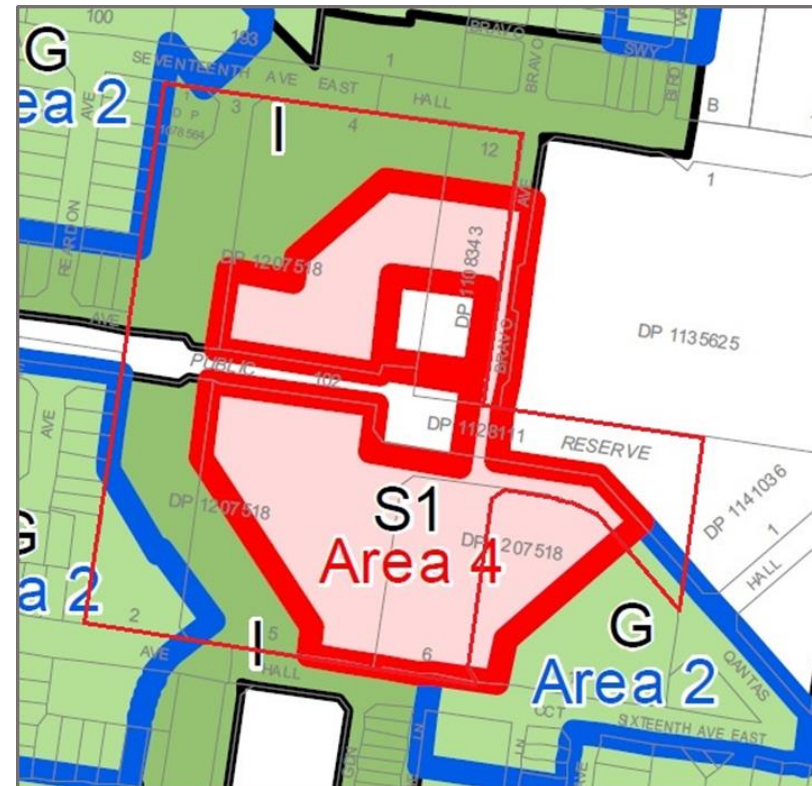
2.1.2 Height of Buildings



I	8.5
M	12
O	15
P	18

As illustrated above, the maximum height of buildings for the subject site is part 8.5 metres and part 18 metres.

2.1.3 Floor Space Ratio



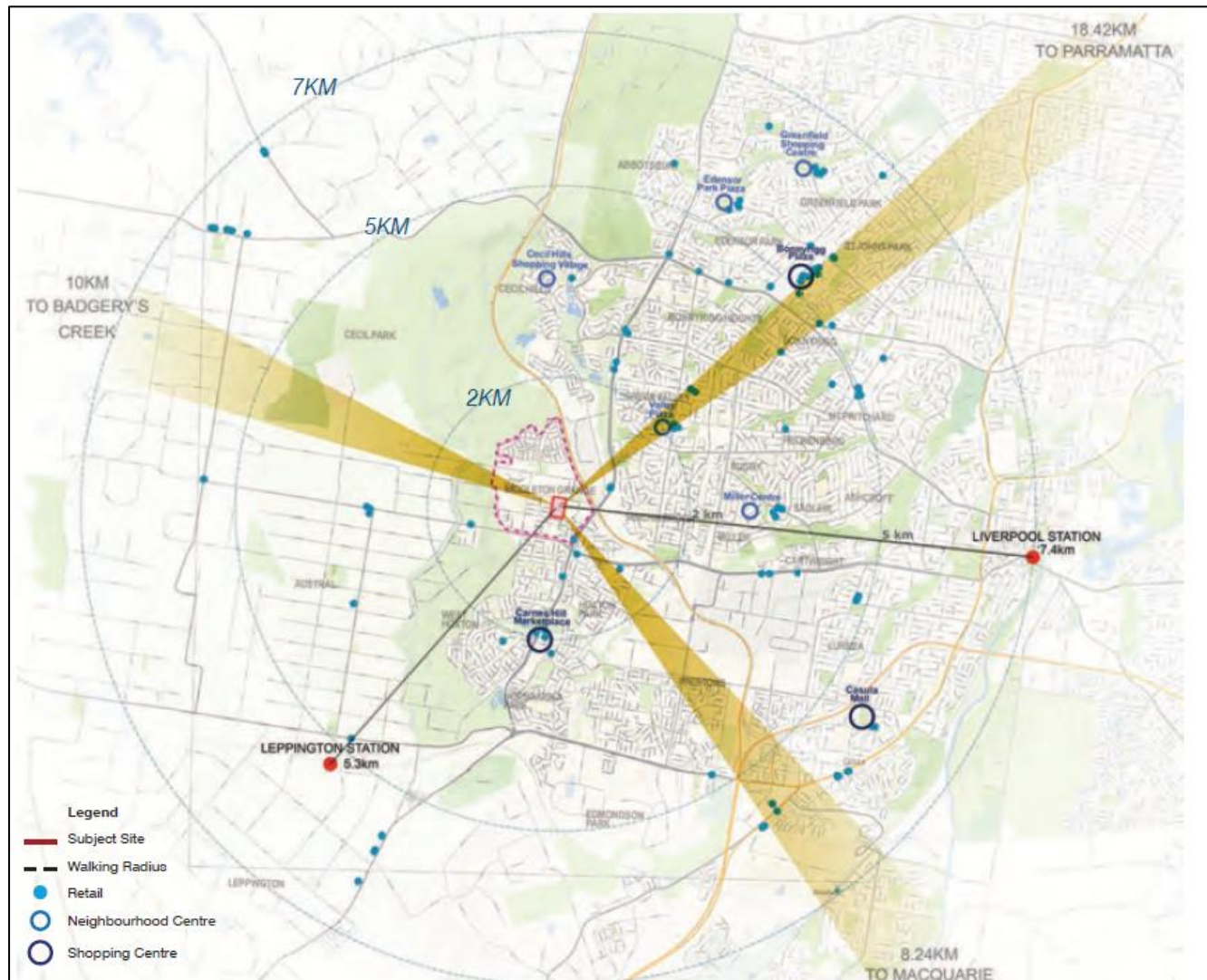
F	0.6
G	0.65
I	0.75
N	1.0
P	1.2
S1	1.5

As illustrated above, the maximum floor space ratio for the subject site is part 0.75:1 and part 1.5:1.

Part of the site is also subject to Clause 7.29 (Area 4) which stipulates that no more than 25% of the gross floor area of all buildings may be used for the purposes of business premises.

3.0 SITE ANALYSIS

3.1 Regional Context



Source: Middleton Grange Urban Design Report, 26 November 2015, Urbis

The subject site is at the heart of the suburb of Middleton Grange and will serve as the town centre for this growing and evolving new community.

The suburb is well serviced by public and private transport opportunities. Leppington train Station, is approximately 5.3 kilometres south west, while Liverpool train station and CBD is 7.4km to the east. Meanwhile the regional road links are extremely close with the Westlink M7 being approximately 700 metres to the west and Cowpasture Road being approximately 500m south-west.

The subject site is strategically located within the Western Sydney Growth Area and includes a number of social and educational facilities in close proximity, including Middleton Grange Primary School, Thomas Hassall Anglican College, The Hoxton Park Technical College and the Liverpool College of higher education.

3.2 Local Context



Source: Middleton Grange Urban Design Report, 26 November 2015, Urbis

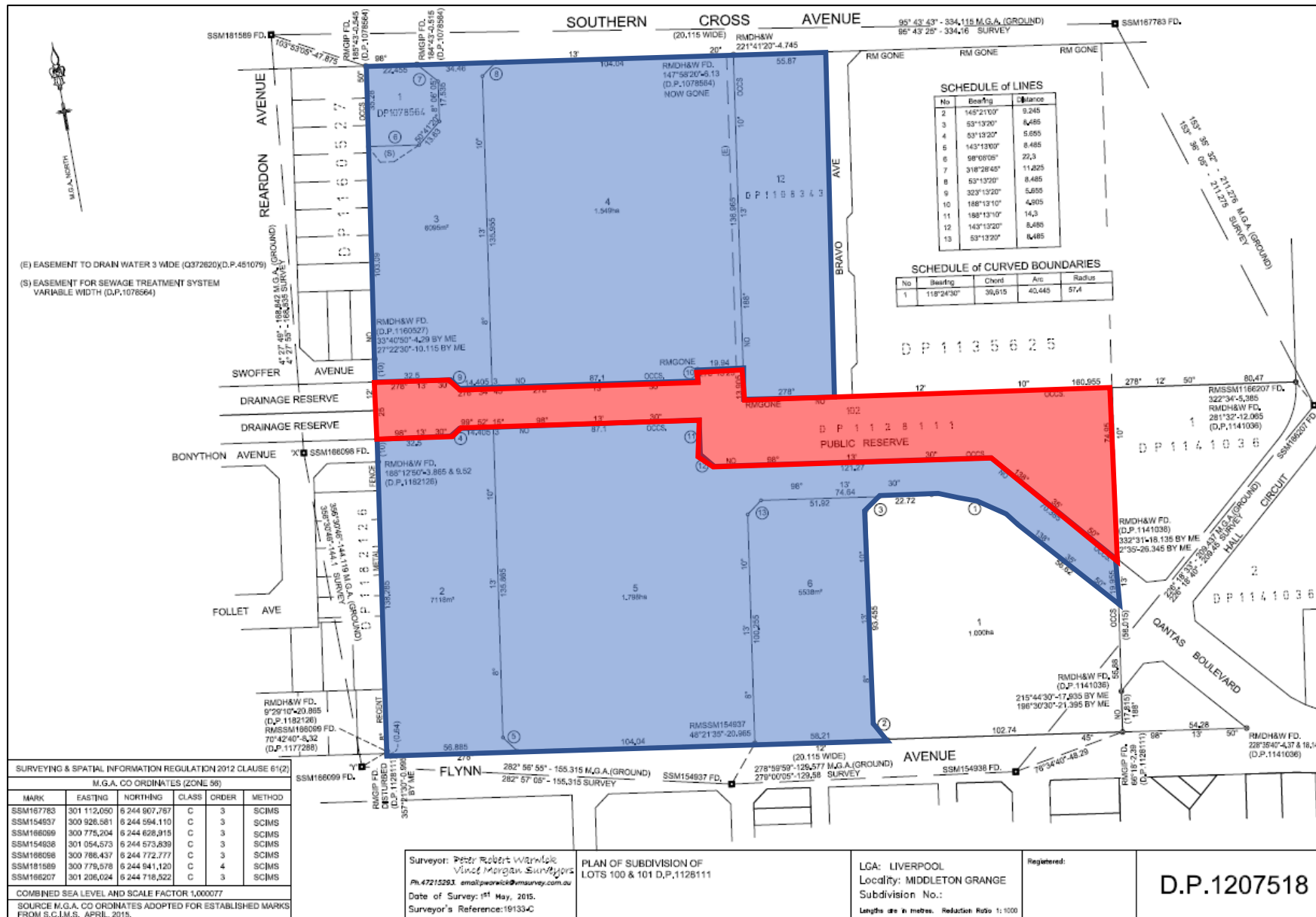
The site is 600 metres from the on/off ramps to the Westlink M7 via Flynn Avenue and Cowpasture Road.

The site is very close to existing educational facilities as discussed earlier, and is adjoined to the east by the Middleton Grange public school.

While the Planning Proposal seeks to facilitate a small open space within the development, there are also a number of recreational and open space within close proximity to the site, directly to the south (opposite) of the site and to the east and north.

The site will serve as the future town centre bringing people together from the community and providing further jobs, employment, recreation and social opportunities.

3.3 Site Survey



4.0 BACKGROUND

The Planning Proposal was originally lodged with Liverpool City Council in June 2015. The matter was considered by Council at its meeting of 16 December 2015, where Council in supporting the progression of the Planning Proposal to the next stage in the Part 3 Plan Making process, resolved to:

1. Endorse, in principle, the Planning Proposal to rezone land at 60-80 Southern Cross Avenue and 45-65 Hall Circuit, Middleton Grange.
2. Delegate to the CEO to negotiate with the proponent regarding increased open space to support the increased residential density, including the completion of a comprehensive Social Impact Assessment.
3. Delegate to the CEO the authority to approve the final Planning Proposal to administer this rezoning, for submission to the Department of Planning and Environment for Gateway.

A Gateway determination was issued by the delegate of the Greater Sydney Commission on 15 August 2016. The Gateway in supporting the progression of the Planning Proposal included a number of conditions that would need to be addressed and approved prior to the progression of the proposal to consultation and exhibition. This included to provide additional information regarding transition of proposed heights to existing neighbouring zones and overshadowing impacts.

Specifically, the Planning Proposal sought to:

to increase the maximum floor space ratio from part 1.5:1 and 0.75:1 to 2.5:1

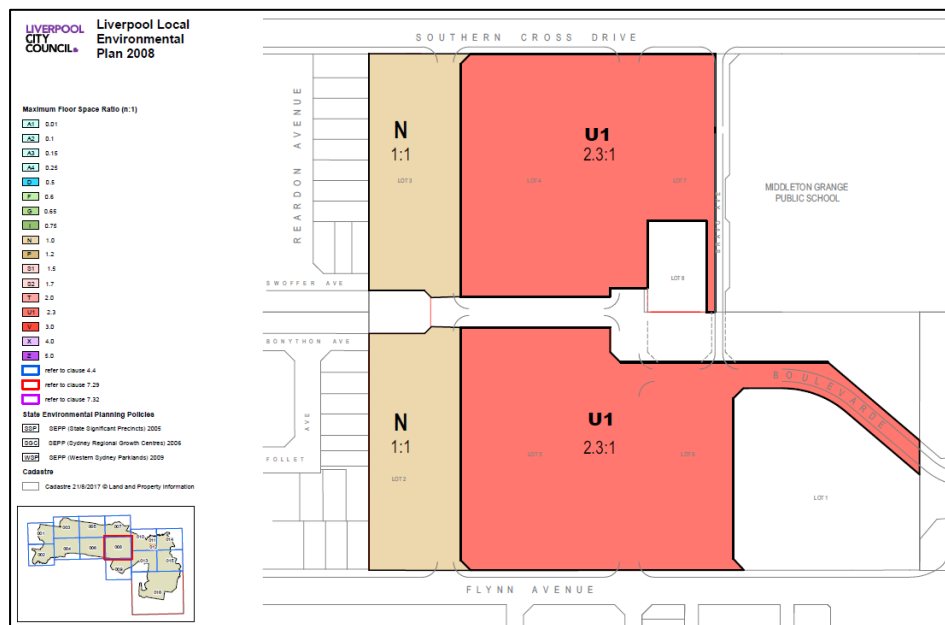
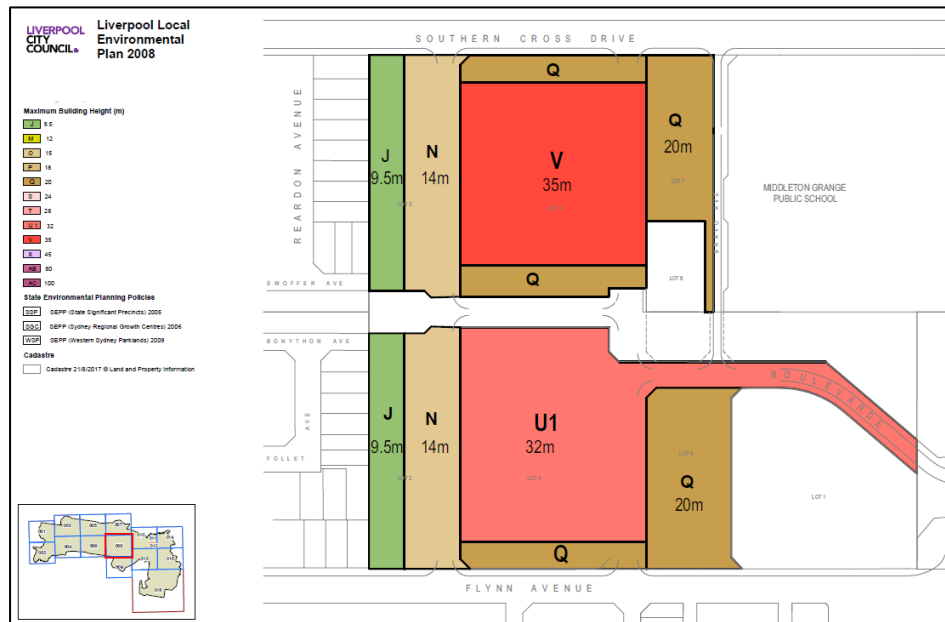


Draft maximum floor space ratio map (2015)

increase the maximum height of buildings from part 8.5 metres and part 18 metres to part 14 metres, 18 metres, 28 metres and 35 metres



Draft maximum height of buildings map (2015)



4.1 Revised Proposal and public exhibition

Detailed subsequently urban design work and economic viability analysis was undertaken to adequately address the matters raised in the Gateway determination, particularly the issue related to transition of height to neighbouring zones and overshadowing impacts. A revised Planning Proposal and Urban Design Report were prepared in June 2018 and was forwarded to the Department of Planning and Environment on 20 June 2018, which included the following controls:

Height: part 9.5m, 14m, 20m, 32m, and 35m

FSR: part 1:1 and 2.3:1

The Department confirmed on 28 June 2018 that the Gateway conditions had been adequately addressed and that the proposal could proceed to public exhibition. The planning proposal was revised (July 2018) for the purposes of public exhibition.

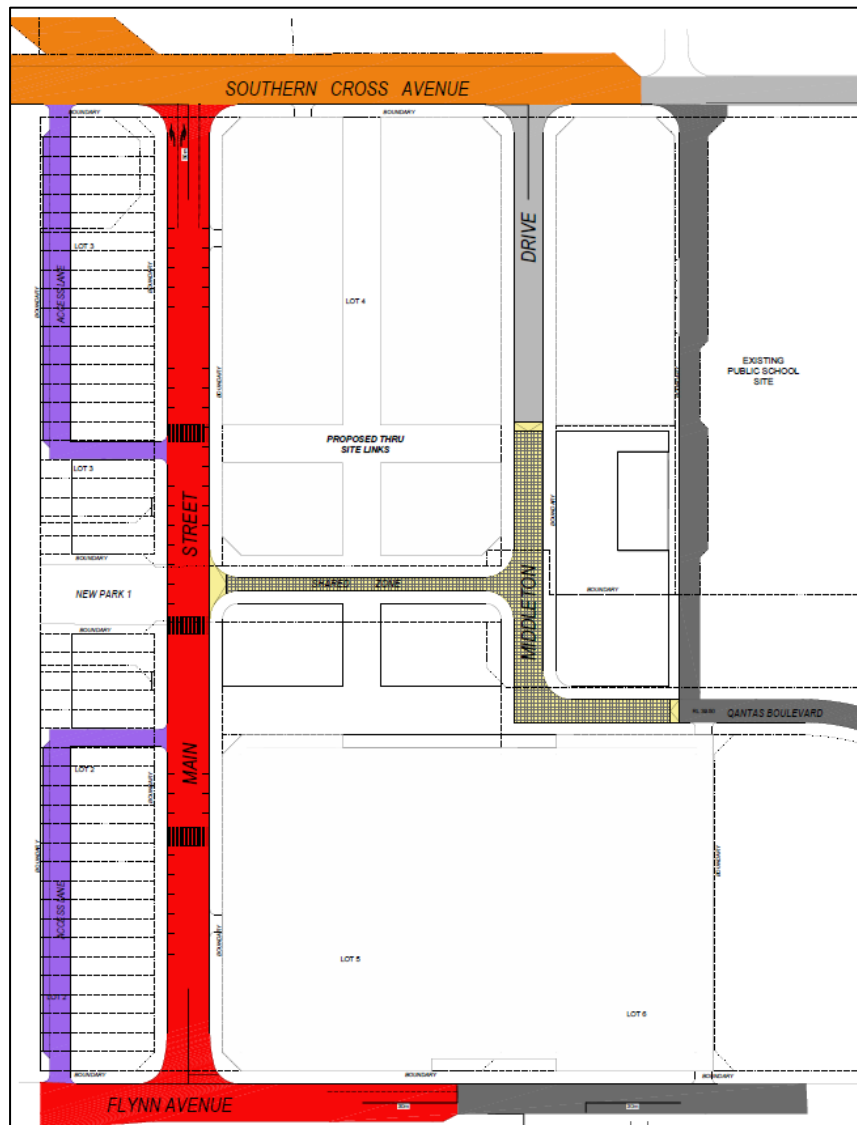
The Planning Proposal was exhibited from Wednesday 29 August 2018 to Friday 26 October 2018 in accordance with the Gateway.

Further, a community forum was held on Monday 17 September 2018. Some practical concerns were raised by the community. Of particular interest was:

1. The maximum heights being proposed (i.e. 12 storeys);
2. The amount of apartments;
3. The amount of open space;
4. The lack of investment in public infrastructure over a number of years in the suburb of Middleton Grange and the impact that the development of the town centre may have on the road network.
5. The erroneous claim that the proposal was to be mainly a social housing development.

5.0 DESIGN PRINCIPLES

5.1 Street network and hierarchy



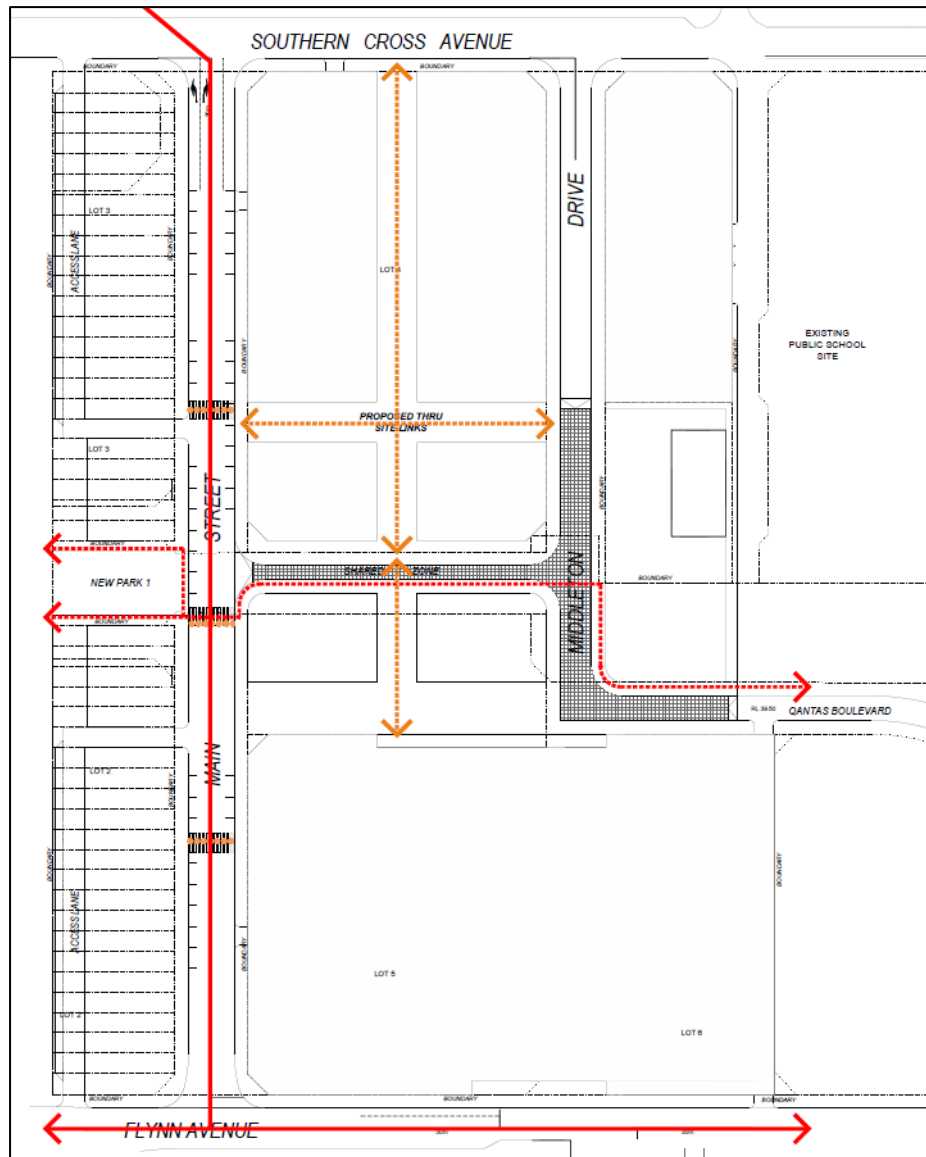
A detailed set of design principles were established very early in the process that have informed the layout and design features of the town centre. This included site access and circulation, the public domain and pedestrian circulation, and open space and building typology.

Following the feedback made during the public exhibition of the planning proposal, the design principles were again reviewed with a focus on further enhancing the public domain, movement of pedestrians and public spaces.

The street hierarchy was slightly amended to relocate the main street to the west, include an additional 3,000sq.m of open space through the centre of the site and creating a much more pedestrian friendly environment with a focal point to the centre for the people of Middleton Grange. With significant shared spaces and traffic calming introduced, the town centre becomes more welcoming, easier to access, and unthreatening for pedestrians. Walking and pedestrian permeability and connectivity are prioritised to make it easier for the people of Middleton Grange to access the town centre and move freely within it.

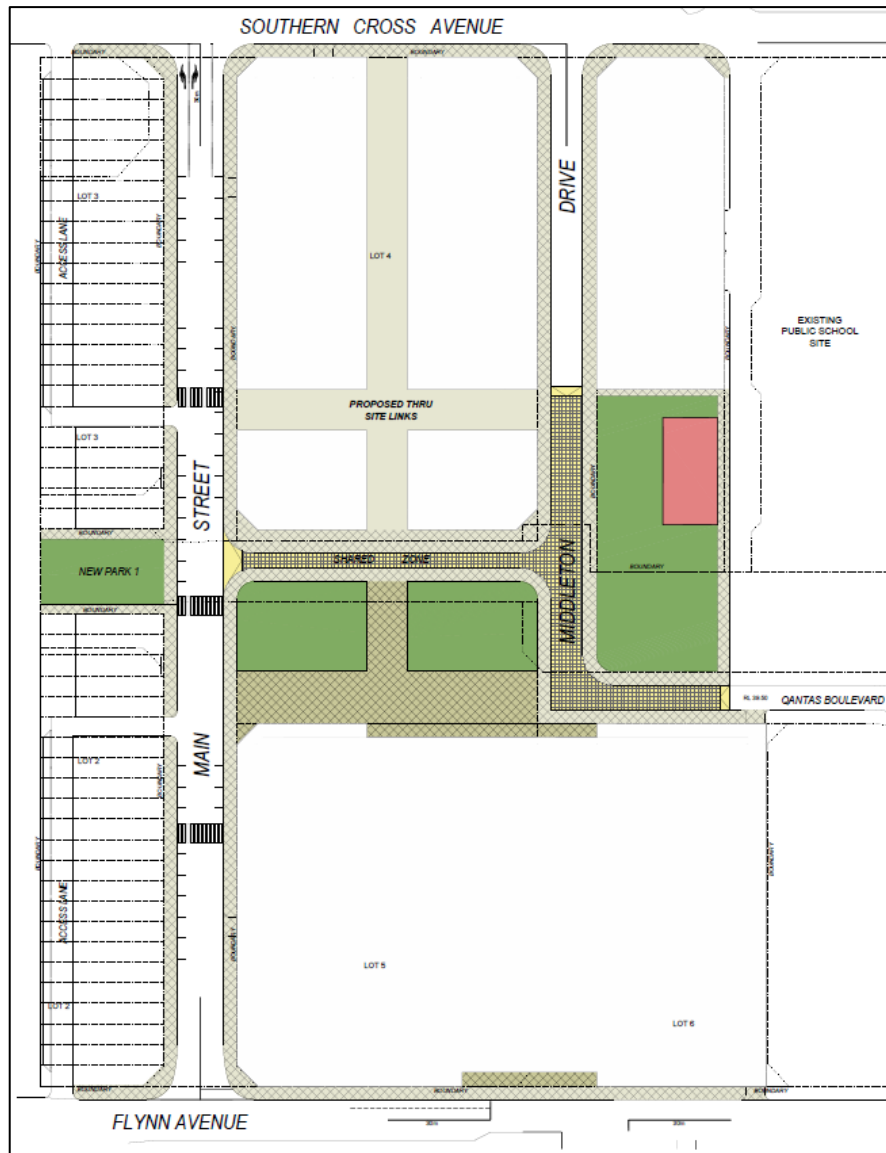
STREET NETWORK LEGEND	
	SHARED ZONE
	LANEWAY
	LOCAL ACCESS STREET
	NEIGHBOURHOOD CENTRE STREET 21.4m
	LOCAL ACCESS STREET 17.4m
	NEIGHBOURHOOD CONNECTOR STREET

5.2 Pedestrian circulation and cycling links



STREET FRONT ACTIVATION LEGEND	
	CYCLE PATH IN OPEN SPACE OR PARK EDGE ST
	CYCLE LANE ON ROAD
	PEDESTRIAN LINK

5.3 Public Open Space - Quality of the Public Realm



The refined concept has facilitated a further review of the amount, quality and design of the open space being proposed within the Middleton Grange town centre. This has resulted in a significant increase in the quantum of open space and opportunities for a variety of uses and designs.

Focus has been made on the arrangement of paving, planting, orientation and connectivity within and between spaces. Pedestrian activity and human interest is supported and encouraged with passive spaces of green soft landscaping and hard landscaping, with activity spilling out on to the streets from ground floor uses.

Streets and street junctions are designed as public spaces (rather than just traffic routes) with significant street trees and street lighting to reinforce the public domain and human scale.

Building facades along the routes are enlivened by active uses with design elements. Building design will be targeted to give interest to passers-by and make the building's function apparent, while views out of the building facilitate overlooking, to contribute to safety.

Traffic speeds are managed on Middleton Drive by the traffic-calming measures as an integral part of the urban design of the public domain.

PUBLIC OPEN SPACE LEGEND

-  PUBLIC PLAZA / FORECOURT
-  HIGH QUALITY PAVEMENT
-  PEDESTRIAN CROSSINGS
-  PEDESTRIAN LINKS
-  PUBLIC OPEN SPACE
-  COMMUNITY CENTER

5.3.1 Landscape Masterplan

The detailed analysis of the landscaping treatment of the public domain has been considered in the Landscape Plan prepared by Habit8, that supports the Planning Proposal.

Specific landscape design treatment to enhance the public realm is promoted by the creation of specific design treatments to the central open space, the new community centre area, pedestrian laneways and main streets.

Allocation of significant street tree planting is provided including type and location. The allocation of specific community uses in the open space are scheduled including public art, the new children's active playground, community orchard, village green and water feature.



SOUTHERN CROSS AVENUE

LOT 1

LOT 2

LOT 3

LOT 4

LOT 5

LOT 6

PROPOSED THRU SITE DRAIN

SHARED ZONE

NEW PARK 1

EXISTING PUBLIC SCHOOL SITE

ACCESS SLANE

BOUNDARY

MAIN STREET

MIDDLETON DRIVE

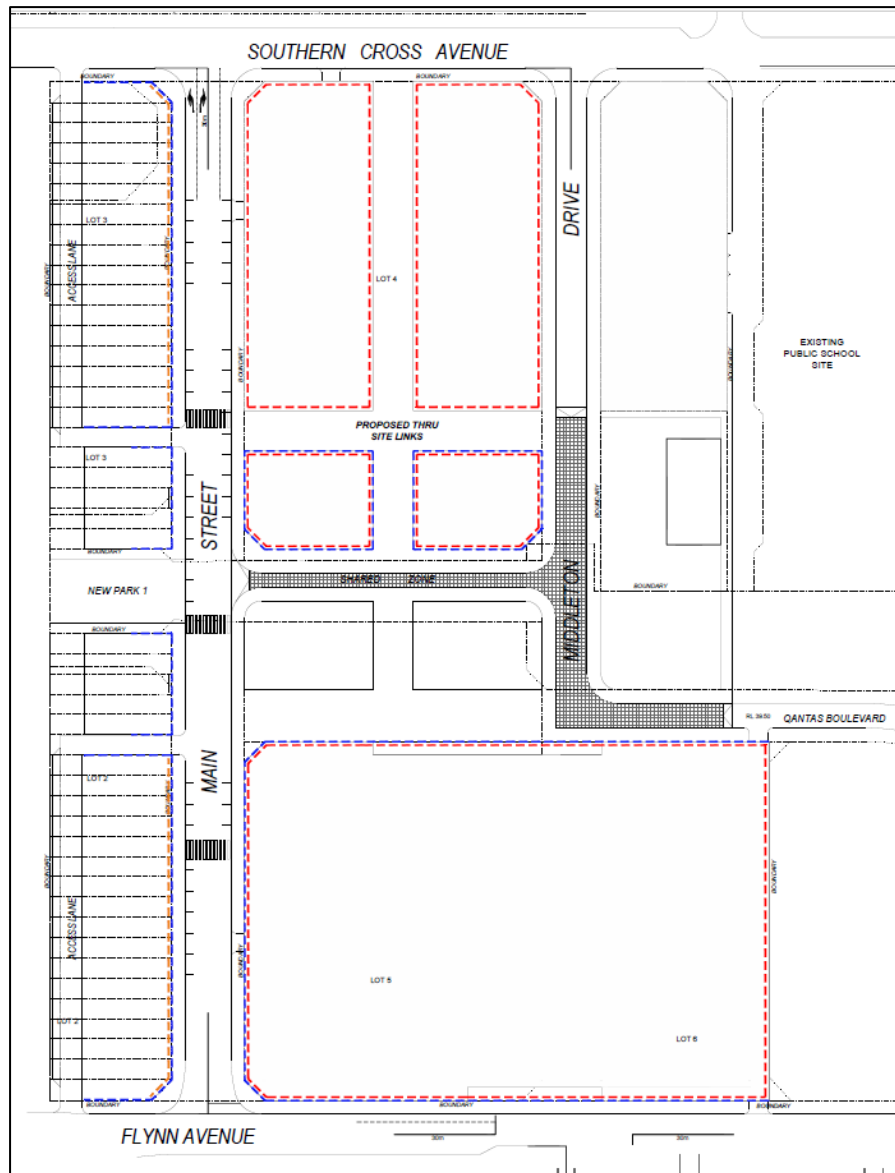
QANTAS BOULEVARD

FLYNN AVENUE

0 200

 PRIMARY ACTIVE FRONTAGE
 SECONDARY ACTIVE FRONTAGE
 VEHICLE ACCESS
 SERVICE ACCESS

5.5 Street setbacks and interface



STREET FRONT ACTIVATION LEGEND

- 2 STOREY STREET WALL
- 4m UPPER LEVEL SETBACK
- 1m UPPER LEVEL SETBACK

6.0 REVISED BUILDING CONCEPT

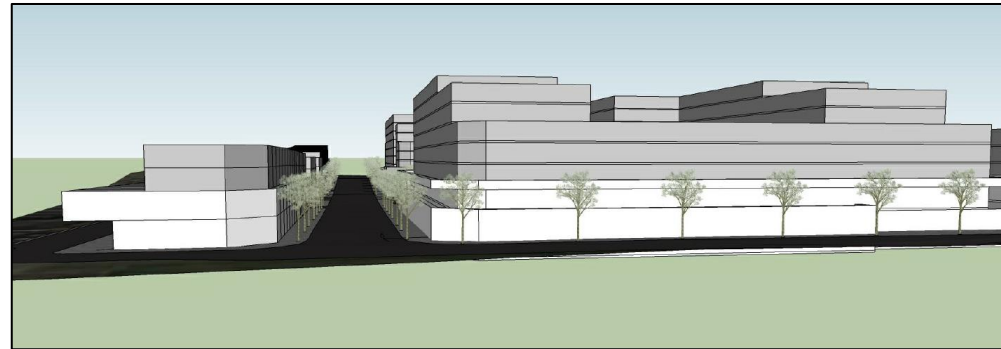
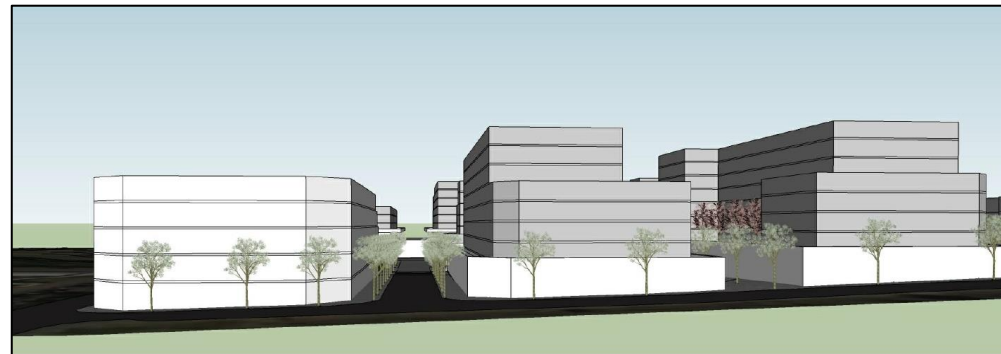
6.1 Concept Plan



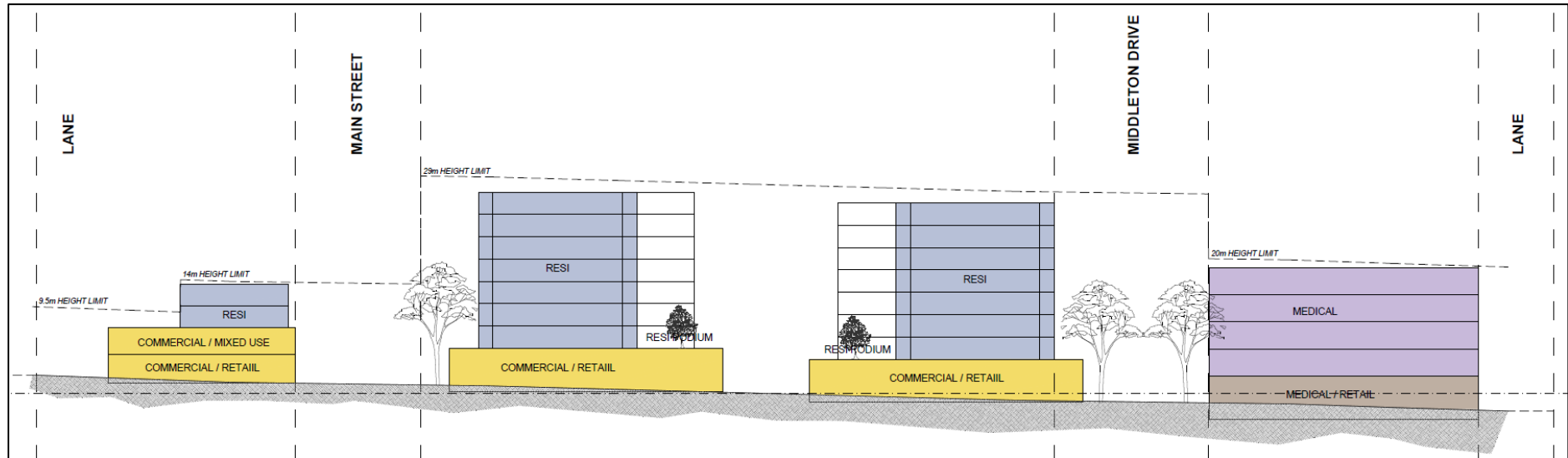
Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

Following public exhibition in August-October 2018, the development concept was further refined to address the concerns and matters raised by the community. The issue of height was raised, being that 12 storeys was too high. While the planning proposal demonstrated that there was no overshadowing impacts and the heights created a transition to lower density development, the heights and transitions in the concept have been revisited. The key amendments have been made to address the community's concerns regarding height.

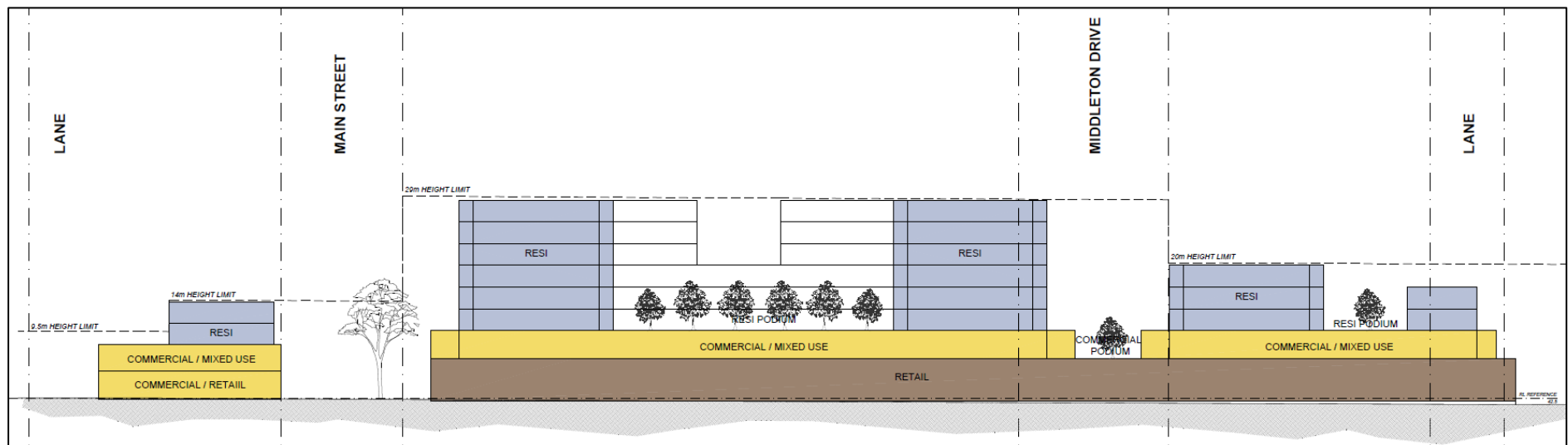
- The maximum height within the town centre is now only 8 storeys and this is only for part of the central portion of the development.
- The split height across the western Lots 2 and 3 is retained to provide for an appropriate transition from 8.5 metres on neighbouring land to 9.5 metres (2 storeys) immediately adjoining, and up to 14 metres (4 storeys) along the frontage to Main Street.
- The additional 3,000sq. of open space within the central portion has opened up the town centre, creating a feeling of breathability, not crowded by buildings, filled with light and space for people to play, linger and sit with passive and active recreational opportunities.
- The reductions in height have also been complemented by internal building heights transitions with laneways and through links further reducing building bulk and long street frontages. The creation of laneways also creates additional pedestrian interface and active frontages, creating a more welcoming and vibrant centre fostering a sense of place and community pride.



6.2 Town Centre cross sections



NORTH CROSS SECTION



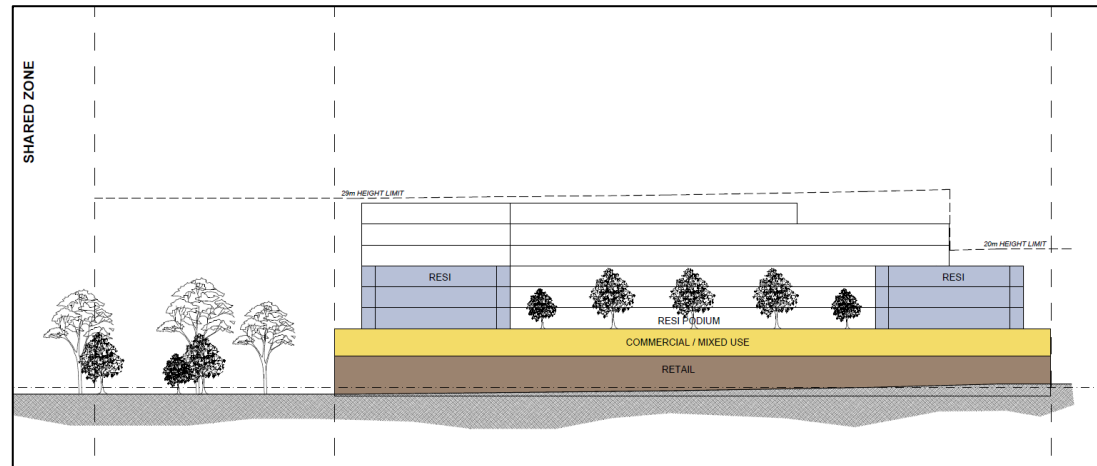
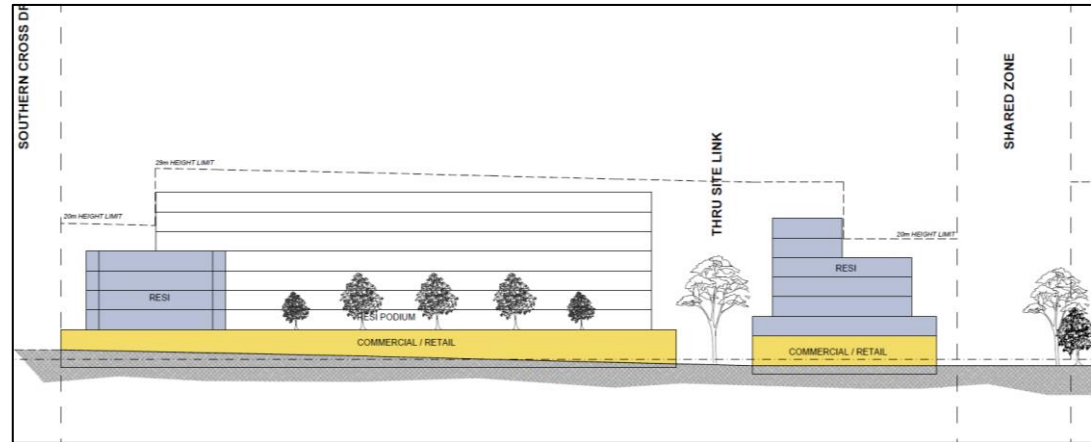
SOUTH CROSS SECTION

Source: Proposed town centre sections, Christiansen O'Brien Architects Pty Ltd

The cross-section diagrams above illustrate the northern and southern sections of the town centre.

The **northern section** illustrates the transition from 8.5 metres on neighbouring land to the west, to 9.5metres (2 storeys) at the direct interface with the development and then up to 14 metres (4 storeys) to Main Street. This in turn provides a better transition from the west of the street to the east of the street where the height increases to 29 metres (8 storeys). The building form has been separated by a laneway, that reduces the sense of building mass and creates additional pedestrian frontage through the open to the air laneway. It also creates a more welcoming approach to the town centre from the north, and a visual connection through to the central open space in the centre of the site. A 20 metre interface with Southern Cross Avenue is retained to provide the appropriate height transition, as illustrated right.

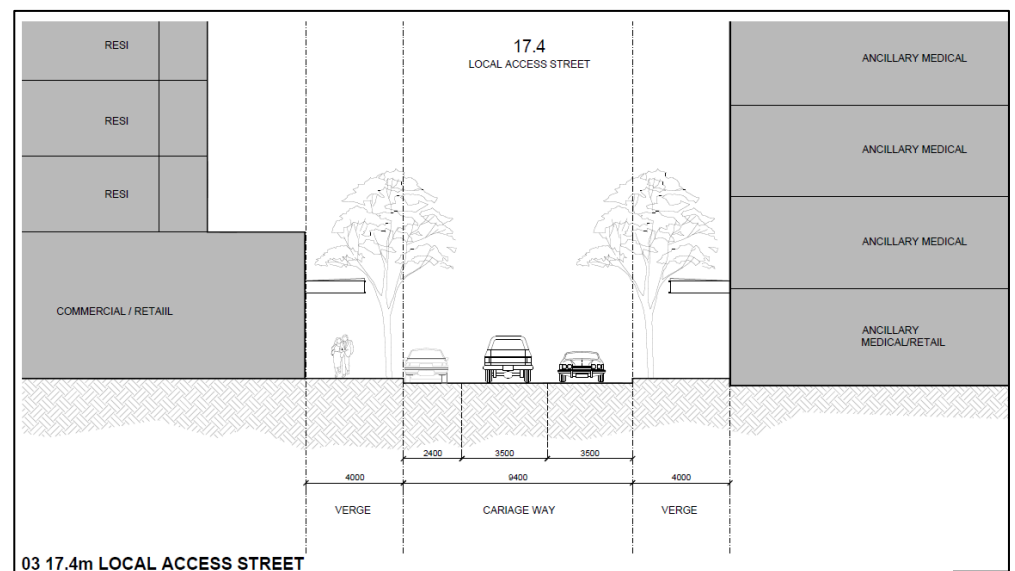
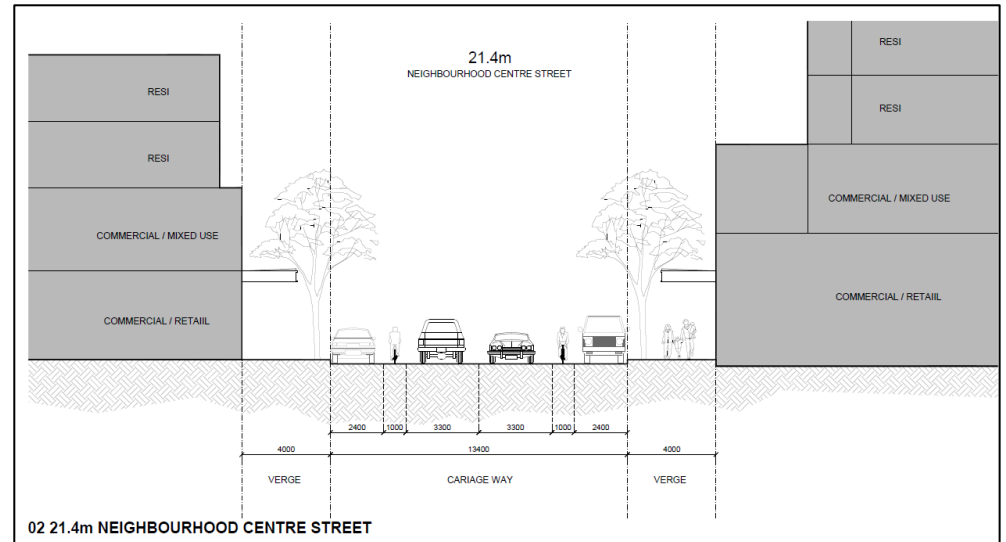
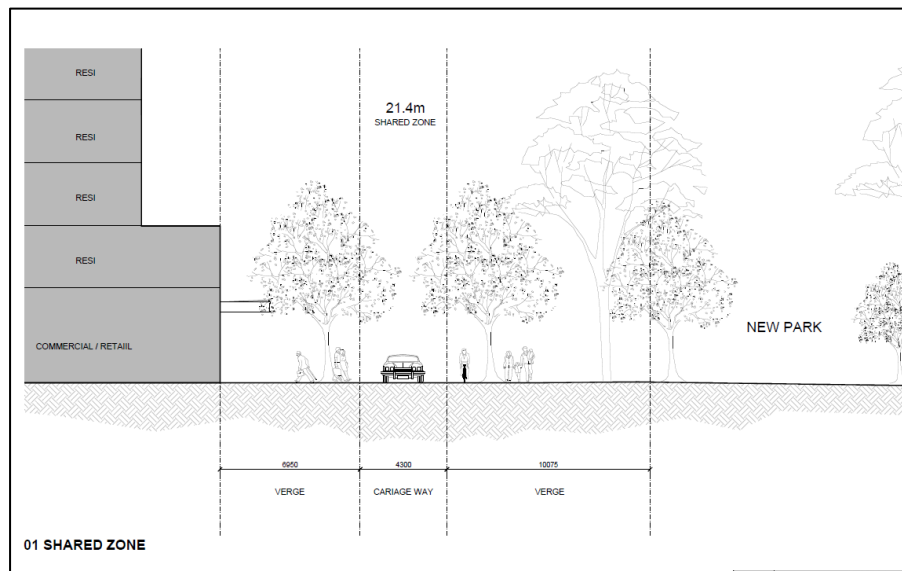
The southern section also illustrates the transition from 8.5 metres on neighbouring land to the west, to 9.5metres (2 storeys) at the direct interface with the development and then to 14 metres (4 storeys) Main Street. Height's within the central portion include a 1-2 storey podium, with heights above ranging up to 6, 7 and 8 storeys (29 metres). This transitions back to the east, being 4 and 5 storeys (20 metres). The issue of transition in height has been thought through across the development to adjoining zones, rather than just at the interface. The transition in heights also retains the urban design outcomes sought to allow sunlight to open spaces, laneways and streets and create active frontages to facilitate a vibrant and welcoming town centre.



6.3 STREET CROSS SECTIONS

The following cross sections illustrate the three-street hierarchy included within the town centre. The street network and hierarchy diagram on page 9 illustrates the location of the streets and the perspectives in Section 8 provide some visual context. The three streets include:

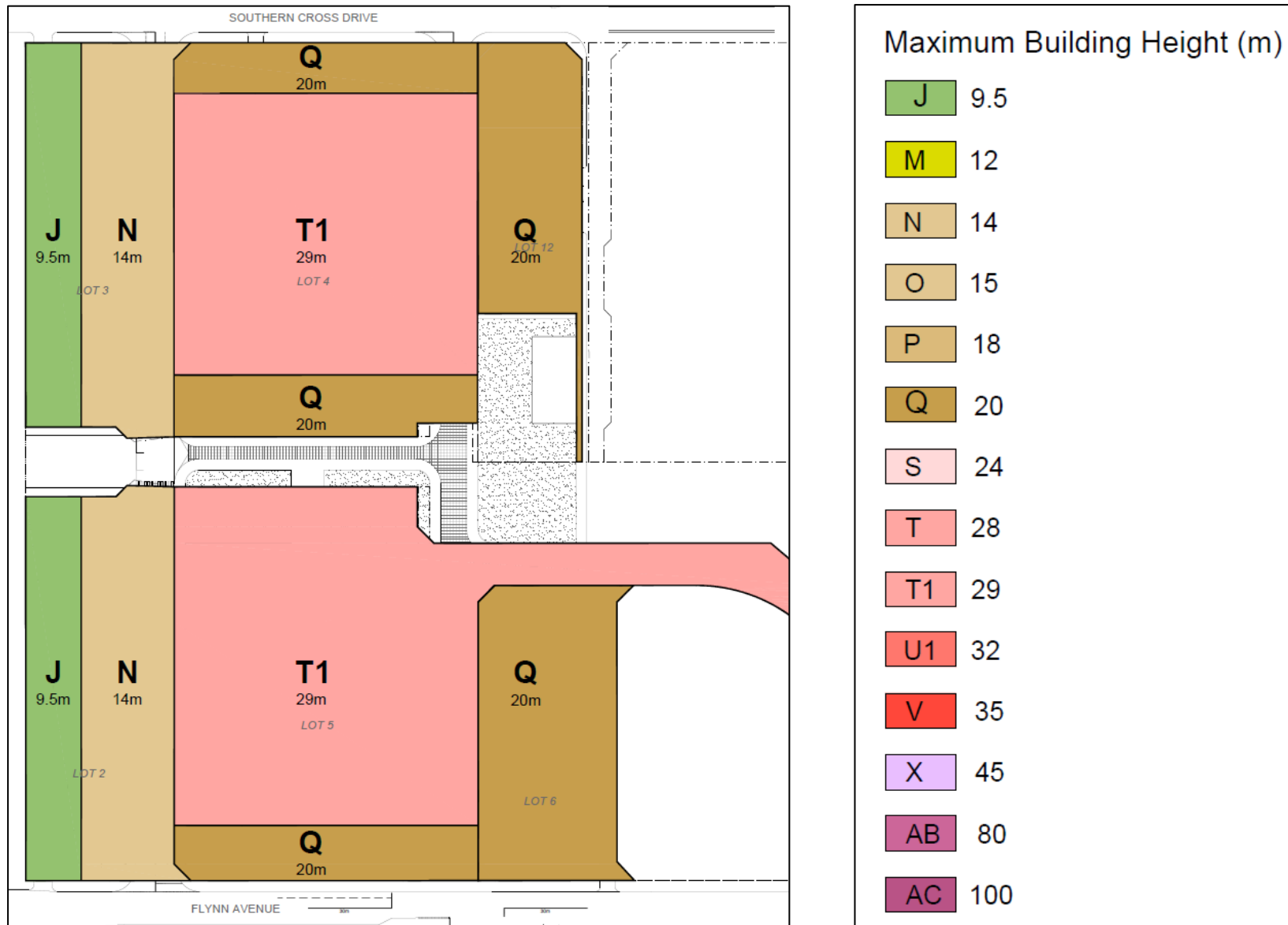
1. East west shared zone – 21.4 metres, including pedestrian areas;
2. Neighborhood centre street (Main Street) – 21.4 metres; and
3. Local Access Street (Middleton Drive) – 17.4 metres



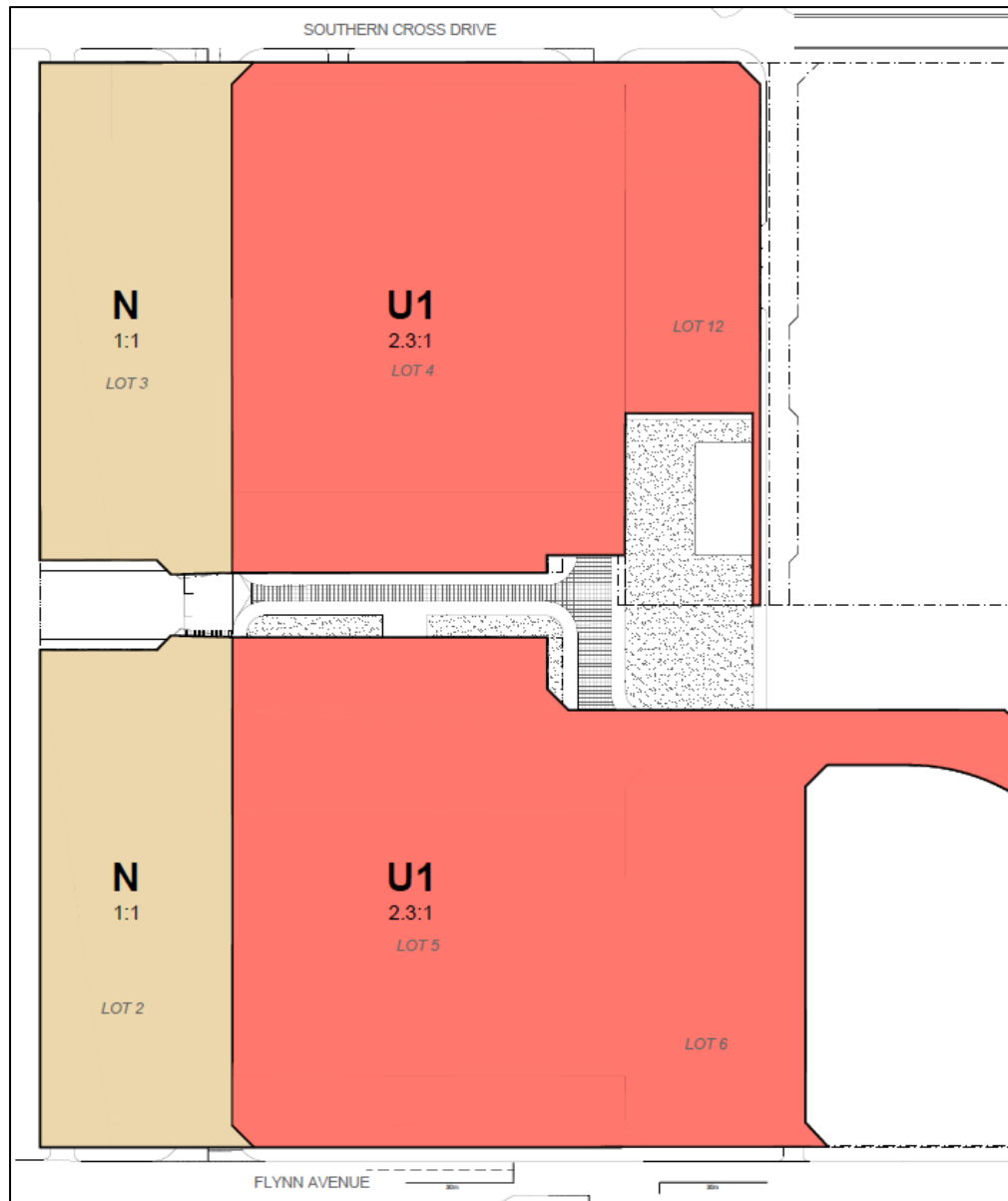
Source: Proposed street sections, Christiansen O'Brien Architects Pty Ltd

7.0 DRAFT LEP MAPS

7.1 Draft Liverpool LEP 2008 Maximum Building Height Map



7.2 Draft Liverpool LEP 2008 Maximum FSR Map



Maximum Floor Space Ratio (n:1)

A1	0.01
A2	0.1
A3	0.15
A4	0.25
D	0.5
F	0.6
G	0.65
I	0.75
N	1.0
P	1.2
S1	1.5
S2	1.7
T	2.0
U1	2.3
V	3.0
X	4.0
Z	5.0

8.0 SHADOW DIAGRAMS

8.1 Winter Solstice



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 0900 ON 21 June



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1000 ON 21 June



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1100 ON 21 June



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1200 ON 21 June



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1300 ON 21 June



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1400 ON 21 June



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1500 ON 21 June

8.2 Summer Solstice



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 0900 ON 21 December



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1000 ON 21 December



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1100 ON 21 December



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1200 ON 21 December



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1300 ON 21 December



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1400 ON 21 December



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1500 ON 21 December

8.3 Autumn and Spring Equinox



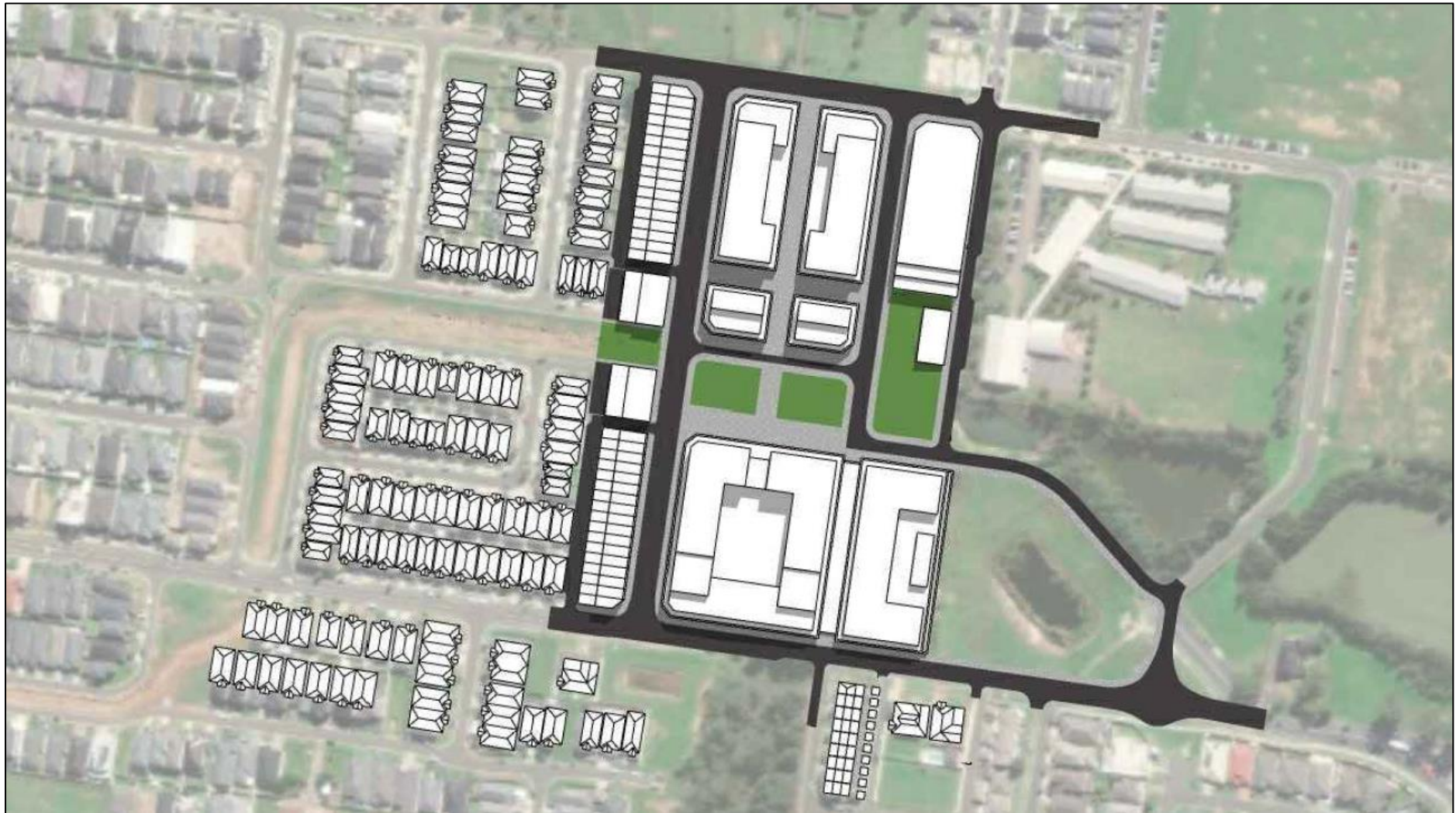
Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 0900 ON 21 March and September



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1000 ON 21 March and September



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1100 ON 21 March and September



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1200 ON 21 March and September



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1300 ON 21 March and September



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

SOLAR DIAGRAM – 1400 ON 21 March and September



Source: Proposed Concept Plans, Christiansen O'Brien Architects Pty Ltd

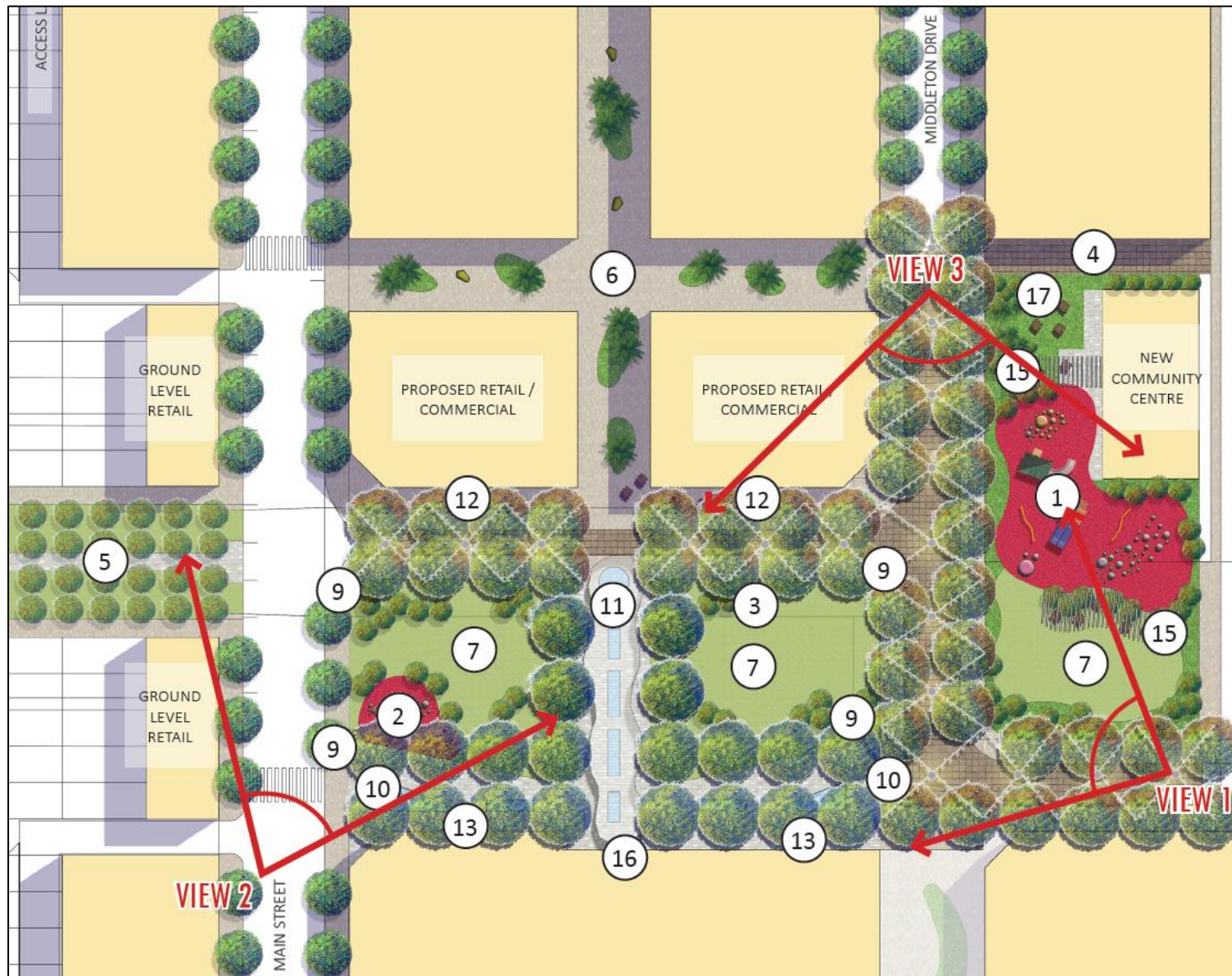
SOLAR DIAGRAM – 1400 ON 21 March and September

8.4 Solar Analysis

The shadow diagrams above illustrate the solar access impacts on 21st June (the shortest day of the year); and also include 21st December (the longest day of the year and the Spring and Autumn Equinox (21st March and September). In relation to the shadow diagrams on the shortest day of the year, the analysis demonstrates:

- 1 Minimal impact to residential properties to the west, and no impact after 10.00am (+5hrs clear solar access between 9.00am and 3.00pm).
- 2 Minimal impact to properties south of Flynn Avenue. (Basically no shadow impact to existing residential properties to the south between 10.00am and 2.00pm - +4hrs clear solar access between 9.00am and 3.00pm).
- 3 Minimal impact to communal open space. (No significant shadows cast before 1.00pm +4hrs clear solar access between 9.00am and 1.00pm). Additional open space provided in revised scheme facilitating additional areas with clear solar access later in the day where other areas may be in shade. Therefore, residents and visitors will be able to access open space in the town centre that will receive sunlight at any time of day.
- 4 Minimal impact to school. (No significant shadows cast before 2.00pm +5hrs clear solar access between 9.00am and 2.00pm).
- 5 Good solar access to private open space (on Podium between 10.00am-1.00pm – 3hrs)
- 6 Good solar access to ground floor active uses along the main streets at various parts of the day encouraging cafes and alfresco uses to activate the street edge.

8.0 PERSPECTIVES



8.1 View 1



8.2 View 2



8.3 View 3





8.0 CONCLUSION

This Urban Design Report has been prepared by Pacific Planning Pty Ltd on behalf of Manta Group Pty Ltd to support the Planning Proposal for the Middleton Grange town centre. Specifically, this report addresses the matters raised during the public exhibition of the planning proposal in August to October 2018.

The key issues raised during the public exhibition period included:

1. The maximum heights being proposed (i.e. 12 storeys);
2. The amount of apartments;
3. The amount of open space;
4. The lack of investment in public infrastructure over a number of years in the suburb of Middleton Grange and the impact that the development of the town centre may have on the road network; and
5. The erroneous claim that the proposal was to be mainly a social housing development.

This report outlines the refined design principles and amendments to the exhibited Planning Proposal, which includes:

- A reduction in maximum building height from 35 and 32 metres (12 storeys) to 29 metres (8 storeys);
- Further increase and amendments to the internal height transition, particularly to the new area of open space and adjoining land;
- A reduction in the number of apartments in the town centre, from 912 dwellings to 671 dwellings;
- Significant increase in the amount of open space, from 751sq.m to 7,632sq.m;
- The creation of new laneways and through links, to reduce building bulk and mass, increase permeability and accessibility, and create additional active frontages to pedestrian spaces;

- Increased amount of shared vehicle and pedestrian space, with traffic calming measures, to provide a larger consolidated safe area of communal open space for residents and visitors of Middleton Grange;
- The Inclusion of a new medical centre on the eastern part of the town centre.

In making the changes to the development concept above, the Planning Proposal has been amended, and seeks to:

- increase the maximum height of buildings from part 8.5 metres and part 18 metres to part 9.5 metres, 14 metres, 20 metres and 29 metres; and
- increase the maximum floor space ratio from part 1.5:1 and 0.75:1 to part 1:1 and 2.3:1.

The proposed transition in heights creates a transition from 8.5 metres on the adjoining land to the west to 9.5 metre along that interface. The block then increases to 14 metres along the frontage to Main Street, allowing for commercial/retail along the ground floor to activate the main street of the town centre. The transition across the street to 29 metres (8 storeys) is more appropriate in defining the main street. A 20 metre height limit to the south and east ensures an appropriate transition to neighbouring sites including the school. The benefits of the reduction in these locations is supported by the overshadowing analysis.

The proposed density of 1:1 and 2.3:1 provides for an average FSR across the town centre of 1.98:1 and facilitates approximately 7,600sq.m, a 911% increase on open space under the existing controls.

The amendment to the principle development controls will facilitate a vibrant and sustainable town centre for the community, which includes residential accommodation that supports housing choice, diversity and affordability in Middleton Grange, jobs and employment, services, recreation and entertainment, and medicinal and social services. The town centre will become a focal point for the community that also fosters a sense of place and pride.