

Prepared for: Campbelltown City Council
Date: 6th April 2021

Site-Specific Development Control Plan

Kellicar Road Precinct



Project and report	Kellicar Road Precinct DCP
Date	28th January 2021
Client	Dumarchand Pty Ltd
Document no.	K:\160052.00\Docs\C_Client\Development Control Plan
Version and date issued	Issue A (Draft to Council) - 04/09/20
	Issue B (Draft to Council) - 16/10/20
	Issue C (Draft to Council) - 16/11/20
	Issue D (Final Draft to Council) - 28/01/21
	Issue E (Final Draft to Council) - 19/03/21
	Issue F (Final Draft to Council) - 06/04/21
Report contact	Nick Bucktin Senior Associate, Urban Design

Architectus Australia Holdings Pty Ltd.
ABN 90 131 245 684

Nominated Architect
Managing Director
Ray Brown
NSWARB 6359

Adelaide
Lower Ground Floor
57 Wyatt Street
Adelaide SA 5000
Australia
T +61 8 8427 7300
adelaide@architectus.com.au

Melbourne
Level 25, 385 Bourke Street
Melbourne VIC 3000
Australia
T +61 3 9429 5733
F +61 3 9429 8480
melbourne@architectus.com.au

Perth
QV1 Upper Plaza West
250 St. Georges Terrace
Perth WA 6000
Australia
T +61 8 9412 8355
perth@architectus.com.au

Sydney
Level 18, MLC Centre
19 Martin Place
Sydney NSW 2000
Australia
T +61 2 8252 8400
F +61 2 8252 8600
sydney@architectus.com.au

architectus.com.au

Contents

1	Introduction		6	Land use within the precinct	35
1.1	Land to which this part applies	6	6.1	Land use	36
1.2	Purpose of this part	6			
1.3	Aims and objectives of this part	6	7	Built form	39
1.4	Relationship to Campbelltown City (Sustainable City) DCP 2015	6	7.1	Overview	40
			7.2	Building height	42
			7.3	Setbacks	43
2	Site context	7	7.4	Building layout, form and design	44
2.1	Strategic planning overview	8	7.5	Residential and commercial entries (pedestrian)	45
2.2	Re-imagining Campbelltown City Centre	9	7.6	Mobility, access and parking	46
			7.7	Solar access	48
3	Vision and objectives for the precinct	11	7.8	Communal open space	50
3.1	Vision	12	7.9	Deep soil, landscaping and green roofs	51
3.2	Objectives for the precinct	12	7.10	Wind mitigation	52
3.3	Design principles	13	7.11	Reflectivity	52
3.4	Illustrative Master Plan	14	7.12	Sustainability and resilience	53
			7.13	Stormwater management	54
4	Local infrastructure and street network	17	7.14	Delivery and staging	56
4.1	Public transport, walking and cycling	18	7.15	Delivery and staging	58
4.2	Street hierarchy	19			
4.3	Street sections	20			
5	Public domain	25			
5.1	Public domain and open space	26			
5.2	Macarthur Walk	27			
5.3	Civic Plaza	28			
5.4	Central Park	29			
5.5	Green Link	30			
5.6	Underbridge Park	31			
5.7	Menangle Plaza	32			
5.8	Kellicar Road Boulevard	33			
5.9	Narellan Park	34			

Figures

Figure 1. The Site	6
Figure 2. Extract from the Greater Sydney Region Plan	8
Figure 3. The North-South Rail Link	8
Figure 4. Extract from The Macarthur Precinct Plan	8
Figure 5. Extract from Reimagining Campbelltown City Centre Master Plan 2020 showing the Kellicar Road Precinct	9
Figure 6. Artists impression of the Civic Plaza space	12
Figure 7. Indicative Kellicar Road Precinct layout	13
Figure 8. Illustrative Master Plan	14
Figure 9. Illustrative Master Plan indicative built form modelling	15
Figure 10. Public Transport, Walking and Cycling	18
Figure 11. Street hierarchy	19
Figure 12. Typical Macarthur Walk Street Section	21
Figure 13. Typical Bugden Place Street Section	21
Figure 14. Typical Kellicar Road Street Section	21
Figure 15. Typical Tindall Street Section	23
Figure 16. Typical Kellicar Lane Street Section	23
Figure 17. Indicative key public domain spaces	26
Figure 18. Indicative concept plan for Macarthur Walk	27
Figure 19. Indicative elevation along Macarthur Walk	27
Figure 20. Indicative concept plan for Civic Plaza	28
Figure 21. Indicative concept plan for Central Park	29
Figure 22. Indicative concept plan for Green Link	30
Figure 23. Indicative concept plan for Underbridge Park	31
Figure 24. Indicative concept plan for Menangle Plaza	32
Figure 25. Indicative concept plan for Kellicar Road Boulevard	33
Figure 26. Indicative concept plan for Narellan Park	34
Figure 27. Preferred land use strategy	36
Figure 28. Example of an activated ground plane	37
Figure 30. Example of an active retail ground plane with residential above	37
Figure 31. Example of community uses located in the podium level and designed to activate the public domain	37
Figure 29. Example of an active retail ground plane with residential above	37
Figure 32. Example of community uses integrated with mixed use buildings	37
Figure 33. Indicative illustration of the future built form and skyline of the twin centres.	40
Figure 34. Re-imagining Campbelltown Strategy - Commitment 5.3 p89	41
Figure 35. Building height with indicative tower locations	42
Figure 36. Indicative setbacks plan	43
Figure 37. Example of high quality architectural design	44
Figure 38. Example of continuous awnings and activated ground floor retail uses.	44
Figure 39. Indicative residential and commercial entries	45
Figure 40. Indicative car parking and basement entries/exits	46
Figure 41. Indicative overshadowing plans 21st June (mid-winter)	49
Figure 42. Indicative locations for communal open space	50
Figure 43. Indicative locations for deep soil	51
Figure 44. Indicative stormwater strategy to manage residual flood risk relating to Birunji Creek	54
Figure 45. Indicative development staging scenario	56

1 Introduction

Introduction



Figure 1. The Site

01 Note: Land indicated is under Gilchrist Drive

1.1 Land to which this part applies

This Development Control Plan (DCP) applies to all land within the Kellicar Road Precinct that is bound by Menangle Road to the north, Narellan Road to the east, Kellicar Road to the south and Gilchrist Drive to the west, as illustrated in Figure 1.

1.2 Purpose of this part

The purpose of this part is to identify the planning, design and environmental objectives and development controls against which Campbelltown City Council will assess future Development Applications (DAs) within the Kellicar Road Precinct as identified above.

1.3 Aims and objectives of this part

This DCP has been prepared to provide a set of guidelines and development controls that will apply to future development of the Kellicar Road Precinct.

This DCP includes objectives and controls for ensuring well designed, quality land use and built form outcomes within the Kellicar Road Precinct and provides guidance for future DAs at the site.

The aims and objectives of this DCP are:

1. To ensure that future development within the Kellicar Road Precinct aligns with the principles and objectives of this part.

2. To promote high quality design and public domain outcomes.
3. To ensure development is economically, socially and environmentally sustainable.
4. To ensure the timely delivery of necessary infrastructure.
5. To create a vibrant, successful and attractive precinct.
6. To maximise opportunities for future residents to access and enjoy the open space within the precinct.
7. To offer opportunities for local employment and business.

1.4 Relationship to Campbelltown City (Sustainable City) DCP 2015

This DCP should be read in conjunction with Campbelltown (Sustainable City) DCP 2015.

When a development control is not specified in this part, development should be consistent with all other relevant controls of Volume 1 Campbelltown (Sustainable City) DCP.

If there is any inconsistency between this part and the Campbelltown (Sustainable City) DCP 2015, this part applies to the extent of the inconsistency.

The development controls within Part 1, Volume 1 of the SCDP shall be relied on in the instance where relevant provisions have not been provided for certain types of development in this DCP.

2 Site context

Site context

2.1 Strategic planning overview

The Kellicar Road Precinct is located in an area that has been identified for significant change in the coming years. The key strategic directions relevant to the site are:

- Campbelltown-Macarthur is identified as a **Metropolitan City Cluster** in the **Western City District Plan**. The subject site is only a 5-minute walk from the Macarthur Train Station and at the centre of the Regional City Centre.
- The **North-South Rail Link** proposes a **rapid transit rail line** linking Campbelltown-Macarthur with Western Sydney Airport, the Aerotropolis and beyond to St Marys. This presents **opportunities for growth and intensification** within Campbelltown-Macarthur.
- In November 2017, the **Macarthur Precinct Plan** was adopted which forms part of the broader **Glenfield to Macarthur Urban Renewal Corridor Strategy**. This study identifies the potential for **high density, mixed use development** on the site.
- The site will play a significant role in fulfilling the **Re-imagining Campbelltown** vision for Campbelltown-Macarthur to accommodate an anticipated 4,500+ new full time jobs and a dwelling forecast of 17,200 over the next 80 years.

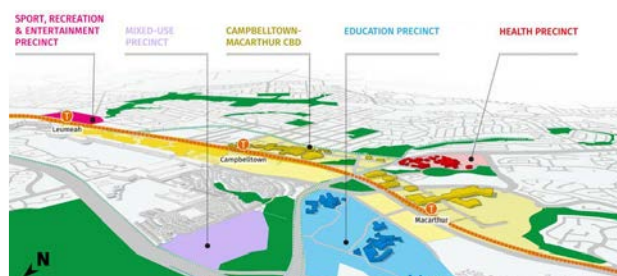


Figure 2. Extract from the Greater Sydney Region Plan. This figure shows the close relationship between the two centres and the importance of the site.

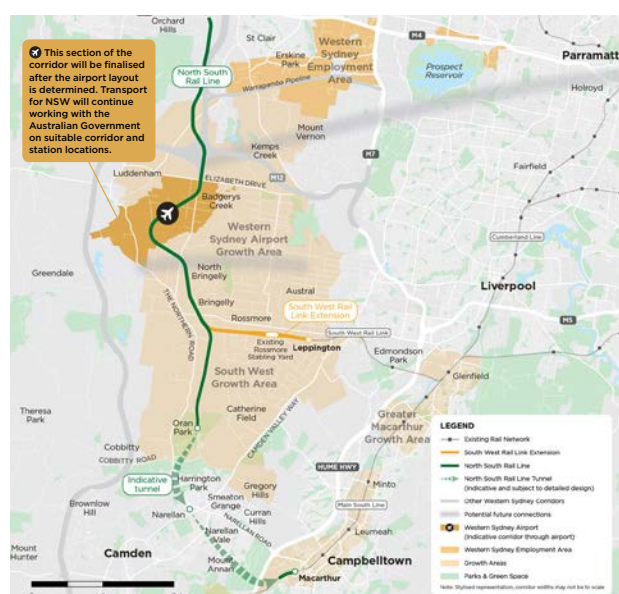


Figure 3. The North-South Rail Link is proposed to connect Macarthur-Campbelltown with Western Sydney Airport and the Aerotropolis. Source: Transport for NSW.



Figure 4. Extract from The Macarthur Precinct Plan. Identifies the site as an appropriate location for Mixed Use Retail/Residential uses, located between the commercial cores at Macarthur and Campbelltown Stations.

Site context

2.2 Re-imagining Campbelltown City Centre

Re-imagining Campbelltown City Centre aims to kick start new employment and investment by attracting and supporting the next generation of jobs, homes and lifestyle, to create Australia's greenest and most sustainable city.

Commencing in 2017, Phase 1 of the project developed a city centre vision following a series of engagement events with community members and stakeholders to establish what the community most value and want to see in the future.

Phase 2 of the project allowed for further community engagement and resulted in a master plan which was released in mid-2020.

The master plan presents a 'Place Framework' and 'Growth Pillars' which capture the community's values and aspirations.

These include:

- Confident and Self Driven
- Connected Place
- Centre of Opportunity
- No Grey to be Seen
- City and Bush
- The Good Life

The document also provides a 'Delivery Framework' of City Making Moves and actions that will unlock the potential of the city centre as the master plan is implemented.

Importantly the Kellicar Road Precinct offers a unique opportunity to deliver early on the vision established in Reimagining Campbelltown. It is identified within the master plan as a City Centre Living and a Health, Knowledge and Innovation Precinct.

Council endorsed the Illustrative Master Plan's consistency with the vision and objectives of Reimagining Campbelltown at its Ordinary Meeting on 9th June 2020.



Figure 5. Extract from Reimagining Campbelltown City Centre Master Plan 2020 showing the Kellicar Road Precinct.

3 Vision and objectives for the precinct

Vision and objectives for the precinct



Figure 6. Artists impression of the Civic Plaza space

3.1 Vision

The vision for the Kellicar Road Precinct is for a new generation mixed use centre with a strong, high quality public domain that contributes positively to the wider health and education hub at Macarthur.

The objective is to transition the area from a car dominated environment to a more people and pedestrian friendly destination with plazas, laneways, shopping and outdoor dining within a landscaped urban setting.

3.2 Objectives for the precinct

The objectives of the precinct are:

- A. To facilitate the provision of additional housing and employment opportunities in a manner that promotes Campbelltown-Macarthur as the key south-west metropolitan centre and strengthens the health and education precinct.
- B. To ensure that the density of land use across the precinct is integrated with nearby transport infrastructure and encourages travel by public transport, walking and cycling.
- C. To achieve a high quality urban form by ensuring that new development exhibits design excellence and responds to the character of the local area.
- D. To ensure that sufficient and quality open space is incorporated with development within the precinct and includes a civic park, a central pedestrian walkway and other public open spaces.
- E. To promote ecologically sustainable development.
- F. To allow for the timely delivery of infrastructure, public domain enhancement and open space to support the orderly development of the precinct.

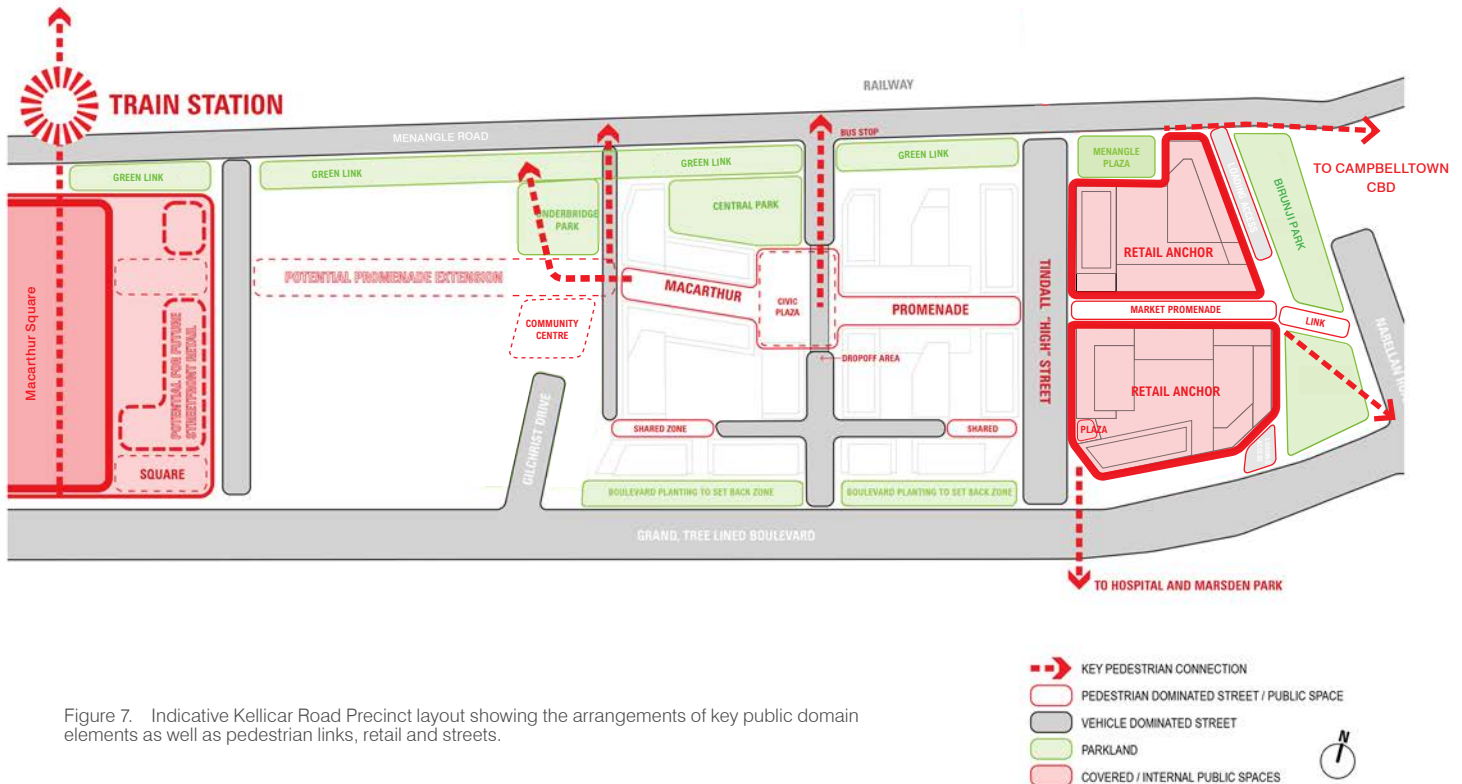


Figure 7. Indicative Kellicar Road Precinct layout showing the arrangements of key public domain elements as well as pedestrian links, retail and streets.

3.3 Design principles

The precinct is to be master planned in accordance with the following urban design principles:

1. A mix of land uses including residential and employment (retail and commercial). A high quality public domain with Macarthur Walk as a central pedestrian spine, book-ended by retail anchors.
2. Kellicar Road to define the southern edge of the precinct as a grand boulevard with consistent street wall height and avenue planting.
3. Menangle Road and rail corridor to define the northern edge incorporating a green linear park with pedestrian and cycle link.
4. A generous provision of green parkland spaces to cater for different recreational needs, tree canopy and stormwater.
5. Tindall Street and Bugden Place with parking and street planting to provide for convenience shopping.
6. Towers setback from street edges, consistent with the street hierarchy.
7. Towers spaced apart and aligned north-south to maintain sunlight and views of the sky between.
8. A laneway strategy to provide service access.
9. Minimise car parking in line with increased public transport utilisation and active travel.

Vision and objectives for the precinct



Figure 8. Illustrative Master Plan

3.4 Illustrative Master Plan

A primary premise of the Kellicar Road Precinct's development is that it is best undertaken via a master-planned approach. This allows for the component sites to be considered as a single precinct, for local streets to be treated on a hierarchical basis and for a substantial investment in the site's public domain.

The Illustrative Master Plan at Figure 8 has been prepared to guide development outcomes for the precinct. It is the basis of this site-specific DCP and is illustrative of the built form and public domain outcomes that the DCP's objectives, principles and controls seek to achieve.

Importantly, the Illustrative Master Plan is indicative of how a varied height format can be achieved across the site.

The master plan is intended to be interpreted and applied, however, with a degree of flexibility. As individual residential buildings are subject to a finer layer of assessment under SEPP 65, for instance, their building shapes and/or their position on the site may change. Any adjustments to residential towers will necessarily be subject to compliance

with the building performance and siting requirements of the Apartment Design Guide (ADG),

Should a substantial departure from the master plan be proposed, an alternate master plan which treats the site as a whole is required to be submitted for Council's endorsement and separate approval.

As the site is large and is likely to be developed in stages, it may also be required to re-visit the masterplan to ensure that it remains valid and receptive to surrounding development. Council may require the illustrative masterplan to be updated as staged development occurs.

Vision and objectives for the precinct



Figure 9. Illustrative Master Plan indicative built form modelling

Objectives

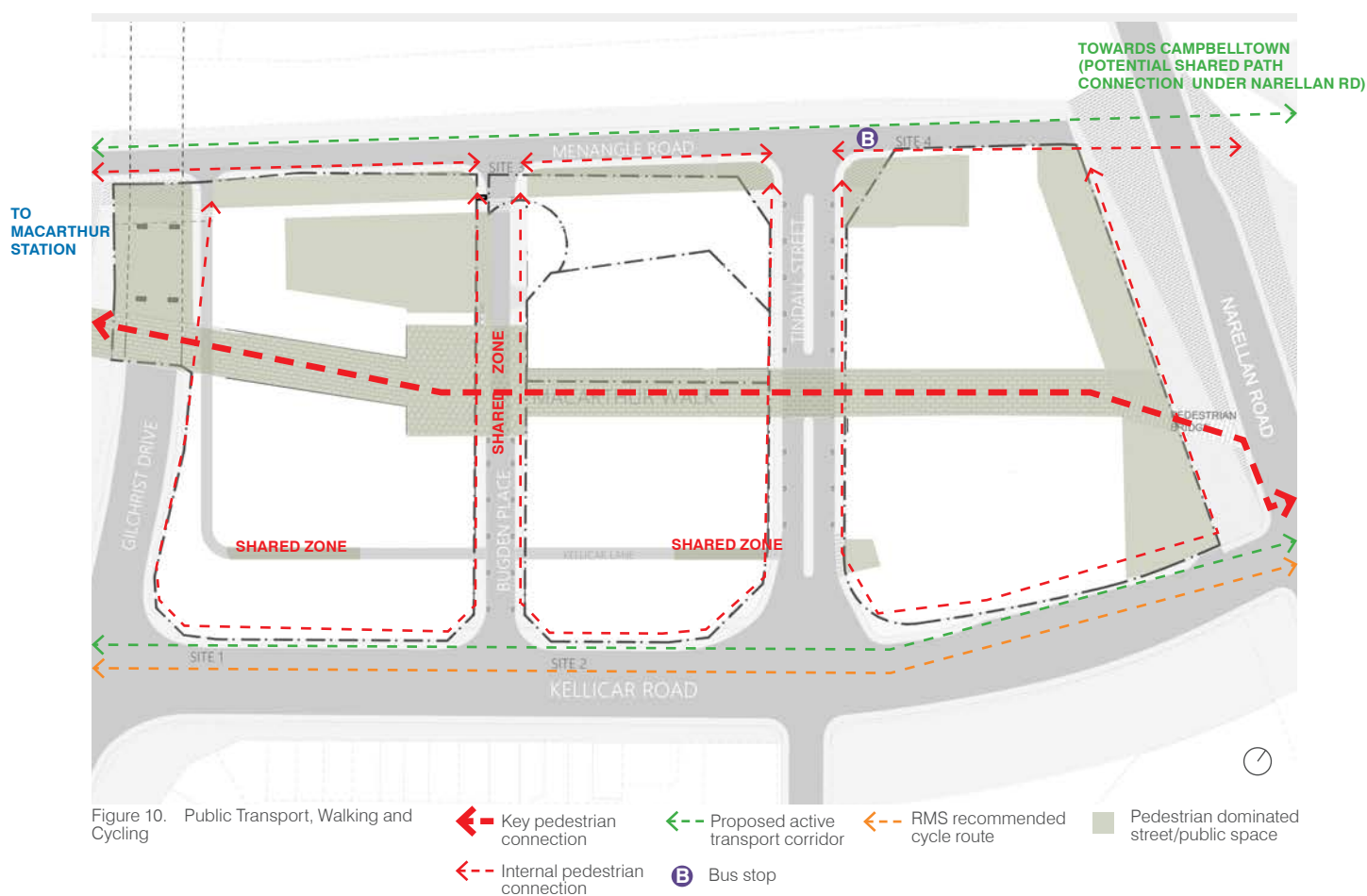
- A. To provide a framework for the future high quality renewal of the site that supports a range of mixed land uses including residential, commercial, retail, public open space and community uses.
- B. To ensure future development prioritises open space and a high quality public domain.

Controls

1. Development of the site should generally be consistent with the Illustrative Master Plan as shown in Figure 8.
2. Where variation from the Illustrative Master Plan is proposed, the applicant is to demonstrate that the variation is consistent with the objectives and principles set out in Part 3 of this Part of this DCP.
3. Any such variation shall not result in the reduction of the overall size of the open space, public plaza and other elements of the public domain to be provided across the precinct, nor should such change have a greater (more adverse) impact on adjoining sites.
4. Any variation to the master plan shall be fully justified and supported by a statement illustrating that the variation will achieve a similar or a better outcome when measured against the objectives and the principles contained in this Part of the DCP.
5. Future Development Applications shall demonstrate consistency with the provisions of the State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development (SEPP 65) and the accompanying Apartment Design Guide (ADG).

4 Local infrastructure and street network

Local infrastructure and street network



4.1 Public transport, walking and cycling

Objectives

- To establish east-west and north-south connections to create a clear, legible and permeable network of streets that connect the Kellicar Road Precinct to:
 - Macarthur Station to the west; and
 - Campbelltown Station to the east; and
 - The University to the north; and
 - Marsden Park and the Hospital to the south.
- To enhance connectivity to public transport, open space and nearby amenities.
- To create a network of walking and cycling connections throughout the site that also connect with surrounding networks and destinations including Macarthur Station, Campbelltown Station and Marsden Park.
- To promote a walkable and active pedestrian environment for all users.
- To minimise vehicular and pedestrian conflict.
- To encourage a modal shift from vehicular usage to more public and active modes of transport.

Controls

- In general, the design of new streets, and shared zones should be delivered in accordance with Figure 10.
- If a direct pedestrian connection to Macarthur station is not established on the adjacent site (Lot 500, DP817216) then a pedestrian link to the station is to be provided utilising land under or adjacent to Gilchrist Drive and within the footpath/verge on Menangle Road.

Note: Ongoing consultation with TfNSW and Council regarding a future active transport corridor along Menangle Road will inform future controls.

Local infrastructure and street network

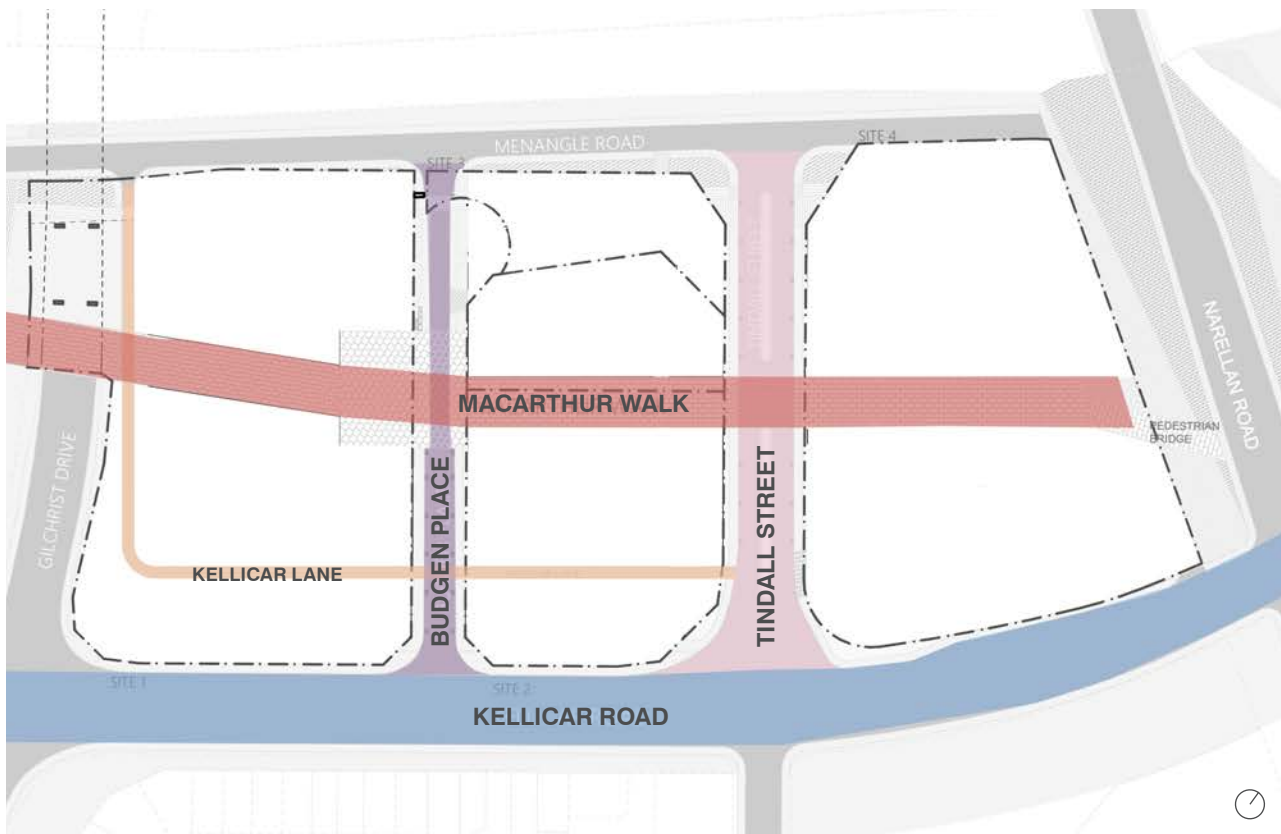


Figure 11. Street hierarchy

- Kellicar Road: Significant vehicular thoroughfare with tree lined boulevard
- Tindall Street; The main street
- Macarthur Walk: Key pedestrian, retailed lined boulevard
- Budgen Place: A local street
- Kellicar Lane: A laneway with pedestrian footpaths

4.2 Street hierarchy

This DCP and its Illustrative Master Plan present the Kellicar Road site as an activated and urbanised precinct.

Objectives

- A. To establish a clear and defined street hierarchy for pedestrian and traffic movement.
- B. To provide a street network with a high level of amenity, safety and permeability for all users.
- C. Ensure that the street network facilitates the efficient provision of waste and other services for the commercial and residential uses within the precinct.
- D. To introduce Macarthur Walk as a new east-west pedestrian promenade.
- E. To prioritise pedestrian amenity throughout the precinct.
- F. To ensure the design of the local road network can service local traffic demand.

Controls

1. The new street network, including streets, laneways, and through site links, should generally be provided in accordance with the street hierarchy in Figure 11.
2. New streets are to be designed in accordance with the relevant street section diagrams in Section 4.3.
3. Introduce a new east-west pedestrian connection (Macarthur Walk) to create a clear direct line of sight through the Precinct.
4. Utilise Budgen Place and Tindall Street as activated local streets.

Local infrastructure and street network

4.3 Street sections

Macarthur Walk (pedestrian only)

- Establish a tree lined east-west 20m wide pedestrian promenade which allows for vehicles to cross at Tindall Street and Bugden Place, subject to traffic calming treatment.
- Provide a minimum clear width of 6m to allow for some servicing and emergency access if required but with an intent to maintain a car-free environment.
- Provide for and maintain safe pedestrian crossings of Tindall Street and Bugden Place through appropriate road and footway treatments.

Bugden Place

- Establish Bugden Place as a local street to increase permeability and access through the development and increase passive surveillance.
- Provide on-street car parking where possible to help street activation.
- Provide a planted verge adjacent to street parking for tree planting.
- Provide footpaths with a minimum dimension of 3.5m on both sides of the street.

Kellicar Road

- Create a green and landscaped boulevard that provides a sense of arrival to the Kellicar Precinct.
- Provide a generous building setback (a minimum of 8m) along Kellicar Road.
- Provide for tree planting, where possible, within the road median and its verges.

Local infrastructure and street network

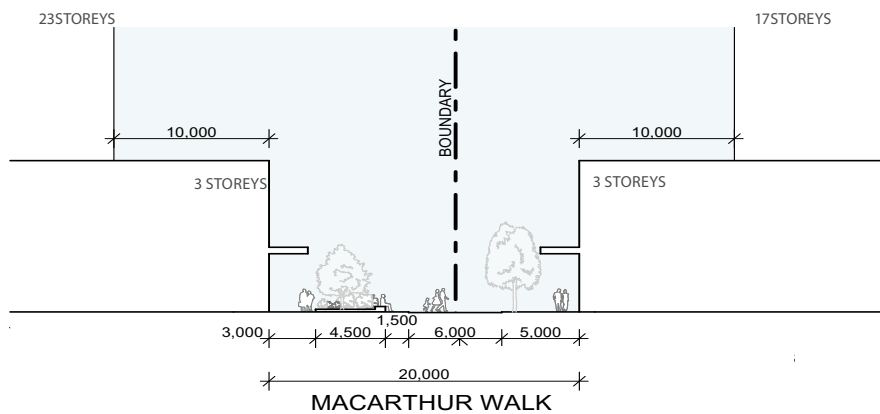


Figure 12. Typical Macarthur Walk Street Section

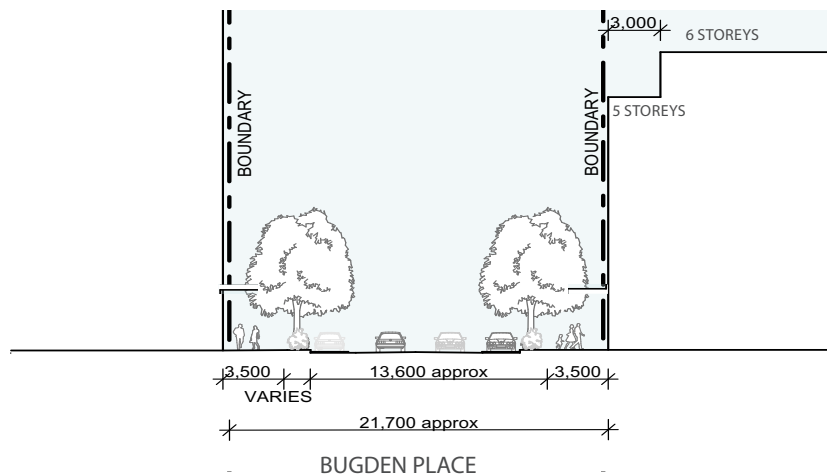


Figure 13. Typical Bugden Place Street Section

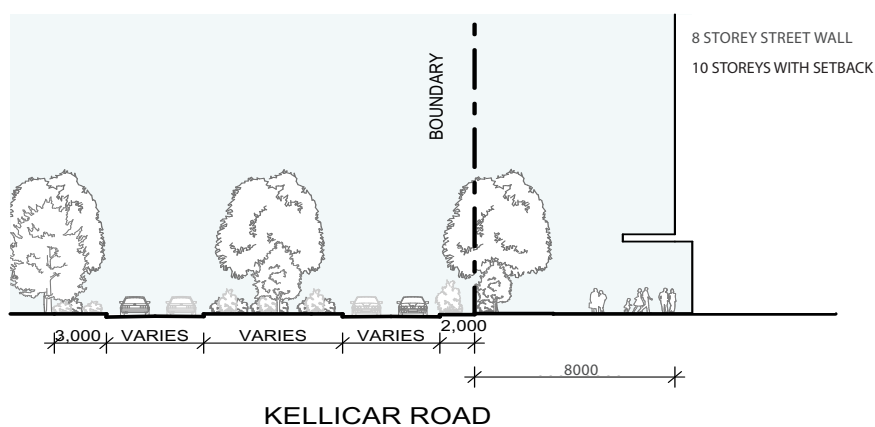


Figure 14. Typical Kellicar Road Street Section

Local infrastructure and street network

Tindall Street

- Establish Tindall Street as a local street with a 'main street' character.
- Provide on-street car parking where possible to help street activation.
- Provide a planted verge adjacent to street parking for tree planting and a planted median strip.
- Provide a sufficient road width to allow for local buses.

Kellicar Lane

- Create a new laneway with pedestrian footpaths with a minimum width of 3.5m.
- Provide access to vehicular basement and service entrances.
- Parts of the laneway can be a shared car and pedestrian environment, with traffic calming provisions.
- Provide access for service vehicles in the laneways. Access may be restricted during the day to facilitate shared spaces.

Local infrastructure and street network

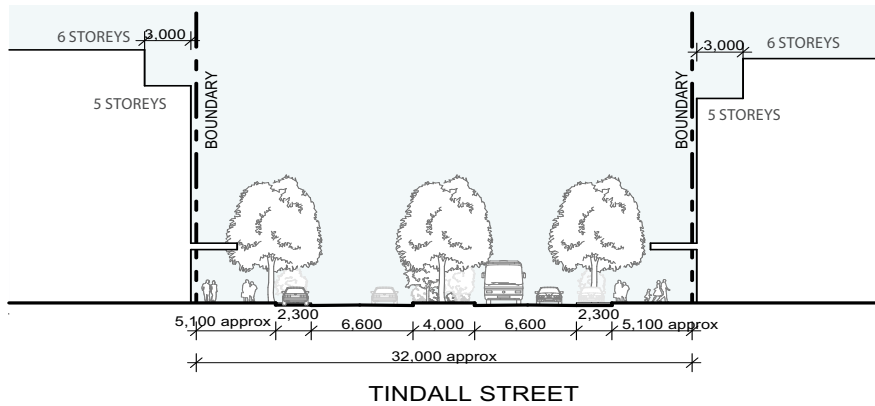


Figure 15. Typical Tindall Street Section

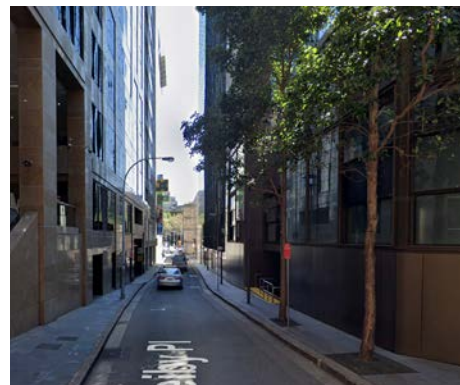
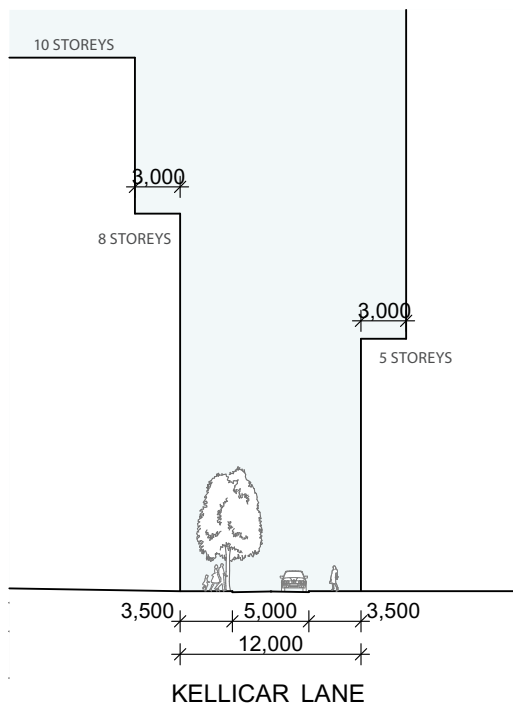


Figure 16. Typical Kellicar Lane Street Section and examples of character showing loading areas, planting and some active frontages - Tanksteam Way and Reiby Place, Sydney

5 Public domain

Public domain



Figure 17. Indicative key public domain spaces

5.1 Public domain and open space

Objectives

- To provide a hierarchy of high quality and accessible open spaces.
- To ensure the design of open space provides for variety of uses, appropriate to its location.
- To provide open space that meets the needs of the local community.

Controls

- Deliver new open space that is generally in accordance with the public domain and open space strategy in Figure 17.
- Incorporate principles contained within Councils 'Our Voice Our Place Aboriginal Interpretation Strategy'
- Provision of the public domain by the developer is to include:
 - A new 20m wide east-west pedestrian spine (Macarthur Walk) that provides a direct line of sight through the precinct and enhances connectivity (refer to concept plan at Figure 18).
 - A new Civic Plaza, with a minimum area of 1,000m² (excluding Bugden Place) and a minimum dimension of 30 metres. The plaza should function as a vibrant square, with a focus on food and beverage with outdoor dining (refer to concept plan at Figure 20).
 - A new large Central Park that has a minimum area of 3,000m². The new central park must be visible from the street and be predominately landscaped (refer to concept plan at Figure 21).
 - A Green Link along Menangle Road with a minimum width of 20m (from kerb to development) that can accommodate an attractive and strategic pedestrian and cycle link between the two centres of Campbelltown and Macarthur (refer to concept plan at Figure 22).
 - A new Under-Bridge Park, located under the Gilchrist Drive road bridge, with opportunity for youth activities such as an urban skate park (refer to indicative concept plan at Figure 23).
 - A new retail plaza (Menangle Plaza) that will link Tindall Street, Menangle Road and the Green Link featuring high quality landscaping and outdoor seating, activated by retail uses overlooking the plaza (refer to concept plan at Figure 24).
 - A generous landscaped building setback and tree-lined boulevard to the Kellicar Road (refer to concept plan Figure 25).
 - A significant linear green space buffering the development from Narellan Road and which is also a key part of the local stormwater strategy (refer to concept plan Figure 26).

Public domain

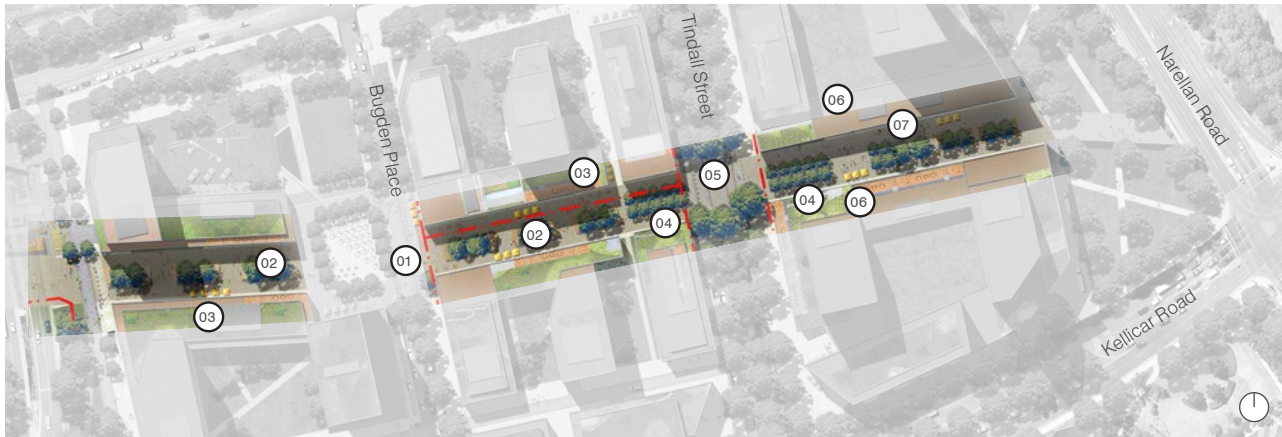
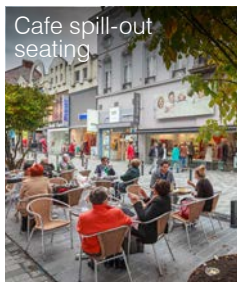


Figure 18. Indicative concept plan for Macarthur Walk

--- Property boundary



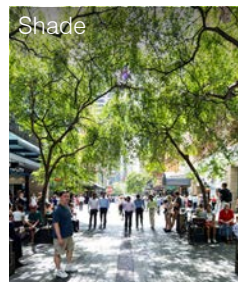
High quality paving and street furniture



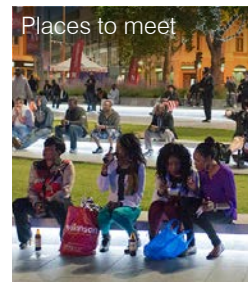
Cafe spill-out seating



Pedestrian priority



Shade



Places to meet

5.2 Macarthur Walk

A wide (20m) east-west pedestrian spine with a signature avenue of feature trees. Macarthur Walk will provide a comfortable and convenient public link through the site away from busy surrounding roads to Macarthur Station and Macarthur Square.

Adjacent ground floor uses will address the linear space to create activity and natural surveillance combined with high quality paving, lighting, planting and street furniture. Cross streets at Tindall Street and Bugden Place provide additional casual surveillance and improve activation.

- 01 Shared zone/crossing at Bugden Place
- 02 Raised planters with feature seat walls, lawn, planting and feature avenue trees
- 03 Outdoor dining/cafe spill-out
- 04 Feature grid of shade trees and informal seating/chairs
- 05 Pedestrian priority crossing/shared zone at Tindall Street
- 06 Access to retail/covered mall
- 07 Steps/level change

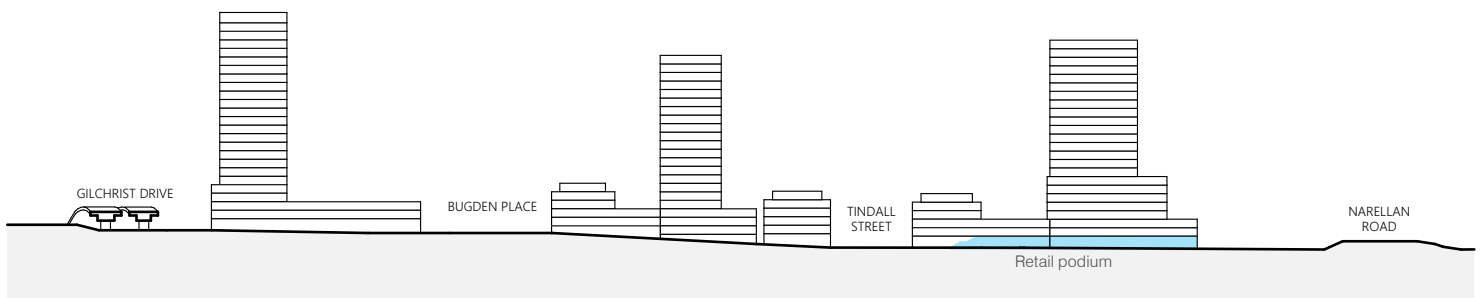


Figure 19. Indicative elevation along Macarthur Walk

Public domain

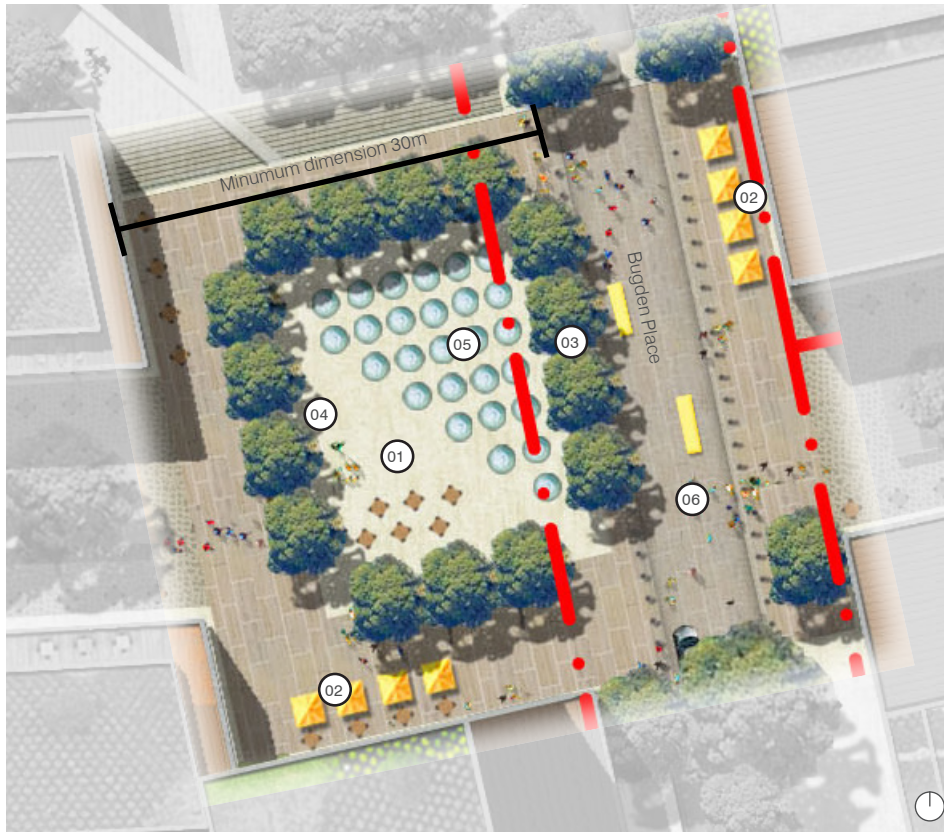
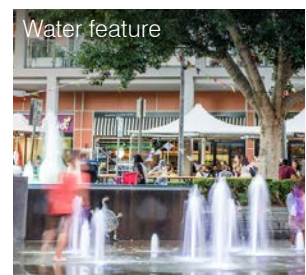


Figure 20. Indicative concept plan for Civic Plaza

— — — Property boundary



5.3 Civic Plaza

A formal public square at the centre of the precinct is located strategically along Macarthur Walk and linking with the Central Park to the north.

Active edges flank a central flexible space defined with avenue shade trees. This space may accommodate a range of community uses from small markets, community gatherings and displays or simply function as a high quality public plaza and meeting place.

Recessed water fountains will provide a playful and cooling feature that may be turned off during events.

- 01 Central flexible space (approx 1000m²)
- 02 Outdoor dining/cafe spill-out
- 03 Avenue shade trees in paving
- 04 Informal seating under shade trees
- 05 Recessed water fountains
- 06 Pedestrian priority crossing/shared zone

Public domain



Figure 21. Indicative concept plan for Central Park

— — — Property boundary

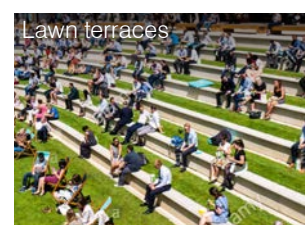
5.4 Central Park

A large 3,000m² community park that offers a range active and passive uses for exercise, play and relaxation. Its north facing aspect allows for good sunlight whilst also offering scenic views out to the north-west.

A feature adventure play area will provide an exciting focal point for families. Ground floor retail and cafés will allow for convenient passive surveillance.

A flat kickabout lawn will occupy the lower area of the site which allows for stepped and terraced viewing areas for spectators.

- 01 Adventure play area with bespoke equipment
- 02 Family BBQ areas
- 03 Cafe seating/terraces
- 04 Lawn terraces kickabout space
- 05 Stairs
- 06 Lawn kickabout space



Public domain



Figure 22. Indicative concept plan for Green Link

— — — Property boundary

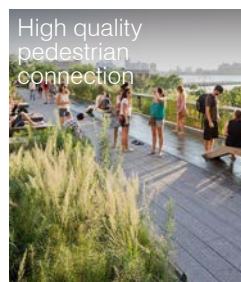
5.5 Green Link

A wide landscape setback to Menangle Road (20m from kerb) will provide for an attractive and strategic pedestrian and cycle link between Campbelltown and Macarthur stations alongside the rail corridor.

A shared path will use an improved Narellan Road underpass for pedestrian, cycling and local traffic.

The Green Link will incorporate native vegetation and landform to define a series of smaller more intimate spaces for exercise, rest and social interaction with intermittent scenic views to the north.

- 01 Improved underpass connection
- 02 Pedestrian/cycle priority crossing
- 03 Informal seating
- 04 Native landscaped and sculptural landforms
- 05 Intimate spaces for exercise, rest and socialising
- 06 Underpass below Gilchrist Drive



Public domain

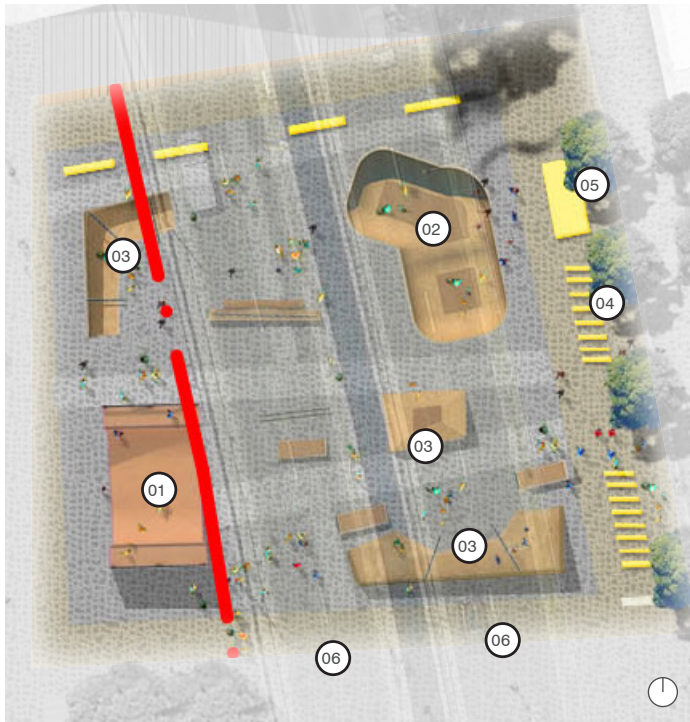
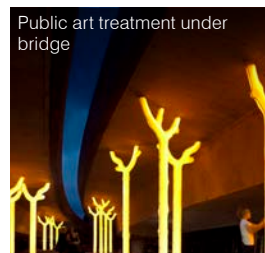


Figure 23. Indicative concept plan for Underbridge Park

--- Property boundary



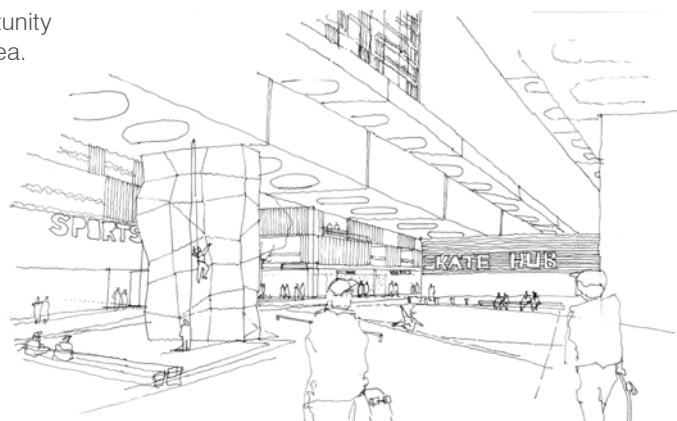
5.6 Underbridge Park

The site boundary includes a significant space located beneath the Gilchrist Drive road bridge. The space has generous clearances to the underside of the road and offers a great opportunity for youth activities such as an urban skate park.

The skate park will be partially covered by the road ensuring good weather protection from excessively hot or rainy days. Surrounding streets and development will offer good passive surveillance.

The underside of the road bridge offers a great opportunity for public art as part of a community project for the area.

- 01 Half pipe
- 02 Skate bowl
- 03 Various ramps and rails
- 04 Cycle storage
- 05 Toilet facilities
- 06 Road bridge above



Artists impression of Underbridge Park

Public domain

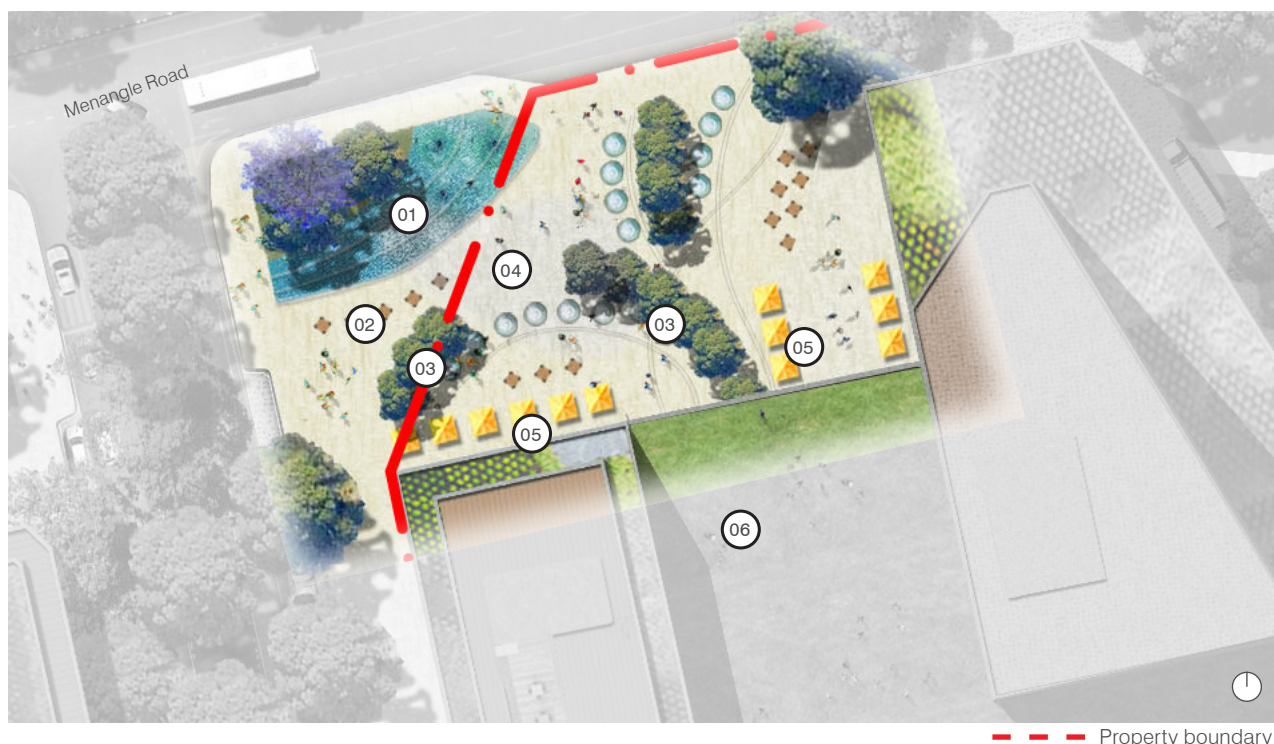


Figure 24. Indicative concept plan for Menangle Plaza

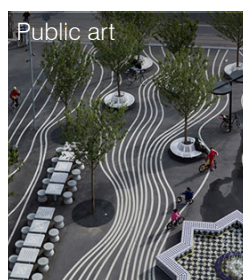
5.7 Menangle Plaza

This north facing plaza will link Tindall Street, Menangle Road and the Green Link with the covered retail mall.

A signature water feature and fountains will combine with high quality paving, street furniture, public art and avenue trees to create an attractive place for alfresco dining.

Paving, lighting and public art will carry through into the retail mall to help emphasise and encourage pedestrian movement between the spaces.

- 01 Water feature
- 02 Informal seating
- 03 Avenue tree planting in paving
- 04 Recessed water fountains in paving
- 05 Cafe/restaurant outdoor dining
- 06 Internal retail mall



Public domain



Figure 25. Indicative concept plan for Kellicar Road Boulevard

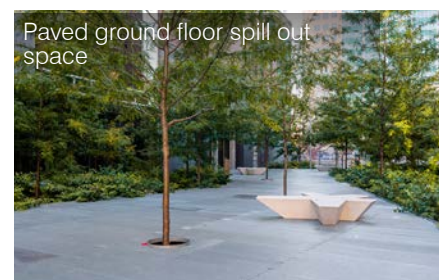
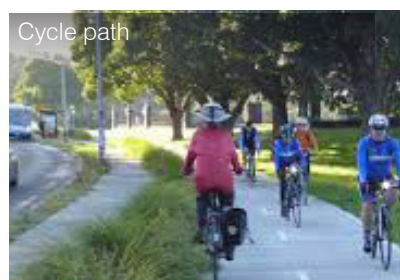
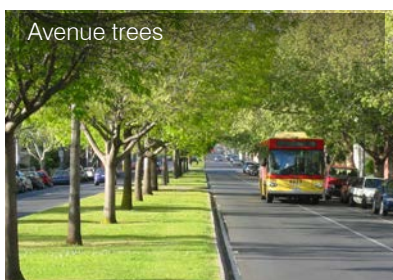
5.8 Kellicar Road Boulevard

Kellicar Road is a significant vehicular thoroughfare, and the function of this road is unlikely to change over time as the population increases. It is noisy and not as inviting for pedestrians, or dining and retail as other streets.

It is, however, how many people arrive at Macarthur. The road has potential as a grand landscaped boulevard with judicious street plantings matched by a generous building setback with potential ground floor retail/showrooms and selective landscaping.

A boulevard of feature trees will help to soften the impact of traffic volumes and provide an attractive gateway to Macarthur.

- ① Generous landscape verge with feature avenue shade trees (species to be determined in consultation with Council)
- ② Generous pedestrian and cycle path to be accommodated connecting along the length of the Kellicar Road frontage.
- ③ Safe and convenient pedestrian crossings/desire lines at Bugden Place and Tindall Street.
- ④ High quality paved surfaces adjoining ground floor commercial/retail/showroom spaces along the Kellicar Road frontage.



Public domain



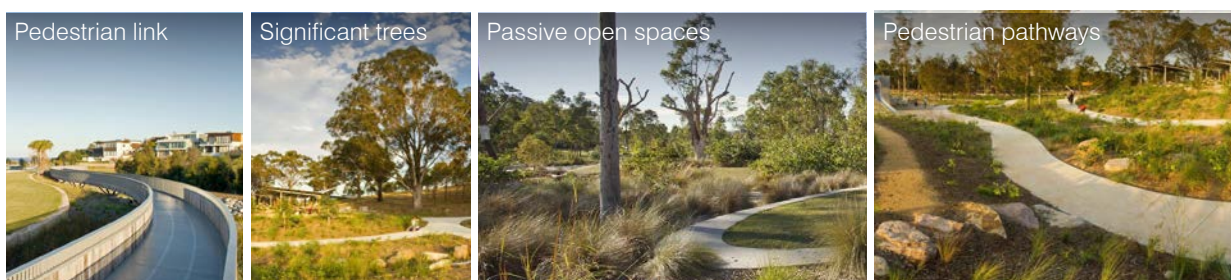
Figure 26. Indicative concept plan for Birunji Park

5.9 Birunji Park

This linear park will provide a passive green open space that buffers the development from Narellan Road. It will contain pedestrian and cycle paths with informal seating and shade trees.

It will create a continuation of the the public space and pedestrian links alongside Birunji Creek to the south connecting to Menangle Road and will function as part of the local stormwater network during extreme flood events.

- 01 Pedestrian link
- 02 Significant tree planting
- 03 Passive open spaces
- 04 Pedestrian pathways



Credit: McGregor Coxall

6 Land use within the precinct

Land use within the precinct

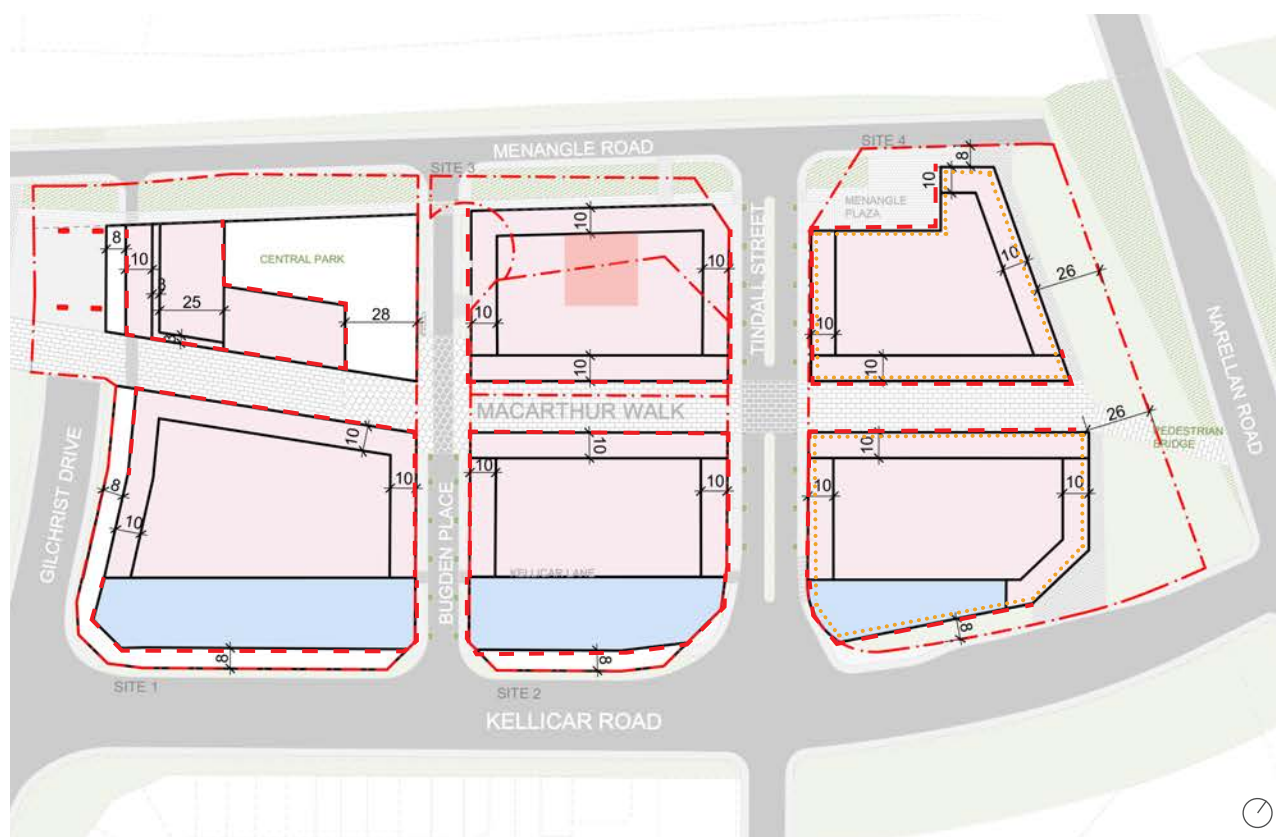


Figure 27. Preferred land use strategy

■ Retail ground floor with commercial above
■ Retail ground floor with residential above

■ Residential ground floor with residential above where building does not address Bugden Place, Tindell Street or Macarthur walk

- - - Active ground floor frontage
- - - Ground Floor Retail Podium

6.1 Land use

The proposed floorspace across the precinct is no greater than could be achieved under current planning controls. The Kellicar Road Precinct Planning Proposal, however, allows for an increase in building height, which in turn warrants an enhanced public domain that is befitting of the future urban precinct.

Objectives

- To create a high quality mixed use precinct with a range of land uses including residential, retail, commercial and community uses.
- To establish an appropriate land use and dwelling mix for the site.
- To encourage employment uses with a range of floor plate sizes, that allow for a premium commercial offering.
- To ensure an active street frontage is provided along primary streets.
- To ensure sufficient provision of public open space and community uses to meet the future needs of the population.

Controls

- The preferred land use strategy is provided in Figure 27. The suggested land use mix across the site is to achieve a minimum of 25% non-residential uses.
- Ground floor frontages to Macarthur Walk, Tindall Street, Bugden Place are to be activated with retail or other suitable uses.
- Commercial development including short term accommodation is encouraged along Kellicar Road.
- Community uses are to be accommodated in the ground and lower floors of mixed use buildings and co-located with public open space.
- Any variation to the land use strategy must demonstrate that development will provide:
 - A diverse, balanced mix of uses that support Campbelltown-Macarthur as a regional centre.
 - An activated ground plane with non-residential uses on key streets and adjacent to open space.
 - Additional jobs and housing to support the growth of Campbelltown-Macarthur.

Land use within the precinct



Figure 28. Example of an activated ground plane



Figure 29. Example of an active retail ground plane with residential above



Figure 30. Example of an active retail ground plane with residential above



Figure 31. Example of community uses located in the podium level and designed to activate the public domain



Figure 32. Example of community uses integrated with mixed use buildings

7 Built form

Built form

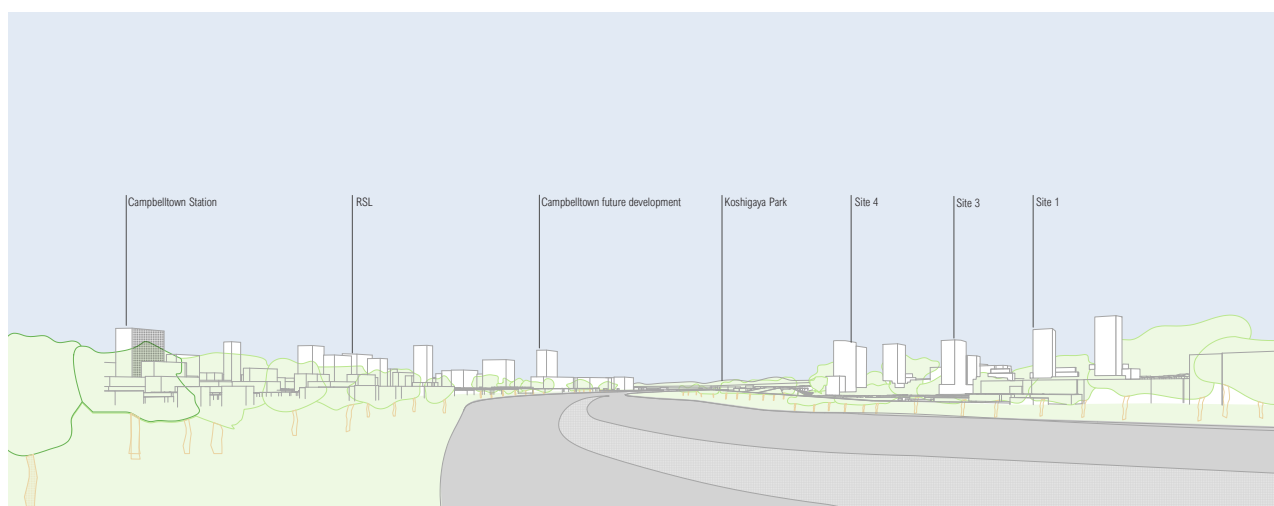


Figure 33. Indicative illustration of the future built form and skyline of the twin centres.

7.1 Overview

This DCP has an overall approach to built form and height that has been summarised in this section and applied to the objectives and controls of this DCP. The following key principles are to apply:

- A. The Re-imagining Campbelltown Strategy states “Building height across the city is not considered a fixed and definitive datum, rather, variations in height enhance the city’s legibility, visual interest and to ensure solar access to public spaces. Building heights should be varied. Where two taller buildings are provided on one site, their height above ground level should have a minimum 15% variation.”
- B. The diagram above presents an indicative illustration of the future built form and skyline of the Campbelltown-Macarthur twin centres. This has considered the vision for Campbelltown-Macarthur as provided by the Re-imagining Campbelltown City Centre Master Plan.
- C. As outlined in this DCP the building heights have been designed to create a low scale Macarthur Walk, sunlit public open spaces, and to create human scaled streetscapes.
- D. Tower forms range between 17 and 25 storeys (32% variation), with a slender form oriented to allow for sun access and views between buildings. There are three different street-wall height conditions (between 3-8 storeys) to create variety, visual interest and enhance the character of the different public spaces. These include:
 1. 8-storey city scale edge for Kellicar Road to strongly define the CBD,
 2. 5-storey European scale for Tindall Street and Bugden Place to create density at a human scale,
 3. 3-storey traditional ‘High Street’ scale to create an intimate pedestrian environment for Macarthur Walk.
- E. The proposed building heights seek to maintain the character of local streets while delivering housing and employment in a well serviced location, making the most efficient use of the strategically positioned site. The proposed varied height approach enables an enhanced urban form outcome with high amenity, solar access and permeability.

Built form

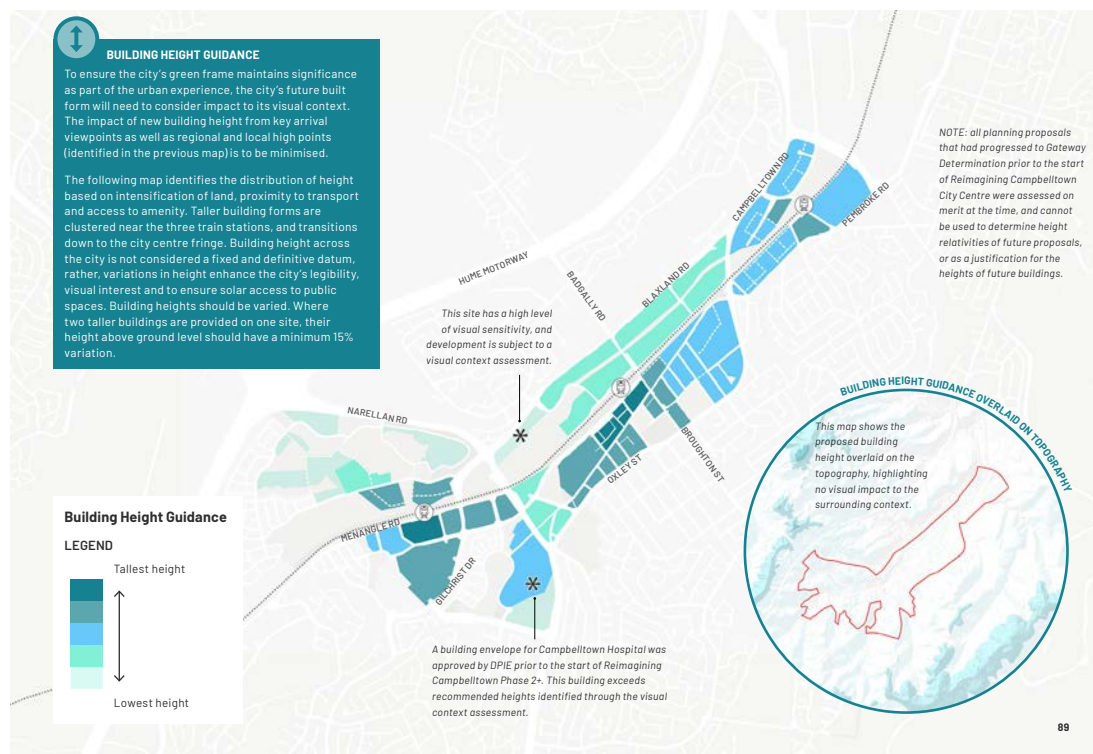


Figure 34. Re-imagining Campbelltown Strategy - Commitment 5.3 p89

- F. The master plan envisages a new skyline for the Campbelltown-Macarthur centre, promoting the centre visually as an economic and social cluster. This is balanced with the need to ensure slender, well spaced towers; maintain landscaped setbacks and a green podium; and provide for a diversity of building heights.
- G. A combination of controls for variable heights, maximum tower footplates, podiums and setbacks to encourage a high quality built form and public domain outcome.

Built form

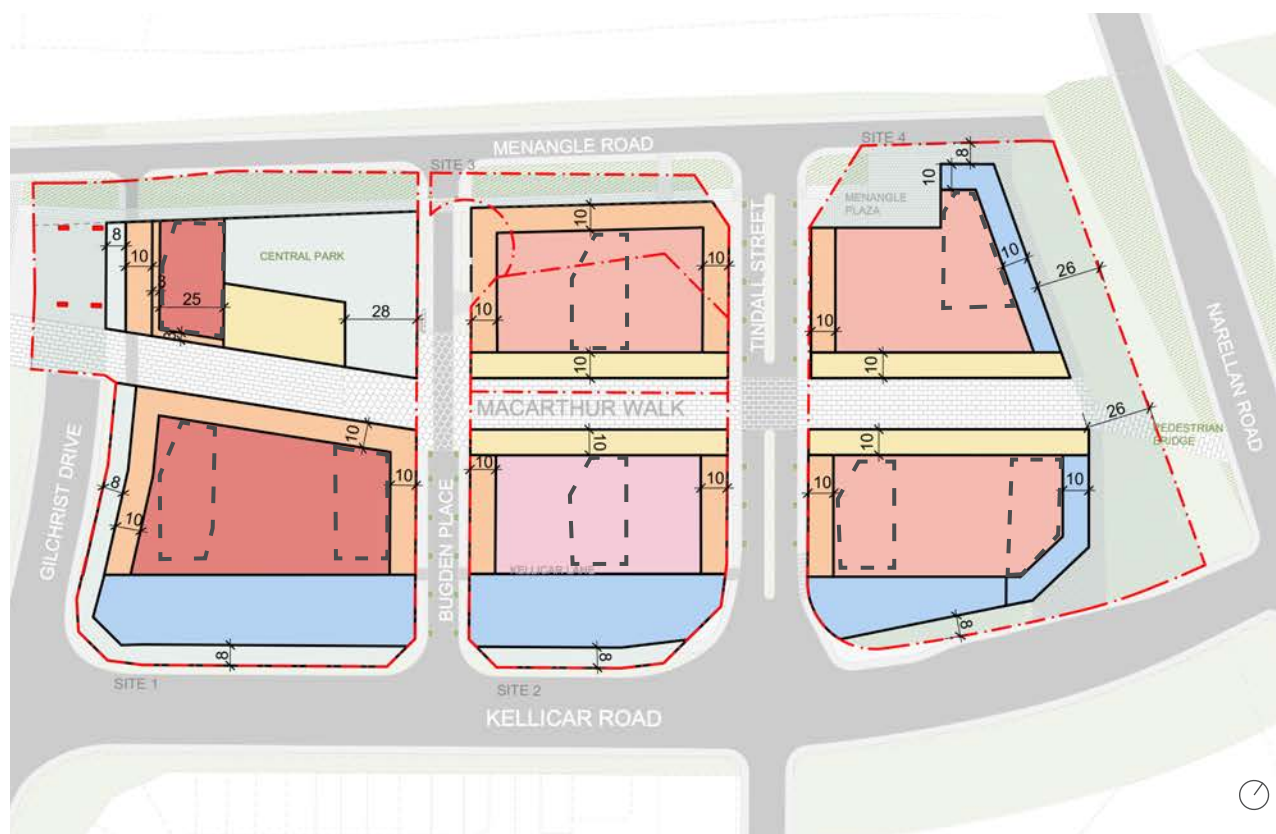
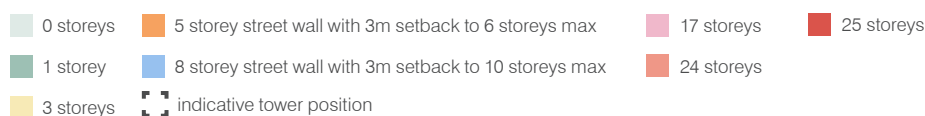


Figure 35. Building height with indicative tower locations



7.2 Building height

Objectives

- To provide a range of building heights and forms which respond to the hierarchy of streets, open space and public domain.
- To ensure buildings provide an appropriate scale to the street and enhance pedestrian amenity.
- To create a consistent street wall height and built form edge that frames the public domain.
- To ensure that tower heights enhance residential amenity with regard to solar access, natural ventilation and privacy.

Controls

- Building height including street wall and tower heights should generally be in accordance with the building height diagram shown in Figure 35.
- The minimum ground floor height for retail development is 4.5m (floor to floor).
- The minimum floor to floor height for ground floor residential is 4.1m and above ground residential is 3.1m (minimum floor to ceiling height is 2.7m)
- Variation to the preferred tower locations as detailed in the Illustrative Master Plan must meet the objectives of Section 7.1 and be supported by an urban design analysis.

Definitions

Street wall height: Refers to the height of a building as it addresses its street frontage measured from ground level up to the top of the podium, where there is a podium, or to the top of the building.

Tower: Refers to a building that is above 10-storeys in height, including its podium levels.

Note: Storeys noted are above natural ground level.

Built form

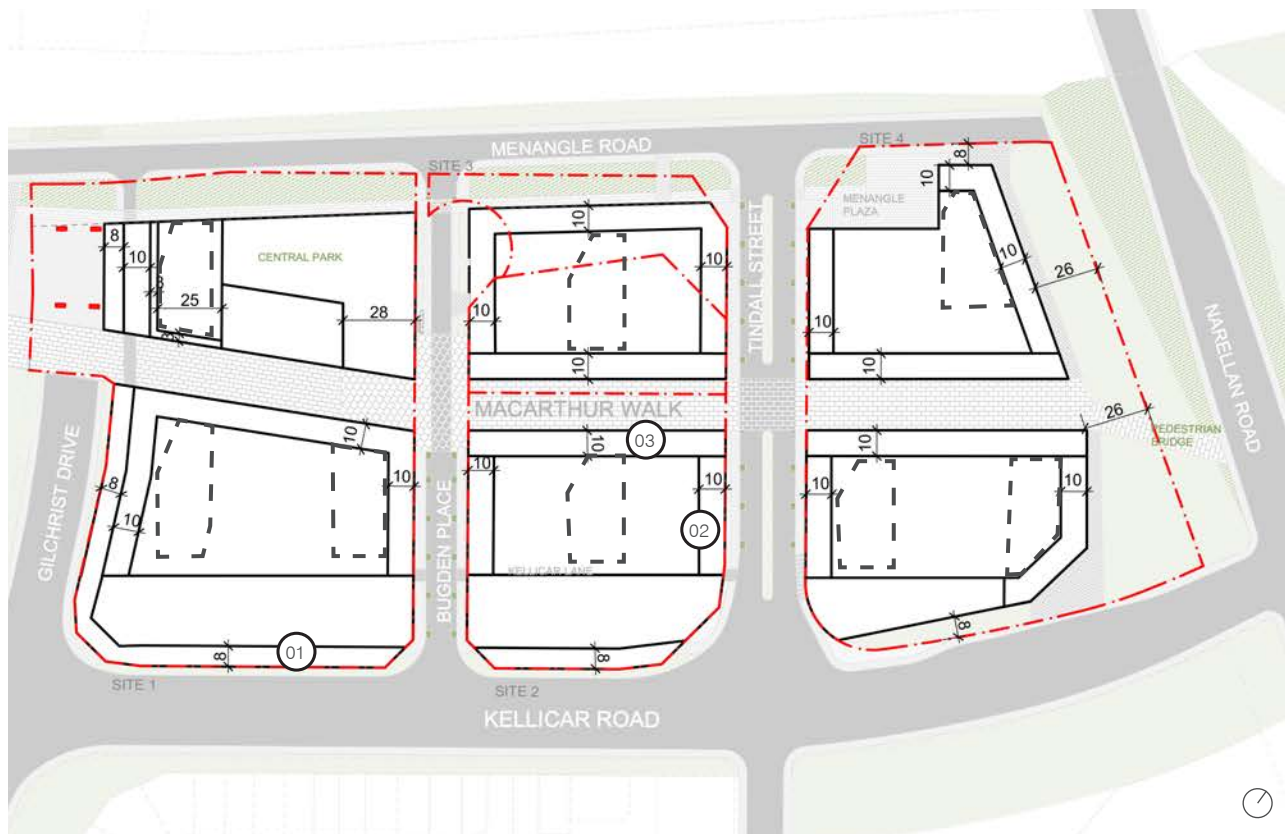


Figure 36. Indicative setbacks plan

— — — — — indicative tower position

- 01 8m typical setback to boundary on Kellicar Road, Narellan Road and Gilchrist Drive
- 02 10m typical setback to towers from street boundary
- 03 3m typical setback for levels above the street wall (excluding towers)
- 04 26m typical setback to Narellan Road boundary

7.3 Setbacks

Objectives

- A. To provide a significant setback to development along Kellicar Road.
- B. To ensure that towers are appropriately setback above podium levels to achieve transition to the streetscape and to allow solar access.
- C. To create an active and defined pedestrian spine along Macarthur Walk.
- D. To minimise unnecessary bulk and scale.
- E. To minimise the impacts of development on adjoining properties with regard to views, privacy and overshadowing.
- F. To provide an adequate setback to Narellan Road that can accommodate residual flows in extreme flood events.

Controls

1. Setbacks should generally be in accordance with the setbacks plan in Figure 36 and street section diagrams in Section 4.3.
2. Provide a generous building setback of 8 metres along Kellicar Road.
3. Establish a consistent street wall along Macarthur Walk, and all streets.
4. Towers are typically to be set back 10m from street boundaries and a minimum setback of 3m is to be provided above street wall height.
5. Ground level setbacks are to be landscaped and planted with appropriate species suited to the site conditions.

Built form

7.4 Building layout, form and design

Objectives

- A. To provide a range of building heights, types and architectural styles to create architectural diversity and visual interest.
 - B. To ensure appropriate building lengths, building articulation and individual ground floor entries to reduce the scale of the buildings as perceived from the public domain.
 - C. To ensure buildings provide the highest level of residential amenity.
 - D. To ensure the design of buildings contribute to activity and provide passive surveillance to streets and open spaces.
 - E. To ensure towers are slender and well separated so as not to compromise solar access.
 - F. To encourage buildings that enhance significant views to, from and within the precinct.
 - G. To avoid elongated or unnecessarily large building footprints that dominate the streetscape.
9. Towers are to achieve a minimum separation distance to adjacent towers of 24m to allow for views between buildings and a sense of openness.
 10. Buildings are to be articulated in length with regular vertical breaks, limiting the overall mass and sense of scale from the public domain.
 11. Floor plates are to be designed to ensure the building length is acceptable, and the internal amenity of residential apartments can be generally consistent with SEPP 65 and the Apartment Design Guide.
 12. Larger floor plates may occur in the podium base where there are two street frontages.
 13. Residential facades are to be architecturally distinguished from commercial facades utilising balconies, planters and materials that clearly differentiate them from commercial glazed facades.
 14. In designing a floor plate, relevant ADG considerations to be considered include facade articulation, solar access, cross ventilation, number of apartments per floor and number of apartments per core.
 15. Building façades are to be articulated by variations in materials, finishes and colours, use of blade or fin walls, sun shading devices or by varying façade elements.
 16. Building services such as mechanical ventilation, roof plant and lift overrun should be integrated with the façade and building design and screened from the public domain.

Controls

1. Building layouts and location are to generally reflect those shown in the Illustrative Master Plan.
2. Development is to be designed to address all key street frontages and open spaces (refer to figure 26).
3. Development is to provide an active ground plane where possible. This should include either retail or commercial spaces, as well as clearly defined building entrances to residential apartments.
4. Non-residential uses at the ground floor are to provide clear glazing to primary streets and open space.
5. Blank façades at ground floor are generally not permitted along primary street frontages and adjacent to public open space.
6. Continuous awnings must be provided along all primary street frontages (Kellicar Road, Macarthur Walk, Tindall Street and Bugden Place).
7. Towers are to be slender to reduce visual impacts, with a maximum residential floor plate of 750m² GFA and a maximum building length for towers of 45m.
8. Towers are to be generally north-south oriented to maximise solar access and minimise overshadowing;



Figure 37. Example of high quality architectural design



Figure 38. Example of continuous awnings and activated ground floor retail uses.

Built form

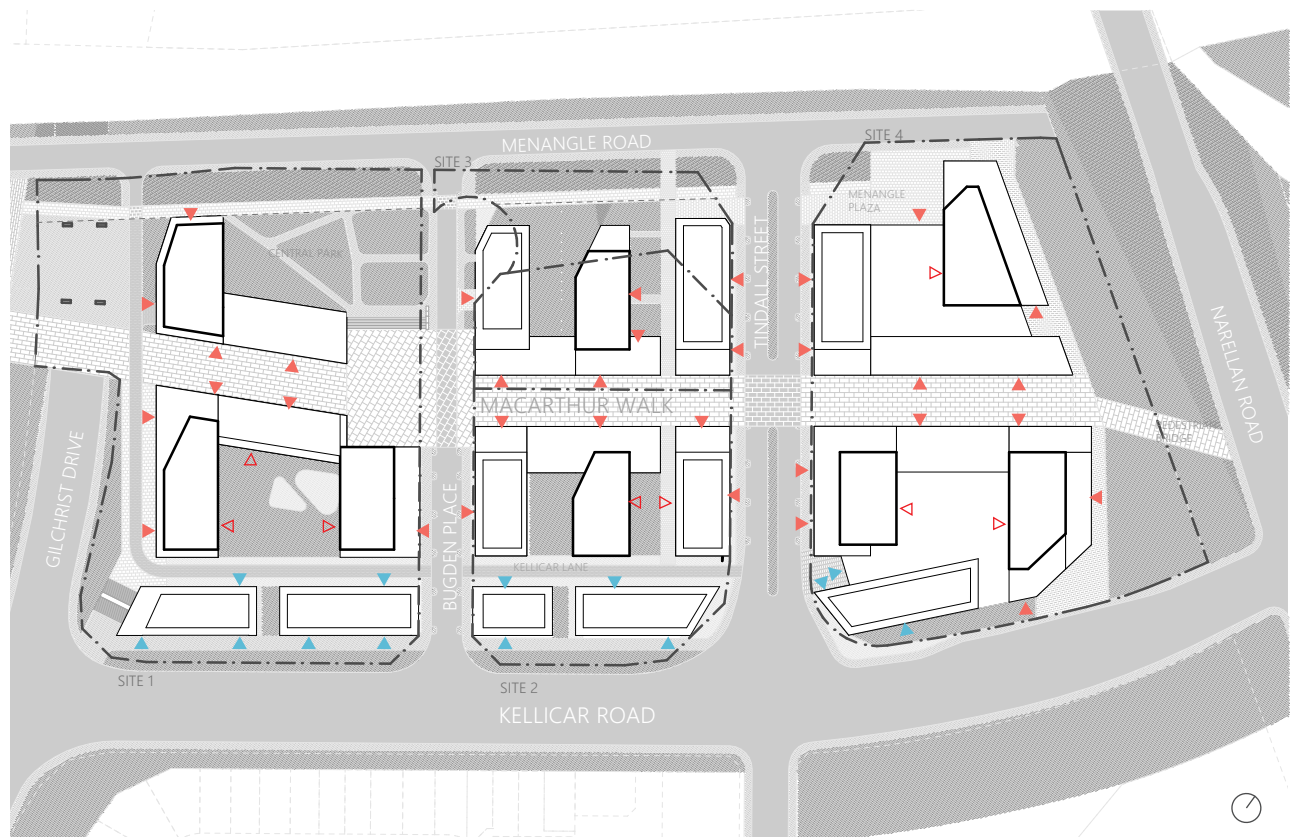


Figure 39. Indicative residential and commercial entries

- ▶ Residential entry
- ▶ Residential entry on podium above
- ▶ Commercial entry

7.5 Residential and commercial entries (pedestrian)

Objectives

- A. To achieve a fine-grain street character supported by multiple residential, retail and commercial entries.
- B. To prioritise pedestrian access throughout the precinct.
- C. To ensure new development brings life to the street with individual entries clearly identifiable along the ground plane, and to provide passive surveillance and opportunities for social interaction.
- D. To provide residential entries along streets, squares and Macarthur Walk to help activate the public domain.
- E. To ensure a high level of security and natural surveillance for people who reside in or are visiting the precinct.

Controls

1. Residential apartment entries are generally to be provided in accordance with the building entries plan shown in Figure 39.
2. Building entries are to be clear, visible and easily identifiable from the street.
3. Provide appropriate lighting along pedestrian paths between public spaces and building entries.

Built form

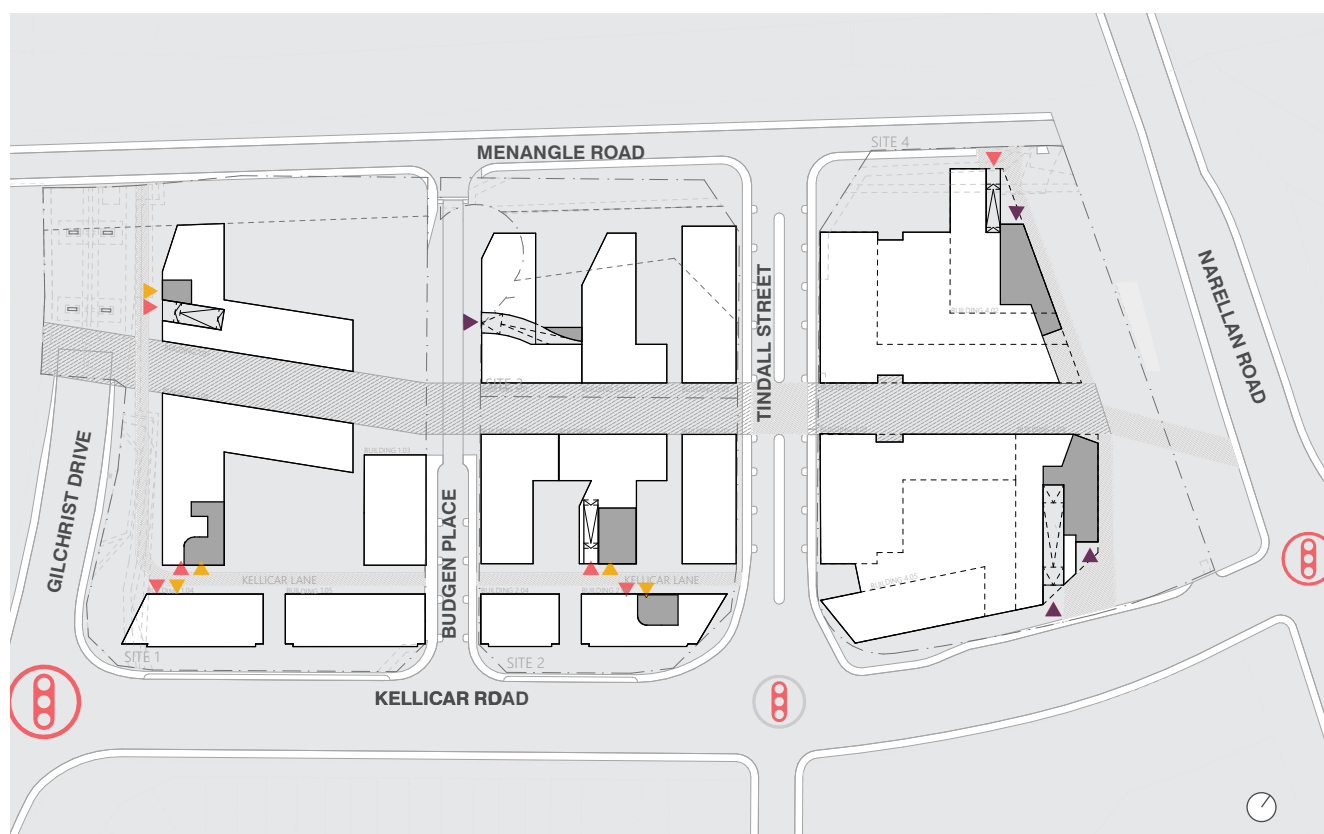


Figure 40. Indicative car parking and basement entries/exits

- | | | |
|--------------------------------------|------------------------------------|------------------------------------|
| ▶ Vehicle entry: parking only | ■ Shared zone | ⓑ Signalled intersection |
| ▶ Vehicle entry: loading entry | ▨ Pedestrian spine: Macarthur Walk | ⓑ Secondary signalled intersection |
| ▶ Vehicle entry: loading and parking | ■ Loading/plant | |

7.6 Mobility, access and parking

Transport, mobility and car parking services for the Kellicar Road Precinct will be further informed by current and ongoing traffic modelling and assessment. Whilst study outcomes are expected to identify broader influences and/or works beyond the frame of the precinct, they will also advise specific site design elements such as desired access points and internal street hierarchy.

Indicative access points are included in the illustrative diagram at Figure 40 but could be varied as a result of further transport analysis.

A key design element of the precinct is a public domain that is 'future-proofed' to the changing nature of mobility services – providing effective shared zones, kiss and ride options and EV charging facilities.

The need for effective community transport services is envisaged – including the provision of kiosks, information, e-mobility options, car sharing and a public infrastructure that enhances active transport and connectivity.

It is expected that each stage of development will incorporate controls to embed state-of-the-art mobility features into the design of the public realm, street edge and built form, accompanied by supporting data and communications infrastructure.

Objectives

- To ensure the location, size and design of vehicle access minimises pedestrian and vehicle conflicts and disruption of traffic on public roads.
- To support the reduction of private vehicle dependency and to encourage the use of sustainable transport.

Built form

Controls

1. Car parking should be provided in accordance with the following rates:

Land Use	Parking Rates for Kellicar Road Precinct
Commercial	1 space per 70m ² GFA
Retail	1 space per 40m ² GFA
Residential	<ul style="list-style-type: none"> – 0.5 spaces per 1 bedroom apartment – 1.2 spaces per 2 bedroom apartment – 1.8 spaces per 3+ bedroom apartment
Residential Visitors	1 space per 10 dwellings
Other uses	To be justified in a transport and parking study, with reference to parking rates contained in the Campbelltown City Council (Sustainable City) DCP 2015

Note. Over time, it may be possible to reduce car parking provision as the use of public transport (including the opening of the new metro station) increases and private car use changes. Any variation to car parking provision should be justified by a traffic analysis, prepared by a qualified traffic engineer.

2. Parking should be underground and located within the extent of the building floor plate above.
3. Short term on-street car parking, car share spaces and kiss and ride facilities are to be provided along Tindall Street and Bugden Place, in accordance with the street sections in Section 4.3 of this DCP.
4. Provision for car share spaces is to be provided in each basement.
5. Car parking design is to include provision for electric vehicle recharge facilities.
6. Basement entry points are to generally be in accordance with Figure 40.
7. Basement entries and cross-overs are to be located and designed to minimise impacts on streetscape, amenity, pedestrian safety and to maintain an active ground floor frontage to primary streets.
8. Data and communication infrastructure is to be incorporated to support mobility as a service provisions.
9. End-of-trip facilities are to be provided for buildings which do not comprise any residential uses.

Built form

7.7 Solar access

Objectives

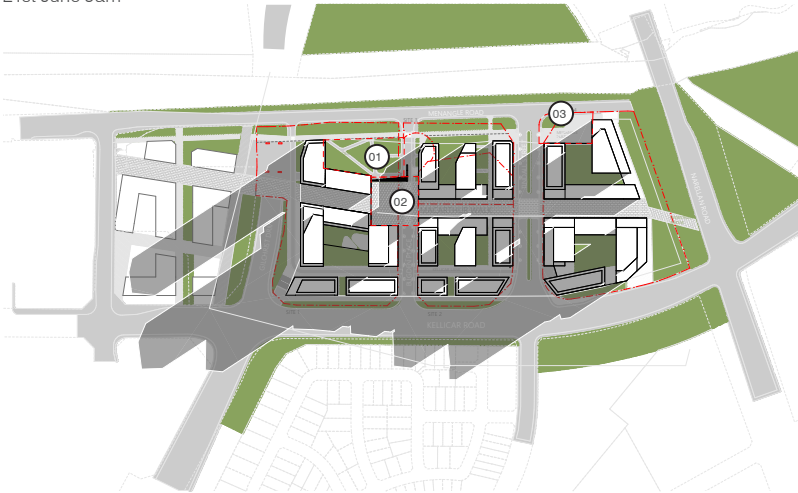
- A. To ensure development results in a good level of sunlight to the key public open spaces where people will be encouraged to spend time.
- B. To ensure an adequate amount of solar access to communal open space (including communal roof gardens).
- C. To ensure residential apartments have a good level of solar access and residential amenity.
- D. To minimise impact on solar access to surrounding residential properties.

Controls

- 1. A minimum of 4 hours of solar access must be provided to at least 70% of the area of the Central Park, Central Plaza and Menangle Plaza between 9am and 3pm on the 21 June (mid-winter).
- 2. Residential development should be generally consistent with the objectives of SEPP 65 and the Apartment Design Guide.
- 3. Surrounding residential properties are to receive a minimum 2hrs of direct solar access between 9am and 3pm on 21st June (mid-winter) as per NSW Apartment Design Guide.
- 4. All development applications must include solar diagrams that at a minimum demonstrate compliance with SEPP 65 and the Apartment Design Guide.

Built form

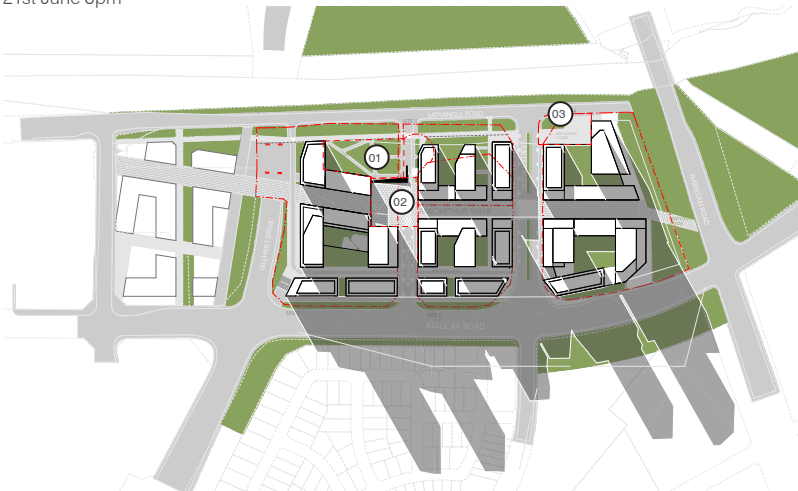
21st June 9am



21st June 12pm Midday



21st June 3pm



- 01 PUBLIC SPACE - CENTRAL PARK
- 02 PUBLIC SPACE - CENTRAL PLAZA
- 03 PUBLIC SPACE - MENANGLE PLAZA

Figure 41. Indicative overshadowing plans 21st June (mid-winter) based on the Illustrative Master Plan showing solar access to key public spaces.

Built form



Figure 42. Indicative locations for communal open space

Communal open space
Communal roof garden

7.8 Communal open space

Objectives

- A. To provide usable communal open space areas for residents and workers.

Controls

1. Residential communal open spaces to be designed to be consistent with the objectives of SEPP 65 and the Apartment Design Guide.
2. Communal open space should generally:
 - Be located at the ground or podium level of buildings wherever possible.
 - Utilise roof gardens for additional open space and access sunlight.
 - Have a frontage to internal streets to maximise casual surveillance and activation.
 - Be accessible, usable and safe.
 - Include recreational facilities for residents and workers such as BBQ facilities, appropriate seating and furniture.
 - Include appropriate landscaping and tree plantings.

Built form

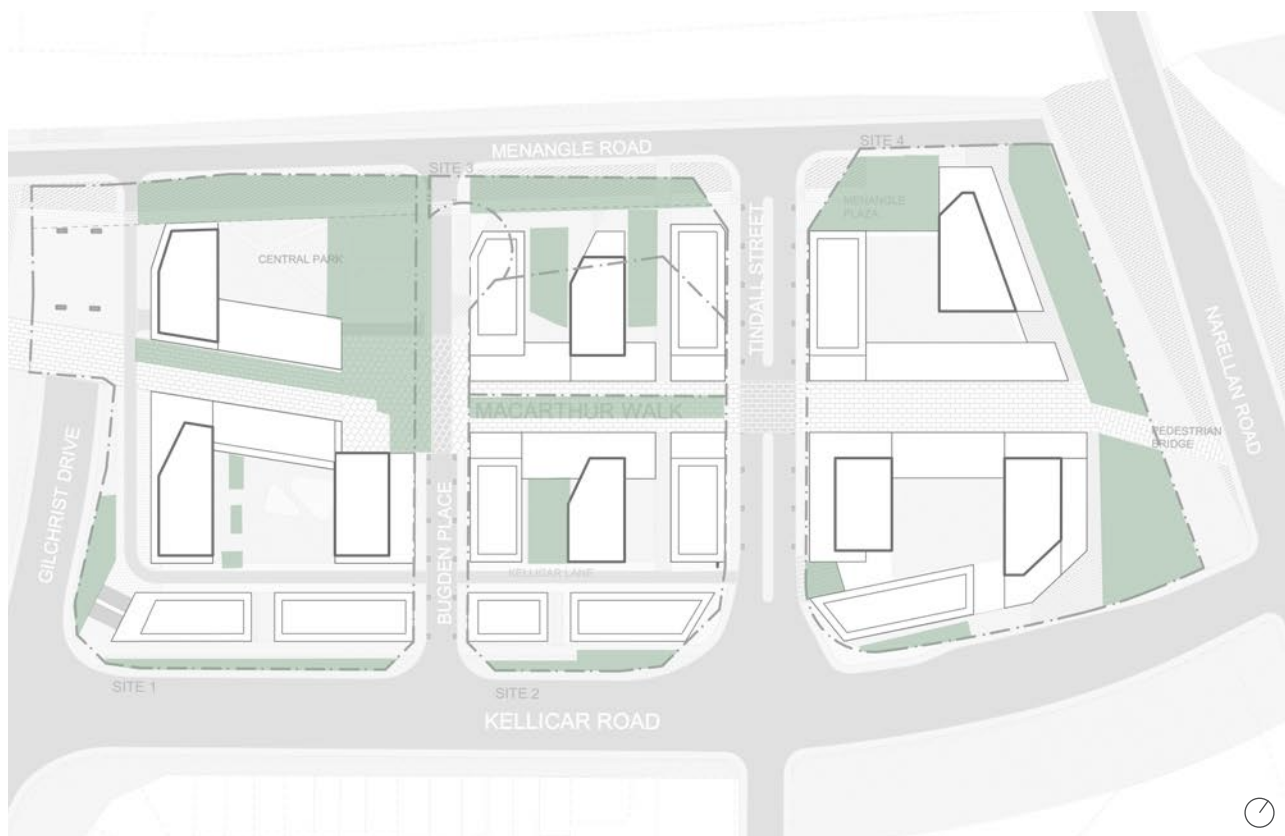


Figure 43. Indicative locations for deep soil

Indicative area available for deep soil planting (subject to basement and landscape design)

7.9 Deep soil, landscaping and green roofs

Objectives

- A. To maximise opportunities for mature healthy landscape planting including significant tree canopy cover.
- B. To ensure there is sufficient area for landscaping and deep soil.
- C. To encourage green roofs which reduce overall urban heat island effect, improve air quality, building efficiency and storm water run-off.
3. A detailed deep soil and landscape plan must be submitted with all future development applications.
4. Green roofs are encouraged for both residential and commercial development.
5. Green roofs do not have to have communal access, but should contain suitable plants such as succulents, herbaceous perennials originating from dry land habitats.

Controls

1. Deep soil should generally be located within public open space or along key pedestrian routes that will benefit from significant tree canopy cover.
2. Deep soil is to be consistent with objectives of SEPP 65 and the Apartment Design Guide.
6. The design of green roofs should be by a qualified landscaped architect and provide details on:
 - The location of proposed structures
 - Drainage, irrigation and waterproofing details
 - Selection of plant species and soil details
 - An accessibility and management plan outlining accessibility requirements and the required and ongoing maintenance for the green roof.

Built form

7.10 Wind mitigation

Windy conditions can cause discomfort and danger to pedestrians, and downdrafts from buildings can inhibit the growth of street trees. Conversely, moderate breezes that penetrate the streets can enhance pedestrian comfort and disperse vehicle emissions and air conditioning plant exhausts.

Objectives

- A. To ensure that new development satisfies nominated wind standards and maintains comfortable conditions for pedestrians.
- B. To ensure that moderate breezes are able to penetrate the streets within and surrounding the precinct.

Controls

Site design for tall buildings (towers) should:

- 1. Set tower buildings back from lower structures built at the street frontage to protect pedestrians from strong wind downdrafts at the base of towers.
- 2. Ensure that tower buildings are well spaced from each other to allow breezes to penetrate the precinct.
- 3. Consider the shape, location and height of buildings to satisfy wind criteria for public safety and comfort at ground level.
- 4. Ensure usability of open terraces and balconies.

7.11 Reflectivity

Reflective materials used on the exterior of buildings can result in undesirable glare for pedestrians and potentially hazardous glare for motorists. Reflective materials can also impose additional heat load on other buildings. The excessive use of highly reflective glass should be discouraged. Buildings with a glazed roof, facades or awnings should be designed to minimise hazardous or uncomfortable glare arising from reflected sunlight.

Objectives

- A. To restrict the reflection of sunlight from buildings to surrounding areas and buildings.

Controls

All new development shall incorporate the following measures:

- 1. New buildings and facades should not result in glare that causes discomfort or threatens safety of pedestrians or drivers.
- 2. Visible light reflectivity from building materials used on the facades of new buildings should not exceed 20%.
- 3. Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that analyses potential solar glare from the proposed development on pedestrians or motorists may be required.

Built form

7.12 Sustainability and resilience

Integrating sustainability and resilience in the built environment is a key foundation of a re-imagined Campbelltown and presents as a trademark opportunity for the Kellicar Road Precinct.

The multi-use precinct will combine new generation working and living environments with active and green spaces designed to deliver a new regional benchmark for sustainable urban renewal development.

The Kellicar Road Precinct commits to benchmark the precinct using the 'Green Star Communities' rating at a 'best practice environmental standard', which is the equivalent of a 4-star certified rating.

The Green Star Communities rating recognises a project's achievements across a broad spectrum of elements – buildings, utilities, public realm and transport systems. Delivery is flexible but structured in line with the opportunities presented with these categories.

Objectives

- A. To achieve a Certified Nominated Green Star Communities Rating for the precinct prior to any construction commencing.
- B. To foster a sustainable, liveable and healthy community.
- C. To encourage energy and water efficiency.
- D. To ensure that all development is resilient to climate change including reducing the impacts of urban heat island effect.
- E. To 'design in' support for healthy and active living.

Controls

1. The Kellicar Road Precinct is to be designed and built to achieve the nominated minimum Green Star Communities 4-Star Rating.
2. Relevant certification from a Green Building Council of Australia (GBCA) approved professional is to be provided prior to any DA that seeks to initiate the master plan.

Without dictating how certification will be achieved, it is expected that development across the precinct may incorporate the following:

- Best practice environmental management through construction
- Climate adaptation strategies to mitigate urban heat island effect.
- The application of CPTED principles in support of safer public places.
- Access to key services and amenities for residents (such as retail, banking, health services, community facilities and fresh food outlets).
- The provision of diverse employment opportunities within the precinct.
- Celebration and interpretation of local and indigenous heritage in the project design and public domain interpretation.
- High quality broadband and public wireless connectivity.
- Integrated water cycle management.
- Energy efficiency design and precinct energy strategies to reduce GHG emissions.
- Design standards to reduce the impact of materials on embodied emissions and resource depletion.
- Non-vehicular transport facilities and active mobility infrastructure (for pedestrians and cyclists).
- Mobility-as-a-service infrastructure including shared and digital mobility and autonomous transport solutions, connecting residents and workers to and around the precinct.
- Support for urban biodiversity through species selection and green spaces.
- A precinct waste management plan in support of advanced waste separation and recycling.

Built form

7.13 Stormwater management

Birunji Creek runs through the car park of the Marketfair site and is contained in a closed culvert system within a 10m wide drainage easement that runs in a south-north direction.

Council's existing 2 x 3.6m pipes presently accommodate 1% AEP Birunji Creek flows and have been noted by Council to be working effectively.

Council's LEP 2015 and the Campbelltown (Sustainable City) DCP 2015 define the requirements for the design of roads, stormwater drainage and flooding. These documents require a free board of 500mm above the mainstream 1% AEP level as the flood planning level.

The DCP does not currently set out provisions for the design of underground car parks. Council Engineering Guidelines require design for underground car parks to ensure that ingress of flow does not occur in the 1% AEP event. Consideration of the PMF (Probable Maximum Flood) is not currently required for underground spaces.

For the subject site, additional consideration of flood risk due to flood events exceeding the flood planning level is prudent for the area between Tindall Street and Narellan Road, especially given the location of Birunji Creek and the extent of flood liability of the site during extreme events. This includes new controls to ensure that basements are not flood affected by all floods up to the PMF.

Additional controls to those already incorporated in Council's DCP 2015 are necessary in order to ensure that development within this part of the Kellicar Road Precinct may proceed without adverse impact on other lands and with due consideration to any necessary evacuation procedures during extreme flood events.

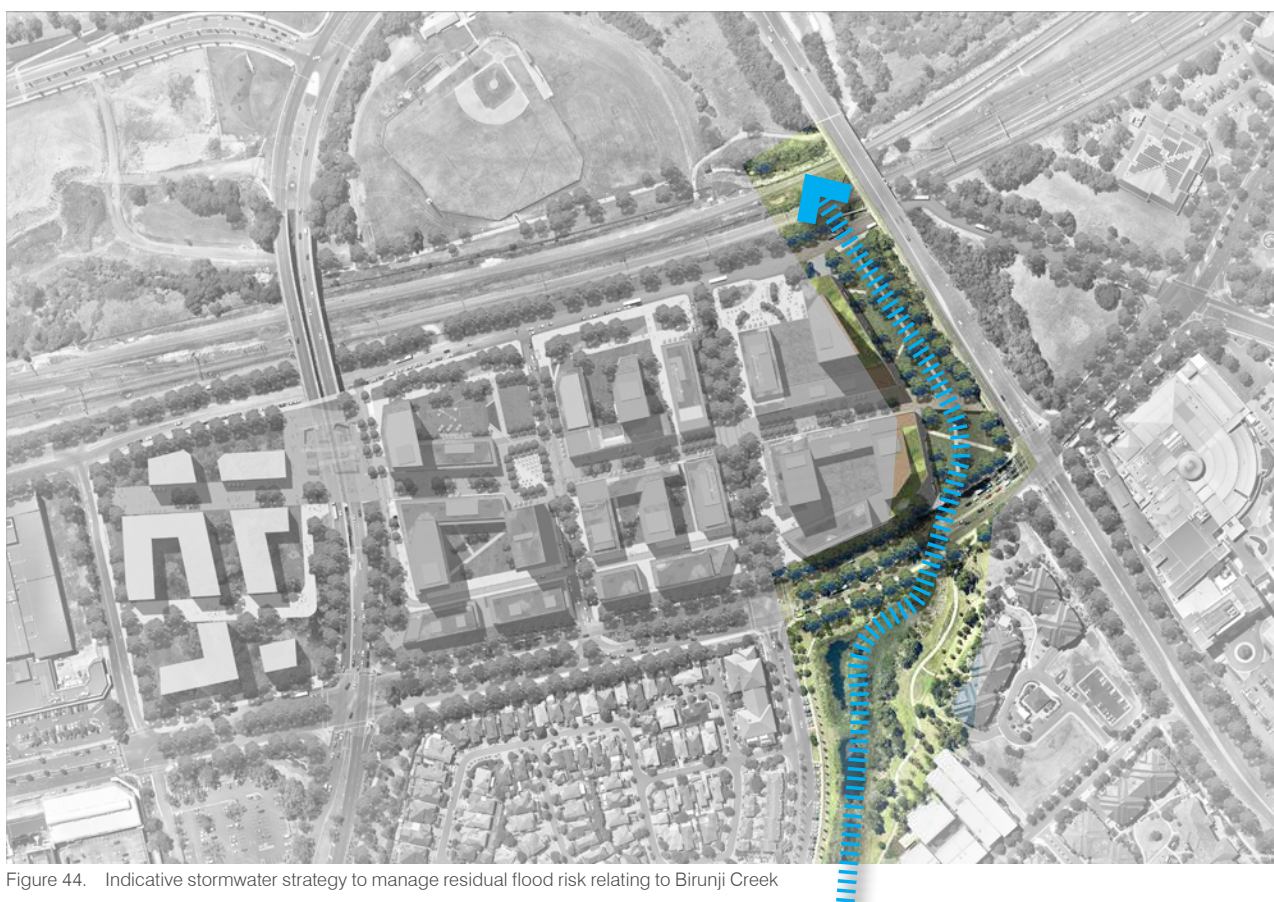


Figure 44. Indicative stormwater strategy to manage residual flood risk relating to Birunji Creek

Built form

Objectives

- A. To minimise the impact of flooding on nearby lands.
- B. To allow the passage of flows during very rare and extreme events.
- C. To ensure that development at the eastern end of the precinct is developed in consideration of flood risk management measures.
- D. To ensure a precinct wide approach to the management of stormwater.

Controls

Floor Level Controls

- Floor level controls are to achieve a 0.5m free board above the 1% AEP flood event.
- Provision of a publicly accessible refuge area is to be provided above the PMF level for developments below the FPL.

Building Components and Methods

- All structures are to have flood compatible building components below the FPL.
- Demonstration that structures below the FPL can withstand the forces of floodwater, debris and buoyancy is required
- Provision of overland flow paths for events exceeding the capacity of the stormwater system are required for all development types.
- Staff and contractor access to culvert systems is to be considered.

Car Parking

- Basement car parking and other underground spaces shall be protected from inundation for events up to the PMF;
- Flood free pedestrian access to parking areas shall be provided.

Evacuation

- Rising DDA access is required from all areas of the development to a refuge area above the level of the PMF;
- Rising DDA access is required from public spaces and roads surrounding the development to a refuge area above the level of the PMF;
- Flood free access is to be provided to areas outside of the floodplain, above the level of the PMF;
- The development is to be consistent with the relevant local flood evacuation strategies;
- The evacuation requirements of the development are to be considered up to the PMF level;

Management and Design

- A site-specific flood risk management plan is to be prepared for development on land below the FPL.
- Site-specific Flood Emergency Response and Evacuation Plans are to be prepared for development on land below the FPL.

On-site Stormwater Management

- Stormwater management for the precinct is to be undertaken in accordance with Section 2.10 of the Campbelltown (Sustainable City) DCP 2015.

Built form

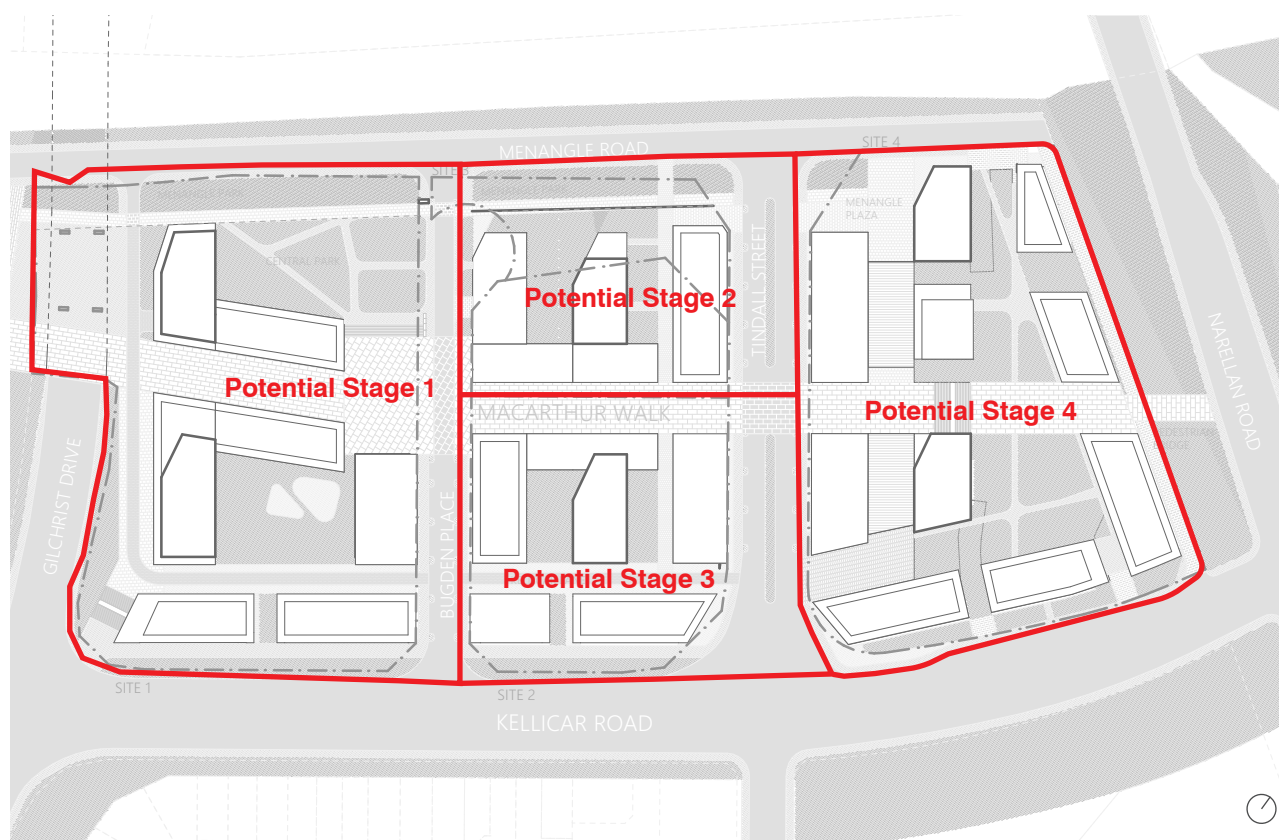


Figure 45. Indicative development staging scenario

7.14 Delivery and staging

A stated objective for the precinct (at Section 3.2) is to allow for the timely delivery of infrastructure, public domain enhancement and open space to support its orderly development.

The purpose of this section is to describe the likely staging of development and the commensurate delivery of public domain and related infrastructure that is expected to be associated with it.

Precinct Infrastructure and Related Works

Section 4 of this DCP outlines a precinct and local street network that is intended to encourage active travel within the precinct and to ensure a high level of amenity, safety and permeability. This street network will either be delivered as part of the precinct's development or upgraded in response to it.

Section 5 of this DCP outlines the scope of public domain works expected to be provided as part of the precinct's development, including:

- A new 20m wide east-west pedestrian spine (Macarthur Walk) of approximately 400m in length
- A new 1,000m² Civic Plaza
- A new 3,000m² Central Park
- A new 1,500m² Under-bridge park (beneath Gilchrist Drive)
- A new 300m long, 20m wide Green Link along Menangle Road
- A new 1000m² Menangle Plaza that connects Tindall Street, the proposed green link and retail development at the eastern end of the precinct

The Illustrative Master Plan and public domain strategy that are the basis of this DCP suggest a pedestrian-cycle-bus (and possibly local traffic) connection between Macarthur and Campbelltown stations. The concept proposes a sophisticated 'city walk' that enhances the sense of arrival for city visitors and commuters and activates key land parcels. Whilst consistent with the 'city centre stitch' theme of Reimagining Campbelltown, the concept relies upon a direct connection beneath the Narellan Road rail overpass and clearly requires transport agency support.

The Planning Proposal and the precinct's development is able to proceed without the proposed connection but

Built form

would be enhanced by it. Obtaining agency endorsement, however, may take some time and could impact the delivery of works along Menangle Road associated with the project.

Likewise, it is proposed to extend the Bugden Place culs-de-sac through to Menangle Road, providing a public thoroughfare and improved pedestrian permeability at this end of the precinct. Various approvals are required for this component to be endorsed. The Planning Proposal does not depend on this road opening but would be enhanced by it. If it does not proceed, a lesser amount of 'work' would be required in association with the development of adjoining land parcels.

Potential Staging Scenario

Development within the Kellicar Road Precinct, involving a total GFA of 224,000m², will be delivered in stages. Whilst this DCP anticipates a potential staging sequence (as per Fig 44 left), the suggested staging needs to be approached with some flexibility as, ultimately, the project's delivery will be driven by market forces.

It is expected that the Kellicar Precinct will be developed over a 5-15-year horizon, potentially commencing construction in 2025.

The 7ha site is presently occupied and leased. As leases expire individual sites will become available for redevelopment, presenting the most logical scenario for the project's gradual delivery.

The current lease for the ex-Bunnings site (i.e. Lot 1, DP 882496) expires in October 2022, prior to other leases across the rest of the precinct.

A potential scenario for development across the precinct is provided below along with a description of the associated infrastructure expected to be provided by the developer.

Stage 1 – ex-Bunnings site (Lot 1, DP 882496)

Associated public infrastructure is to include:

- The western portion of Macarthur Walk.
- The Underbridge Park.
- Central Park.
- Civic Plaza including the planned extension/opening of Bugden Place (from Macarthur Walk to Menangle Road) if separate approval is granted for this work.
- The first tranche of the green link across site's frontage to Menangle Road if separate endorsement is obtained for this work.
- Related upgrades to adjacent roads to accommodate traffic flows.

This site is likely to be developed in 2 phases, north and south of Macarthur Walk, with the northern portion adjacent to Menangle Road being developed first.

Stage 2 – the ex-RMS site (Lot 2614, DP262484) – this site encompasses adjacent land owned by NSW Health at 6 Bugden Place (Lot 22, DP862080).

The development potential of the ex-RMS site has been 'bundled' with the NSW Health site in order to achieve a developable portion of sufficient size to accommodate development in the form proposed. The NSW Health site is currently occupied by the Macarthur Women's Health Centre (WILMA).

Associated public infrastructure is to include:

- The proposed green link across the site's frontage to Menangle Road.
- Related upgrades to adjacent roads to accommodate traffic flows.

Stage 3 – the Fit HQ site (Lot 1, DP747811)

Associated public infrastructure is to include:

- The extension of Macarthur Walk.
- Related upgrades of adjacent roads to accommodate traffic flows as well as the landscaped setback to Kellicar Road (on private land).

Built form

Stage 4 – the ‘Marketfair’ shopping centre site (Lot 2341, DP830786) – this site presents as the final stage of the precinct’s development and, like the initial stage of development which is similar in size, is likely to be developed in 2 phases.

Associated public infrastructure is to include:

- The construction and embellishment of the proposed Menangle Plaza.
- The completion of the Green Link along Menangle Road.
- Provision and embellishment of a new park and emergency overland flow path for Birunji Creek.
- The completion of Macarthur Walk as well as the completion of the landscaped setback to Kellicar Road (on private land).
- Related upgrades to adjacent roads to accommodate traffic flows.

Securing Infrastructure Provision

This DCP ‘locks in’ the development outcomes expected of the precinct and establishes a likely delivery framework to ensure that these outcomes are achieved.

To secure the delivery of the required infrastructure the landowners/developer may choose to enter into a Voluntary Planning Agreement (VPA) with Council. Alternatively, Council may require that a Concept Development Application under Division 4.4 of the EP&A Act be submitted, outlining the staging and delivery of required works. Either approach requires landowner agreement and ongoing discussions with Council.

The landowners/developer may also seek to enter into a VPA with the State Government to offset any potential State Infrastructure Contribution (SIC) that may be applied to the site.

Any VPA with Council and/or State Government will likely address a range of matters, including provision for:

- The dedication of public open spaces and their embellishment.
- Pedestrian connections to other parts of the CBD.
- Necessary roadworks and associated infrastructure
- Detailed public domain design and delivery.
- Community facilities, such as child-care, meeting spaces, WILMA and recreational space (indoor/ outdoor).
- Active transport infrastructure.

Details of any VPA offer will be informed by ongoing discussions with Council and the State Government.

architectus™