

Our ref: PS120530-WSP-P&M-LTR-003 RevF

3 October 2024

Ruairi O'Shaughnessy Assistant Development Manager Walker Corporation 1 Farrer Place Sydney NSW 2000

Dear Mr O'Shaughnessy

Appin Development - Part 2 Planning Proposal: Strategic Traffic Impact Assessment

1. Introduction

1.1 The proposal

The Proponent has prepared the subject submission to rezone 91.05 hectares of land (the **Site**) within the Appin Precinct from *RU2 Rural Landscape* to the following zones:

- Urban Development Zone
- Zone 1 Urban Development (UDZ)
- Special Purposes Zone
- Zone SP2 Infrastructure (SP2)
- Conservation Zone
- Zone C2 Environmental Conservation (C2)

The Site is known as the Appin (Part 2) Precinct. The Site directly adjoins the Appin (Part 1) Precinct – refer to Figure 1.1.

1.2 The Appin (part 1) precinct planning proposal (PP-2022-3979)

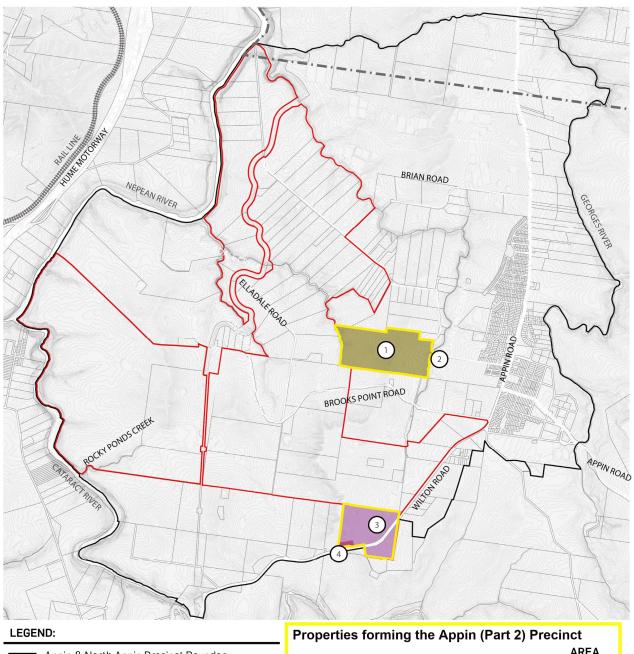
In November 2022, Walker Corporation Pty Ltd and Walker Group Holdings Pty Ltd (the **Proponent**) lodged a Planning Proposal (PP-2022-3979) to rezone part of the Appin Precinct. The Appin (Part) Precinct Planning Proposal was approved by the Department of Planning and Environment (DPE) in June 2023.

The UDZ will facilitate approximately 12,900 dwellings. The C2 zone will facilitate the conservation of 460ha of endangered ecological community and help implement the Office of the NSW Chief Scientist & Engineer (NSW Chief Scientist) recommendations.

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Appin & North Appin Precinct Boundary Appin (Part) Precinct Plan Appin (Part 2) Precinct Boundary LGA Boundary LAND OWNERSHIP Phillip Nelson Dunbier and Penny Grace Dunbier John Joseph McEvoy Glynis Rita Patrick

Properties forming the Appin (Part 2) Precinct					
REF	LOT#	PLAN REF	ADDRESS	AREA (HA)	
DUNBIER LAND					
1	32	DP736923	110 Macquariedale Road	61.18	
2	1	DP1000355	90 Macquariedale Road	0.23	
KINGS LAND					
3	3	DP804375	725 Wilton Road	36.61	
4	1	DP 804375	525 Wilton Road	1.41	

APPIN (PART 2) PRECINCT - LAND OWNERSHIP PLAN

1:40,000 @ A4 DATE: 23-03-23 REVISION NO: -

Source: Walker Corporation, 3 October 2024



The new zones are accompanied by a structure plan outlining the intended land uses. In addition, the Proponent produced an Appin and North Appin Precincts Indicative Plan to illustrate how the new zones might fit within the broader precinct as land is developed. The Indicative Plan has no statutory weight and will be refined as further planning proposals are prepared.

These plans are summarised in Table 1.1.

Table 1.1 PP-2022-3979 Title and purpose of plans

Appin & North Appin Precincts Indicative Plan	Appin (Part 1) Precinct Plan (the Precinct Plan)	3 Appin (Part 1) Precinct Structure Plan (the Structure Plan)
Broader context and for information purposes only. It has no statutory weight. It identifies: — Higher-order transport network — Centres hierarchy — School sites — Conservation areas — Residential areas — Cultural Sites and Connections.	It shows the land proposed to be rezoned and incorporated into a new schedule in the Western Parkland City SEPP 2021. The precinct plan contains the development provisions (clauses and maps) applicable to the Site and is used in assessing development applications.	Structure plan for the site, showing staging of release areas. Development is to be generally consistent with the structure plan. It illustrates land use components including (but not limited to): — Low and medium-density residential — Retail and employment centres — School — Open space — Drainage network/basins
		— Transport network.
(21,000+ dwellings)	(12,000 dwellings)	(12,000 dwellings)

1.3 Population growth

Greater Sydney's population is projected to grow to approximately 6.1 million by 2041—over a million more people than currently live in the Sydney region.

The NSW Government has identified Growth Areas to accommodate the population that will choose to live in greenfield areas (new suburbs). The Greater Macarthur Growth Area (**GMGA**) is one such growth area and is a logical extension of the urban form of south-west Sydney. The GMGA is divided into precincts. The Appin Precinct and North Appin Precinct are the southernmost land release precincts of the GMGA. The goal is to deliver 22,300 dwellings.

The rezoning and release of land for development will achieve this goal.



1.4 The Appin (part 2) precinct planning proposal

The Appin (Part 2) Precinct Plan (**the precinct plan**) shows the proposed new zones. 'The precinct plan' will be incorporated into the *State Environmental Planning Policy (Precincts—Western Parkland City) 2021* and contain the provisions (clauses and maps) that will apply to 'the Site.' 'The precinct plan' envisages the delivery of the following:

- 1,312 dwellings (as a mix of low-density, medium density and apartments)
- 30,312 sqm of gross lettable retail/commercial floor area
- 16.91ha conservation land

The planning proposal submission is aligned with strategic land use planning, State and local government policies, infrastructure delivery and PP-2022-3979. The development potential is tempered by a landscape-based approach that protects the environment and landscape values, shaping the character of new communities. A series of residential neighbourhoods are to be delivered within the landscape corridors of the Nepean and Cataract Rivers, supported by local amenities, transit corridors and community infrastructure.

The submission includes a hierarchy of plans. The plans and their purpose are summarised in Table 1.2.

Table 1.2 The subject planning proposal's plans and proposal

Conservation areasResidential areas	assessing development applications.	Retail and employment centresSchool
 Cultural Sites and Connections. 		Open spaceDrainage network/basinsTransport network.
(21,000 dwellings)	(1,312 dwellings)	(1,312 dwellings)



1.5 Transport Management and Accessibility Plan

A Transport Management and Accessibility Plan (TMAP) (Pentelic Advisory, 28 February 2024) has been prepared to support the rezoning proposal for the Appin Precinct. The Appin Precinct includes the Appin (Part) Precinct (12,900 new homes) and the surrounding Appin and North Appin Precinct Indicative Plan. This area includes a combined total of approximately 22,000 new homes. It includes the development in the four lots that are the subject of this report. This plan was endorsement by Transport for NSW on 01 May 2024.

The TMAP provides a consolidated transport plan for the whole Appin Precinct, of which the development expected in the four lots assessed in this report equal approximately 6%. It concluded that the transport network planned for the development can support the planned yields as part of a walkable, well-connected series of 'places'. The TMAP proposes transport initiatives across a range of transport aspects that support travel demand management to achieve a sustainable mode share target of 30% (public transport and active transport) by 2051. The TMAP presents a staged infrastructure plan to cater for the needs of the Appin and North Appin Precinct as well as regional transport passing through and immediately adjacent to the site.



2. Purpose of the report

WSP Australia Pty Ltd has been engaged by the Proponent to prepare a Strategic Traffic Impact Assessment to support the Appin (Part 2) Precinct Plan (**the precinct plan**) and Appin (Part 2) Precinct Structure Plan (**the structure plan**). Please refer to Figure 1.1 and Table 2.1 for key attributes of the precinct plan and structure plan area.

The Appin (Part 2) Precinct Plan zones land for conservation, urban development and infrastructure. It establishes the statutory planning framework permitting the delivery of a range of residential typologies, retail, education, business premises, recreation areas, and infrastructure services and provides development standards that development must fulfil. Within the proposed urban development zone, 1,312 dwellings and more than 30,000 sqm of gross lettable floor area for retail and commercial space can be delivered.

Table 2.1 Summary of Appin and North Appin precincts key attributes

Location		Key Attributes		
Appin (Part 2) Precinct		Area	Total – 100.1 haPrivate Ownership – 100.1 ha	
		LGA	Wholly Wollondilly LGA	
	5 6 1 00	Proposed dwellings	1,312	
	Camera Ca	Proposed retail & commercial floor space	30,000+	
		Proposed Population	3,705	

This report summarises the strategic transport impact of the proposed development within the Part 2 lots and should be read in conjunction with the assessment for Part 1 of the Appin and North Appin Precinct, which is described in the TMAP.

The objectives of the report are:

- Assess the traffic impact of the Part 2 lots, as part of the wider Appin and North Appin Precinct
- Review the public transport and active transport elements of the transport network to reduce reliance on private vehicle travel
- Recommend an infrastructure plan, as part of the wider Appin and North Appin Precinct.
- Outline transport access to the Part 2 lots.

The Part 2 development was included within the assessed development within the Appin Precinct TMAP, which was endorsed by Transport for NSW on 01 May 2024. No additional mitigation measures are needed beyond those that have already been proposed for the Appin Precinct in the TMAP.

The Proposal can be supported in its current form.



3. Lots

Walker Corporation would like four land parcels to be added to the Appin (Part) Precinct—Part 2 Planning Proposal relating to the following lots (refer to Figure 1.1):

- Lot 1 DP 804375
- Lot 3 DP 804375
- Lot 1 DP 1000355
- Lot 32 DP 736923

The development on the four lots is included within the total yield assessed in the *Appin Precinct Transport Management & Accessibility Plan* (Pentelic Advisory, 28 February 2024). This Planning Proposal will not change the development stage that these lots are planned to occur in.

3.1 Land use

Lot 1 DP 1000355 and Lot 32 DP 736923 are included within the area allocated to the town centre in Stage 3A. Stage 3A was planned to have the following characteristics:

- Approximately 3,300 total lots
- Approximately 30,000m² retail gross floor area yielding approximately 2,110 jobs
- Delivered between 2041 and 2051+.

It is estimated that the Lot 32 DP 736923 could contain 900 dwellings out of the projected total of 3,300 in Stage 3A–or approximately 27%.

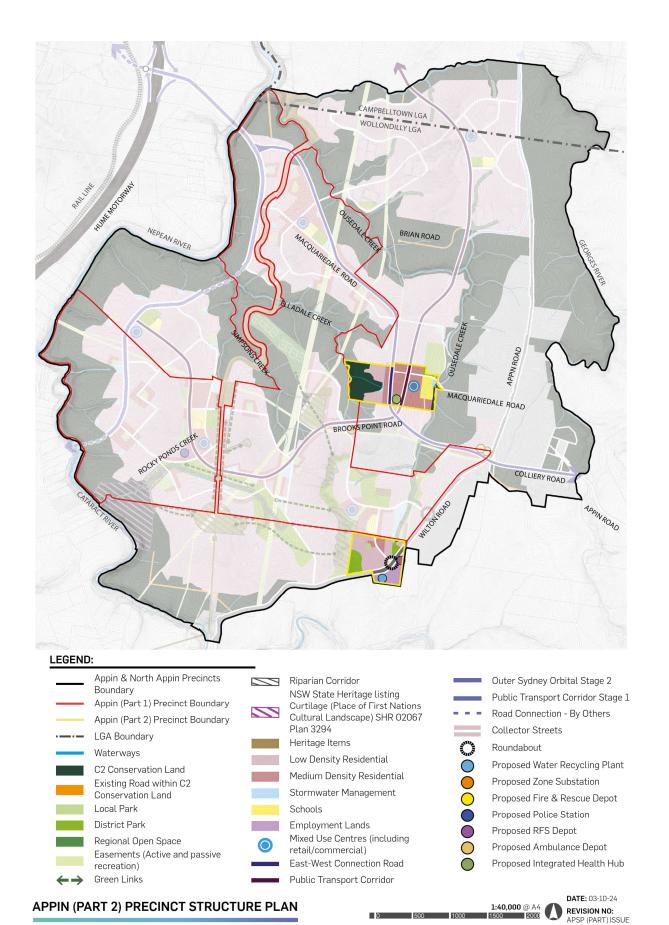
Lot 1 DP 804375 and **Lot 3 DP 804375** are located in Stage 4A—the southernmost residential area. Stage 4A was planned to have the following characteristics:

- Approximately 630 total lots
- Delivered towards the end of the development before 2056.

It is estimated that the Lot 3 DP 804375 could contain 402 dwellings out of the projected total of 630 in Stage 4A–or approximately **65%**.

Combined four lots - The anticipated development within the four lots equates to approximately **6%** of the total trip generation of the Appin and North Appin Precinct.





Source: Walker Corporation, 3 October 2024

Figure 3.1 Indicative structure plan showing subject sites



4. Trip generation

Trip generation rates used for this assessment are the same as those identified in the endorsed TMAP, which were in turn based on Transport for NSW published documents and transport mode share change from strategic transport modelling. Adjustments were made for working from home and a mode shift to public transport based on Sydney Strategic Travel Model (STM) and Public Transport Project Model (PTPM) modelling.

4.1 Traditional single dwelling lots

The trip rate assumptions used in the road network assessment were based on the Roads and Maritime Services *Technical Direction TDT13/04a Guide to Traffic Generating Developments Updated traffic surveys* and assumed working from home assumptions:

- Using demographic projections associated with people per household of the reference zone, the increase in local trips and assumed change in public transport usage:
 - 0.88 trips per single dwelling in the AM peak hour in 2031, changing to 0.81 in 2041 and 2051
 - 0.92 trips per single dwelling in the PM peak hour, changing to 0.84 in 2041 and 2051
- Applying in/out directional splits of:
 - 70 per cent out/30 per cent in during the AM peak hour
 - 30 per cent out/70 per cent in during the PM peak hour.

4.2 Medium and high density dwellings

Based on the Roads and Maritime Services *Technical Direction TDT13/04a Guide to Traffic Generating Developments Updated traffic surveys* and assumed working from home assumptions, the trip generation for medium density dwellings is estimated as:

- 0.51 trips per single dwelling in the AM peak hour, changing to 0.47 in 2041 and 2051
- 0.51 trips per single dwelling in the PM peak hour, changing to 0.47 in 2041 and 2051.

This equates to approximately 57 per cent of the traditional single-dwelling trip generation rate.

4.3 Commercial land use

The rate for commercial (office) land use is from the Roads and Maritime Services *Technical Direction TDT13/04a Guide to Traffic Generating Developments Updated traffic surveys*, using the example in nearby Wollongong as the basis for the calculation (trip rates of 0.95 vehicle trips per 100m² GFA during AM peak hour and 0.77 during PM peak hour).

4.4 Neighbourhood centre retail land use

The rate for retail centres is based on those published in the *Transport for NSW Trip Generation Surveys for Small Suburban Shopping Centres Data Report* (Bitzios, 2018).

- Large local centre Trip rates of 4.08 vehicle trips per 100m² GLFA during AM peak hour and 5.77 vehicle trip rates during PM peak hour, based on surveys from Mittagong.
- Small neighbourhood centres Trip rates of 8.23 vehicle trips per 100m² GLFA during AM peak hour and 9.87 vehicle trip rates during PM peak hour, based on surveys from Wakeley Shopping Centre.



4.5 Traffic Generation

Using the above trip rates, the potential trip generation for the four subject lots have been estimated in Table 4.1. With development occurring between 2041 and 2051, trip generation is expected to peak by 2051. The volumes shown in Table 4.1 are based on the 2051 trip generation rates.

Table 4.1 Trip generation

Loto	Landura	AM Peak hour		PM Peak hour	
Lots	Land use	In	Out	In	Out
Lot 1 DP 1000355 and Lot 32 DP 736923	 302 dwellings (apartments) 30,312 m² gross floor area retail and commercial 	710	670	900	1,000
Lot 1 DP 804375 and Lot 3 DP 804375	414 medium-density dwellings595 low-density dwellings	140	540	560	140
Sub-Total		850	1,210	1,460	1,130

Notes Estimated based on 2051 trip generation rates for applicable land uses from Appin Precinct Transport Management & Accessibility Plan (Pentelic Advisory, 28 February 2024)

The total traffic generation estimated for the Appin Precinct in the TMAP is approximately 5,850 inbound trips in the AM Peak, 15,460 outbound trips in the AM Peak, and 14,670 inbound trips in the AM Peak and 4,750 outbound trips in the PM peak. The trip generation shown in Table 4.1 represents around 11% of the total trips in and out of the Appin Precinct development.

The impact of this development has been assessed in the TMAP in an Aimsun mesoscopic model. The results of this traffic modelling is summarised in section 5.

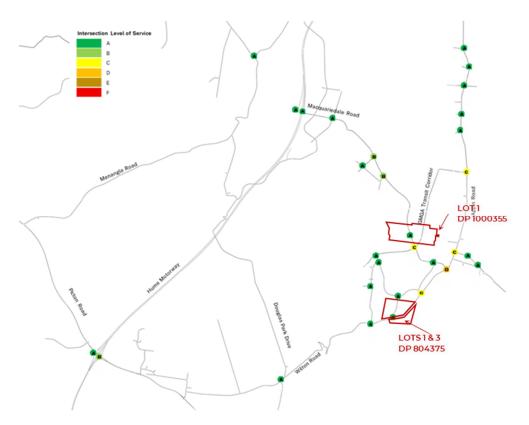


5. Traffic impact

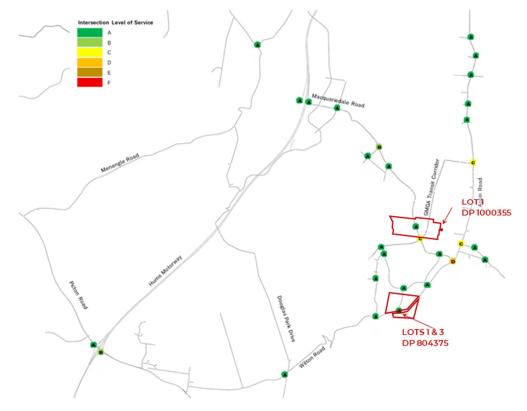
The TMAP assessed the impact of the Appin Precinct, which includes the proposed development expected in the four lots assessed in this report. A package of road network upgrades are planned to augment the regional road network and local connections to connect the Appin Precinct to the wider road network. The analysis, including an Aimsun traffic model, found that:

- Roads in the vicinity of the four lots are generally operating with a low congestion in 2031, 2041 and 2051, with a vehicle density of between 1 and 20 vehicles per km in the AM and PM peaks in 2051
- Intersections within the Appin Precinct near the four lots are performing with a Level of Service of D or better, as shown in Figure 5.1 and Figure 5.2 for the 2031 AM and PM peaks respectively, Figure 5.3 and Figure 5.4 for the 2041 AM and PM peaks respectively, and Figure 5.5 and Figure 5.6 for the 2051 AM and PM peaks respectively. This indicates that the surrounding road network can accommodate the traffic generated by the development.
 - The intersection of Macquariedale Road and the Transit Corridor operates at Level of Service C in 2031 and Level of Service C/D in 2041 and 2051
 - Access intersections to Lot 1 DP 1000355 and Lot 32 DP 736923 on Macquariedale Road and the Transit Corridor operate at Level of Service A in 2031, Level of Service A/B in 2041 and Level of Service C/D in 2051
 - The access near Lot 1 DP 804375 and Lot 3 DP 804375 onto Wilton Road performs at Level of Service A in 2031, 2041 and 2051.
- The proposed Greater Macarthur Growth Area road network will reduce congestion.
- The Macquariedale Road (east-west) link and connection to the M31 Hume Motorway will support 6,300 new homes by 2031 and will reduce the reliance on Appin Road.
- Travel times on the M31 Hume Motorway will increase before reducing to times closer to existing with the introduction of south-facing ramps at Spring Farm Parkway.
- Average speed along the Greater Macarthur Transit Corridor would be around 50km/h.
- No significant congestion in the Appin Precinct for all the modelled years (2031, 2041 and 2051).



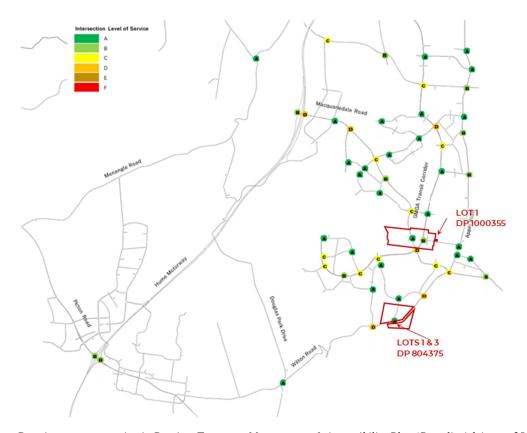


Base image source: Appin Precinct Transport Management & Accessibility Plan (Pentelic Advisory, 28 February 2024)
Figure 5.1 TMAP – 2031 GMGA case intersection LOS – AM Peak

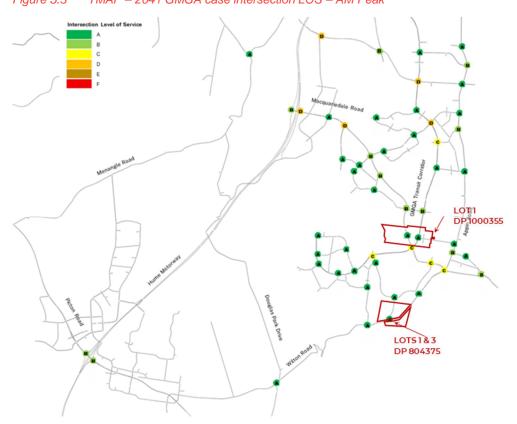


Base image source: Appin Precinct Transport Management & Accessibility Plan (Pentelic Advisory, 28 February 2024)
Figure 5.2 TMAP – 2031 GMGA case intersection LOS – PM Peak



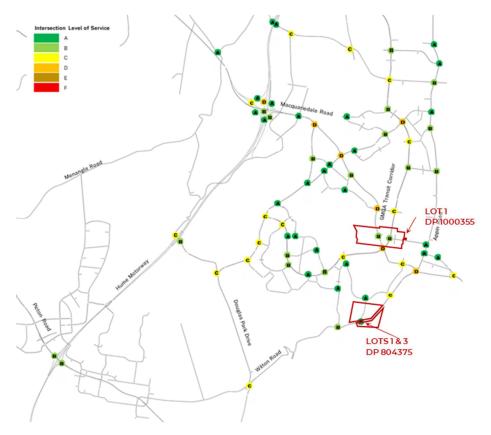


Base image source: Appin Precinct Transport Management & Accessibility Plan (Pentelic Advisory, 28 February 2024)
Figure 5.3 TMAP – 2041 GMGA case intersection LOS – AM Peak

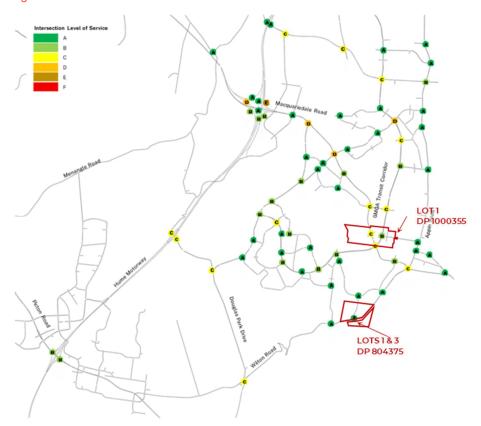


Base image source: Appin Precinct Transport Management & Accessibility Plan (Pentelic Advisory, 28 February 2024)
Figure 5.4 TMAP – 2041 GMGA case intersection LOS – PM Peak





Base image source: Appin Precinct Transport Management & Accessibility Plan (Pentelic Advisory , 28 February 2024) Figure 5.5 TMAP - 2051 GMGA case intersection LOS - AM Peak



Base image source: Appin Precinct Transport Management & Accessibility Plan (Pentelic Advisory, 28 February 2024)
Figure 5.6 TMAP – 2051 GMGA case intersection LOS – PM Peak



6. Transport upgrades

The TMAP recommended a package of transport upgrades to support the Appin Precinct development and manage the growth in regional traffic, and traffic from other developments. A map of the transport upgrades is shown in Figure 6.1.

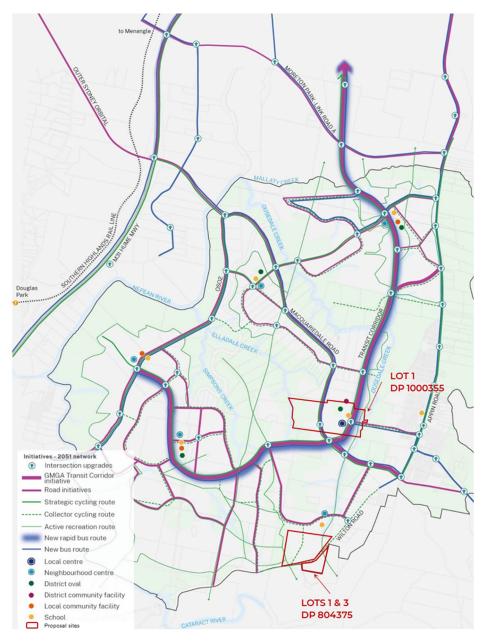


Figure 6.1 Map of transport upgrades

The timing of key upgrades will match the anticipated development staging and available road network capacity. From the perspective of the four lots, most of the transport improvements are expected to be in place by the time their development start to generate trips:

- Macquariedale Road east-west link (proposed), assumed by 2031, will be in place before development starts in the planning proposal lots
- Greater Macarthur Transit Corridor (planned), assumed by 2041, will provide the spine of public transport services, linking the residential development to the local centre and the Appin Precinct to the north.
- Local access intersections along Wilton Road, assumed by 2031, will provide access into Lot 1 DP 804375 and Lot 3 DP 804375.



7. Site access

Access to the four lots is shown in Figure 7.1.

Lot 1 DP 1000355 and Lot 32 DP 736923, within the Town Centre, will have a high level of access via two higher-order roads (Greater Macarthur Transit Corridor and Macquariedale Road) as well as local connections to Stages 1, 2 and east to the existing Appin township.

Lot 1 DP 804375 and Lot 3 DP 804375, located on Wilton Road have existing access to the road network. In the future, development within Lot 3 DP 804375 will connect to Wilton Road via a new intersection and local access road.

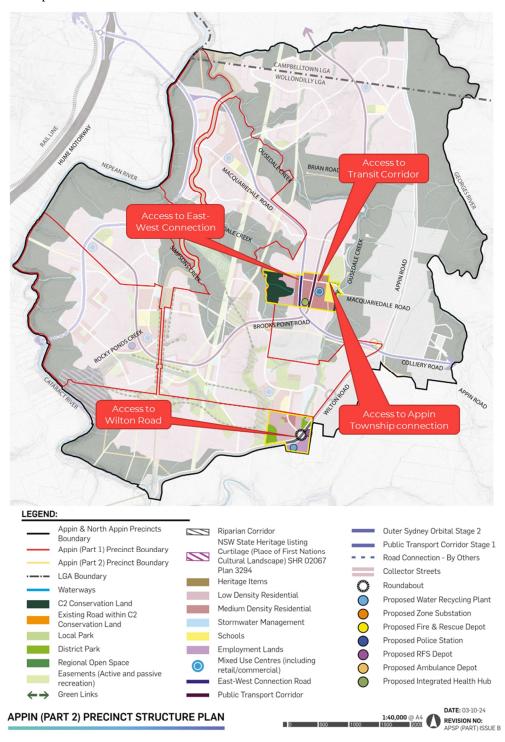


Figure 7.1 Site access



Lot 1 DP 1000355 and Lot 32 DP 736923

In terms of the staging of the development and the road network, the TMAP indicates that the delivery of Macquariedale Road and the section of the Transit Corridor adjacent to the local centre prior to the development in Lot 1 DP 1000355 and Lot 32 DP 736923. These road corridors provide the majority of the access requirements for the development in these lots. Later, as development commences in Stage 3A (containing Lot 1 DP 1000355 and Lot 32 DP 736923), further connections to the existing Appin township, the completion of the Transit Corridor north to Macarthur and its extension into new residential areas west of the local centre will improve access to these lots.

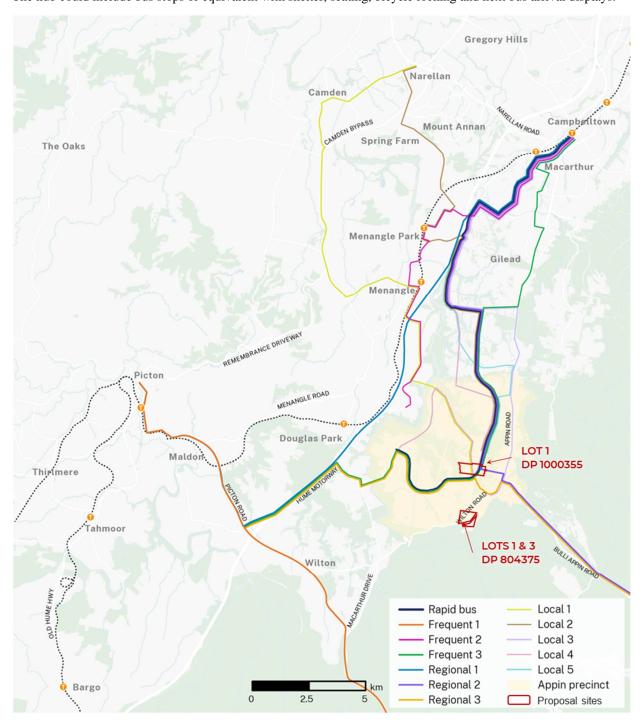
Lot 1 DP 804375 and Lot 3 DP 804375

Development in these lots, located adjacent to Wilton Road, is planned after 2041. Local road connections through these lots to Wilton Road are planned early in the development, making the available for access to Lot 1 DP 804375 and Lot 3 DP 804375 when they are ready to be developed.



8. Public transport

The Greater Macarthur Transit Corridor will be the focal point of public transport services through the Greater Macarthur Growth Area. Lot 1 DP 1000355 and Lot 32 DP 736923 will have a higher intensity of land use than other areas in the Appin Precinct. The neighbourhood centre land use will be a destination for a significant percentage of local trips. This higher potential for public transport trip generation means it will be a bus-hub for the area, with a high number of boardings and alighting passengers supported by high-standard of facility. It is planned to be serviced by rapid, frequent, regional and local services based on the indicative bus network shown in Figure 8.1 and will also be an interchange location for passengers transferring between services. The hub could include bus stops or equivalent with shelter, seating, bicycle locking and next bus arrival displays.

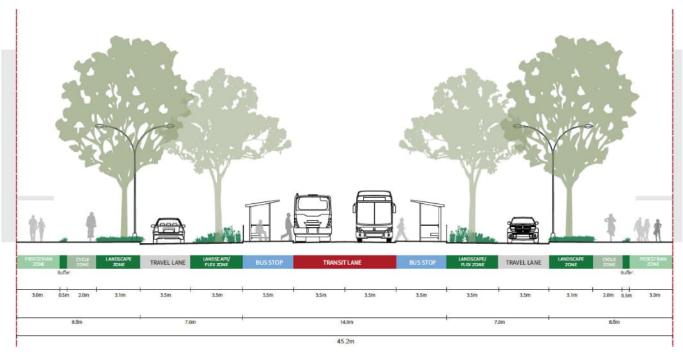


Source: Appin Precinct Transport Management & Accessibility Plan, Pentelic Advisory, 28 February 2024

Figure 8.1 Proximity of indicative bus network and the planning proposal sites



A planned public transport corridor passes through **Lot 1 DP 1000355 and Lot 32 DP 736923**. The corridor is planned to facilitate a frequent (5 minute headway) and efficient service capable of attracting large numbers of passengers to the service. It is envisaged that the corridor would include a 45.2 m wide corridor including bus lanes or equivalent in each direction. An indicative layout of the public transport corridor from the TMAP is shown in Figure 8.2.



Source: Hatch, 2023

Figure 8.2 Greater Macarthur Transit Corridor typical section

Lot 1 and Lot 3 in DP 804375 may be served by future additional local bus services as they are away from the transit corridor and will contain a lower density of housing.



9. Active transport

Within each stage and as development proceeds within the Appin and North Appin Precincts a network of paths and active transport infrastructure is planned to support higher use of walking and cycling for local movement. The network will be developed based on the principles of the Wollondilly Shire Council Shared Cycleway Plan, including:

- Connecting logical start and end points (e.g. schools to residential areas, towns to each other, etc.).
- Maximising/using off road routes wherever feasible.
- On road routes along major connecting roads may be considered in rural areas to reduce construction costs and increase useability.
- Target known future land release areas for off road routes.
- Link tourist and other places of interest to encourage visitors and residents into recreational cycling.

This will include connections to the existing Appin township, as well as connection to a separated off-road path along the east side of Appin Road to Appin in the long-term.

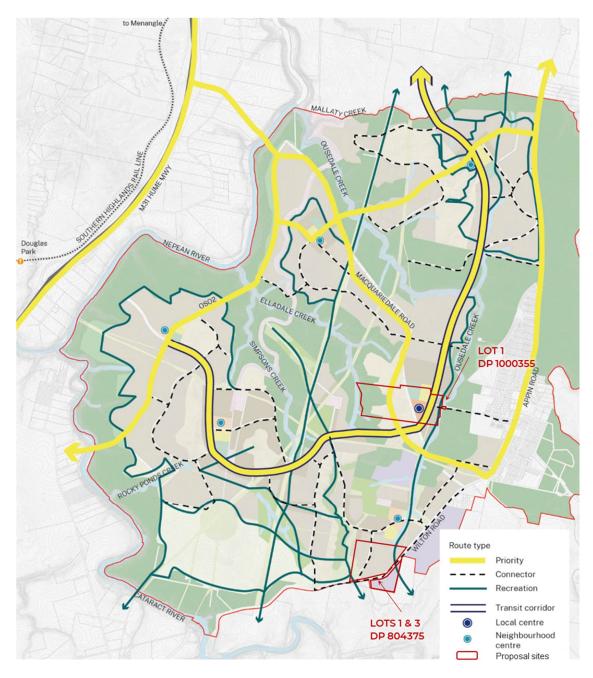
9.1 Cycle network

Cycleway and shared pathway routes will be proposed within Appin and North Appin Precinct including a mixture of shared paths, mixed traffic and on-street cycle lanes. This will be done to avoid mixing cyclists with traffic on the streets with the highest traffic volumes, where possible.

Bicycle racks would be provided in the Town Centre (including **Lot 32 DP 736923**), at neighbourhood centres, community centres and recreation facilities. Commercial buildings would be required to provide cyclist end of trip facilities, including bike locking and showers, as per the requirements of the Planning guidelines for walking and cycling.

A map showing the proposed cycle network and the planning proposal sites is shown in Figure 9.1. Lot 1 DP 1000355 and Lot 32 DP 736923 are connected to the proposed cycle network by priority, connector and recreational cycle routes, including the priority route alongside the Greater Macarthur Transit Corridor. Lot 1 and Lot 3 in DP 804375 are proposed to be linked to the cycle network by connector and recreational routes.





Source: Appin Precinct Transport Management & Accessibility Plan, Pentelic Advisory, 28 February 2024
Figure 9.1 Proposed (indicative) cycling network for Appin Precinct and the planning proposal sites

9.2 Pedestrian network

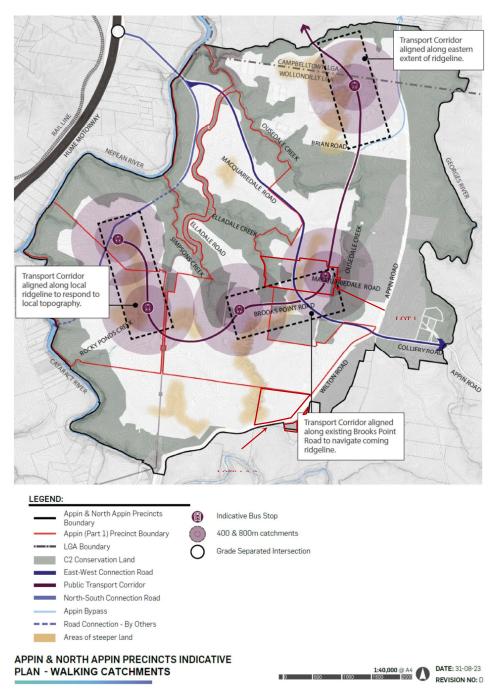
Town centre

Appropriate urban design and traffic management measures are planned along the streets within the Town Centre (including **Lot 32 DP 736923**) to reinforce the high pedestrian activity area and improve pedestrian safety. Treatments proposed include entry thresholds (using textured pavement/pavers), road width changes, raised thresholds, street lighting and lower speed limits.

Local facilities

The pedestrian and cycle networks will be designed to have a greater level of permeability than provided to vehicles to further promote their greater use. They are based on 400m and 800m walking catchments to local shops, schools, public transport, open space, supermarkets and grocery stores etc, shown in Figure 9.2.





Source: Walker Corporation, 3 October 2024

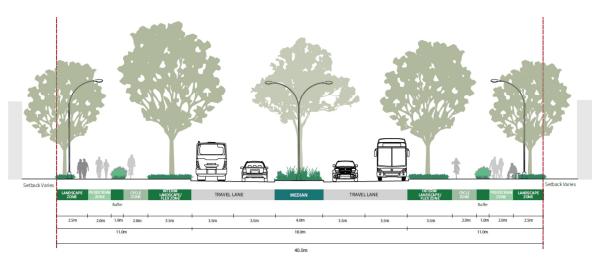
Figure 9.2 Walk catchments along Transit Corridor and at local centre

Street sections

Off-street shared paths are planned to complement Wollondilly and Campbelltown Council's cycle/pedestrian paths scheme and increase permeability for pedestrians and cyclists. All streets (except laneways) would have 1.2 m minimum footpaths, on one or both sides of the street. Footpaths and shared paths would be designed with regard to the Planning guidelines for walking and cycling.

The Greater Macarthur Transit Corridor, shown in Figure 8.2, and Macquariedale Road, shown in Figure 9.3, would have wider footpaths of 3.0m and 2.0m respectively on both sides to cater for the higher anticipated pedestrian volumes around the local centre (passing through **Lot 32 DP 736923**). These footpaths would be separated from the cycle zone to improve pedestrian safety and amenity.





Source: Hatch, 2023

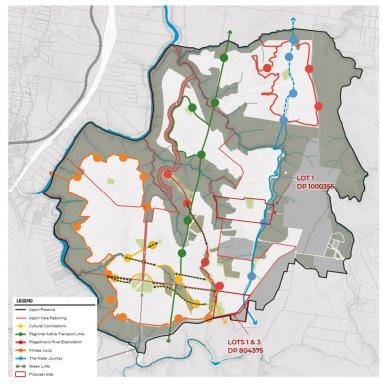
Figure 9.3 Macquariedale Road typical cross section

Crossing opportunities

The pedestrian network would concentrate on connecting high trip generating land uses, such as retail centres, community and recreation facilities and schools. Paths will be safe and well lit, with pedestrian crossing treatments on strong pedestrian desire lines at road crossings. Signalised intersections in the local centre would assist pedestrian movement to and from the retail and commercial area

Active recreation

Recreation and cultural trails are planned for the Appin Precinct, as shown in Figure 9.4. All four planning proposal sites are connected to The Water Journey. **Lot 1** and **Lot 3 in DP 804375** are also connected to the Cultural Connections, Ridgeline to River Expedition and Fitness Loop trails.



Source: Urbis, 2023

Figure 9.4 Active Recreation Trails



10. Mitigation measures

The development within Lot 1 DP 1000355, Lot 32 DP 736923, Lot 1 DP 804375 and Lot 3 DP 804375 has already been assessed in the *Appin Precinct Transport Management & Accessibility Plan* (Pentelic Advisory, 28 February 2024), and therefore no additional mitigation measures are needed beyond those that have already been proposed for the Appin and North Appin Precinct.

The TMAP presents 82 transport initiatives for further investigation, grouped into six transport objectives based on a review of strategic context, assessing the existing and proposed Movement and Place context, analysis of the challenges and opportunities and a co-design process with the Transport Working Group. The transport objectives include:

- 15-minute neighbourhoods
- Sustainable travel demand
- Integrated multi-modal network
- Access and connectivity
- Active travel options
- Productive network.

Important measures directly benefiting and mitigating the impact of the four subject lots include:

- North-South Transit Corridor road and public transport services, and bus hub
- East-West Connection Road
- Local bus services and bus stops with shelter
- Active transport network including bicycle parking within the Town Centre and end-of-trip facilities in new development.



11. Conclusions

The transport assessment undertaken for the Appin and North Appin Precinct (Appin Precinct Transport Management & Accessibility Plan (Pentelic Advisory, 28 February 2024)) assessed that the transport network could accommodate the proposed development within the Appin and North Appin Precinct and the Greater Macarthur Growth Area with an appropriate set of transport improvements.

The development within Lot 1 DP 1000355, Lot 32 DP 736923, Lot 1 DP 804375 and Lot 3 DP 804375 was included within the assessed development within the Appin Precinct. The proposed network is also therefore appropriate for the development in these lots.

It is envisaged that a more detailed assessment of the transport network for the Part 2 lots will be undertaken at the development application stage to inform the design of the proposed master-planned community.

The Proposal can be supported in its current form.

Yours sincerely

Principal Transport Engineer