



Planning &
Environment

Kellyville Station Precinct Proposal

DECEMBER 2015



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Department Planning and Environment

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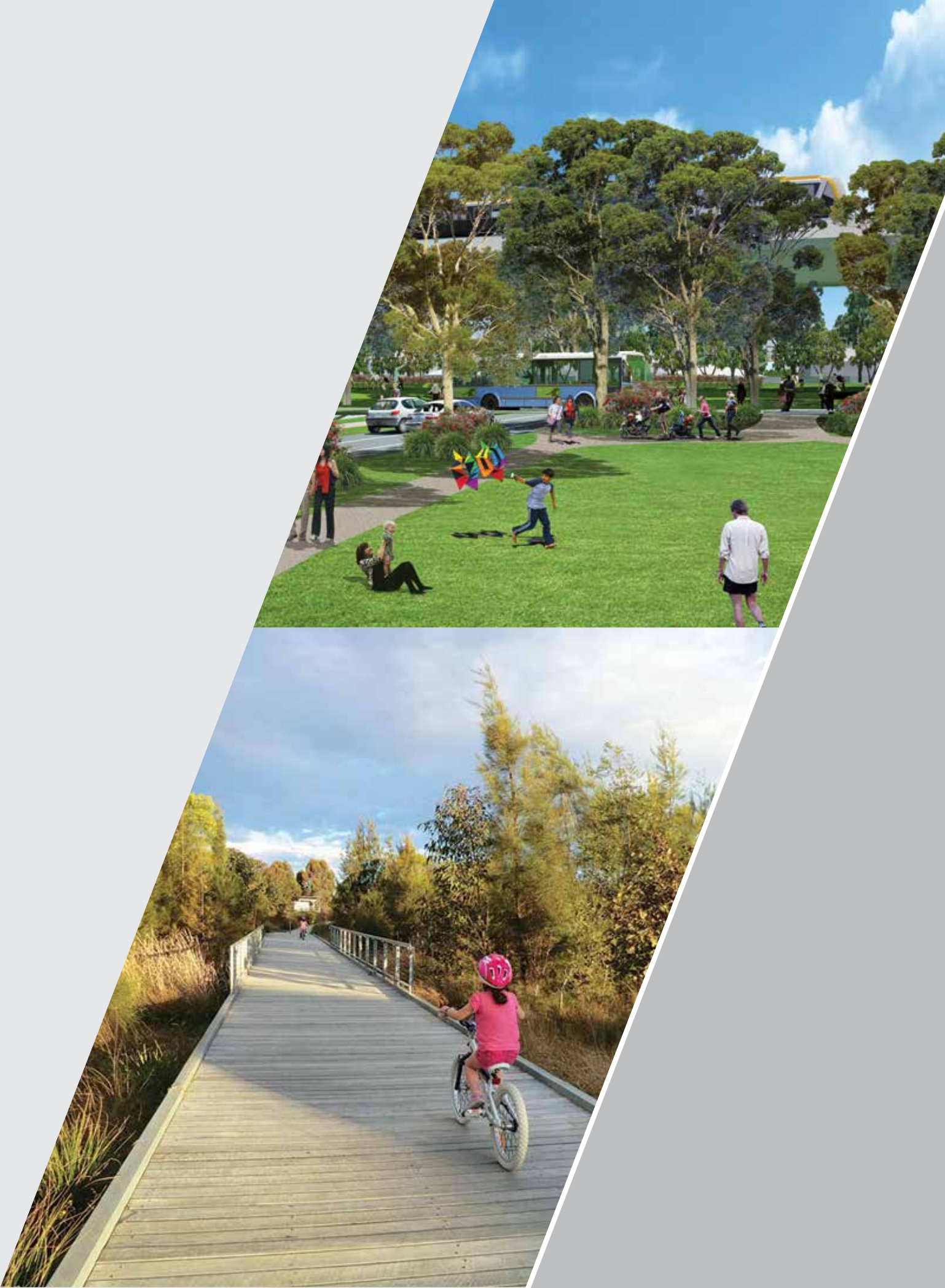
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Executive summary

This document is a summary of the Kellyville Station Precinct Proposal prepared by the Department of Planning and Environment.

The proposal has been informed by the 2013 North West Rail Link Corridor Strategy, which was prepared to guide development of land around the eight new stations on the rail link. Consultation with local councils, State government agencies and the local community has been an integral part of the process.

The Kellyville Station Precinct is centred on the new Kellyville Station which will provide excellent transport access to employment centres, retail hubs and educational facilities across Sydney. The precinct will provide for a greater supply of homes, more housing choice, and more jobs and services closer to home.

This is a long term project to be delivered over 20 years. Like any renewal area, the project will evolve over time. By 2036, it is expected that the Kellyville Precinct will be transformed into a vibrant, connected and walkable centre which is attractive to live, work and spend time in.

Although this draft plan includes controls such as maximum height and floor space ratios, all future development proposals will still need to address other relevant controls such as those in *State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development*, and the applicable Development Control Plan. This will determine the overall built form of development in the precinct.



Figure 1: Indicative aerial view- Caddies Creek sports complex extension

The proposal includes the rezoning of parts of the precinct close to the new station to provide for:

- ▶ a new local centre around the station providing a mix of shops, cafés, restaurants, local services and apartments;
- ▶ more housing options to benefit from the excellent connections to transport, including high and low rise apartments, with the highest buildings closest to the station;
- ▶ new and improved open space, including greater access to the creek corridors, and expanded Cattai Creek Sporting Complex; and
- ▶ provision for additional community facilities.

Large parts of the precinct will retain their existing character with improved connections to the new station, local centre and proposed open space.

The precinct proposal will be supported by a range of infrastructure improvements including:

- ▶ new Metro station at Kellyville with bus, taxi, cycle, and kiss and ride interchange facilities, and customer car park;
- ▶ new and upgraded intersections including Memorial Avenue upgrade between Old Windsor Road and Windsor Road,
- ▶ new precinct access road off Memorial Avenue;
- ▶ new local streets, pedestrian paths and cycle paths; and
- ▶ bus priority measures including bus priority lanes.

To further assist the provision of local infrastructure upgrades and improvements, the government has allocated approximately \$15 million across the Showground, Bella Vista and Kellyville Station Precincts through the Precinct Support Scheme. Consultation with the community will help inform which works will be funded.



Figure 2: Indicative streetview – courts underneath the railway skytrain



Figure 3: Indicative streetview – the local community embracing Kellyville's green character

1.0 North West Rail Link Corridor Strategy

1.1 North West Rail Link Corridor Strategy

The \$8.3 billion Sydney Metro Northwest (formerly known as the North West Rail Link) is Australia's largest transport infrastructure project currently under construction and a priority rail project for the NSW Government.

Sydney Metro Northwest, due to open in the first half of 2019, includes the 23 kilometre line from Epping to Cudgegong Road, and will deliver eight new railway stations to Sydney's growing North West. Sydney Metro Northwest will also include the existing 13 kilometre Epping to Chatswood rail line.

The second stage of Sydney Metro, the Sydney Metro City and Southwest, will extend from Chatswood, run under Sydney Harbour, the Sydney CBD and west to Bankstown. This section is planned to open in 2024 with the capacity to run a metro train every two minutes each way under the centre of Sydney.

The Department of Planning and Environment and Transport for NSW, in consultation with relevant local councils and State government agencies, finalised the North Rail Link Corridor Strategy in September 2013. The Corridor Strategy, which included Structure Plans for each station precinct, was prepared to guide planning around the stations, and integrate land use and transport planning to meet current and emerging challenges associated with future expected growth in the North West region.

The Corridor Strategy:

- ▶ identified future visions for the precincts surrounding the new stations;
- ▶ projected housing and job growth for each precinct and the corridor as a whole; and
- ▶ established a framework for managing future land use change.

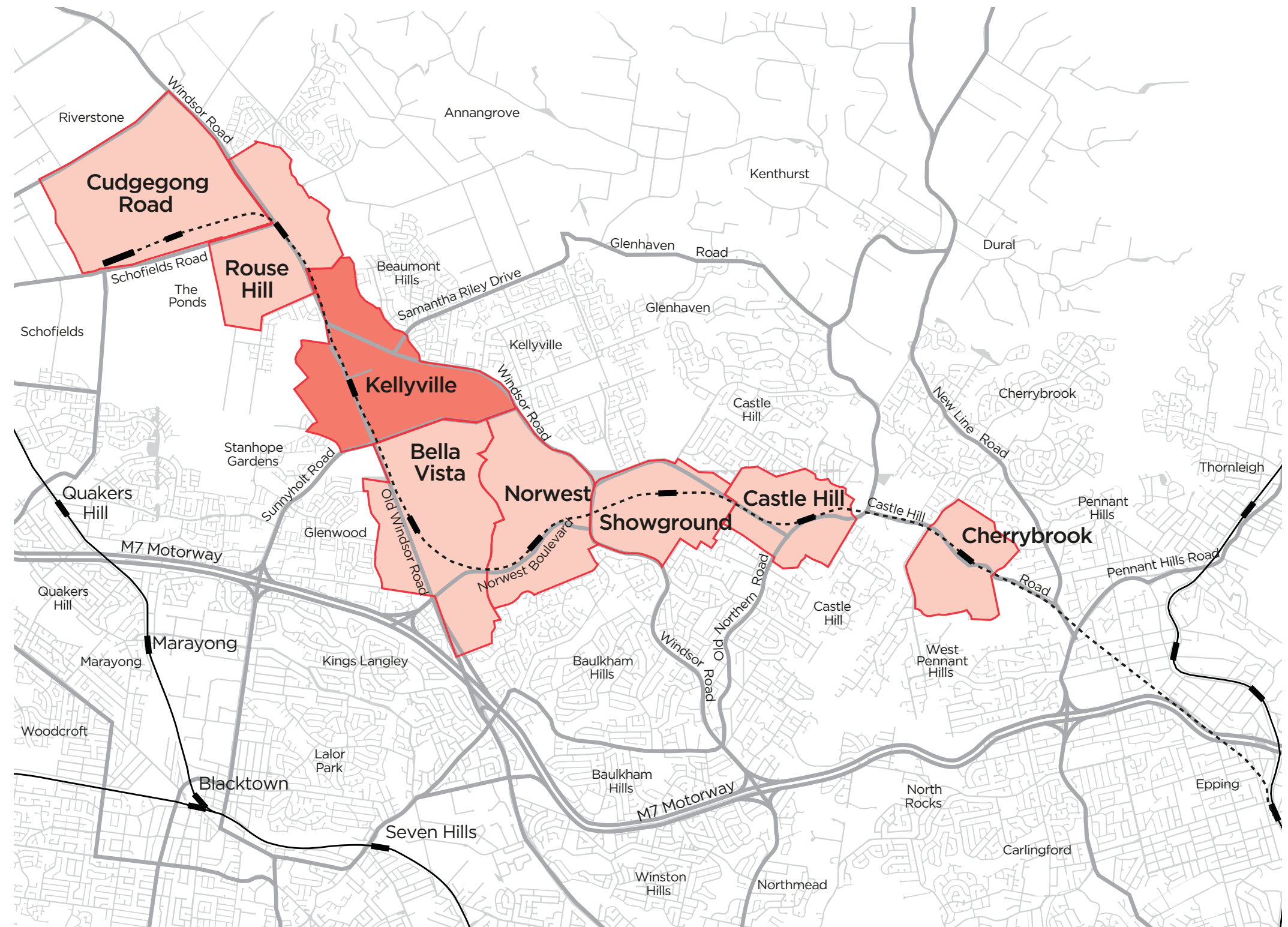


Figure 4: North West Rail Link Corridor Station Precincts

1.2 Kellyville Station Structure Plan

A Structure Plan was prepared for the Kellyville Station Precinct as part of the North West Rail Link Corridor Strategy.

This plan considered the potential for the Sydney Metro Northwest to transform the Kellyville Station Precinct by providing a new focal point for the community centred upon the station. Opportunities were identified for more homes and jobs close to the station, a greater mix of housing choice, and a mix of neighbourhood shops and services to provide for the daily needs of the community.

The Structure Plan is a high level plan used to guide future planning of the precinct. It relies on further detailed planning to determine the most appropriate planning controls. In this case it has been used to guide the current proposal for the Kellyville Station Precinct.

The station precinct includes land within an 800 metre radius, or roughly a 10 minute walk, of the new Kellyville station. The boundary has also taken into account the surrounding road network, natural features, and the development pattern of the area.

The area of the precinct east of Old Windsor Road is located within The Hills Local Government Area, and the area west of Old Windsor Road is located within the Blacktown Local Government Area.

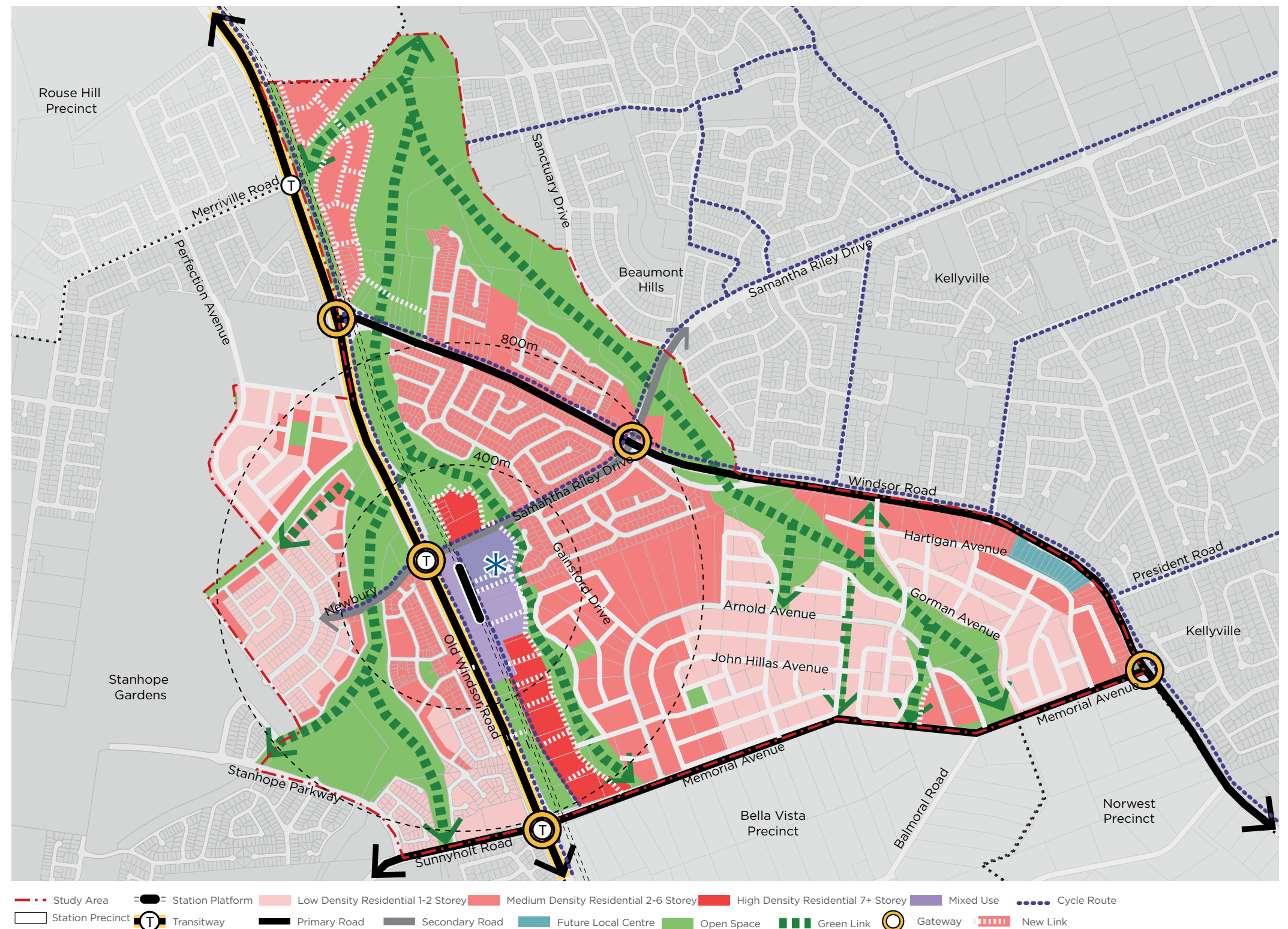


Figure 5: Kellyville Station Structure Plan

2.0 Priority Precincts

Our vision for Sydney for the next 20 years is for 'A strong global city ... a great place to live'. This is the key message of *A Plan for Growing Sydney*, the NSW Government's plan for Sydney's future. The plan has four key goals:

- ▶ A competitive economy with world class services and transport;
- ▶ A city of housing choice with homes that meet our needs and lifestyles;
- ▶ A great place to live with communities that are strong, healthy and well connected; and
- ▶ A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

One of the biggest challenges in meeting these goals is how best to provide the 664,000 new homes and 689,000 new jobs for an extra 1.6 million more residents predicted by 2031. One of these ways is through the Priority Precincts program.

2.1 The Priority Precincts Program

The Priority Precincts program aims to provide for new housing and jobs in centres with good existing or planned transport services. The program coordinates the delivery of infrastructure to ensure that the growth will be supported by improved public open space and community facilities to make these areas attractive places to live, and enhance people's lifestyles and living standards.

A major consideration for Priority Precincts is walking distance to public transport, shops and services. Most people are comfortable with a ten-minute walk to public transport and shops and services, which is about a distance of 800 metres.

2.2 Changing preferences and lifestyles

Sydney is changing all the time. As well as needing to house and provide jobs for an extra 1.6 million people by 2031, we also need to consider the changing preferences and lifestyles of Sydney's residents.

The Priority Precincts program plans for development over the medium to long term and therefore need to take into consideration these changes, which include:

- ▶ Increased desire to live in centres with good transport connections and proximity to shops and services to make life more convenient and enjoyable;
- ▶ Improved access to public transport, as well making it easier to cycle and walk, which reduces traffic congestion, exhaust emissions, and result in more pleasant streets and neighbourhoods;
- ▶ Reflect the demand for apartments in centres with jobs, shops, services and transport especially from the growth in single and couple only households; and
- ▶ Allow aging in place, by providing a range of housing types so people can live close to family and friends no matter what their life stage.



Figure 6: North Ryde Station Precinct

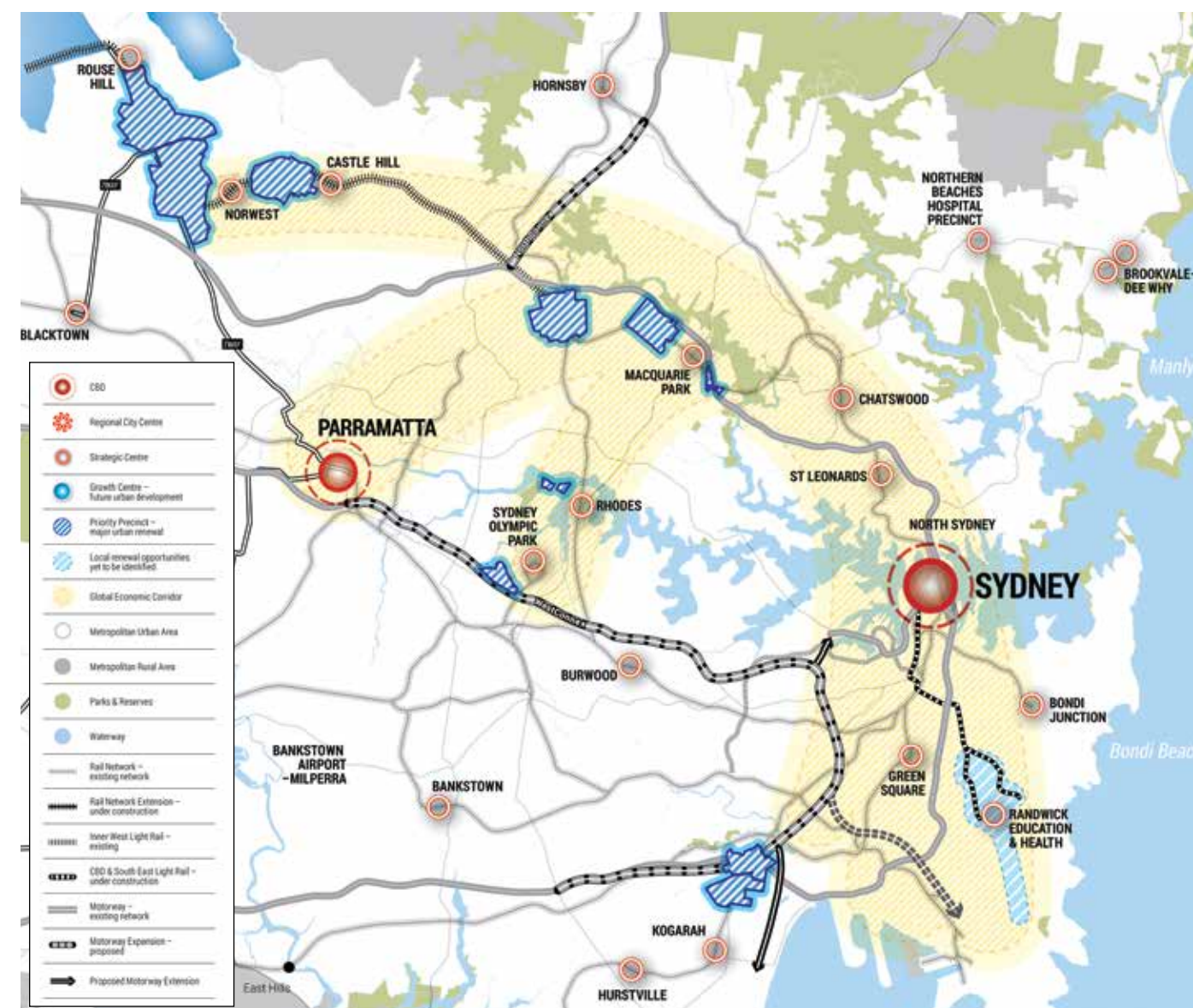


Figure 7: Priority Precincts

2.3 Community Consultation

One of the key principles of the Priority Precincts program is extensive community engagement throughout the planning process. Consultation that has been undertaken leading up to the exhibition of the Kellyville Precinct Proposal included:

Community information stalls

- Five events were attended by the Department between August 2014 and March 2015 including Paws in the Park (August 2014), Orange Blossum Festival (September 2014), Hawkesbury Harvest and Food Fair (October 2014), Bella Vista Farm Markets (November 2014) and the Castle Hill Show (March 2015).

Newsletter

- A precinct specific newsletter was delivered to approximately 5,700 residents within the three precincts in October 2014.

Telephone survey

- Conducted in April 2014, with 503 randomly selected residents completed the survey.
- Community feedback on the visions for the future of each precinct included vibrant and well-connected communities with good transport links, job opportunities and educational facilities.

On line survey

- Available for 10 weeks over August to October 2014, and completed by 280 respondents, with 63% living in the Kellyville, Bella Vista or Showground Station Precincts.
- The most important features influencing where people would live were public transport; proximity to cafés, restaurants and shops; and proximity to parks and open space.
- The most popular local facilities to support growth in the area were parks and reserves; community facilities such as libraries and community centres; and bicycle and pedestrian paths.

Stakeholder Briefing Sessions

- Sessions were held for the Showground Station Precinct on 30 October 2014 and 30 March 2015, and for the Kellyville and Bella Vista Station Precincts on 6 November 2014 and 1 April 2015.
- Information was provided to representatives of community, business and other relevant groups about the planning for the precincts. These sessions provided stakeholders the opportunity to raise issues they may have had.



Figure 8: Community Information Stalls

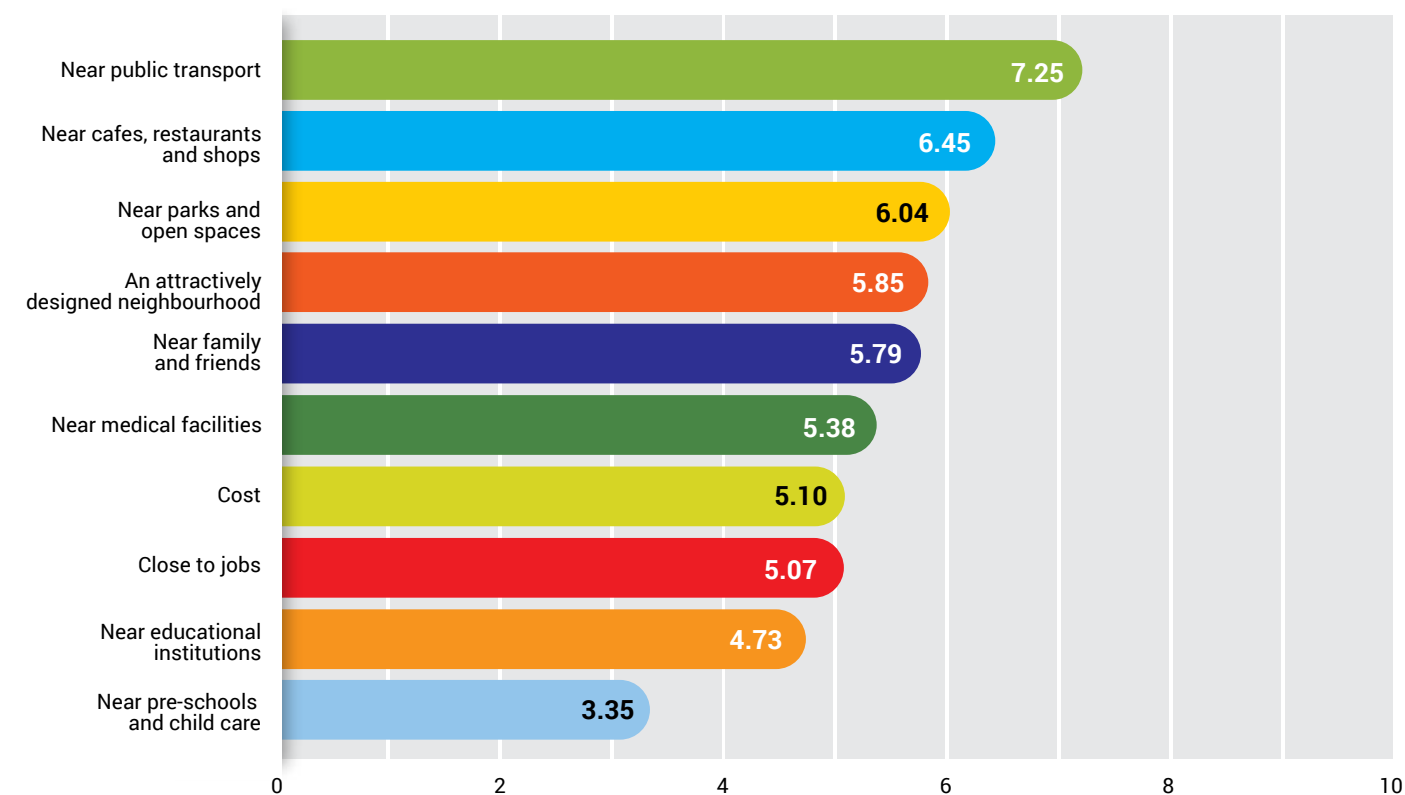


Figure 9: On-line survey result – average ranking for each factor influencing choice of housing location

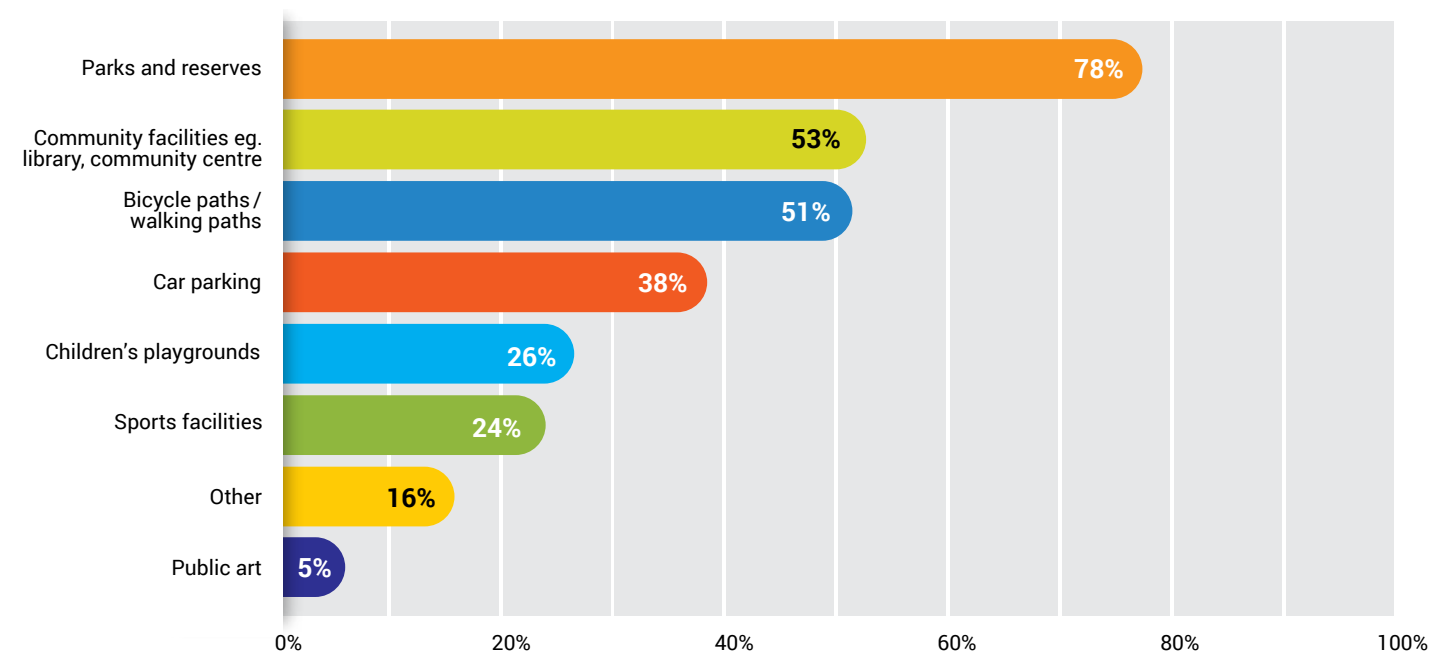


Figure 10: On-line survey result – most popular local facilities to support growth (up to three items could be chosen)

3.0 Environmental and Social Analysis

3.1 Transport

Established Road Network and Sydney Metro Northwest

Old Windsor Road, Windsor Road, Memorial Avenue and Samantha Riley Drive are the main roads through the precinct, and managed by the State road authority. These roads experience the highest usage levels in the precinct and provide access to important employment and service centres in the region.

The new Sydney Metro Northwest network will run alongside Old Windsor Road in Kellyville and will significantly improve transport access in the region, providing greater connections across Sydney.

Bus and cycle routes

Bus routes run along the North West Bus Transitway (T-way) to major destinations such as Rouse Hill, Parramatta and the Sydney Central Business District. Other bus services connect residents in Kellyville to areas such as North Sydney, Castle Hill and Macquarie Park.

Within the precinct, cycle routes are generally limited to Old Windsor and Windsor Road, however, there are a number of off-road and on-road cycle routes in the surrounding area. There are no separate pedestrian or bicycle crossings over Caddies Creek or Elizabeth Macarthur Creek.

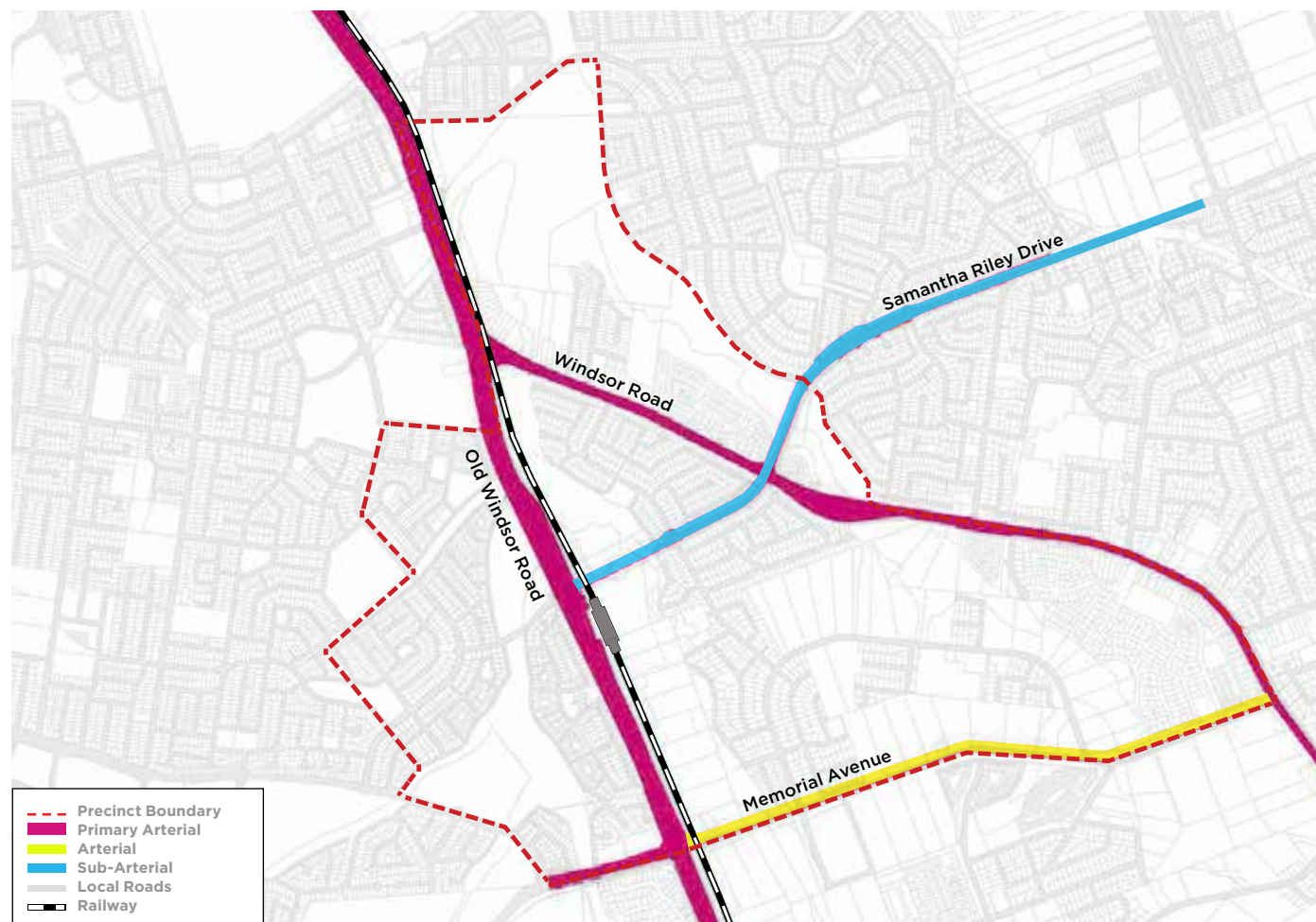


Figure 11: Existing road network and rail line

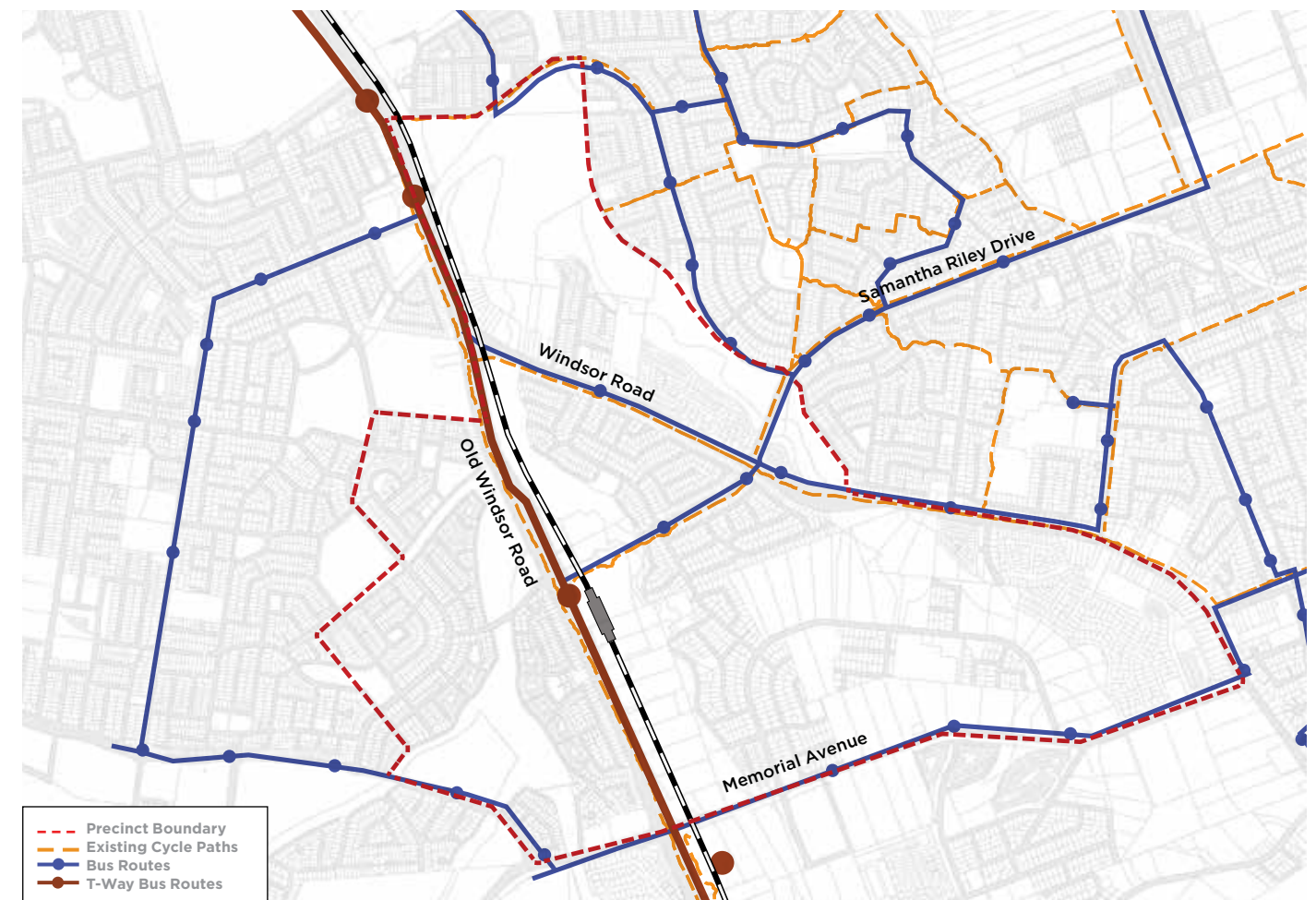
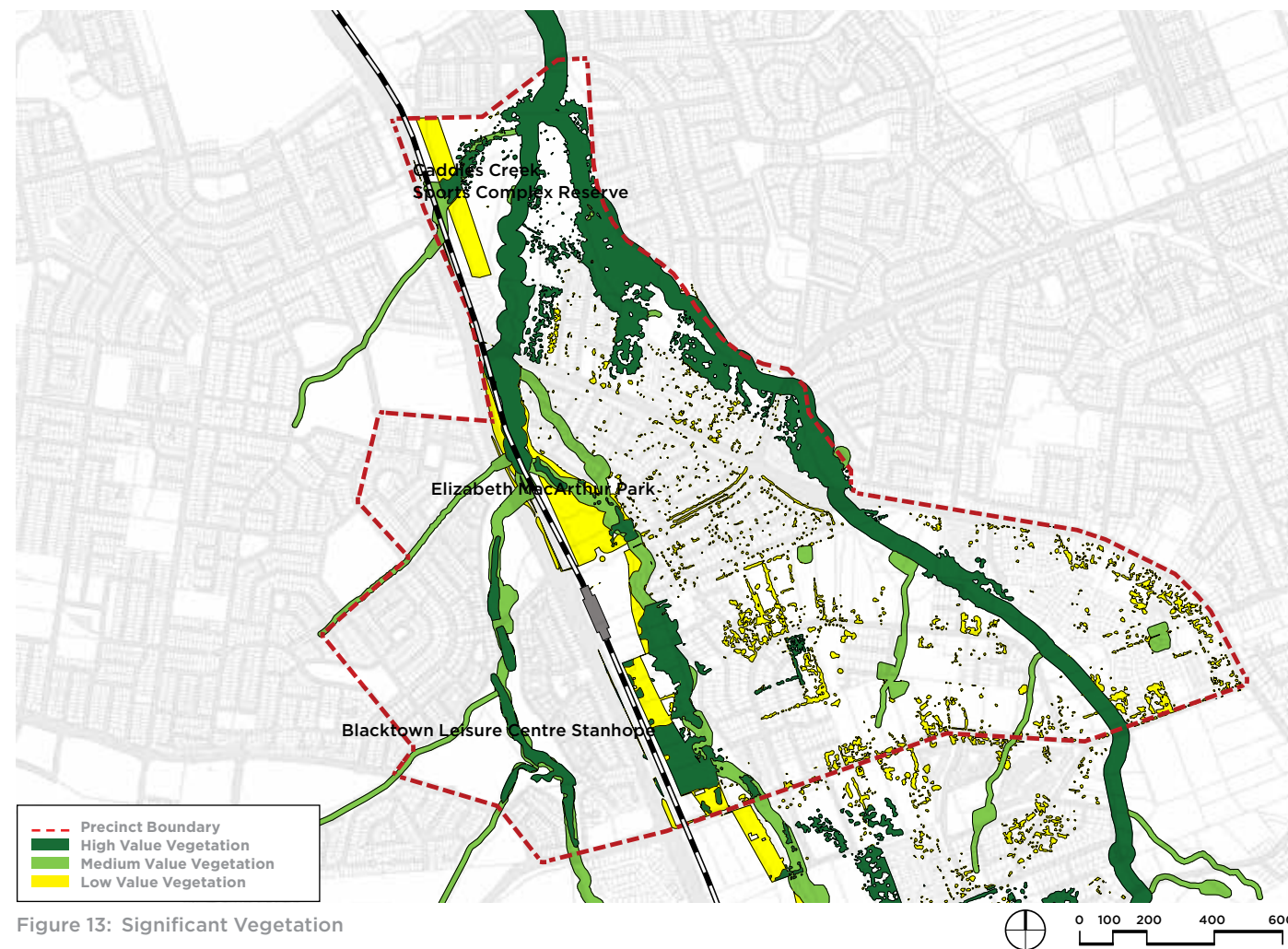


Figure 12: Bus and cycle networks

3.2 Existing Open Space and Ecology

Playing fields and small neighbourhood parks are scattered throughout the precinct. There are a number of parks within the Blacktown Local Government Area, including those in Somerset Street, Epsom Avenue and along Newbury Drive.

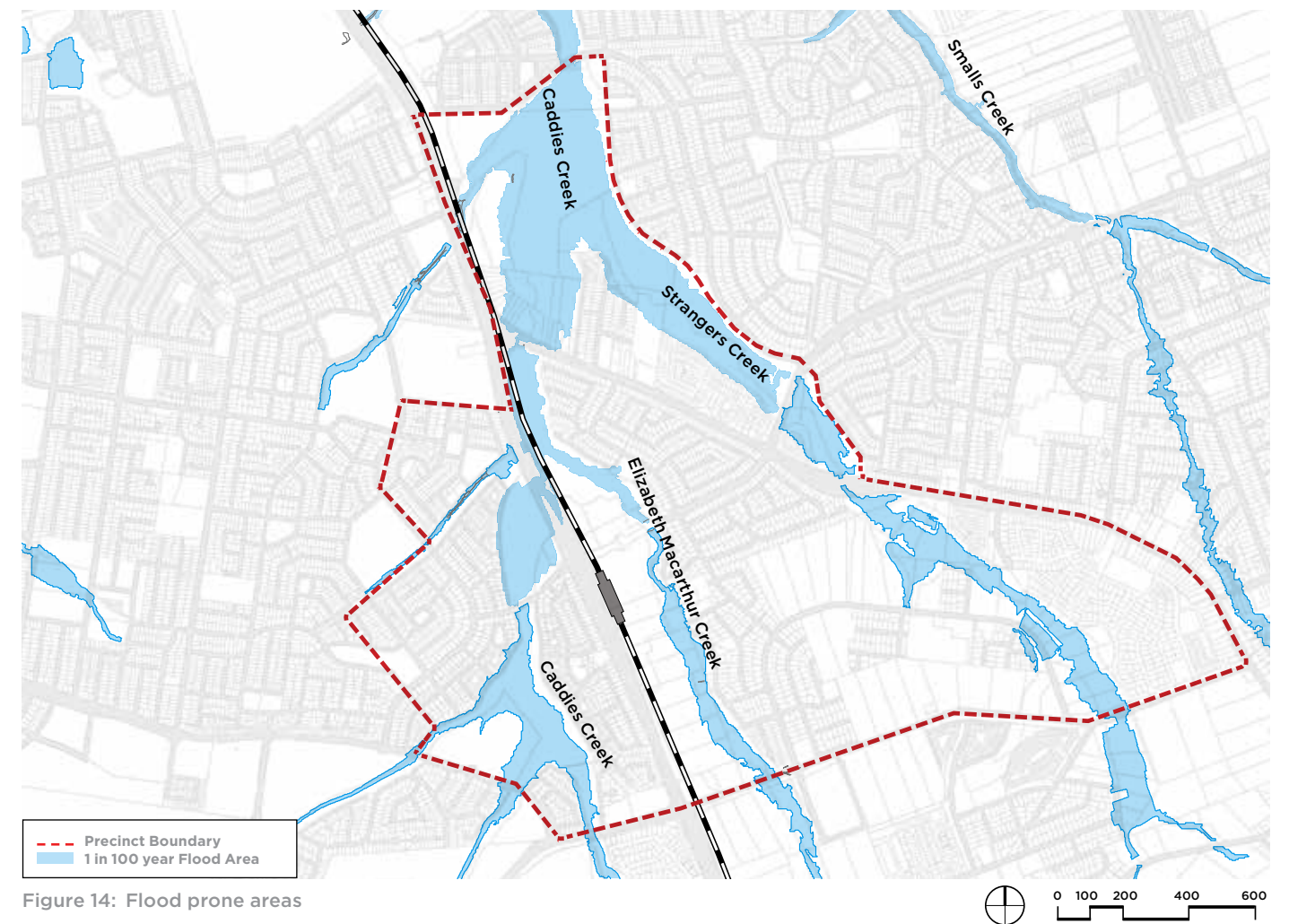
Riparian (or creek) corridors are a key feature of the precinct, although use of these areas by the community is limited due to the lack of paths and other facilities. The creek corridors also tend to have the highest value vegetation in the precinct, which includes potential endangered ecological communities.



3.3 Water Courses and Flooding

Three major creek lines run through the precinct, Caddies Creek, Elizabeth Macarthur Creek and Strangers Creek, which meet in the northern part of the precinct and flow on to the Hawkesbury River. These creeks provide an important drainage function for the precinct and surrounding areas and are primarily under Sydney Water ownership and/or management.

The 1 in 100 year flood event level and overland flow paths restrict development in these areas, although they do provide an opportunity to provide for green space and recreation areas.



3.0 Environmental and Social Analysis

3.4 Land Ownership

Most lots within the precinct are less than 800m² and feature single, detached family homes. The largest parcels of land are owned by government. This includes Transport for NSW (for the Metro construction), Sydney Water (riparian/creek corridors), and The Hills Shire Council and Blacktown City Council (mainly for open space and parks).

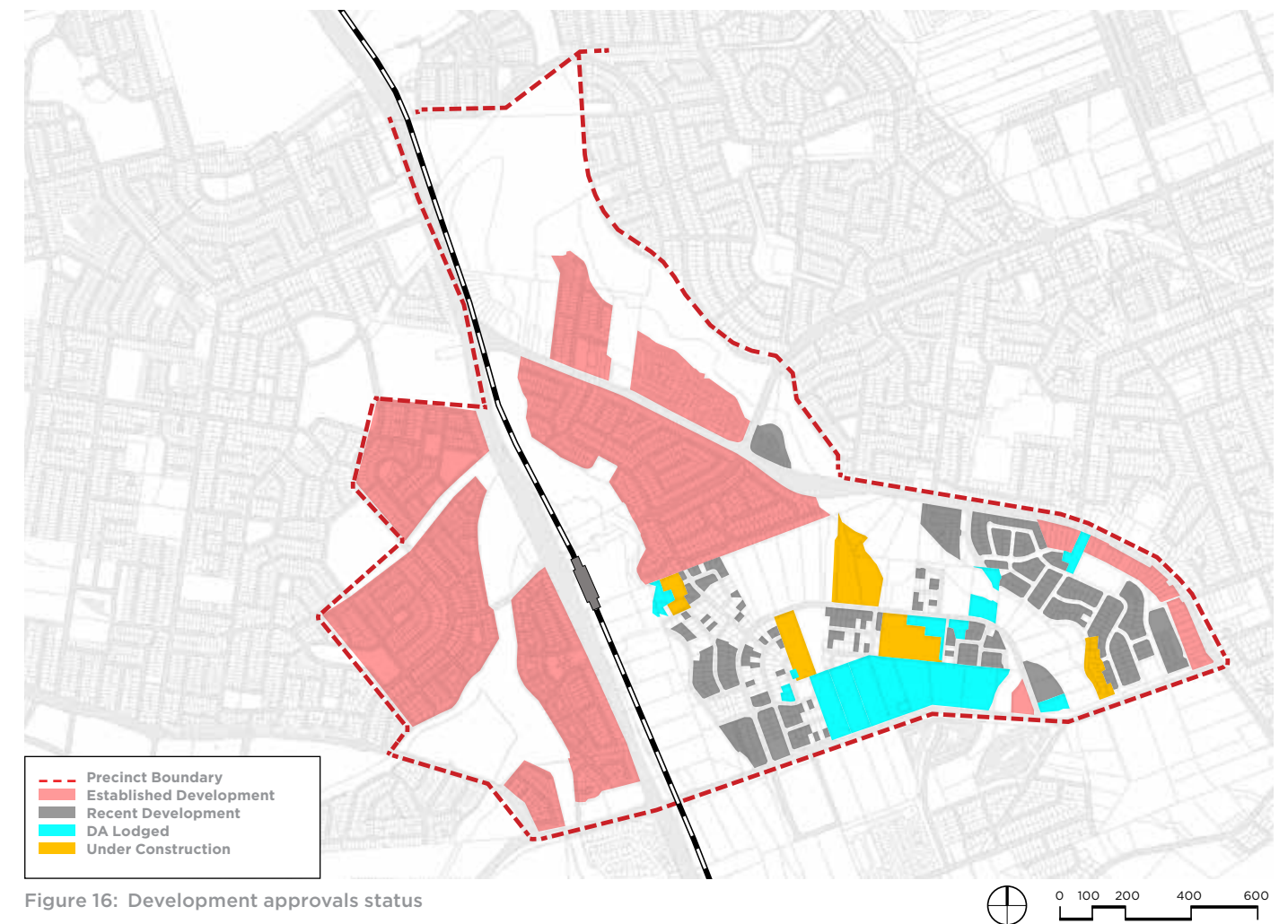
The larger lots in private ownership reflect the older subdivision pattern in the area, which is changing as the Balmoral Road Release Area continues to provide new housing.



3.5 Recent Development

Since the 2013 Structure Plan was finalised, there has been significant development activity in the Balmoral Road Release Area in the south-eastern part of the precinct, which is on-going. This is largely in the form of detached, stand-alone dwellings, but also some attached/town house style housing.

Consideration has been given to the condition and age of existing buildings and the likelihood of land being redeveloped. Recent development is considered a short to medium term constraint to development, as the average life cycle of a building is generally 30-40 years.

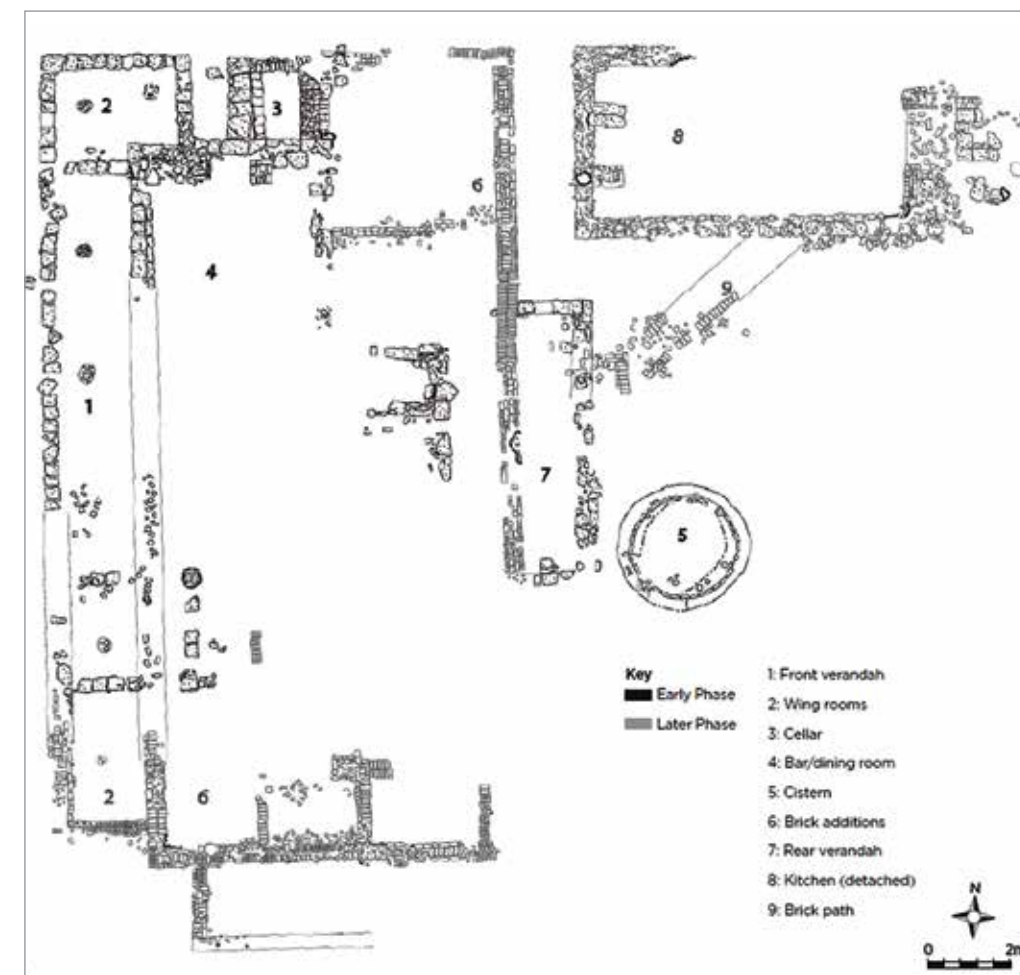


3.6 Heritage

Construction work for the Sydney Metro Northwest has resulted in the discovery of the archaeological remains of the White Hart Inn, which has major historical significance for the early European settlement of this region. This site is located about 300 metres north of the intersection of Windsor Road and Old Windsor Road, in the location of the elevated section of the Metro line.

There is potential for the site to be used as a historical interpretation centre for the community.

Other heritage items in the precinct are the Former Divine Word Mission at 4 Sabal Place, Beaumont Hills, along with Windsor Road, and the former alignment of Old Windsor Road (now the location of the North West Bus T-Way) which is a local archaeological heritage item.



4.0 The proposal

4.1 Vision

“A green, vibrant and connected community”



Figure 20: Impression of the creek as open space between the new and existing development

Residential	<ul style="list-style-type: none"> ▶ Approximately 4,200 new homes over the next 20 years. This is in addition to homes planned but not yet developed in the Balmoral Road Release Area. ▶ Increase housing supply and housing choice. ▶ Walkable neighbourhood with convenient access to the station, jobs, shops, cafés and open space. .
Employment	<ul style="list-style-type: none"> ▶ Approximately 2,200 new jobs created over the next 20 years. ▶ Local shops, services and community facilities to be main employers. ▶ Rail access to more jobs across the region via the new rail line.
Open Space	<ul style="list-style-type: none"> ▶ Town square with landscaping, seating and lighting linking the station with the Elizabeth Macarthur Creek corridor. ▶ Caddies Creek sports complex to be enlarged to provide extra sporting fields and amenities. ▶ Opening up creek corridors for pedestrian and cycle paths with connections across to the station and local centre. ▶ New neighbourhood and local parks. ▶ Using areas under the skytrain for recreational uses such as court sports, futsal (5 a side football) or playgrounds.
Retail and Community	<ul style="list-style-type: none"> ▶ Local centre at the station to provide 5,000m² to 10,000m² of shops and services for day to day shopping needs. ▶ Active shop fronts and outdoor dining for lively and safe streets. ▶ Provision for a new community facility in the town square.
Built form	<ul style="list-style-type: none"> ▶ Higher scale development closest to the station – ranging from 6 to 15 storeys. ▶ Lower height apartments in limited locations still close to transport – ranging in height from 3 to 6 storeys. ▶ Potential for new apartments in Stanhope Gardens – ranging from 5 to 14 storeys. ▶ Controls for setbacks, building separation and landscaping to promote good urban design.
Connectivity and Sustainability	<ul style="list-style-type: none"> ▶ New streets connecting new and existing residential and employment areas to the station and town centre. ▶ Improved connections for pedestrians and cyclists through the precinct. ▶ Provision for improved public transport connections to the station. ▶ Measures to promote stormwater management and water quality, and energy efficiency. ▶ Enhancing and protecting the ecological values of the Elizabeth Macarthur Creek corridor.



Figure 21: Impression of the pedestrian link from Kellyville Station to the Elizabeth Macarthur Creek green corridor.

4.0 The proposal

4.2 Precinct Plan

The Precinct Plan, the overall plan for the precinct, has been guided by the 2013 Structure Plan, specialist studies, consultation and detailed analysis to determine the most appropriate land uses and built form for the precinct.

The plan features a new local centre around the station, more homes within walking distance of transport connections, as well as new community facilities and more useable areas of parks and open space.

Land has also been identified within Stanhope Gardens with potential to provide new apartments over time, within walking distance of the station.

As a result of recent development between Elizabeth Macarthur Creek and Windsor Road, the new development will be limited to areas close to the new station and T-way stops.

Other areas within the precinct will retain their existing character of predominantly detached homes, to continue to provide this important housing choice, but with improved connections to open space and to the station and local centre.

The proposed rezoning and development controls have been informed by this plan, and are located in section 4.6 of this report.

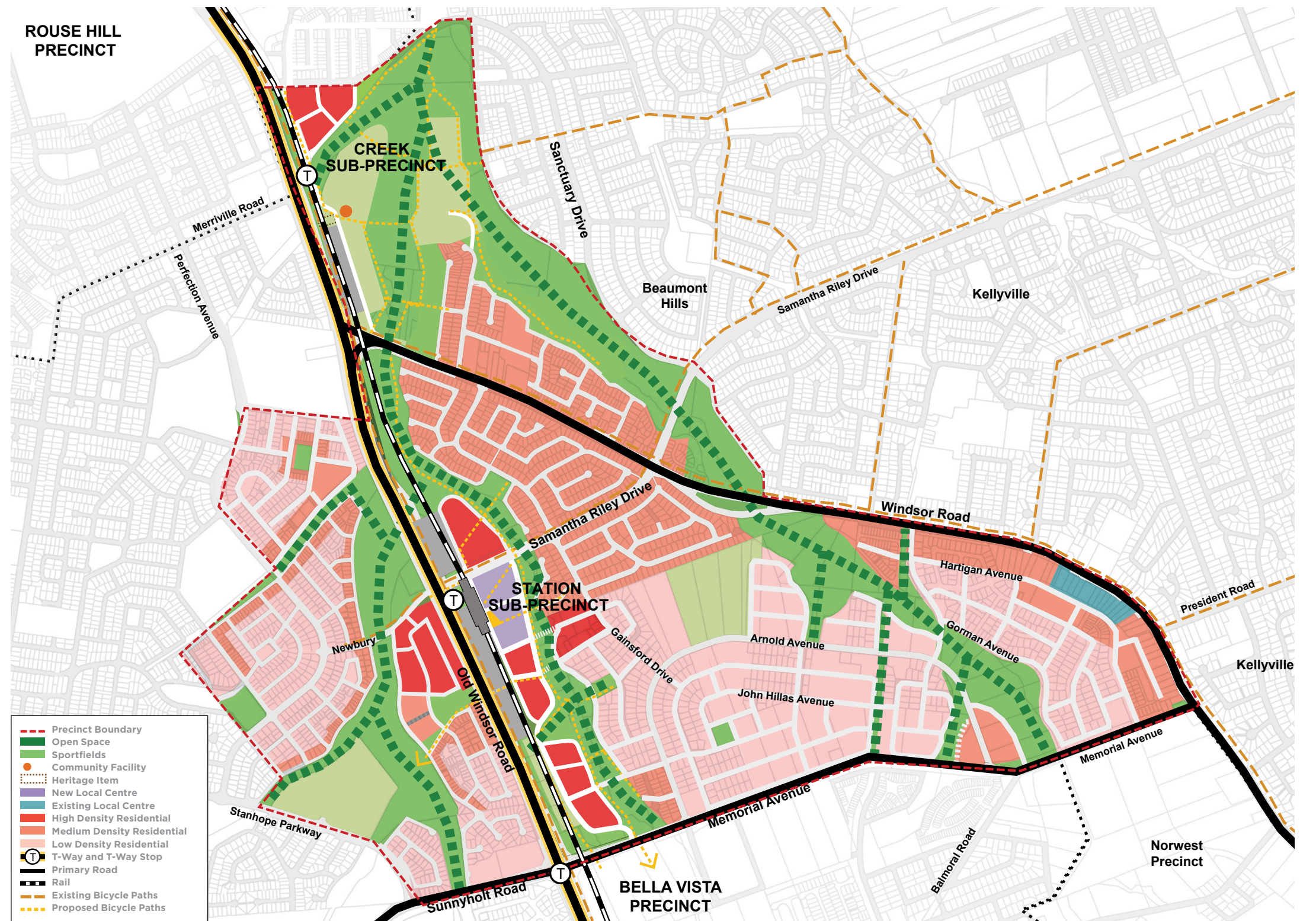


Figure 22: Precinct Plan for the Kellyville Station Precinct

Local Centre and Town Square

A new local centre will be focused around the station and transport interchange to become the heart of the local community. The centre will benefit from the activity around the new station and transport interchange, and provide for a range of uses including shops, cafés, restaurants, and local services.

A new town square is planned to become an important focus for the new and existing community, and is planned to include features such as paving, landscaping, public art and water features, seating and lighting. The town square could also provide a clear and safe link from the station to Elizabeth Macarthur Creek corridor, and other residential areas beyond.

Space has also been made available in the town square for a new community centre to include facilities such as meeting rooms and community services.

Residential apartments will be located within the centre, above shops and business on lower levels. These buildings will be the highest buildings in the precinct to benefit from the excellent access to transport, shops, services and open space. The new population in the centre will also provide more activity on the streets and support local business.



Figure 24: Impression of the streetview overlooking the town square



Figure 23: Local centre location (● location of artist impression illustrated in Figure 24)



Figure 25: Rouse Hill as an example of a town square



Figure 26: Size, treatments, furniture and public art (Rouse Hill)



Figure 27: Activated facade precedent of Riley Street Penrith

4.0 The proposal

New residential apartments

New residential apartments are proposed on land south of the local centre to Memorial Avenue. A range of heights (6–15 storeys) is encouraged to promote variety and good urban design. Lower building heights are proposed for the apartment buildings adjoining the Elizabeth Macarthur Creek corridor. Apartment buildings up to 14 storeys are also proposed in Stanhope Gardens close to Newbury Avenue.

Low to mid-rise apartments (3–8 storeys) are proposed for the northern part of the precinct near the Merriville T-way stop, land east of Elizabeth Macarthur Creek within 300 metres of the station, and other land within Stanhope Gardens in close proximity to the station.



Figure 28: New residential areas connected to existing neighbourhoods and with generous connections to open space



Figure 29: Aerial view over the proposed residential area



Figure 30: Precedent of the built form (Pymont)



Figure 31: Precedent of high quality design (Pymont)



Figure 32: Victoria Park as precedent to the new Kellyville residential area



Figure 33: Elevation with residential development around the central open space

4.3 Public Open Space Network

Overview

An extensive and integrated network of public open spaces is proposed to achieve the vision of a green, connected community, with the creation of attractive, pleasant places to meet the needs of the existing and future community. These are planned to include:

- ▶ a variety of new green open spaces within the precinct to perform a range of functions such as active play spaces, relaxation/ leisure spaces, meeting spaces, and improved biodiversity through quality landscaping;
- ▶ a town square opposite Kellyville Station which will link the station and local centre to Elizabeth Macarthur Creek and residential areas further east;
- ▶ expanding the Caddies Creek sports complex already proposed by The Hills Shire Council to feature more playing fields and amenities;
- ▶ green open spaces along the Caddies Creek, Elizabeth Macarthur Creek and Strangers Creek corridors with pedestrian and bicycle paths;
- ▶ small courts under the elevated rail line (skytrain);
- ▶ local neighbourhood parks amongst new residential apartments to cater for existing and new residents. and
- ▶ an interpretation centre at The White Hart Inn heritage site



4.0 The proposal

Creek Corridors

The existing creek corridors along Caddies Creek, Elizabeth Macarthur Creek and Strangers Creek are proposed to become important green open space areas that will play important hydrological, ecological, landscaping and recreational roles. Opportunities will be available for new pedestrian and bicycle paths along the creek lines, and bridges to link the established residential areas with the station and new town centre. It will also provide a vegetated buffer for the new development.



Figure 35: Snapshot of the proposed public open space



Figure 36: Example of activated creek corridor (The Ponds)



Figure 37: Example of creek corridor (Harrington Park)



Figure 38: Impression of Elizabeth Macarthur Creek between the existing neighbourhood and the new development around the station

Local Neighbourhood Parks

Local neighbourhood parks provide important places for recreation, physical and social activity. These can be places for walking, cycling, children's play areas, and simply as places to get some fresh air and sunshine. They support physical activity to help provide for a healthy community social interaction, and break-out spaces for people living in the new apartments. New local neighbourhood parks have been planned adjoining new apartment buildings.



Figure 39: Snapshot of a proposed neighbourhood park



Figure 40: Example of uses in a neighbourhood park (Blaxland Riverside Park)



Figure 41: Example of pedestrian and cycle paths in a neighbourhood park (Moore Park)



Figure 42: Impression of the public open space in the central area of the precinct

4.0 The proposal

Sport fields

New sports fields in the Caddies Creek Reserve are already planned for by The Hills Shire Council. The precinct proposal plans to extend this area by an additional 5.7 hectares, providing for more playing fields, an amenities building and additional car parking, along with walking and cycling connections . The expanded parkland would also help to protect important ecological communities and drainage corridors in the precinct.



Figure 43: Snapshot of the proposed sports fields at Caddies Creek



Figure 44: Example of sports fields (AFL fields, Victoria)



Figure 45: Variety of different sporting fields



Figure 46: Aerial view looking south from Sanctuary Drive

Small courts

Space under the elevated skytrain presents a unique opportunity to utilise this land for recreational uses that enhance and precinct amenity, and to ensure these spaces are not wasted. A number of small courts are proposed for this area, for activities including informal games or futsal (5 a side football). Additional safety and activity can be encouraged through the use of lighting, public art projects and adjoining pedestrian and cycle paths.



Figure 47: Snapshot of the proposed courts under the skytrain

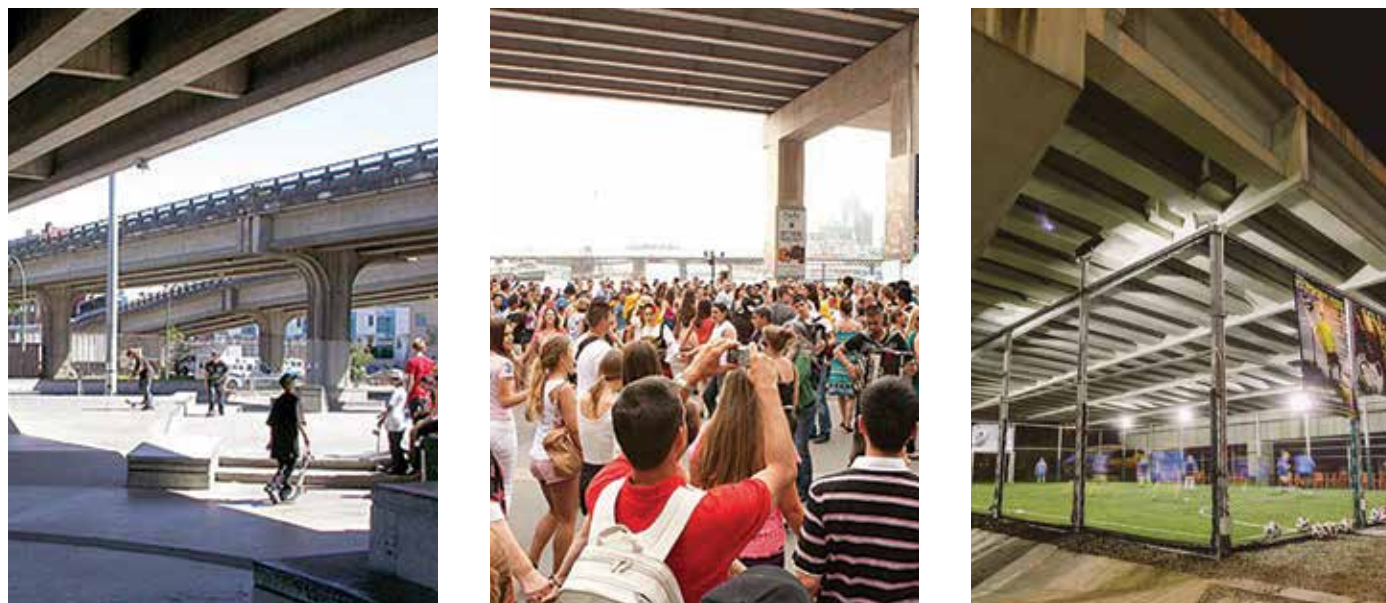


Figure 48: Examples of usable areas and public spaces for under the skytrain (Toronto, Canada and Singapore)



Figure 49: Streetview impression of the courts under the skytrain

4.0 The proposal

4.4 Access and Movement

Proposed street network and public transport

A number of transport initiatives are proposed for the precinct including:

- ▶ New Sydney Metro Kellyville Station with bus, taxi, cycle and kiss-and-ride interchange facilities;
- ▶ Customer car park for 1200 spaces, along with 160 existing spaces at the T-way car park;
- ▶ Memorial Avenue upgrade between Old Windsor and Windsor Road; and
- ▶ A new T-intersection on the northern side of Memorial Avenue between Windsor Road and Elizabeth Macarthur Creek providing access to the southern end of the precinct.

The station, local centre and residential areas identified for development will require new access streets and connections with the wider road network. Some streets will be delivered as part of the Sydney Metro Northwest station and precinct access works. Other streets will need to be provided in the precinct as these areas develop.

An indicative street network has been developed to meet a number of goals, including:

- ▶ creating a hierarchy of streets to establish the main travel routes through the precinct;
- ▶ creating a more legible street layout to make it easier to get around;
- ▶ making walking and cycling through the precinct pleasant and easy; and
- ▶ discouraging rat running activity through local streets.

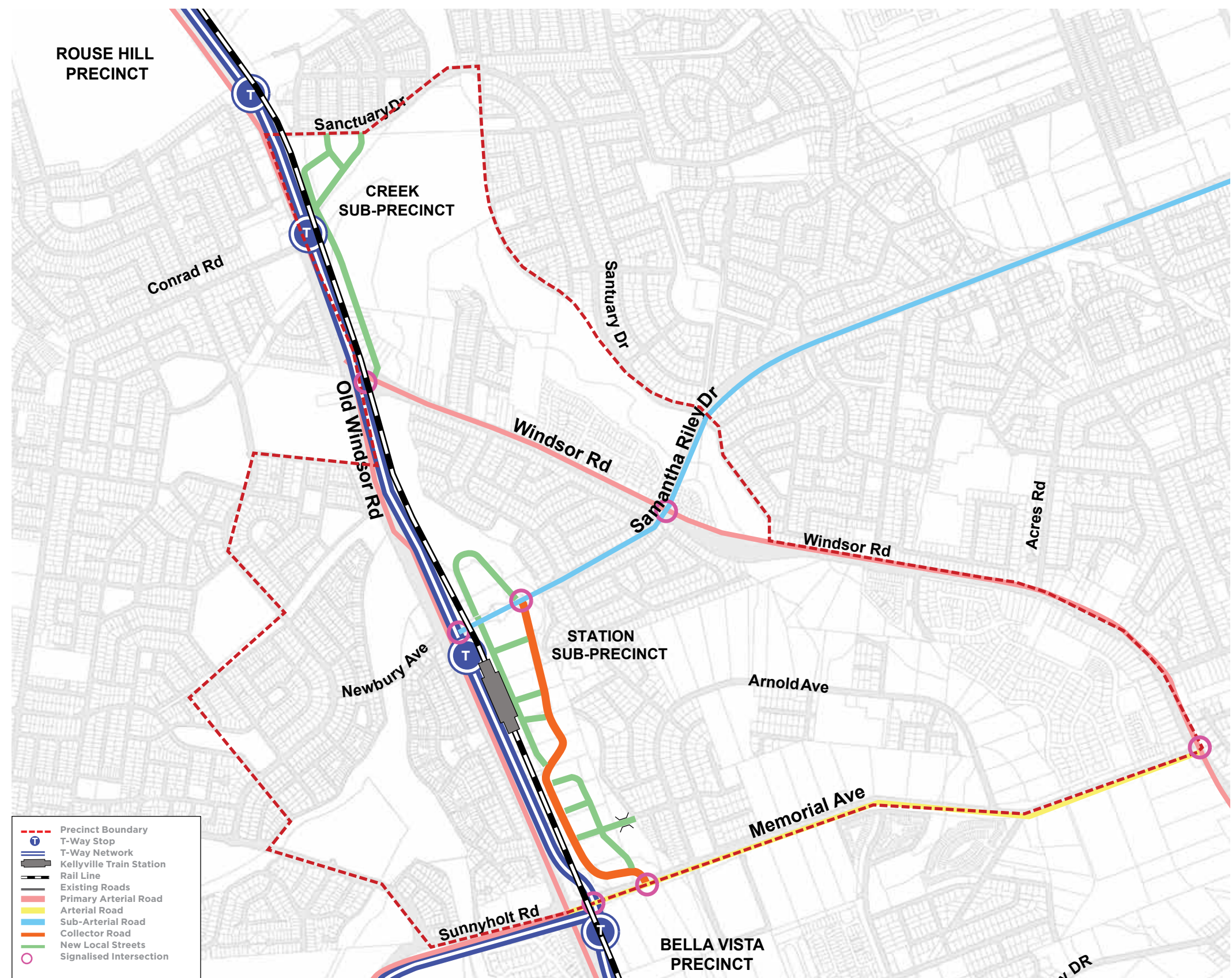
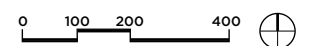


Figure 50: Access and movement



Pedestrian and cycle paths

Pedestrian and cycle connections are planned within the precinct, to be integrated with the public transport network.

The planned improvements include:

- ▶ A new pedestrian bridge across Old Windsor Road linking residents in Stanhope Gardens to the station and the local centre;
- ▶ Safe, accessible and attractive routes to encourage pedestrians and cyclists to travel throughout the precinct and beyond;
- ▶ Integrate pedestrian and cycling paths and facilities with the open space network and improve linkages to open spaces;
- ▶ New bridge crossings over Elizabeth Macarthur Creek to provide improved access from existing residential areas to the station, local centre and proposed open space;
- ▶ Linking new pedestrian and cycle paths with existing paths within the precinct and beyond;
- ▶ Maximise cycling facilities within new developments, around the station, and the local centre;
- ▶ Providing traffic calming measures to minimise conflict between vehicles and pedestrians;
- ▶ Integrate road safety and traffic control measures in the design of new streets; and
- ▶ New and/or upgraded footpaths on both sides of streets within key areas.

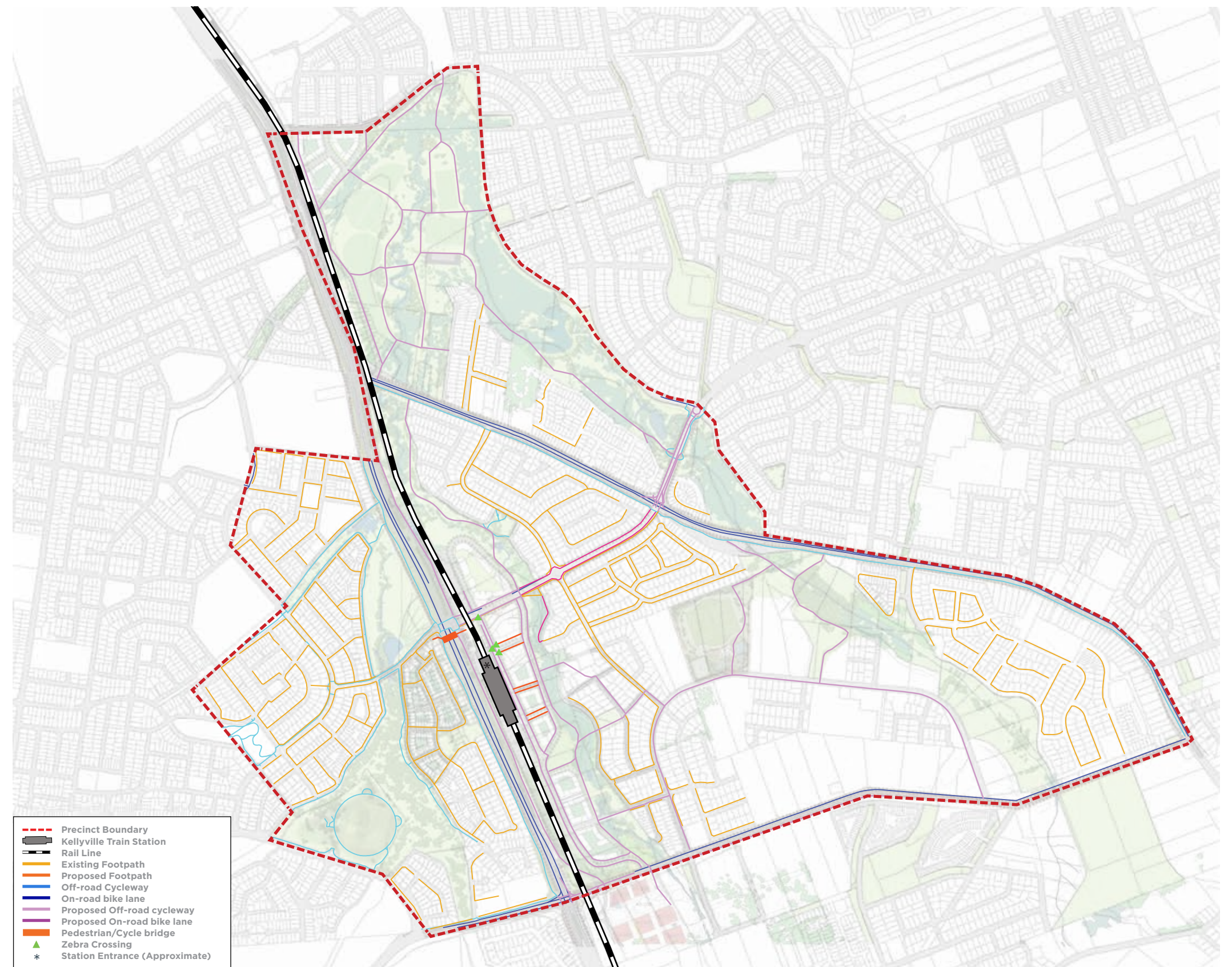


Figure 51: Proposed pedestrian and cycle network

4.0 The proposal

4.5 Built Form

Overview

A built form strategy was developed for the precinct following a detailed analysis of the land available, and how best to provide for the growing demand for more homes while also protecting the natural environment and minimising impacts on existing residential areas not planned to change.

The key features of the built form strategy are:

- ▶ focus most of the new development on land closest to the station to maximise the number of residents and workers within an easy walk of the station and shops, and keep these areas lively and vibrant;
- ▶ locate the highest buildings around the station;
- ▶ providing for taller buildings with smaller footprints so that a better public domain, more parks and landscaping can be delivered;
- ▶ lower building heights (4-6 storeys) where buildings adjoin the creek corridors;
- ▶ transition heights down to areas with stand-alone houses;
- ▶ plan for a mix of building heights to provide variety and interest, and increase housing choice;
- ▶ plan for a clear and legible street pattern to make getting through the precinct easier.
- ▶ minimal street setbacks at ground and podium levels within the local centre to maximise activation of the streets and public domain; and
- ▶ 5m landscaped setbacks in new residential areas.

Changes are also recommended for *The Hills Local Environmental Plan 2012* to allow a minimum allotment size of 1,500m² for apartments.



Figure 52: Creek sub-precinct view south – indicative built form



Figure 53: Station sub-precinct view north east – indicative built form

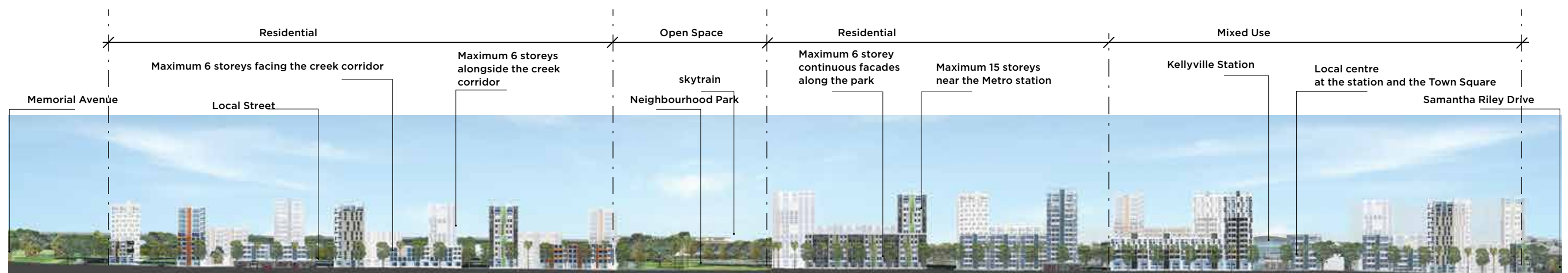


Figure 54: Indicative elevation of the built form

4.0 The proposal

Shadow Study

Shadow studies have been undertaken to inform the design of the precinct built form. Public open spaces need a balance of shade and sun exposure to provide shade in the summer and sun in the winter. The solar analysis has been undertaken at the autumn/spring equinox and at mid-winter (21 June, the shortest day of the year). Future development proposals may vary from the indicative built form and overshadowing impacts shown and should be further addressed in future development applications.

This analysis ensures a minimum of two hours of solar access to north facing windows on adjacent properties, and that the existing open space areas still receive some sunlight, particularly during times of the day when they are most used.

June 21 @ 09.00

Figure 55



June 21 @ 12.00

Figure 56



June 21 @ 15.00

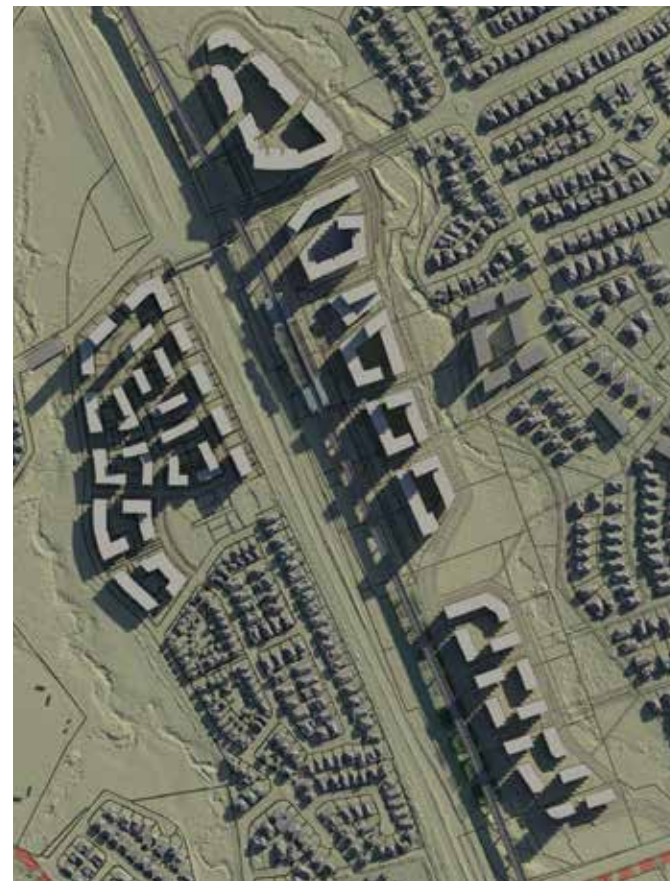
Figure 57



Shadow Diagram of the Creek Sub-Precinct

June 21 @ 09.00

Figure 58



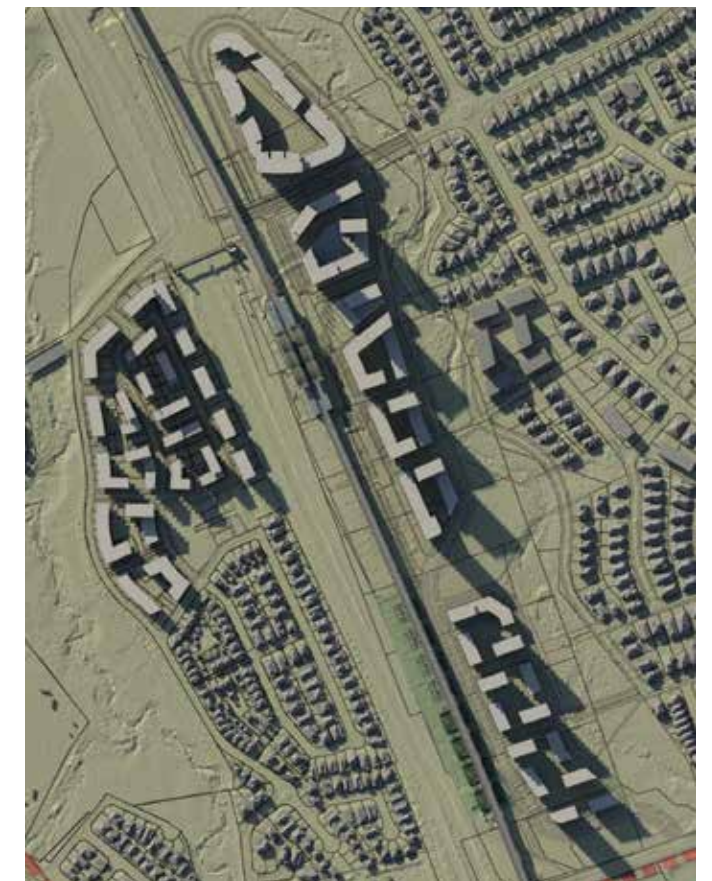
June 21 @ 12.00

Figure 59



June 21 @ 15.00

Figure 60



Shadow Diagram of the Station Sub-Precinct

4.6 Proposed Planning Controls

Proposed Zoning

The proposed zones in the areas changing in the precinct are:

B2 Local Centre:

The new local centre at the station will be zoned B2 to permit a broad range of commercial and community uses, as well as residential apartments above.

RE1 Public Recreation:

The expansion of the Caddies Creek sports complex is to be zoned RE1. Development controls for other open space identified in the precinct proposal have been recommended to allow for some flexibility in their exact location.

R1 General Residential:

The R1 zone will apply to the land located to the south of the proposed B2 Local Centre land. All types of residential development are permitted within the R1 zone, including residential apartments. Office and business premises are also permitted to allow employment uses if demand arises.

R4 High Density Residential:

The R4 zone permits residential apartments. It will apply to the residential area to the south of the proposed R1 zoned land, as far south as Memorial Avenue. It will also apply to the areas identified for residential apartments in the north of the precinct, east of Elizabeth Macarthur Creek, and in Stanhope Gardens on the western side of Old Windsor Road.

Existing Zoning

The R2 Low Density Residential, R3 Medium Density, RE1 Public Recreation, SP2 Infrastructure and W1 Natural Waterway zones will be retained for other areas in the precinct.

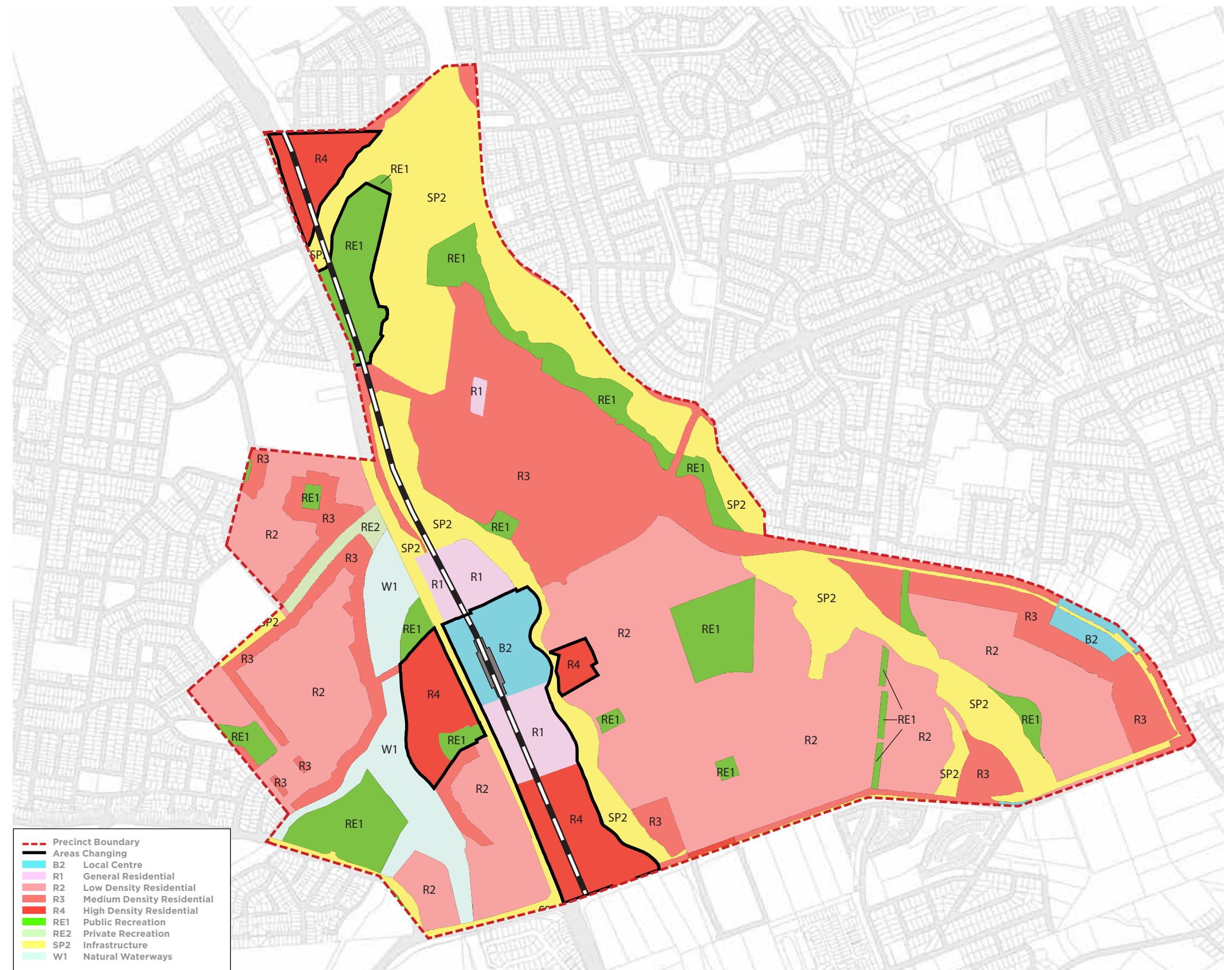


Figure 61: Proposed Zoning Map

4.0 The proposal

Heights

The proposal includes a range of maximum building heights across the precinct, which along with the floor space ratio controls will create variety in building forms.

The proposed building heights in the areas changing are to achieve the following:

- ▶ the highest buildings closest to the station;
- ▶ by encouraging taller, slimmer buildings rather than shorter, bulkier buildings, more private open space and landscaping can be delivered;
- ▶ lower building heights (4-6 storeys) where buildings adjoin the creek corridors;
- ▶ transition heights down to areas with stand-alone houses and townhouses.

The proposed height controls are maximums, and all future development proposals will still need to address other relevant controls such as overshadowing and privacy in *State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development*, and the applicable Development Control Plan. This will determine the actual height of future developments.

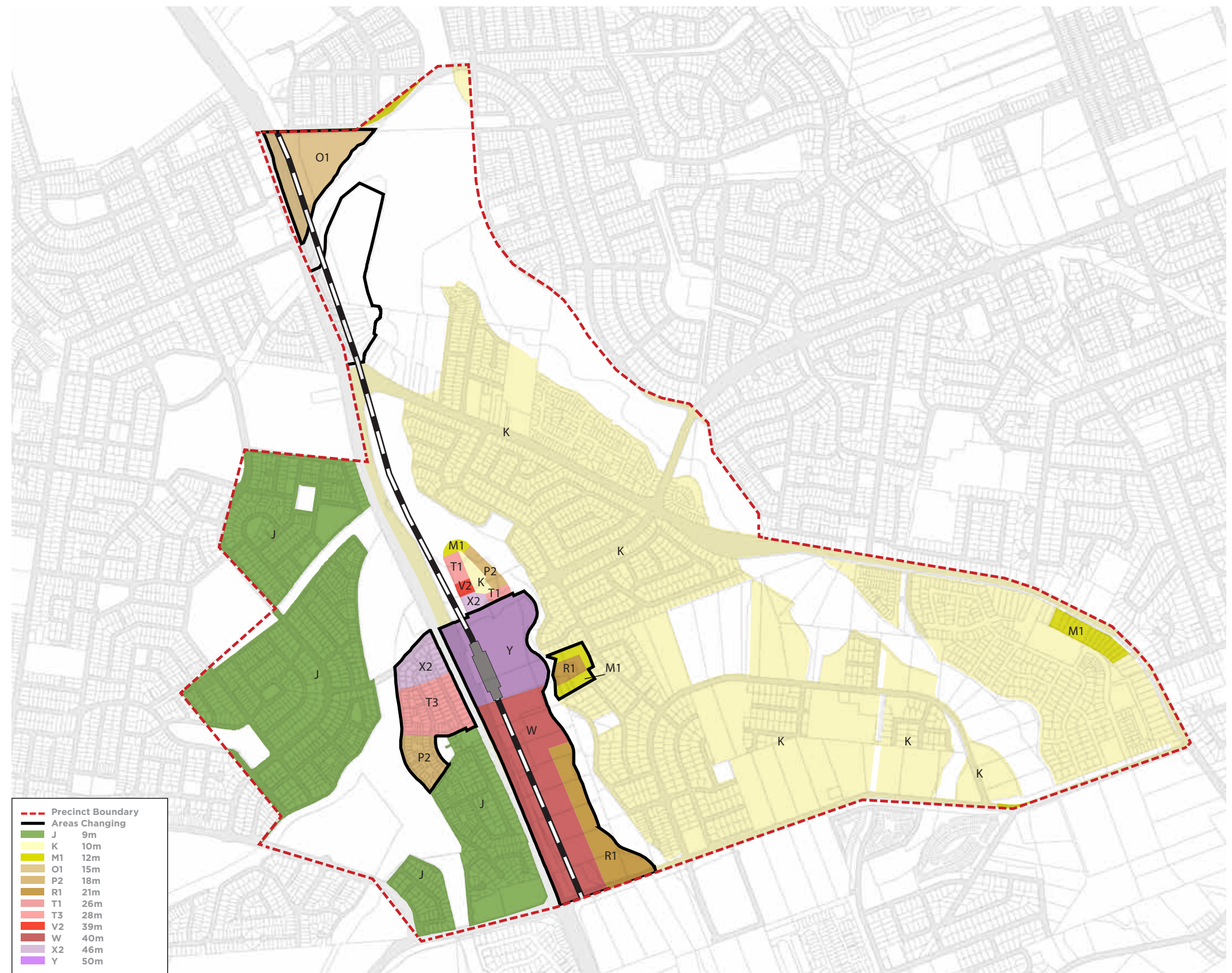
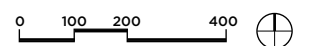


Figure 62: Proposed Height Map



Floor Space Ratios

A range of floor space ratio (FSR) controls have been proposed to help achieve the desired built form for the precinct. The highest FSRs have been provided around the station to focus the greatest level of development in these areas. The FSRs have also been selected to have greater confidence that development will be financially viable, and achieve the housing and jobs forecasts for the precinct.

The proposed FSR controls are maximums, and all future development proposals will still need to address other relevant controls such as setbacks and open space provisions in *State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development*, and the applicable Development Control Plan. This will determine the actual built form of future developments.

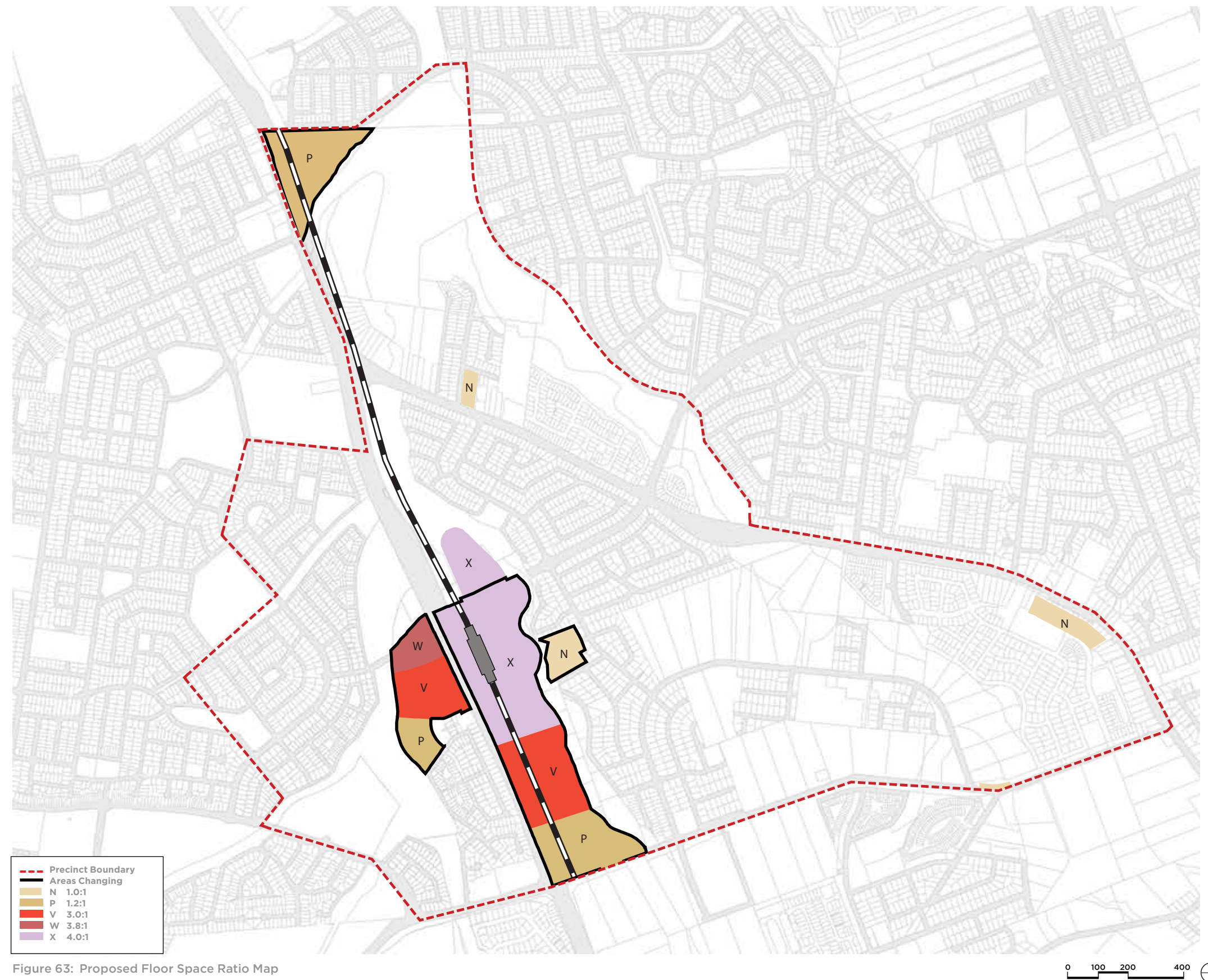


Figure 63: Proposed Floor Space Ratio Map

5.0 Infrastructure Analysis

5.1 Infrastructure Schedule

The table below provides a summary of the key infrastructure items identified to support the forecast growth in the precinct. This includes public transport, walking and cycling upgrades, roads, community infrastructure and open space. The infrastructure items would be funded and delivered by a range of sources as identified in the table. Full details of this schedule are available in the Planning Report.

Item	Measure	Responsibility	Timing	Funding Mechanism
Public Transport				
1	Construction of the Sydney Metro Northwest including new Kellyville Metro Station; station plaza; public domain; bus, taxi, kiss and ride facilities; customer car parks with a total of 1,360 spaces; new pedestrian/cycle bridge over Old Windsor Road; new precinct access streets; upgrade of Samantha Riley Drive; and shared pedestrian/cycle path between Rouse Hill and Memorial Avenue (Kellyville).	Transport for NSW (TfNSW)	Sydney Metro Northwest to be completed in 2019.	TfNSW delivery responsibility
2	Improvements to the rapid bus and suburban bus network to create a more connected system that provides direct routes to, from and through the precinct to areas such as Rouse Hill, Blacktown via Norwest Business Park and Bella Vista, and Castle Hill.	TfNSW	Bus service levels are reviewed continually by TfNSW and Roads and Maritime Services. Detailed planning for location of bus stops would occur as the area redevelops.	TfNSW delivery responsibility
3	Potential for a new bus only connection between the Northwest Transitway and local street network/Newbury Avenue.	TfNSW	As the precinct develops	TfNSW delivery responsibility
Walking & Cycling				
4	Footpaths on all new streets; new pedestrian crossings on new and existing streets as required; linking footpaths on existing roads including Samantha Riley Drive, Memorial Road, Arnold Avenue, Wenden Avenue and Gainsford Drive.	Relevant road authority/developer	To be determined as precinct develops	TfNSW funding responsibility
5	Pedestrian and cycle paths along Elizabeth Macarthur Creek connecting through to Rouse Hill and the Bella Vista Station Precinct. A creek crossing would also be required to connect residents to the station.	Relevant road authority/developer/Sydney Water	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan
6	Cycle paths along new and existing roads, including on Windsor Road, Samantha Riley Drive, Memorial Avenue and Arnold Avenue.	Relevant road authority/developer	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan
Roads				
7	Memorial Road upgrade between Old Windsor Road and Windsor Road, including intersection upgrades.	TfNSW	To be determined as the precinct develops	TfNSW delivery responsibility
8	Investigate potential for a new intersection on the northern side of Memorial Avenue, between Windsor Road and Arnold Avenue providing access to the southern end of the precinct.	Relevant road authority/developer	With the first subdivision for residential areas to the north of Memorial Road	Delivery as part of Council's Section 94 Plan
9	New local roads as development occurs to provide greater access within the precinct and surrounding areas, including a new local bridge across Elizabeth Macarthur Creek.	Relevant road authority/developer	As the precinct develops	Delivery as part of Council's Section 94 Plan
Education & Community Infrastructure				
10	Expansion of existing primary schools (and out of school hours facilities where possible).	Department of Education and Communities (DEC)	To be determined as precinct develops	Delivered as part of DEC's School Cluster Asset Plan
11	New multipurpose community centre at either Kellyville or Bella Vista town centres.	Council/ developer	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan
Open Space				
12	5.7ha sports fields adjacent to Caddies Creek Sporting Complex and new open space under the skytrain for activities such as small sport courts and playgrounds.	Council/ developer	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan
13	Provision of two new local parks and new town square.	Council/ developer	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan
14	Revitalising Elizabeth Macarthur Creek, including new recreational areas along the creek.	Sydney Water/Council/ developer	To be determined as precinct develops	Delivery as part of Council's Section 94 Plan

5.2 Precinct Support Scheme

Through the Precinct Support Scheme, the NSW Government has allocated approximately \$15 million across the Showground Station, Kellyville Station and Bella Vista Station Precincts to fund local infrastructure upgrades.

The funding is to enable Councils to provide local infrastructure that will directly benefit the community. The funding is additional to development contributions (i.e., Section 94 contributions), and could be used by Councils to develop a new local park, upgrade existing open space, improve the local streets or provide additional community facilities, amongst other things.

The precinct planning process, along with community consultation has identified a number of projects which could be funded through this scheme for the Kellyville Station Precinct. This funding could be allocated towards:

- ▶ walking and cycling paths along existing streets such as Samantha Riley Drive, Memorial Avenue, Arnold Avenue, Wenden Avenue and Gainsford Drive (see Figure 51 for the location of proposed walking and cycling paths);
- ▶ walking and cycling paths along Elizabeth Macarthur Creek and Caddies Creek corridors (see Figure 51 for the location of proposed walking and cycling paths);
- ▶ improvements to existing/planned sports fields such as Arnold Avenue Sports Complex and Stanhope Gardens Reserve (see Figure 34 for the

location of these sports fields);

- ▶ new sports fields at Caddies Creek, Kellyville (see Figure 22 and 34 for the location of these sports fields); and/or
- ▶ community centre at Kellyville or Bella Vista town centres.

Projects have also been identified for the Bella Vista Station and Showground Station Precincts including:

- ▶ pedestrian and cycle paths through Bella Vista Farm, connecting residents to the Circa Shopping Centre (Bella Vista Station Precinct);
- ▶ walking and cycling paths including along existing streets and Elizabeth Macarthur Creek and Cattai Creek corridors (Bella Vista Station and Showground Station Precincts);
- ▶ contribution to the the upgrade of facilities at

the Castle Hill Showground (Showground Station Precinct);

- ▶ enlarging and improving Chapman Avenue Reserve (Showground Station Precinct); and/or
- ▶ improving existing/planned playing fields at Balmoral Reserve, Kellyville Park, and Fred Caterson Reserve (Bella Vista Station and Showground Station Precinct).

Through the exhibition process, the Department is seeking community feedback on the types of projects the community would like to see funded through the Precinct Support Scheme.

Following public exhibition, the Councils and the Department would work together to review the shortlisted projects and reach agreement on the recommended project(s) to receive Precinct Support Scheme funding for each precinct.



Figure 64: Example of walking and cycle paths along a creek corridor (Jacobs Ridge Queensland)



Figure 65: Example of a community facility (Surry Hills Library and Community Centre)

