

Bella Vista And Kellyville State-Led Rezoning Open Space Needs Assessment

October 2024

Department of Planning,
Housing and Infrastructure



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Acknowledgement of Country

Cred Consulting acknowledges the Traditional Custodians of the lands on which we operate. We pay our respects to the Traditional Custodians Ancestors and Elders, past and present. We recognise the strength, resilience and contributions of First Nations Peoples, and the eternal and spiritual connection held in the lands, skies and waters, through cultural practices and beliefs.

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Introduction and context

1. Introduction

1.1 Background

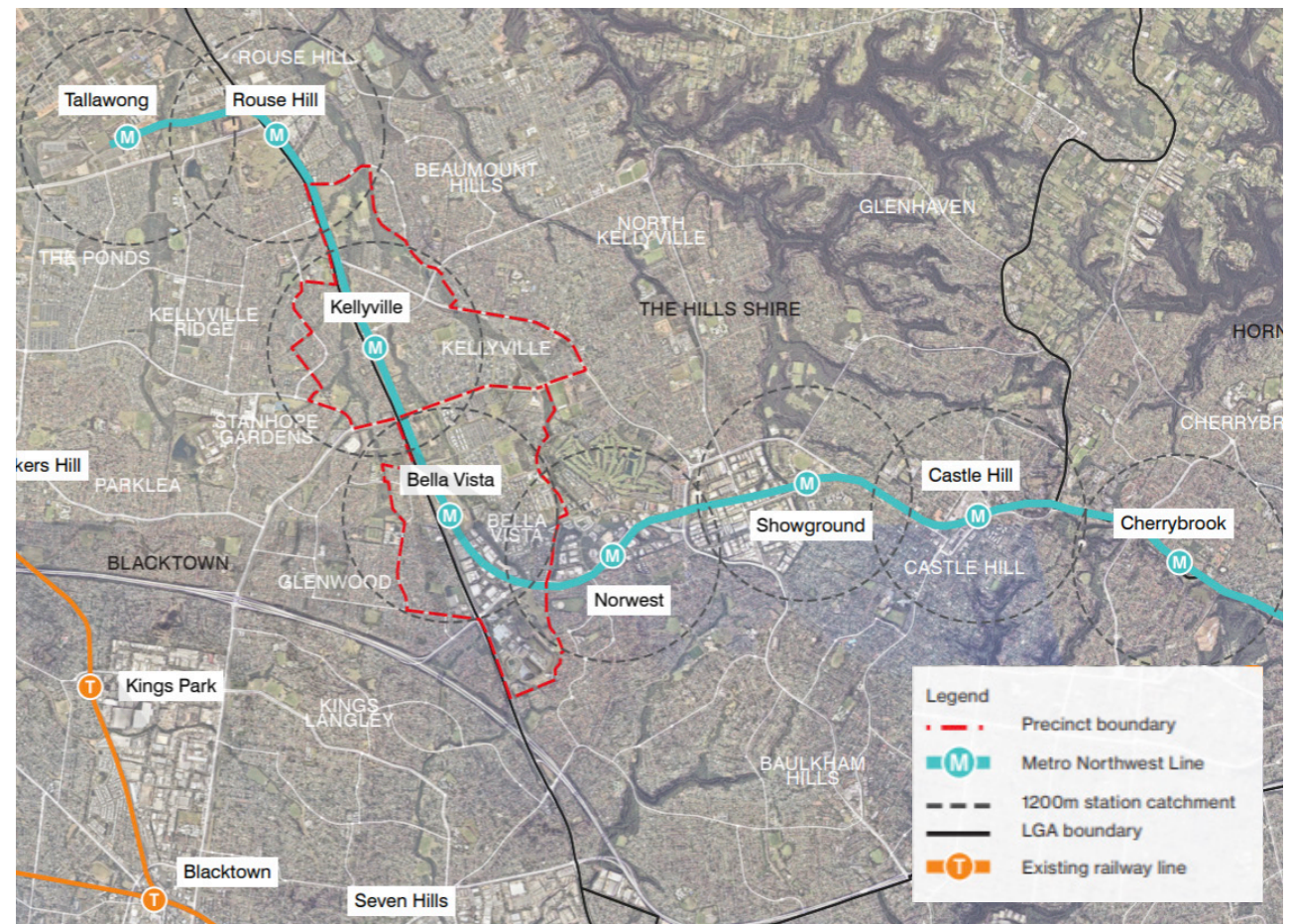
Housing is a key priority for the NSW Government. Currently, there is a shortage of diverse and affordable homes in well-located areas, close to where people live and work and close to transport and other amenities.

Eight priority high growth areas, – TOD's (Transport Oriented Development - Accelerated Precincts) – near transport hubs in greater Sydney have been identified for accelerated rezoning:

- Bankstown
- Bays West
- Bella Vista
- Crows Nest
- Homebush
- Hornsby
- Kellyville
- Macquarie Park

Rezoning around these transport hubs will create capacity for up to 47,800 new homes over 15 years, within walking distance of these key stations.

Figure 1 - Context map (Source: Architectus)



1.2 Purpose of this report

This study looks specifically at the Kellyville and Bella Vista Precincts (the Precincts) for which Cred Consulting has been engaged to:

- Peer review open space needs and recommendations completed under 2017 rezoning for Kellyville and Bella Vista.
- Provide an understanding of the current and future requirements for open space in the Kellyville and Bella Vista Precincts.
- Determine appropriate open space hierarchy and minimum sizes to accommodate increased projected population.
- Recommend options to deliver potential open space enhancements and new open space areas.

Other technical studies that are being undertaken as part of the review include urban design, feasibility and affordable housing, and traffic and transport.

1.3 Methodology

This Needs Assessment considers a range of indicators, including:

- Population growth and demographic characteristics.
- Peer review of previous studies undertaken for the Precincts.
- Strategic context and major projects.
- Open space and participation trends.
- Stakeholder engagement. As part of this Needs Assessment, we conducted interviews with Blacktown Council, Hills Shire Council, Landcom, Schools Infrastructure NSW and Office of Strategic Lands. Feedback from these sessions been incorporated across the report in relevant sections.
- Open space inventory and mapping.
- Benchmarking (population, proximity and comparative).

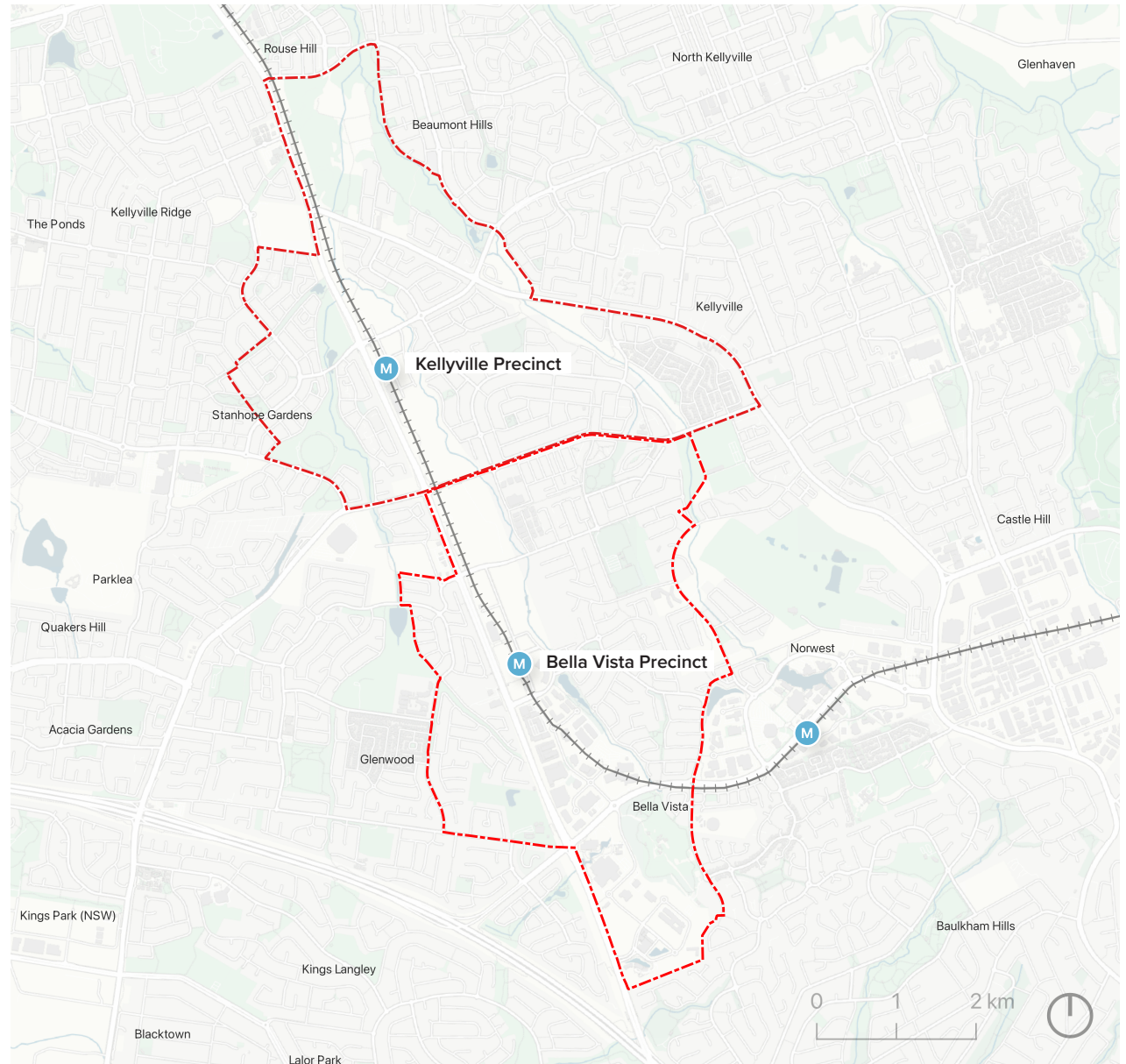
1.4 Bella Vista and Kellyville Precincts

Figure 2 shows the Bella Vista and Kellyville Precincts that are situated in the Hills Shire and Blacktown Local Government Areas (LGAs), north west of Sydney CBD.

The Bella Vista Station Precinct is located off Celebration Drive and east of Old Windsor Road between Norwest and Kellyville Stations.

The Kellyville Station Precinct is located to the east of Kellyville Metro Station and to the south of Samantha Riley Drive.

Figure 2 - Bella Vista and Kellyville Precinct boundaries





1.5 Definitions

Open space

Consistent with NSW policies, open space is broadly defined as publicly owned and accessible land primarily used for formal and informal recreation and leisure activities. This includes parks and reserves, sports spaces, natural areas, and urban public spaces.

Often, many of these functions overlap or there are a range of functions in one space. In the future, it would be important to ensure all future open spaces are multifunctional and capable of meeting the diverse needs of the community.

Recreation

Recreation includes a broad range of passive and active leisure activities that we participate in for fun, relaxation, health and wellbeing, and to connect with our families and communities. This includes casual activities like going for a walk or a picnic with friends, as well as fitness activities and social, organised, competition, and elite sporting activities.

Recreation facilities

Recreation facilities are the built infrastructure such as sportsfields, aquatic facilities, outdoor courts, indoor recreation centres, play spaces, swimming pools, outdoor fitness stations, off-leash dog areas, recreation trails, golf courses, lawn bowling clubs, and community gardens.

1.6 Benefits of open spaces

Social benefits

Open space and recreation facilities are important social connectors which provide a space for the community to meet each other and interact, as well as come together to share and celebrate. For example, a well-designed public domain enables older people and people with disability to get out, be involved in community life, stay fit, and participate in active transport. Open space, and in particular urban plazas are important for creative and cultural expression. These spaces provide opportunities for formal, organised events as well as informal gatherings; performance spaces and spaces to create; and places where the community can build a sense of common identity.

Participation in sport and recreation also reduces the risk of health conditions and improves social and emotional health and wellbeing. Participation in recreation has benefits across the life stages: for children and young people, participation in regular physical activity has benefits for physical and mental development, psychological benefits including improving the symptoms of anxiety and depression, and reduction in youth offending and anti-social behaviour¹. For older people, participation in physical activity is important for healthy ageing and social connection.

Research is deepening our understanding of the importance of access to quality open space for health and wellbeing outcomes. While living

in a city can increase people's risk of mental illness, living close to green space is shown to have positive impacts on mental health². Access to green space is linked to increased physical activity, relaxation, social interaction, stress reduction and mental health benefits across all ages, socio-economic groups and genders. However, it is the quality and variety of green space that is important, rather than the amount or number of spaces^{3,4}.

The Australian Clearinghouse for Sport identifies that sport is "widely regarded as a core element of social inclusion in Australian communities". It provides opportunities for diverse groups to meet and interact, and build relationships and understanding. Apart from the health benefits of physical activity, participating in sporting activities or as part of a club can "contribute to an individual's or group's sense of belonging, and promote trust, cooperation and tolerance". Competition can also invoke a sense of pride and accomplishment. The Settlement Council of Australia (a settlement services network) has also identified that sport can and does contribute to positive settlement outcomes and social inclusion for people from migrant and refugee backgrounds, and supports integration into Australian society. Recreation activities can also be a form of cultural expression, for example playing a traditional sport or performing a traditional dance⁵.

Economic benefits

The economic benefits of open space and recreation include increased property values for dwellings located close to open space, increased tourism for example to major parks and events, and reduced health and social costs⁷. The direct use value of parks (the amount residents would pay to use equivalent private facilities) is also significant although hard to quantify. For example in San Francisco the direct use value of park facilities was found to be US\$1.92 per visit for general park use (e.g. dog walking, sitting), US\$5.02 per visit for sports facilities use (e.g. running, team sports) and US\$4.28 for special uses (e.g. fishing, festivals, gardening)⁸.

- The benefits of community sport infrastructure in Australia has been quantified by KPMG⁹, and is an example of how all open space provides economic benefits:
- Community sport infrastructure is estimated to generate an annual value of more than \$16.2 billion to Australia, with \$6.3 billion worth of economic benefit, \$4.9 billion worth of health benefit and \$5.1 billion worth of social benefit⁹. The \$6.3 billion worth of economic benefit includes the economic activity associated with the construction, maintenance and operation of community sport infrastructure and the increased productivity of those who are physically active as a result of such infrastructure.
- The \$4.9 billion worth of health benefit includes personal benefits to those who

are less likely to contract a range of health conditions which are known to be associated with physical inactivity and the benefits to the health system.

- The \$5.1 billion worth of social benefit includes the increased human capital resulting from the social interactions that are facilitated by community sport infrastructure and the broader community benefits of providing “green space” (e.g. sports fields).

Environmental benefits

Open space is an important resource to protect and build biodiversity. Biodiversity in cities is facing a number of human-induced pressures including habitat loss due to urban development, introduction and spread of invasive pest and weed species, greater demand on natural resources and urban runoff from roads, houses and industry. Natural areas include areas of biodiversity importance, and planning for open space and recreation needs to balance the community’s recreation needs with fragile conservation areas.

For example, in Randwick City, the 13 hectare Randwick Environment Park is an example of a Council-managed open space with biodiversity conservation significance, comprising bushland, including vegetation of National conservation significance such as the Eastern Suburbs Banksia Scrub, an ephemeral wetland and open space area. Its Plan of Management (PoM) ensures the protection, conservation and enhancement of this significant natural heritage site while providing for the community’s

recreation, social and educational enjoyment of the park.

Open space supports resilience to environmental shocks which is increasingly important in a climate changed world. Open space, with permeable surfaces such as grass and soil can help to reduce and manage flooding and the impact of more severe heavy rain events, which are predicted to increase in intensity with climate change, temporarily storing water and aiding with infiltration. Green spaces with tree cover can act as urban “cool rooms”, reducing the ambient temperature and the urban heat island effect. Every 10 percent increase in tree canopy can reduce land surface temperatures by 1 degrees Celsius⁶. Trees and shrubs in open space also remove air pollutants that endanger human health.

¹ AIHW for the Australian Institute of Health and Welfare, Physical activity across the life stages, 2018

² Myers, Z., Green for wellbeing – Science tells us how to design urban spaces that heal us, The Conversation, 28 August 2017

³ World Health Organisation (WHO) Regional Office for Europe, Urban green spaces and health, 2016

⁴ Wheeler, et al., Beyond greenspace: An ecological study of population general health and indicators of natural environment type and quality, International Journal of Health Geographics, 2015

⁵ Cred Consulting for NSW Office of Sport, Sports Facility Needs in Multicultural Communities, 2018

⁶ NSW Office of Environment and Heritage, Technical Guidelines for Urban Green Cover in NSW

⁷ The Trust for Public Land, The Economic Benefits of the Public Park and Recreation System in the City of Los Angeles, California, May 2017

⁸ The Trust for Public Land, The Economic Benefits of San Francisco's Park and Recreation System, 2014

⁹ KPMG for the Australian Sports Commission, The Value of Community Sport Infrastructure: Investigating the Value of Community Sport Facilities to Australia, 2018



Drivers for change

2. Review of policies and previous studies

A range of national, regional and local strategies and policies influence the open space needs for the Precincts. While a range of these strategies have been reviewed as part of this work, this section summarises findings from the most relevant strategies and policies from an open space perspective.

2.1 State policies

Public Open Space Strategy for NSW (2022)

The Public Open Space Strategy provides the overall framework and objectives to help develop thriving and resilient open spaces across NSW, enabled by the NSW Government through leadership, coordinated direction and support.

It has five broad objectives:

- Better recognition for public open space.
- Stronger First Nations involvement.
- Coordinated planning, governance, policy and funding.
- Greater social, environmental and economic value.
- Better outcomes for regional NSW.

NSW Public Spaces Charter (2021)

The Charter's purpose is to support everyone in NSW to have access to high-quality public space that allows them to enjoy and participate in public life.

The charter defines public spaces as all places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive.

They include:

- Public open spaces
- Public facilities, and
- Streets.

The charter identifies 10 principles for quality public space, to support all those who advocate on behalf of, provide advice on, make decisions about, or plan, design, manage and activate public spaces in NSW:

- Open and welcoming
- Community focused
- Culture and creativity
- Local character and identity
- Green and resilient
- Healthy and active

- Local business and economies
- Safe and secure
- Design for places, and
- Well-managed.

Draft Greener Places Design Guide (2023)

The Draft Greener Places Design Guide covers how to design, plan and implement green infrastructure in urban areas throughout NSW. It provides strategies, performance criteria and recommendations to help planning authorities and design and development communities deliver green infrastructure. These have been incorporated across this Needs Assessment in relevant sections.

Share Our Space Program (2023)

Schools Infrastructure NSW have introduced a new program that aims to provide an opportunity for community members to use the school's outdoor facilities during holidays and off-peak hours for a wide range of activities, from sports and recreation to cultural events and celebrations.

In addition, the program helps to build stronger ties between schools and the broader community. By sharing space with the community, the aim is to create a sense of ownership and responsibility for schools and their role in building relationships, connections and resilience for all.

Everyone Can Play (updated 2023)

‘Everyone Can Play’ is a set of design principles and best practice recommendations for playspaces in NSW, focusing on inclusive playspaces. An inclusive playspace invites people of all ages, abilities and cultures to come together to socialise and thrive.

Adventurous Spaces Guide (2024)

The Adventurous Spaces guide is a practical tool to help anyone involved in creating skateparks, tracks and trails to meet the growing demand for places to skate, scoot and ride BMX and mountain bikes. It provides guidance on how to plan, design, deliver and manage quality adventurous open spaces for communities throughout NSW.



Bella Vista Farm

Draft Norwest Precinct Plan (2023)

Norwest Precinct adjoins the Bella Vista Precinct, growth and change in Norwest Precinct will impact the open space uses within and around Bella Vista Precinct. Key findings relating to open spaces listed in the Draft Norwest Precinct Plan are listed below.

- It states that the Norwest Central Precinct currently lacks sufficient passive and active open space given the extent of future growth identified.
- Kellyville Memorial Park is the only public active open space within the Precinct, located in the far north-western corner. Whilst there are other public open space areas within the broader Strategic Centre, these do not meet the benchmarks established within Council's Recreation Strategy.
- It is also recognised that there are various north-south tracks and trails. However, there is a clear shortfall in east-west connections.
- The embellishment of existing and future open space areas will also be essential in enabling these spaces to be properly enjoyed by residents and workers. Creating desirable and practical spaces are drawcards in attracting residents and workers. This may include the provision of park benches, playgrounds and walkways.
- Overcoming open space shortfalls will depend upon the delivery of new open spaces. However, it is acknowledged that given Norwest is a relatively established

area, finding appropriate sites for active open spaces (such as playing fields) may prove particularly challenging.

- To better meet the needs of the community for passive recreation, an additional pocket park is proposed on the northern side of Norwest Lake.
- The relevant land acquisition and capital works will also need to be incorporated into a future contributions plan to ensure that it can be delivered by Council in the future.
- An additional local park is also anticipated as part of the future redevelopment of Mackillop Drive (in accordance with the site specific planning proposal).

Active open space

It identifies ongoing work that could help meet future demand:

- Expansion of Caddies Creek Reserve: 4 new playing fields.
- Expansion of Fred Caterson Reserve (Castle Hill Pony Club): 3 new playing fields.
- Enhancement of Castle Glen Reserve Playing Fields (to allow for Winter use).
- New field in Castle Hill (To be determined - potentially co-located with an existing school).

Passive open space

Previous infrastructure analysis for areas within the Strategic Centre has established a framework to provide new facilities to meet the demand of future residents and workers. These facilities are funded through Contributions Plans and Planning Agreements and include:

- Expansion and embellishment of Chapman Avenue Reserve.
- Revitalisation of Cattai Creek Corridor.
- New urban plazas adjoining Hills Showground Station, Norwest Station, Bella Vista Station, Norbrik Drive and Solent Circuit.
- Embellishment of Castle Hill Showground and Cockayne Reserve.
- New local park at Norbrik Drive, including a through site link to Bella Vista Farm.
- New local and district parks within the corridor between Bella Vista and Kellyville Stations.
- New local park at Mackillop Drive.

Draft Rouse Hill Precinct Plan (2023)

Rouse Hill Precinct adjoins the Kellyville Precinct, growth and change in Rouse Hill Precinct will impact the open space uses within and around Kellyville Precinct. Key findings relating to open spaces listed in the Draft Rouse Hill Precinct Plan are listed below.

Active open space

Based on benchmarks and the existing and planned active open space network, there may be a potential demand for an additional 500-1,000 dwellings within the Strategic Centre (beyond that already anticipated under the current controls) to be catered for within the planned active open space network, subject to further embellishments to increase capacity.

Any proposal to increase residential yields must ensure an appropriate infrastructure solution is established and contributions mechanism put in place as part of any changes to planning controls. Further residential growth beyond that identified in this Plan would not be serviced by any existing or planned active open space and as a result, would reduce levels of service for existing and future residents in the locality, with an alternative solution needed to address the resultant demand.

Passive open space

The Precinct is well serviced in terms of passive open space. However additional residents, workers and visitors will create demand for new open spaces, especially within the heart of the Strategic Centre.

The new central local park identified within the structure plan for the Northern Frame will increase the quantum of open space within the core of the Town Centre and will greatly improve accessibility to open space.

As this Precinct is further master planned, opportunities for new parks and plazas will need to be investigated within individual sites.



Events in public spaces in Hills Shire LGA

2.2 Precinct specific studies and local council policies

Kellyville Station Structure Plan (2013)

A vision and structure plan was prepared to guide future land use, development types, open space and connections within the precinct. Key elements of the plan include:

- A new Metro Station located at the corner of Old Windsor Road and Samantha Riley Drive.
- A local centre supporting a mix of uses around the new Metro Station, which will become the focal point for the community.
- A mix of high density, medium density and low density houses and apartments.
- It outlined upgrading of the public domain of Kellyville can be achieved through a number of initiatives:
 - The need for additional urban plazas, parks and open spaces for the amenity of existing and future residents and workers.
 - The creation of new open space linkages, streets and connections between transport, new and existing housing, commercial, retailing and civic spaces.
 - The protection of existing green spaces within the precinct which form part of the Kellyville identity, such as the Stanhope Gardens Reserve and Maurice Hughes Reserve. Areas that have conservation value will become key in providing additional open space and recreational assets to the Kellyville community.
- It noted that given the quantity of undeveloped land in government ownership, there are opportunities to provide a well-connected open space network, within walking distance from new residential areas.

Figure 3 - Open space & conservation within the precinct
(Source: Kellyville Station Structure Plan, 2013)



Kellyville Station Precinct Proposal (2015)

The Kellyville Station Precinct Proposal 2015, builds on the 2031 study following additional specialist studies and consultation with local councils, State government agencies and the local community.

The differences from the 2013 plan with regard to open spaces was the extensive and integrated network of public open spaces proposed to achieve the vision of a green, connected community, with the creation of attractive places to meet the needs of the existing and future community. These were 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)

Figure 4 - Proposed open space network (Source: Kellyville Station Proposal, 2015)

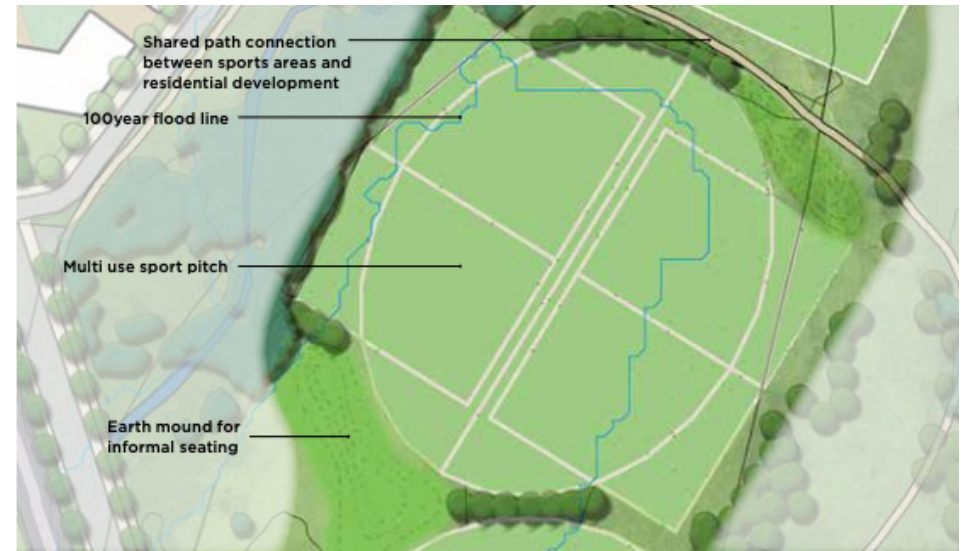


- local neighbourhood parks amongst new residential apartments to cater for existing and new residents, and
- an interpretation centre at The White Hart Inn heritage site.

Figure 5 - Snapshot of proposed open spaces as part of 2015 proposal (Source: Kellyville Station Proposal, 2015)



Proposed public open space near Caddies Creek



Proposed sports fields at Caddies Creek



Proposed neighbourhood park



Proposed courts under the skytrain

Kellyville Station Precinct Finalisation Report (2017)

The Kellyville Station Precinct Finalisation Report details the proposed planning amendments within the State Environmental Planning Policy Amendment.

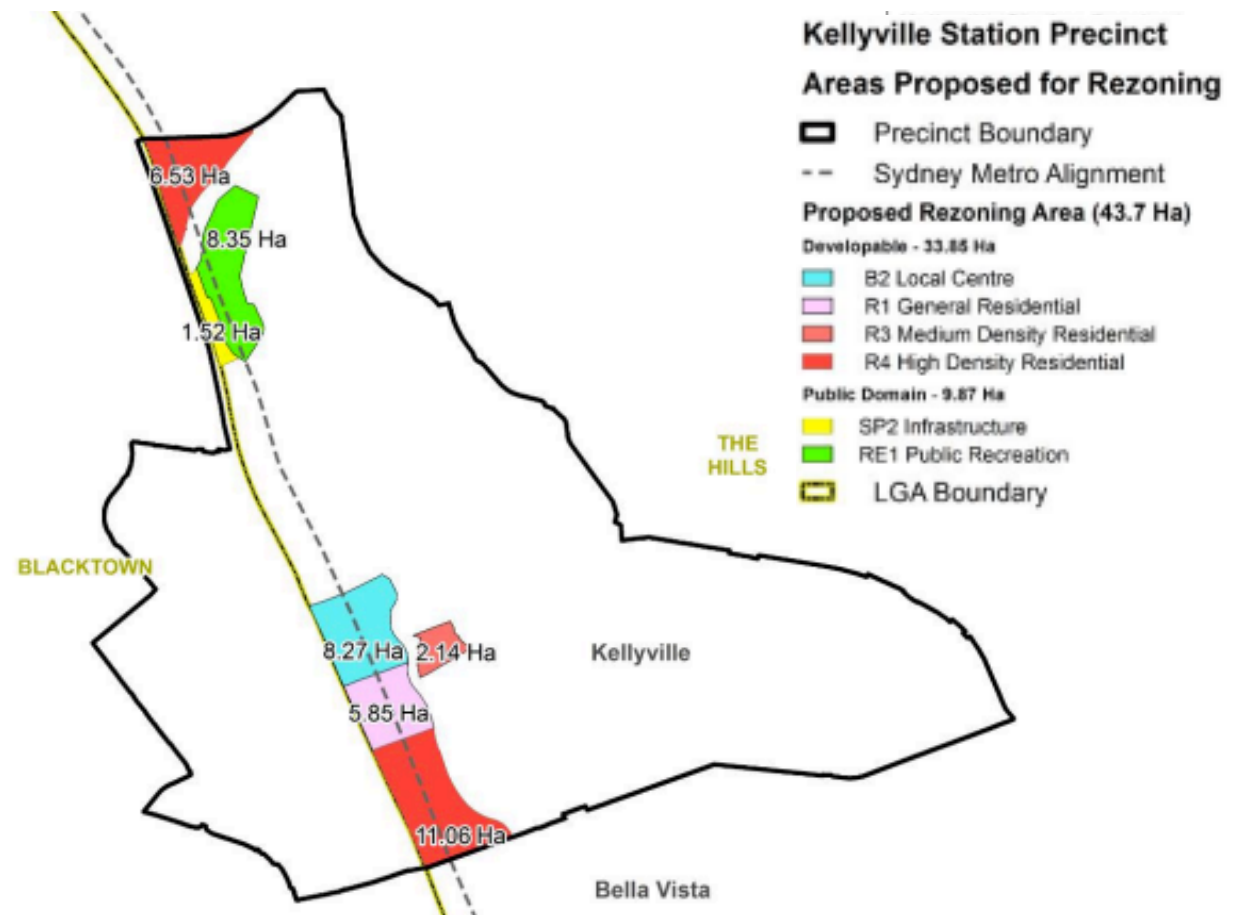
It summarises the public consultations conducted and respond to issues raised in the submissions.

The infrastructure schedule lists the open spaces either required or proposed as part of the precinct rezoning and development, which could be funded through funds allocated for precinct development and developer contributions.

Key relevant changes to the plan included:

- 33.85 hectares of land to be rezoned, including 32 hectares of NSW Government owned land adjacent to the new Kellyville Metro station.
- 10 hectares of land to be rezoned as public open space.
- A combined 8,400 new homes in Bella Vista and Kellyville, a number which has been capped through a clause in the SEPP to align with local and state infrastructure.
- 1,000 jobs focussed around the new station.

Figure 6 - Areas proposed to be rezoned in the Kellyville Station Precinct (Source: Kellyville Station Precinct Finalisation Report, 2017))



Bella Vista Station Structure Plan (2013)

A vision and structure plan was prepared to guide future land use, development types, open space and connections within the precinct.

Key elements of the plan include:

- The new Metro station location aligned to Old Windsor Road.
- A commercial core around the future station location, with mixed use and the existing business park uses stretching north and south, respectively, in the land between Old Windsor Road and Elizabeth Macarthur Creek
- A mix of high density, medium density and low density houses and apartments.
- The primary public domain initiative nominated within the Bella Vista Structure Plan is the delivery of an attractive and accessible open space network to serve as a catalyst for private investment.
- Significant upgrading of the Elizabeth Macarthur Creek riparian drainage corridor running parallel to Old Windsor Road, to create an appealing, landscaped corridor containing mixed use and business park zoned sites will act as a link through to the new station. It will be landscaped appropriately and setback from new, wide and shaded footpaths to allow barrier-free access to the open spaces.
- It identified that upgrading Bella Vista public domain can be achieved through a number of initiatives:

**Figure 7 - Existing and proposed open spaces as part of 2015 proposal
(Source: Bella Vista Station Proposal, 2015)**



- The creation of a new open space linkage between the commercial core and high density housing towards Memorial Avenue, with accessible and safe pathways appropriate for pedestrians and cyclists.
- The protection of existing green spaces within the precinct which form part of the Bella Vista identity, such as Valentine Sports Park, Kellyville Memorial Park and Bella Vista Farm.
- The creation of a significant public open space, south of Balmoral Road in close proximity to both high and low density housing.

Bella Vista Station Precinct Proposal (2015)

The Bella Vista Station Precinct Proposal 2015, builds on the 2031 study following additional specialist studies and consultation with local councils, State government agencies and the local community.

The differences from the 2013 plan with regard to open spaces was the integrated network of public open spaces proposed to create attractive places to meet the needs of the existing and future community. These were 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 Bella Vista Station which will link the station and local centre to Elizabeth Macarthur Creek and residential areas further east
- green open spaces along the Caddies Creek, Elizabeth Macarthur Creek and Strangers Creek corridors with pedestrian and bicycle paths
- local parks
- neighbourhood parks near rail line, and
- 'green streets' by encouraging appropriate set backs to roads and reserves, and tree planting.

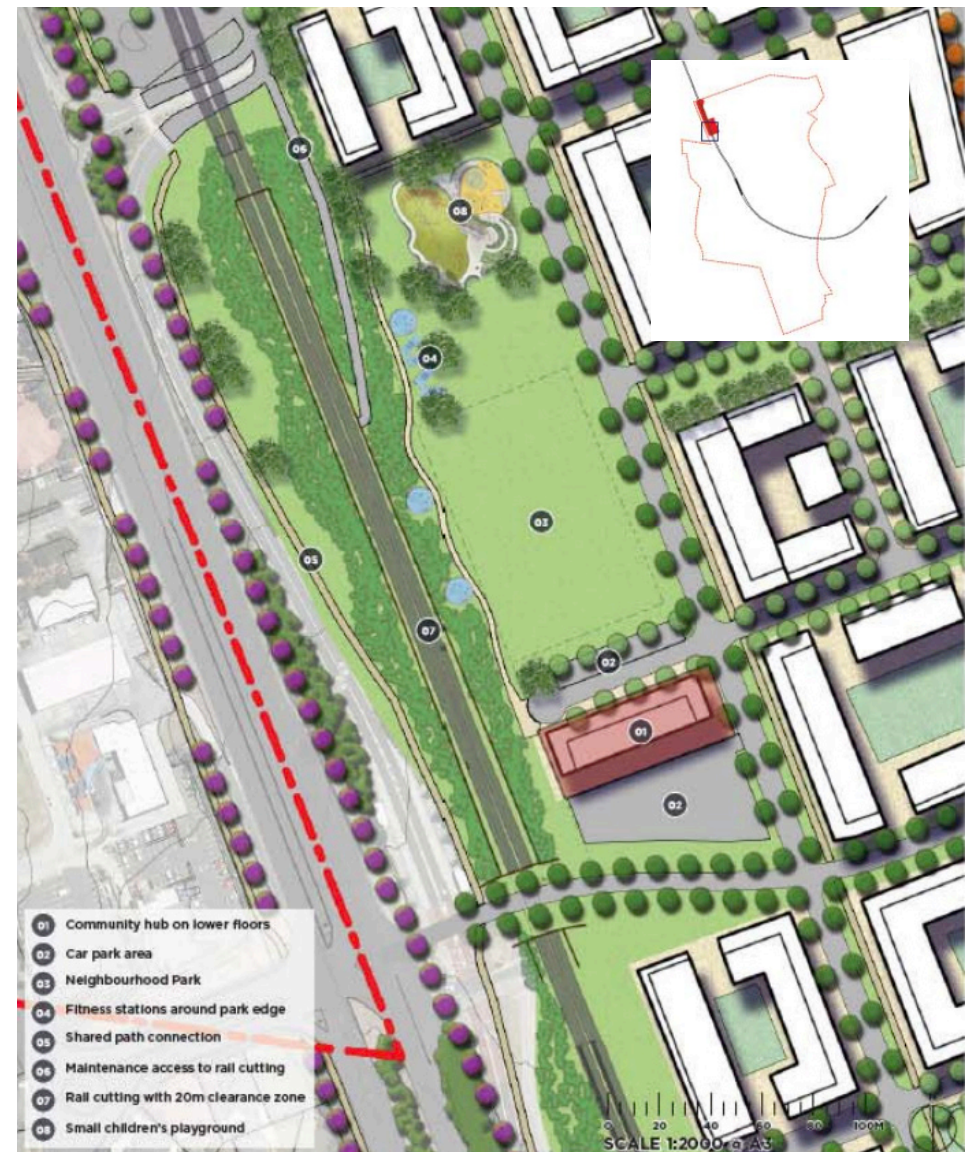
Figure 8 - Proposed open space network (Source: Bella Vista Station Proposal, 2015)



Figure 9 - Snapshot of proposed open spaces as part of 2015 proposal (Source: Bella Vista Station Proposal, 2015)



Proposed creek corridor upgrades



Proposed neighbourhood park

Bella Vista Station Precinct Finalisation Report (2017)

The Bella Vista Station Precinct Finalisation Report details the proposed planning amendments within the State Environmental Planning Policy Amendment.

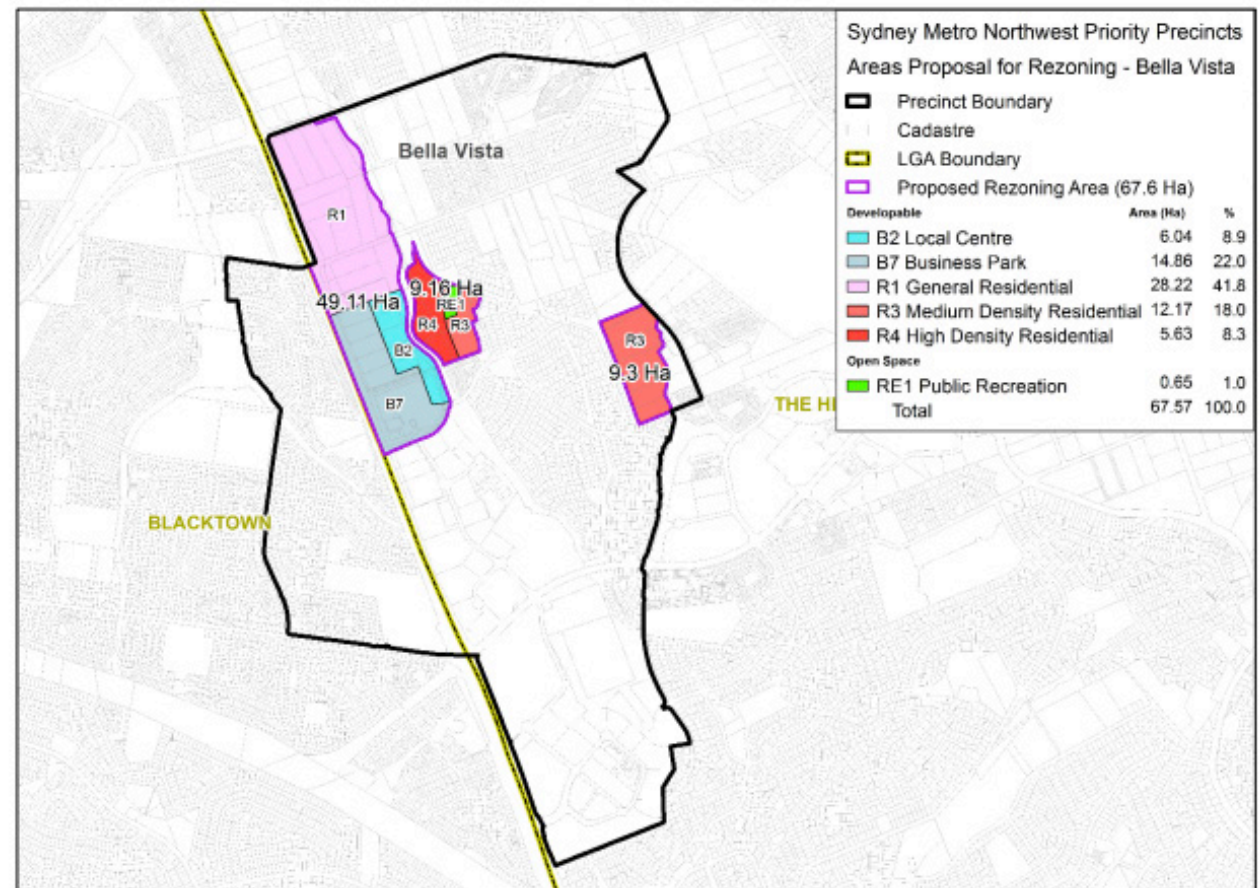
It summarises the public consultations conducted and respond to issues raised in the submissions.

The infrastructure schedule lists the open spaces either required or proposed as part of the precinct rezoning and development, which could be funded through funds allocated for precinct development and developer contributions.

Key relevant changes to the plan included:

- A combined 8,400 new homes in Bella Vista and Kellyville, a number which has been capped through a clause in the SEPP to align with local and state infrastructure.
- 67.57 hectares of land to be rezoned, including 50 hectares of NSW Government owned land adjacent to the Bella Vista Metro station.
- 9,400 new jobs.
- The land east of Elizabeth Macarthur Creek that was proposed to be rezoned R4 High Density Residential, and RE1 Public Open Space, has been expanded and reconfigured to be a mix of R4 High Density Residential, R3 Medium Density Residential, and the RE1 Public Open Space.

Figure 10 - Areas proposed to be rezoned in the Bella Vista Station Precinct (Source: Bella Vista Station Precinct Finalisation Report, 2017)



Bella Vista Precinct - Infrastructure proposed

- New Village Plaza, minimum 0.2 ha, located near Bella Vista station and extension of Brighton Drive.
- Provision of new local parks, with playgrounds and amenities, with a minimum total area of 2 ha.
- Provision of a new neighbourhood park 1.5 ha, with active and passive recreation uses.
- Provision of recreational areas, including playgrounds and amenities, as well as bush regeneration along Elizabeth Creek Corridor.

Kellyville and Bella Vista Station Precinct, Landscape Master Plan and Open Space Strategy (2020)

In 2020, Landcom prepared a dedicated landscape master plan and open space strategy. This document outlines the open spaces that will be provided as well as embellished as part of the State Significant Development (SSD) sites.

As shown in Figure 12, across the Bella Vista and Kellyville SSD sites, the following new open spaces were proposed:

- Within Bella Vista SSD sites, 5.62 ha:
 - Approximately 2.74 ha of district open space with a multi use field and passive open space.
 - Local open space with small kick about space of approximately 0.67 ha.
 - Local open space with small kick about space of approximately 0.38 ha.
 - A number of small urban square or plazas totaling 0.74 ha.
 - Embellishment of open spaces within the riparian corridor (approximately 1.09 ha) to enable a diversity of recreation activities.
- Within Kellyville SSD sites, 2.46 ha:
 - Local open space of approximately 0.67 ha.
 - Park under the viaduct of 1.05 ha.
 - A small urban square or plaza of approximately 0.16 ha.
 - Embellishment of open spaces within the riparian corridor (approximately 0.58 ha) to enable a diversity of recreation activities.

This 8.08 ha of informal recreation spaces for 13,845 people (living in 8,400 dwellings) equates to a provision rate of 0.58 ha per 1,000 people. In terms of percentage of site, this roughly equates to 15% of the SSD sites.

Figure 11 - Proposed open spaces character inspiration
(Source: <https://www.joinin.landcom.nsw.gov.au/SMNWP/bella-vista-open-space>)

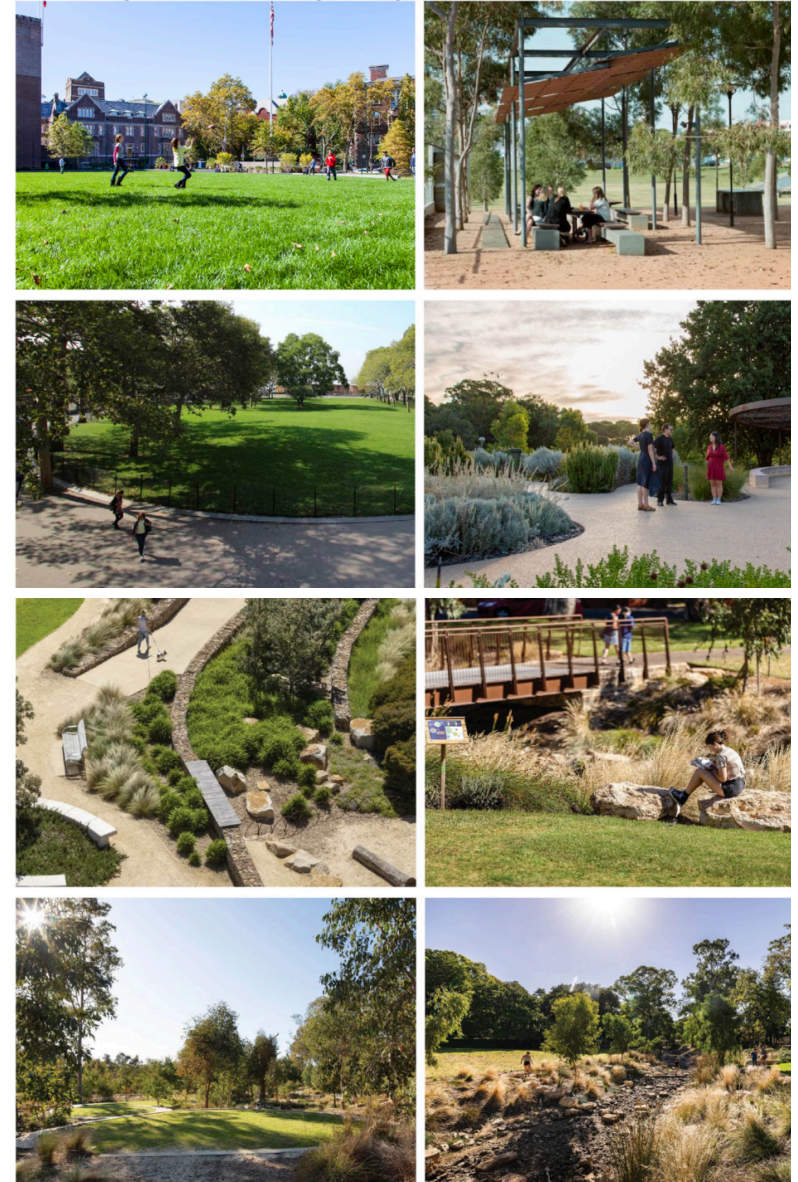
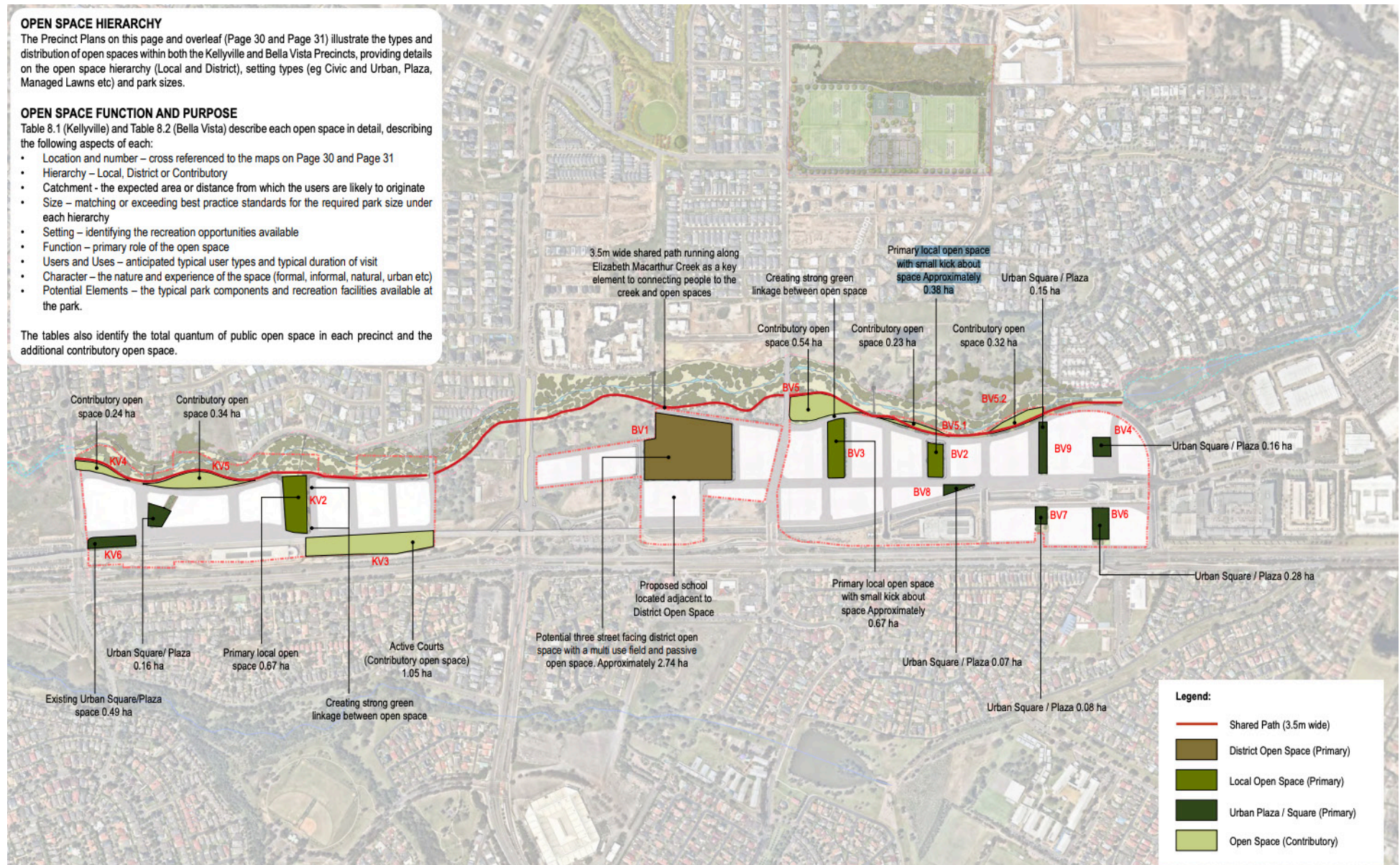


Figure 12 - Proposed open spaces and potential open space examples (Source: Landcom, Kellyville and Bella Vista Station Precinct, Landscape Master Plan and Open Space Strategy, 2020)



Blacktown Recreation and Open Space Strategy (2017)

The Strategy sets out how Council will improve recreation and open space in Blacktown LGA. It will guide the future planning, ensuring all residents have equitable access to quality indoor and outdoor places to live healthy and active lifestyles.

The documents also provides benchmarks for some open space and recreation facilities, which have been considered in determining open space benchmarks for this Needs Assessment.

Relevant objectives from the Strategy include:

Parks and recreation

- Enhance the quality of our parks.
 - Complete designs for a minimum of 4 parks per year to accommodate current and future population needs.
- Provide an equitable spread of quality playgrounds to meet present and future needs of our community.
 - Increase informal and imaginative play opportunities to complement formal playground facilities.
 - Increase accessible play options for our children with disabilities in selected locations.
- Provide a diverse range of recreation opportunities that will benefit the health and wellbeing of our community.

- Increase provision of fitness stations.
- Review opportunities to increase provision for leisure based sports using up to date census data to ensure facilities are located where highest demand may exist (e.g. mountain biking, cycling, skating, running, badminton, volleyball, outdoor table tennis).
- Provide opportunities to capture the shift towards informal sport and recreation activities.
 - Discuss the need for flexible, unstructured sports with state sporting organisations and local associations to encourage participation in these activities.
- Improve our understanding of recreation spaces for young people in our city.
 - Expand the provision of youth spaces from skate parks and sporting courts to areas which engage youth of all ages and abilities such as parkour areas, fitness equipment, dance spaces and areas to simply sit and socialise.

Sportsgrounds

- Provide an equitable spread of quality sportsgrounds to meet present and future needs of our community.
- Improve key facilities for sporting associations that will assist in development of the sport and increase participation.

- Provide sporting opportunities for groups within our community.
 - Remove barriers and encourage participation for the following priority groups: Women, Culturally and linguistically diverse, People with disabilities, and Youth.

Open space corridors

- Develop plans that will assist the enhancement of corridors and linear trail systems.
 - Enhance connections both within open space and between open space and transport links/places of interest whilst protecting any important ecological characteristics of corridors.

Activation and participation

- Encourage use of all open space to increase community wellbeing.
- Engage in projects to identify areas of need and activation within the community.

The Hills Shire Recreation Strategy (2019)

The Recreation Strategy 2019 establishes the basis for the planning and provision of open space and recreation facilities in the Shire to 2036.

It informs the planning priorities and five-year actions contained in Hills Future 2036, the Local Strategic Planning Statement. It provides the finer detail about how Council will achieve the vision and guide growth into the future.

This Strategy is based around the following planning priorities to guide actions over the next five years and for the longer term:

- Provide social infrastructure to meet residents' needs, using clear benchmarks and acknowledging the different types of open space and how this relates to the Shire's changing centres.
- Provide new and upgraded passive and active open spaces by understanding current provision, supply and demand, gaps, opportunities for enhancement, and the kind of recreation facilities that the growing community is most likely to use.
- Expand and improve the active transport network, including recreational tracks and trails, local links, and cycling links.

The Strategy notes for Kellyville/Bella Vista and the Showground Precinct, one field per 4,530 people and one field per 4,297 people respectively.

This is slightly lower than 4,000 people per field (Council's benchmark for high density areas); however, these precincts adjoin the bushland corridors of Cattai Creek (Showground Precinct) and Elizabeth Macarthur Creek (Kellyville and Bella Vista), which serve an important open space function. Furthermore, the Strategy identifies that building small courts under the Sydney Metro Northwest viaduct will help to address the playing field shortfall in these locations.



Bike path in Bella Vista Farm

Master Plan - Caddies Creek Sports Complex - Stage 2 (2021)

A Master Plan for Caddies Creek Sports Complex, Beaumont Hills – Stage 2 was prepared in 2021.

The Master Plan was prepared to represent a long term vision for Caddies Creek Sports Complex, incorporating a premier facility for football in accordance with Council's Recreation Strategy.

The site is already home to football, cricket and baseball, as well as providing passive recreation opportunities including a playground and shared pathway network.

Stage 2 proposed to include four additional fields as well as opportunities for smaller court sports, amenities facilities and car parking.

The four additional fields will cater to the 13,845 people resulting from the 8,400 dwellings proposed at the SSD sites. This equates to a provision of 1.0 field per 2,000 dwellings or 1.2 fields per 4,000 people.

Figure 13 - Draft Master Plan Caddies Creek Sports Complex - Stage 2
(Source: Hills Shire Council)



Bella Vista & Kellyville Station Precincts, Contributions Plan No. 18 (2022)

The Contributions Plan identifies a range of facilities and services as being required to address the impacts of the expected development from the originally anticipated 8,400 dwellings, including:

- Open space facilities
- Community facilities
- Transport and traffic
- Water management, and
- Plan administration costs.

The 2022 Contribution Plan notes that the additional population anticipated within the Bella Vista and Kellyville Station Precincts was not catered for within Council's existing open space network and was not accounted for under any previous contributions plans.

The 2022 Contribution Plan notes that based on the traditional benchmarks for greenfield locations (2.83 ha per 1,000 population) an additional population of 13,845 people would generate demand for approximately 39.18 hectares of open space comprising approximately 16.6 ha of active open space and 22.57 ha of passive open space.

However, the Plan notes that given the high density urban character of the Precincts and the high cost of land, the provision of open space at these benchmark rates would not be feasible. The following section provides an overview of the Plan's proposed provision of open space to meet the needs of the future population within the Precinct, as at 2022.

Active open space demand

As of 2022, The Hills Shire Local Government Area, playing fields were provided at a rate of approximately 1 field per 2,144 persons.

Based on this level of service provision, an additional population of 13,845 people generated the need for 6.5 additional playing fields.

However, in recognition of the difficulties associated with the provision of active open space within high density areas Council's Recreation Strategy 2019 includes a benchmark level of service provision for new high density development of 1 playing field per 2,000 high density dwellings.

Based on this benchmark the future growth within the corridor generated demand for 3.52 playing fields. When applying this threshold requirement, a total of 4 playing fields was required to satisfy the additional demand.

Active open space proposed

To address the demand for active open space, it was proposed at that time that the Caddies Creek Sporting Complex will be expanded by 9.5 hectares to accommodate an additional 4 single playing fields (allowing for 1 cricket oval) and associated parking, amenities, playground, pathways and planting.

It was noted that around 7.1ha of land will be transferred to Council and funded through the State Government's Special Infrastructure Contribution Framework and other programs.

The demand for the above active open space was solely generated by the residential development within the Bella Vista and Kellyville Precincts and was therefore deemed appropriate that residential development within these areas be subject to the full cost of providing this open space facility. Furthermore the above infrastructure is consistent with the NSW State Government's Finalisation Report for the Kellyville Station Precinct which contains an infrastructure schedule which requires the land to be used for the expansion of the sport fields.

Passive open space demand

The purpose of passive open space is to provide informal play space and opportunities for supervised play within convenient walking distance from any given residence. The State Significant Development Applications for Kellyville and Bella Vista were supported by a Social Infrastructure and Open Space Assessment, prepared by Elton Consulting in August 2019. The assessment recommended that a total of around 8ha of open space to be distributed across:

- 6 to 8 local parks with an average park size of 0.4ha and a minimum size of 0.2ha (3.0 ha in total) located within 200m walking distance of residents. These parks can include pocket parks, play space for very young children, play space for older children and local recreation space such as sports courts.
- One large district park of approximately 3ha central to both precincts, that includes a mix of active and passive activities and

a common or plaza suited to community gatherings. This space can also cater for local sport facilities such as training and informal sport matches. It could also be designed as a shared use space with the local primary school. In order for this space to be shared use, there would need to be careful design and good management agreements in place.

- A high quality linear open space along the length of Elizabeth Macarthur Creek (approximately 2ha) that is within 10 minutes walking or 800m to residents' (400m preference for high density areas) to residents and wide enough to comfortably accommodate cyclists and pedestrians.

Passive open space proposed

The demand for passive open space was proposed to be met through the provision of the following:

- 1.4 ha of land for two local parks within the Bella Vista Precinct ranging in size from 3,815m² to 6,650m².
- 0.67 ha of land for one neighbourhood park within the Kellyville Precinct.
- 1.05 ha of land under the viaduct (within the Kellyville Precinct) accommodating a small courts (as well as associated seating, lighting and fencing) which will cater for a combination of activities.
- 2.97 ha of land for a District Open Space within the Bella Vista Precinct adjoining the future primary school.

- 0.32 ha of land for two town square urban plazas, located at each station, each with an area of 1,600m².
- 1.67 ha of land for 'riparian parks' within the Elizabeth Macarthur Creek corridor and greenway link, and
- 2.4km of cyclepath along Elizabeth Macarthur Creek from Samantha Riley Drive to Celebration Drive.

The demand for this passive open space was solely generated by the residential development within the Bella Vista and Kellyville Precincts and was therefore deemed appropriate that residential development within these Precincts be subject to the full cost of providing these open space facilities.

**Figure 14 - Location of open spaces
(Source: Bella Vista & Kellyville Station Precincts, Contributions Plan No. 18)**



Landcom and Sydney Metro Consultation (Phase 1) Outcomes Report (2024)

Over a 10-week period from December 2023 to February 2024, Landcom commissioned JOC Consulting to undertake engagement with the community to understand what they value most about open spaces and how they see these aspirations coming to life in the new Precincts.

As shown in Figure 15, snapshots of the key themes from the report include:

Theme 1: Exercise and movement

The community identified a strong desire to enjoy the new open spaces and the natural landscape through movement and exercise. Existing local residents looked forward to having more opportunities to exercise close to home.




Theme 2: Nature and wellbeing

The positive impact that spending time in nature has on wellbeing was a common sentiment expressed throughout many of our conversations with the community.

Theme 3: Connection and play

Participants were drawn to the idea of open spaces facilitating interpersonal connection and opportunities for play. Throughout the consultation, many families with young children expressed a desire for more places where children could safely play while parents supervise and catch up with friends. Play spaces that cater to different age groups and play levels whilst still being viewed from the same area was highly desirable for families with multiple children.

Figure 15 - Key themes from consultation (Source: Landcom and Sydney Metro Consultation (Phase 1) Outcomes Report, 2024))

 Theme 1 Exercise and Movement	 Theme 2 Nature and Relaxation	 Theme 3 Connection and Play
<p><i>A place for walking, running and cycling was the overall most valued vision across both precincts, with participants emphasising the need for safe, well-lit pathways and facilitate connections to existing and future planned active transit networks.</i></p>	<p><i>The community expressed a strong preference for peaceful, natural settings for relaxation and connecting with the environment. This was accentuated by comments that, for many, this will "be their backyard" as Bella Vista and Kellyville welcome more residents in new apartment buildings.</i></p>	<p><i>There is significant interest in areas that facilitate social interaction and play for all ages and abilities, with a particular emphasis on inclusive and accessible design.</i></p>
<p><u>Supporting insights:</u> A place for cycling, running and walking was the overall most valued vision across both precincts Taking part in informal exercise was valued #1 among phone survey responses.</p>	<p><u>Supporting insights:</u> The ability to connect with nature was valued #1 for online survey participants. A peaceful place to relax and wind down was the #3 valued vision across all community pop-up sessions.</p>	<p><u>Supporting insights:</u> A fun place with different activities and play was valued #2 across all community pop-up sessions. A place to gather with friends and family was valued #3 among online survey participants across both precincts.</p>
<p>Top considerations were:</p> <ul style="list-style-type: none"> Protecting cyclists and pedestrians from vehicle traffic Enhancing visibility and safety at night Creating safe areas for children and young people to walk, run, cycle and play sport 	<p>Top considerations were:</p> <ul style="list-style-type: none"> Protecting and maintaining the surrounding bushland and creek Ensure that outdoor spaces considers wildlife Improving access through joining pathways and parking facilities 	<p>Top considerations were:</p> <ul style="list-style-type: none"> Providing play options that are enjoyable for all ages and abilities Providing suitable facilities that allow for all-day use of the space Ensuring there are places for parents to supervise their children
<p>Top ideas included:</p> <ul style="list-style-type: none"> Connecting to surrounding shared pathways and local places of interest Pathways within the open spaces that are wide, protected, well-lit and accessible for all Opportunities to learn about the site's history while moving through the space 	<p>Top ideas included:</p> <ul style="list-style-type: none"> Seating that invites comfort and relaxation through shape and material Enhancing the connection to nature, wildlife, and history through storytelling (interpretation and interactive features) Trees, planting and shade for natural cooling 	<p>Top ideas included:</p> <ul style="list-style-type: none"> Facilities that allow for spending long periods of time outdoors Shelter from sun and rain Options for all-ages play equipment and games that are accessible for all

2.3 Key findings

The SSD sites provide open spaces proportionate to population growth

Previous studies conducted identify that the SSD sites will have a forecast population of 13,845 people living in 8,400 dwellings. These studies along with local Council policies, indicate that sufficient open spaces (both active and passive) have been planned to accommodate this population growth.

This includes 8.08 ha of passive recreation spaces (within SSD sites) and 9.5 ha of active recreation spaces (outside the SSD sites). This total 17.58 ha for 13,845 people equates to 1.27 ha per 1,000 people.

In terms of fields, the four additional fields planned at Caddies Creek Reserve (within the 9.5 ha active recreation space) for 13,845 people/ 8,400 dwellings equates to 1.2 fields per 4,000 people or 1.0 field per 2,000 dwellings.

These studies also identify that existing open spaces lack the capacity to accommodate pressures arising from any further population growth.

Consequently, any additional dwellings uplift proposed through this TOD process, along with the resultant population increase, will require planning and delivery of new open spaces.

Making the most of open spaces

As part of the SSD sites, the planned open spaces encompass areas beneath the viaduct, proposing outdoor courts, along with riparian parks bordering the creek, fostering connections with nature.

This demonstrates innovative use of traditionally underused spaces like viaducts for recreational purposes, as well as novel approaches such as dedicating RE1 spaces within drainage corridors.

What has happened so far

Approved SSD concept plan

The concept SSD application lodged by Landcom for the SSD sites in Kellyville and Bella Vista Station Precincts was approved by the Minister for Planning in December 2022.

The approved concept proposal includes around 8.08 ha of public open spaces across the Precincts.

Landcom is on track to deliver the proposed open spaces, as well embellishments to open spaces within the riparian zones, as development starts/continues to occur.

Caddies Creek Reserve

9.5 ha of land previously owned by Planning Ministerial Corporation (PMC), also known as Office of Strategic Lands, was rezoned as RE1

Public Recreation zone, to enable the expansion of Caddies Creek sporting fields.

The land is yet to be transferred over to Council ownership. However, several works identified as part of the Master Plan have been completed.

Caddies Creek Reserve playing fields now includes four sporting fields, two amenities buildings and abundant parkland, car parking for more than 120 cars, a new playground and more than two kilometres of shared pedestrian/ cycle paths.

This reserve features two football fields, which will be used as a cricket oval during summer, a stand-alone football field and a baseball diamond. All fields will have their own associated amenities with provision for parking.

Revitalisation of Elizabeth Macarthur Creek Corridor

Anecdotal evidence from interviews with Landcom and Hills Shire Council highlights that Sydney Water is also currently revitalising parts of the Elizabeth Macarthur Creek Corridor to offer a range of passive recreational opportunities.

3. Demographic context

For the purpose of this Needs Assessment, to gain insights into the population characteristics of people living within and in close proximity to the precincts, we adopted a broader approach by examining demographic data of people living within a 5km radius of the Precincts (catchment suburbs). This data is then compared with that of the Hills Shire LGA, Blacktown LGA, and the WSROC region.

The information presented in this chapter is derived from the 2021 ABS Census, as obtained through .id community.



Depiction of community profile in Blacktown LGA

3.1 Current population characteristics

According to ABS 2021, the existing population with the Precincts is 20,494 people. However, a wider catchment of suburbs within 5km of the Precincts have been considered to understand the current population characteristics.

As shown in Table 1, in 2021, the catchment suburbs:

- Have a **median age of 37 years**. The age profile is similar to Hills Shire LGA, Blacktown LGA and the WSROC region. However there are a **higher proportion of people aged 35 to 49**.
- Have a **higher population density** compared to Hills Shire LGA, Blacktown LGA and the WSROC region. However the percentage of medium and high-density dwellings in these areas are lower than the WSROC region.
- The catchment suburbs have a **lower proportion of low income households** compared to Blacktown LGA and the WSROC region. However areas such as Lalor Park (29%) and Marayong (25%) have much higher number of low income households. On top of this almost 30% of households in the catchment area are spending over 30% of their income on rent, and almost 20% are spending over 30% of their income on their mortgage. This is considered housing stress.
- The population of the catchment suburbs are **relatively culturally diverse**, with 42% of people born overseas and 41% speaking a language other than English at home. Although this is slightly lower than Blacktown LGA and the WSROC region, it suggests there is a need for open spaces and recreational offerings that cater to different cultural needs. The top languages spoken in the Hills Shire LGA include Mandarin, Cantonese, Hindi, Korean and Arabic. The top languages spoken in Blacktown LGA include Filipino, Punjabi, Hindi, Arabic and Gujarati.
- **Almost 50% of households** in the catchment suburbs are **couples with children**. This is higher than Blacktown LGA and the WSROC region. The area is also home to the highest proportion of couples with children under 15 (34.6%). Given the high population density, it is likely many of these families live in or will live in apartments.
- Just over **one quarter of people live with one or more long-term health conditions**. The most common conditions are arthritis and asthma. 4% of the population live with disability.

Table 1 - Comparison of demographics characteristics (Data source: 2021 statistics, profile.id)

	Catchment suburbs*	The Hills Shire LGA	Blacktown LGA	WSROC Region
Population overview				
Usual resident population (URP)	392,917	191,876	396,776	1,693,884
Population density (persons per sq km)	2243.5	496.7	1660.6	312.8
Age overview				
Median age	37	38	34	34
Babies and preschoolers (0 to 4 years)	6.8%	5.8%	7.5%	6.7%
Primary schoolers (5 to 11 years)	10.7%	10.8%	10.9%	9.8%
Secondary schoolers (12 to 17 years)	8.2%	8.8%	8%	7.5%
Tertiary education and independence (18 to 24 years)	8.8%	8.6%	9.1%	9.2%
Young workforce (25 to 34 years)	13.1%	10.1%	14.9%	15.5%
Parents and homebuilders (35 to 49 years)	24.5%	23.6%	23.4%	21.5%
Older workers and pre-retirees (50 to 59 years)	11.1%	12.4%	10.7%	11.5%
Empty nesters and retirees (60 to 69 years)	8.6%	9.8%	8.2%	9.4%
Seniors (70 to 84 years)	7%	8.6%	6%	7.4%
Elderly (85 years and over)	1.2%	1.5%	1.1%	1.5%

*Suburbs within 5km of the Precincts

Table 1 - Comparison of demographics characteristics (Data source: 2021 statistics, profile.id)

	Catchment suburbs*	The Hills Shire LGA	Blacktown LGA	WSROC Region
Income and wellbeing overview				
SEIFA index of disadvantage	1061.4	1098.1	987.3	957.3
Need for assistance due to disability	4.1%	3.7%	5.3%	5.9%
Long term health conditions	26%	26.1%	26.6%	26.7%
Low income households (less than \$800 per week)	12.3%	11%	16.4%	19.4%
Cultural diversity overview				
Aboriginal and Torres Strait Islander	1.5%	0.6%	3%	2.2%
People born overseas	41.7%	40.4%	44.4%	43%
People who speak a language other than English at home	41%	38.8%	46.3%	47.5%
Households overview				
Couples with children	49.8%	52.1%	45.1%	39.2%
Couples with children aged under 15	34.6%	34.1%	31.9%	26.5%
Couples without children	21.3%	23.4%	18.3%	20.2%
One parent families with children	9.9%	8.5%	12.8%	12.6%
One parent families with children aged under 15	4.4%	3.5%	6.2%	5.6%
Lone person households	13%	11.9%	15.1%	18.5%
Group households	2.1%	1.4%	2.5%	3.1%

*Suburbs within 5km of the Precincts

Table 1 - Comparison of demographics characteristics (Data source: 2021 statistics, profile.id)

	Catchment suburbs*	The Hills Shire LGA	Blacktown LGA	WSROC Region
Dwellings overview				
Medium density dwellings	11.7%	10.8%	13.9%	16.3%
High density dwellings	7.3%	9.3%	6%	16.8%
Renting privately	23.4%	19.6%	26.4%	29.2%
Social housing	2.2%	0.4%	6.2%	5.5%
Spending over 30% of income on mortgage	17.7%	18.8%	18%	20.4%
Spending over 30% of income on rent	29.6%	29.9%	31.1%	36.2%

*Suburbs within 5km of the Precincts

3.2 Forecast population

3.2.1 Population projection

DPHI has provided the following dwelling and population uplift figures, which serve as the foundation for this Needs Assessment.

Population uplift to 2041

As shown in Table 2, DPHI estimates a dwelling uplift of 2,487 dwellings by 2041. Applying an average household size of 1.965 people per dwelling (provided by DPHI) results in a projected population increase of 4,887 people within the Precincts.

Ultimate population uplift

As shown in Table 2, DPHI further estimates that the ultimate dwelling uplift across the two Precincts will reach 3,060 dwellings upon completion, which is an additional 573 dwellings from 2041. Using the same average household size, this translates to an anticipated ultimate population of 6,013 people, which is an additional 1,126 people from 2041.

Total resulting population

As shown in Table 3, this population uplift is in addition to the existing population of 20,494 people in the Precincts and the anticipated population of 13,845 people resulting from the originally planned 8,400 dwellings. The combination of the existing population, the population projected from the SSD sites, and the new population uplift will yield a total population of 39,226 people by 2041 and an ultimate population of 40,352 people within the Precincts.

Table 2 - Population uplift (Source: DPHI)

Precinct	Dwelling uplift to 2041	Population uplift to 2041	Ultimate dwelling uplift	Ultimate population uplift
Kellyville	1,547 dwellings	3,040 people	1,547 dwellings	3,040 people
Bella Vista	940 dwellings	1,847 people	1,513 dwellings	2,973 people
Total across the Precincts	2,487 dwellings	4,887 people	3,060 dwellings (+ 573 dwellings)	6,013 people (+ 1,126 people)

Table 3 - Total forecast population for the Precincts

Precinct	Forecast population to 2041	Forecast ultimate population
Existing population within the Precincts (sourced from ABS 2021 statistics)	20,494 people	20,494 people
Indicative population resulting from the 8,400 dwellings at the SSD sites (sourced from Bella Vista & Kellyville Station Precincts, Contributions Plan No. 18, 2022)	13,845 people	13,845 people
Additional population resulting from dwelling uplift (sourced from DPHI, as per table above)	4,887 people	6,013 people
Total across the Precincts	39,226 people	40,352 people

3.2.2. Likely characteristics of future population

In general, areas with medium to high-density development across Greater Sydney and Western Sydney, which is likely to be true for the future residents of the Precincts, tend to have the following characteristics:

- A higher proportion of young people, especially those in the 25-34 age group.
- A lower proportion of older individuals, specifically those between 50 and 69 years old.
- A greater percentage of infants and toddlers (aged 0 to 4 years), with a correspondingly lower percentage of school-age children (aged 5 to 17 years), indicating a demographic of young families.
- Greater cultural diversity.
- A lower median weekly household income.
- A high proportion of private renters among the residents.
- A greater incidence of one-person households.



Park run at Kellyville

3.3 Key findings

The Precincts population will grow by ~14% by 2041

Considering the existing population of 20,494 people and the 13,845 people from the originally anticipated 8,400 dwellings in the SSD sites, by 2041, the population uplift of 4,887 people at the Precincts resulting from the uplift of 2,487 dwellings represents a ~14% increase in population. This will increase slightly by another 3% when dwellings are fully taken up.

This indicates that there is a likely need for some additional open spaces to cater to the population growth into the future.

Future open spaces should respond to the demographic characteristics of the population

Looking at the current and future population characteristics, the following should be taken in consideration when planning, designing and delivering open spaces in the future:

Culturally sensitive design

Given the high percentage of culturally diverse residents, with many speaking a language other than English at home, open spaces should cater to various cultural practices. This might include areas for cultural events, multi-functional spaces, or specific design elements that reflect the community's diversity.

Family-friendly and intergenerational spaces

With a high proportion of future households likely being couples with children and a high proportion of infants and toddlers, ensure open spaces have playgrounds,

splash pads, and other amenities for young children. Consider including shaded areas and child-friendly infrastructure. Provide spaces for intergenerational activities. Especially in multicultural communities, there is higher likelihood of grandparents accompanying children to playgrounds, so provide spaces for passive recreation which also promotes passive surveillance.

Spaces for young people

As there is a growing proportion of young people, provide open spaces that encourage social interaction, like picnic areas, outdoor gyms, and spaces for outdoor activities like yoga or fitness classes.

Spaces for older people

Although there's likely to be a lower proportion of older people, include areas suitable for this age group, such as walking paths, seating areas, and gardens, as well as exercise equipment that promotes mobility among older people.

Accessible open spaces

Ensure that open spaces are easily accessible, particularly for those living in medium and high-density housing. Create green corridors and linear parks that connect existing open spaces and improve accessibility.

4. Open space and recreation trends

4.1 Recreation trends

As our communities, cities and lifestyles change, so does our participation in recreation – from the kinds of activities that we prefer, to when and how often we participate, and the places that we use. Participation in recreation (both sport and non-sport physical activities) is evolving as our lifestyles, communities and urban environments change.

Nationally, the most significant trend in recreation participation in recent years is an increase in participation in informal, flexible and unstructured recreation activities such as walking, running or personal fitness, while research from the NSW Office of Sport shows that participation rates for many organised sports have held constant or are declining.

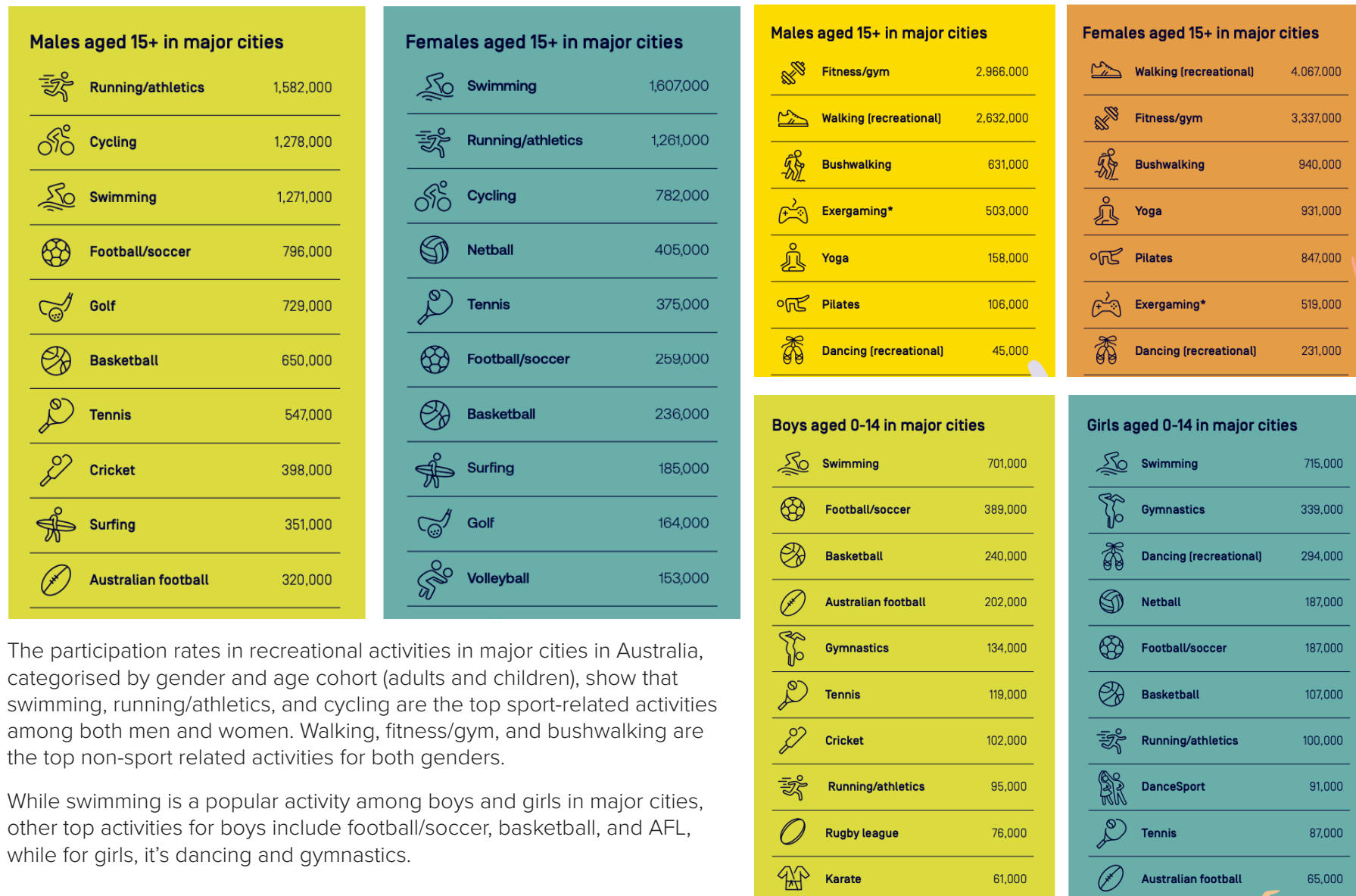
“Today more than ever, Australians are time poor, have limited budgets, are being inundated by new forms of entertainment and face increasing barriers to participation. As society changes, new preferences are emerging; Australians desire greater flexibility, more tailored products and sports that work for them.”

– Australian Sports Commission



Community exercise programs in Blacktown LGA

Figure 16 - Participation rates by recreation activity in major cities
 (Source: AusPlay, National Sport and Physical Activity Participation Report, October 2023)



The participation rates in recreational activities in major cities in Australia, categorised by gender and age cohort (adults and children), show that swimming, running/athletics, and cycling are the top sport-related activities among both men and women. Walking, fitness/gym, and bushwalking are the top non-sport related activities for both genders.

While swimming is a popular activity among boys and girls in major cities, other top activities for boys include football/soccer, basketball, and AFL, while for girls, it's dancing and gymnastics.

4.2 Open space trends

As our urban landscapes continue to evolve and densify, the demand for open spaces has increased significantly. In response, new trends are emerging in the design and management of open spaces. From flexible and multipurpose areas to streets that double as recreational spaces, cities are looking for innovative ways to maximise the potential of open spaces. This section provides an overview of both established and emerging trends in open space design and management.

Flexible and multipurpose spaces

The availability of land for recreation and community use is becoming increasingly limited, with challenges such as rising land prices and limited availability to acquire new land.

This highlights the importance of creating adaptable and multipurpose open spaces that can cater to a wide range of recreational activities for people to enjoy and participate in.

By designing open spaces to be flexible and multifunctional, they can meet changing community recreation needs and preferences over time.



Burwood Park, Burwood

Burwood Park is a highly utilised urban green space and multi-purpose park, providing spaces for different community uses and interests, from passive recreation, to active sports, to cultural participation, viewing, and play. It includes facilities popular with local seniors and culturally diverse residents for dance, tai chi, table tennis, fitness, games, and walking in shaded areas.



Box Hill Gardens Multipurpose Area, Box Hill

Box Hill Gardens functions as both community space and courts for multiple sports and recreation activities, including table tennis, soccer, as well as a 1km walking and running track that will start and finish at the multi-purpose site.

Public toilets, water bubblers, and seating are integrated into the space, forming a rebound wall for ball sports and inclusive space where people can stay for extended periods of time.

Recreational loops

Walking and cycling paths that form circuits/ loops are gaining popularity, particularly among culturally diverse communities.

By providing additional amenities such as seating, play areas, bubblers and lighting, these circuit paths become inviting and comfortable public spaces that encourage physical activity and social interaction.



Brisbane City Loop, Brisbane

The Brisbane City Loop is a 7km recreational circuit path that begins at Kangaroo Point Cliffs and passes through several iconic landmarks, including South Bank, the CBD, Botanic Gardens, and Goodwill Bridge. This loop offers an array of activities, such as walking through scenic parks and gardens, rock climbing on the cliffs, resting at designated areas, playing in children's playgrounds, and exercising on equipment along the way.



The Capital Ring Walk, London

The Capital Ring is a 78-mile circular walking route that connects 15 London boroughs. It features parks, nature reserves, historic landmarks, and other attractions along the way, as well as several access points for public transportation.

Recreational links

A recreational link is an active path that connects people to open spaces and other public facilities for walking, cycling, or running. Cities worldwide are repurposing underused spaces as recreational links.

These links are being enhanced with greenery, play areas, cycle paths, educational elements, and exercise equipment for increased recreational capacity.



Photo source: Matthew Duchesne for Cred Consulting

Goods Line, Ultimo

The Goods Line is an urban linear park that is designed for daily use by students and workers. With elements of sit, play, and relaxation incorporated into a linear strip of open space, the needs of many local residents and commuters are met.



Photo source: www.Miamiandbeaches.com

The Underline, Miami

The Underline is a 16km multimodal linear park, urban trail and public art destination located below the Miami Metrorail, in an area with 70% residents from non-English speaking backgrounds.

With it's series of "rooms", featuring butterfly gardens, gathering places, including a 50-foot dining table and smaller tables with dominoes, gym areas and dog friendly areas, the Underline is an example of repurposing unused land into public space that meets diverse user interests.

Activated plazas and squares

As the demographics of communities in NSW evolve together with its urban nature, there is a growing trend for recreation to take place on hard surfaces.

To cater to this preference, open spaces can be designed to include not only shaded areas with hard surfaces for activities such as tai chi and social gatherings, but also for a variety of other activities such as outdoor dining, markets, concerts and festivals.



The Connection, Rhodes

The Connection is an award-winning community precinct, located alongside the Rhodes foreshore and adjacent to the Bennelong Bridge. It provides opportunities for local residents to participate in a range of activities, programs and events.

The outdoor space includes hard surface area and amphitheater for performance, as well as reflective glass used for dancing, water play area, bicycle parking, public toilets, water bubbler, and large scale public artworks.

Prahran Square, Melbourne

City of Stonnington transformed a ground-plane carpark into a new civic space/ square within the densely populated neighbourhood of Prahran.

Prahran Square is the new cultural and recreational heart of Prahran, with spaces to relax, meet friends and take a breather from the busy retail streets nearby.

Features include playspace, lawn, seats, shade, picnic tables, and public toilets.

Urban play

To make open spaces more dynamic and engaging, many urban parks and plazas are now being designed to accommodate games such as table tennis, chess, and hopscotch.

These activities expand the range of recreational options available in these spaces and encourage people to interact with each other in fun and sociable ways.



Urban Pinball, Seoul

The Urban Pinball in Seoul is a public space that offers a unique pinball experience to visitors. People can toss a ball and play the game in this public space, which utilises the existing physical slopes of the site to create a distinctive and exciting way to engage with public spaces.

In addition, the pinball features can be used as seating and hangout areas when not in use for playing the game.



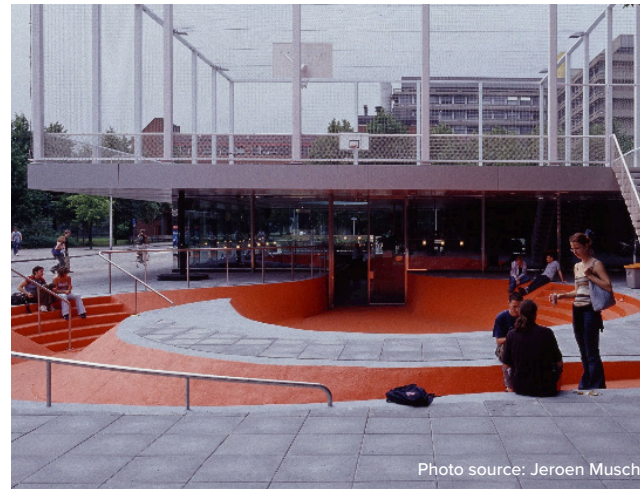
Musical Swings

Musical Swings is an award-winning urban interactive artwork that invites people to make music together. Each swing triggers notes from classical instruments, that when swung in unison, create a musical composition.

Recreation in podiums

To increase the amount of available recreational space, many cities are exploring the idea of using podium levels to create areas for both active and passive recreation.

Ensuring that these spaces are easy to access is critical to their success. While retrofitting existing building rooftops for this purpose may be challenging, it is a viable option for new developments.



Basketbar, Utrecht

The Basketbar in Utrecht features a full-size basketball court located on a podium level above a trendy café. The space also includes a modern seating plaza that appeals to the younger demographic of the area. With its high visual connectivity to the court, the area remains active and safe both during the day and at night, creating a vibrant and dynamic atmosphere.



The Concourse, Chatswood

The park located on the podium level of the Concourse Library in Chatswood is a prime example of how elevated public spaces can be created. This innovative public space includes lush greenery, grassy areas, ample seating, and hard surface areas that are frequently used by the local community year-round. Additionally, the park regularly hosts events and other engaging activities.

Walls for recreation

Vertical wall-based recreation is a growing trend that involves activities such as climbing walls and mirrored surfaces for dance practice.

This approach is gaining popularity as it allows for maximum use of available surfaces for recreational activities, while also providing new and unique experiences for the community.



Climbing wall, Merida

The Factoria Joven (“youth factory”) is a skate park and climbing wall in Merida, Spain, which opened in March 2011. Since its opening the facility has been bustling with activity. The climbing wall attracts people of all ages and genders and provides free and differentiated recreational opportunities. In addition to a large climbing wall and space for biking and skating, Factoria Joven includes a computer lab and dance studio, meeting rooms and spaces for street theater, video, electronic music and graffiti.



Dancer's Alley, Darling Harbour

Young street dancers travel to Darling Harbour, where there are mirrored walls in the laneway between the ICC Theatre and the Exhibition Centre. Anything from up to a hundred dancers can be seen practicing at the ‘Dancer’s Alley.’

In an interview for [Sydney Morning Herald](#), a student states: “this is a really big common space where a lot of people mix and make connections.” The free and accessible open space is a large attraction for the dance community.

Rooftop recreation

As cities continue to grapple with limited ground-level space, the utilisation of rooftops for recreation presents a promising solution to meet the evolving needs of urban residents and foster vibrant, inclusive communities. Rooftop recreation is emerging as a trend in, encompassing activities like rooftop gardens, playgrounds and sports courts.

This innovative approach is steadily gaining traction as it leverages underutilised rooftop areas for recreational purposes, thereby optimising urban space.



The Peak at Toa Payoh, Singapore

The Peak at Toa Payoh is a community garden situated on the rooftop of a multi-storey car park. Community gardens often cater to specific groups within the community, and utilising rooftop spaces is an ideal way to establish such gardens due to the enthusiastic participation of volunteers. This presents a unique opportunity, particularly in areas with a substantial Asian population, as they are likely to be familiar with these types of spaces from their ancestral countries.



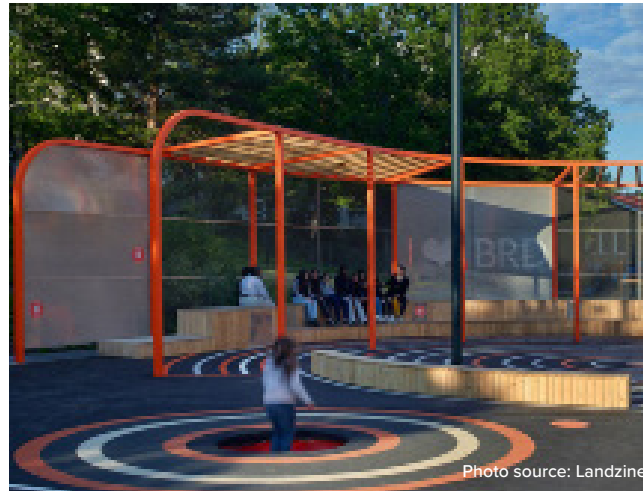
Park 'n' Play, Copenhagen

The rooftop of a car park has been transformed into a dynamic and versatile recreational area featuring play and exercise equipment, and is popular among people of all ages for various activities. The rooftop's design includes a striking red staircase that creates a strong visual connection between the rooftop and the ground floor, making the rooftop's urban public space highly visible to visitors.

Spaces for young people

Women and gender-diverse people are more likely than men to feel unsafe in open spaces, and feel as though a space is not designed with them in mind.

Designing with a gender lens removes barriers to meet the needs of people of different gender identities and expressions, and welcome all to use open spaces.



Bredäng Park, Sweden

This award-winning park is focused on the needs of girls, and features circular seating, pergolas, stage space and hard surfaces for dance and free sports. The previous site was home to a football pitch, primarily used by men for organised sports.

The new park was co-designed with girls living in the Swedish suburb, and through this process, realised the vision for a safe, vibrant space where young girls feel welcome to dance, play, and spend time with friends.



Julia Reid Reserve, Oran Park

Julia Reid Reserve is a recreation facility developed by Greenfields Development Company, together with Landcom and Camden Council.

The multi-purpose precinct was designed with input from local high school students, and includes a skatepark, parkour facilities, table tennis, kick-about area, multipurpose courts, shelters and seating, along with areas to 'watch and learn.' Adjoining the skatepark is the Julia Reserve Community Centre and Youth Precinct.

Cultural representation

Open spaces that reflect the needs and interests of culturally diverse communities are more likely to attract and retain users from those communities.

Incorporating visual and symbolic markers such as place names, public art, and statues can enhance the cultural representation in these spaces, creating a sense of welcome, pride, and ownership for diverse communities.

This approach can lead to increased utilisation of public spaces and a stronger sense of community ownership and belonging.



Afghan Bazaar, Dandenong

Dandenong's Afghan Bazaar, a recognised Afghan precinct in Melbourne, has evolved into a community hub, and is home to a high concentration of Afghan businesses.

Informed by comprehensive consultation with the local Afghan community, enhancements to the precinct include detailed paving, seating that references the traditional Arabic 'suffah', integrated artwork, and a vivid blue colour scheme inspired by the Mazar-e-Sharif (Blue Mosque).



Rainbows in public spaces

Rainbows have become a symbol of inclusion and welcoming for LGBTIQ+ people and can signify safety where they are located.

City of Sydney has installed rainbow footpaths in numerous locations throughout the city, including a rainbow-shaped crossing at Taylor Square in Darlinghurst. Further East, in Sydney's popular Coogee Beach, a 50-meter-long rainbow on the sweeping beachfront staircase makes a bold statement in support of the local LGBTIQ+ community.

Digital integration

Digital integration in open spaces, such as parks, is a growing trend that enhances visitor experiences and park management.

This includes features like free Wi-Fi, smart lighting, and interactive installations. Mobile apps are offering visitors real-time information, augmented reality tours, and event updates.

At the same time, sensors and IoT devices help park managers optimise maintenance and monitor environmental conditions for sustainability. This technology-driven approach creates more engaging and efficient open spaces while fostering greater community involvement and sustainability.



Interactive public spaces, Montreal

Montreal installs interactive equipment in its plazas to encourage social connections. One of these installations is the Loop at One Seaport Courtyard, which is a fusion of a music box, a zeotrope, and a railway handcar. Visitors can hop in two at a time into these illuminated, moving cylinders and pump a lever to bring a classic fairy tale to life. The faster you pull the handle, the faster the images inside the loop will play.



Smart sensors and displays

The City of Parramatta has installed Melrose Park with smart environmental sensors and creatively showcases the data for visitors. These displays provide information on air quality, temperature, wind speed, and more, allowing park visitors to stay informed about their environment. This initiative is a great example of how environmental data can be effectively integrated into public spaces, enriching the visitor experience while promoting awareness of local conditions.

4.3 Key findings

The recreation and open space trends indicate that future open spaces within the Precincts should be designed to be flexible, inclusive and promote social connection.

Consider non-traditional and innovative approaches to providing recreation opportunities

There is limited land available within the Precincts, which poses a challenge in allocating large parcels of space for open areas, potentially conflicting with the TOD's emphasis on prioritising land for housing.

This constraint necessitates a shift towards innovative approaches to providing recreational spaces.

Trends such as rooftop and podium-level recreation can be incorporated into new mixed-use developments. Exploring all available spaces for recreation, including vertical options like climbing gyms under viaducts, could maximise usage.

Although addressing governance challenges in embracing these new approaches may be daunting, this approach would ultimately result in more open spaces being available.

Provide spaces for informal activities

The most significant trend in recreation participation in Australia in recent years is an increase in more informal, unstructured recreation activities such as walking for recreation.

We need to share our streets and other spaces for recreational outcomes as our population grows and land is limited to delivering new open spaces. Consider providing wide streets which incorporate recreational corridors with activities and initiatives such as play streets, exercise trails, garden trails, creative and cultural trails.

Create multi-purpose and adaptable spaces

Recreation trends show a shift in the type of sports people are interested in. This means that fields should be planned and designed flexibly to allow uses to change and adapt over time. Additionally, given more people are pursuing individualised and casual sports, alternative formats for community sport must be prioritised in the Precincts in the future.

The background features several large, overlapping circles in various shades of green and yellow. A dark green circle is in the top right, a light green circle is in the top center, a pale yellow circle is in the middle right, and a dark green circle is in the bottom right. The text is positioned on the left side, overlapping the dark green background and the light green circle.

**What we have and
what we need**

5. Approach to open space analysis

This Needs Assessment evaluates open spaces based on various attributes, including the quantity of provision, the function of open spaces, their hierarchy, proximity, and population benchmarking to cater to the growing population.

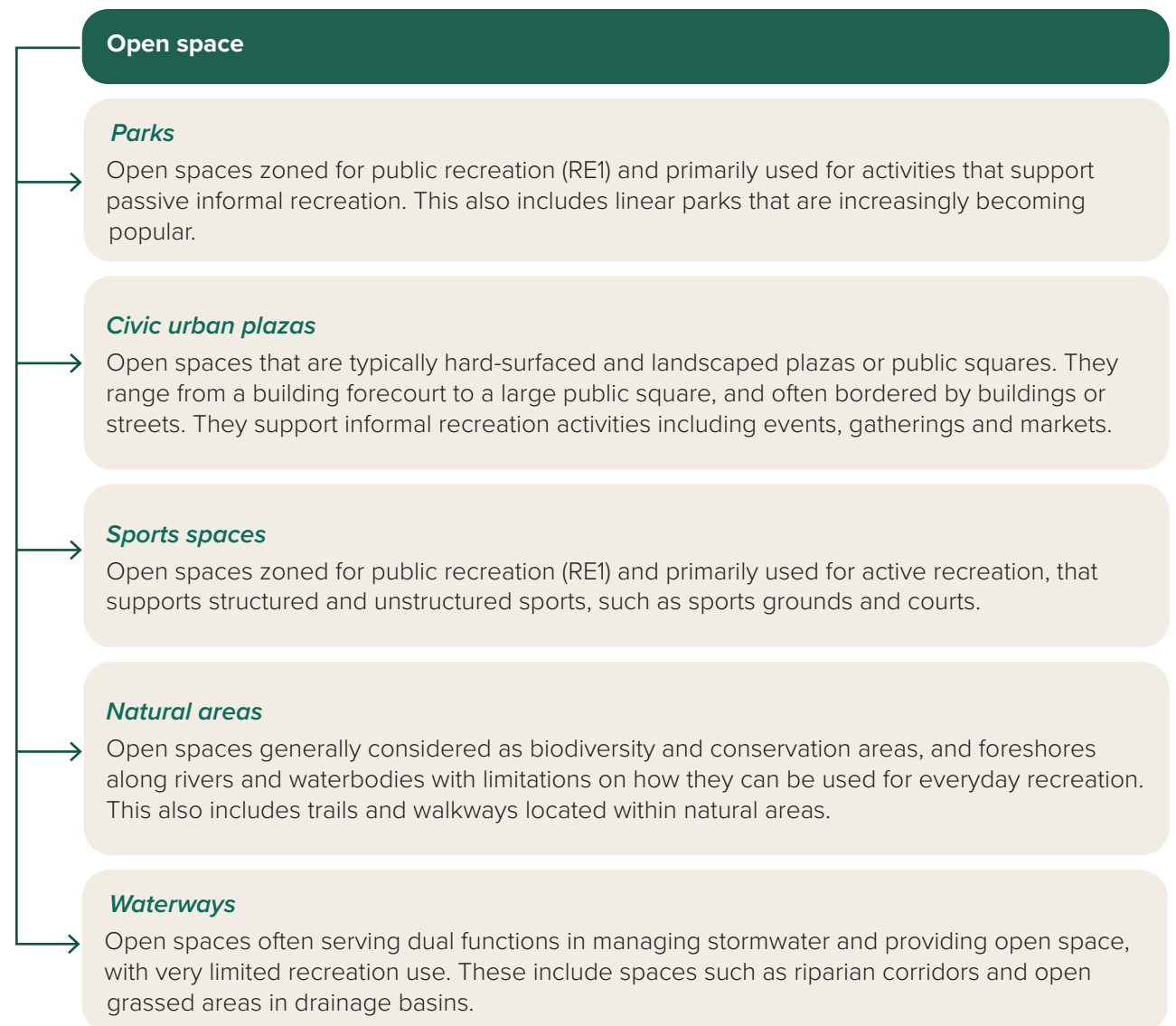
This section outlines the approach and standards adopted for the supply and demand analysis that follows. It's important to note that this approach section does not contain the findings themselves, those are provided in the following chapters.

5.1 Functions

Open spaces are generally classified according to their primary function. As shown in Figure 17, this includes parks and reserves, civic urban plazas, sports spaces, natural areas and waterways.

The definitions used are drawn from NSW Public Open Space Strategy 2023, The NSW Greener Places Design Guide 2020, the Hills Shire Recreation Strategy 2019, and the Blacktown City Council Recreation and Open Space Strategy 2017.

Figure 17 - Open space functions (source: NSW Public Open Space Strategy 2023, The NSW Greener Places Design Guide 2020, the Hills Shire Recreation Strategy 2019, and the Blacktown City Council Recreation and Open Space Strategy 2017)



5.2 Hierarchy

Strategies such as the NSW Public Open Space Strategy 2023, The NSW Greener Places Design Guide 2020, the Hills Shire Recreation Strategy 2019, and the Blacktown City Council Recreation and Open Space Strategy 2017 specify desired standards for open space.

These standards are typically defined based on various hierarchical levels, considering the catchment area served by a particular open space, its nature and size, the anticipated number of users, and the distance people are willing to travel to access and use the open space.

This Needs Assessment uses the hierarchies and standards listed in Table 4 and Table 5.

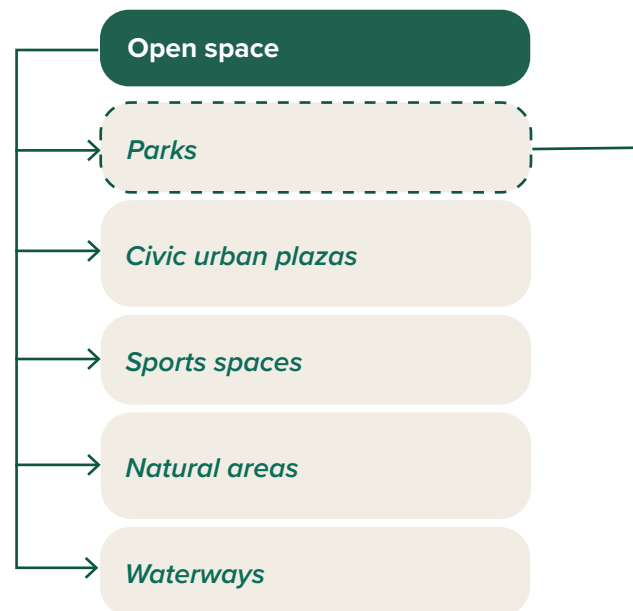
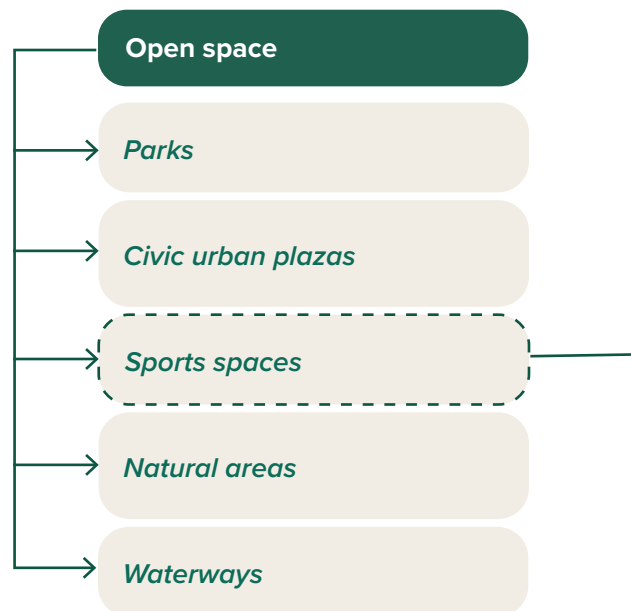


Table 4 - Open space hierarchy and standards for parks (source: NSW Public Open Space Strategy 2023, The NSW Greener Places Design Guide 2020, the Hills Shire Recreation Strategy 2019, and the Blacktown City Council Recreation and Open Space Strategy 2017)

Hierarchy	Description	Typical scale	Travel distance
Regional	Any large or unique area with good links to public transport that attract visitations from Hills Shire and Blacktown LGAs or wider, including tourists.	Unlimited (5 ha +)	Up to 30 minutes travel time on public transport or by vehicle/ 5–10 km from most houses
District	A large or significant open space that serves more than one suburb. Can cater for a wide cross section of community interests. Generally, provides a diverse range of facilities including toilets to encourage longer stays.	Minimum 2ha to 5ha.	20 minutes walk / 1.6 km walking distance from most houses
Local	Serving residents within a suburb. Usually support shorter 30min - 60mins stays by catering for informal recreation, relaxation and children's play.	Minimum 0.3ha to 2.0ha.	5 minutes walk / 400 m walking distance from most houses, and 200m in high density areas
Neighbourhood	Smaller open spaces that serve residents within immediate locality and within easy walking distance from home to provide for short stay activities, usually children's play. Open spaces smaller than 0.3ha usually provide very limited recreation opportunity, and are not a preferred approach for planning future open space.	Minimum 0.15 to 0.3ha.	200m from most houses

Table 5 - Open space hierarchy and standards for sports spaces (source: NSW Public Open Space Strategy 2023, The NSW Greener Places Design Guide 2020, the Hills Shire Recreation Strategy 2019, and the Blacktown City Council Recreation and Open Space Strategy 2017)



Hierarchy	Description	Typical scale	Travel distance
Regional	Regional facilities cater for multiple sports and recreation opportunities. They can be used for various levels from local sport, representative, state and national sport.	Unlimited (10 ha +)	Up to 30 minutes travel time on public transport or by vehicle/ 5–10 km from most houses
District	They are generally larger and cater for a wide catchment including a minimum four full-sized playing fields. They include a larger amenities building, floodlighting, car parking and multi-purpose/ hard courts (tennis, netball, basketball, etc.). They are generally suitable for grassroots local and representative sport, as well as recreation.	5-10ha	1.6-5km from most houses
Local	They predominantly include two full-sized playing fields, amenities, floodlighting and car parking. They include infrastructure sufficient for grassroots local sport and recreation.	5ha	1–1.6 km from most houses

5.3 Population benchmarking

Benchmarks are as a valuable tool for estimating the quantity of open space that ideally should be provided, given the opportunity, feasibility, and funding availability.

While benchmarks provides a reasonable indication of the overall quantity of open space required, it does not account for efficient access to open space, quality of the open space, improvements provided, or demand from the local community.

Traditional benchmarks, like the typical 2.83 ha per 1,000 people, are often historical and don't consider the challenges of providing new open space in infill areas. Alternative benchmarks are maintaining current provision of open spaces per person, which also pose challenges in densifying areas.

Benchmarks used in this Needs Assessment are drawn from various reputable sources, including the Hills Shire Recreation Strategy 2019, Blacktown City Council Recreation and Open Space Strategy 2017, as well as from comparable urban areas such as the City of Parramatta, Inner West, City of Canada Bay and Canterbury Bankstown.

As shown in Table 6, a comparison of these benchmarks was provided to DPPI. The table also highlights the benchmarks selected by DPPI for use in this Needs Assessment.

In cases where the overall quantity of open space falls short of standard benchmarks, there should be the aim to provide well distributed and high quality open space to support a higher number of people.

Table 6 - Comparison of benchmarks

Type	Benchmark standard	Source	Adopted in this Needs Assessment
Parks	1.0 ha per 1,000 people	City of Parramatta	✓
	1.21 ha per 1,000 people	Hills Shire and Blacktown City	
	Maintain current LGA-wide provision of 1.33 ha per 1,000 people	Inner West Council	
	1 – 1.5 ha of parks and recreation areas per 1,000 people	City of Canterbury Bankstown	
	1.3 ha per 1,000 people	City of Canada Bay - This has been extrapolated from the benchmark of 2.6ha per 1,000 people, assumes 50% of parks.	
Sports spaces	1.0 ha per 1,000 people	City of Parramatta	✓
	1.3 ha per 1,000 people	City of Canada Bay - This has been extrapolated from the benchmark of 2.6ha per 1,000 people, assumes 50% of sports spaces.	
	1.62 ha per 1,000 people	Hills Shire and Blacktown City	
Playing fields	1 field per 4,000 people	Hills Shire Council	✓

Type	Benchmark standard	Source	Adopted in this Needs Assessment
	1 field per 1,850 people	Blacktown City	
	Current provision of 1 field per 3,000 people	City of Canterbury Bankstown	
Outdoor courts	1 per 2,500 people	Inner West Council	
	1 per 4,200 people	Wollondilly Shire	✓
	1 per 10,000 people	Parks and Leisure Australia 2020	
Adventurous spaces	1 local facility per 10,000 people, 1 district facility per 25,000 people, and 1 regional facility per 50,000 people	Hills Shire Council	
	1 facility per 48,000 people	Inner West Council	✓
Outdoor fitness equipment	1 outdoor fitness equipment per 12,000 people	City of Parramatta Council	✓
Dog off-leash	1 dog off-leash area per 50,000 people	City of Parramatta Council	✓
	Current provision of 1 dog off-leash park per 4,780 residents	City of Canada Bay	
Playgrounds	1 playground within 400m of homes	Hills Shire Council	✓

5.4 Population catchments

Benchmarking has been conducted at two scales: first, within the two Precincts, and second, within an area encompassing 1.6 km from the Precincts' boundaries.

This is because it is likely that existing provision within the Precincts are used not only by residents within the Precincts but also by people living within a 1.6 km distance (at a minimum), so we do not discount that usage. This approach also allows us to assess whether existing provisions in close proximity to the Precincts can support future population growth.

One limitation of this study is the lack of available data on the utilisation rates of existing open spaces, such as sporting fields. In these instances, we have relied on anecdotal evidence gathered from councils through online interviews.

The population figures used for benchmarking are as follows:

Precincts only

- **2041:** 39,226 people, which includes the existing population within the Precincts, the SSD population, and the new uplift population projected for 2041.
- **Ultimate:** 40,352 people, which includes the existing population within the Precincts, the SSD population, and the ultimate new uplift population (including the population projected for 2041).

Precincts + 1.6 km

- **2041:** 131,440 people, including the existing population within the Precincts and the 1.6 km radius, the SSD population, and the new uplift population projected for 2041.
- **Ultimate:** 132,566 people, including the existing population within the Precincts and the 1.6 km radius, the SSD population, and the ultimate new uplift population (including the population projected for 2041). Note that the forecast population for other areas within this 1.6 km radius has not been included in this calculation.

6. Supply and demand analysis

6.1 Open spaces within the Precincts

The Bella Vista and Kellyville Precincts have significant open spaces both within their boundaries and within a 400m proximity.

Figure 18 shows these areas, including parks, reserves and sports spaces. It also highlights private recreation spaces, environmental conservation areas and stormwater management and drainage areas, providing contextual information.

The figure labels certain significant open spaces in the vicinity. Please refer to Table 7 for the corresponding legend.

Focusing solely on parks, reserves, and sports spaces zoned for public recreation (RE1), the combined area within the Precincts totals 90ha - 44.5ha of parks and reserves and 45.5ha of sports spaces.

Additionally, there is ~70ha of open spaces zoned for storm water management and drainage areas, please note that these are not entirely appropriate for recreation uses. As a result, these areas have not been factored into the calculations for assessing open space supply.

Bella Vista and Kellyville Precincts have 100ha of parks, reserves and sports spaces zoned for public recreation (RE1).

Figure 18 - Open spaces within 400m of the Precincts

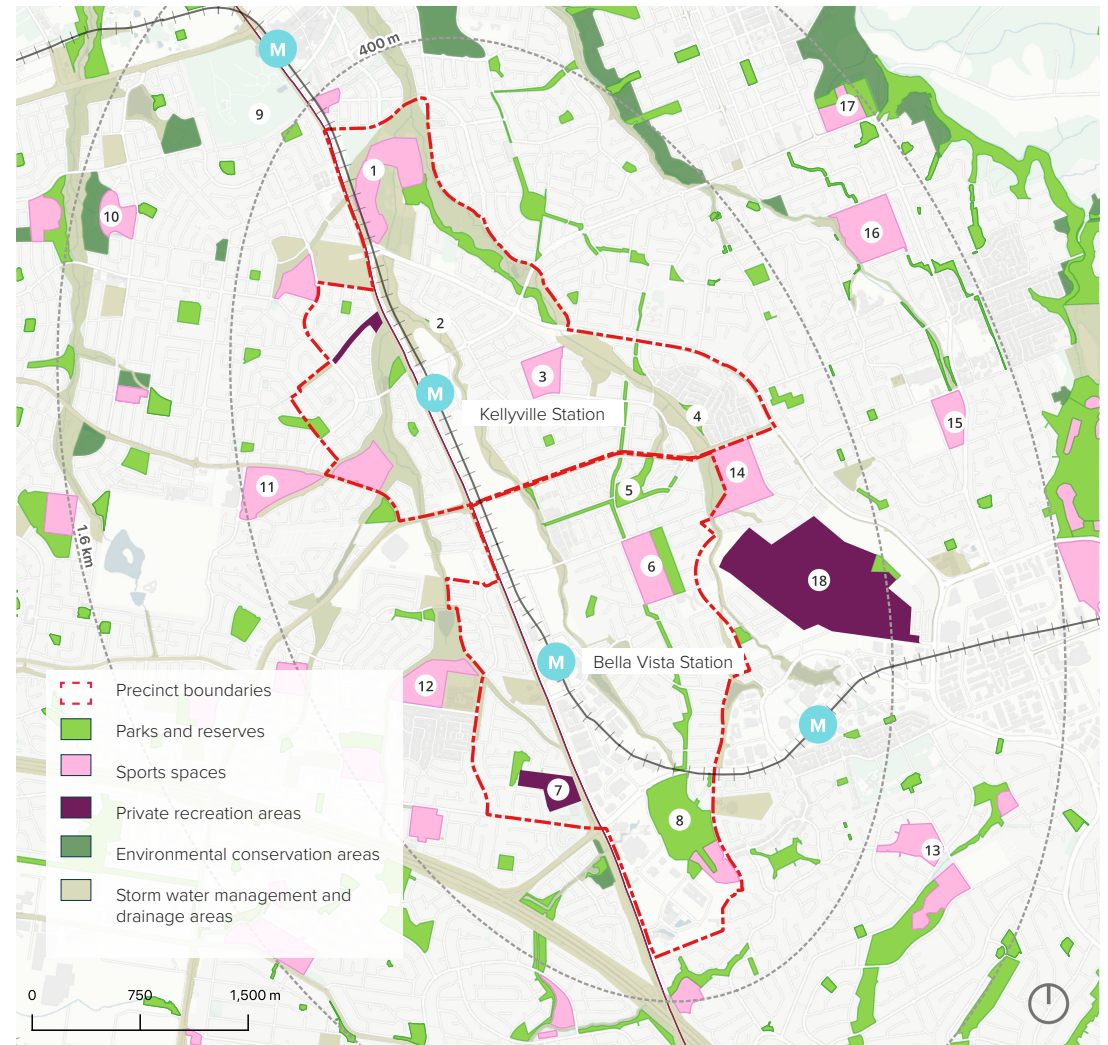


Table 7 - Key open spaces within 400m of the Precincts

Map reference	Name of open space
1	Caddies Creek Park and Sporting Complex
2	Macquarie Avenue Reserve
3	Arnold Avenue Sports Complex
4	Brodrick Boulevard Reserve
5	Rutherford Avenue Reserve
6	Balmoral Road Sports Complex and Reserve
7	Valentine Sports Park
8	Bella Vista Farm
9	Castlebrook Memorial Park Rouse Hill
10	Peel Reserve and Jonas Bradley Oval
11	Blacktown Leisure Centre Stanhope
12	Glenwood Reserve
13	Mackillop Drive Reserve
14	Kellyville Memorial Park Reserve
15	Centenary of ANZAC Reserve
16	Bernie Mullane Sports Complex
17	Samantha Riley Drive Reserve
18	Castle Hill Country Club



Peel Reserve and Jonas Bradley Oval



Samantha Riley Drive Reserve



Bernie Mullane Sports Complex



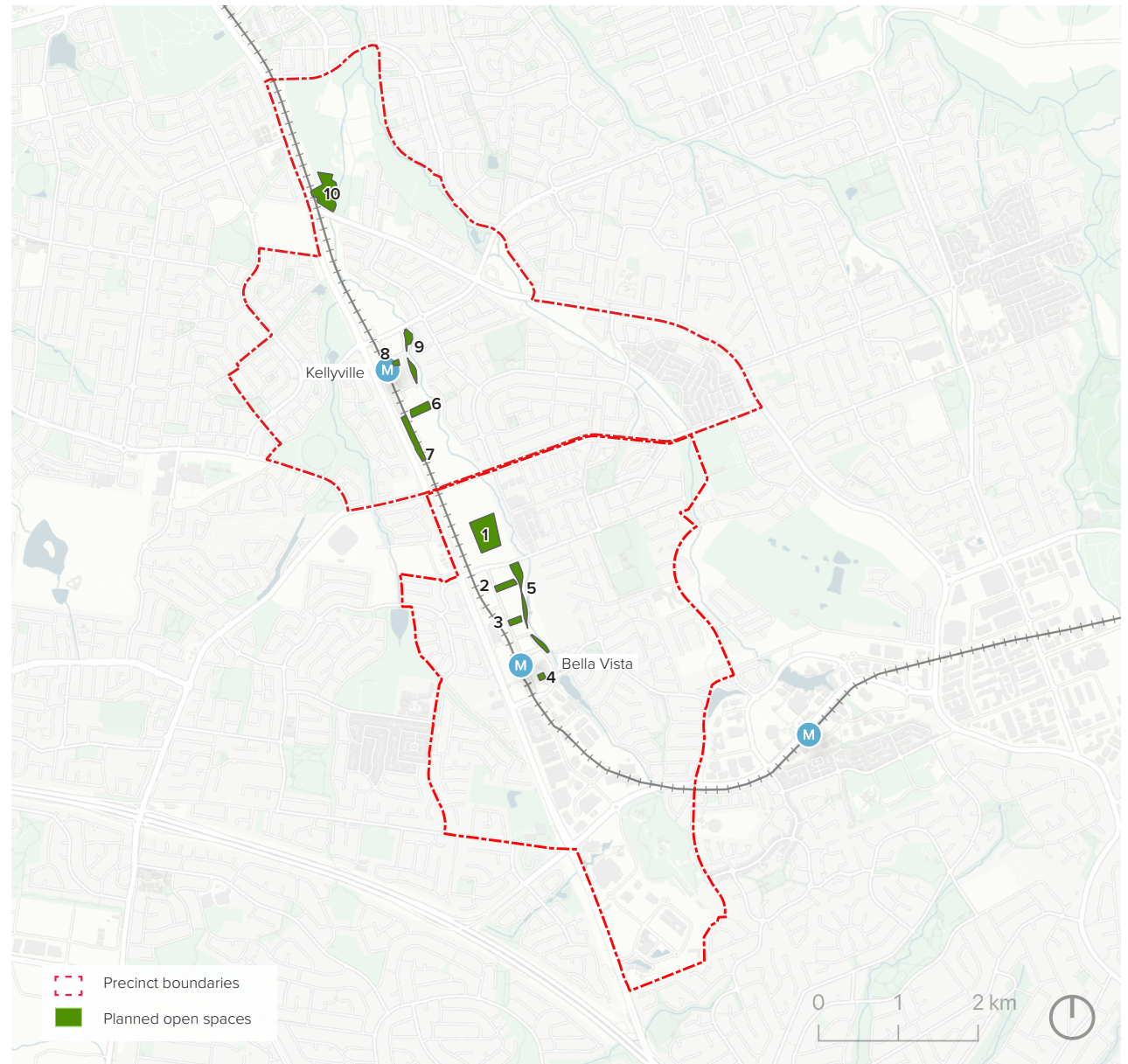
Bella Vista Farm

6.2 Planned open spaces within the Precincts

As identified in the peer review of previous studies, Figure 19 shows the planned open spaces within the Precincts that will be delivered as part of the SSD sites:

- Within Bella Vista SSD sites, 5.62 ha:
 - 1: Approximately 2.74 ha of district open space with a multi use field and passive open space.
 - 2: Local open space with small kick about space of approximately 0.67 ha.
 - 3: Local open space with small kick about space of approximately 0.38 ha.
 - 4: A number of small urban square or plazas totaling 0.74 ha.
 - 5: Embellishment of open spaces within the riparian corridor (approximately 1.09 ha) to enable a diversity of recreation activities.
- Within Kellyville SSD sites, 2.46 ha:
 - 6: Local open space of approximately 0.67 ha.
 - 7: Park under the viaduct of 1.05 ha.
 - 8: A small urban square or plaza of approximately 0.16 ha.
 - 9: Embellishment of open spaces within the riparian corridor (approximately 0.58 ha) to enable a diversity of recreation activities.
- 10: Expansion of the Caddies Creek Reserve to provide four additional sportsfields.

Figure 19 - Planned open spaces within the Precincts



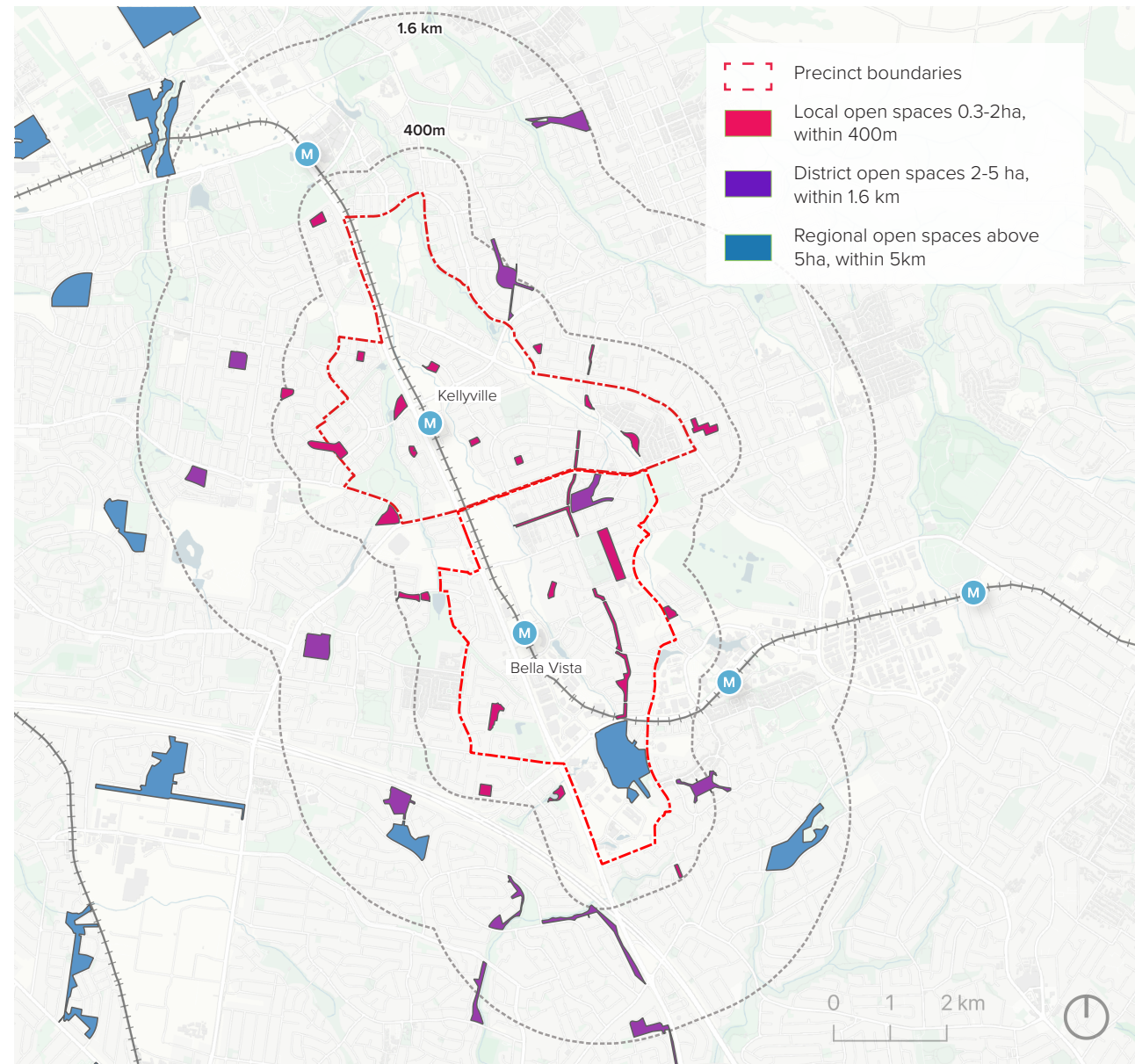
6.3 Parks

6.3.1. Current supply

Figure 20 shows local, district, and regional parks within and in proximity to the Precincts. Local parks range in size from 0.3 ha to 2.0 ha and serve people living in the immediate vicinity. District parks range from 2 ha to 5 ha and cater to a wider community for various uses, while regional parks are larger than 5 ha and attract users from across the region.

- Within the Precinct, there is a total of 53.1 ha of parks, which includes 45 ha of existing parks and 8.08 ha of planned park.
- Within 1.6km of The Precinct (including parks within the Precincts), there is a total of 114.3 ha of parks, which includes 106.2 ha of existing parks and 8.08 ha of planned parks.

Figure 20 - Parks within and in proximity of the Precincts, by hierarchy



6.3.2. Proximity

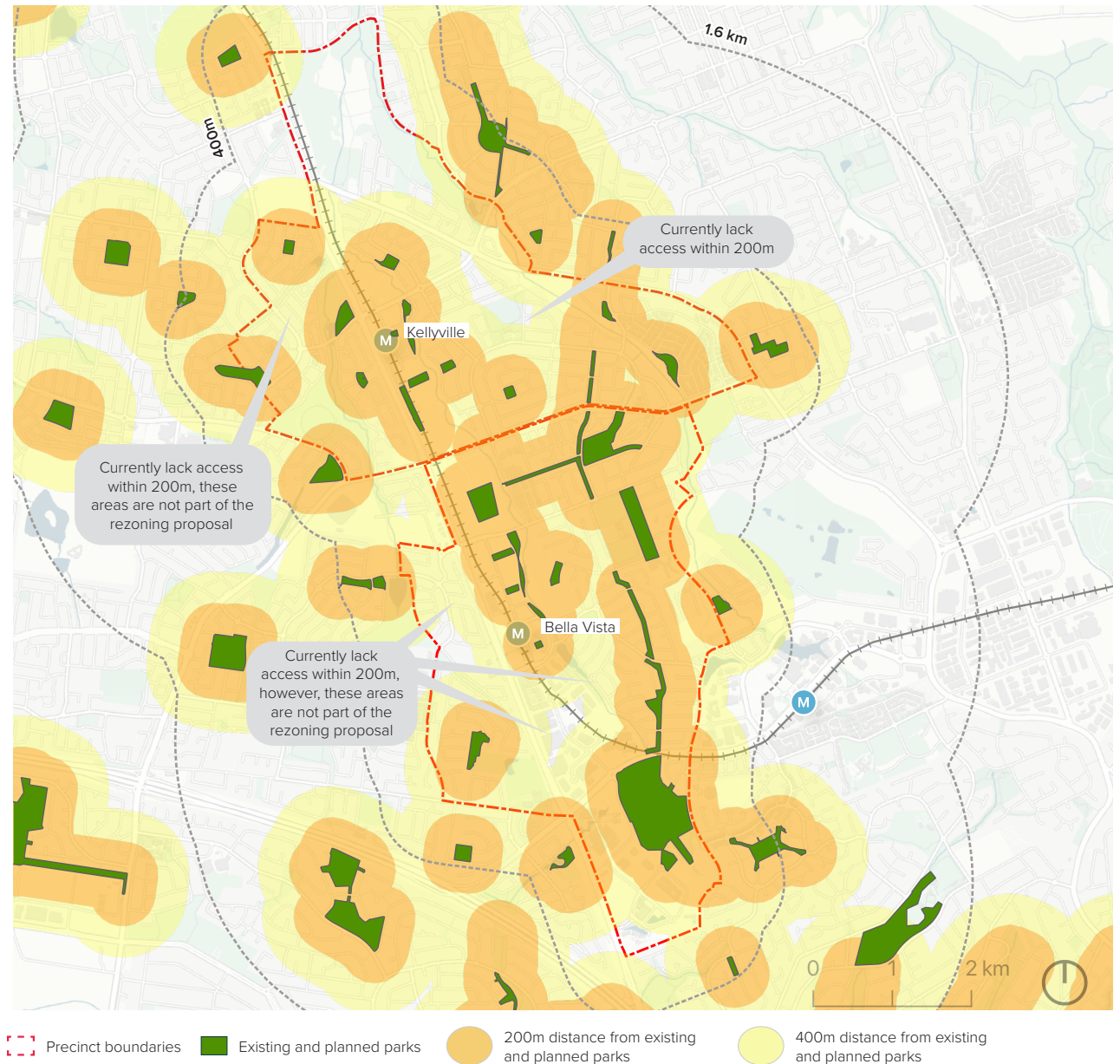
With the TOD rezoning process, it is expected that higher-density development will occur in the area. According to the desired standards outlined in Table 6, all areas within the precincts should have access to at least one local park within 200 meters.

To assess access to parks and reserves, the typical proximity benchmarks are 400 meters for local parks, 2 kilometers for district parks, and 5 kilometers for regional parks and reserves. However, for the purpose of this Needs Assessment, it is most useful to identify any areas within the Precincts that lack parks and reserves within a 200 meter and 400 meter distance.

Figure 21 shows both existing and planned parks within the Precincts, along with a 200 meter and 400 meter radius from each.

This indicates that some areas don't have access to parks within these distances and should be prioritised for future planning and delivery of parks.

Figure 21 - 200m and 400m distance from parks



6.3.3. Future demand

Benchmark demand triggered

Table 8 shows the demand for parks generated across the Precincts, as well as within the individual LGAs, based on the benchmark standard of 1 hectare per 1,000 people. By 2041, this benchmark indicates a need for 5 hectares of park space, which increases to a total of 6 hectares at the ultimate uplift, representing an additional 1 hectare. This data can help inform councils' contribution plans, where funds could be directed toward enhancing existing parks, acquiring land for new parks, or creating connections between existing parks, thereby improving the overall recreational network.

Comparison with current and planned provision to understand how much additional parks is required in the future

Table 9 compares benchmark demand with existing and planned park provisions, factoring in the current population and the SSD population within the Precincts. It indicates a total existing or planned provision of 53.1 hectares of parks. By 2041, the total demand for parks will reach 39.2 hectares, and by the ultimate uplift, the demand will increase to 40.4 hectares, indicating a benchmark surplus for the Precincts.

Table 10 extends this analysis to include the Precincts plus a 1.6 km radius. This approach factors in the likelihood that existing residents within a 1.6 km radius use parks in the Precincts, especially larger parks like Bella Vista Farm. In this broader area, there is an existing or planned provision of 114.3 hectares of parks. However, by 2041, the demand will rise to 131.4 hectares, and by the ultimate uplift, it will reach 132.6 hectares. This indicates a benchmark deficit of 17 hectares by 2041 and 18 hectares by the ultimate uplift.

In summary, while the analysis of the Precincts alone suggests adequate provision of parks, a broader analysis shows potential deficits. While the Precincts have limited capacity to address broader needs, this demonstrates that future development cannot rely on parks in the proximity to service future population growth. It also highlights the importance of delivering smaller parks where possible, and ensuring that communal open spaces are included in future developments (which would be available for use by residents of these developments). This approach will help mitigate additional pressure on existing parks, allowing them to continue serving current users who live in close proximity to the Precincts.

6.3.4. Summary of needs

The demand generated purely by the TOD uplift indicates a need for additional park spaces. However, comparing this with existing and planned provision shows that there is adequate provision of parks in terms of overall quantum within the Precincts, but a deficit of parks when looking at a broader area of 1.6km. Proximity mapping on the other hand indicates gaps in access to parks within 200m and 400m distances.

These factors indicate that there is a **need to establish local parks in areas with limited access**. Future development should also focus on enhancing the quality of existing parks within the Precincts and surrounding areas, and the provision of communal open spaces within developments to reduce pressure on existing parks.

Table 8 - Parks population-based benchmark demand

Benchmark demand triggered		Uplift to 2041			Ultimate uplift		
		Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct	Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct
Dwellings		1,547	940	2,487	1,547	1,513	3,060
Population (Dwellings * 1.965)		3,040	1,847	4,887	3,040	2,973	6,013
Parks (ha)	1 ha per 1,000 people	3 ha	2 ha	5 ha	3 ha	3 ha	6 ha

Table 9 - Parks population-based benchmark - Precincts only - comparing demand to existing and planned provision

Precincts only	Benchmark standard	Current + planned provision	By 2041 (39,226 people)		Ultimate (40,352 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Parks (ha)	1 ha per 1,000 people	53.1 ha	39.2 ha	+ 13.9 ha benchmark surplus	40.4 ha	+ 12.7 ha benchmark surplus

Table 10 - Parks population-based benchmark - Precincts + 1.6 km - comparing demand to existing and planned provision

Precincts + 1.6 km	Benchmark standard	Current + planned provision	By 2041 (131,440 people)		Ultimate (132,566 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Parks (ha)	1 ha per 1,000 people	114.3 ha	131.4 ha	-17.1 ha benchmark deficit	132.6	-18.3 ha benchmark deficit

6.4 Civic urban plazas

6.4.1. Planned civic urban plazas

As shown in Figure 22, a number of civic urban plazas are being planned and delivered as part of the SSD sites.

6.4.2. Future demand

Civic urban plazas are essential components of city life, offering spaces for community gatherings and public events. They contribute significantly to the vibrancy and connectivity of our urban areas.

There are no benchmarks to estimate the number of civic urban plazas required.

6.4.3. Summary of needs

While there are no benchmarks to estimate the number of civic urban plazas required, consider **opportunities to expand plazas** near the stations and provide more plazas in the rezoning areas.

Figure 22 - Planned urban plazas in the SSD sites (Source: Landcom, Kellyville and Bella Vista Station Precinct, Landscape Master Plan and Open Space Strategy, 2020)



6.5 Sports spaces

6.5.1 Current supply

Figure 23 shows the sports spaces within and around the Precincts. This includes areas zoned for public recreation (RE1) and accommodates playing fields and outdoor courts. It shows that there is a substantial amount of open space dedicated to sports, both within and near the Precincts.

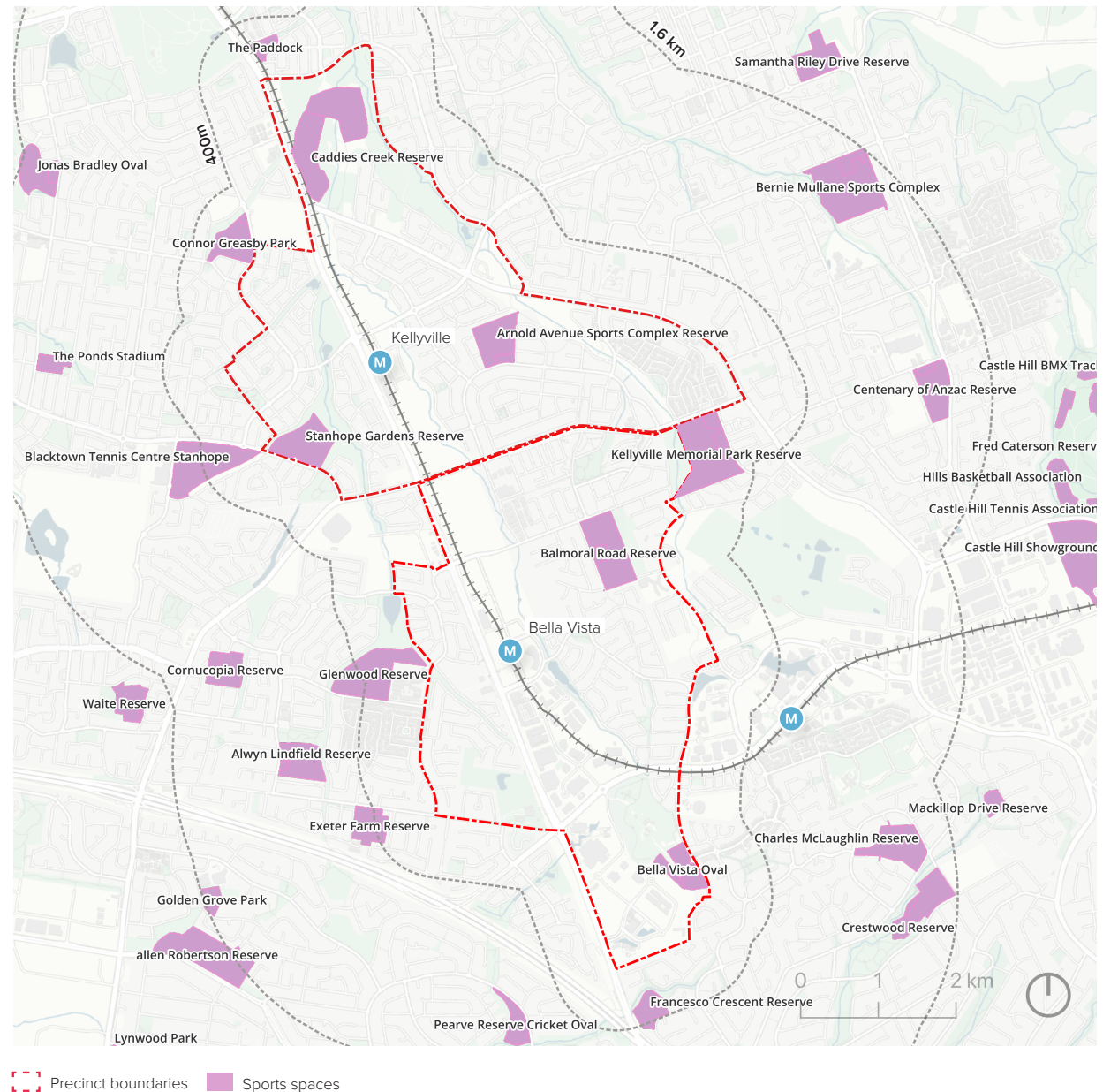
Within the Precincts, there is a total of 47.2 hectares of sports spaces that includes 37.2 hectares of existing spaces and 10 hectares of planned spaces. These include both playing fields and outdoor courts.

Sports spaces within the Precincts include Caddies Creek Reserve, Stanhope Gardens Reserve, Arnold Avenue Reserve, Balmoral Road Reserve, and Bella Vista Oval. These areas offer a variety of facilities such as playing fields, tennis courts, netball courts, multipurpose courts, and cricket nets.

Within 1.6km of the Precincts, there is an additional 147 hectares of sports spaces. It should be noted that the fields at Kellyville Memorial Park is set to become the home for Parramatta Eels with a focus on elite training. A centre of excellence is being delivered in the park, which will open in 2025.

Please refer to the Appendix for a detailed audit of sports spaces within 5km of the Precincts and the facilities within them.

Figure 23 - Sports spaces within and in proximity of the Precincts



6.5.2. Future demand

Benchmark demand triggered

Table 11 shows the demand for sports spaces (land on which playing fields and courts are located) generated across the Precincts, as well as within the individual LGAs, based on the benchmark standard of 1 hectare per 1,000 people. By 2041, this benchmark indicates a need for 5 hectares of sports space, which increases to a total of 6 hectares at the ultimate uplift, representing an additional 1 hectare. This data can help inform Council's contribution plans, where funds could be directed toward enhancing existing sports spaces or acquiring land for new sports spaces.

Comparison with current and planned provision to understand how much additional parks is required in the future

Table 12 compares benchmark demand with existing and planned sports space provisions, taking into account the current population and the SSD population within the Precincts. It indicates a total existing or planned provision of 47.2 hectares of sports spaces. By 2041, the total demand for sports spaces is projected to reach 39.2 hectares, and by the ultimate uplift, demand will increase to 40.4 hectares. This indicates a slight benchmark surplus for the Precincts by 2041 and by ultimate uplift.

Table 13 extends the analysis to include the Precincts plus a 1.6 km radius, recognising that residents within this area are likely to use the sports spaces in the Precincts. In this broader context, there is an existing or planned provision of 194.2 hectares of sports spaces. By 2041, demand will rise to 131.4 hectares, and by ultimate uplift, it will reach 132.6 hectares, indicating a benchmark surplus in both cases. However, this may not accurately reflect the true situation, as it does not consider the utilisation rates of existing sports spaces. Feedback from Council indicates that existing sports spaces are operating at, near, or beyond capacity, meaning they may not have the ability to accommodate additional pressure from population growth.

6.5.3. Summary of needs

The demand generated purely by the TOD uplift indicates a need for 5 hectares of sports spaces by 2041 and an additional 1 hectare by ultimate population. Furthermore, existing sports spaces are operating at, near, or beyond capacity, meaning they may not have the ability to accommodate additional pressure from population growth.

These factors indicate that there is a **need to provide an additional 2 to 3 hectares of sports spaces across the Precincts.**

Table 11 - Sports spaces population-based benchmark demand

Benchmark demand triggered		Uplift to 2041			Ultimate uplift		
		Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct	Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct
Dwellings		1,547	940	2,487	1,547	1,513	3,060
Population (Dwellings * 1.965)		3,040	1,847	4,887	3,040	2,973	6,013
Sports spaces (ha)	1 ha per 1,000 people	3 ha	2 ha	5 ha	3 ha	3 ha	6 ha

Table 12 - Sports spaces population-based benchmark - Precincts only - comparing demand to existing and planned provision

Precincts only	Benchmark standard	Current + planned provision	By 2041 (39,226 people)		Ultimate (40,352 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Sports spaces (ha)	1 ha per 1,000 people	47.2 ha	39.2 ha	+ 8 ha benchmark surplus	40.4 ha	+6.8 ha benchmark surplus

Table 13 - Sports spaces population-based benchmark - Precincts + 1.6 km - comparing demand to existing and planned provision

Precincts + 1.6 km	Benchmark standard	Current + planned provision	By 2041 (131,440 people)		Ultimate (132,566 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Sports spaces (ha)	1 ha per 1,000 people	194.2 ha	131.4 ha	+ 62.8 ha benchmark surplus	132.6 ha	+ 61.6 ha benchmark surplus

6.6 Playing fields -

6.6.1. Current supply

As shown in Figure 24, there are over 40 playing fields within and in proximity of the Precincts. A variety of sports are played on these fields, including cricket, soccer, hockey, AFL, rugby, baseball and touch football.

Feedback from both Blacktown Council and Hills Shire Council emphasises that existing fields are already operating at capacity.

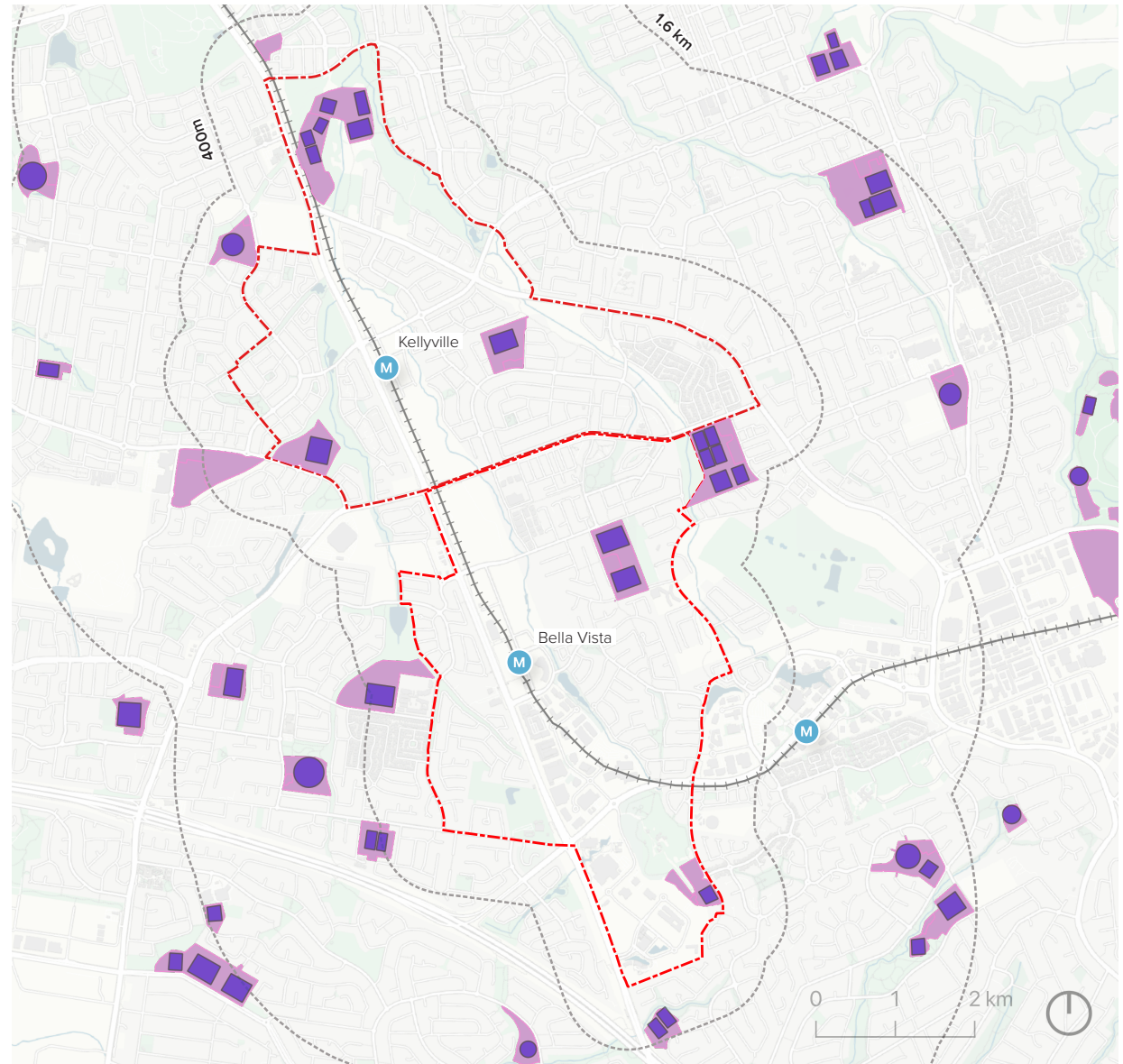
The planned four additional playing fields at Caddies Creed Reserve will accommodate the future population resulting from the initial 13,845 people/ 8,400 dwellings, and any additional population beyond this threshold will require the provision of new playing fields.

There are:

- 11 existing and planned playing fields within the Precincts, and
- An additional 25 fields within 1.6km of the Precincts.

Please refer to the Appendix for a detailed audit of playing fields within 5km of the Precincts and the facilities within them.

Figure 24 - Existing and planned playing fields within and in proximity of the Precincts



--- Precinct boundaries ■ Sports spaces ● Playing fields

6.6.2. Future demand

Benchmark demand triggered

Table 14 shows the demand for playing fields generated across the Precincts, as well as within the individual LGAs, based on the benchmark standard of 1 field per 4,000 people. By 2041, this benchmark indicates a need for 1.5 fields, which increases to a total of 2 fields at ultimate uplift. This data can help inform Council's contribution plans, where funds could be directed toward enhancing existing playing fields or acquiring land for and embellishing new playing fields.

Comparison with current and planned provision to understand how much additional parks is required in the future

Table 15 compares benchmark demand with existing and planned playing field provisions, considering both the current population and the SSD population within the Precincts. It indicates a total existing or planned provision of 11 fields, including those planned at Caddies Creek. By 2041 and by ultimate population, the total demand for playing fields is projected to reach 10 fields. This results in a benchmark surplus for the Precincts. However, this assessment may not accurately reflect the true situation, as it does not account for the utilisation rates of existing playing fields. Feedback from Council indicates that current fields are operating at, near, or beyond capacity, suggesting they may struggle to accommodate additional pressure from population growth.

Table 16 extends the analysis to include the Precincts plus a 1.6 km radius, recognising that residents within this area are likely to use the playing fields in the Precincts. In this broader context, there is an existing or planned provision of 25 fields. A benchmark standard of one field per 4,000 people has been applied for the high-density areas within the Precincts, while a standard of one field per 2,000 people is used for the surrounding 1.6 km radius, reflecting the benchmark for lower-density areas. By 2041 and by ultimate population, demand will reach 56 fields, indicating significant benchmark deficits in both scenarios. Although the Precincts may not be able to cater to the deficits in the surrounding 1.6 km area, this analysis demonstrates that the Precincts cannot rely on nearby playing fields. Therefore, it is essential for the Precincts to provide new fields proportional to population growth.

6.6.3. Summary of needs

Considering that existing fields are operating at capacity and have limited ability to accommodate additional demand, aligning with the demands purely generated by the TOD uplift, deliver a **minimum of two new playing fields**.

Table 14 - Playing fields population-based benchmark demand

Benchmark demand triggered		Uplift to 2041			Ultimate uplift		
		Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct	Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct
Dwellings		1,547	940	2,487	1,547	1,513	3,060
Population (Dwellings * 1.965)		3,040	1,847	4,887	3,040	2,973	6,013
Playing fields	1 field per 4,000 people	1 field	0.5 field	1.5 fields	1 field	1 field	2 fields

Table 15 - Playing fields population-based benchmark - Precincts only - comparing demand to existing and planned provision

Precincts only	Benchmark standard	Current + planned provision	By 2041 (39,226 people)		Ultimate (40,352 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Playing fields	1 field per 4,000 people for Precincts	11 fields	10 fields	+ 1 field benchmark surplus	10 fields	+ 1 field benchmark surplus

Table 16 - Playing fields population-based benchmark - Precincts + 1.6 km - comparing demand to existing and planned provision

Precincts + 1.6 km	Benchmark standard	Current + planned provision	By 2041 (131,440 people)		Ultimate (132,566 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Playing fields	1 field per 4,000 people for Precincts and 1 field per 2,000 for 1.6km radius area	36 fields	56 fields	-20 fields benchmark deficit	56 fields	-20 fields benchmark deficit

6.7 Outdoor courts

6.7.1. Current supply

As shown in Figure 25, within the existing sports spaces located in and around the Precincts, there are 74 outdoor courts. A variety of sports are played on these courts, including basketball, netball, and tennis. It is worth noting that these courts not only serve the local resident population, but many of them are also used by people from a broader catchment area.

There are:

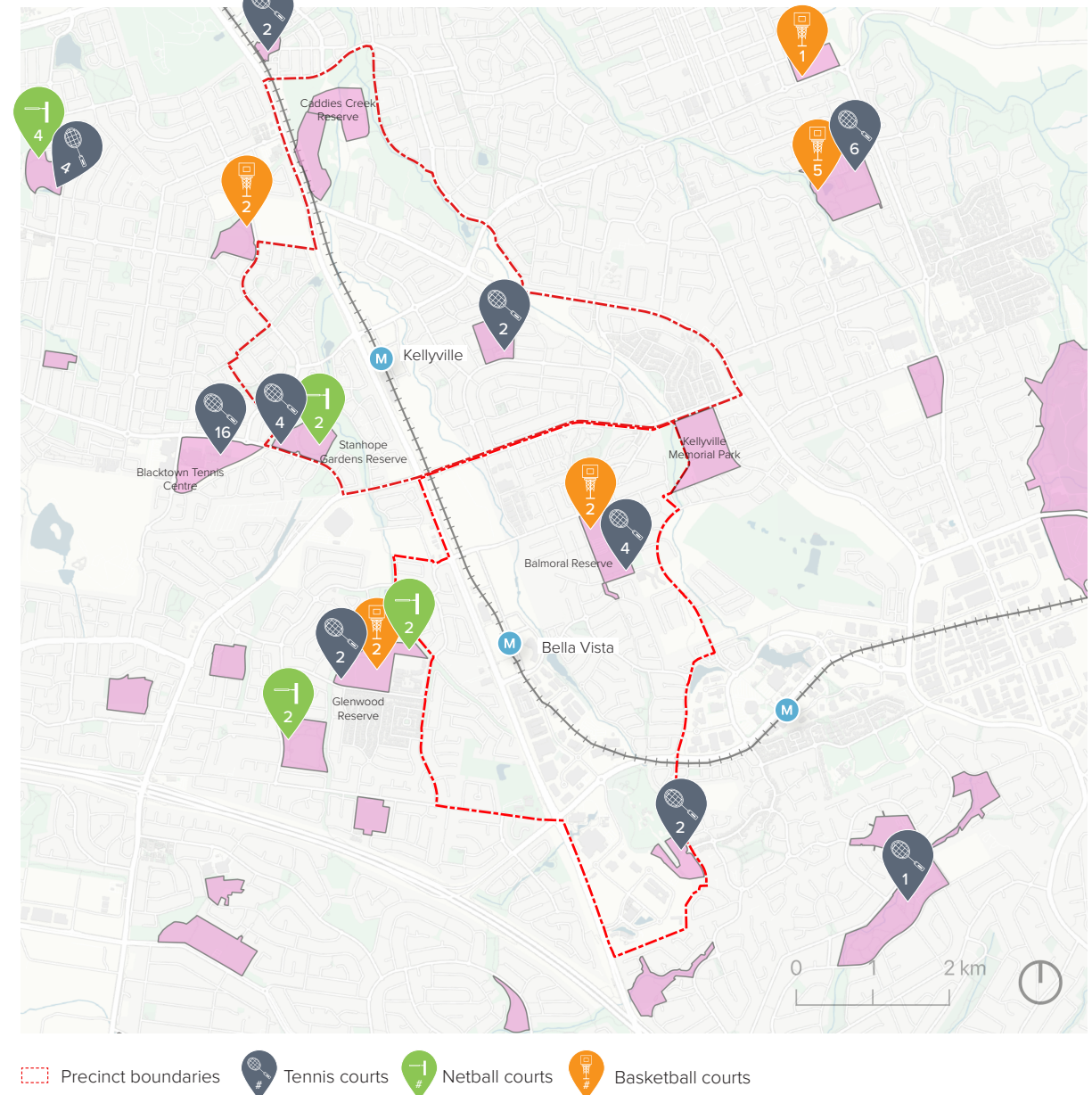
- 16 outdoor courts within the Precincts, and
- An additional 58 outdoor courts within 1.6km of the Precincts.

Please refer to the Appendix for a detailed audit of courts within 5km of the Precincts and the facilities within them.



Crestwood Reserve

Figure 25 - Outdoor courts within and in proximity of the Precincts



6.7.2. Future demand

Benchmark demand triggered

Table 17 shows the demand for outdoor courts generated across the Precincts, as well as within the individual LGAs, based on the benchmark standard of 1 court per 4,200 people. By 2041 and by ultimate population, this benchmark indicates a need for 1 court. This data can help inform Council's contribution plans, where funds could be directed toward enhancing existing courts or establishing new outdoor courts - both formal and informal.

Comparison with current and planned provision to understand how much additional parks is required in the future

Table 18 compares benchmark demand with existing and planned outdoor courts provisions, taking into account the current population and the SSD population within the Precincts. It indicates a total existing or planned provision of 16 courts. By 2041, the total demand for outdoor courts is projected to reach 9 courts, and by the ultimate uplift, demand will increase to 10 courts. This results in a benchmark surplus for both scenarios.

Table 19 extends the analysis to include the Precincts plus a 1.6 km radius, recognising that residents within this area are likely to use the courts in the Precincts. In this broader context, there is an existing or planned provision of 58 courts. By 2041, demand will be 31 courts, and by the ultimate uplift, it will reach 32 courts, indicating a benchmark surplus in both cases.

However, this may not accurately reflect the true situation, as it does not consider the utilisation rates of existing outdoor courts. Feedback from Council indicates that spaces such as tennis courts are likely under-utilised but there is a rising demand for more multi-purpose outdoor courts and basket ball courts.

6.7.3. Summary of needs

While there is no benchmark deficit in outdoor courts when compared to current provision both within the Precincts and surrounding areas, considering rising demand for outdoor courts, **incorporate new informal courts**, such as basketball half-courts and multipurpose courts as part of parks, sports spaces, under viaduct areas, town squares and plazas, and communal open spaces in residential developments. In the long-term, based on how participation and utilisation rates of courts shift, some courts could be retro-fitted to cater to sports in demand.

Table 17 - Outdoor courts population-based benchmark demand

Benchmark demand triggered		Uplift to 2041			Ultimate uplift		
		Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct	Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct
Dwellings		1,547	940	2,487	1,547	1,513	3,060
Population (Dwellings * 1.965)		3,040	1,847	4,887	3,040	2,973	6,013
Outdoor courts	1 court per 4,200 people	0.7 court	0.4 court	1 court	0.7 court	0.7 court	1 court

Table 18 - Outdoor courts population-based benchmark - Precincts only - comparing demand to existing and planned provision

Precincts only	Benchmark standard	Current + planned provision	By 2041 (39,226 people)		Ultimate (40,352 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Outdoor courts	1 court per 4,200 people	16 courts	9 courts	+ 7 courts benchmark surplus	10 courts	+6 courts benchmark surplus

Table 19 - Outdoor courts population-based benchmark - Precincts + 1.6 km - comparing demand to existing and planned provision

Precincts + 1.6 km	Benchmark standard	Current + planned provision	By 2041 (131,440 people)		Ultimate (132,566 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Outdoor courts	1 court per 4,200 people	58 courts	31 courts	+ 27 courts benchmark surplus	32 courts	+ 26 courts benchmark surplus

A variety of recreation facilities are available within and in proximity of the Precincts. Figure 26 shows adventure spaces, dog off-leash spaces and outdoor fitness stations that are within and in the vicinity of the Precincts.

6.8 Adventure spaces

6.8.1. Current supply

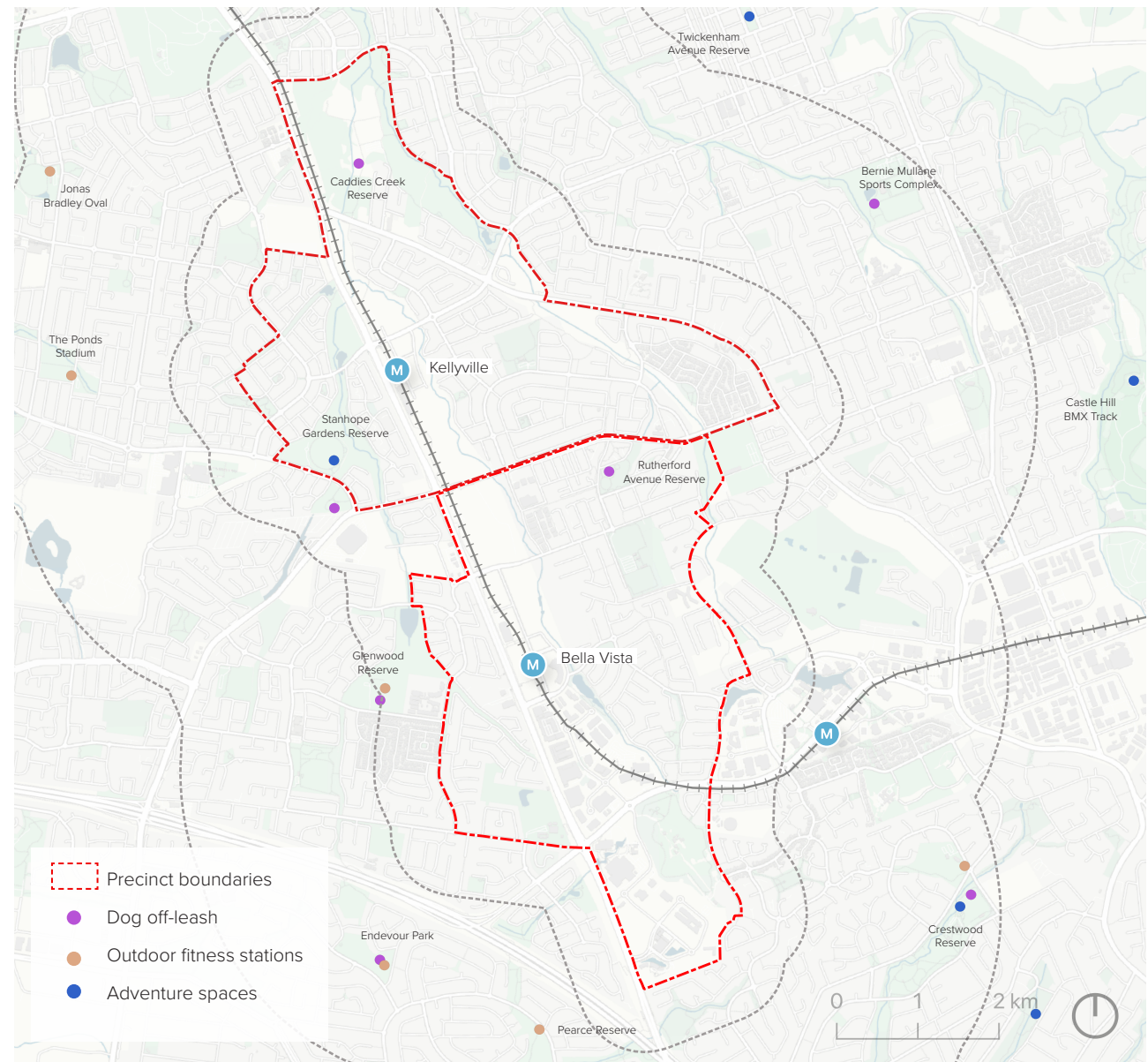
The NSW Adventure Spaces Guidelines notes that there are two different type of adventure spaces - roll and ride activities.

Roll activities use a wheeled, non-motorised device within a skate park or the urban environment. This can include skateboards, scooter and bikes.

Ride activities include mountain biking trails, pump tracks and skill parks.

As shown in Figure 26, there is currently 1 adventure space within the Precincts and an additional facility within 1.6km. There are three more within proximity of the Precincts. These include skate parks, pump tracks and mountain bike trails.

Figure 26 - Recreation facilities within and around the Precincts



6.8.2. Future demand

Benchmark demand triggered

Table 21 shows the demand for adventure spaces generated across the Precincts, as well as within the individual LGAs, based on the benchmark standard of 1 facility per 48,000 people. By 2041 and ultimate uplift, this benchmark does not trigger a need for an adventure space in the Precincts.

Comparison with current and planned provision to understand how much additional parks is required in the future

Table 22 compares benchmark demand with existing and planned adventure spaces provisions, taking into account the current population and the SSD population within the Precincts. It indicates a total existing or planned provision of 1 adventure facility at Stanhope Gardens Reserve. By 2041 and ultimate uplift, there is benchmark demand for 1 adventure facility which will be met by current provision.

Table 23 extends the analysis to include the Precincts plus a 1.6 km radius, recognising that residents within this area are likely to use the adventure space in the Precincts. In this broader context, there is an existing or planned provision of 2 adventure facilities, which includes the provision at Crestwood Reserve. By 2041 and by the ultimate uplift, the demand will rise to 3 adventure spaces, indicating a benchmark deficit of one adventure space.

While the TOD uplift and any planned open space and recreation facilities likely cater primarily to future growth, adventure spaces represent a recreational opportunity that could address unmet demands in the surrounding area. Although providing large-scale adventure facilities, such as district skate parks, may be challenging, there are opportunities to incorporate smaller, local adventure spaces. For example, creating “learn to ride” loops in parks and smaller roll facilities, like those at Glenwood Skate Park in NSW, can effectively serve the community’s needs while promoting active recreation.

6.8.3. Summary of needs

There is no demand or benchmark deficit for adventure spaces projected for either 2041 or the ultimate population. As an opportunity to meet broader community unmet needs, **consider incorporating local adventure roll or ride spaces** as part of parks, sports spaces, under viaduct areas, town squares and plazas, and communal open spaces in residential developments.

Table 20 - Adventure spaces population-based benchmark demand

Benchmark demand triggered		Uplift to 2041			Ultimate uplift		
		Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct	Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct
Dwellings		1,547	940	2,487	1,547	1,513	3,060
Population (Dwellings * 1.965)		3,040	1,847	4,887	3,040	2,973	6,013
Adventurous spaces	1 facility per 48,000 people	0 facility	0 facility	0 facility	0 facility	0 facility	0 facility

Table 21 - Adventure spaces population-based benchmark - Precincts only - comparing demand to existing and planned provision

Precincts only	Benchmark standard	Current + planned provision	By 2041 (39,226 people)		Ultimate (40,352 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Adventurous spaces	1 facility per 48,000 people	1 facility	1 facility	0 facility	1 facility	0 facility

Table 22 - Adventure spaces population-based benchmark - Precincts + 1.6 km - comparing demand to existing and planned provision

Precincts + 1.6 km	Benchmark standard	Current + planned provision	By 2041 (131,440 people)		Ultimate (132,566 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Adventurous spaces	1 facility per 48,000 people	2 facilities	3 facilities	-1 facility benchmark deficit	3 facilities	-1 facility benchmark deficit

6.9 Outdoor fitness stations

6.9.1. Current supply

As shown in Figure 26, there are currently no outdoor fitness stations within the Precincts and seven outdoor fitness stations within 1.6km of the Precincts.

6.9.2. Future demand

Benchmark demand triggered

Table 24 shows the demand for outdoor fitness stations generated across the Precincts, as well as within the individual LGAs, based on the benchmark standard of 1 facility per 12,000 people. By 2041 and ultimate uplift, this benchmark triggers a need for 0.5 outdoor fitness station. This data can help inform Council's contribution plans, where funds could be directed toward enhancing existing or establishing new fitness stations.

Comparison with current and planned provision to understand how much additional parks is required in the future

Table 25 compares benchmark demand with existing and planned fitness station provisions, taking into account the current population and the SSD population within the Precincts. By 2041 and by ultimate population, there will be a demand for 3 outdoor fitness stations. This indicates a benchmark deficit of 3 stations by 2041 and by ultimate uplift.

Table 26 extends the analysis to include the Precincts plus a 1.6 km radius, acknowledging that current residents within the Precincts are likely using outdoor fitness stations in this larger area. In this broader context, there is an existing or planned provision of 7 outdoor fitness stations. By 2041 and ultimate uplift, the demand for these stations is projected to reach 11. This indicates a deficit of 4 stations. While future provision within the Precincts may not be able to fully address this deficit, it highlights that the Precincts cannot depend on surrounding areas to meet the demand for future growth and will likely need to establish new outdoor fitness stations within their boundaries.

6.9.3. Summary of needs

While the TOD uplift generates a demand for only 1 (rounded up from 0.5) outdoor fitness station by both 2041 and the ultimate uplift, when considering current provision and existing population, there is a deficit of 3 stations. This presents an opportunity to **provide 3 outdoor fitness stations in the Precincts** within existing and future open spaces to address unmet latent demand.

Table 23 - Outdoor fitness stations population-based benchmark demand

Benchmark demand triggered		Uplift to 2041			Ultimate uplift		
		Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct	Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct
Dwellings		1,547	940	2,487	1,547	1,513	3,060
Population (Dwellings * 1.965)		3,040	1,847	4,887	3,040	2,973	6,013
Outdoor fitness stations	1 station per 12,000 people	0.3 station	0.2 station	0.5 station	0.3 station	0.2 station	0.5 station

Table 24 - Outdoor fitness stations population-based benchmark - Precincts only - comparing demand to existing and planned provision

Precincts only	Benchmark standard	Current + planned provision	By 2041 (39,226 people)		Ultimate (40,352 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Outdoor fitness stations	1 station per 12,000 people	0 station	3 stations	-3 stations benchmark deficit	3 stations	-3 stations benchmark deficit

Table 25 - Outdoor fitness stations population-based benchmark - Precincts + 1.6 km - comparing demand to existing and planned provision

Precincts + 1.6 km	Benchmark standard	Current + planned provision	By 2041 (131,440 people)		Ultimate (132,566 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Outdoor fitness stations	1 station per 12,000 people	7 stations	11 stations	-4 stations benchmark deficit	11 stations	-4 stations benchmark deficit

6.10 Dog off-leash areas

6.10.1. Current supply

As shown in Figure 26, 2 dog off-leash areas are located within the Precincts, and an additional 6 within 1.6km of the Precincts. According to Animal Medicines Australia (2022, approximately 69% of households in Australia own pets, with dogs being the most common (48%), followed by cats (33%). This rate is likely to increase in the future.

6.10.2. Future demand

Benchmark demand triggered

Table 27 shows the demand for dog off-leash areas generated across the Precincts, as well as within the individual LGAs, based on the benchmark standard of 1 facility per 50,000 people. By 2041 and ultimate uplift, this benchmark does not trigger a need for another dog off-leash area.

Comparison with current and planned provision to understand how much additional parks is required in the future

Table 28 compares benchmark demand with existing and planned fitness station provisions, taking into account the current population and the SSD population within the Precincts. By 2041 and by ultimate uplift, there will be a demand for one dog off-leash area, which will be met by current provision.

Table 26 extends the analysis to include the Precincts plus a 1.6 km radius, acknowledging that current residents within the Precincts are likely using dog off-leash areas in this larger area. In this broader context, there is an existing or planned provision of 8 dog off-leash areas. By 2041 and by ultimate uplift, benchmarking indicates a demand for 3 dog off-leash areas, which indicates a benchmark surplus in both scenarios.

6.10.3. Summary of needs

There is no demand or benchmark deficit for dog off-leash areas. However, with the increasing trend of dog ownership in Australia, consider **providing amenities such as dog waste bags and water fountains in parks and open spaces** to support on-leash and off-leash activities.

Table 26 - Dog off-leash areas population-based benchmark demand

Benchmark demand triggered		Uplift to 2041			Ultimate uplift		
		Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct	Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct
Dwellings		1,547	940	2,487	1,547	1,513	3,060
Population (Dwellings * 1.965)		3,040	1,847	4,887	3,040	2,973	6,013
Dog off-leash	1 facility per 50,000 people	0	0	0	0	0	0

Table 27 - Dog off-leash areas population-based benchmark - Precincts only - comparing demand to existing and planned provision

Precincts only	Benchmark standard	Current + planned provision	By 2041 (39,226 people)		Ultimate (40,352 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Dog off-leash	1 facility per 50,000 people	2 areas	1 area	+1 area benchmark surplus	1 area	+1 area benchmark surplus

Table 28 - Dog off-leash areas population-based benchmark - Precincts + 1.6 km - comparing demand to existing and planned provision

Precincts + 1.6 km	Benchmark standard	Current + planned provision	By 2041 (131,440 people)		Ultimate (132,566 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Dog off-leash	1 facility per 50,000 people	8 areas	3 areas	+5 areas benchmark surplus	3 areas	+5 areas benchmark surplus

6.11 Playgrounds

6.11.1. Current supply

A majority of existing parks, reserves and sports spaces include playgrounds in them. As shown in Figure 27, there are currently 9 playgrounds within the Precincts and another 17 within close proximity of the Precincts.

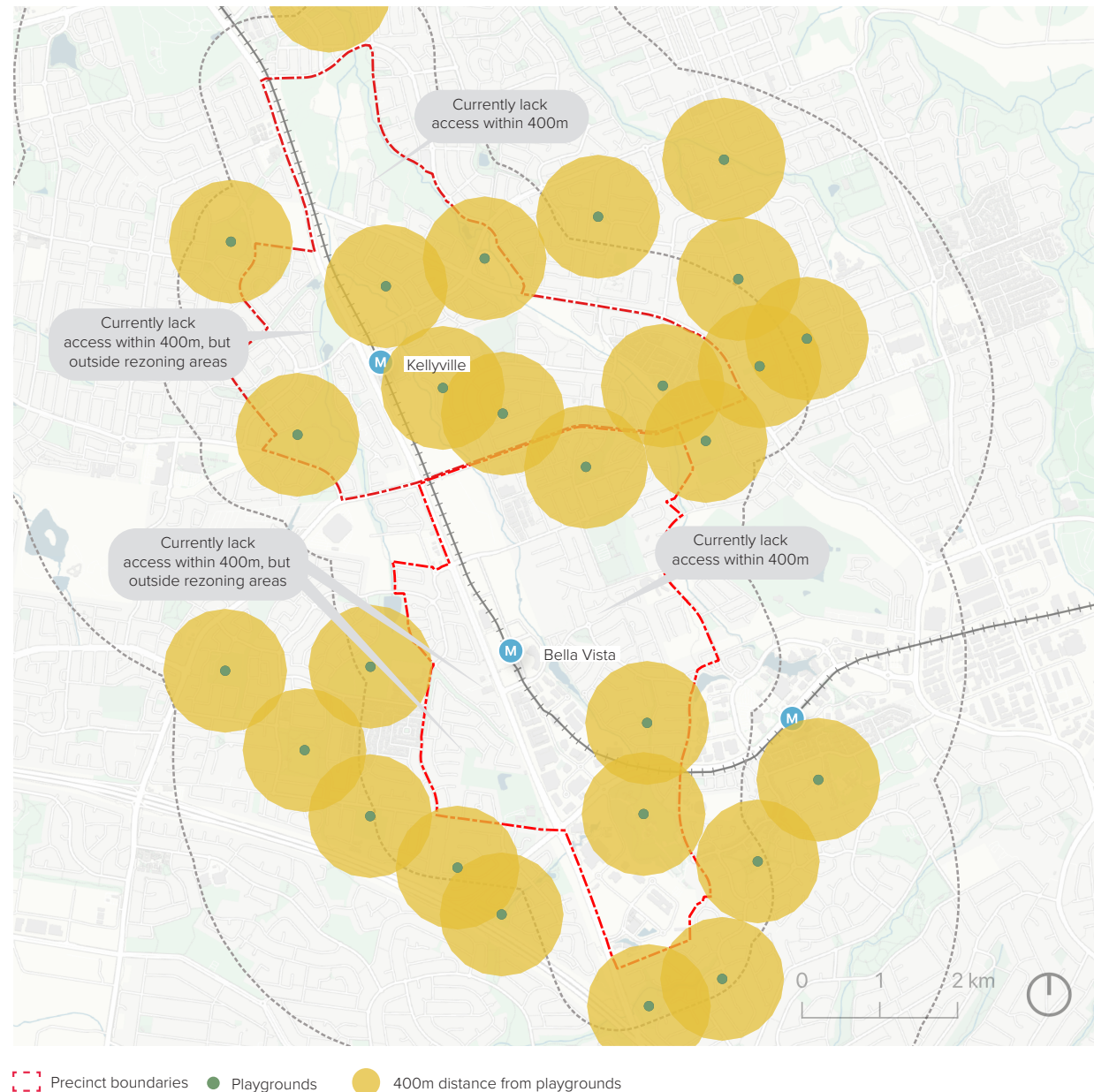
6.11.2. Future demand

The adopted benchmark for playgrounds is that all homes should be within 400m of a playground. Figure 27 shows a 400m distance from existing playgrounds and shows that many areas lack access to a playground within 400m distance.

6.11.3. Summary of needs

An additional **2-3 playgrounds would be required to bridge access gaps**. Where possible, playgrounds should enable use by people of all ages and abilities.

Figure 27 - Playgrounds within and in proximity of the Precincts



Bella Vista and Kellyville Precincts - Open Space Assessment



Balcombe Heights Reserve



Turon Avenue Reserve



International Peace Park



Coolong Reserve



Livvi's Place Playground



Ted Horwood Reserve



Needs Assessment

7. Needs assessment

Principles

The following principles have been established for the planning and delivery of future open spaces, taking into consideration the current and projected demographic makeup of the community, open space and recreation trends, best practices, and the recent consultation conducted by Landcom.

Welcoming to everyone

Ensure that open spaces are welcoming to people of all ages, abilities, and backgrounds. Design spaces that cater to a diverse range of uses and recreational preferences.

Networked open spaces

Ensure open spaces are well-connected to surrounding areas and to other existing open spaces via quality walking and cycling links. Ensure that connections are designed to encourage higher levels of physical activity and serve as destinations in their own right by offering a range of recreation activities, enhancing the overall appeal and functionality of the network.

Connection to nature

Design open spaces with an emphasis on natural elements to promote relaxation and wellbeing. Include trees, native plants, gardens, and water features to create a calming environment. This also supports local biodiversity.

Innovative design

Future open spaces should incorporate innovative design approaches that deliver open spaces not just on the ground, embrace new technologies, sustainable practices, and creative uses of space.

Flexible and adaptable

Create open spaces that can adapt to different uses over time. Consider multi-use areas that can host community events, markets, or performances. Provide movable furniture or adjustable setups to accommodate various activities and seasonal changes.

Social anchors

Design open spaces that foster interpersonal connections and support social connection and play for all ages. Include playgrounds, picnic areas, and community gathering spaces.

What we have

There are significant open spaces both within and around the Precincts, encompassing a variety of parks, sports spaces accommodating both playing fields and outdoor courts, and some private recreation areas.

Bella Vista Farm is the only regional open space within the Precincts. Several district open spaces, primarily sports facilities, serve people living within and beyond the Precincts. The majority of parks, however, are local spaces, indicating a limited number of district open spaces that provide passive recreation opportunities.

There are several linkage parks within the Precincts, creating a network of connected open spaces, which will be a priority moving forward. Additionally, more open spaces are planned within the Precincts as part of the SSD sites.

Figure 28 - Existing open spaces by function

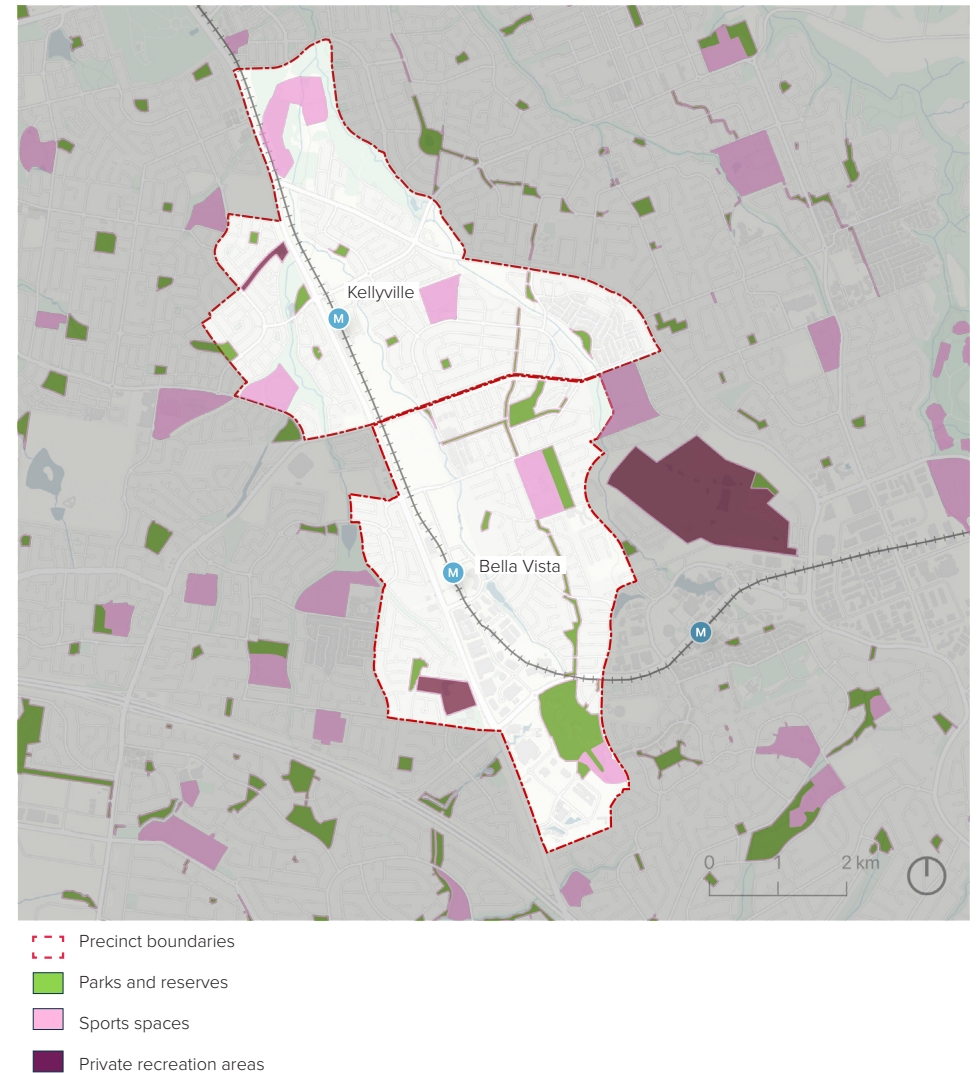
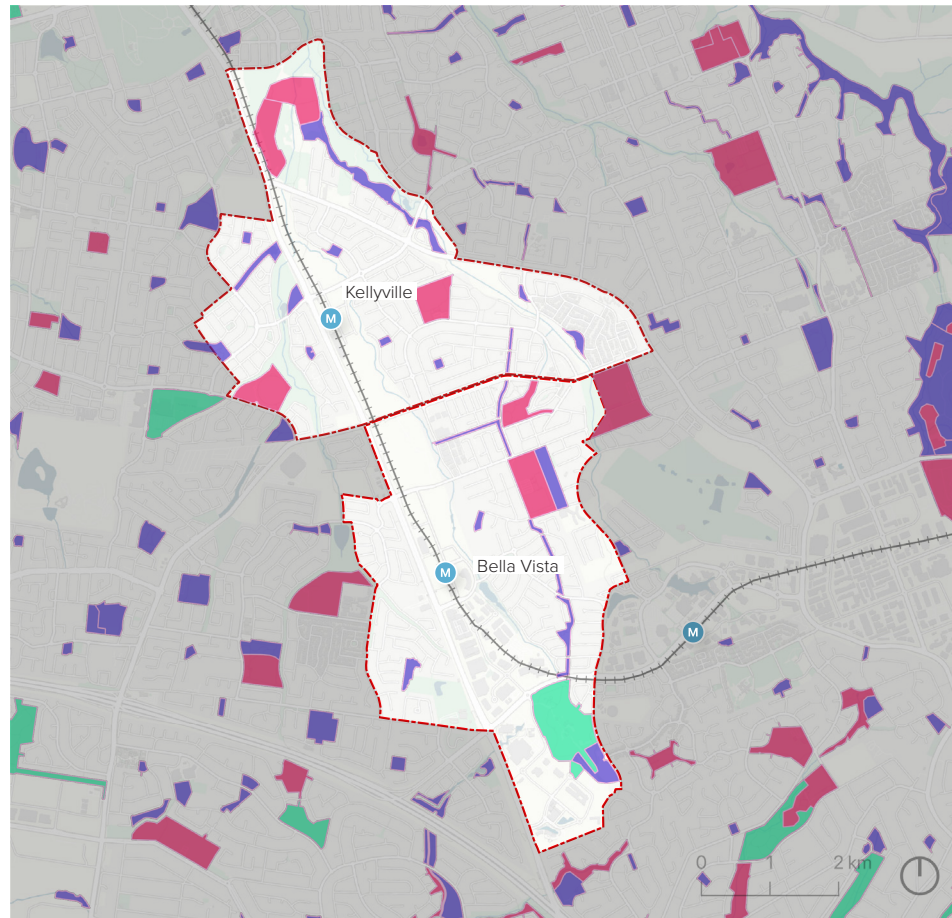
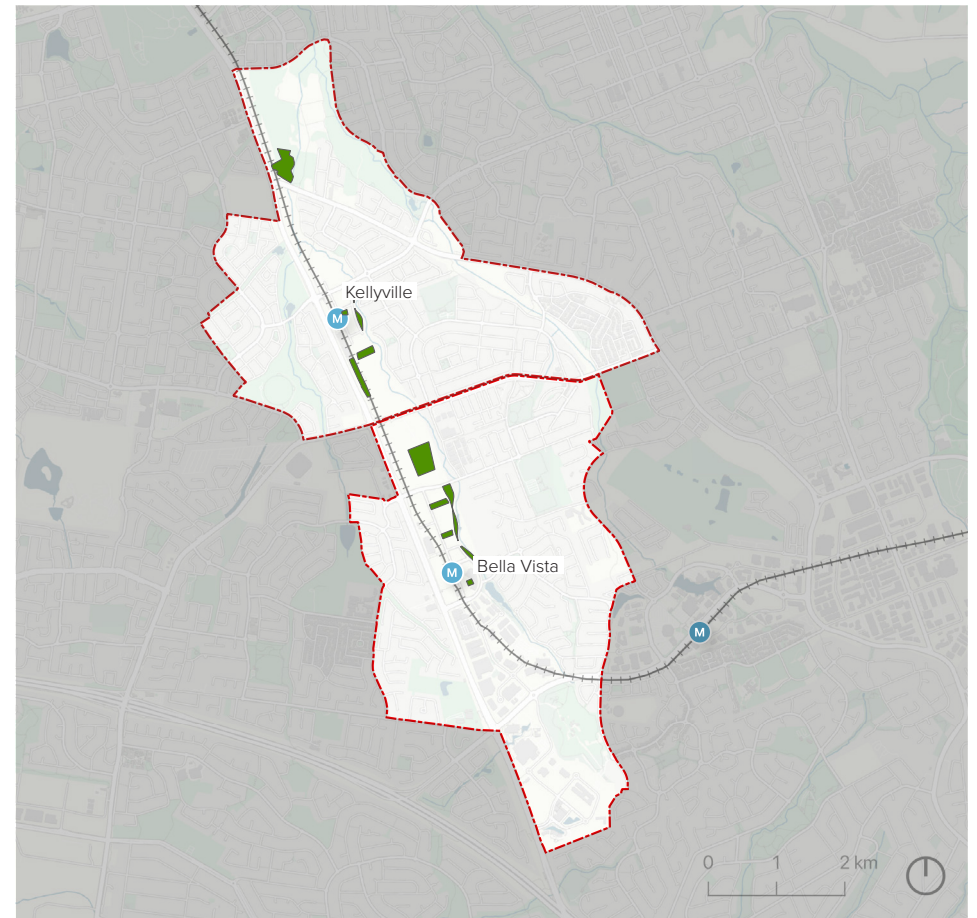


Figure 29 - Existing open spaces by hierarchy



- Precinct boundaries
- Local open spaces
- District open spaces
- Regional open spaces

Figure 30 - Planned open spaces



- Precinct boundaries
- Planned open spaces

What we need

TOD population uplift

By 2041, there is an estimated TOD uplift of 2,487 dwellings, resulting in a projected population increase of 4,887 people within the Precincts.

The ultimate dwelling uplift across the two Precincts will reach 3,060 dwellings upon completion, which is an additional 573 dwellings from 2041. This translates to an anticipated ultimate uplift population of 6,013 people, which is an additional 1,126 people from 2041.

This population uplift is in addition to the existing population of 20,494 people in the Precincts and the anticipated population of 13,845 people resulting from the originally planned 8,400 dwellings.

The combination of the existing population, the population projected from the SSD sites, and the new population uplift will yield a total population of 39,226 people by 2041 and an ultimate uplift population of 40,352 people within the Precincts.

A review of previous studies and key strategies identify that adequate open spaces have been planned to cater to the population resulting from the originally anticipated 13,845 people/ 8,400 dwellings, and any new population will require provision of new open spaces.

Population growth nearby

Draft precinct plans for neighbouring areas such as Norwest and Rouse Hill indicate substantial future population growth, with these populations likely to use open spaces in and around the Kellyville and Bella Vista Precincts. This cumulative growth highlights the need for new and embellished open spaces to support future liveability.

Strategic priorities

Both Blacktown and Hills Shire Councils' open space and recreation strategies recognise the substantial existing provision but also acknowledge a deficit when considering significant population growth. They particularly highlight the need for additional spaces for active recreation and call for more diverse recreational facilities, including adventure play areas, outdoor fitness stations, and off-leash dog parks. Furthermore, they stress the importance of creating recreational links between open spaces to ensure accessibility and connectivity.

Benchmarking

A variety of indicators or benchmarks have been used in this Study including population and proximity benchmarks, and participation and utilisation trends.

They confirm the need for some additional open spaces and recreational facilities to cater to the forecast population growth.



International Peace Park

Population benchmarking summary

The table below summarises the analysis of open space and recreation facilities population benchmarking results.

Table 29 - Number of open spaces or facilities triggered by TOD uplift based on population benchmarks

Benchmark demand triggered		Uplift to 2041			Ultimate uplift		
		Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct	Kellyville Precinct (The Hills)	Bella Vista Precinct (The Hills)	Total Precinct
Dwellings		1,547	940	2,487	1,547	1,513	3,060
Population (Dwellings * 1.965)		3,040	1,847	4,887	3,040	2,973	6,013
Parks (ha)	1 ha per 1,000 people	3 ha	2 ha	5 ha	3 ha	3 ha	6 ha
Sports spaces (ha)	1 ha per 1,000 people	3 ha	2 ha	5 ha	3 ha	3 ha	6 ha
Playing fields	1 field per 4,000 people	1 field	0.5 field	1 field	1 field	1 field	2 fields
Outdoor courts	1 court per 4,200 people	0.7 court	0.4 court	1 court	0.7 court	0.7 court	1 court
Adventurous spaces	1 facility per 48000 people	0	0	0	0	0	0
Dog off-leash	1 facility per 50,000 people	0	0	0	0	0	0
Outdoor fitness stations	1 station per 12,000 people	0.3 station	0.2 station	0.5 station	0.3 station	0.2 station	0.5 station

Please note that this is information useful to inform councils' contribution plans, but needs identified taken into account existing and planned provision and population, and other indicators such as proximity, participation and utilisation trends.

Table 30 - Precincts only population benchmarking considering uplift to 2041 and ultimate population

Precincts only	Benchmark standard	Current + planned provision	By 2041 (41,079 people)		Ultimate (50,798 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Parks (ha)	1 ha per 1,000 people	53.1 ha	39.2 ha	+13.9 ha benchmark surplus	40.4 ha	+ 12.7 ha benchmark surplus
Sports spaces (ha)	1 ha per 1,000 people	47.2 ha	39.2 ha	+ 8.0 ha benchmark surplus	40.4 ha	+ 6.8 ha benchmark surplus
Playing fields	1 field per 4,000 people for precinct and 1 field per 2,000 for 1.6km radius area	11 fields	10 fields	+ 1 fields benchmark surplus	10 fields	+ 1 fields benchmark surplus
Outdoor courts	1 court per 4,200 people	16 courts	9 courts	+ 7 courts benchmark surplus	10 courts	+ 6 courts benchmark surplus
Adventurous spaces	1 facility per 48000 people	1 facility	1 facility	0	1 facility	0
Dog off-leash areas	1 facility per 50,000 people	2 areas	1 area	+ 1 area benchmark surplus	1	+ 1 area benchmark surplus
Outdoor fitness stations	1 station per 12,000 people	0 stations	3 stations	-3 stations benchmark deficit	3 stations	-3 stations benchmark deficit

Please note that these are summaries of population based benchmarks only, the needs identified take into account proximity, utilisation and participation trends.

Table 31 - Precinct + 1.6 km population benchmarking considering uplift to 2041 and ultimate population

Precincts + 1.6 km	Benchmark standard	Current + planned provision	By 2041 (133,293 people)		Ultimate (143,012 people)	
			Benchmark demand	Benchmark gap	Benchmark demand	Benchmark gap
Parks (ha)	1 ha per 1,000 people	114.3 ha	131.4 ha	-17.1 ha benchmark deficit	132.6 ha	-18.3 ha benchmark deficit
Sports spaces (ha)	1 ha per 1,000 people	194.2 ha	131.4 ha	+ 62.8 ha benchmark surplus	132.6 ha	+ 61.6 ha benchmark surplus
Playing fields	1 field per 4,000 people for precinct and 1 field per 2,000 for 1.6km radius area	36 fields	56 fields	-20 fields benchmark deficit	56 fields	-20 fields benchmark deficit
Outdoor courts	1 court per 4,200 people	58 courts	31 courts	+ 27 courts benchmark surplus	32 courts	+ 26 courts benchmark surplus
Adventurous spaces	1 facility per 48,000 people	2 facilities	3 facilities	-1 facility benchmark deficit	3 facilities	-1 facility benchmark deficit
Dog off-leash	1 facility per 50,000 people	8 areas	3 areas	+ 5 areas benchmark surplus	3 areas	+ 5 areas benchmark surplus
Outdoor fitness stations	1 station per 12,000 people	7 stations	11 stations	-4 stations benchmark deficit	11 stations	-4 stations benchmark deficit

Please note that these are summaries of population based benchmarks only, the needs identified take into account proximity, utilisation and participation trends.

Open spaces and recreation facilities needed to cater to future population growth

Considering the available open spaces and recreation facilities within the Precincts and within a 1.6km radius and comparing them to the existing and forecast population of the area, indicate a need for the following additional open spaces and recreational facilities:

Parks

The demand generated purely by the TOD uplift indicates a need for 5 hectares of parks by 2041 and an additional 1 hectare by ultimate population. However, comparing this with existing and planned provision shows that there is adequate provision of parks in terms of overall quantum within the Precincts, but a deficit of parks when looking at a broader area of 1.6km.

Proximity mapping on the other hand indicates gaps in access to parks within 200m and 400m distances within the Precincts. These factors indicate that there is a **need to establish local parks in areas with limited access**.

Future development should also focus on enhancing the quality of existing parks within the Precincts and surrounding areas, and the provision of communal open spaces within developments to reduce pressure on existing parks.

Civic urban spaces

While there are no benchmarks to estimate the number of civic urban plazas required, consider **opportunities to expand plazas** near the stations and provide more plazas in the rezoning areas.

Sports spaces

The demand purely generated purely by the TOD uplift indicates a need for 5 hectares of sports spaces by 2041 and an additional 1 hectare by ultimate population. However, comparing this with existing and planned provision within the Precincts shows that there is adequate provision in terms of land area of sports spaces.

However, existing sports spaces are operating at, near, or beyond capacity, meaning they may not have the ability to accommodate additional pressure from population growth. These factors indicate that there is a **need to provide an additional 2 to 3 hectares of sports spaces across the Precincts**. These are areas within which fields and courts can be located.

Playing fields

The demand purely generated purely by the TOD uplift indicates a need for 2 fields by 2041 and by ultimate population.

Benchmarking at a Precinct and a wider 1.6km radius indicate significant deficit of playing fields, both by 2041 and by ultimate population. Furthermore, considering that existing fields are operating at capacity and have limited ability to accommodate additional demand, deliver a

minimum of two new fields. These fields can be located anywhere within the Precincts, but should be connected well via quality active transport links.

Outdoor courts

While there is no benchmark deficit in outdoor courts when compared to current provision both within the Precincts and surrounding areas, considering rising demand for outdoor courts, **incorporate new informal courts**, such as basketball half-courts and multipurpose courts as part of existing or future parks, sports spaces, under viaduct areas, town squares and plazas, and communal open spaces in residential developments.

In the long-term, based on how participation and utilisation rates of courts shift, there is an opportunity to retrofit some courts to cater to emerging or in demand sports at the time.

Adventure spaces

There is no benchmark demand or deficit for adventure spaces projected for either 2041 or the ultimate population.

Nonetheless, as an opportunity to meet broader community demands, **consider incorporating local adventure roll or ride spaces** as part of parks, sports spaces, under viaduct areas, town squares and plazas, and communal open spaces in residential developments.

Outdoor fitness stations

While the TOD uplift generates a demand for only 1 additional outdoor fitness station by both 2041 and the ultimate uplift, when considering

current provision and existing population, there is a deficit of 3 stations by 2041 and by ultimate population.

This presents an opportunity to **provide 3 outdoor fitness stations in the Precincts** within existing and future open spaces to address unmet latent demand.

Dog off-leash areas

There is no benchmark demand or deficit for dog off-leash areas.

However, with the increasing trend of dog ownership in Australia, consider **providing amenities such as dog waste bags and water fountains in parks and open spaces** to support on-leash and off-leash activities.

Playgrounds

Many areas within the Precincts lack access to a playground within 400m distance.

An additional **2-3 playgrounds would be required to bridge access gaps**. Where possible, playgrounds should enable use by people of all ages and abilities.

Recreational links

Quality recreational and active transport links should be provided across the Precinct connecting homes to existing and future open spaces.



Appendix

Issues raised and comments regarding open space in Kellyville SSDA

Issues raised

Relevant issues raised regarding open space are:

- The Hills Shire Council requested that all land proposed to be public open space should be zoned RE1
- Public Recreation to provide certainty with regard to their location and size. Council does not support public plazas being included as public open space.
- Concerns were raised about local parks identified in the Elizabeth Macarthur Creek drainage corridor and whether this would impact on their usability, and whether Sydney Water, as owner of the land, would allow access for the construction of facilities such as bike paths.
- Council was also concerned that insufficient areas of land have been proposed for playing fields, and requested that the Department work with Council to investigate whether Rouse Hill Regional Park could be expanded to accommodate this demand.

Department comments

The Department is recommending that a 10 hectare parcel of NSW Government owned land in the north of the precinct be rezoned to RE1 Public Recreation. This is 19%, or nearly one-fifth of all land proposed to be rezoned in

the precinct. This land would be provided to Council to expand the planned Caddies Creek sporting fields.

An area under the skytrain has also been identified to be provided with several small courts for activities such as informal games or 5-a-side football.

The remaining areas of public open space identified in the draft plans are not proposed to be rezoned at this stage as their exact location and dimensions will not be finalised until the road layout and subdivision pattern has been established. This will occur following the lodgement of development applications for the super-lot subdivision and enabling works on the NSW Government owned land. The preferred location and size of these areas of open space, as well as their functions, were included in the draft DCP for the precinct.

Once these open space areas have been confirmed, they could then be zoned RE1 Public Recreation to be acquired or dedicated to Council. It is noted that public plazas are considered to be open space.

The land to be rezoned around the station will become a new transit oriented, urban town centre with a different built form to the largely low density suburban built form elsewhere in The Hills. This will influence the likely population structure in this area, as well as the available opportunities for open space where competition for land uses around the station, and resultant land costs, will be high.

Open space planning therefore needs to respond to these circumstances, with more innovative and efficient approaches to provision of public open space.

Sydney Water is planning to upgrade the drainage function and environmental quality of Elizabeth Macarthur Creek, and this could include opportunities to provide for pedestrian and cycling paths and publicly accessible open space alongside the creek to benefit the local community. The Department has recommended that environmental facilities and recreation areas be permitted as additional permitted uses in this creek corridor.

The benefits of new and upgraded walking and cycling paths through the precinct reflect the findings in The Baulkham Hills Shire Council Recreation Strategy, which was published in 2007 found that the most popular recreational activities for adults across Australia were walking (37.3% of all respondents, and the fastest growing activity since 2001), aerobic/fitness, swimming, cycling, tennis and running. Walking is also the most popular choice of physical activity in The Hills.

Shortages of playing fields is a common issue across Sydney, not just for The Hills. This has been documented in the NSW Legislative Assembly Standing Committee on Public Works – Inquiry into Sportsground Management in NSW (2006).

To address the shortages of land for playing fields, councils across Sydney have been installing synthetic fields, and in some cases

also installing lighting. These councils include Warringah, Hornsby and Sutherland Shire Councils, which have high demand for sporting fields from their residents.

The Department understands that The Hills Shire Council are considering a range of options to address the need for more sports fields in the local government area. This may include forming an agreement with Department of Education and Communities to share school facilities and the conversion of fields to synthetic turf. The Department is supportive of this approach.

The Rouse Hill Regional Park is a significant regional asset nearby that could also provide for additional sporting fields in the future if even more land is need for sports fields. The Department will progress discussions with the Office and Environment and Heritage about this issue.

Issues raised and comments regarding open space in Bella Vista SSDA

Issues raised

Relevant issues raised regarding open space are:

- The Hills Shire Council requested that all land proposed to be public open space should be zoned RE1
- Public Recreation to provide certainty with regard to their location and size. Council

does not support public plazas being included as public open space.

- Council was also concerned that insufficient areas of land have been proposed for playing fields, and requested that the Department work with Council to investigate whether Rouse Hill Regional Park could be expanded to accommodate this demand.
- Concerns were also raised about local parks identified in the Elizabeth Macarthur Creek drainage corridor and whether this would impact on their usability, and whether Sydney Water, as owner of the land, would allow access for the construction of facilities such as bike paths.

Department comments

A new park is proposed in the area to be rezoned east of Elizabeth Macarthur Creek, with an area of 6,500m².

Other areas of public open space in the precinct identified in the draft plans are not proposed to be rezoned at this stage as their exact location and dimensions will not be finalised until the road layout and subdivision pattern has been established. This will occur following the lodgement of a development application for the super lot subdivision and enabling works on the NSW Government owned land. The preferred location and size of these areas of open space, as well as their functions, were included in the draft DCP for the precinct. Once these open space areas have been confirmed, they could then be zoned RE1 Public Recreation to be acquired or dedicated to Council. It is noted that

Public plazas are considered to be open space.

The land to be rezoned around the station will become a new transit oriented, urban town centre with a different built form to the largely low density suburban built form elsewhere in The Hills. This will influence the likely population structure in this area, as well as the available opportunities for open space where competition for land uses around the station, and resultant land costs, will be high. Open space planning therefore needs to respond to these circumstances, with more innovative and efficient approaches to provision of public open space.

Sydney Water is planning to upgrade the drainage function and environmental quality of Elizabeth Macarthur Creek, and this could include opportunities to provide for pedestrian and cycling paths and publicly accessible open space alongside the creek to benefit the local community.

The Department has recommended that environmental facilities and recreation areas be permitted as additional permitted uses for this creek corridor as far south as Celebration Drive

The benefits of new and upgraded walking and cycling paths through the precinct reflect the findings in The Baulkham Hills Shire Council Recreation Strategy, which was published in 2007 found that the most popular recreational activities for adults across Australia were walking (37.3% of all respondents, and the fastest growing activity since 2001), aerobic/fitness, swimming, cycling, tennis and running.

Walking is also the most popular choice of physical activity in The Hills.

Shortages of playing fields is a common issue across Sydney, not just for The Hills. This has been documented in the NSW Legislative Assembly Standing Committee on Public Works – Inquiry into Sportsground Management in NSW (2006).

To address the shortages of land for playing fields, councils across Sydney have been installing synthetic fields, and in some cases also installing lighting. These councils include Warringah, Hornsby and Sutherland Shire Councils, which have high demand for sporting fields from their residents. The benefits that these councils have identified from using synthetic turf include achieving use levels two to three times that of grassed fields, their availability for use in wet weather, and reduced maintenance costs.

The Department is recommending that a parcel of NSW Government owned land around 8ha in size in the Kellyville Station Precinct, to the north of the Bella Vista Station Precinct, be rezoned to RE1 Public Recreation. This land would be acquired by Council to expand the planned Caddies Creek sporting fields to a district recreational facility.

The Department understands that Council are considering a range of options to address the need for more sports fields in the local government area. This may include forming an agreement with Department of Education and Communities to share school facilities and

the conversion of fields to synthetic turf. The Department is supportive of this approach.

The Rouse Hill Regional Park is a significant regional asset nearby that could also provide for additional sporting fields in the future if even more land is need for sports fields. The Department will progress discussions with the Office and Environment and Heritage about this issue.

Sports spaces within 5km of the Precincts

Figure 31 - Current provision of sports spaces within 5km of the Precincts

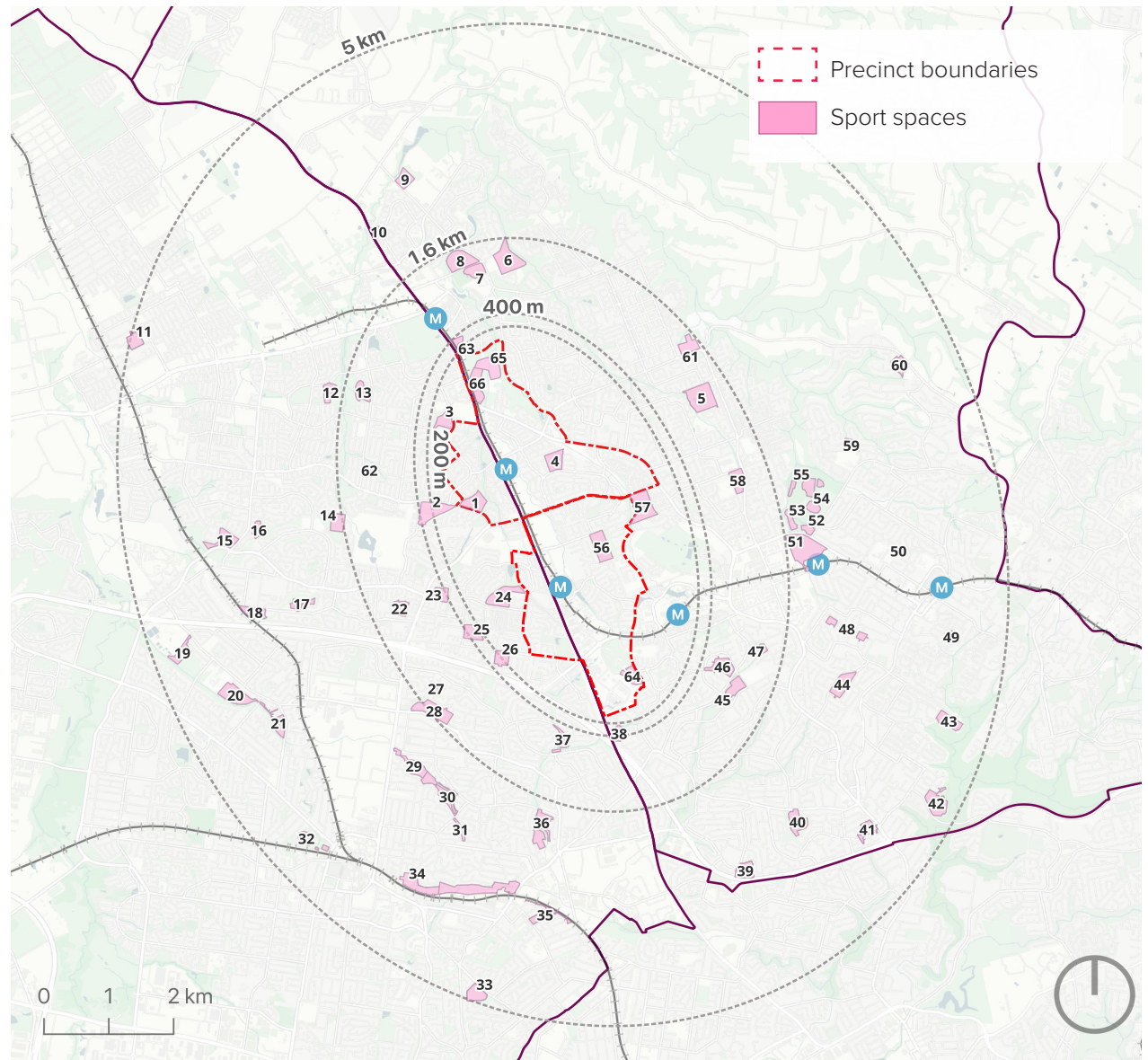


Table 32 - Sports spaces within 5km of the Precincts

Map ref	Sports ground name	Facilities
1	Stanhope Gardens Reserve	1 playing field, 4 tennis courts, 2 netball courts
2	Blacktown Tennis Centre Stanhope	16 tennis courts
3	Connor Greasby Park	2 playing fields, 2 basketball courts
4	Arnold Avenue Sports Complex Reserve	2 playing fields, 2 tennis courts
5	Bernie Mullane Sports Complex	5 playing fields, Indoor playing stadium, 5 netball courts, 6 tennis courts
6	Kellyville Netball Courts	38 netball courts
7	Kanebright Oval	1 playing field
8	Centenary playing fields	1 playing field, cricket nets, outdoor fitness equipment
9	Hills United Soccer Club	2 playing fields
10	Connie Lowe Reserve	1 playing field
11	Schofields Park	2 playing fields, 3 netball courts
12	Peel Reserve	1 playing field, cricket nets
13	Jonas Bradley Oval	1 playing field, 4 tennis courts, 4 netball courts, cricket nets
14	Paterson Reserve	2 playing field, 3 netball courts, 1 basketball court, 2 cricket nets
15	Quarkers Hill Park	1 playing fields, 5 netball courts, bocci pitch, 4 cricket nets, 2 tennis courts
16	Mihkelson Reserve	1 playing field
17	Corbin Reserve	1 baseball diamond
18	Wright Reserve	1 playing field, 1 basketball court, cricket nets, outdoor fitness equipment
19	Melrose Park	1 playing field, outdoor fitness equipment
20	Harvey Park	4 playing fields, 3 netball courts, bike pump track
21	Marayong Park	3 playing fields, 1 tennis court, cricket nets
22	Waite Reserve	2 playing fields

Map ref	Sports ground name	Facilities
23	Cornucopia Reserve	1 playing field
24	Glenwood Reserve	3 playing fields, 2 netball courts, 2 tennis courts, 2 basketball court, outdoor fitness equipment
25	Alwyn Lindfield Reserve	2 playing fields, 2 netball courts, skate park, cricket nets
26	Exeter Farm Reserve	2 playing fields
27	Golden Grove Park	1 playing field
28	Allen Robertson Reserve and Morgan Power Reserve	5 playing fields
29	Lynwood Park	4 playing fields
30	Cavanagh Reserve	1 playing field, 2 tennis courts
31	Wheeler Park	1 basketball
32	Blacktown Showground	2 playing fields, 2 basketball courts
33	Gratham Reserve	2 playing fields, 2 tennis courts, outdoor fitness equipment
34	International Peace Park	5 playing fields, 24 netball courts
35	Best Road Reserve	2 playing fields, 3 netball courts
36	Ashley Brown Reserve	2 playing field
37	Pearve Reserve Cricket Oval	1 playing field, 4 tennis courts, 3 basketball courts
38	Francesco Crescent Reserve	2 playing fields, 2 cricket nets
39	Gooden Drive Reserve	1 playing field, 4 netball courts
40	Balcombe Heights Reserve	2 playing fields, skate park
41	Yattenden Oval Reserve	1 playing field, 2 cricket nets
42	Ted Horwood Reserve	5 playing fields, 2 cricket nets, 5 tennis courts, 7 netball courts, 1 basketball court, outdoor fitness equipment
43	Eric Mobbs Reserve	4 playing fields, cricket nets

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Map ref	Sports ground name	Facilities
44	Alfred Henry Whaling Memorial Reserve	1 playing field used for athletics
45	Crestwood Reserve	3 playing fields, 2 cricket nets, outdoor gym equipment, 6 tennis courts
46	Charles McLaughlin Reserve	2 playing field, 2 cricket nets
47	Mackillop Drive Reserve	1 playing field
48	Coolong Reserve	1 playing field, 6 netball courts, learn to ride cycle track
49	Greenup Park Reserve	1 playing field
50	Castle Hill High School	2 playing fields, 3 basketball, 1 tennis court
51	Castle Hill Showground	1 playing field
52	Castle Hill Tennis Association	10 tennis courts
53	Hills Basketball Association	indoor basketball courts
54	Fred Caterson Reserve	6 playing fields, 4 cricket nets
55	Castle Hill BMX Track	BMX track
56	Balmoral Road Reserve	4 playing fields, 4 tennis courts, 2 basketball
57	Kellyville Memorial Park Reserve	6 playing fields
58	Centenary of Anzac Reserve	2 playing fields, 1 patonque court
59	Castle Glen Reserve	4 playing fields
60	Glenhaven Oval	1 playing field, cricket nets
61	Samantha Riley Drive Reserve	4 playing fields, 1 basketball, 2 cricket nets
62	The Ponds Stadium	1 playing field , outdoor fitness equipment
63	The Paddock	2 tennis courts
64	Bella Vista Farm	1 playing field, 2 tennis courts
65	Caddies Creek Baseball Park	4 playing fields
66	Beaumont Hills Park	1 playing field



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