August 2025

Bannockburn South East Precinct Structure Plan – Community Infrastructure Assessment and Addendum – ASR Research

ASR Research has prepared the below report, titled Bannockburn South East PSP Community Infrastructure Assessment (the Community Infrastructure Assessment) for the Victorian Planning Authority (VPA). The assessment was prepared to provide a benchmark assessment and make recommendations for the delivery and apportionment of community infrastructure within Bannockburn South East with a view of needs across the wider Bannockburn Growth Plan area.

Since the initial preparation of the Community Infrastructure Assessment in December 2022, the potential housing and population densities for Bannockburn South East have been revised, increasing the potential resident population within the precinct.

Additionally, the report has been revised to reflect a better understanding of specific local community infrastructure needs, objectives and capabilities following further engagement with Golden Plains Shire Council.
Due to these revisions, an update of the community infrastructure benchmarking analysis and recommended items contained in the assessment was required.

The following addendum provides an update to the initial findings building from the original infrastructure benchmarking.



ASR RESEARCH

Planning today for the communities of tomorrow

Bannockburn South East PSP

Community Infrastructure Assessment

August 2025 Addendum Report

Version 4

Prepared by ASR Research

On behalf of the Victorian Planning Authority

August 25, 2025

TABLE OF CONTENTS

1. INTRODUCTION 4

1.1 Background 4
1.2 What is a PSP? 5
1.3 Draft Bannockburn South East PSP Place Based Plan 6
1.4 Assessment Objectives 8
1.5 Community Infrastructure Definition & Scope 8
1.6 Description of Study Area 9

2 VPA PSP PLANNING GUIDELINES 11

2.1 Precinct Structure Planning Guidelines: New Communities in Victoria (October 2021) 11
2.2 Review of Benchmark Infrastructure Costings: Benchmark Infrastructure Costing, Prepared for VPA by Cardno (2018) 19

3 DETAILED COMMUNITY INFRASTRUCTURE ASSESSMENT 23

3.1 Development & Population Assumptions 23
3.2 Quantitative Estimates of Community Infrastructure Demand Generated by the Study Area. 23

4 RECOMMENDED COMMUNITY INFRASTRUCTURE PLAN FOR BSEPSP 34

5 INDICATIVE COMMUNITY INFRASTRUCTURE DCP COSTS AND APPORTIONMENT 35

APPENDICES 37

Appendix 1. – Study Area Demand and Supply Estimates 38
Appendix 2 – VPA Community Infrastructure Specifications 47
Appendix 3 – VPA Community Infrastructure Cost Estimates 50

List of Figures

Figure 1 – Location of Bannockburn South East PSP 4
Figure 2 - Bannockburn South East PSP and Surrounding Areas 5
Figure 3 – Draft Bannockburn South East PSP Place Based Plan 7
Figure 4 – Primary Study Area (Bannockburn South East PSP) & Bannockburn Study Area 10

List of Tables

Table 1 – Draft Land Use Budget for the BSEPSP* 6
Table 2 – Key Elements of the PSP Guidelines Relevant to the Community Infrastructure Assessment Process 13
Table 3 – Development and Population Assumptions 23
Table 4 - Detailed Community Infrastructure Assessment of All Study Areas 24
Table 5 – Recommended Community Infrastructure Plan for BSEPSP 34
Table 6 – Recommended Community Infrastructure Projects for BSEPSP DCP (Excluding Land Acquisition Costs) 36
Table 7 - Community Infrastructure Provision Standards & Demand & Supply Estimates for Bannockburn South East PSP & Study Area 39
Table 8 - Typical PSP Active Open Space Specifications by Size 47
Table 9 - Typical PSP Sport Pavilion Specifications by Number of Playing Fields 48
Table 10 – Typical PSP Community Centre Configurations x Hierarchy Type 49

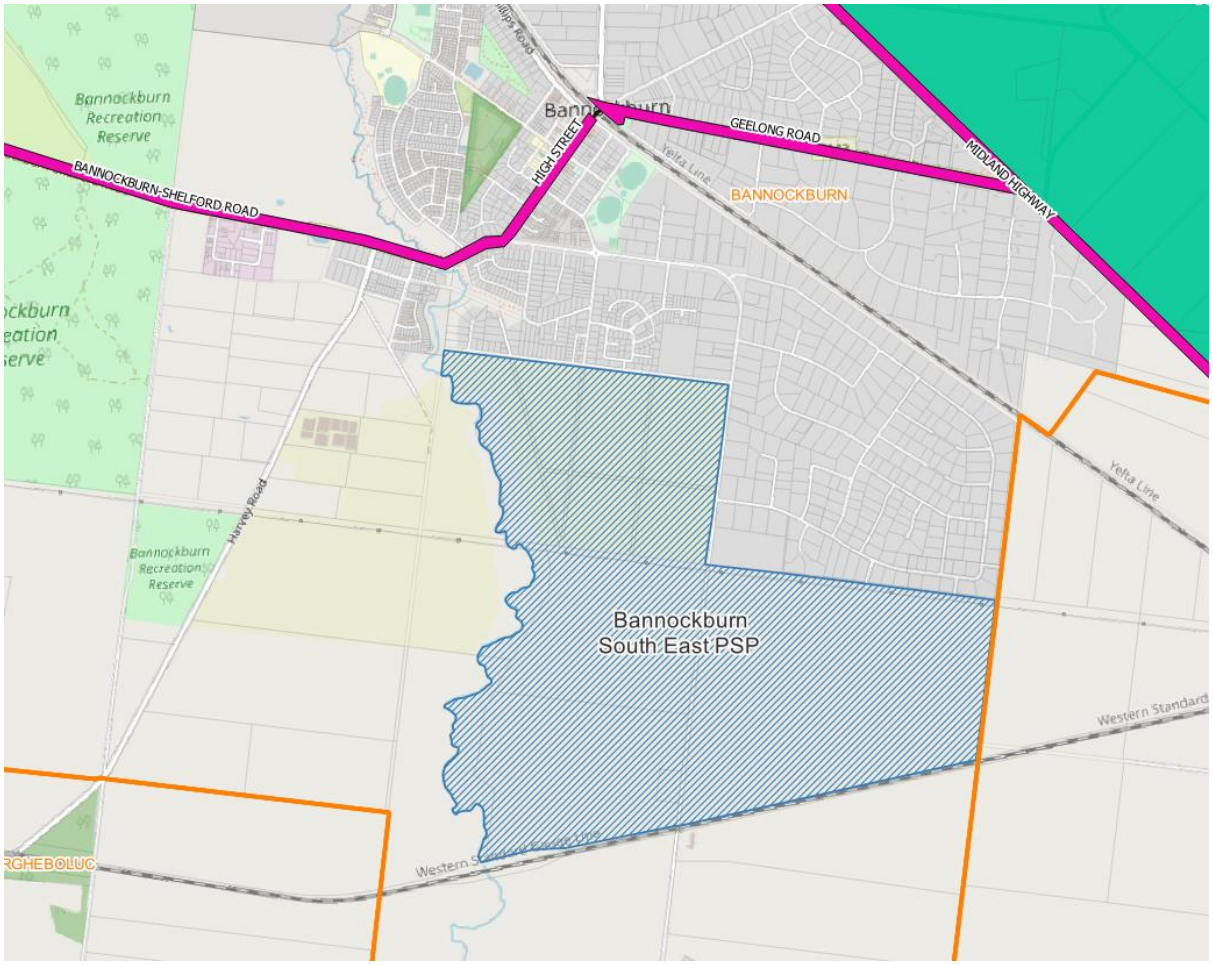
1. Introduction

1.1 Background

ASR Research was engaged by the Victorian Planning Authority (VPA) to prepare the following Community Infrastructure Assessment Addendum to confirm community infrastructure requirements associated with the preparation of the Bannockburn South East Precinct Structure Plan (BSEPSP) shown in Figure 1 below.

The need for the Addendum has been triggered by high DCP costs resulting from a relatively high number of proposed multipurpose community centre projects (3 centres consisting of 2 Level 1 Centres and 1 Level 2 Centre). This has resulted in a need to update a previous Addendum prepared by ASR Research in 2024[1].

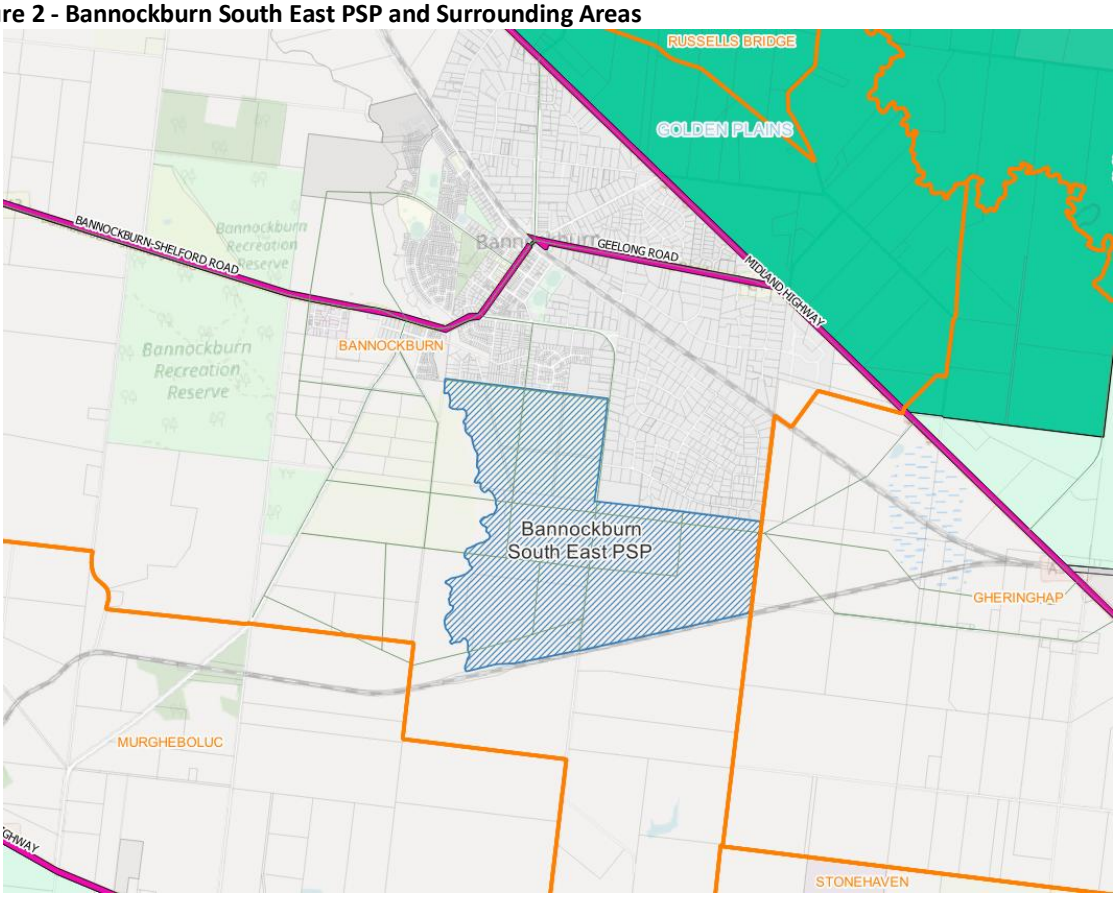
Figure 1 – Location of Bannockburn South East PSP



[1] Bannockburn South East Precinct Structure Plan Community Infrastructure Assessment: Addendum Report, July 5, 2024, prepared by ASR Research

As shown in Figure 2 below, the BSEPSP is wholly located in the locality of Bannockburn.

Figure 2 - Bannockburn South East PSP and Surrounding Areas



1.2 What is a PSP?

The recently released Precinct Structure Planning Guidelines (October 2021), prepared by the Victorian Planning Authority on behalf of the State Government, defines a PSP as:

> *"…a high-level strategic plan that sets out the preferred spatial location of key land uses and infrastructure to guide decisions on staging of development, subdivision permits, building permits and infrastructure delivery. PSPs are deliberately flexible – they cannot anticipate and control every challenge that may be encountered at detailed design and delivery phases. As a tool to guide subdivision and delivery of essential infrastructure, they provide certainty of intended outcomes and the flexibility for detailed design to respond to site-specific requirements and solutions, and innovations. Once prepared, PSPs are incorporated documents within the planning scheme. As such, they have a specific role to address matters within the scope of the planning system—ensuring they are consistent with the regulatory environment they operate in".*

A key output of most PSP processes is the preparation of a Community Infrastructure Plan.

1.3 Draft Bannockburn South East PSP Place Based Plan

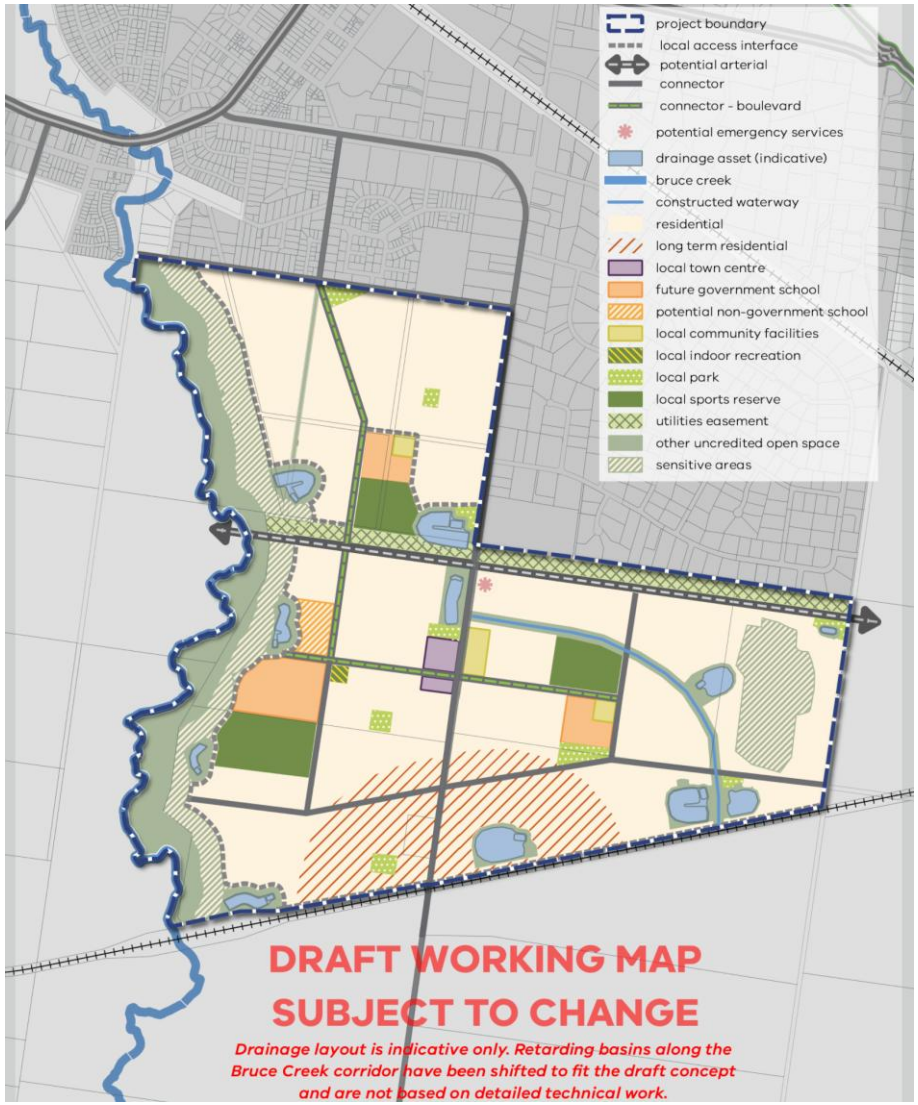
A draft Place Based Plan, shown in Figure 3 on the following page, has been prepared by the Victorian Planning Authority. This assessment is based on this draft Place Based Plan and is subject to refinement through the plan preparation process and agency validation stages of the PSP process. The VPA has prepared a draft land use budget for the BSEPSP which is summarised below in Table 1.

Table 1 – Draft Land Use Budget for the BSEPSP*

Land Use Class	Land Use Type	Land Use Sub Type	Area (ha)	% of Total Area	% of NDA
Transport	Arterial Road	Future Arterial Road	10.25	2%	3.23%
		Total	10.25	2%	3.23%
	Total		***10.25***	***2%***	***3.23%***
Education/Community/Government	Community Facilities	Community Facilities	3.60	1%	1.14%
		Indoor Recreation	0.60	0%	0.19%
		Total	4.20	1%	1.32%
	Education	Government School	15.39	3%	4.85%
		Non-Government School	3.01	1%	0.95%
		Total	18.40	4%	5.80%
	Total		***22.60***	***4%***	***7.12%***
Credited Open Space	Local Open Space	Local Park	6.67	1%	2.10%
		Local Sports Reserve	21.50	4%	6.78%
		Total	28.17	5%	8.88%
	Total		***28.17***	***5%***	***8.88%***
Uncredited Open Space	Drainage	Drainage	27.47	5%	8.66%
		Waterway within Conservation	43.40	8%	13.68%
		Waterways	8.14	2%	2.56%
		Total	79.01	15%	24.90%
	Other	Other	2.48	0%	0.78%
		Total	2.48	0%	0.78%
	Utility Easement/Corridor	Electricity	15.24	3%	4.80%
		Total	15.24	3%	4.80%
	Total		***96.72***	***18%***	***30.49%***
NDA - R	activity centre	Local Town Centre	2.71	1%	0.85%
		Total	2.71	1%	0.85%
	residential	Residential	314.58	60%	99.15%
		Total	**314.58**	**60%**	**99.15%**
	Total		***317.28***	***61%***	***100.00%***
Other	Investigation Area	Investigation Area	48.00	9%	15.13%
		Total	48.00	9%	15.13%
	Total		***48.00***	***9%***	***15.13%***
Grand Total			**523.02**	**100%**	**164.84%**

* Subject to further investigation at the time of writing.

Figure 3 – Draft Bannockburn South East PSP Place Based Plan



Source: Victorian Planning Authority, June 2024

1.4 Assessment Objectives

The objectives of the Addendum assessment were to:

- Recalculate community infrastructure demand and supply requirements generated by the BSEPSP in the context of the wider Bannockburn Study Area;
- Review the Draft Place Based Plan to assess what changes, if any, are recommended for the BSEPSP in light of the changes to the development assumptions;
- Summarise succinctly the community infrastructure items that should form part of an updated Community Infrastructure Plan for the BSEPSP and BSE Development Contributions Plan (BSEDCP); and
- Provide high level indicative costings and catchment apportionment advice for community infrastructure items recommended to form part BSEDCP.

1.5 Community Infrastructure Definition & Scope

For the purposes of this Assessment community infrastructure is defined as both public and private, Council and non-Council facilities (e.g. buildings and ovals) likely to be required to support social services, programs, activities and accessibility to them (e.g. Kindergarten services, child care, community meetings, sporting competition, informal recreation etc.). The scope of the assessment is largely (but not limited to) the following community infrastructure categories:

1. Early years services;
2. Open space (active and passive);
3. Indoor recreation facilities;
4. Community meeting spaces, libraries and learning centres;
5. Education facilities;
6. Health services;
7. Justice, Police & Emergency services; and
8. Aged care.

Categories 1 to 4 are typically (but not exclusively) Local Government responsibilities and are often (but not always) included in development contribution agreements associated with significant land use developments. However, government and non-government education facilities (typically primary and secondary schools), where deemed to be required within a land use development, are generally funded (both land and building costs) by the State Government and non-government education providers.

1.6 Description of Study Area

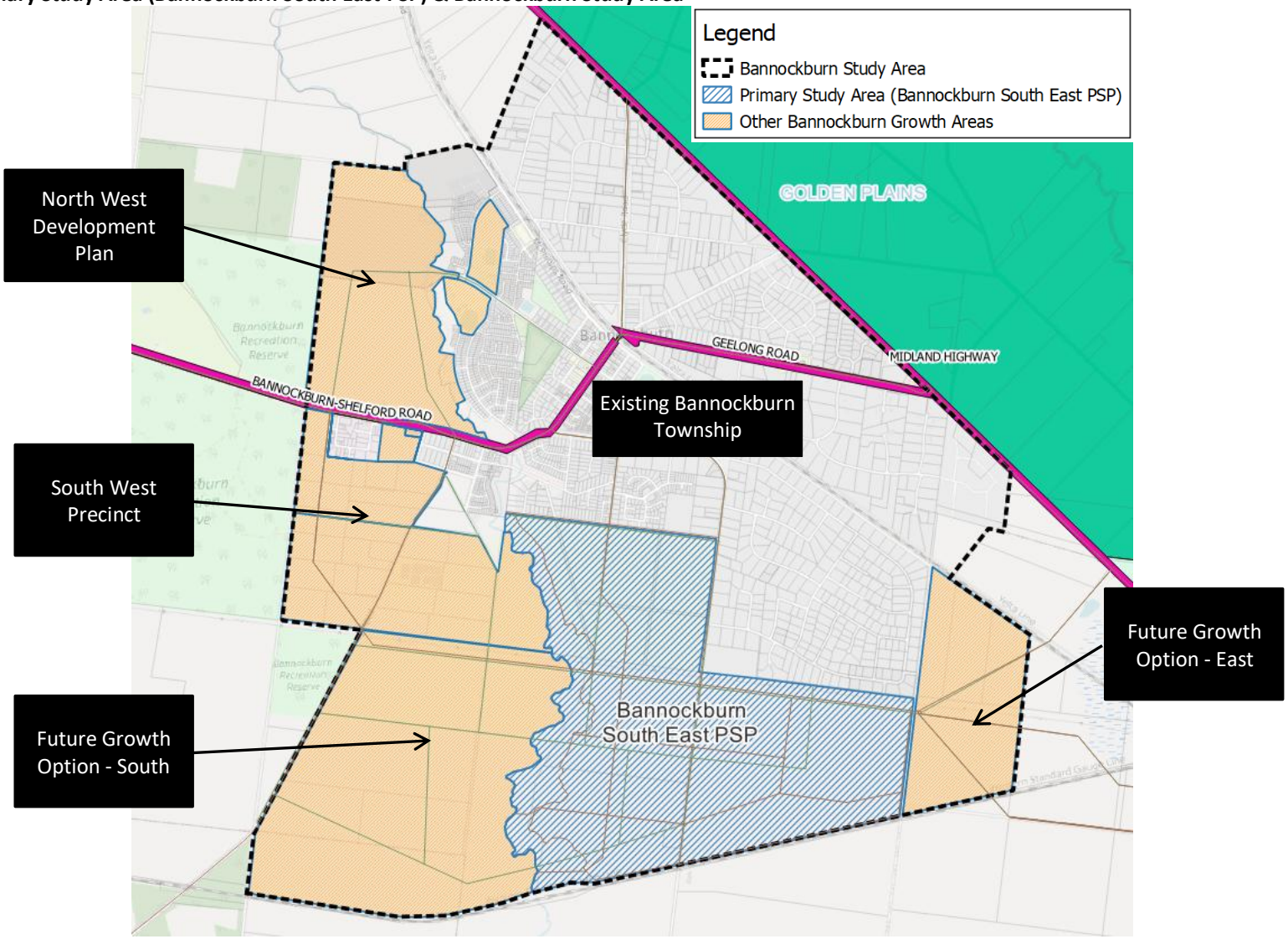
The Bannockburn Study Area includes growth areas and future growth options identified in the Bannockburn Growth Plan, which was gazetted in September 2021.

Figure 4 on the following page shows the Bannockburn Study Area used to prepare the Assessment. The Study Area is divided into:

1. A Primary Study Area consisting of the BSEPSP; and
2. A Secondary Study Area (Bannockburn Study Area) consisting of the existing Bannockburn Township, the BSEPSP and the other proposed growth areas located in the Bannockburn Study Area. These are:
    - North West Development Plan;
    - South West Precinct;
    - Future Growth Option – South; and
    - Future Growth Option – East.

It is anticipated that full development of the Bannockburn Study Area will take approximately 30 years.

Figure 4 – Primary Study Area (Bannockburn South East PSP) & Bannockburn Study Area



2 VPA PSP Planning Guidelines

2.1 Precinct Structure Planning Guidelines: New Communities in Victoria (October 2021)

The Precinct Structure Planning Guidelines: New Communities in Victoria (the Guidelines) are a Victorian Government initiative to ensure the Victorian Planning Authority (VPA) and other planning authorities prepare plans for places that enable best practice, liveable new communities for Victoria. The purpose of the Guidelines is to provide the framework for preparing PSPs that guarantees quality outcomes while also being flexible, responsive and supportive of innovation by setting aspirational goals for our future communities. The approach provides a transitionary model enabling 20-minute neighbourhoods to evolve over time and achieve the objectives as the area matures. The Guidelines are based on planning for 20-minute neighbourhoods, a principle in Plan Melbourne 2017-2050 (Plan Melbourne) that advocates for living locally to ensure accessible, safe and attractive local communities. The Guidelines are structured in the following four parts:

- PART 1 - PURPOSE AND PLANNING CONTEXT. Provides the context for preparing a PSP, including how the Guidelines ensure a future where Victoria is socially and economically strong, environmentally resilient and engaged with the opportunities of a rapidly changing world.
- PART 2 - PSP PATHWAYS AND PROCESSES (PSP 2.0). Outlines the process for co-designing a PSP with key stakeholders using the PSP 2.0 approach to develop a shared vision for the precinct and resolve key planning challenges early.
- PART 3 - CONSTRUCTING A PSP. Provides specific guidance on the General Principles and Performance Targets to be adopted when preparing a PSP. The principles and targets reflect the aspirations of policies such as Plan Melbourne and UN SDGs. They also reflect broader updates to State Government policies including the Department of Transport's Movement and Place Framework and Resilient Melbourne's Living Melbourne – Our Metropolitan Urban Forest.
- PART 4 - PRACTITIONER'S TOOLBOX. Provides guidance on the more detailed aspects of planning for Victoria's new communities. The Practitioner's Toolbox is available online and kept up to date with the latest tools and practices, including updates and changes to relevant government planning policies and guidance notes.

The Guidelines have a hierarchy of elements to explain what needs to be considered and delivered in a PSP. Elements are grounded in state policy and strategy or key future directions for greenfield precincts as determined by the VPA through the preparation process.

There are a number of sections within the PSP Guidelines that specifically relevant to the preparation of a Community Infrastructure Assessment. The most relevant elements are located in Part 3 (Constructing a PSP) and include:

- **Offer High-Quality Public Realm**
  - Offer high-quality public realm and open space
  - The public realm and open space network are crucial to creating the identity of a neighbourhood, and can have a significant impact on liveability, social cohesiveness, sense of place, the community's health and wellbeing, and the urban heat island effect.
- **Services and Destinations**
  - Provide services and destinations that support local living
  - Encouraging communities to 'live locally' means ensuring facilities and services are located close to housing and that the services meet the community's daily needs.
- **Infrastructure and Coordination**
  - Smarter infrastructure investment, and an integrated approach to land-use planning, is essential to unlocking development and ensuring housing affordability PSPs identify infrastructure needs and coordinate their integration with appropriate future land uses in order to provide for future communities.
  - The Guidelines provide direction around the distribution of community facilities, open space and transport required to support compact, walkable 20-minute neighbourhoods. Coordinated and timely delivery of this infrastructure is critical to enable development in greenfield areas and therefore affordability of land. The logical and orderly development of precincts also ensures that new communities have the things they need to thrive.

Table 2 on the following page provides a summary of the key community infrastructure assessment principles, the application of these principles to the PSP process and key PSP targets. In addition to the PSP Guidelines the VPA, Department of Education (DE) and Melbourne Archdiocese Catholic Schools (MACS) have prepared a number of additional resources to assist with the community infrastructure planning process in PSP locations. These include:

- Victorian Planning Authority – Guidance Note – PSP2.0 (November 2021);
- Victorian Planning Authority – Community Infrastructure Planning in New Communities Guidance Note (November 2021);
- Victorian Planning Authority – Infrastructure Contributions Plan Guidelines (March 2021);
- Department of Education & Training - Victorian Government School Site Selection Criteria – Toolbox (October 2021);
- Victorian Planning Authority – PSP Note – Non-Government Schools; and
- Melbourne Archdiocese Catholic Schools - Catholic Schools Site Selection Criteria Guidelines (2021).

Table 2 – Key Elements of the PSP Guidelines Relevant to the Community Infrastructure Assessment Process

PSP Feature & General Principles	How to Apply to PSP	PSP / Performance Targets
Offer High-Quality Public Realm		
F 10. Local recreational spaces and facilities **Networks of open space and facilities that optimise the use of available land and provide equitable access to sport and recre ation, leisure, environmental benefits, cultural benefits and visual amenity.**		
F 10.1 The open space network should include local parks that: • have a variety of sizes and proportions, generally ranging from 0.1 to 3 hectares • are located to enable access by local residents without having to cross significant barriers such as arterial roads, railways or waterways • provide a diversity of amenity experiences – both internal to the park and external interfaces that will provide an amenity context for development. Relevant VPP: Clause 56.05-2	• A Public Realm & Water Plan should be developed. The plan may demonstrate a diverse range of open space typologies that respond to place (for example, linear open space, waterway corridors, biodiversity areas and the productive use of encumbered land). The plan should show park sizes, preferred interfaces and walkable catchments (adjusted for significant barriers).	T11 The open space network should seek to meet the following minimum targets: • Within residential areas (including activity centres): - 10% of net developable area for local parks and sports field reserves - 3-5% of net developable area set aside for local parks - 5-7% of net developable area set aside for sports field reserves. • Within dedicated employment and/ or economic activity areas, 2% of the net developable area for local parks. Relevant VPP: Clause 19.02-6S, 53.01 T12 Open space and sports reserves should be located to meet the following distribution targets: • A sports reserve or open space larger than 1 hectare within an 800m safe walkable distance of each dwelling • A local park within a 400m safe walkable distance of each dwelling. Relevant VPP: Clause 56.05-2 Note: Includes sports reserves and public land that is encumbered by other uses but is capable of being utilised for open space purposes.
F 10.2 Proposed sporting reserves should be located, designed and configured to be: • targeted to forecast community needs, including design, landscaping and functionality accessible • appropriately meeting their purpose, having regard to shared use opportunities • able to take advantage of opportunities for alternative water supply (including co-location with stormwater harvesting and treatment facilities)	• A community needs analysis should be undertaken to inform the plan at preparation stage. • A Public Realm & Water Plan should show sporting reserve size, purpose and walkable catchments. • Topography should be considered when determining the appropriate location of sport reserves.	

PSP Feature & General Principles	How to Apply to PSP	PSP / Performance Targets
• distinctive and responsive to local character and surrounding land use.		
F 10.3 A network of diverse open space should be provided across the precinct that connects (via open space or major pedestrian/cycle links) to metropolitan or regional open space networks.	• A Public Realm & Water Plan should show linkages and connections, any barriers to connectivity, and measures to overcome barriers.	
F 10.4 The location and scale of open space should respond to and optimise integration with the existing topography, waterway features, landscape features, biodiversity conservation areas and cultural heritage values.	• A Public Realm & Water Plan should detail the features the open space network is responding to. • A PSP may include any relevant cross section/s of existing or proposed features. For example, waterway, conservation area, Water Sensitive Urban Design (WSUD) element with the surrounding urban form to clearly show expected development interface outcomes.	
F 10.5 The public realm network should be located, configured and designed to enhance and optimise the role of encumbered or restricted public land (for example, waterways, conservation, utility easements, schools) for multifunctional spaces and cater for a broad range of local users and visitors. Where possible, the provision of open space should be integrated with and/or link with waterways and Water Sensitive Urban Design (WSUD) elements. The public realm network should account for provision of multifunctional water management assets. Relevant VPP: Clause 56.05-2, 19.03-3S	• The community needs analysis should identify possible functions of each space. This could also include the potential role and function of school sports fields, waterways and/or floodways in contributing to the network. • Place-specific guidance should express expectations with regard to landscaping outcomes in open spaces and the public realm.	
Services And Destinations		
F 14. Local schools and community Infrastructure **Education and community infrastructure and facilities that are located to equitably and efficiently maximise their accessibility and shared use.**		
F 14.1 Education and community facilities (i.e. primary, secondary and specialist schools, kindergartens, community centres, health facilities and sport reserves) should: • be co-located within community hubs • have good visual and physical links to a local centre • be located on connector streets, linked by walking and cycling paths • be located in proximity to high-quality public transport where possible • be located away from potential hazards.	• A Community Infrastructure Plan should show the preferred location of education and community facilities and identify their locational advantages. The assessment should ensure that the context of surrounding or planned development is considered to inform the role and location of education and community facilities. • Where a specialist school is required, it should wherever possible, be located adjacent to an existing or proposed government school—preferably a secondary school.	T18 The location of dwellings should achieve the following accessibility targets in relation to education and community facilities: • 70% of dwellings located within 800m of a government primary school • 100% of dwellings located within 3,200m of a government secondary school • 80% of dwellings located within 800m of a community facility • 80% of dwellings located within 800m of a health facility.

PSP Feature & General Principles	How to Apply to PSP	PSP / Performance Targets
Relevant VPP: Clause 56.03-3	• Planning to co-locate kindergartens with all new government primary schools (including within co-located community facilities) should be undertaken in consultation with Department of Education (DE) to determine appropriate land take and design requirements. Note: PSPs are only capable of accommodating the provision of infrastructure. Timing of delivery is subject to the discretion of the relevant service provider.	Note: A health facility may include areas where a general practitioner would be capable of operating (for example, commercial or mixeduse zone).
F 14.2 High intensity facilities such as libraries, childcare centres, justice/emergency services and community centres should be located within close proximity of an activity centre or have good visual and physical links to an activity centre and active transport routes.	• Consultation with agencies and service providers should explore spatial and locational needs of these facilities, as well as likely delivery models. • A community infrastructure needs assessment should be prepared to inform plan preparation, identifying potential local synergies available in the PSP area.	
F 14.3 Upgrades to existing infrastructure and/or the provision of new infrastructure should align with council and/or agency service plans and provide guidance to reflect the most cost-efficient approach to addressing service needs. This includes making use of any spare capacity of existing facilities within the catchment area and pursuing integrated service planning and delivery opportunities.	• A community infrastructure needs assessment should be undertaken to inform plan preparation, identifying spare capacity within the catchment and exploring integrated delivery opportunities. • Consultation with community infrastructure service providers should be undertaken to explore integrated delivery opportunities.	
F 14.4 Where feasible, education and community infrastructure should provide space for not-for-profit organisations. Opportunities should also be explored in town centres for space that not-for-profits may be able to rent	• Consultation with not-for-profit organisations and DE, Council and other community land use managers, as well as developers of town centres, should be undertaken early to identify and co-design opportunities for shared facilities.	
F 14.5 The location of emergency services should be within easy access to the arterial road network to maximise coverage and reduce response times.	• A community infrastructure needs assessment should be undertaken to inform plan preparation, identifying the location of existing or proposed emergency service facilities. • A Community Infrastructure Plan should identify the preferred location of emergency services if located within the precinct.	

PSP Feature & General Principles	How to Apply to PSP	PSP / Performance Targets
F 15. Lifelong learning opportunities **Education and community infrastructure and facilities that cater for the many social needs of the community and individuals at any stage of their lives.**		
F 15.1 The amount of land allocated for education and community facilities, and their role and function, should be determined in consultation with service providers and should respond to the local context, the broader strategic context, and the forecast service needs of the new or changing community. Relevant VPP: Clause 56.03-3	• A community infrastructure needs assessment should identify likely community needs. The assessment should ensure that the context of surrounding or planned development is considered to inform the role and location of education and community facilities. • Consultation with community infrastructure service providers should be undertaken to explore opportunities to respond to changing needs in an innovative way.	Refer to T18 Targets
F 15.2 The location and design of education and community facilities should cost-effectively maximise functional use, flexibility, safety, amenity and operational efficiency (e.g. shared use of facilities with active open space, alternative funding models, adaptable design models, community access to school grounds, etc.)	• A Community Infrastructure Plan should show any proposed agreement for shared use. • A Precinct Infrastructure Plan should identify timing, delivery responsibility, potential funding sources and commitments to shared delivery and use of facilities.	
F 15.3 Opportunities for non-government schools and tertiary education facilities should be identified through engagement with the non-government school and tertiary education sectors.	• Consultation with non-government education providers should be undertaken early in the PSP process. • A Community Infrastructure Plan should identify any nongovernment education facilities (where known).	
F 15.4 Future opportunities for higher order health and education (e.g. tertiary education) should be considered during the PSP process and land areas or 'areas of strategic interest' should be nominated where known.	• Consultation with higher order health and education providers should be undertaken early in the PSP process to explore any opportunities for these sites to be nominated and for partnerships to be forged. • A Community Infrastructure Plan should identify any facilities (where known) and identify any catalyst impacts of these facilities.	
Infrastructure Coordination		
F 17. Staging and location of development **Directing the staging and location of development within a PSP to:** • **use available capacity in existing infrastructure** • **support the orderly and economic extension or augmentation of existing infrastructure** • **match the timely provision of new infrastructure.** **This will include directing the location and timing of development and identifying trigger points for the provision of required infrastructure.**		
F 17.1 The structure and design of a PSP should accommodate the coordinated delivery of key infrastructure (basic and essential	• Encourage active engagement with government departments, service providers and utility agencies to input their forward	T20 Identify all basic and essential infrastructure with spatial requirements on the future place-based structure plan (e.g. open

PSP Feature & General Principles	How to Apply to PSP	PSP / Performance Targets
infrastructure and other infrastructure) and appropriate staging of development to provide for: • integration and shared-use opportunities • timely delivery, taking into consideration likely sequencing of development, land ownership constraints and funding sources • efficient delivery, taking into consideration likely sequencing of development • development that will not be isolated from basic and essential infrastructure and services • ensuring that development does not take place unless it can be serviced in a timely manner • ensuring that development within a PSP can be staged to match the attainment of infrastructure triggers and the provision of infrastructure and services • opportunities for alternative delivery models that achieve sustainability or other community benefits.	plans, identify and define essential infrastructure and to explore strategic partnerships for planning, funding and delivery. • A Precinct Infrastructure Plan should identify all infrastructure needed to service the new neighbourhoods, indicative timing, delivery responsibility, other potential funding sources and any agreed commitments to partnerships or alternative delivery models. • The indicative locations of essential infrastructure should consider the local requirements of service providers relevant to the PSP.	space, schools, community centres, integrated water management, etc.)
F 17.2 The staging of development within PSPs should consider: • proximity to existing or proposed development fronts or serviced land • proximity to significant public transport infrastructure or public transport services • proximity to existing or committed community infrastructure such as schools • proximity to new or existing arterial or connector road infrastructure • existing uses (for example, extractive uses) which may transition over a longer period of time • its role in facilitating delivery of this infrastructure.	• Active engagement with government departments, service providers, utility providers, landowners, developers and local government to explore the potential staging of development that aligns with potential planning, funding and delivery of infrastructure. • Spatial arrangement of land uses within a PSP and the provision of infrastructure within a Precinct Infrastructure Plan are aligned to encourage appropriate staging of development. • Direction is provided on the location and timing of development fronts within a PSP and the trigger points for required infrastructure, where relevant, in order to ensure development matches the timely provision of infrastructure. • An indicative staging plan should be prepared where appropriate.	
F 17.3 Land should be set aside and reserved to allow for all public land uses, including schools, community centres, health, emergency and justice facilities, road widening and grade separation of rail from all transport corridors (includes roads, pedestrian and bicycle paths) where a delivery agency has agreed to the commitment.	• Land required in the future should be identified in a Place Based Plan.	
F 17.4 Structure and design of a PSP should seek to maximise opportunities for development to utilise existing infrastructure or to capitalise on planned infrastructure commitments.	• An infrastructure and servicing assessment should be prepared to inform plan preparation and should identify existing capacity of infrastructure. • Consultation should be undertaken with agencies and servicing authorities to identify opportunities to leverage planned infrastructure commitments.	

PSP Feature & General Principles	How to Apply to PSP	PSP / Performance Targets
F 18. Innovative and sustainable infrastructure delivery **Actively pursuing innovative and sustainable models for infrastructure delivery, and long-term strategic infrastructure opportunities that align with the UN SDGs and the 20-minute neighbourhood framework.**		
F 18.1 Alternative and innovative infrastructure and service delivery approaches should be explored early in the PSP place-shaping and visioning stages to ensure new and innovative initiatives are embedded in the design and structure of a PSP. Implications for urban form, housing, jobs and other features of the 20-minute neighbourhood should be considered and addressed through the PSP.	• The PSP vision statement should identify any proposed infrastructure or service delivery innovations, as well as actions to support the vision.	Refer to Performance Target T18
F 18.2 Potential mechanisms to incentivise the early delivery of key infrastructure should be explored, particularly where fragmented land parcels and/or other site constraints exist that prohibit the logical delivery of infrastructure to support new job growth.	• Active engagement with key implementing stakeholders will identify opportunities and commitment to bring forward infrastructure. • All commitments should be identified in the Precinct Infrastructure Plan. • A staged approach to drainage outfall should be considered to align with incremental development of the precinct.	

2.2 Review of Benchmark Infrastructure Costings: Benchmark Infrastructure Costing, Prepared for VPA by Cardno (2018)

2.2.1 Overview

This section provides a brief description of the key community infrastructure provision benchmarks, facility configuration models and cost benchmarks[2] prepared by the VPA.

2.2.2 Open Space & Recreation

The VPA PSP Guidelines include some key provision targets for open space and recreation planning. Its focus has largely (but not exclusively) been on 'local' scale provision as opposed to regional / sub-regional provision. Key guidelines are:

- Unencumbered passive open space (3% to 5% of Net Developable Area or NDA);
- Active open space - sports grounds and outdoor court based facilities such as tennis and netball (5% to 7% of NDA); and
- Indoor recreation centre land (5 hectares per 60,000 people).

In addition to these documented measures, are other less well documented factors / guidelines influencing open space and recreation outcomes include:

- Encumbered open space, particularly open space set aside for drainage purposes and as part of linear networks along rivers and creeks, typically represent a significant proportion of the gross area of a PSP site. The contribution these assets provide by way of informal recreation outcomes and improved physical and mental health is considerable. Encumbered open space provision outcomes are not prescriptively derived as each PSP site provides unique topographical, hydrological and environmental characteristics.

Appendix 4 shows indicative active open space and sporting pavilion specifications for 2 active open space sizes (5 to 6 hectares and 8 to 10 hectares). These specifications are included in the VPA commissioned *Benchmark Infrastructure and Costs Guide* (prepared by Cardno in 2018).

[2] Source: Review of Benchmark Infrastructure Costings: Benchmark Infrastructure Costing, Prepared for VPA by Cardno (2018)

In addition to these PSP guideline provision benchmarks this review includes demand-based estimates for organised sport derived from the AusPlay Survey[3] (AusPlay) which provides the major source of participation data for sport and other informal physical activities in Australia. These estimates are contained within Appendix 3 of this report and referred to in Section 8.

2.2.3 Multipurpose Community Centres

For the purposes of this assessment a multipurpose community centre is defined as a building owned and or managed by Local Government which accommodates a range of services and offers flexible community spaces made available to local residents and community groups for a variety of potential uses.

In the context of greenfield locations community centres have primarily incorporated a range of early years services and offered flexible community meeting spaces. However, the potential range of services and functions a community centre can incorporate is very broad. In order to ensure the effective and efficient use of capital and operational resources contemporary community centres are multipurpose (i.e. offering more than one service and function) rather than stand-alone (i.e. dedicated to one service or function only), and, where practical, co-located with other community infrastructure and public open space. Land area allocations in greenfield locations are reasonably generous in comparison to the actual building footprint provided in order to allow for sufficient on-site car parking and facilitate longer term expansion requirements as local needs evolve and change and shifts in government policy occur (e.g. the Victorian State Government's proposed introduction of 15 hours per week of funded 3 year old Kindergarten over the coming decade).

Other key characteristics and issues associated with multipurpose community centres are outlined below.

- Although not all multipurpose community centres are identical, it is possible to describe the types of services and functions typically incorporated into such facilities.
- Typically, such facilities are a combination of a few (but rarely all) of the following services and functions: Kindergarten; Maternal & child health; Playgroups; Occasional child care; long day child care; community meeting spaces; Planned Activity Groups; Neighbourhood houses / adult education; and Library.
- Multipurpose community centres can vary greatly in size depending on the services and activities to be accommodated within it and can typically range from 500 square metres to 2,500 square metres.
- Unlike public open space (both passive and active), the VPA PSP Guidelines do not specify a quantitative measure of how many facilities should be provided either using an area based standard

[3] Ausplay is a large scale national population tracking survey funded and led by Sport Australia. AusPlay collects participation data; not membership data. The club sport data in AusPlay relates to how participation took place (e.g. survey respondents who self-identified that they participated in an activity through a sports club or association).

(as applies to public open space) or a population based standard. Municipal Planning schemes do not provide any guidance on this matter either.

- In the absence of specific PSP Guidelines and statutory requirements, the VPA has tended to rely on the provision guidelines outlined in the *Planning for Community Infrastructure in Growth Area Communities* (2008) and a more recently prepared update of this report – the draft *Community Infrastructure Planning Guidelines Refresh* (2023).
- However, it is also possible to estimate the level of demand for specific service types likely to be generated by a PSP.

It should be noted this assessment evaluates the impact of the Victorian State Government's *Best Start, Best Life Policy* (June 2022) kindergarten reforms which will lead to three-year-old kinder being made available for 15 hours per week by 2029, and four-year-old kinder (which will transition to "Pre-Prep") increasing to a 30-hour per week program by 2036.

Due to the large variety of possible community configuration options the analysis focuses on the following 3 types of community centres where a large urban population of up to 60,000 people can be anticipated (note: the ultimate Bannockburn Study Area population capacity is estimated to be less than this, but given its proximity to the City of Greater Geelong is assessed as a future large urban centre):

- Level 1 community facility (1,200 m2 building footprint & 0.8 ha of land) @ 1 centre per 20,000 people;
- Level 2 community facility (1,500 m2 building footprint & 1 ha of land) @ 1 centre per 20,000 people; and
- Level 3 community facility (2,500 m2 building footprint & 1.5 ha of land) @ 1 centre per 60,000 people.

The scope of services and activities covered by these facilities include Kindergarten, Maternal & Child Health, Playgroups, Occasional Child Care, Neighbourhood Houses, Libraries and a variety of flexible community meeting spaces and consulting rooms.

Appendix 1 shows indicative community centre configurations for each of the 3 types of community centres considered by this assessment and which are included in the VPA commissioned *Benchmark Infrastructure and Costs Guide* (prepared by Cardno). Level 1 and 2 community centres both include Kindergarten and Maternal and Child Health rooms as well as multipurpose community meeting spaces. Level 2 centres have larger community meeting spaces that are capable of accommodating a neighbourhood house service. Level 3 community centres differ from Level 1 centres by not typically including early years services such as Kindergarten and Maternal and Child Health. Instead these facilities include higher order services (i.e. services provided to a larger population catchment) such a Library and specialised community space for other service forms and population target groups.

Appendix 2 shows indicative community centre configurations for each of the 3 types of community centres considered by this assessment and which are included in the VPA commissioned *Benchmark Infrastructure and Costs Guide* (prepared by Cardno). Level 1 and 2 community centres both include Kindergarten and Maternal and Child Health rooms as well as multipurpose community meeting spaces. Level 2 centres have larger community meeting spaces that are capable of accommodating a neighbourhood house service. Level 3 community centres differ from Level 1 centres by not typically including early years services such as Kindergarten and Maternal and Child Health. Instead, these facilities include higher order services (i.e. services provided to a larger population catchment) such a Library and specialised community space for other service forms and population target groups.

3 Detailed Community Infrastructure Assessment

3.1 Development & Population Assumptions

This section provides indicative quantitative community infrastructure demand and supply estimates for both the BSEPSP and broader Bannockburn Study Area using a combination of development assumptions provided by the VPA and demographic profile data contained within Golden Plains Shire Council's population forecasts prepared by .id consulting (https://forecast.id.com.au/goldenplains).

The VPA requested ASR Research provide an analysis of community infrastructure needs based on development assumptions summarised in the table below.

Table 3 – Development and Population Assumptions[4]

	Bannockburn South East PSP (BSEPSP): Primary Study Area	Bannockburn Study Area
Dwelling Yield	5,238	14,058
Average Household Size	2.95	2.95
Anticipated Population	15,452	41,471[5]
Net Developable Area – Residential (NDA-R))	NDA – Residential 317.28 hectares	Not applicable

3.2 Quantitative Estimates of Community Infrastructure Demand Generated by the Study Area

Table 4 on the following pages summarises the key findings, issues and preliminary demand and supply estimates associated with the proposed development of the BSEPSP and more broadly the Bannockburn Study Area. Appendix 1 of this report provides indicative demand estimates and / or supply requirements generated by the BSEPSP and the Bannockburn Study Area for various forms of community infrastructure that lend themselves to some form of quantifiable demand and / or supply measure. These estimates were based on the age profile of the Bannockburn South small area in the year 2041[6]. A description of the measures used to calculate community infrastructure demand, the assumptions that underpin them, and their source is also outlined in Appendix 1.

[4] Note: As this assessment has been prepared in the early stages of the planning process, it is likely that the projected dwelling and population estimates will change as development commences. However, it is anticipated that any discrepancies which may occur will be minimal and not sufficient to materially impact the recommendations contained in this report.
[5] Note: Dwelling and population assumptions for other growth area precincts located within the Study Area may change after the preparation of this assessment. Under this scenario, the apportionment of demand and development contributions costs identified in this report may need to be amended to reflect any change to these assumptions.
[6] Source: Golden Plains Shire Council's population forecasts prepared by .id consulting (https://forecast.id.com.au/goldenplains).

Table 4 - Detailed Community Infrastructure Assessment of All Study Areas

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
Public Open Space			
Passive Open Space			
	As per PSP Guidelines, passive open space requirements for the Bannockburn South East PSP will be delivered on the basis of: • 3% to 5% of net developable area (NDA) for residential zoned land. Based on the application of the 3% to 5% target the PSP will require anywhere between 9.5 to 15.9 hectares of land to be set aside for passive open space purposes in the residential component of the PSP.	Not applicable.	The passive open space provision strategy outlined in the draft Place Based Plan consists of both encumbered and unencumbered public open spaces. The following quantities of unencumbered and encumbered passive public open space are proposed: • 6.67 hectares of unencumbered passive public open space (also referred to as credited open space) to be delivered in the form of 8 local parks, which represents 2.1% NDA; and • 96.72 hectares of encumbered open space (also referred to as uncredited open space), representing 30.49% of NDA. Although the current unencumbered passive open space land allocation is below the 3% to 5% target range specified by the PSP Guidelines, this is partly off-set by a reasonably high allocation for active open space (refer below) and anticipated opportunities to develop important informal recreation open space nodes along Bruce Creek and other encumbered open spaces. Target 12 of the PSP Guidelines aims to ensure that the following unencumbered passive open space distribution target is achieved: • A local park within a 400m safe walkable distance of each dwelling.
Active Open Space			
	As per PSP Guidelines, active open space requirements for the Bannockburn South East PSP will be delivered on the basis of: • 5% to 7% of net developable area (NDA) for residential zoned land.	Not applicable.	The draft Place Based Plan includes the provision of 21.5 hectares of active open space representing 6.78% of NDA. These sports reserves will be delivered across three active open space reserves, one located in the north (approximately 6 hectares), one in the south west

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
	Based on the application of the 5% to 7% target the PSP will require anywhere between 15.9 to 22.2 hectares of land to be set aside for passive open space purposes in the residential component of the PSP.		(approximately 10 hectares) and one in the south east (approximately 6 hectares). Target 12 of the PSP Guidelines aims to ensure that the following unencumbered active open space distribution target is achieved: • A sports reserve or open space larger than 1 hectare within an 800m safe walkable distance of each dwelling.
Council Indoor & Aquatic Leisure Centres and Fitness Centres			
Indoor courts / stadiums			
	1.5 indoor courts	4.1 indoor courts	Although Bannockburn is currently serviced by the existing Bannockburn Community Sports Stadium (2 courts) which caters for a variety of sports and activities including basketball, netball and gymnastics, the long term development of the Study Area indicates a need for 2 more courts. This assessment supports the establishment a new indoor recreation facility within the BSEPSP, located centrally within the PSP on a 0.6 hectare site.
Indoor Aquatic Leisure Centre			
Annual aquatic leisure centre visits	Approximately 108,200 aquatic leisure centre visits per annum (note: estimates based on City of Greater Geelong utilisation rates as Golden Plains Shire does not have an aquatic leisure centre)	Approximately 290,300 aquatic leisure centre visits per annum (note: estimates based on City of Greater Geelong utilisation rates as Golden Plains Shire does not have an aquatic leisure centre)	There is no existing public aquatic leisure centre in Bannockburn or the Shire of Golden Plains. The nearest facilities are located in the City of Greater Geelong at Waterworld (approximately a 20 minute drive from Bannockburn) Kardinia Aquatic Centre (approximately a 30 minute drive from Bannockburn). Given the long term population capacity of the Bannockburn Study Area, this assessment considers the establishment a new medium sized aquatic leisure centre (e.g. which includes a 25 metre indoor pool and gymnasium) as potentially justifiable in the long term. However, Council does not support setting aside land in the BSEPSP for a Council aquatic leisure centre.
Swim participants	Approximately 2,100 swim participants	Approximately 5,700 swim participants	

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
Fitness / gym users	Approximately 3,100 members	Approximately 8,300 members	
Multipurpose Community Centres			
Level 1 Community Centre	0.8 community centres	2.1 community centres	Based on the analysis of discrete services and functions that are typically accommodated within a Council multipurpose community centre, this assessment recommends the BSEPSP include the provision of 1 Level 1 community centre (approximately 1,200m2 of floor space and located on a 0.8 hectare site) in an appropriate location for a new Local Community Both facilities should include: • Kindergarten rooms (x3); • MCH consulting rooms (x2); • Flexible community meeting spaces able to be configured for varying sizes and varying activities (including classroom-based activities); and • Consulting suites for outreach visiting services.
Level 2 Community Centre	0.8 community centres	2.1 community centres	Based on the analysis of discrete services and functions that are typically accommodated within a Council multipurpose community centre, this assessment recommends the BSEPSP include the provision of 1 Level 2 community centre (with 1,500m2 of building floor space and located on a 1.0 hectare site). This facility should include: • Kindergarten rooms (x4); • MCH consulting rooms (x2); • Flexible community meeting spaces able to be configured for varying sizes and varying activities (including classroom-based activities); • A Neighbourhood House service; and • Consulting suites for outreach visiting services.
Level 3 Community Centre	0.3 community centres	0.7 community centres	The main anchor service provided by a Level 3 Community Centre is a library. Rather than construct a new library facility in the BSEPSP, Council has indicated a

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
			preference to extend and upgrade the existing Bannockburn Library located in the Bannockburn Town Centre in response to additional demand generated future growth areas. On this basis, this assessment does not recommend the establishment a Level 3 Community Centre in the BSEPSP.
Early Years Services			
Long Day Child Care			
	Approximately 760 places (equivalent of 6 large child care centres)	Approximately 2,000 places (equivalent of 17 large child care centres)	Projected demand estimates support the need to facilitate the establishment of up to 6 large privately provided long day child care centre within the Bannockburn South East PSP. The long day child care centres should provide for a kindergarten function to meet some of the expected demand for 3 and 4 year kindergarten programs.
3 & 4 Year Old Sessional Kindergarten			
	Approximately 7 kindergarten rooms under the proposed kindergarten policy environment[7] (30 hours of four year old kindergarten per week, and 15 hours of three year old kindergarten per week).	Approximately 18 kindergarten rooms under the proposed kindergarten policy environment (30 hours of four year old kindergarten per week, and 15 hours of three year old kindergarten per week).	The demand estimates support the need for up to 7 kindergarten rooms in the BSEPSP to cater for both 3 and 4 year old sessional kindergarten programs. This assessment recommends that 3 kindergarten rooms should ideally be incorporated into the proposed Level 1 facility and 4 kindergarten rooms should ideally be incorporated into the proposed Level 2 facility.
Maternal & Child Health			
	2.5 MCH consulting rooms	6.8 MCH consulting rooms	The demand estimates support the need for 3 MCH consulting rooms within the BSEPSP. It is proposed that this be delivered in the following manner: • 2 MCH consulting rooms incorporated within both the Level 1 and Level 2 community centres proposed for Bannockburn South East PSP.
Playgroups			

[7] Victorian State Government Best Start, Best Life Policy (June 2022).

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
	14 playgroup sessions per week	38 playgroup sessions per week	The demand increases generated by the PSP for playgroup activities can be accommodated within either flexible community meeting spaces or Kindergarten rooms to be incorporated within all multipurpose community centres proposed for the BSEPSP.
Neighbourhood Houses / Adult Education			
Number of Neighbourhood House facilities	0.6 Neighbourhood Houses	1.5 Neighbourhood Houses	Projected demand estimates support the need to facilitate the establishment of 1 new Neighbourhood House service, preferably integrated within the Level 2 Community Centre proposed for the BSEPSP.
Number of Neighbourhood House users per week	Approximately 460 users per week	Approximately 1,200 users per week	
Libraries			
Number of Library Facilities	0.4 libraries	1.2 libraries	Rather than construct a new library facility in the BSEPSP, Council has indicated a preference to extend and upgrade the existing Bannockburn Library located in the Bannockburn Town Centre in response to additional demand generated future growth areas.
Number of Library loans per annum	Approximately 56,200 loans per annum	Approximately 151,000 additional loans per annum	
Number of Library visits per annum	Approximately 24,700 library visits per annum	Approximately 66,400 additional library visits per annum	
Library floor area requirement (m2)	Approximately 0 sqm of library floorspace	Approximately 2,000 sqm of library floorspace	
Education Facilities			
Government Primary			
			As part of the external agency consultation undertaken to inform the preparation of this assessment, the Department of Education (DE) have requested that two

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
			Government Primary School sites be set aside in the BSEPSP (each located on 3.5 hectares of land). The location and configuration of the school site should be delivered in accordance with the *Victorian Government School Site Selection Criteria – Toolbox* (October 2021).
Government Primary School enrolments	Approximately 1,190 government primary school enrolments	Approximately 3,180 government primary school enrolments	
Government Primary School sites	1.7 Government Primary Schools	4.7 Government Primary Schools	
Government Secondary			
			Although Bannockburn is serviced by one existing Government Secondary School (Bannockburn P-12 College), DE has confirmed there is likely to be a requirement to set aside land for an additional Government Secondary School site within the BSEPSP on an 8.4 hectare site.
Government Secondary School enrolments	Approximately 540 government secondary school enrolments	Approximately 1,450 government secondary school enrolments	
Government Secondary School sites	0.5 Government Secondary Schools	1.6 Government Secondary Schools	
Government Specialist School			
	No estimates.	No estimates.	DE have confirmed there is no requirement to set aside land for a proposed government specialist school within the within the BSEPSP.
Catholic Primary Schools			
	Approximately 350 Catholic primary school enrolments	Approximately 930 Catholic primary school enrolments	As part of the external agency consultation undertaken to inform the preparation of this assessment, the Melbourne Archdiocese Catholic Schools (MACS) has

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
			requested that land (3 hectares) be set aside in the BSEPSP for a future Catholic Primary School.
Catholic Secondary Schools			
	Approximately 300 Catholic secondary school enrolments	Approximately 800 Catholic secondary school enrolment	As part of the external agency consultation undertaken to inform the preparation of this assessment, the Melbourne Archdiocese Catholic Schools (MACS) confirmed there was no requirement to set aside land for a Catholic Secondary School site within the BSEPSP.
Other Independent Primary Schools			
	Approximately 180 independent primary school enrolments	Approximately 480 additional independent primary school enrolments	Given the interest expressed by the Melbourne Archdiocese Catholic Schools (MACS) for an additional Catholic Primary School, the establishment of another independent primary school is not deemed to be a high priority.
Other Independent Secondary Schools			
	Approximately 210 independent secondary school enrolments	Approximately 570 independent secondary school enrolments	Although there may be interest from another independent school provider to establish a campus in the BSEPSP, the VPA has not received anu formal interest at this stage.
TAFE			
	Approximately 300 TAFE enrolments	Approximately 800 TAFE enrolments	Given both the long term population size of the Bannockburn Study Area and the proximity of the nearest TAFE facility (Deakin University - Geelong Waterfront Campus, approximately 20 minutes by car) large scale investment in additional campus facilities within the Bannockburn South East PSP would appear unlikely.
University			
	Approximately 340 university enrolments	Approximately 920 university enrolments	Given both the long term population size of the Bannockburn Study Area and the proximity of the nearest University facility (Deakin University – Waurn Ponds Campus, approximately 20 minutes by car) large scale investment in additional campus facilities within the Bannockburn South East PSP would appear unlikely.

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
Law Courts, Police & Emergency Services			
Police			
	There are no documented provision standards for this service	There are no documented provision standards for this service	Formal correspondence received from Victoria Police in late 2023 as part of the VPA's agency validation engagement process has confirmed the agency does require an allocation of land in the Bannockburn South East PSP for the purposes of a accommodating a future police station. However, as no preferred land area allocation was recommended by Victoria Police, an asterisk will be shown in the Place Based Plan in a preferred location (e.g. Town Centre) that will trigger the relevant developer in that location to liaise with Victoria Police to confirm both if and when a site will be required and how much land should be allocated.
Fire Services			
	There are no documented provision standards for this service	There are no documented provision standards for this service	Formal correspondence received from the Country Fire Authority (CFA) in late 2023 as part of the VPA's agency validation engagement process has confirmed the agency does not require an allocation of land in the Bannockburn South East PSP for the purposes of accommodating a fire station.
Ambulance Services			
	There are no documented provision standards for this service	There are no documented provision standards for this service	Formal correspondence received from Ambulance Victoria in late 2023 as part of the VPA's agency validation engagement process has confirmed the agency does not require an allocation of land in the Bannockburn South East PSP for the purposes of accommodating an ambulance station.
State Emergency Services			
	There are no documented provision standards for this service	There are no documented provision standards for this service	Formal correspondence received from the Victorian State Emergency Service in late 2023 as part of the VPA's agency validation engagement process has confirmed the agency does not require an allocation of land in the Bannockburn South East PSP for the purposes of accommodating a VicSES facility.

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
Law courts			
	There are no documented provision standards for this service. However, The *Court Services Victoria Strategic Asset Plan:2016-2031* identifies a clear hierarchy of law court facilities.	There are no documented provision standards for this service. However, The *Court Services Victoria Strategic Asset Plan:2016-2031* identifies a clear hierarchy of law court facilities.	Given both the long term population size of the Bannockburn Study Area and the proximity of the nearest law courts (Geelong Magistrates Court, approximately 20 minutes by car) investment in additional law court facilities within the BSEPSP would appear unlikely.
Health			
Acute / Sub-Acute Health Services			
	Equivalent to approximately 60 public and private hospital beds	Equivalent to 150 public and private hospital beds	Formal correspondence received from the Department of Health in late 2023 as part of the VPA's agency validation engagement process has confirmed the agency does not require an allocation of land in the Bannockburn South East PSP for the purposes of accommodating an acute / sub-acute health facility.
Community health services & other primary care services			
	Approximately 1,700 community health clients Approximately 0.4 community health service sites Approximately 5 general practices	Approximately 1,700community health clients Approximately 1.2 community health service sites Approximately 12 general practices	The catchment area serviced by Barwon Health includes Bannockburn. Barwon Health has five major community health centres that provide a range of services to the Barwon region. However, there are no dedicated community health sites located in Bannockburn. Given the long term population size of the Bannockburn Study Area, this assessment recommends that an allocation of floor space (the amount and type to be determined when concept planning for the facility commences) within the Level 2 Community Centre proposed for the PSP be set aside for the purposes of community health service provision.
Aged Care & Other Services for Older Persons			
Residential Aged Care Places			
	Approximately 70 to 80 residential aged care places	Approximately 200 residential aged care places	Given the current absence of residential aged care facilities, and the projected increase in demand over the next 20 years in the area, additional provision within the

Community Infrastructure Type	Demand / Supply Requirements Generated by Bannockburn South East PSP	Bannockburn Study Area	Recommended Response Measures for Bannockburn South East PSP
			BSEPSP is considered desirable. However, an assessment of need undertaken by the Australian Government for the broader Aged Care Planning Region (ACPR) within which the site is located (i.e. the Grampians Region) will determine when and how many places will be funded. This assessment recommends a site be identified within the BSEPSP for a residential aged care facility subject to market interest from either the private sector or not-for-profit organisations.

4 Recommended Community Infrastructure Plan for BSEPSP

Outlined below is a revised community infrastructure plan for the BSEPSP based on the revised development assumptions and other information presented and analysed in the previous sections of this report.

Table 5 – Recommended Community Infrastructure Plan for BSEPSP

Community Infrastructure Type	Current Provision in the Draft Place Based Plan	Land Allocation	DCP Item	Apportionment to BSEPSP
Public Open Space				
Passive Open Space	8 unencumbered passive open space parks configured and distributed in accordance with both PSP Guidelines and Council's open space development standards.	6.67 ha	T.B.C	100%
Active Open Space and sports pavilions	3 active open space reserves located and configured as follows: • Active open space north – (approximately 6 ha) with 1 sports pavilion; • Active open space south east – (approximately 6 ha) with 1 sports pavilion; and • Active open space south west – (approximately 10 ha) with 1 sports pavilion.	21.5 ha	Yes	100% for land acquisition, playing field construction and sports field construction
Council Indoor & Aquatic Leisure Centres and Fitness Centres				
Indoor recreation facility	1 indoor recreation centre site	0.6 ha	Yes	100% for land acquisition only
Multipurpose Community Centres				
Level 1 Community Centre	1 Level-1 Community Centre	0.8 ha	Yes	100% for land and construction
Level 2 Community Centre	1 Level-2 Community Centre	1.0 ha	Yes	100% for land and construction
Education Facilities				
Government Primary	2 Government Primary Schools	3.5 ha	No	Not applicable
Government Secondary	1 Government Secondary School	8.4 ha	No	Not applicable
Non-Government Primary	1 non-Government school (most likely a Catholic Primary School)	3.0 ha	No	Not applicable
Police & Emergency Services				
Police	1 potential future police station	Co-locate in, or adjacent to proposed Town Centre (0.25 ha)	No	Not applicable

5 Indicative Community Infrastructure DCP Costs and Apportionment

Outlined in Table 6 on the following page are the recommended community infrastructure projects to be incorporated into the BSEPSP DCP and indicative costs for each based on the VPA's benchmarks costs guide (refer to Appendix 3 for more details)

.

Table 6 – Recommended Community Infrastructure Projects for BSEPSP DCP (Excluding Land Acquisition Costs)

Community Infrastructure Type	Land Area (Ha)	Benchmark Construction Cost (July 2025)	1 July 2025 Index Figure	Revised Cost Estimate	Cost Source	% Apportionment to Bannockburn South East PSP Development	Levy Type	Cost Apportioned to Bannockburn South East PSP Development
Active Open Space and sports pavilions								
Land acquisition cost for Active Open Space North	6.0 ha	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	100%	Development Infrastructure Levy	T.B.C by the VPA / Council
Construction of Active Open Space North (approximately 6ha)	6.0 ha	$9,251,966	1.33	$12,305,115	VPA Benchmark Costs (Item 42, Estimate 50)	100%	Development Infrastructure Levy	$12,305,114.78
Construction of pavilion for Active Open Space North (small pavilion)	Not applicable	$2,151,062	1.33	$2,860,912	VPA Benchmark Costs (Item 40, Estimate 50)	100%	Community Infrastructure Levy	$2,860,912.46
Land acquisition cost for Active Open Space South East	6.0 ha	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	100%	Development Infrastructure Levy	T.B.C by the VPA / Council
Construction of Active Open Space South East (approximately 6ha)	6.0 ha	$9,251,966	1.33	$12,305,115	VPA Benchmark Costs (Item 42, Estimate 50)	100%	Development Infrastructure Levy	$12,305,114.78
Construction of pavilion for Active Open Space South East (small pavilion)	Not applicable	$2,151,062	1.33	$2,860,912	VPA Benchmark Costs (Item 40, Estimate 50)	100%	Community Infrastructure Levy	$2,860,912.46
Land acquisition cost for Active Open Space South West	10 ha	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	100%	Development Infrastructure Levy	T.B.C by the VPA / Council
Construction of Active Open Space South West (approximately 10ha)	10 ha	$12,099,430	1.33	$16,092,242	VPA Benchmark Costs (Item 43, Estimate 50)	100%	Development Infrastructure Levy	$16,092,241.90
Construction of pavilion for Active Open Space South Large (large pavilion)	Not applicable	$3,581,105	1.33	$4,762,869.65	VPA Benchmark Costs (Item 41, Estimate 50)	100%	Community Infrastructure Levy	$4,762,869.65
Council Indoor & Aquatic Leisure Centres and Fitness Centres								
Land acquisition cost for indoor recreation precinct	0.6 ha	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	100% (land only)	Development Infrastructure Levy	T.B.C by the VPA / Council
Construction of 2 indoor multipurpose courts facility	Not applicable	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	75%	Community Infrastructure Levy	T.B.C by the VPA / Council
Multipurpose Community Centres								
Land acquisition cost for Level 1 Community Centre - North	0.8 ha	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	100%	Development Infrastructure Levy	T.B.C by the VPA / Council
Construction of Level 1 Community Centre - North	Not applicable	$9,096,034	1.32	$12,006,765	VPA Benchmark Costs (Item 37, Estimate 50)	100%	Development Infrastructure Levy	$12,006,764.88
Land acquisition cost for Level 2 Community Centre – South East	1.0 ha	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	T.B.C by the VPA / Council	100%	Development Infrastructure Levy	T.B.C by the VPA / Council
Construction of Level 2 Community Centre – South east	Not applicable	$10,747,314	1.32	$14,186,454	VPA Benchmark Costs (Item 38, Estimate 50)	100%	Development Infrastructure Levy	$14,186,454.48

Appendices

Appendix 1. – Study Area Demand and Supply Estimates

Table 7 - Community Infrastructure Provision Standards & Demand & Supply Estimates for Bannockburn South East PSP & Study Area

Community Infrastructure Category	Demand / Supply Metric	Description of Demand / Supply Metric	Source of Demand / Supply Metric	Bannockburn South East PSP: Scenario 3 - approx. 40% Increase in Base Case	Study Area (Scenario 3)
1. Public Open Space, Outdoor Sport and Indoor Recreation Facilities					
1.1 Public open space and indoor recreation facilities					
Unencumbered passive open space	*4.0%*	Percentage of net developable area to be provided as unencumbered public open space within residential areas (including activity centres)	Victorian Planning Authority, Precinct Structure Planning Guidelines: New Communities in Victoria (October, 2021)	14	Not applicable
Unencumbered active open space	*6.0%*	Percentage of net developable area to be provided as unencumbered public open space	Victorian Planning Authority, Precinct Structure Planning Guidelines: New Communities in Victoria (October, 2021)	21	Not applicable
All unencumbered public open space	*10.0%*	Percentage of net developable area to be provided as unencumbered public open space	Victorian Planning Authority, Precinct Structure Planning Guidelines: New Communities in Victoria (October, 2021)	35	Not applicable
Council owned multipurpose indoor recreation courts	10,000	Approximate total population per court	Source: ASR calculation of all existing indoor courts (Council / State owned & school based basketball courts) in Greater Melbourne as at June 30 2024.	1.5	4.1
Council aquatic leisure centre visits per annum	7.0	Number of visits per person per annum	Victorian Department of Jobs, Precincts & Regions, Know Your Council: 2023-2024 Dataset (City of Greater Geelong)	108,165	290,298
Council aquatic / leisure centres	93,000	Approximate total population per facility	Source: ASR calculation of all existing Council Indoor Aquatic Leisure Centres in Greater Melbourne as at June 30 2024.	0.2	0.4
1.2 Organised Sport Participation					
Type of organising entity by activity: Total organised (adults - people aged 15 and over)					
Fitness/Gym	13%	% of people aged 15 years and over participating in organised physical activity or sport at least once per year	Australian Sports Commission, AusPlay Survey (AusPlay): Victorian data. January 2024 - December 2024 Victoria Data (Table 19)	1,962	5,266

Community Infrastructure Category	Demand / Supply Metric	Description of Demand / Supply Metric	Source of Demand / Supply Metric	Bannockburn South East PSP: Scenario 3 - approx. 40% Increase in Base Case	Study Area (Scenario 3)
Pilates	5%	As above	As above	793	2,129
Walking (Recreational)	5%	As above	As above	767	2,057
Running/jogging	5%	As above	As above	697	1,872
Basketball	3%	As above	As above	519	1,392
Yoga	3%	As above	As above	463	1,243
Football/soccer	3%	As above	As above	436	1,171
Swimming	3%	As above	As above	428	1,148
Australian football	3%	As above	As above	422	1,131
Tennis	2%	As above	As above	386	1,036
Golf	2%	As above	As above	360	966
Netball	2%	As above	As above	317	850
Cricket	2%	As above	As above	277	744
Bush walking	2%	As above	As above	268	720
Dancing (recreational)	1%	As above	As above	208	558
Type of organising entity by activity: Total organised (Children - people aged up to 14 years)					
Swimming	24%	% of children aged 0-14 participating in organised physical activity or sport at least once per year	Australian Sports Commission, AusPlay Survey (AusPlay): Victorian data. January 2024 - December 2024 Victoria Data (Table 20)	958	2,572
Football/soccer	10%	As above	As above	410	1,100

Community Infrastructure Category	Demand / Supply Metric	Description of Demand / Supply Metric	Source of Demand / Supply Metric	Bannockburn South East PSP: Scenario 3 - approx. 40% Increase in Base Case	Study Area (Scenario 3)
Basketball	10%	As above	As above	399	1,070
Australian football	9%	As above	As above	355	953
Gymnastics	6%	As above	As above	255	683
Dancing (recreational)	5%	As above	As above	214	575
Netball	5%	As above	As above	189	508
Tennis	5%	As above	As above	185	497
Walking (Recreational)	5%	As above	As above	181	485
Cricket	4%	As above	As above	172	463
2. Early Years Services					
2.1 Kindergartens					
Total number of enrolments in 4 year old Kindergarten	100%	Total number of enrolments in 4 year old Kindergarten	ASR Research assumption	296	795
Total number of enrolments in 3 year old Kindergarten	100%	Total number of enrolments in 3 year old Kindergarten	ASR Research assumption	300	806
Total 3 & 4 year old enrolments attending sessional kindergarten	100%	Sum of above	ASR Research assumption	596	1,601
Required number of places to satisfy demand for 3 and 4 year old kindergarten	1 place per four-year old and 1 place per 2 three year old			446	1,198
Number of kindergarten rooms required under proposed kindergarten reform policy environment (15 hours per week of three year old kindergarten by 2029 and 30 hours of four year old kindergarten by 2036)	66 enrolments for three year old kindergarten & 33 enrolments for four year old kindergarten.		ASR constructed calculation	13.5	36.3
Estimated number of stand-alone kindergarten rooms	50%	Percentage of the total supply of all kindergarten rooms that will be met by Council owned / managed facilities	ASR Research constructed assumption	6.8	18.2

Community Infrastructure Category	Demand / Supply Metric	Description of Demand / Supply Metric	Source of Demand / Supply Metric	Bannockburn South East PSP: Scenario 3 - approx. 40% Increase in Base Case	Study Area (Scenario 3)
2.2 Maternal & Child Health					
Number of MCH Full-Time Nurses	120	1 FT nurse per 120 children 0 years	Typical measure used by ASR Research for land use development CINAs (e.g. Precinct Structure Plans)	2.5	6.8
Number of MCH consulting units	1	Number of MCH consulting units required per FT nurse	Based on above	2.5	6.8
2.3 Playgroup					
Number of 2 hr playgroup sessions per week	106	Total number children aged 0-4 years per playgroup session per week	ASR Research constructed measure using Playgroup Victoria data for Victoria (2025): 3,000 sessions per week and 2,000 playgroup venues	14.3	38.3
2.4 Occasional Child Care					
Number of occasional child care places	120	Total number children aged 0-4 years per long day child care place	Register of Approved Children's Services in Victoria (February 2025) for Greater Melbourne	13	34
Number of occasional child care centres	30	Total number of facilities required based on number of licensed places generated (see above)	ASR Research constructed measure based on a typical sized occasional child care facility.	0.4	1.1
2.5 Long Day Child Care Centres					
Number of Long Day Child Care places	2.0	Total number children aged 0-4 years per long day child care place	AreaSearch, Location Benchmarks - Child Care (https://areasearch.com.au/incolour/childcare), October 2024 (data for Greater Melbourne)	755	2,027
Number of Long Day Child Care centres	120	Total number of facilities required based on number of licensed places generated (see above)	ASR Research constructed measure based on a typical large sized long day child care facility.	6	17
3. Community Facilities (Excluding Early Years)					
3.1 Multipurpose Community Centres					
Level 1 Community Centre	20,000	Population per Level 1 Community Centre (servicing an overall population catchment of 60,000 people)	Draft Community Infrastructure Planning Guidelines Refresh (2023), prepared by ASR Research on behalf of the Victorian Planning Authority	0.8	2.1

Community Infrastructure Category	Demand / Supply Metric	Description of Demand / Supply Metric	Source of Demand / Supply Metric	Bannockburn South East PSP: Scenario 3 - approx. 40% Increase in Base Case	Study Area (Scenario 3)
Level 2 community Centre	20,000	Population per Level 2 Community Centre (servicing an overall population catchment of 60,000 people)	Draft Community Infrastructure Planning Guidelines Refresh (2023), prepared by ASR Research on behalf of the Victorian Planning Authority	0.8	2.1
Level 3 Community Centre	60,000	Population per Level 3 Community Centre (servicing an overall population catchment of 60,000 people)	Draft Community Infrastructure Planning Guidelines Refresh (2023), prepared by ASR Research on behalf of the Victorian Planning Authority	0.3	0.7
3.2 Neighbourhood Houses					
Number of Neighbourhood House users per week	3%	Percentage of population using a Neighbourhood House in a given week	Neighbourhood Houses Victoria, Neighbourhood Houses Survey 2017	464	1,244
Number of Neighbourhood House Sites	2.2	Number of Neighbourhood Houses per 60,000 people	Source: ASR calculation of all existing Neighbourhood Houses in Greater Melbourne as at June 30 2024.	0.6	1.5
3.3 Libraries					
Number of library loans annum	3.6	Total loans per person	Victorian Department of Jobs, Precincts & Regions, Know Your Council: 2023-2024 Dataset (Golden Plains Shire)	56,246	150,955
Number of library visits per annum	1.6	Total visits per person	Victorian Department of Jobs, Precincts & Regions, Know Your Council: 2023-2024 Dataset (Golden Plains Shire)	24,723	66,354
Library floorspace m2	Refer to source of measure for description of formula	Library floorspace based on population size	Based on NSW Library Building Calculator Tool, NSW State Library (https://www.sl.nsw.gov.au/people-places/planning-tools/library-building-calculator)	0	1,969
Number of library facilities	1.7	Number of Library facilities (branches and outreach/lounges) per 60,000 people	Source: ASR calculation of all existing Neighbourhood Houses in Greater Melbourne as at June 30 2024.	0.4	1.2
4. Education Enrolment & Facility Estimates					
4.1 Primary Schools					
Govt Primary Enrolment	64%	% of 5-11 year old population	Australian Bureau of Statistics, 2021 Census of Population and Housing, based on data for Golden Plains LGA	1,185	3,180
Catholic Primary Enrolment	19%	% of 5-11 year old population	As above	345	927

Community Infrastructure Category	Demand / Supply Metric	Description of Demand / Supply Metric	Source of Demand / Supply Metric	Bannockburn South East PSP: Scenario 3 - approx. 40% Increase in Base Case	Study Area (Scenario 3)
Non Govt Primary Enrolment	10%	% of 5-11 year old population	As above	180	482
Total Primary Enrolment	93%	% of 5-11 year old population	As above	1,714	4,600
Government Primary School site	3,000	Total number of dwellings per Government Primary School	Department of Education (more typically applied in metropolitan Melbourne growth areas)	1.7	4.7
4.2 Secondary Schools					
Govt Secondary Enrolment	44%	% of 12-17 year old population	Australian Bureau of Statistics, 2021 Census of Population and Housing, based on data for Golden Plains LGA	540	1,450
Catholic Secondary Enrolment	24%	% of 12-17 year old population	As above	299	804
Non Gov Secondary Enrolment	17%	% of 12-17 year old population	As above	213	572
Total Secondary Enrolment	86%	% of 12-17 year old population	As above	1,056	2,834
Government Secondary School site	10,000	Total number of dwellings per Government Secondary School	Department of Education (more typically applied in metropolitan Melbourne growth areas)	0.5	1.4
4.3 TAFE					
Total TAFE Enrolments	2.6%	% of 15+ year old population	Australian Bureau of Statistics, 2021 Census of Population and Housing, based on data for Golden Plains LGA	298	799
4.4 Universities					
Total University Enrolments	3.0%	% of 15+ year old population	Australian Bureau of Statistics, 2021 Census of Population and Housing, based on data for Golden Plains LGA	343	922
5. Health					
5.1 Hospitals					
Number of public and private hospital beds	3.6	Number of public and private beds per 1,000 people	ASR constructed calculation based on an audit of all public and private hospitals located in Greater Melbourne (June 30, 2024)	56	149
Number of public hospital beds	2.0	Number of public beds per 1,000 people	ASR constructed calculation based on an audit of all public hospitals located in Greater Melbourne (June 30, 2024)	31	83
Number of private hospital beds	1.6	Number of public beds per 1,000 people	ASR constructed calculation based on an audit of all private hospitals located in Greater Melbourne (June 30, 2024)	25	66

Community Infrastructure Category	Demand / Supply Metric	Description of Demand / Supply Metric	Source of Demand / Supply Metric	Bannockburn South East PSP: Scenario 3 - approx. 40% Increase in Base Case	Study Area (Scenario 3)
5.2 Community Health					
Community health service sites	35,000	Total population per community health service site	ASR constructed calculation based on an audit of all community health service sites located in Greater Melbourne (June 2024)	0.4	1.2
Community health clients	11%	Proportion of total population accessing a community health service per year	Community Health First, Community Health Impact Report 2023-24	1,745	4,683
5.3 General practices					
General practices	0.30	Number of general practice clinics per 1,000 people (Victoria)	Department of Health and Human Services, Victoria Health Profile 2015 (https://discover.data.vic.gov.au/dataset/2015-local-government-area-profiles)	5	12
6. Aged Care					
Residential aged care places	71.5	Number of aged care places per 1000 people aged 70 years +	Australian Government Productivity Commission, Report on Government Services 2025 - aged care services data tables (Table 14A.B), 30 January 2025	74	200
7. Arts & Culture					
Type of arts / cultural activity participated in (people aged 15 and over)					
Performing in a drama, comedy, musical or variety act	1%	% of 15+ population participating in activity	Australian Bureau of Statistics. (2021-22). Cultural and creative activities. ABS. https://www.abs.gov.au/statistics/people/people-and-communities/cultural-and-creative-activities/latest-release.	114	307
Singing or playing a musical instrument	4%	As above	As above	401	1,075
Dancing	2%	As above	As above	206	553
Writing	5%	As above	As above	572	1,536
Visual art activities	15%	As above	As above	1,672	4,486
Craft activities	13%	As above	As above	1,534	4,117
Designing websites, computer games or interactive software	19%	As above	As above	2,175	5,838

Community Infrastructure Category	Demand / Supply Metric	Description of Demand / Supply Metric	Source of Demand / Supply Metric	Bannockburn South East PSP: Scenario 3 - approx. 40% Increase in Base Case	Study Area (Scenario 3)
Fashion, interior or graphic design	27%	As above	As above	3,091	8,296
Type of arts / cultural activity participated in (children aged 0 to 14)					
Drama activities	5%	% of 5-14 population participating in activity	Australian Bureau of Statistics. (2021-22). Cultural and creative activities. ABS. https://www.abs.gov.au/statistics/people/people-and-communities/cultural-and-creative-activities/latest-release.	196	526
Singing or playing a musical instrument	19%	As above	As above	773	2,074
Dancing	13%	As above	As above	516	1,386
Art and craft activities	39%	As above	As above	1,553	4,169
Creative writing	19%	As above	As above	741	1,988
Creating digital content	15%	As above	As above	617	1,655
Screen based activities	90%	As above	As above	3,607	9,680
Reading for pleasure	72%	As above	As above	2,898	7,779

Appendix 2 – VPA Community Infrastructure Specifications

This Appendix shows indicative community infrastructure specifications for the main DCP items typically identified in a PSP. These specifications include active open space reserves, sporting pavilions and community centres.

Table 8 - Typical PSP Active Open Space Specifications by Size

Component	Unit	5 to 6 Hectares	8 to 10 Hectares
Combination of two ovals & three soccer fields	No	1 Ovals 1 soccer	2 Ovals
Car park	Spaces	120	175
Netball / basketball court	No	2	2
Tennis Courts	No	2	
Cricket pitch and practice nets	No	1 /1	2 / 1
Goals	No	2 sets	4 sets
Internal access road	m2	1350	1980
Landscaping	m2	30430	55435
Lighting – training & site	No	6	14
Signage	No	15	24
Site boundary fencing	m	1000	1300
Driveway crossing access from street	No	1	1
Utility service connections	Item	1	1
Interchange shelters	No	5	8
Turf surface and irrigation system	m2	21340	55440
Score Board	No	2	2

Source: Review of Benchmark Infrastructure Costings: Benchmark Infrastructure Costing, Prepared for VPA by Cardno (2019)

Table 9 - Typical PSP Sport Pavilion Specifications by Number of Playing Fields

Description / Facility	Unit	Two playing areas	Three playing areas
Four changes rooms with toilets and showers	m2	120	
Six change rooms with toilets and showers	m2		240
Two umpire change rooms with toilets	m2	40	
Three umpire change rooms with toilets	m2		60
Storage	m2	80	120
Office / first aid room	m2	20	30
Canteen and kitchen	m2	20	40
Public Toilets	m2	40	60
Multipurpose community room / social room (A small (50-80m2) community meeting space, entry foyer and circulation space)	m2	100	
Multipurpose community room / social room (A small (100-125m2) community meeting space, entry foyer and circulation space)	m2		150
Total Building floor space	**m2**	**420**	**700**
Covered spectator area	m2	80	120

Source: Review of Benchmark Infrastructure Costings: Benchmark Infrastructure Costing, Prepared for VPA by Cardno (2019)

Table 10 – Typical PSP Community Centre Configurations x Hierarchy Type

Description / Facility	Unit	Level 1	Level 2	Level 3
Kindergarten Facility Two kindergarten rooms to accommodate 99 licensed places, including children's toilets and amenities, storage space, office, staff room and staff toilets and amenities display and circulation space	m2	750	750	
Extra 33-place kindergarten room / multipurpose meeting space	m2	150	150	
Maternal and child health consulting facility (two consulting rooms plus waiting space / program room	m2	100	100	200
Multipurpose community spaces (A combination of small (50-80m2) and medium (100-125m2) community meeting spaces, plus public toilets and amenities, office, staff room and staff toilets and amenities, reception and circulation space)	m2	200	500	
Multipurpose and specialist community spaces (A combination of small (50-80m2), medium (100-125m2) and large (180m2+) community meeting spaces and classrooms plus public toilets and amenities, reception and circulation space)	m2			450
Library	m2			1500
Specialist community space (adult reception / neighbourhood house, arts and cultural facility, youth facility, planned activity group space etc)	m2			250
Total building floor space	**m2**	**1200**	**1500**	**2400**
Small commercial kitchen	No	1		
Medium commercial kitchen	No		1	
Large commercial kitchen	No			1
Kindergarten outdoor play spaces	m2	700	700	
Car parking spaces	Spaces	60	75	125
Playground	m2	800	800	800
Landscaping	m2	500	500	500

Source: Review of Benchmark Infrastructure Costings: Benchmark Infrastructure Costing, Prepared for VPA by Cardno (2019)

Appendix 3 – VPA Community Infrastructure Cost Estimates[8]

COMMUNITY INFRASTRUCTURE BIC

ITEM	CATEGORY	DESCRIPTION	STANDARD	COST APPLICATION	ESTIMATE P50	ESTIMATE P90
37	**Community Facilities**	Level 1 Facility	Contemporary standard	Bldg floor area	$9,096,034	$10,136,913
38	**Community Facilities**	Level 2 Facility	Contemporary standard	Bldg floor area	$10,747,314	$11,898,811
39	**Community Facilities**	Level 3 Facility	Above contemporary standard allowing for place making architectural features	Bldg floor area	$14,341,746	$15,766,458

SPORTS PAVILION BIC

40	**Sports and Recreation Facilities**	Sports Pavilion 2 playing areas	Contemporary standard multi-purpose facility	Bldg floor area	$2,151,062	$2,207,038
41	**Sports and Recreation Facilities**	Sports Pavilion 3 playing areas	Contemporary standard multi-purpose facility	Bldg floor area	$3,581,105	$3,669,067

SPORTS AND RECREATION FACILITY BIC

42	**Sports and Recreation Facilities**	Sports and recreation facility 5 to 6 hectare site	Contemporary senior and junior sporting competition standard	Per Reserve	$9,251,966	$10,690,005
43	**Sports and Recreation Facilities**	Sports and recreation facility 8 to 10 hectare site	Contemporary senior and junior sporting competition standard	Per Reserve	$12,009,430	$13,800,649

BENCHMARK INFRASTRUCTURE COST ITEM	BENCHMARK ITEMS	1 JULY 2025 INDEX
Roads and Intersection	1 to 16	1.32
Bridges and Culverts	17 to 36	1.32
Community Infrastructure	37 to 39	1.33
Sports Pavilion	40 to 41	1.33
Sports & Recreation Facility	42 to 43	1.33

[8] Source: Victorian Planning Authority, benchmark cost estimates for the 2025/26 financial year (Benchmark-Costs-Estimates-For-The-2025-2026-Financial-Year-–-1-July-2025.pdf)

Bannockburn South East Precinct Structure Plan

Community Infrastructure and Open Space Needs Assessment

December 2022
V9

EXECUTIVE SUMMARY

1. Purpose and objectives of assessment

- The purpose of the assessment is to identify the community infrastructure and open space needs of the Bannockburn South East Precinct Structure Plan area in the context of the broader development of the Bannockburn Township and the Geelong Region. The findings and recommendations of the assessment will inform the Bannockburn South East Precinct Structure Plan.
- The objectives of the assessment are to:
  - Identify the demand for community infrastructure and open space generated by the existing Bannockburn Township, the proposed Bannockburn growth areas and the Bannockburn and District Area
  - Assess the capacity of existing or planned infrastructure in Bannockburn and District and the broader Geelong Region to cater for this demand
  - Identify the gaps in infrastructure provision and how these gaps could be addressed in the existing Bannockburn Township, Bannockburn South-East PSP area, the other Bannockburn growth areas and Bannockburn and District
  - Identify the quantum of demand for each infrastructure type that can be attributed to the existing Bannockburn Township, Bannockburn South-East PSP area, the other growth areas and Bannockburn and District.

2. Dwelling and population assumptions used in assessment

Area	Area ha	Dev Area Ha	Est Net Dev Ha	Dwellings	People	Timeframe
Existing township (already developed)				2,200	7,000	
Existing township (to be developed)				451	1,300	
Ormond Road Rezoning	16	16	15	172	507	< 2 years
South East PSP	523	315	235	3,766	11,109	2 years
South West PSP	161	97	97	1,159	3,240	5-10 years
North West Development Plan	176	106	80	1,267	3,738	<2 years
Future Growth Option – South	374	234	168	2,693	7,944	20+ years
Future Growth Option – East	122	73	55	878	2,591	20+ years
Total				**12,586**	**37,429**	

3. Assessment outcomes

Modified or new infrastructure required in Bannockburn and District at full development

Community facilities, health and education facilities

- Four new kindergarten locations – one with 3 rooms, three with 2 rooms (33 place rooms, 297 places)
- Three new M&CH consultation rooms – one location with 2 rooms, the other location with a single room
- New childcare provision by private operators
- Three licensed rooms for occasional care (22 place rooms, 66 places). Can be used for other groups related children's activities
- Health precinct for Barwon Health and other providers

- Four new government primary schools
- One new government secondary school
- One new catholic primary school
- Additional general meeting space areas for intergenerational activities
- Dedicated youth hub. Extension to or replacement of existing facility. Spaces suitable for youth activities in nominated community buildings
- Dedicated men's shed. Extension to or replacement of existing facility
- Dedicated space for neighbourhood house activities and two community garden locations
- Dedicated library facility (2,000m2 floorspace). Extension to or replacement of existing facility
- New civic/cultural venue
- New dedicated space for community arts activities. Spaces suitable for community arts activities in nominated community buildings
- New residential aged care beds by private providers

Recreation facilities

- Upgraded equestrian facilities at Leighdale
- New medium size aquatic facility – recreation pool, learn to swim pool, toddler pool, gym, fitness rooms.
- New two court indoor stadium and additional indoor court at Bannockburn Stadium
- Four new football/cricket ovals (two reserves)
- Two new netball courts and two new lawn bowls greens
- New three field turf soccer facility (one field may eventually become synthetic)
- One new synthetic hockey field. Land for second field.
- New grass athletics track (may eventually become synthetic)
- New three field baseball/softball facility.
- Linear parks along Bruce's Creek, constructed waterway, transmission line and rail corridor, five new district parks (one with a dog park) and seven new local parks
- New subregional playspace, three new district playspaces and seven new local level playspaces

Infrastructure delivery, recommended locations and catchment areas

Facility	Land area (if relevant)	Recommended location Growth area /township	Geographic catchment served
New community precinct/hub: – 3 room kindergarten – 2 room M&CH centre – 1 room occasional care – Youth hub – General activity spaces – Community garden – Civic space	3ha	SE PSP	 SE PSP, FGO-E SE PSP, FGO-E, FGO-S SE PSP, FGO-E B'burn and District SE PSP, FGO-E SE PSP, FGO-E, FGO-S B'burn and District
New community centre: – 2 room kindergarten – 1 room M&CH centre – Neighbourhood house space – General activity spaces – Men's shed	1.0ha	SW PSP	 SW PSP SW PSP, FGO-S B'burn and District SW PSP B'burn and District

Facility	Land area (if relevant)	Recommended location Growth area /township	Geographic catchment served
New community centre: – 2 room kindergarten – 1 room occasional care – Aged activities space – General activity spaces – Community garden	1.0ha	NW DP	 NW DP NW DP, Township B'burn and District NW DP NW DP, Township
New community centre: – 2 room kindergarten – 1 room occasional care – Community arts space – General activity spaces	1.0ha	FGO-S	 FGO-S FGO-S, SWP SP B'burn and District SE PSP
Health precinct – Barwon Health and other providers	1ha	Township or SE PSP	B'burn and District
Library	1.5ha	Township or SE PSP	B'burn and District
Government Primary School	3.5ha	SE PSP	SE PSP
Government Primary School	3.5ha	SE PSP	SE PSP, FGO-E
Government Primary School	3.5ha	SW PSP	SW PSP
Government Primary School	3.5ha	FGO-S	FGO-S
Government Secondary College	8.4ha	SE PSP	SE PSP, FGO-S, FGO-E
Catholic primary school	3ha	SE PSP	SE PSP, FGO-S, FGO-E
Medium size aquatic facility	1.5ha	FGO-S	B'burn and District
CFA/SES facility	1.2ha	SE PSP	B'burn and District
Police station	0.3ha	SE PSP	B'burn and District
Ambulance station	0.3ha	SE PSP	B'burn and District
Indoor stadium	0.6ha	SE PSP	SE PSP, FGO-S, FGO-E
Additional indoor court: Bannockburn Stadium	-	Township	Township
Football/cricket sporting reserve (2 ovals, 2 netball courts)	8ha	SE PSP	SE PSP, FGO-E
Football/cricket sporting reserve (2 ovals, 2 bowling greens)	8ha	FGO-S	FGO-S, SW PSP
Soccer facility (3 fields, one eventually synthetic)	8ha	SE PSP	SE PSP, SW PSP, FGO-S, FGO-E
One new synthetic hockey field. Land for second field	3ha	FGO-S	B'burn and District
Grass athletics track (may eventually become synthetic)	4ha	FGO-S	B'burn and District
Baseball/softball facility (3 fields)	4ha	FGO-E	B'burn and District
Linear park along Bruce's Creek	3ha	SE PSP	SE PSP
Linear park along Bruce's Creek and rail corridor	4ha	FGO-S	FGO-S
Linear park along Bruce's Creek	1ha	SW PSP	SW PSP
Park around Bannockburn Lagoon	1ha	SW PSP	SW PSP
Park along the constructed waterway, transmission easement and rail corridor	4ha	SE PSP	SE PSP
District park (including dedicated dog park)	2ha	SE PSP	SE PSP
District park	2ha	NW DP	NW DP
District park	2ha	SW PSP	SW PSP
District park	2ha	FGO-E	FGO-E
District park	2ha	FGO-S	FGO-S
Two local level parks	1ha each	FGO-S	FGO-S
Two local level parks	1ha each	SE PSP	SE PSP
Local level park	1ha	SW PSP	SW PSP
Local level park	1ha	NW DP	NW DP
Local level park	1ha	FGO-E	FGO-E

Facility	Land area (if relevant)	Recommended location Growth area /township	Geographic catchment served
Subregional playspace	1.5ha	SE PSP	B'burn and District
District playspace	-	NW DP	NW DP
District playspace	-	SW PSP	SW PSP
District playspace	-	FGO-E	FGO-E
District playspace	-	FGO-S	FGO-S
Two local level playspaces	-	FGO-S	FGO-S
Two local level playspaces	-	SE PSP	SE PSP
Local level playspace	-	SW PSP	SW PSP
Local level playspace	-	NW DP	NW DP
Local level playspace	-	FGO-E	FGO-E
Upgraded Leighdale Equestrian Centre	-	Leighdale	B'burn and District

Infrastructure provision in Bannockburn South East PSP Area

- The table below lists the infrastructure items that should be considered for location in the Bannockburn SE PSP area (note: it is proposed that most of the items be aggregated in three community hubs). It identifies the catchment area served by each infrastructure item and the proportion of demand for the item that can be attributed to the Bannockburn SE PSP area. The proportions are determined by dividing the population of the SE PSP area into the catchment population for the facility.
- The infrastructure items listed in the table can serve one of the following six catchment areas:
  - SE PSP area – 11,109 people
  - SE PSP, FG0-E – 13,710 people
  - SE PSP, FGO-E, FGO-S – 21,654 people
  - SE PSP, FGO-E, FGO-S, SW PSP – 24,894 people
  - Township – 37,429 people
  - Bannockburn and District – 47,380 people

Item	Land area Ha	Recommended setting	Geographic Catchment served	Proportion of demand attributable to SE PSP
New community hub:	3	In community/ recreation Hub in prominent accessible location Hub 1		
- 3 room kindergarten			SE PSP, FGO-E	81%
- 2 room M&CH centre			SE PSP, FGO-E, FGO-S	51%
- 1 room occasional care			SE PSP, FGO-E	81%
- Youth hub			B'burn and District	23%
- General activity spaces			SE PSP, FGO-E	81%
- Community garden			SE PSP, FGO-E, FGO-S	51%
- Civic/cultural space			B'burn and District	23%
Health precinct for Barwon Health and other providers	1	In prominent community/recreation precinct Hub 2	B'burn and District	23%
Library	1.5	Hub 1	B'burn and District	23%
Government primary school	3.5	Hub 2	SE PSP	100%
Government primary school	3.5	Hub 3	SE PSP, FGO-E	81%
Government secondary college	8.4	SE PSP	SE PSP, FGO-S, FGO-E	51%

Item	Land area Ha	Recommended setting	Geographic Catchment served	Proportion of demand attributable to SE PSP
Catholic primary school	3	Hub 1	SE PSP, FGO-S, FGO-E	51%
CFA/SES facility	1.2	In accessible location with good egress	B'burn and District	23%
Police station	0.3	In accessible location with good egress	B'burn and District	23%
Ambulance station	0.3	In accessible location with good egress	B'burn and District	23%
Indoor stadium (2 courts)	0.6	In sporting hub Hub 3	SE PSP, FGO-S, FGO-E	51%
Football/cricket sporting reserve (ovals, netball courts)	8	Hub 3	SE PSP, FGO-E	81%
Soccer facility	8	Hub 3	SE PSP, SW PSP, FGO-S, FGO-E	45%
Linear park along Bruce's Creek	3	Bruce's Creek	SE PSP	100%
Linear park along the constructed waterway, transmission line and railway corridor	4	Drainage, transmission and rail line	SE PSP	100%
District park Including dedicated dog park	2	With sporting reserve	SE PSP	100%
Two local level parks	2	In residential areas	SE PSP	100%
Subregional playspace	1.5	Hub 1	B'burn and District	23%
Two local level playspaces	-	Within local parks	SE PSP	100

Infrastructure required elsewhere in the Bannockburn Township to provide for the Bannockburn SE PSP area

Facility	Land area ha	Recommended location	Geographic catchment served	Proportion of demand attributable to SE PSP
Health precinct for Barwon Health and other providers	1	Township or SE PSP	B'burn and District	23%
Library	1.5	Township or SE PSP	B'burn and District	23%
Government Secondary College	8.4	FGO-S	SE PSP, FGO-S, FGO-E	51%
Medium size aquatic facility	1.5	FGO-S	B'burn and District	23%
Additional indoor court at Bannockburn Stadium	-	Township	Township	26%
One new synthetic hockey field. Land for second field.	3	FGO-S	B'burn and District	23%
Grass athletics track (may eventually become synthetic)	4	FGO-S	B'burn and District	23%
Baseball/softball facility (3 fields)	4	FGO-E	B'burn and District	23%

TABLE OF CONTENTS

SECTION ONE – INTRODUCTION 8
1.1 Purpose of Study 8
1.2 Definition of Community Infrastructure 8
1.3 Terminology 8
1.4 Study Methodology 9
SECTION TWO – BANNOCKBURN DEVELOPMENT CONTEXT 10
2.1 Introduction 10
2.2 Development and locational characteristics 10
SECTION THREE – LITERATURE REVIEW 13
3.1 Introduction 13
3.2 Key documents 13
3.3 Other relevant documents 15
SECTION FOUR – BANNOCKBURN AND DISTRICT DEMOGRAPHIC PROFILE 18
4.1 Introduction 18
4.2 Demographic characteristics 18
4.3 Age structure 19
4.4 Implications 19
SECTION FIVE – EXISTING COMMUNITY INFRASTRUCTURE IN BANNOCKBURN TOWNSHIP 20
SECTION SIX– QUANTITATIVE ASSESSMENT: COMMUNITY INFRASTRUCTURE/OPEN SPACE DEMAND 23
6.1 Quantitative Assessment 23
6.2 Facility models 25
SECTION SEVEN– QUALITATIVE ASSESSMENT 26
7.1 Introduction 26
7.2 Assessment 26
SECTION EIGHT– SUMMARY OF INFRASTRUCTURE REQUIREMENTS 36
8.1 Introduction 36
8.2 Summary of Findings 36
8.3 Infrastructure Provision 37
8.4 Infrastructure provision in Bannockburn South East PSP Area 40
8.5 Infrastructure provision in other growth/township areas 42
APPENDICES 46
Appendix A – Literature Review 50
Appendix B - Quantitative Analysis of Community Infrastructure Demand at full development: 56
Appendix C - Facility models 62
Appendix D – Distance analysis, existing provision 68
Appendix E – Distance analysis, provision recommended in this assessment 74

SECTION ONE – INTRODUCTION

1.1 Purpose of Study

The purpose of the Study is to identify the community infrastructure and open space needs of the Bannockburn South East Precinct Structure Plan area in the context of the broader development of the Bannockburn Township and the Geelong Region. The findings and recommendations of the assessment will inform the Bannockburn South East Precinct Structure Plan.

The objectives of the assessment are to:

- Identify the demand for community infrastructure and open space generated by the existing Bannockburn Township, the proposed growth areas and the Bannockburn and District Area.
- Assess the capacity of existing or planned infrastructure in Bannockburn and District and the broader Geelong Region to cater for this demand.
- Identify the gaps in infrastructure provision and how these gaps could be addressed in the existing Bannockburn Township, Bannockburn South East PSP area, the other Bannockburn growth areas and Bannockburn and District.
- Identify the quantum of demand for each infrastructure type that can be attributed to the existing Bannockburn Township, Bannockburn South East PSP area, the other growth areas and Bannockburn and District.

1.2 Definition of Community Infrastructure

Community infrastructure is defined as health, recreation, educational, cultural, community support and emergency services facilities provided by Government agencies, community organisations, Local Government and private organisations.

1.3 Terminology

For this purpose of this report:

- Council refers to Golden Plains Shire.
- South East PSP and SE PSP refer to the Bannockburn South East Precinct Structure Plan area.
- South West PSP and SW PSP refer to the Bannockburn South West Precinct Structure Plan area.
- North West Development Plan and NW DP refer to the Bannockburn North West Development Plan area.
- Future Growth Option - South and FGO-S refer to the Future Growth Option South Growth area
- Future Growth Option – East and FGO-E refer to the Future Growth Option East Growth area
- Existing Bannockburn Township refers to the area within the existing township boundary.
- Township refers to the area which included the existing Township and the five growth areas.
- Bannockburn and District refers to the area which encompasses the existing Township, five growth areas, surrounding rural district and nearby towns.
- At full development (AFD) refers to the time when a geographic area is fully built out.

1.4 Study Methodology

The study methodology involved the following steps:

- A review of planning and policy documents developed by the VPA, Golden Plains Shire and other organisations which have relevance to community infrastructure and open space provision in Bannockburn and District.
- Identification of existing and planned community infrastructure and open space that caters for or will cater for the Bannockburn and District community.
- An assessment of the capacity of existing and planned infrastructure and open space in Bannockburn and District to provide for the increased demand generated by residential development and population growth in Bannockburn and District.
- A quantitative analysis of the future demand for community infrastructure and open space generated by Bannockburn and District and its component areas.
- Consultation with Council and other relevant organisations involved in the provision of community infrastructure and open space about existing and future community infrastructure and open space provision in Bannockburn and District.
- A qualitative assessment of community infrastructure and open space needs in Bannockburn and District based on the findings of the literature review, infrastructure audit, quantitative analysis, desired facility models and consultation process.
- Confirmation of future community infrastructure and open space needs in the Bannockburn South East PSP area and the remainder of Bannockburn Township and how these needs could be addressed.
- Production of draft and final reports.

SECTION TWO – BANNOCKBURN DEVELOPMENT CONTEXT

2.1 Introduction

The section describes the development and locational characteristics of the Bannockburn Township, Bannockburn SE PSP area, Bannockburn and District Area, Geelong City and the G21 Region.

2.2 Development and locational characteristics

2.2.1 Existing Bannockburn Township and Growth Areas

The existing Bannockburn Township consists of around 2,200 dwellings and has a population of around 7,000 people. 623 lots are yet to be developed in the Township (including the Ormond Rd area) and could accommodate an additional 1,800 people.

The Bannockburn Growth Plan proposes five potential growth areas in Bannockburn - the South East PSP, South West PSP, North West Development Plan area, Future Growth Option – South and Future Growth Option – East. The development timeframes for these growth areas range from within 2 years to 20+ years. The growth areas have the potential to yield 9,760 dwellings and generate a population of 28,620 people. If these growth areas are realized, Bannockburn could have a population size at full development of around 37,430 people.

Table 1 – Bannockburn, existing township and growth areas, dwelling and population yields

Area	Area ha	Dev Area Ha	Est Net Dev Ha	Dwellings	People	Timeframe
Existing township (already developed)				2,200	7,000	
Existing township (to be developed)				451	1,300	
Ormond Road Rezoning	16	16	15	172	507	< 2 years
South East PSP	523	315	235	3,766	11,109	2 years
South West PSP	161	97	97	1,159	3,240	5-10 years
North West Development Plan	176	106	80	1,267	3,738	<2 years
Future Growth Option – South	374	234	168	2,693	7,944	20+ years
Future Growth Option – East	122	73	55	878	2,591	20+ years
Total				**12,586**	**37,429**	

Source: VPA, GPS, Bannockburn Growth Plan and GPS population forecasts (id)

2.2.2 Bannockburn and District

Bannockburn is a service centre for the southern portion of the Golden Plains Shire. This area contains the townships/districts of Lethbridge, Teesdale, Meredith and Inverleigh (all located within a 20 minute drive of Bannockburn. Therefore, some of the services/community facilities based in Bannockburn, such as the schools, health services, indoor recreation centre, cultural centre, library and soccer fields, cater for a larger area and greater population size than just Bannockburn. Conversely, facilities in the district, such as Leighdale Equestrian Centre, cater for Bannockburn.

The current population of the Bannockburn and District Area is 14,955 (Bannockburn 7,000, District 7,955). This could rise to 47,380 at full development (Bannockburn 37,430 and District 9,950)

Figure 1 - Existing Bannockburn township, SE PSP and other growth areas: dwelling and population yields

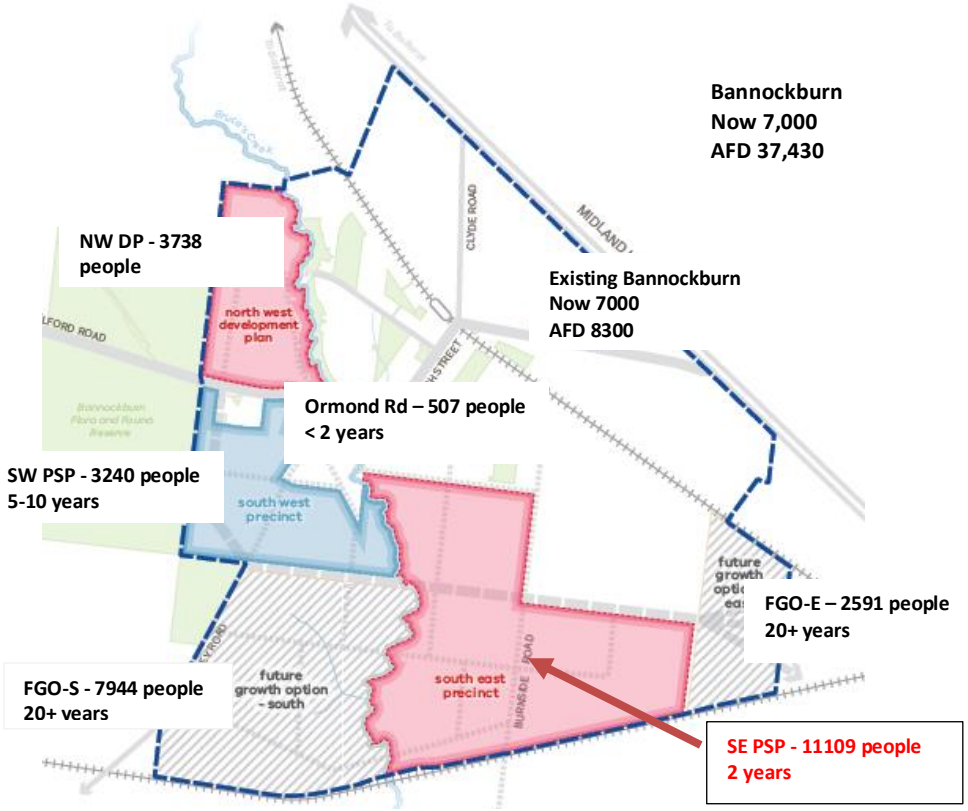
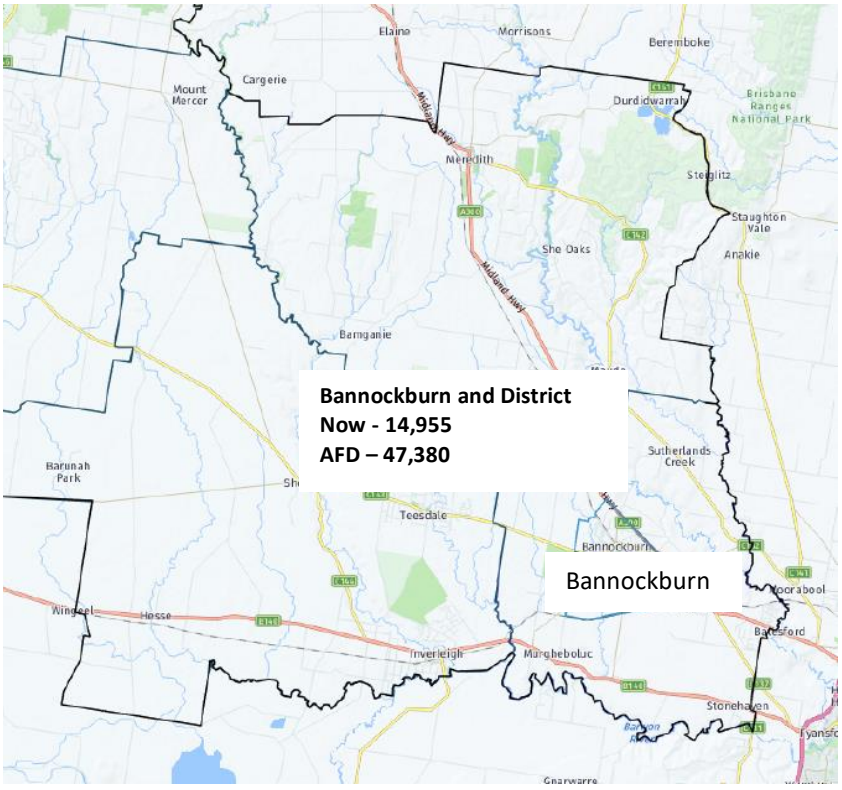


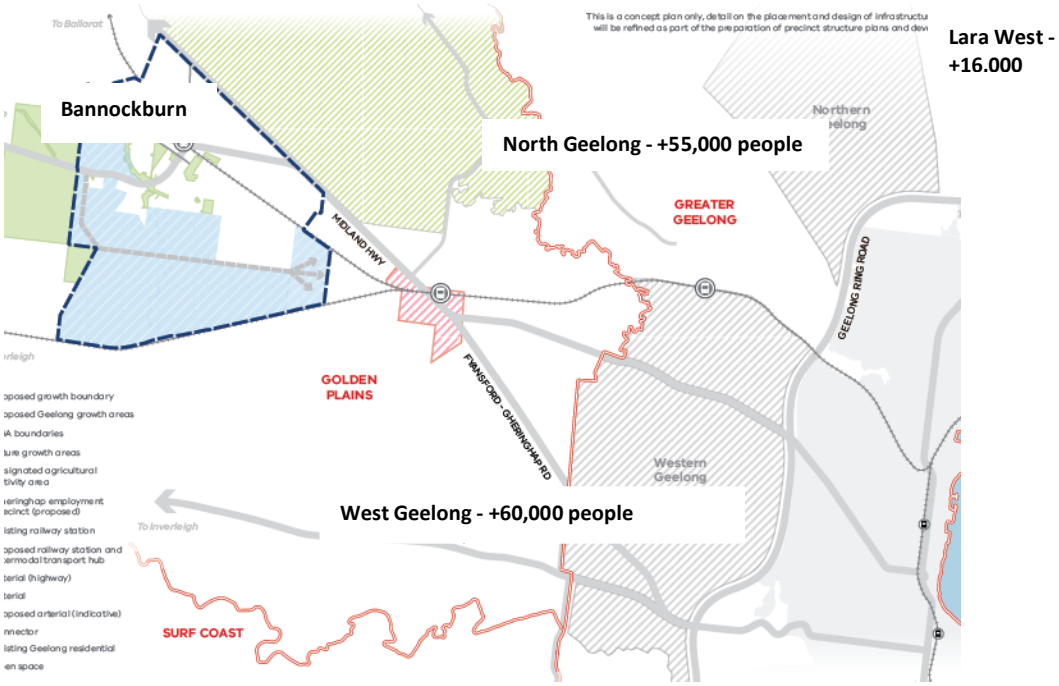
Figure 2 – Bannockburn and District



2.2.3 Geelong City

The Geelong CBD is about a 20 minute drive from Bannockburn. This is close enough for Bannockburn residents to access many services and facilities located in Geelong, e.g., major health services, aquatic centres, hockey fields. The City municipal area has a population of around 270,000 people. This could grow to 460,000 at full development. The major growth areas are Lara West, North Geelong, West Geelong, Armstrong Creek, Geelong CBD, Drysdale and Ocean Grove.

Figure 3 – Growth Areas in Geelong near Bannockburn



2.2.4 G21 Region

Bannockburn is located in the G21 Region. The Region has a current population size of around 350,000 people and is projected to grow to more than 570,000 at full development. Most of the growth (160,000 people) is anticipated to occur in the City of Greater Geelong. Outside of Greater Geelong, is it projected that there will be population growth in Torquay/Jan Juc, Bannockburn and Colac. The Growth Plan describes what the roles of the various population centres in the G21 Region will be in 2050. It nominates Bannockburn as being a regional centre in the same category as Colac, Lara, Leopold, Drysdale/Clifton Springs, Ocean Grove and Torquay/Jan Juc.

Population growth in Geelong and the G21 Region will substantially increase demand for municipal and regional level community infrastructure e.g., hospitals, performing arts centre, museums, aquatic facilities, hockey centre, TAFE College. Bannockburn will contribute to this demand and its residents will compete with other Geelong/G21 residents for access to this higher order community infrastructure.

SECTION THREE – LITERATURE REVIEW

3.1 Introduction

This section contains a review of planning and policy documents developed by the Victorian Planning Authority, Golden Plains Shire, Geelong City, G21, other Government agencies, relevant non-Government organisations and peak sporting bodies that have relevance for community infrastructure provision in Bannockburn and the broader Geelong Region.

3.2 Key documents

3.2.1 Bannockburn Growth Plan 2021

This Plan provides a vision and framework for the future development of the Bannockburn Township through to 2050. The Plan proposes five potential growth areas in Bannockburn - the South East PSP, South West PSP, North West Development Plan area, Future Growth Option – South and Future Growth Option – East.

The Plan makes the following references to community infrastructure and open space provision in Bannockburn generally and the South East and South West PSP areas and the North West Development Plan Area specifically (note: the Plan makes no references to community infrastructure and open space provision in the Future Growth Options area – South and West):

General

- Provide walking and cycling linkages to open space areas, community facilities and the town centre in new development areas and subdivisions.
- Provide open space areas in new developments that incorporate pedestrian, bicycle or riding trail paths to other open space areas such as the Bruce's Creek Corridor.
- Create flora and fauna corridors within open space reserves that incorporate locally indigenous vegetation, where there are identified biodiversity values.
- Provide walking and cycling trails, preferably on the eastern side of Bruce's Creek.
- Provide community infrastructure in Bannockburn that services the local catchment and surrounding townships.
- Consider the need for spaces for community events such as graduations, weddings, markets or performances.
- Encourage the provision of new health and community services in the existing Bannockburn Town Centre or in future town centres as defined by the Bannockburn Urban Growth Plan.
- Make provision for an SES/CFA site at a suitable location in the growth areas.
- Make provision for the following community infrastructure in the growth areas:
  - Two kindergartens
  - Maternal and child health facility
  - Day care facility
  - 2-3 government primary schools, government secondary school and catholic primary school
  - Lower order indoor recreation centre
  - Aquatic facility
  - Netball courts, tennis courts and ovals.

SE Growth Area

- Protect and regenerate the biodiversity values of Bruce's Creek.
- Establish a new environmental corridor along the proposed constructed waterway.
- Establish a community meeting place with a local activity centre and community infrastructure in a central location.
- Identify a linear open space network connecting Bruce's Creek, the constructed waterway corridor and the railway corridor in the south.
- Develop land adjacent to the transmission easement as a key environmental, transport and recreational corridor, subject to approval from AusNet Services.
- Identify and project sites of historic heritage significance such as homesteads, farmhouses and drystone walls.
- Deliver flexible spaces for community activities and provide a range of services, including government and Catholic schools.

NW DP Area

- Provide a bridge on Milton Street and shared path crossing points over Bruce's Creek to allow access to the Bannockburn P-12 College, the Recreation Precinct and the Bannockburn Town Centre.
- Protect and enhance the function of and connectivity between the key environmental assets of Bruce's Creek and Bannockburn.
- Provide new open space and drainage assets that provide recreational and environmental value.
- Identify and protect sites of historic heritage significance such as homesteads, farmhouses and drystone walls.

SW Growth Area

- Protect and enhance the function of and connectivity between the key environmental assets of Bruce's Creek, Bannockburn Flora and Fauna Reserve and the Bannockburn Lagoon.
- Develop land adjacent to the transmission easement as a key environmental, transport and recreational corridor, subject to approval from AusNet Services.
- Provide road and shared path crossing points over Bruce's Creek to allow access to the existing town and the South East Precinct.
- Provide an urban structure that protects key sightlines from the precinct to the Bannockburn Flora and Fauna Reserve.
- Identify and project sites of historic heritage significance such as homesteads, farmhouses and drystone walls.
- Investigate suitable use for the land adjacent to the Bannockburn Lagoon.

3.2.2 Bannockburn Community Infrastructure and Services Plan 2021

This Plan contains an analysis of community infrastructure provision is Golden Plains Shire. It identifies current deficits in provision and the infrastructure required to cater for the community in the future. The Plan makes the following findings about Bannockburn and District:

- The playground at Lions Park should be relocated to/expanded at a suitable location in the growth areas.
- The Oval 1 pavilion at Victoria Park needs upgrade.
- The following facilities are needed in Bannockburn at it grows (note: the plan factored in the NW DP, SE and SW PSP areas and FGO–S. **It did not consider the FGO– East**):
  - 3 cricket ovals, 3 football ovals, 3 soccer pitches
  - 2 MCH consult rooms, 180 licensed kindergarten places
  - Community rooms of mixed sizes
  - New playspaces
  - New health and medical facilities and clinical consulting rooms
  - New aged care facilities and support services.

The Plan makes the following suggestions about the provision of community infrastructure in the Bannockburn Township:

- 2 dual-use football/cricket ovals within the South West or South East growth areas, ideally as a dual-oval facility supported by a sports pavilion that also provides an extra-large community room (social space).
- 1 additional football oval (after 2031) at a suitable location to be determined, ideally dual-purpose for another pitch sport.
- 3 outdoor netball courts co-located with existing or new football ovals and supported by the same football pavilions.
- 3 soccer pitches either all located on the same site or co-located with new football/cricket ovals, supported by pavilion(s) that each provide a medium or extra-large community room.
- At least 180 kindergarten licensed places provided primarily through 4 x 33-place sessional kindergarten rooms (132 licensed places, likely 2 new facilities each in different growth areas). The remaining places to be provided through a new Integrated Children's Centre (private/community operated); [also consider co-location with any new primary schools delivered by the Department of Education]
- 2 MCH consult rooms provided through new sessional kindergarten centres, either both within the same centre or 1 room in 2 new kindergartens.
- 1 small or medium community room provided within the North West growth area, potentially co-located with a bookable clinical consulting room.
- 3 (maximum) community rooms of mixed sizes (in addition to those provided though new sports pavilions) provided within the South West and South East growth areas, potentially co-located with 1 or more bookable clinical consulting rooms.
- New play areas (number and location to be determined), potentially co-located with new sports facilities and/or new community rooms and other neighbourhood activity centre uses.
- Residential aged care facility (size, type and location to be determined).

3.3 Other relevant documents

Other relevant documents include:

VPA

- VPA Precinct Structure Planning Guidelines 2021

- Bannockburn Retail Study 2020
- Biodiversity Assessment: Bannockburn Growth Areas 2021
- Arboriculture Assessment Location: Bannockburn South East PSP 2021
- Existing Ecological Conditions Report, Bannockburn Growth Area, South East Section 2021
- Bannockburn South East PSP – Cultural Values Assessment 2021
- Bannockburn South East PSP Historical Heritage Assessment 2021

Golden Plains Shire

- Council Plan 2021-2025
- Playspace Strategy 2019-2029
- Sport and Active Recreation Strategy 2020-2030
- Community Vision 2040
- Active Ageing and Inclusion Plan 2020-2024
- Municipal and Public Heath Plan 2011-2015
- Open Space Strategy 2014-2019
- Path and Trails Strategy 2014-2019
- Youth Development Strategy 2015-2019

Other

- Victorian Government School Site Selection Criteria Guidance (DET 2021)
- G21 and AFL Barwon Regional Strategy
- G21 and Cricket Victoria Barwon Regional Cricket Strategy
- G21 Regional Hockey Strategy
- Barwon Health Strategic Plan 2019
- GRL Library Strategic Plan 2021-25

These documents are reviewed in full in Appendix A. A summary of the information they contain is as follows:

- A framework for preparing precinct structure plans, including provision standards for open space and certain community infrastructure types.
- Council's key objectives for the period 2021-2025 and the actions it will take to achieve these objectives.
- The actions Council will take to improve the quality and distribution of playspaces and encourage its community to be more active.
- Council's overall vision for and what the Council wants to achieve by 2040.
- The actions that Council will take to ensure aged and disabled people can participate in community life.
- Council's key goals with respect to improving the health of its community and the actions it will take to achieve these goals.
- Recommendations about the future provision of open space and paths and trails across the Shire.
- The actions that Council will take to support youth in the Shire.
- The retail facility needs of the Bannockburn community as it grows
- The quality and extent of biodiversity values in the proposed Bannockburn growth areas.

- An arboriculture assessment of trees on private land in the Bannockburn South East Precinct Structure Plan area.
- An ecological assessment of the Bannockburn SE PSP Area.
- The known and potential Wadawurrung living cultural heritage values of the Bannockburn SE PSP area
- A heritage assessment of the Bannockburn SE PSP area.
- General principles and requirements for government school site selection in greenfields, established areas and high density areas.
- Recommendations about the future provision of football, cricket and hockey facilities in the G21 Region.
- Recommendations about the future provision of hockey facilities in the G21 Region.
- The new or redeveloped facilities that will be provided by Barwon Health over the next decade.

The principles, standards, findings and recommendations contained in the documents should be considered when assessing the demand for community infrastructure provision in Bannockburn, investigating gaps or deficiencies in provision and identifying future facility options.

SECTION FOUR – BANNOCKBURN AND DISTRICT DEMOGRAPHIC PROFILE

4.1 Introduction

This section provides information on the demographic characteristics of Bannockburn Township (now and future) and their implications for future community infrastructure and open space provision in Bannockburn.

4.2 Demographic characteristics

Table 2 provides data on the demographic trends that have occurred in the Bannockburn Township over the past 10 years. The data indicates that:

- Bannockburn has aged over the last decade with the 60+ age group growing as a proportion of the total population.
- Bannockburn has become more affluent with a significant rise in average household income between 2016 and 2021.
- Otherwise, the Bannockburn community has experienced little change with workforce characteristics, household structures and the dwelling mix staying the same.

Table 2 – Demographic data, characteristics

	Bannockburn Township			Golden Plains		
ABS Census	**2011**	**2016**	**2021**	**2011**	**2016**	**2021**
Population	3505	5283	**6470**	**18770**	**21688**	**24935**
SEIFA index 2016						
− Score	1027	996	-	1011	1035	-
− Position in Victoria with 1 the worst/1520/2650/79	944/1520	2034/2650	-	58/79	61/79	
Average household size (persons)	3	3	3	2.8	2.8	2.9
Median age (years)	35	34	35	39	39	39
Age structure						
− 0-4 years	8	9	8	7	7	6
− 5-14 years	17	17	17	16	16	16
− 16-29 years	17	17	16	15	16	17
− 30-59 years	41	40	40	44	42	41
− 60+ years	16	18	19	18	20	22
Median household income, $pw*	1187	1661	2055	1217	1448	1899
Australian born % of total population	85	85	87	86	85	86
Household structure as % of all households						
− Couple family without children as a % of all households	34	34	33	38	38	38
− Couple family with children as a % of all households	54	54	55	51	51	51
− Single parent households as a % of all households	11	11	12	10	11	11
− Lone person households as a % of all households	13	13	14	17	18	17
Occupation as % of all workers						
− Professional	15	15	-	15	15	-
− Clerical	13	13	-	12	12	-
− Technical/Trades	20	20		18	18	-

	Bannockburn Township			Golden Plains		
ABS Census	**2011**	**2016**	**2021**	**2011**	**2016**	**2021**
− Managers	11	11	-	14	14	-
− Community and personal care workers	13	13	-	10	10	-
Dwellings as % of all dwellings						
− Separate house	99	99	96	99	99	99
− Semi-detached/row or terrace house/townhouse	0.2	0.2	4	0.3	0.2	1
− Flat/Unit/Apartment	0.2	0.2	0.1	0.4	0.3	0
− Other	0.2	0.2	0	0.5	0.4	0

4.3 Age structure

Table 3 provides data on population growth in and the age breakdown of Bannockburn Township. The data indicates that:

- Bannockburn's population will continue to be younger than tat of Golden Plains overall.
- Bannockburn's child and young adult age cohorts will grow larger numerically and as proportions of the total population.
- Bannockburn's youth and middle-aged cohorts will grow larger numerically but decline as proportions of the total population.
- The 50+ age cohort in Bannockburn and Golden Plains will decline as proportions of the total population. This is opposite to the trend occurring in most other regional Victorian municipalities.

Table 3 – Demographic data, Bannockburn, future population and age structure

	Bannockburn		Golden Plains Shire	
Population				
− Total population (est. 2022)	7,000		24,616	
− Projected total population (AFD)	37,430		68,006	
Age breakdown (as % of total 2019 and 2041 populations)				
	2022	**2041**	**2022**	**2041**
− 0-9 years	16.3	16.7	14.4	15.1
− 10-19 years	15.0	13.8	14.4	13.8
− 20-29 years	11.4	13.3	9.6	10.9
− 30-39 years	14.5	15.7	12.0	13.4
− 40-49 years	15.1	13.4	14.5	13.7
− 50-59 years	11.0	10.2	14.0	12.0
− 60-69 years	8.0	8.1	11.7	10.3
− 70-85+years	8.7	8.9	9.3	10.8

4.4 Implications

The implications of these trends for community infrastructure and open space provision in Bannockburn are as follows:

- Facility demand from across all age groups will remain strong.
- Demand for sporting infrastructure will grow as the sub-junior and young adult age cohorts grow.
- Demand for early years services will also grow proportionally stronger as the child population increases in number and proportion.

SECTION FIVE – EXISTING COMMUNITY INFRASTRUCTURE IN BANNOCKBURN TOWNSHIP

Figures 5 and 6 on the following pages show the locations of existing community infrastructure and open space in Bannockburn. The figures indicate that nearly all the community facilities and open space areas in Bannockburn are aggregated in three hubs – Victoria Park, Bannockburn College/Recreation Precinct and Bannockburn Cultural Centre.

Figure 4 below shows the position of the existing infrastructure in relation to the new growth areas. The figure indicates that the existing infrastructure will be located in the north of the extended township, reasonably distant from the southern and western growth areas (particularly the southern edges) and across Bruce's Creek from the NW DP Area and South West PSP Area. This distance, in terms of access and convenience, may not be an issue for township level infrastructure, e.g., the library. However, it will be an issue for local level facilities such as kindergartens, local parks and playgrounds - which should be within a walkable distance from households.

Figure 4 – Location of existing community infrastructure in relation to the growth areas

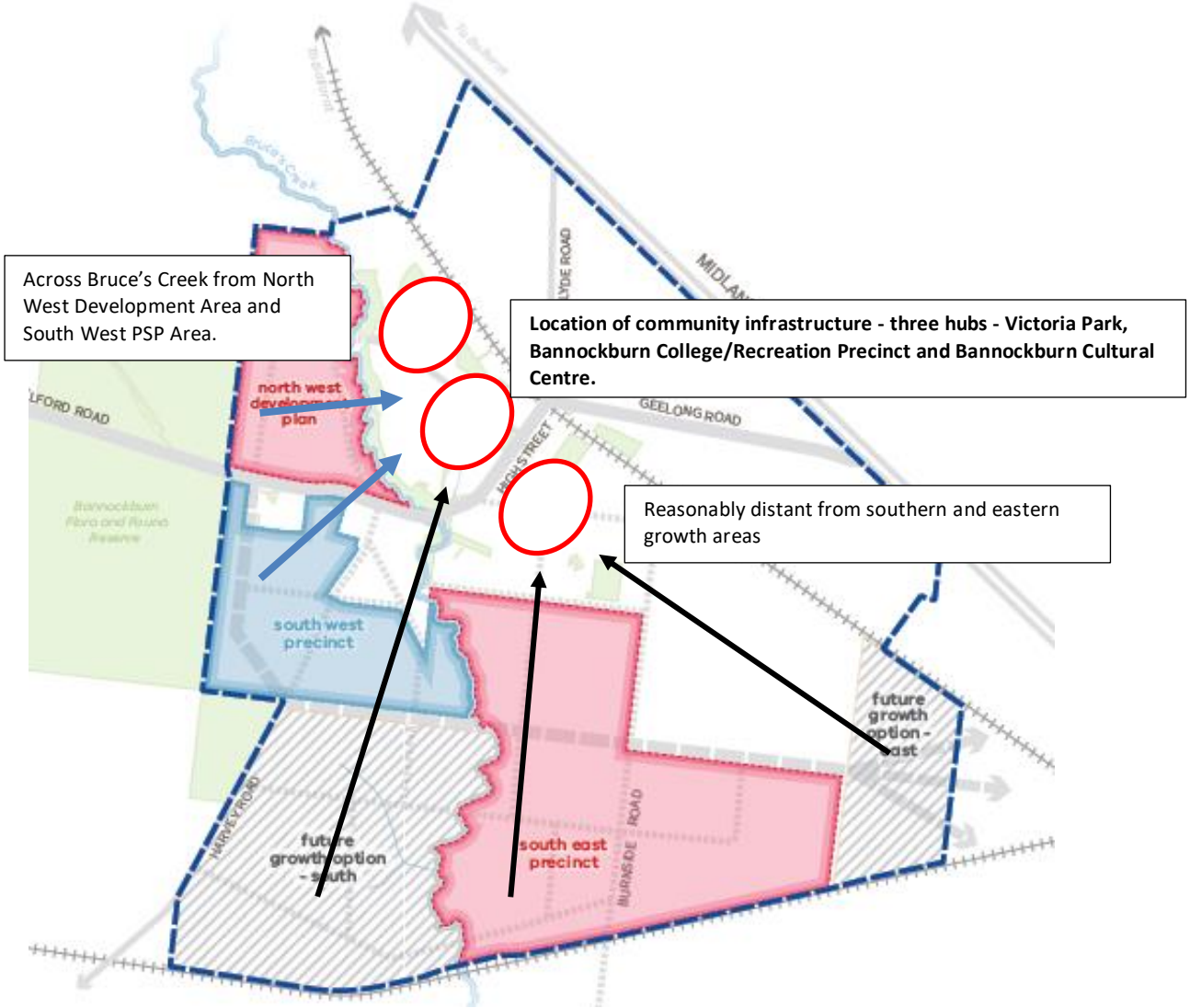


Figure 5 - Location of Community Infrastructure

1. Victoria Park, 2 ovals, 2 netball courts, 2 bowling greens, playground
2. Heart of Bannockburn, water park
3. Family service centre, kindergarten, M&CH, childcare, playgroups
4. Cultural Centre, library, activity spaces
5. SES/CFA stations
6. Police station
7. Ambulance Station
8. St Mary McKillop PC
9. Bannockburn College P-12
10. Bright Minds ELC
11. Happy Feet ELC
12. Recreation Precinct, 2 court stadium, 2 soccer field, 6 tennis courts
13. Shire Hall

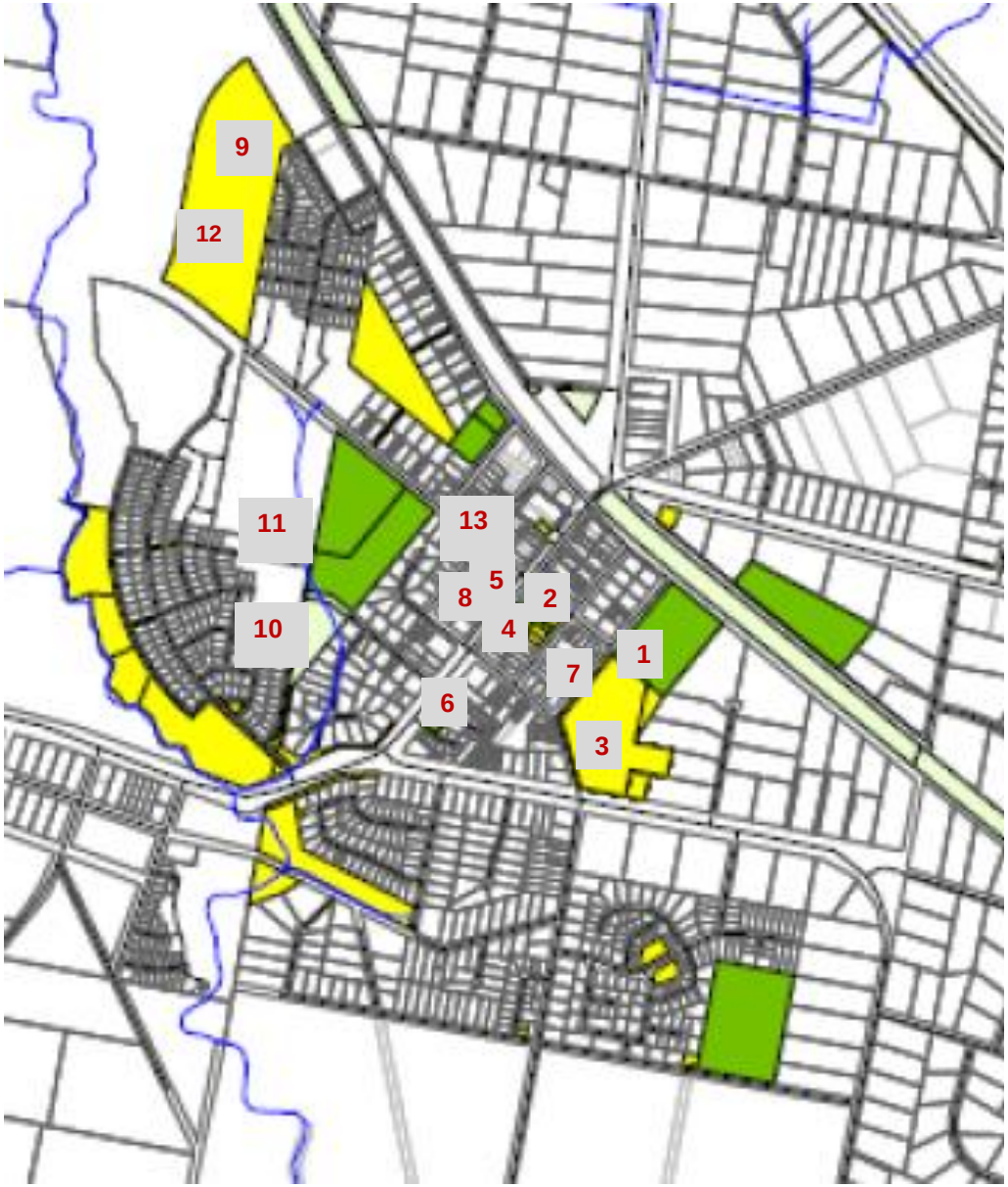
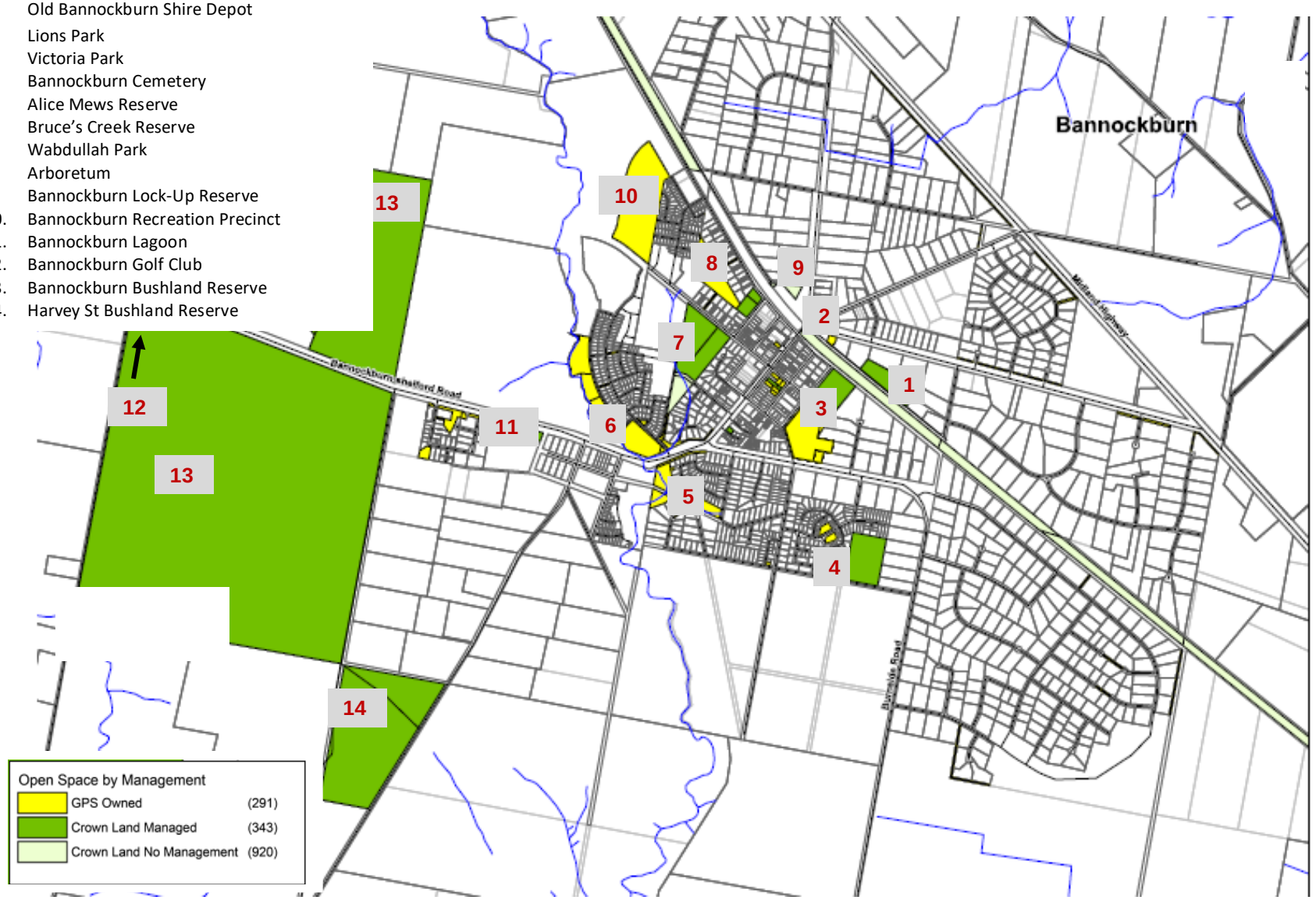


Figure 6 – Location of open space areas, Bannockburn

1. Old Bannockburn Shire Depot
2. Lions Park
3. Victoria Park
4. Bannockburn Cemetery
5. Alice Mews Reserve
6. Bruce's Creek Reserve
7. Wabdullah Park
8. Arboretum
9. Bannockburn Lock-Up Reserve
10. Bannockburn Recreation Precinct
11. Bannockburn Lagoon
12. Bannockburn Golf Club
13. Bannockburn Bushland Reserve
14. Harvey St Bushland Reserve



SECTION SIX– QUANTITIVE ASSESSMENT OF COMMUNITY INFRASTRUCTURE/OPEN SPACE DEMAND

6.1 Quantitative Assessment

6.1.1 Methodology

The quantitative assessment of demand involved the application of infrastructure provision ratios/standards to the projected dwelling yields and population sizes (at full development) of the existing township and new growth areas in Bannockburn, the district surrounding Bannockburn and the Bannockburn and District area (see table 4).

Table 4 – Geographic areas, quantitative assessment

Area	Projected population at full development
Existing Bannockburn Township	8,300
Ormond Road Rezoning (from rezoning submission)	507
South East PSP	11,109
South West PSP	3,240
North West Development Plan	3,738
Future Growth Option – South	7,944
Future Growth Option – East	2,591
Bannockburn Township	37,429
Surrounding District	9,951
Bannockburn and District	47,380

The ratios/standards have been derived from several sources including the VPA Precinct Structure Planning Guidelines (2021) They are consistent with ratios/standards used in infrastructure assessments conducted for growth areas in other regional cities, such as Ballarat, Geelong and Wodonga (see Appendix B, column 3 for the sources of the standards/ratios). The quantitative assessment has been confined to infrastructure items that are normally provided by Council (e.g., early years facilities, playing fields, community centres etc) and Government and private facilities that could be central components of community hubs (e.g., primary and secondary schools, emergency services etc). Some ratios/standards apply to specific age cohorts and others to the entire population. Some relate to geographical distance. The age breakdown projected in the id population forecasts for the Bannockburn Township in 2041 were used when specific age cohort sizes were required.

It should be noted that there are multiple provision ratios/standards for some infrastructure items. For example, there are two distance ratios for active recreation reserves – the VPA standard of 1 reserve within 800m of all households and the standard of 1 reserve within 2kms of all households which is often used in rural townships. Both standards have been applied in the quantitative assessment but the rural standard has been used in the qualitative assessment (Section 7) as it considers local circumstances, e.g., housing density and ease of travel.

6.1.2 Outcomes

The outcomes of the quantitative assessment are provided in detail in that table in Appendix B. The table contains the following information:

1. Provision ratios for each infrastructure type.
2. The facility demand generated by the new development and established areas.
3. The overall facility demand generated by the Bannockburn Township and Bannockburn and District.

A summary of the findings of the analysis is provided in Table 5.

Table 5 – Outcomes of quantitative assessment

Item	Demand Analysis					
	Existing B'burn Township	Growth areas		Total B'burn	Nearby district	Total B'burn and D'trict
		SE PSP	Other growth areas			
	8300	**11109**	**3240**	**37429**	**9951**	**47380**
Kindergarten place, 3 and 4yo	138	189	307	634	170	804
Maternal and child health centre (session)	9	13	21	43	12	55
Long day care place	92	127	207	426	113	539
Occasional care place	16	22	35	73	19	92
Playgroups	1.6	2.2	3.5	7.3	2	9.3
Neighbourhood house	0.41	0.56	0.91	1.88	0.5	2.38
Multipurpose community centre	0.8	1.1	1.9	3.8	1	4.8
Community meeting room/hall	1.6	2.2	3.5	7.3	2	9.3
Youth space	1.0	1.4	2.3	4.7	1.2	5.9
Men's shed	0.20	0.28	0.44	0.92	0.25	1.17
Community garden area (m2)	825	1100	1900	3825	100	3925
Branch library (floor space m2)	365	500	811	1676	448	2124
Community arts centre	0.14	0.19	0.29	0.62	0.17	0.79
Regional performing arts centre	0.020	0.028	0.044	0.092	0.025	0.117
Indoor recreation court	0.8	1.1	1.9	3.8	1	4.8
Aquatic centre	0.20	0.28	0.44	0.92	0.25	1.17
Total open space (ha)	-	24	43	67	-	-
Passive space (ha)	-	7-12	13-21	20-33	-	-
Local park/playspace	8 existing	5	10	23	-	-
Sports fields (ha)	-	12-17	22-30	34-47	-	-
Tennis court	2	2	5	9	2	11
Netball court	2.7	3.7	6	12.4	3.3	15.7
Bowling green	0.8	1.1	1.9	3.8	1	4.8
Athletics track	0.054	0.074	0.12	0.248	0.066	0.314
Football oval	1.6	2.2	3.5	7.3	2	9.3
Cricket oval	2.0	2.8	4.4	9.2	2.5	11.7
Soccer field	1.6	2.2	3.5	7.3	2	9.3
Baseball/softball field facility	0.27	0.37	0.6	1.24	0.33	1.57
Hockey field	0.14	0.19	0.29	0.62	0.17	0.79
Government PS student	588	806	1306	2700	722	3422
Catholic PS student	230	315	510	1055	282	1337
Independent PS student	101	151	245	497	135	632
Government SC student	368	505	819	1692	452	2144
Catholic SC student	194	266	432	892	238	1130
Independent SC student	114	156	253	523	140	663
Fire station	0.14	0.19	0.29	0.62	0.17	0.79
SES unit	0.068	0.093	0.15	0.311	0.083	0.394
Ambulance station	0.14	0.19	0.29	0.62	0.17	0.79
Police station	0.081	0.111	0.179	0.371	0.099	0.47

6.2 Facility models

Facility models for Council supplied community infrastructure are presented in Appendix C. The following information for each infrastructure item is provided – provision ratio, setting and hierarchy, land area, component elements, catchment area and population triggers. The models have been informed by:

- The outcomes of the literature review.
- Discussion with Council officers and external service providers.
- The models used in other Victorian regional growth areas.
- Facility guidelines developed by Government agencies and peak associations.

Note: the models are not meant to be applied strictly and prescriptively. However, they should be used as a guide when undertaking the qualitative analysis of community infrastructure provision (see Section 7).

SECTION SEVEN– QUALITATIVE ASSESSMENT

7.1 Introduction

This section contains a qualitative assessment of community infrastructure needs in Bannockburn Township at full development. The qualitative assessment has been undertaken by facility type, i.e., early years, health, education, cultural, community services and recreation facilities.

The following information has been considered in conducting the assessment (where relevant):

- The findings and recommendations contained in relevant Council and external documents.
- The findings of the quantitative assessment with respect to the number of facilities by infrastructure type required to cater for nominated areas in Bannockburn.
- The outcomes of the distance/distribution analysis for certain infrastructure types (see Appendices D and E)
- The facility provision models outlined in Appendix C.
- The comments of Council staff and other relevant providers and facility managers about current and future infrastructure needs and options for satisfying these needs.

7.2 Assessment

7.2.1 Early Years Services/Facilities

Kindergarten

There are 5 kindergarten programs operating in Bannockburn. 2 are provided from a Council centre and 3 from private child care centres. The programs have a licensed capacity of 183 places and can cater for 366 three and four year old children. In addition, there are 3 kindergartens in nearby townships – Inverleigh (33 places), Meredith (34) and Teesdale (33).

Table 6 – Kindergarten places, 3yo and 4yo

Facility	Address	Licensed capacity (places)	Enrolment capacity (children)
Bannockburn	Pope St	50	100
Kardinia ELC	Pope St	35 for kindergarten	70
Bright Minds ELC	Archer Way, Bannockburn	55 for kindergarten	110
Happy Feet ELC	Saffin Crt	43 for kindergarten	86
Total		**183**	**366**

The quantitative assessment of demand indicated that 634 places will be needed in Bannockburn Township at full development. 183 places are currently available. This leaves a shortfall of 451 places. Assuming 40% of this gap will be met by private childcare centres, this leaves 271 sessional places to be provided. Provision should be made for four new kindergarten facilities. These facilities will supply an additional 297 places.

- 3 room (33 place each room) kindergarten in SE PSP
- 2 room (33 place each room) kindergartens in NW DP, FG-N and FGO-S

Table 7 – Estimated kindergarten places at full development, 3 and 4yo

Demand Analysis									
Existing B'burn Township	Growth areas						Total B'burn	Nearby districts	Total B'burn and District
	SE PSP	SW PSP	NW DP	FGO-S	FGO-E	Ormond Rd			
8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
138	189	55	64	135	44	9	634	170	804

Note: the State Government has announced its intention to fund 4yo kindergarten for 30 hours per week (up from 15 hours per week currently funded). If this occurs, additional capacity will be needed beyond what is recommended above. The 3 room centre will at least require a 4th room. The 2 room centres will require 3rd rooms. Further input from the Department of Education will be needed to understand the full implications of this announcement for future kindergarten provision in the Bannockburn Township.

M&CH

A 2 room M&CH centre (room capacity 20 sessions) is located at the Bannockburn Family Services Centre. 3 single room centres (capacity 10 sessions each) are provided in nearby townships – at the Inverleigh Kindergarten, Meredith Hub and Teesdale Kindergarten. Current supply in Bannockburn is 20 sessions. Current demand is 9 sessions. The quantitative assessment of demand indicates that 43 sessions or 4.3 rooms will be needed in Bannockburn at full development; 13 sessions or 1.3 rooms in SE PSP. Suggested provision is as follows:

- Existing centre at Bannockburn FSC used to capacity.
- 2 consultation rooms in SE PSP.
- 1 consultation rooms in FGO – East.

Table 8 – Estimated M&CH sessions at full development

Demand Analysis									
Existing B'burn Township	Growth areas						Total B'burn	Nearby districts	Total B'burn and District
	SE PSP	SW PSP	NW DP	FGO-S	FGO-E	Ormond Rd			
8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
9	13	4	4	9	3	1	43	12	55

Childcare

3 privately run childcare centres operate in Bannockburn. Combined, they offer 395 places. There is no provision in nearby townships.

Table 9 – Long day childcare places

Facility	Address	Licensed capacity	Enrolment capacity
Kardinia ELC	Pope St	102	70
Bright Minds ELC	Archer Way, Bannockburn	167	110
Happy Feet ELC	Saffin Crt	126	86

The demand assessment indicates that 539 places will be required across Bannockburn and District at full development, 127 of these in the SE PSP area. Suggested provision is as follows:

- Existing centres used to capacity.
- Private sector to meet demand in SE PSP and other growth areas.

Table 10 – Estimated long day places at full development

Demand Analysis									
Existing B'burn Township	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
	SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
92	127	37	43	91	30	6	426	113	539

Occasional care/playgroups

There are no occasional care programs in Bannockburn. Programs operate in Inverleigh and Meredith. The demand assessment indicates that 73 places will be needed in Bannockburn Township at full development, 22 in SE PSP area. Suggested provision is three licensed 22 place rooms - in SE PSP, FGO-S and NW DP.

Currently, there is one playgroup facility in Bannockburn and 4 in the District. Playgroups can be held in any suitable activity/meeting space. It is recommended that activity spaces suitable for playgroup use be provided in new community buildings in the growth areas.

7.2.2 Health/Community Support Services and Facilities

Primary care and community/mental health facilities/residential aged care beds

Bannockburn's primary health care needs will continue to be met by the acute care facilities provided by Barwon Heath and St John of God Hospital. The growing population across the Geelong region, including Bannockburn, will substantially increase the demand for services at these facilities. Barwon Heath and St John of God Hospital. will continue to respond to this increase in demand by:

- Extending existing and providing new facilities (e.g., University Hospital, MacKellar Centre, Norlane, Torquay).
- Redeveloping existing facilities to increase productivity and throughput and respond to changes in medical and surgical treatment processes (e.g., University Hospital).
- Constantly updating processes and equipment to improve productivity (all locations).
- Relocating services that do not need to be at the hospital sites to other locations in Geelong.
- Using waiting lists to manage demand for some services.

Bannockburn's community/mental health care needs are currently met by programs provided by Barwon Health at facilities in Geelong Central, Corio, Norlane and North Geelong. These needs will continue to be met by these programs and facilities as the population of Bannockburn grows. However, it is probable that in the medium to long term, Barwon Health will want to establish permanent programs in Bannockburn and will seek access to a dedicated

facility and/or shared consulting rooms, meeting rooms and activity spaces. Consideration should be given to making provision for a health precinct in the Bannockburn Township.

Bannockburn has 120 residential aged care beds. An additional 362 beds will be needed at full development. These will most likely be provided by private operators.

GP services/Dental/Allied health Services

A number of health, dental and allied health clinics operate in Bannockburn. The further development of Bannockburn will significantly increase demand for these services. For example, an increase in the Bannockburn and District's population from 15,000 to 47,380 could generate demand for 16-18 more general practitioners. These practitioners will assemble into a number of practices and will most likely operate from purpose built owned or rented premises. Specialist medical and allied health practitioners, such as physiotherapists, may also operate from these practices.

Community Support Services

Bannockburn residents will continue to access a range of community support services in Geelong. However, it is likely that as Bannockburn grows in size, more providers will want to establish a presence on a regular, part or fulltime basis. They will need access to consulting rooms, meeting rooms and activity spaces. These spaces could be provided at multipurpose community centres in Bannockburn.

7.2.3 Education Facilities

Government Primary School

One government primary school operates in Bannockburn – part of the P-12 Bannockburn College. The demand assessment indicates that at full development Bannockburn Township will generate 2,700 government primary school students, with 806 from the SE PSP area. Some of these students will go to school in Geelong but at least 3 or 4 additional schools could be required in Bannockburn. DET has advised that provision should be made for four government primary schools in the Bannockburn growth areas – two in SE PSP, one in SW PSP and one in FGO-S. DET has based this provision assessment on the demand estimates outlined in Table 11 below and its objective of achieving optimal long term enrolment sizes at the schools.

Table 11 – Estimated Government primary school demand at full development

Demand Analysis										
Item	**Existing B'burn Township**	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
		SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
	8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
Schools	0.9	1.3	0.4	0.4	0.9	0.3	0.1	4.2	1.3	5.6
Students	588	806	235	271	576	188	36	2700	722	3422

Government Secondary School

Bannockburn has one government secondary school – part of the P-12 Bannockburn College. The demand assessment indicates that at full development Bannockburn and District will require 1.7 schools and generate 2,144 government secondary students (0.37 schools and 505 students from in the SE PSP). A number of these students will go to government schools in Geelong but one additional school may be required in Bannockburn. DET has advised that provision should be made for a second government secondary school in the Bannockburn growth areas – in SE PSP.

Table 12 – Estimated Government secondary school demand at full development

Demand Analysis										
Item	**Existing B'burn Township**	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
		SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
	8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
Schools	0.27	0.37	0.12	0.13	0.27	0.09	0.02	1.26	0.38	1.65
Students	368	505	147	170	361	118	23	1692	452	2144

Catholic Primary/Secondary Schools

Bannockburn has one catholic primary school - St Mary McKillop PS in High St. It does not have a catholic secondary college. The closest colleges are the Clonard Girls College and St Joseph's Boys College in Geelong. The demand assessment indicates that all full development Bannockburn and District will generate 1,337 catholic primary and 1,130 catholic secondary school students. The Catholic Education Office advises that a second catholic primary school will be needed in Bannockburn as the population grows (preferably located in the SE PSP area). It also advises that a secondary school will not be required. It believes that there is sufficient capacity in its existing schools in Geelong and the planned schools in the West and North Geelong growth areas to provide for Bannockburn.

Table 13 – Estimated Catholic primary and secondary school demand at full development

Demand Analysis										
Item	**Existing B'burn Township**	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
		SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
	8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
Pri Schools	0.29	0.41	0.13	0.14	0.30	0.10	0.02	1.39	0.42	1.81
Pri Students	230	315	92	106	225	74	14	1055	282	1337
Sec Schools	0.09	0.13	0.04	0.04	0.09	0.03	0.01	0.43	0.13	0.56
Sec Students	194	266	78	90	190	62	12	892	238	1130

Independent schools

There are several large independent schools in Geelong – e.g., Geelong Grammar, Geelong College and Geelong Baptist College. Some current and future students from Bannockburn do and will attend these and other

independent schools in Geelong. A private school could possibly establish in Bannockburn and District. An anchor population for the school of 47,380 could be sufficient to create interest. However, the presence of independent schools in close proximity to Bannockburn may lessen this interest.

University/TAFE

The closest TAFE College is the Gordon Institute in Geelong. Gordon Institute does not anticipate providing a facility in Bannockburn because of its proximity to Geelong. The Institute's current facility strategy is to continue to strengthen the two campuses in Geelong. However, it may want to have a presence in the long term. Provision should be made for a small TAFE presence in Bannockburn – this could be at the Bannockburn College Site.

The closest university locations are the Deakin University campuses in Geelong and the Victoria University campus in Werribee. These universities are consolidating at their current locations and would not establish facilities in Bannockburn.

7.2.4 Community Facilities

Community centres/community meeting rooms

Bannockburn and District has a large number of small to medium size community meeting spaces (24 locations including the Bannockburn Community Centre, Lethbridge Public Hall). The Golden Plains Community Infrastructure Plan 2021 indicated that these facilities have spare capacity. The Plan also indicated and Council officers confirmed that Bannockburn and District lacks large meeting/function spaces. There is no neighbourhood house in Bannockburn and District. There is a men's shed in Victoria Park but no formal community garden areas. A small, dedicated youth facility is located in the Bannockburn Recreation Precinct.

Population growth in Bannockburn will significantly increase the demand for community facilities. A larger men's shed will be required. The local community may ask for access to spaces for community gardens. A larger dedicated youth facility and shared spaces that can be used for youth activities will be needed. A dedicated space for a neighbourhood house program is also likely to be required.

Table 14 – Estimated community facility demand at full development

Demand Analysis										
Item	**Existing B'burn Township**	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
		SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
	8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
N'hood house	0.41	0.56	0.16	0.19	0.40	0.13	0.03	1.88	0.50	2.38
C'ity centre	0.8	1.1	0.3	0.4	0.8	0.3	0.1	3.8	1.0	4.8
Activity Room/hall	1.6	2.2	0.6	0.7	1.6	0.5	0.1	7.3	2.0	9.3
Youth space/ hub	1.0	1.4	0.4	0.5	1.0	0.3	0.1	4.7	1.2	5.9
Men's shed	0.20	0.28	0.08	0.09	0.20	0.06	0.01	0.92	0.25	1.17
Community garden	0.8	1.1	0.3	0.4	0.8	0.3	0.1	3.8	1	4.8

Library

Bannockburn had a dedicated library facility (floor area – 240m2) at the Bannockburn Cultural Centre next to the SES/CFA stations. The demand assessment indicates that around 2,000m2 of floor space will be needed to cater for Bannockburn and District at full development. A number of provision options could be considered:

1. The library taking over the full cultural centre building, the SES/CFA complex moving to another site and the library expanding into this site.
2. Developing a new library in the growth areas (2,000m2).

Option One may not provide the land area required and a new location in the growth areas may be needed.

Table 15 – Estimated library floorspace requirement at full development

Demand Analysis									
Existing B'burn Township	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
	SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
365	500	146	168	357	117	23	1676	448	2124

Other Civic/Cultural Venues

A population size of 47,380 in Bannockburn and District can justify the provision of civic/cultural venue which could be used for medium size Council, community and cultural activities and events (public meetings, music performances, theatre, exhibitions, functions, school speech nights etc).

A dedicated community arts venue with training rooms and arts studio can also be justified on a population basis. Shared wet and dry arts spaces should also be provided at other locations across Bannockburn. The civic venue could be one of these locations.

There is currently no public gallery in Bannockburn and District. A dedicated public gallery cannot be justified. A space/s is needed for local art exhibitions. The foyer and activity spaces at the community centres and the civic venue could be potential locations. They should be designed in a manner that makes them suitable for art displays.

7.2.5 Recreation Facilities

Indoor recreation facilities

Bannockburn does not have an indoor or outdoor pool. The closest public indoor aquatic centres are in Newtown and Norlane, both within a 20 minute drive from Bannockburn. Bannockburn is also serviced by private swim centres (e.g., Kardinia College). A population size of 47,380 in Bannockburn and District would normally be sufficient to justify the provision of a medium size indoor aquatic centre. However, the close proximity of the facilities in Geelong complicates this matter. A site has been allocated in the Bannockburn Recreation Precinct for an aquatic facility. However, this site may be found to be too small for an aquatic facility or be required for other purposes. Provision should be made in the growth areas for an aquatic facility.

There are 5 indoor courts in Bannockburn and District – 2 at Bannockburn College, 2 at the Bannockburn Recreation Precinct and a single court at St Mary McKillop Primary School. Land has been set aside for a third court at Bannockburn Recreation Precinct. The demand assessment indicates that 5 courts will be required in Bannockburn and District at full development. Theoretically, there is a sufficient number of courts in Bannockburn to meet this demand. However, public access to the school courts cannot be guaranteed. Thus, additional community owned courts may be needed. The third court at the recreation precinct will be required. Provision should also be made for a 2 court stadium in the growth areas.

Local playing fields

There are 3 cricket/football ovals in Bannockburn – 2 at Victoria Park and 1 at Bannockburn College (limited public access). There are 6 cricket/football ovals in the District – in Lethbridge, Meredith, Shelford, Teesdale and Inverleigh (X2). Some have limited capacity and functionality due to their size and condition. There is currently a shortage of cricket fields.

The demand assessment indicates that at full development, Bannockburn and District will require 9 football fields and 12 cricket ovals (7 and 9 in Bannockburn Township and 2 and 3 in SE PSP). It is highly likely the demand may not be this high. Many of the people moving to Bannockburn will come from the Geelong or Werribee areas. Many will be associated with clubs outside of Bannockburn and together with their children will remain attached to these clubs. Some may prefer to play for clubs in the nearby townships, e.g., Inverleigh. It may take several years before there is sufficient impetus for new local football and cricket clubs to form. It is likely that the clubs will start with junior teams and then expand into seniors. However, the loss of players to Geelong clubs will be offset to a significant extent by increasing female participation. It is recommended that provision be made for two sporting reserves (each 2 ovals) in the growth areas. Opportunities to provide cricket wickets on future soccer fields and school playing fields should also be explored.

There are 2 soccer fields in Bannockburn at the Bannockburn Recreation Precinct. There are no dedicated fields in the District. Council is giving consideration to developing a synthetic oval field at the Recreation Precinct. This field would be suitable for soccer. The demand assessment indicates that all full development Bannockburn and District will generate demand for 9 soccer fields (7 in the township and 2 in SE PSP). Soccer will be similar to football and cricket in terms of the attachment of players to external clubs. However, not to the same extent. Many players will be experiencing the sport for the first time and will look for local opportunities. The impetus for a second soccer club to form may occur before cricket and football. Provision should be made for a 3 to 4 field soccer venue in the growth areas, one field could eventually be synthetic.

Table 16 – Estimated demand for playing fields at full development

Demand Analysis										
Item	**Existing B'burn Township**	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
		SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
	8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
Aust Rules football oval	1.6	2.2	0.6	0.7	1.6	0.5	0.1	7.3	2.0	9.3
Cricket oval	2.0	2.8	0.8	0.9	2.0	0.6	0.1	9.2	2.5	11.7
Soccer field	1.6	2.2	0.6	0.7	1.6	0.5	0.1	7.3	2.0	9.3

Courts and greens

Bannockburn and District has 20 dedicated tennis courts – 6 in Bannockburn, 6 in Teesdale (2 offline), 4 in Lethbridge and 4 in Inverleigh. There are also 6 multi-lined courts at Bannockburn College. The demand assessment indicates that 9 courts will be required in Bannockburn and District at full development; 2 in SE PSP. Like other sports, some tennis players in Bannockburn will be members at Geelong clubs. Therefore, the demand will be less. The existing courts across Bannockburn and District should be sufficient to meet demand.

Bannockburn and District has 4 dedicated netball courts (Victoria Park and Inverleigh Recreation Reserve) and 11 multi-lined courts - 8 at Bannockburn College (limited public access), 2 at Bannockburn Stadium, 1 at St Mary McKillop Primary School and 2 at Inverleigh Recreation Reserve. The demand assessment indicates that 16 courts will be required in Bannockburn and District at full development, 12 in Bannockburn and 2 in SE PSP. There are a sufficient number of existing courts to meet demand. However, a new football/netball club is likely to form in Bannockburn as it grows. This club will need access to netball courts at its home sporting reserve. Provision should be made for 2 courts at one of the new football/cricket sporting reserves in the growth areas.

There are 3 bowling greens in Bannockburn and District, 2 at Victoria Park and 1 at the Inverleigh Recreation Reserve. The demand assessment indicates that 5 greens will be required in Bannockburn and District at full development, 4 in Bannockburn and 1 in SE PSP. The bowls facility at Victoria Park cannot be expanded. Provision should be made for a new 2 green facility in the growth areas.

Table 17 – Estimated demand for outdoor courts/greens at full development

Demand Analysis										
Item	**Existing B'burn Township**	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
		SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
	8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
Tennis court	2	2	1	1	2	1	0	9	2	11
Netball court	2.7	2	1	1	2	1	0	12.4	2	15.7
Bowling green	0.8	1.1	0.3	0.4	0.8	0.3	0.1	3.8	1.0	4.8

Sub-regional and regional recreation venues

Bannockburn residents access a range of sub-regional/regional level recreation facilities in Golden Plains and Geelong. These include the equestrian venue in Leighdale, hockey fields and baseball/softball fields at Stead Park, baseball fields at Geelong Baseball Centre, outdoor netball complex at Kardinia Park, velodrome and criterium track at Geelong West and Belmont, aquatic centres at Norlane and Central Geelong and athletics tracks at Goldsworthy and Landy fields. Geelong Council is also undertaking feasibility studies for new regional level soccer and indoor recreation stadiums. Bannockburn residents will be able to use these facilities in the future. However, demand and competition for time will intensify as the populations of Golden Plains, Geelong and broader G21 region grow. Bannockburn and District, at 47,380 people, could not sustain a velodrome or criterium track. However, it could sustain a hockey field, baseball/softball fields, a medium size aquatic facility and an athletics track. Provision should be made for these facilities in the growth areas.

Passive areas and playspaces

The Bannockburn and District community has access to the full hierarchy of passive open space – major/regional, district and neighbourhood parks. The You Yangs Regional Park is located within a 20 minute drive. Other major/regional parks located within a 40 minute drive include the Brisbane Ranges Park, Mt Rothwell Conservation Reserve, Geelong Foreshore and the parklands along the Werribee River. Several district parks are located in Bannockburn and District. They include Police Paddocks in Lethbridge, Inverleigh Conservation Reserve, Bannockburn Flora and Fauna Reserve and Leigh River Linear Reserve. The District also has numerous local/neighbourhood parks.

The demand assessment indicates that a minimum of 20-33ha of passive space and 15 local parks will be required in the growth areas. Bruce's Creek flows through the Existing Bannockburn Township and the NW DP, SW PSP, SE PSP and FGO-S growth areas. A linear park has been developed along the creek in the Existing Township. This should be extended into the southern growth areas, where feasible. Crossing points should be provided at strategic locations along the linear park to promote connectivity between the growth areas. A separate constructed waterway is proposed for the SE PSP area. A linear park could be created along this water corridor. Passive spaces could be provided within the proposed active reserves. Areas that contain significant biodiversity values or other conservation, environmental or heritage assets could be identified and, where feasible, protected in open space. The transmission easement and railway corridor could be developed as open space. Consideration should also be given to nominating an area for a fenced in dog park in a district park in the growth areas.

Bannockburn has a township level playspace in High St and district and local level playspaces distributed across the township. A population size of 47,380 people in Bannockburn and District can justify the provision of a significant sub-regional level playspace which is supported by equitably distributed district and local level playspaces in the Existing Township and growth areas. A network of paths should be provided for walking and cycling purposes. The paths should connect the key commercial areas, community facilities and parks in the Bannockburn Township at full development and traverse passive and active open space areas.

Table 18 – Estimated demand for passive open space

Demand Analysis										
Item	**Existing B'burn Township**	**Growth areas**						**Total B'burn**	**Nearby districts**	**Total B'burn and District**
		SE PSP	**SW PSP**	**NW DP**	**FGO-S**	**FGO-E**	**Ormond Rd**			
	8300	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
Ha	-	7-12	3-5	2-4	5-8	2-3	0.5-0.8	20-33	-	-
Within 400m of all dwellings	8 existing	5	2	2	4	2	0	23	-	-

7.2.6 Emergency Services

The CFA/SES facility in located in High St Bannockburn. A larger facility capable of accommodating more vehicles/trucks will be needed in Bannockburn as it grows. Provision should be made for a new facility in the growth areas. It should be located on or near a main road. The police station is also located in High St Bannockburn on a 1000m2 site. A larger facility and site is likely to be required as Bannockburn grows. The ambulance station is located in Moore St Bannockburn on a house block size land parcel. Additional garage and office space is likely to be needed as Bannockburn grows. The Moore St site could not accommodate this expansion. A new location could be required.

SECTION EIGHT– SUMMARY OF INFRASTRUCTURE REQUIREMENTS

8.1 Introduction

This section provides a summary of the findings/recommendations of the qualitative assessment and suggested locations and land areas for the recommended facilities.

8.2 Summary of Findings

The qualitative assessment indicates that the following additional community infrastructure and open space areas will be required to service the Bannockburn and District at full development.

Community facilities, health and education facilities

- Four new kindergarten locations – one with 3 rooms, three with 2 rooms (33 place rooms, 297 places)
- Three new M&CH consultation rooms – one location with 2 rooms, the other location with a single room
- New childcare provision by private operators
- Three licensed rooms for occasional care (22 place rooms, 66 places). Can be used for other groups related children's activities
- Health precinct for Barwon Health and other providers
- Four new government primary schools
- One new government secondary school
- One new catholic primary school
- Additional general meeting space areas for intergenerational activities
- Dedicated youth hub. Extension to or replacement of existing facility. Spaces suitable for youth activities in other nominated community buildings
- Dedicated men's shed. Extension to or replacement of existing facility
- Dedicated space for neighbourhood house activities
- Two community garden locations
- Dedicated library facility (2,000m2 floorspace). Extension to or replacement of existing facility
- New civic/cultural venue
- New dedicated space for community arts activities. Spaces suitable for community arts activities in other nominated community buildings
- Replacement ambulance and police stations and CFA/SES facility
- New residential aged care beds by private providers

Recreation facilities

- Upgraded equestrian facilities at Leighdale
- New medium size aquatic facility – recreation pool, learn to swim pool, toddler pool, gym, fitness rooms.
- New two court indoor stadium and additional indoor court at Bannockburn Stadium
- Four new football/cricket ovals (two reserves)
- Two new netball courts and two new lawn bowls greens
- New three field turf soccer facility (one field may eventually become synthetic)
- One new synthetic hockey field. Land for second field.
- New grass athletics track (may eventually become synthetic)
- New three field baseball/softball facility.
- Linear parks along Bruce's Creek, constructed waterway, transmission line and rail corridor, five new district parks (one including a dog park) and seven new local parks
- New subregional playspace, three new district playspaces and seven new local level playspaces

It should be recognised that residents from the Existing Bannockburn Township will use facilities in the growth areas and vice versa. It should also be recognised that the Bannockburn growth area communities will use and, therefore, add to the demand for facilities outside of Bannockburn and District. These facilities will include regional and municipal level facilities in Geelong like the Geelong Performing Arts Centre and Gallery.

8.3 Infrastructure Provision

Table 19 provides recommendations on the how the infrastructure listed in Section 6.3 should be delivered – facility description, recommended location and the catchment area served.

The following factors and objectives were taken into consideration when determining the location of the infrastructure items:

- The timeframe for development, population size, geographic size and location of the growth areas.
- Achieving, as far as possible, an equitable distribution of infrastructure across the Bannockburn Township.
- Where feasible, aggregating community infrastructure into hubs/precincts.

Table 19 – Description and location of and catchment area served by community infrastructure

	Facility	Land area (if relevant)	Recommended location Growth area/township	Geographic catchment served
1	New community precinct/hub: – 3 room kindergarten – 2 room M&CH centre – 1 room occasional care – Youth hub – General activity spaces – Community garden – Civic space	3ha	SE PSP	 SE PSP, FGO-E SE PSP, FGO-E, FGO-S SE PSP, FGO-E B'burn and District SE PSP, FGO-E SE PSP, FGO-E, FGO-S B'burn and District
2	New community centre: – 2 room kindergarten – 1 room M&CH centre – Neighbourhood house space – General activity spaces – Men's shed	1.0ha	SW PSP	 SW PSP SW PSP, FGO-S B'burn and District SW PSP B'burn and District
3	New community centre: – 2 room kindergarten – 1 room occasional care – Aged activities space – General activity spaces – Community garden	1.0ha	NW DP	 NW DP NW DP, Township B'burn and District NW DP NW DP, Township
4	New community centre: – 2 room kindergarten – 1 room occasional care – Community arts space – General activity spaces	1.0ha	FGO-S	 FGO-S FGO-S, SWP SP B'burn and District SE PSP
5	Health precinct for Barwon Health and other providers	1ha	Township or SE PSP	B'burn and District
6	Library	1.5ha	Township or SE PSP	B'burn and District
7	Government Primary School	3.5ha	SE PSP	SE PSP
8	Government Primary School	3.5ha	SE PSP	SE PSP, FGO-E
9	Government Primary School	3.5ha	SW PSP	SW PSP
10	Government Primary School	3.5ha	FGO-S	FGO-S
11	Government Secondary College	8.4ha	SE PSP	SE PSP, FGO-S, FGO-E
12	Catholic primary school	3ha	SE PSP	SE PSP, FGO-S, FGO-E
13	Medium size aquatic facility	1.5ha	FGO-S	B'burn and District
14	CFA/SES facility	1.2ha	SE PSP	B'burn and District

	Facility	Land area (if relevant)	Recommended location Growth area/township	Geographic catchment served
15	Police station	0.3ha	SE PSP	B'burn and District
16	Ambulance station	0.3ha	SE PSP	B'burn and District
17	Indoor stadium	0.6ha	SE PSP	SE PSP, FGO-S, FGO-E
18	Additional indoor court at Bannockburn Stadium	-	Township	Township
19	Football/cricket sporting reserve (ovals, netball courts)	8ha	SE PSP	SE PSP, FGO-E
20	Football/cricket sporting reserve (ovals, bowling greens)	8ha	FGO-S	FGO-S, SW PSP
21	Soccer facility	8ha	SE PSP	SE PSP, SW PSP, FGO-S, FGO-E
22	One new synthetic hockey field. Land for second field.	3ha	FGO-S	B'burn and District
23	Grass athletics track (may eventually become synthetic)	4ha	FGO-S	B'burn and District
24	Baseball/softball facility (3 fields)	4ha	FGO-E	B'burn and District
25	Linear park along Bruce's Creek	3ha	SE PSP	SE PSP
26	Linear park along Bruce's Creek and rail corridor	4ha	FGO-S	FGO-S
27	Linear park along Bruce's Creek	1ha	SW PSP	SW PSP
28	Park around Bannockburn Lagoon	1ha	SW PSP	SW PSP
29	Park along the constructed waterway, transmission easement and rail corridor	4ha	SE PSP	SE PSP
30	District park (including dedicated dog park)	2ha	SE PSP	SE PSP
31	District park	2ha	NW DP	NW DP
32	District park	2ha	SW PSP	SW PSP
33	District park	2ha	FGO-E	FGO-E
34	District park	2ha	FGO-S	FGO-S
35	Two local level parks	1ha each	FGO-S	FGO-S
36	Two local level parks	1ha each	SE PSP	SE PSP
37	Local level park	1ha	SW PSP	SW PSP
38	Local level park	1ha	NW DP	NW DP
39	Local level park	1ha	FGO-E	FGO-E
40	Subregional playspace	1.5ha	SE PSP	B'burn and District
41	District playspace	-	NW DP	NW DP
42	District playspace	-	SW PSP	SW PSP
43	District playspace	-	FGO-E	FGO-E
44	District playspace	-	FGO-S	FGO-S
45	Two local level playspaces	-	FGO-S	FGO-S
46	Two local level playspaces	-	SE PSP	SE PSP
47	Local level playspace	-	SW PSP	SW PSP
48	Local level playspace	-	NW DP	NW DP
49	Local level playspace	-	FGO-E	FGO-E
50	Upgraded equestrian facility at Leighdale	-	Leighdale	B'burn and District

8.4 Community Infrastructure and open space provision in Bannockburn South East PSP Area

Table 20 lists the infrastructure items that should be considered for location in the Bannockburn SE PSP area. It identifies the catchment area served by each item and the proportion of demand for the item that can be attributed to the Bannockburn SE PSP area. The proportions are determined by dividing the population of the SE PSP area into the catchment population for the facility. Note: it is proposed that most of the infrastructure items be aggregated in three hubs.

The infrastructure items listed in the table can serve one of the following six catchment areas:

- SE PSP area – 11,109 people
- SE PSP, FG0-E – 13,710 people
- SE PSP, FGO-E, FGO-S – 21,654 people
- SE PSP, FGO-E, FGO-S, SW PSP – 24,894 people
- Township – 37,429 people
- Bannockburn and District – 47,380 people

Table 20 - Proposed infrastructure in the Bannockburn SE PSP area

	Recommendation	Land area Ha	Recommended setting	Geographic Catchment served	Proportion of demand attributable to SE PSP	Population trigger
1	New community hub:	3	In community/recreation Hub in prominent accessible location Hub 1			
	– 3 room kindergarten			SE PSP, FGO-E	81%	2 rooms – 1,500 SE PSP 3rd room – 5,000 SE PSP
	– 2 room M&CH centre			SE PSP, FGO-E, FGO-S	51%	1,500 SE PSP
	– 1 room occasional care			SE PSP, FGO-E	81%	1,500 SE PSP
	– Youth hub			B'burn and District	23%	5,000 SE PSP
	– General activity spaces			SE PSP, FGO-E	81%	1,500 SE PSP
	– Community garden			SE PSP, FGO-E, FGO-S	51%	5,000 SE PSP
	– Civic/cultural space			B'burn and District	23%	5,000 SE PSP
5	Health precinct for Barwon Health and other providers	1	In prominent community/recreation precinct Hub 2	B'burn and District	23%	20,000 B'burn Township
6	Library	1.5	Hub 1	B'burn and District	23%	15,000 B'burn Township
7	Government primary school	3.5	Hub 2	SE PSP	100%	12,000 B'burn Township

	Recommendation	Land area Ha	Recommended setting	Geographic Catchment served	Proportion of demand attributable to SE PSP	Population trigger
9	Government primary school	3.5	Hub 3	SE PSP, FGO-E	81%	20,000 B'burn Township
11	Government secondary college	8.4	SE PSP	SE PSP, FGO-S, FGO-E	51%	15,000 B'burn Township
12	Catholic primary school	3	Hub 1	SE PSP, FGO-S, FGO-E	51%	15,000 B'burn Township
14	CFA/SES facility	1.2	In accessible location with good egress	B'burn and District	23%	15,000 B'burn Township
15	Police station	0.3	In accessible location with good egress	B'burn and District	23%	15,000 B'burn Township
16	Ambulance station	0.3	In accessible location with good egress	B'burn and District	23%	15,000 B'burn Township
17	Indoor stadium (2 courts)	0.6	In sporting hub Hub 3	SE PSP, FGO-S, FGO-E	51%	18,000 B'burn Township
19	Football/cricket sporting reserve (ovals, netball courts)	8	Hub 3	SE PSP, FGO-E	81%	15,000 B'burn Township
21	Soccer facility	8	Hub 3	SE PSP, SW PSP, FGO-S, FGO-E	45%	15,000 B'burn Township
25	Linear park along Bruce's Creek	3	Bruce's Creek	SE PSP	100%	1,000 SE PSP
29	Linear park along the constructed waterway, transmission line and railway corridor	4	Drainage, transmission line and rail line	SE PSP	100%	1,000 SE PSP 5,000 SE PSP (rail)
30	District park (including dedicated dog park)	2	With sporting reserve	SE PSP	100%	2,000 SE PSP
38	Two local level parks	2	In residential areas	SE PSP	100%	1,000 SE PSP
40	Subregional playspace	1.5	Hub 1	B'burn and District	23%	4,000 SE PSP
46	Two local level playspaces	-	Within local parks	SE PSP	100	1,000 SE PSP

Table 21 lists the new or modified infrastructure will be required elsewhere in the Bannockburn Township to provide for the Bannockburn SE PSP area. This infrastructure can one of the following two catchment areas:

Table 21 – Proposed infrastructure outside the SE PSP area which will service the SE PSP area

	Facility	Land area ha	Recommended location	Geographic catchment served	Proportion of demand attributable to SE PSP	Population trigger
5	Health precinct for Barwon Health and other providers	1	Township or SE PSP	B'burn and District	23%	20,000 B'burn Township
6	Library	1.5	Township or SE PSP	B'burn and District	23%	15,000 B'burn Township
13	Medium size aquatic facility	1.5	FGO-S. In recreation hub	B'burn and District	23%	25,000 B'burn Township
18	Additional indoor court at Bannockburn Stadium	-	Township	Township	26%	12,000 B'burn Township

	Facility	Land area ha	Recommended location	Geographic catchment served	Proportion of demand attributable to SE PSP	Population trigger
22	One new synthetic hockey field. Land for second field.	3	FGO-S- In recreation hub	B'burn and District	23%	25,000 B'burn Township
23	New grass athletics track (may eventually become synthetic)	4	FGO-S	B'burn and District	23%	25,000 B'burn Township
24	Baseball/softball facility (3 fields)	4	FGO-E	B'burn and District	23%	25,000 B'burn Township

8.5 Infrastructure provision in other growth/township areas

The suggested infrastructure provision in the other growth areas/township is outlined in the tables 22-26.

Table 22 – North West Development Plan Area

	Facility	Land area (if relevant)	Geographic catchment served	Population trigger
3	New community centre:	1.0ha		
	– 2 room kindergarten		NW DP	1,500 NW DP
	– 1 room occasional care		NW DP, Township	1,500 NW DP
	– Aged activities space		B'burn and District	1,500 NW DP
	– General activity spaces		NW DP	1,500 NW DP
	– Community garden		NW DP, Township	1,500 NW DP
29	District park	2ha	NW DP	2,000 NW DP
36	Local level park	1ha	NW DP	1,000 NW DP
39	District playspace	-	NW DP	2,000 NW DP
46	Local level playspace	-	NW DP	1,000 NW DP

Table 23 – South West PSP Area

	Facility	Land area (if relevant)	Geographic catchment served	Population trigger
2	New community centre:	1ha		
	– 2 room kindergarten		SW PSP	1,500 SW PSP
	– 1 room M&CH centre		SW PSP, FGO-S	1,500 SW PSP
	– Neighbourhood house space		B'burn and District	1,500 SW PSP
	– General activity spaces		SW PSP	1,500 SW PSP
	– Men's shed		B'burn and District	1,500 SW PSP
9	Government Primary School	3.5ha	SW PSP	27,000 B'burn Township

	Facility	Land area (if relevant)	Geographic catchment served	Population trigger
27	Linear park along Bruce's Creek	1ha	SW PSP	1,000 SW PSP
28	Park around Bannockburn Lagoon	1ha	SW PSP	1,000 SW PSP
32	District park	2ha	SW PSP	2,000 SW PSP
37	Local level park	1ha	SW PSP	1,000 SW PSP
47	Local level playspace	-	SW PSP	1,000 SW PSP

Table 24 - Future Growth Option - East

	Facility	Land area (if relevant)	Geographic catchment served	Population trigger
24	Baseball/softball facility (3 fields)	4ha	B'burn and District	25,000 B'burn Township
33	District park	2ha	FGO-E	2,000 FGO-E
39	Local level park	1ha	FGO-E	1,000 FGO-E
43	District playspace	-	FGO-E	2,000 FGO-E
49	Local level playspace	-	FGO-E	1,000 FGO-E

Table 25 - Future Growth Option – South

	Facility	Land area (if relevant)	Geographic catchment served	Population trigger
4	New community centre: – 2 room kindergarten – 1 room occasional care – Community arts space – General activity spaces	1.0ha	 FGO-S FGO-S, SWP SP B'burn and District SE PSP	 1,500 FGO-S 1,500 FGO-S 1,500 FGO-S 1,500 FGO-S
9	Government primary school	3.5ha	FGO-S	35,000 B'burn Township
13	Medium size aquatic facility	1.5ha	B'burn and District	25,000 B'burn Township
20	Football/cricket sporting reserve (ovals, netball courts, bowling greens)	10ha	FGO-S, SW PSP	5,000 FGO-S
22	One new synthetic hockey field. Land for second field.	3ha	B'burn and District	25,000 B'burn Township
23	Grass athletics track (may eventually become synthetic)	4ha	B'burn and District	25,000 B'burn Township
26	Linear park along Bruce's Creek/rail corridor	4ha	FGO-S	1,000 FGO-S, 5,000 FGO-S
34	District park	2ha	FGO-S	2,000 FGO-S
35	Two local level parks	1ha each	FGO-S	1,000 FGO-S
44	District playspace	-	FGO-S	2,000 FGO-S
45	Two local level playspaces	-	FGO-S	1,000 FGO-S

Table 26 – Township

	Facility	Land area (if relevant)	Recommended location	Geographic catchment served	Population trigger
5	Health precinct for Barwon Health and other providers	1ha	Township or SE PSP	B'burn and District	20,000 B'burn Township
6	Library	1.5ha	Township or SE PSP	B'burn and District	15,000 B'burn Township
16	Additional indoor court at Bannockburn Stadium	-	Township	Township	12,000 B'burn Township

Figure 7 – Recommended infrastructure provision

NW DP
Community centre
- 2 room kindergarten
- Occasional care room
- Aged activities space
- General activity spaces
- Community garden

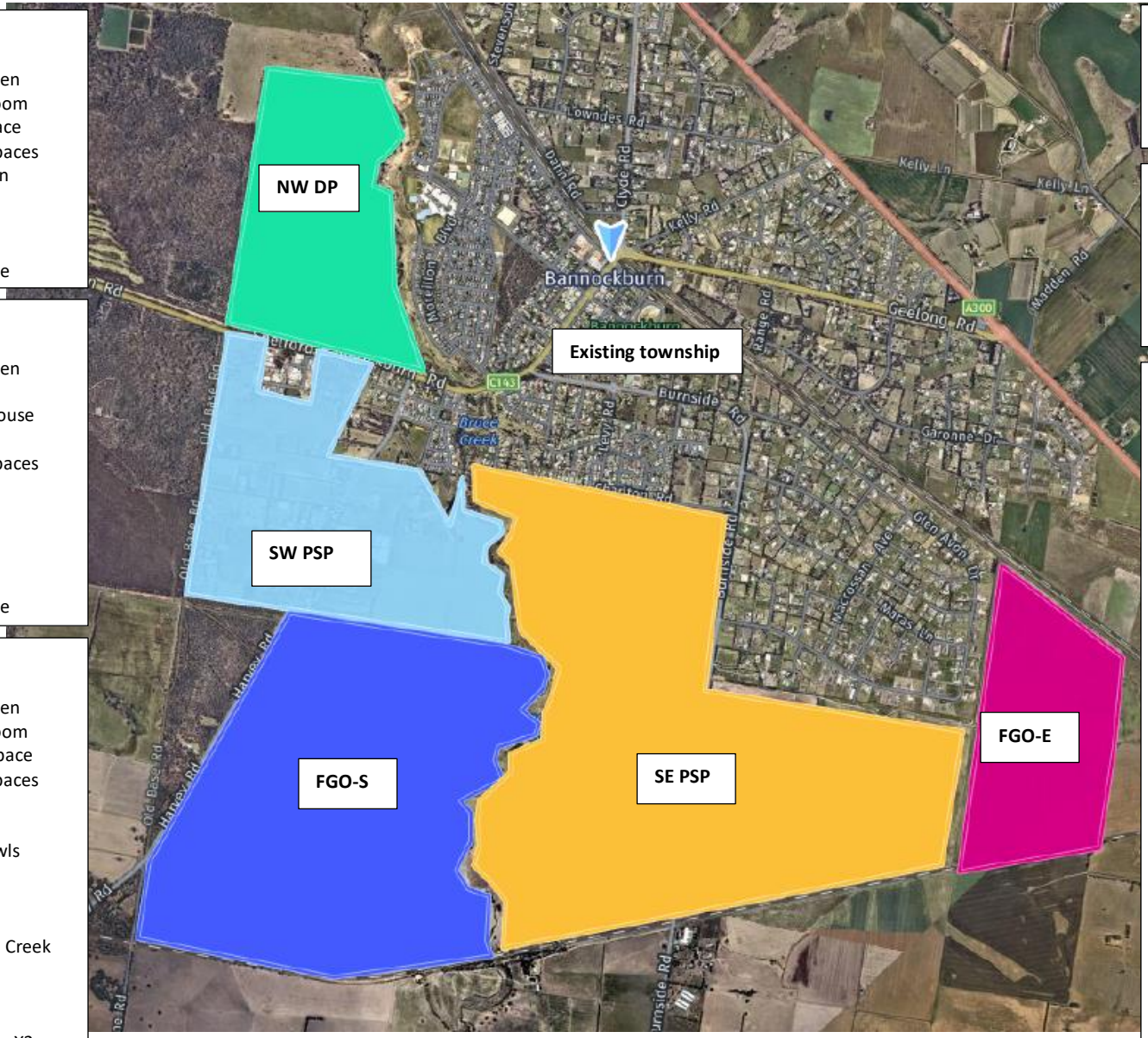
District park
Local park
District playspace
Local level play space

SW PSP
Community centre
- 2 room kindergarten
- M&CH room
- Neighbourhood house space
- General activity spaces
- Men's shed

Government PS
District park
Local park
Local playspace
Local level play space

FGO-S
Community centre
- 2 room kindergarten
- Occasional care room
- Community arts space
- General activity spaces

Government PS
Aquatic facility
Football/cricket/bowls reserve
Hockey field
Athletics track
Linear park - Bruce's Creek
District park
Local park X2
District playspace
Local level play space X2



Existing Township
Health precinct
Library
Indoor court – Bannockburn Stadium

FGO-E
Baseball/softball facility
District park
Local park
District playspace
Local level play space

SE PSP
Community centre
- 3 room kindergarten
- M&CH rooms
- Occasional care
- Youth hub
- General activity spaces
- Community garden
- Civic/cultural space

Library
Health precinct
Government PS (X2)
Government SC
Catholic PS
CFA/SES facility
Ambulance facility
Police station
Indoor stadium
Football/cricket/netball reserve
Soccer reserve
Linear parks along Bruce's Creek and constructed waterway
District park
Local park X2
Sub-regional play space
Local level play space X2

Table 27 provides a comparison of the references to community infrastructure and open space provision made in the Bannockburn Growth Plan 2021 and the Bannockburn SE PSP Community Infrastructure and Open Space Needs Assessment (Draft 2022). The 2022 assessment was based on a higher population size and considered a broader range of infrastructure.

Table 27 – Comparison between recommendations in Bannockburn Growth Plan and the Bannockburn SE PSP Community Infrastructure and Open Space Needs Assessment

Bannockburn Growth Plan (2021)	Bannockburn SE PSP Community Infrastructure and Open Space Assessment (Draft 2022
General	
• Provide walking and cycling linkages to open space areas, community facilities and the town centre in new development and subdivision.	• Makes a general reference to providing walking paths in the linear parks and other parks which link key destinations.
• Provide open space areas in new developments that incorporate pedestrian, bicycle or riding trail paths to other open space areas such as the Bruce's Creek Corridor.	• Identifies the number and type of open space areas that should be provided in each development area (active recreation reserves, district parks, local parks and linear parks) and suggests that paths be provided in these open space areas.
• Create flora and fauna corridors within open space reserves that incorporate locally indigenous vegetation, where there are identified biodiversity values.	• Suggests that areas with biodiversity, heritage and conservation values be protected, where feasible, in open space reserves
• Provide walking and cycling trails, preferably on the eastern side of Bruce's Creek.	• Suggests that a linear park be created along Bruce's Creek where feasible in SW PSP, SE PSP and FGO-S and paths be provided in the park.
• Provide community infrastructure in Bannockburn that services the local catchment and surrounding townships.	• Makes provision for local, township and district/sub-regional level infrastructure ranging from kindergartens serving local communities to an aquatic facility serving the Bannockburn and District community.
• Consider the need for spaces for community events such as graduations, weddings, markets or performances.	• Makes provision for a civic/cultural facility which would be used for the purposes.
• Encourage the provision of new health and community services in the existing Bannockburn Town Centre or in future town centres as defined by the Bannockburn Urban Growth Plan.	• Makes provision for four new community centres and a health services precinct which could accommodate a range of health and community support programs.
• Make provision for an SES/CFA site at a suitable location in the growth areas.	• Make provision for a 1.2ha site in SE PSP area.
• Make provision for the following community infrastructure in the growth areas:	
– Two kindergartens	• Makes provision for 4 new kindergarten locations based on demand analysis and distribution standards.
– Maternal and child health facility	• Makes provision for 2 new M&CH locations based on demand analysis and distribution standards.
– Day care facility	• Recommends that long day care demand continues to be met by the private sector.
– 2-3 government primary schools, government secondary school and catholic primary school	• Makes provision for 4 government primary school, a government secondary school and a catholic primary school.
– Lower order indoor recreation centre	• Makes provision for 3rd court to be constructed at Bannockburn Stadium and a new 2 court stadium in SW PSP.
– Aquatic facility	• Makes provision for medium size aquatic facility in FGO-S

Bannockburn Growth Plan (2021)	Bannockburn SE PSP Community Infrastructure and Open Space Assessment (Draft 2022
SE Growth Area	
• Protect and regenerate the biodiversity values of Bruce's Creek.	• Suggests that areas with biodiversity, heritage and conservation values be protected, where feasible, in open space reserves, including Bruce's Creek environs.
• Establish a new environmental corridor along the proposed constructed waterway.	• Suggests that a linear park be created along the proposed constructed waterway.
• Establish a community meeting place with a local activity centre and community infrastructure in a central location.	• Suggests that a library, civic cultural facility and community centre be provided in a central location.
• Identify a linear open space network connecting Bruce's Creek, the constructed waterway corridor and the railway corridor in the south.	• Suggests that a linear park be created along the proposed, constructed waterway, Bruce's Creek, transmission easement and rail corridor.
• Develop land adjacent to the transmission easement as a key environmental, transport and recreational corridor, subject to approval from AusNet Services.	• Suggests that a linear park be created along the transmission easement.
• Identify and project sites of historic heritage significance such as homesteads, farmhouses and drystone walls.	• Suggests that areas with biodiversity, heritage and conservation values be protected, where feasible, in open space reserves.
• Deliver flexible spaces for community activities and provide a range of services, including government and Catholic schools.	• Makes provision for government primary and government secondary schools and catholic primary school. Makes provision for several community meeting spaces, e.g., library, community centre, civic cultural facility.
NW DP Area	
• Provide a bridge on Milton Street and shared path crossing points over Bruce's Creek to allow access to the Bannockburn P-12 College, the Recreation Precinct and the Bannockburn Town Centre.	• Does not make specific reference to a bridge but states that NW DP is separated from existing township by Bruce's Creek.
• Protect and enhance the function of and connectivity between the key environmental assets of Bruce's Creek and Bannockburn.	• Suggests that areas with biodiversity, heritage and conservation values be protected, where feasible, in open space reserves.
• Provide new open space and drainage assets that provide recreational and environmental value.	• Makes provision for district and local level open space areas and playspaces.
• Identify and protect sites of historic heritage significance such as homesteads, farmhouses and drystone walls.	• Suggests that areas with biodiversity, heritage and conservation values be protected, where feasible, in open space reserves.
SW Growth Area	
• Protect and enhance the function of and connectivity between the key environmental assets of Bruce's Creek, Bannockburn Flora and Fauna Reserve and the Bannockburn Lagoon.	• Suggests that areas with biodiversity, heritage and conservation values be protected, where feasible, in open space reserves. Suggests that land around Bannockburn Lagoon be set aside as open space.
• Develop land adjacent to the transmission easement as a key environmental, transport and recreational corridor, subject to approval from AusNet Services.	• Suggests that a linear park be created along the transmission easement.
• Provide road and shared path crossing points over Bruce's Creek to allow access to the existing town and the South East Precinct.	• Suggests that crossing points be provided at specific locations along Bruce's Creek.
• Provide an urban structure that protects key sightlines from the precinct to the Bannockburn Flora and Fauna Reserve.	• Does not mention in report. Urban design issue.

Bannockburn Growth Plan (2021)	Bannockburn SE PSP Community Infrastructure and Open Space Assessment (Draft 2022
• Protect sites of historic heritage. Identify and project sites of historic heritage significance such as homesteads, farmhouses and drystone walls.	• Suggests that areas of heritage and conservation values be protected, where feasible, in open space reserves.
• Investigate suitable use for the land adjacent to the Bannockburn Lagoon.	• Suggests that land around Bannockburn Lagoon be set aside as open space.
Other	
-	• Makes provision for the following infrastructure not identified in the Bannockburn Growth Plan. This infrastructure was identified in the literature review, demand analysis and consultation with Council staff and other providers: – Three licensed rooms for occasional care (22 place rooms, 66 places). – Dedicated youth hub. Extension to or replacement of existing facility. Spaces suitable for youth activities in other nominated community buildings – Dedicated men's shed. Extension to or replacement of existing facility – Dedicated space for neighbourhood house activities – Two community garden locations – Dedicated library facility (2,000m2 floorspace). Extension to or replacement of existing facility – New dedicated space for community arts activities. Spaces suitable for community arts activities in other nominated community buildings – New three field turf soccer facility (one field may eventually become synthetic) – One new synthetic hockey field. Land for second field. – New grass athletics track (may eventually become synthetic) – New five field baseball/softball facility – Upgraded Leighdale Equestrian Centre

APPENDICES

Appendix A – Literature Review

Document	Description
Golden Plains Shire	
Council Plan 2021-2025	This document outlines Council's objectives for the period 2021-2025 and the actions it will take to achieve these objectives. The actions that have relevance to community infrastructure and open space provision in Bannockburn are as follows: • Advocacy for improved police response times and a 24/7 Police Station in Bannockburn. • Promote participation and community activities through the provision of a network of Council facilities. • Open and activate the Golden Plains Youth Hub. • Implement the Playspace and Sport and Active Recreation Strategies, including: – Prioritise, advocate and plan for upgrades. – New community recreational facilities and rationalisation of existing facilities.
Playspace Strategy 2019-2029	This strategy outlines the actions Council will take to improve the quality and distribution of playspaces. The actions that have relevance to community infrastructure and open space provision in Bannockburn are as follows: • Improve the quality, accessibility, diversity, amenity and play and environmental value of playspaces in Golden Plains. • Strategically redevelop 8 key Township parks for play and construct "the Heart" in Bannockburn • Seek to improve the standard of future urban subdivisions to encourage play, access to nature, independent mobility and liveability. • Adopt guidelines for design requirements, locational criteria and what should be provided in each hierarchy level of playspace. The strategy makes the following specific observations and recommendations about playspaces in Bannockburn: • Bannockburn needs a much broader range of types of play opportunities. • Wheelchair accessible and sensory play opportunities are needed, more trees and natural elements and more maintenance. • Review the location of Lions Park following the development of the 'Heart' as families suggested is not within a safe walkable distance of residences. • Plan for the development of an additional playspace in the town as it grows. • Landscape the trail to the secondary school. • Provide additional play elements of interest to older children in the town. • Provide paths around larger reserves and more path access within parks to social and play elements.
Sport and Active Recreation Strategy 2020-2030	This strategy outlines the actions Council will take to encourage its community to be more active. It makes one specific recommendation about Bannockburn – continue to plan and seek external funding for development of Bannockburn Heart Stage 2. The strategy makes the observation that Golden Plains lacks facilities that could be found in rural municipalities of similar size - swimming pool, synthetic hockey pitches, fenced off-leash dog areas, baseball/softball facilities, parkour, pump parks/mountain bike parks and croquet greens The strategy identifies several facilities that could be considered for provision in Golden Plains as it grows. These include an aquatic centre, fenced off dog off leash park, public indoor fitness centre, outdoor gym equipment and synthetic hockey field.
Community Vision 2040	This document outlines Council's overall vision for the municipality and lists a number of statements about what it wants the municipality to achieve by 2040. The statements that have relevance to community infrastructure and open space provision are as follows: • We want to celebrate through arts and culture, activities and events. • We want opportunities to meet, socialise and build strong, resilient networks. • We want to value and preserve our natural ecosystems, landscapes, features, open spaces, bushland and connection to cultural heritage. • We want places, spaces and programs that support active and passive recreation and socialisation. • We want access to services, facilities and activities for people of all ages and abilities. • We want safe, connected pedestrian and transport infrastructure/services. • We want to learn, develop and progress with access to quality care, education and training. • We want access to a range employment opportunities and pathways.

Document	Description
Community Infrastructure Plan 2021	This plan contains an analysis of community infrastructure provision is Golden Plains Shire. It identifies current deficits in provision and the infrastructure required to acter for the community in the future. The plan make the following findings about Bannockburn and District: • The playground at Lions Park should be relocated to/expanded at a suitable location in the growth areas • The Oval 1 pavilion at Victoria Park needs upgrade. • The following facilities are needed in Bannockburn at it grows (note: the plan factored in the NW DP, SE and SW PSP areas and Future Growth Option – S. It did not consider the Future Growth Option – East) – 3 cricket ovals, 3 football ovals, 3 soccer pitches – 2 MCH consult rooms, 180 licensed kindergarten places – Community rooms of mixed sizes – New playspaces – New health and medical facilities and clinical consulting rooms – New aged care facilities and support services. The Plan makes the following suggestions about the provision of community infrastructure in Bannockburn: • 2 dual-use football/cricket ovals within the 'South West' or 'South East' growth areas, ideally as a dual-oval facility supported by a sports pavilion that also provides an 'extra-large' community room (social space). • 1 additional football oval (after 2031) at a suitable location to be determined, ideally dual-purpose for another pitch sport. • 3 outdoor netball courts co-located with existing or new football ovals and supported by the same football pavilions. • 3 soccer pitches either all located on the same site or co-located with new football/cricket ovals, supported by pavilion(s) that each provide a 'medium' or 'extra-large' community room. • At least 180 kindergarten licensed places provided primarily through 4 x 33-place sessional kindergarten rooms (132 licensed places, likely 2 new facilities each in different growth areas). The remaining places to be provided through a new Integrated Children's Centre (private/community operated); [also consider co-location with any new primary schools delivered by the Department of Education] • 2 MCH consult rooms provided through new sessional kindergarten centres, either both within the same centre or 1 room in 2 new kindergartens. • 1 small or medium community room provided within the 'North West' growth area, potentially co-located with a bookable clinical consulting room. • 3 (maximum) community rooms of mixed sizes (in addition to those provided though new sports pavilions) provided within the 'South West' and 'South East' growth areas, potentially co-located with 1 or more bookable clinical consulting rooms. • New play areas (number and location to be determined), potentially co-located with new sports facilities and/or new community rooms and other 'neighbourhood activity centre' uses. • Residential aged care facility (size, type and location to be determined).
Active Ageing and Inclusion Plan 2020-2024	This plan outlines the actions that Council will take to ensure aged and disabled people can participate in community life. The action that has relevance to community infrastructure and open space provision in Bannockburn are as follows: • Audit Council's existing buildings, and report findings back to Council with a recommendation on accessibility requirements.
Municipal and Public Heath Plan 2011-2015	The document outlines Council's key goals with respect to improving the health of its community and the actions it will take to achieve these goals. The actions that have relevance to community infrastructure and open space provision are as follows: • Support local community events e.g., Farmer's markets, festivals, community gardens. • Provide and activate spaces and develop opportunities for communities to connect and participate. • Provide, maintain and advocate for sustainable and accessible facilities that promote and enable healthy recreation, physical activity and social connection. • Ensure Council facilities are welcoming and inclusive for all. • Maintain parks, ovals, trails, paths and open spaces to provide quality places to be active. • Support and promote active travel in the Shire.

Document	Description
	• Support and actively participate in regional/state recreation and sporting. • Promote, encourage and provide opportunities for women and girls to participate in physical activity. • Provide high quality public spaces and infrastructure.
Open Space Strategy 2014-2019	This strategy makes recommendations about the future provision of open space across the Shire. It contains the following actions about Bannockburn: • Continue to develop the open space network consistent with the Bannockburn UDF and Bannockburn Infrastructure Development Plan. • Continue to implement the Bruce's Creek Reserve Masterplan. • Enhance the maintenance regime for Bruce's Creek Reserve. • Renew and progressively implement the landscape plan for Victoria Park. • Review the provision of carparking areas and public toilets at the parks in Bannockburn and the main access points to the trail along Bruce's Creek. • Consider developing family/social areas at the Bannockburn Lock-Up Park and Victoria Park. • Develop informal play and family/social areas at the Education/Recreation Precinct. • Consider designating a dog off lead area in one of the parks in the town.
Path and Trails Strategy 2014-2019	This strategy makes recommendations about the future provision of paths and trails across the Shire. It contains the following actions about Bannockburn: • Continue to develop the paths and trails network consistent with the Bannockburn UDF and Bannockburn Infrastructure Development Plan. • Make provision for the development of a trail around the perimeter of the growth boundary of the township. • Explore the feasibility of developing: – A circuit path around or a NE-SW link through Victoria Park – A trail along the railway line or Midland Hwy to Lethbridge.
Youth Development Strategy 2015-2019	This strategy outlines the actions that Council will take to support the youth in the Shire. It commits the Council to continuing to support the development of youth friendly spaces and utilising existing community assets including the youth lounge.
Bannockburn Recreation Precinct Masterplan 2021	This plan contains directions for the future development of the recreation precinct. The plan retains the areas set aside for the aquatic centre and 3rd indoor court and recommends the provision of a synthetic surface multipurpose field in the vacant land north of the soccer fields. It also makes provision for the central pavilion to be extended.
Leighdale Equestrian Centre Masterplan 2020-2030	This plan contains directions for the future development of the centre. The plan recommends a range of works – new arenas, roof over arenas, extended pavilion, lighting etc.
VPA	
Bannockburn Urban Growth Plan 2021	This plan provides a vision and framework for the future development of the Bannockburn Township through to 2050. The Plan proposes five potential growth areas in Bannockburn - the South East PSP, South West PSP, North West Development Plan Future Growth Option – South and Future Growth Option – East. The development timeframes for these growth are range from within 2 years to 20+ years. The Plan indicates that the growth areas have the potential to yield 9,760 lots and generate a population of 28,630 people. The Plan makes the following references to community infrastructure and open space provision: General • Provide walking and cycling linkages to open space areas, community facilities and the town centre in new development and subdivision. • Provide open space areas in new developments that incorporate pedestrian, bicycle or riding trail paths to other open space areas such as the Bruce's Creek Corridor. • Create flora and fauna corridors within open space reserves that incorporate locally indigenous vegetation, where there are identified biodiversity values. • Provide walking and cycling trails, preferably on the eastern side of the creek. • Provide community infrastructure that services the local catchment and surrounding townships.

Document	Description
	• Consider the need for spaces for community events such as graduations, weddings, markets or performances. • Encourage the provision of new health and community services in the existing Bannockburn Town Centre or in future town centres as defined by the Growth Plan SE Growth Area • Protect and regenerate the biodiversity values of Bruce's Creek. • Establish a new environmental corridor along the proposed constructed waterway. • Establish a community meeting place with a local activity centre and community infrastructure in a central location. • Identify a linear open space network connecting Bruce's Creek, the constructed waterway corridor and the railway corridor in the south. • Develop land adjacent to the transmission easement as a key environmental, transport and recreational corridor, subject to approval from AusNet Services. • Identify and project sites of historic heritage significance such as homesteads, farmhouses and drystone walls. • Deliver flexible spaces for community activities and provide a range of services, including government and Catholic schools. NW DP Area • Provide a bridge on Milton Street and shared path crossing points over Bruce's Creek to allow access to the Bannockburn P-12 College, the Recreation Precinct and the Bannockburn Town Centre. • Protect and enhance the function of and connectivity between the key environmental assets of Bruce's Creek and Bannockburn. • Provide new open space and drainage assets that provide recreational and environmental value. • Identify and protect sites of historic heritage significance such as homesteads, farmhouses and drystone walls. SW Growth Area • Protect and enhance the function of and connectivity between the key environmental assets of Bruce's Creek, Bannockburn Flora and Fauna Reserve and the Bannockburn Lagoon. • Develop land adjacent to the transmission easement as a key environmental, transport and recreational corridor, subject to approval from AusNet Services. • Provide road and shared path crossing points over Bruce's Creek to allow access to the existing town and the South East Precinct. • Provide an urban structure that protects key sightlines from the precinct to the Bannockburn Flora and Fauna Reserve. • Protect sites of historic heritage. Identify and project sites of historic heritage significance such as homesteads, farmhouses and drystone walls. • Investigate suitable use for the land adjacent to the Bannockburn Lagoon.
Bannockburn Retail Study 2020	This study assesses the retail facility needs of the Bannockburn community as it grows. It finds that a second retail precinct will be required in Bannockburn. It identifies a location on Burnside Road as an ideal site for the precinct, due to its proximity and convenient access for the existing residents in Bannockburn's south, as well as future residents locating to the growth area south sector. It states that that this site will also provide easy access to the Bannockburn Town Centre, which is expected to continue its role as the primary retail facility serving Bannockburn and the surrounding rural towns.
Biodiversity Assessment: Bannockburn Growth Areas 2021	This study identifies and assesses the quality and extent of potential biodiversity values within the proposed Bannockburn Growth Area (the study area). The study makes the following findings and recommendations that have implications for open space provision in the Bannockburn Growth Areas. • Exclude occurrences of high quality endangered EVCs from development and retain either in public reserves or protected areas on private land. • Retain large, high quality patches of native vegetation. Incorporate into reserves or subdivision layout that minimises patch fragmentation and decline. • Retain the Bannockburn Lagoon remain as a public reserve. • Determine whether the current modelled wetland in the south-west section of the growth areas should be retained as a public reserve.

Document	Description
	• Restore the Bruce's Creek riparian corridor and potential native vegetation along the escarpment and watercourse via enhancing habitat quality, increasing habitat connectivity, and reducing impacts from the surrounding environments.
Arboriculture Assessment Location: Bannockburn South East PSP 2021	This study undertakes an arboriculture assessment of trees on and around private land in the Bannockburn South East Precinct Structure Plan area. The Study makes the following key findings: • The value of the Eucalyptus camaldulensis (River Red Gums) along Bruce's Creek cannot be overstated. Some of these individuals are extraordinary specimens of the species. • The remainder of the large Eucalyptus camaldulensis are paddock trees. Along with five examples of the protected species Eucalyptus leucoxylon ssp. connata (Melbourne Yellow Gum) in the Levy Road property, these paddock trees are also high value for retention; however, most of these trees have structural factors, or high value habitat in large dead branches, making them inappropriate to retain in residential lots. These trees must be retained in public land with sufficient space around them to allow them to be isolated from the public, preferably by dense complimentary planting under the trees.
Existing Ecological Conditions Report, Bannockburn Growth Area, South East Section 2021	The study undertakes an ecological assessment of the South East PSP Area. The Study makes the following key findings: • The Bruce's Creek corridor should be excluded from development and retained due to the suite of ecological values present. • It is important that the enhancement of ecological values within the study area are not undermined through unrestricted and uncontrolled public access throughout retained areas. Public access should be restricted to clearly defined shared community facilities (i.e., BBQ areas, play equipment etc) that are accessible via a connected network of shared paths (walking and cycling shared paths). • Given the degraded condition of the Bruce Creek corridor, an opportunity exists to revegetate and naturalise the vegetation adjacent to the Creek-line.
Bannockburn South East PSP – Cultural Values Assessment 2021	This assessment documents the known and potential Wadawurrung living cultural heritage values of the Bannockburn SE PSP area. The key findings of the assessment are as follows: • There are currently 59 Aboriginal places and no historical references or preliminary reports registered on the (Victorian Aboriginal Heritage Register (VAHR) within the Bannockburn Growth Plan Area. None are registered within the BSE Study Area. • Bannockburn South East PSP area – Cultural Values Assessment ix: Stony rises/knolls – Moderate archaeological sensitivity, higher near escarpment edge and/or near water, especially for artefact scatters and stone arrangements – Escarpment – Low-Moderate archaeological sensitivity, especially for Aboriginal Ancestral Remains and Quarries – Swampy / marshy areas – Low-Moderate archaeological sensitivity, particularly where seasonally dry, and especially for scarred trees and earth features – Undulating Volcanic Plain – Low archaeological sensitivity, most likely Aboriginal place types being low-density scatters or isolated occurrences of stone artefacts. – Areas of significant ground disturbance – nil to negligible archaeological sensitivity.
Bannockburn South East PSP Historical Heritage Assessment 2021	This study undertakes a heritage assessment of the Bannockburn SE PSP area. The key findings of the assessment are as follows: • There are no registered/listed heritage sites located within the study area. • There are seven registered historic heritage sites and one registered historic precinct within the defined thematic region (as detailed in Section 5). All are located north of the study area. • One historic place, a historic farmhouse with an associated dairy, barn, and dry stone wall (Grayson's Farm, 430 Burnside Road, Bannockburn • A dry stone wall, part of Grayson Farm, but also holding individual significance as an example of an early-nineteenth century constructed dry stone wall in Bannockburn region. This wall is recommended for retention. • A number of places of local interest were identified within the Bannockburn East PSP area: – Recommendation 1: Place Specific Heritage Study – Grayson Farm, 430 Burnside Road, Bannockburn. – Recommendation 2: Preservation/Protection of Bruce's Creek as a historic Landscape of Local Interest. – Recommendation 3: Preservation of Dry Stone Wall within the Study Area (Survey Area A – FA-9). – Recommendation 4: Incorporation of Place History into the Future Development.

Document	Description
	– Recommendation 5: Preservation of Historic Places/Features of Local Interest. Recommendation 6: Protection of Unidentified Heritage Places/Sites in the Vicinity of the PSP Area: – Recommendation 6A: Bruce's Creek and Surrounds – Recommendation 6B: Gheringhap-Moorona Railway Line Reserve
Other	
G21 and AFL Barwon Regional Strategy G21 and Cricket Victoria Barwon Regional Cricket Strategy	These strategies make recommendations about the future provision of football and cricket facilities in the G21 Region. They identify that additional fields will be needed in Bannockburn.
G21 Regional Hockey Strategy	This strategy makes recommendation about the future provision of hockey facilities in the G21 Region. It makes the following recommendation about hockey facilities in Bannockburn: • Investigate opportunities to provide better facility access locally for the Golden Plains Hockey Club. Explore school partnership opportunities for satellite/training facilities within the Golden Plains Shire (GPS). The strategy also refers to a new regional hockey complex in Armstrong's Creek
Barwon Health Strategic Plan 2019	This plan identifies the new or redeveloped facilities that will be previsedby Barwon Health on over the next decade. They include: • More emergency capacity at the University Hospital site • A mental health crisis hub at the University Hospital site • A paediatric emergency hub at the University Hospital site • A paediatric rehabilitation facility at the McKellar Centre • The Torquay Community Hospital
GRL Library Strategic Plan 2021-25	This plan commits GRL to advocate, plan and secure funding for place based library developments in the G21 Region.

Appendix B - Quantitative Analysis of Community Infrastructure Demand at full development: Existing Township, Growth Areas, District area and Bannockburn and District

Item	Ratio/standard	Source of standard	Demand Assessment									
			Existing B'burn T'ship	Growth areas						Total B'burn	District	Total B'burn and District
				SE PSP	SW PSP	NW DP	FGO-S	FGO-E	O'nd Rd			
	Population AFD		**8300**	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
	Dwellings AFD		**2651**	**3766**	**1159**	**1267**	**2693**	**878**	**172**	**12586**	**3850**	**37429**
	Estimated Net Developable Area		**-**	**236**	**97**	**80**	**168**	**55**	**15**	**-**	**-**	**-**
EARLY YEARS FACILITIES												
Kindergarten place for 3 and 4yo	1 place per child aged 3 and 4 years	Victorian Government target	138	189	55	64	135	44	9	634	170	804
Kindergarten enrolments 3 and 4yo	Total number of 3 and 4 year old children	Victorian Government target	276	379	110	127	271	88	17	1268	339	1607
Maternal and child health centre (room)	1 room per 140 infants aged 0 years people	Sector benchmark	1	1.3	0.4	0.4	0.9	0.3	0.1	4.4	1.2	5.6
Maternal and child health centre (session)	1 per 14 infants aged 0 years	Sector benchmark	9	13	4	4	9	3	1	43	12	55
Long day child care centre	1 per 9,000 people	VPA standard	1	1.2	0.4	0.4	0.9	0.3	0.1	4.3	1.1	5.4
Long day care place	1 per 4.8 children 0-6 years	Current provision rate across Victoria	92	127	37	43	91	30	6	426	113	539
Occasional care place	1 place per 28 children aged 0-6 years	Current provision rate across Victoria	16	22	6	7	16	5	1	73	19	92
Playgroups	1 per 5,000 people		1.6	2.2	0.6	0.7	1.6	0.5	0.1	7.3	2	9.3
COMMUNITY FACILITIES												
Neighbourhood house	1 per 20,000 people	VPA standard	0.41	0.56	0.16	0.19	0.40	0.13	0.03	1.88	0.5	2.38
Multipurpose community centre	1 per 10,000 people	ASR standard based on provision in Victorian regional cities	1.4	1.1	0.3	0.4	0.8	0.3	0.1	4.4	1.0	5.4
	Within 800m of 80% of dwellings	VPA PSP Guidelines 2021	2 existing	2	1	1	1	1	0	8	-	-
Community meeting room/hall	1 per 5,000 people	ASR standard based on provision in Victorian regional cities	1.6	2.2	0.6	0.7	1.6	0.5	0.1	7.3	2	9.3
Branch library	1 per 30,000 people	ASR standard based on provision in Victorian regional cities	0.27	0.37	0.11	0.12	0.26	0.09	0.02	1.24	0.33	1.57

Item	Ratio/standard	Source of standard	Demand Assessment									
			Existing B'burn T'ship	Growth areas						Total B'burn	District	Total B'burn and District
				SE PSP	SW PSP	NW DP	FGO-S	FGO-E	O'nd Rd			
	Population AFD		**8300**	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
	Dwellings AFD		**2651**	**3766**	**1159**	**1267**	**2693**	**878**	**172**	**12586**	**3850**	**37429**
	Estimated Net Developable Area		**-**	**236**	**97**	**80**	**168**	**55**	**15**	**-**	**-**	**-**
Branch library (floor space)	45m2 per 1,000 people	NSW Public Library Standards 2001	365	500	146	168	357	117	23	1676	448	2124
Youth space	1 per 8,000 people	VPA standard	1.0	1.4	0.4	0.5	1.0	0.3	0.1	4.7	1.2	5.9
Youth centre	1 per 40,000 people	VPA standard	0.20	0.28	0.08	0.09	0.20	0.06	0.01	0.92	0.25	1.17
Men's Shed	1 per 40,000 people	ASR standard based on provision in Victorian regional cities	0.20	0.28	0.08	0.09	0.20	0.06	0.01	0.92	0.25	1.17
Community garden	1 garden: 10,000 people	ASR standard based on provision is select Victorian urban areas	0.8	1.1	0.3	0.4	0.8	0.3	0.1	3.8	1	4.8
	100m2 – 1,000 people	ASR standard based on provision is select Victorian urban areas	825	1100	300	400	800	300	100	3825	100	3925
Community arts space	1 per 8,000 people	VPA standard	1.0	1.4	0.4	0.5	1.0	0.3	0.1	4.7	1.2	5.9
Community arts centre	1 per 60,000 people	VPA standard	0.14	0.19	0.05	0.06	0.13	0.04	0.01	0.62	0.17	0.79
Municipal performing arts centre	1 per 150,000 people	VPA standard	0.054	0.074	0.022	0.025	0.053	0.017	0.003	0.248	0.066	0.314
Regional performing arts centre	1 per 400,000 people	VPA standard	0.020	0.028	0.008	0.009	0.020	0.006	0.001	0.092	0.025	0.117
Regional museum	1 per 400,000 people	ASR standard based on provision in Victorian regional cities	0.020	0.028	0.008	0.009	0.020	0.006	0.001	0.092	0.025	0.117
Regional art gallery	1 per 400,000 people	ASR standard based on provision in Victorian regional cities	0.020	0.028	0.008	0.009	0.020	0.006	0.001	0.092	0.025	0.117
INDOOR RECREATION												
Indoor recreation court	1 per 10,000 people	ASR standard based on provision in Victorian regional cities	0.8	1.1	0.3	0.4	0.8	0.3	0.1	3.8	1	4.8

Item	Ratio/standard	Source of standard	Demand Assessment									
			Existing B'burn T'ship	Growth areas						Total B'burn	District	Total B'burn and District
				SE PSP	SW PSP	NW DP	FGO-S	FGO-E	O'nd Rd			
	Population AFD		**8300**	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
	Dwellings AFD		**2651**	**3766**	**1159**	**1267**	**2693**	**878**	**172**	**12586**	**3850**	**37429**
	Estimated Net Developable Area		**-**	**236**	**97**	**80**	**168**	**55**	**15**	**-**	**-**	**-**
Lower order indoor Recreation (2 courts)	1 per 20,000 people	VPA standard	0.41	0.56	0.16	0.19	0.40	0.13	0.03	1.88	0.5	2.38
Higher-order indoor Recreation	1 per 50,000 people	VPA standard	0.162	0.222	0.065	0.075	0.159	0.052	0.010	0.745	0.199	0.944
Indoor/aquatic space (25m)	1 per 40,000 people	VPA standard	0.20	0.28	0.08	0.09	0.20	0.06	0.01	0.92	0.25	1.17
Indoor/aquatic space (50m)	1 per 150,000 people	VPA standard	0.054	0.074	0.022	0.025	0.053	0.017	0.003	0.248	0.066	0.314
OPEN SPACE												
Total open space	10% of NDA	VPA PSP Guidelines 2021	-	24	10	8	17	6	2	67		
Passive space	3-5% of NDS	VPA PSP Guidelines 2021	-	7-12	3-5	2-4	5-8	2-3	0.5-0.75	20-33		
Sports fields	5-7% of NDA	VPA PSP Guidelines 2021	-	12-17	5-7	4-6	9-12	3-4	0.25-0.5	34-47		
Local park	With 400m of all dwellings	VPA PSP Guidelines 2021	8 (existing)	5	2	2	4	2	0	23	-	-
Sports reserve	Within 800m of all dwellings	VPA PSP Guidelines 2021	2 (existing)	3	1	1	2	1	-	10		
Sports reserve	Within 2kms of all dwellings	ASR standard based on provision in Victorian regional cities	2	<1	<1	<1	<1	<1	<1	1		3
District sports facility	1 per 9,000 people	VPA standard	0.9	1.2	0.4	0.4	0.9	0.3	0.1	4.2	1.1	5.3
Tennis court	1 per 5,000 people	ASR standard based on provision in Victorian regional cities	2	2	1	1	2	1	0	9	2	11
Lower-order tennis (1-2 courts) (Public)	1 per 25,000 people	VPA standard	0.32	0.44	0.13	0.15	0.32	0.10	0.02	1.48	0.4	1.88
Higher-order tennis facility (6-10 courts) (Club)	1 per 35,000 people	VPA standard	0.23	0.32	0.09	0.11	0.23	0.07	0.01	1.06	0.28	1.34

Item	Ratio/standard	Source of standard	Demand Assessment									
			Existing B'burn T'ship	Growth areas						Total B'burn	District	Total B'burn and District
				SE PSP	SW PSP	NW DP	FGO-S	FGO-E	O'nd Rd			
	Population AFD		**8300**	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
	Dwellings AFD		**2651**	**3766**	**1159**	**1267**	**2693**	**878**	**172**	**12586**	**3850**	**37429**
	Estimated Net Developable Area		**-**	**236**	**97**	**80**	**168**	**55**	**15**	**-**	**-**	**-**
Netball court	1 per 3,000 people	ASR standard based on provision in Victorian regional cities	2.7	3.7	1.1	1.2	2.6	0.9	0.2	12.4	3.3	15.7
Bowls green	1 per 10,000 people	ASR standard based on provision in Victorian regional cities	0.8	1.1	0.3	0.4	0.8	0.3	0.1	3.8	1	4.8
Lawn bowls facility (4 greens)	1 per 40,000 people	VPA standard	0.20	0.28	0.08	0.09	0.20	0.06	0.01	0.92	0.25	1.17
Athletics track	1 per 150,000 people	VPA standard	0.054	0.074	0.022	0.025	0.053	0.017	0.003	0.248	0.066	0.314
Aust rules football oval	1 per 5,000 people	ASR standard based on provision in Victorian regional cities	1.6	2.2	0.6	0.7	1.6	0.5	0.1	7.3	2	9.3
Cricket oval	1 per 4,000 people	ASR standard based on provision in Victorian regional cities	2.0	2.8	0.8	0.9	2.0	0.6	0.1	9.2	2.5	11.7
Soccer field	1 per 5,000 people	ASR standard based on provision in Victorian regional cities	1.6	2.2	0.6	0.7	1.6	0.5	0.1	7.3	2	9.3
Baseball/softball field	1 per 30,000 people	ASR standard based on provision in Victorian regional cities	0.27	0.37	0.11	0.12	0.26	0.09	0.02	1.24	0.33	1.57
Hockey field	1 per 60,000 people	ASR standard based on provision in Victorian regional cities	0.14	0.19	0.05	0.06	0.13	0.04	0.01	0.62	0.17	0.79
Velodrome	1 per 400,000 people	ASR standard based on provision in Victorian regional cities	0.020	0.028	0.008	0.009	0.020	0.006	0.001	0.092	0.025	0.117
Criterium	1 per 400,000 people	ASR standard based on provision in Victorian regional cities	0.020	0.028	0.008	0.009	0.020	0.006	0.001	0.092	0.025	0.117
EDUCATION FACILITIES												
Special needs school	1 per 60,000 people	VPA standard	0.14	0.19	0.05	0.06	0.13	0.04	0.01	0.62	0.17	0.79

Item	Ratio/standard	Source of standard	Demand Assessment									
			Existing B'burn T'ship	Growth areas						Total B'burn	District	Total B'burn and District
				SE PSP	SW PSP	NW DP	FGO-S	FGO-E	O'nd Rd			
	Population AFD		**8300**	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
	Dwellings AFD		**2651**	**3766**	**1159**	**1267**	**2693**	**878**	**172**	**12586**	**3850**	**37429**
	Estimated Net Developable Area		**-**	**236**	**97**	**80**	**168**	**55**	**15**	**-**	**-**	**-**
Government primary school	1 per 3,000 dwellings	VPA standard	0.9	1.3	0.4	0.4	0.9	0.3	0.1	4.3	1.3	5.6
Government secondary school	1 per 10,000 dwellings	VPA standard	0.27	0.38	0.12	0.12	0.27	0.09	0.02	1.27	0.38	1.65
Catholic primary school	1 per 9,100 dwellings	CEO standard	0.29	0.41	0.13	0.14	0.30	0.10	0.02	1.39	0.42	1.81
Catholic secondary school	1 per 30,000 dwellings	CEO standard	0.09	0.13	0.04	0.04	0.09	0.03	0.01	0.43	0.13	0.56
Primary school students	All children aged 5-11 years	Population projections	918	1259	367	423	900	294	57	4218	1128	5346
Government primary students	64% of children aged 5-11	Proportion as per Census 2021	588	806	235	271	576	188	36	2700	722	3422
Catholic primary students	25% of children aged 5-11	Proportion as per Census 2021	230	315	92	106	225	74	14	1056	282	1338
Independent school students	11% of children aged 12-17	Proportion as per Census 2021	101	151	44	51	108	35	7	497	135	632
Secondary school students	All children aged 12-17 years	Population projections	669	918	268	309	656	214	42	3076	822	3898
Government secondary students	55% of children aged 12-17	Proportion as per Census 2021	368	505	147	170	361	118	23	1692	452	2144
Catholic secondary students	29% of children aged 12-17	Proportion as per Census 2021	194	266	78	90	190	62	12	892	238	1130
Independent primary students	11% of children aged 5-11	Proportion as per Census 2021	114	156	46	53	112	36	7	524	140	664
TAFE	1 per 150,000 people	VPA standard	0.054	0.074	0.022	0.025	0.053	0.017	0.003	0.248	0.066	0.314
University	1 per 150,000 people	VPA standard	0.054	0.074	0.022	0.025	0.053	0.017	0.003	0.248	0.066	0.314
AGED CARE												
Adult day care/planned activity group facility	1 per 50,000 people	VPA standard	0.162	0.222	0.065	0.075	0.159	0.052	0.010	0.745	0.199	0.944

Item	Ratio/standard	Source of standard	Demand Assessment									
			Existing B'burn T'ship	Growth areas						Total B'burn	District	Total B'burn and District
				SE PSP	SW PSP	NW DP	FGO-S	FGO-E	O'nd Rd			
	Population AFD		**8300**	**11109**	**3240**	**3738**	**7944**	**2591**	**507**	**37429**	**9951**	**47380**
	Dwellings AFD		**2651**	**3766**	**1159**	**1267**	**2693**	**878**	**172**	**12586**	**3850**	**37429**
	Estimated Net Developable Area		**-**	**236**	**97**	**80**	**168**	**55**	**15**	**-**	**-**	**-**
EMERGENCY SERVICES												
Police station	1 per 100,000 people	VPA standard	0.081	0.111	0.032	0.037	0.079	0.026	0.005	0.371	0.099	0.47
Fire station	1 per 60,000 people	VPA standard	0.14	0.19	0.05	0.06	0.13	0.04	0.01	0.62	0.17	0.79
SES	1 per 120,000 people	VPA standard	0.068	0.093	0.027	0.031	0.066	0.022	0.004	0.311	0.083	0.394
Ambulance	1 per 60,000 people	VPA standard	0.14	0.19	0.05	0.06	0.13	0.04	0.01	0.62	0.17	0.79
Law courts	1 per 400,000 people	VPA standard	0.020	0.028	0.008	0.009	0.020	0.006	0.001	0.092	0.025	0.117
HEALTH												
Small community health	1 per 30,000 people	VPA standard	0.27	0.37	0.11	0.12	0.26	0.09	0.02	1.24	0.33	1.57
Small community service	1 per 30,000 people	VPA standard	0.27	0.37	0.11	0.12	0.26	0.09	0.02	1.24	0.33	1.57
Medium community health	1 per 50,000 people	VPA standard	0.162	0.222	0.065	0.075	0.159	0.052	0.010	0.745	0.199	0.944
Large community health	1 per 150,000 people	VPA standard	0.054	0.074	0.022	0.025	0.053	0.017	0.003	0.248	0.066	0.314
Hospital	1 per 500,000 people	VPA standard	0.02	0.02	0.01	0.01	0.02	0.01	0.00	0.09	0.02	0.11

Appendix C - Facility models

Activity	Provision ratio	Facility models for Council provided facilities			
		Settings and hierarchy	Land area	Elements/fields	Population trigger
EARLY YEARS SERVICES					
3 and 4yo kindergarten	1 place per child aged 3 and 4 years	Sessional: A minimum of 2 licensed rooms (33 place each) within a children's/ community centre/hub. A lesser facility (e.g., 1 room centre facility) may be provided if the development area is small and/or bounded by significant barriers. A stand-alone facility could also be constructed in these circumstances. The centre should be accessibly and prominently located in its local catchment area. The centre could be at a primary school (Victorian Government's Kinder Co-Location Commitment, see https://www.schoolbuildings.vic.gov.au/kindergartens-or-next-door-schools) Integrated: Private and community sector childcare centres providing integrated kindergarten programs.	Part of children's/ community centre.	33 place playrooms Kitchen Staff areas Amenities Storage Outdoor play area	1st room: 1,000 people 2nd room: 3,000 people
M&CH service	1 session: 14 infants 1 consulting room: 140 infants	A facility with a minimum of 2 consulting rooms within a children's/ community centre, community health centre or activity centre which is accessibly located in its catchment area. The facility could also be at a primary school if integrated with a preschool. A one room centre could be satisfactory if the development area is small and/or bounded by significant barriers.	Part of a children's/ community centre	2 consulting rooms (one would be permissible if the catchment area is small). Waiting room Kitchen area Staff and family amenities Storage facility	1st room - 2,000 people 2nd room – 10,000 people
Long day care	1 centre per 9,000 people 1 place per 576 children aged 0-6 years.	Provision by private and community sector. 100+ place facilities situated in prominent safe locations.	-	--	-
Occasional childcare	1 place: 28 children aged 0-6 years	Licensed education and care room within a children's/community centre/hub, recreation centre, neighbourhood house or centre. Room could be used for other purposes when not needed for OCC.	Part of children's/ community centre	22-33 place playroom Kitchen, staff areas, amenities Storage Outdoor play area	22 place area – 2,000 people
Playgroups	1 group: 5000 people	Access to activity spaces within a community activity centre, recreation centre, sports pavilion, community arts centre, hall and/or neighbourhood house.	-	Activities area Kitchen, amenities Storage Outdoor play area (preferable)	When demand emerges

Activity	Provision ratio	Facility models for Council provided facilities			
		Setting and hierarchy	Land area	Elements/fields	Population trigger
COMMUNITY/CULTURAL SERVICES					
N'bourhood house	1 facility: 20,000 people	Suitable facilities within a children's/community centre or as a stand-alone building which is prominently located within the development area.	Part of children's/ community centre. 0.3ha if stand-alone	Offices Classrooms/art areas Activity/meeting spaces Licensed children's room Consulting rooms	10,000 people
Community meetings/ activities	1 room: 6,000 people	Hierarchy of spaces ranging from large rooms (300 people capacity – standing) through to small meeting rooms for 10 people. The spaces could be located at community centres, arts facilities, recreation centres, schools, churches, sports pavilions, civic buildings etc.	Element of a range of facilities	Activity spaces Kitchen Storage Amenities area Outdoor area	A community room should be provided as early as possible in the development
Community Centre	1 centre:10,000 people	Multipurpose venues that could contain kindergarten, M&CH and childcare facilities, neighbourhood house, youth space, PAG facility, and spaces for community activities. The centre would be prominently located near a school or community hub.	Land required will depend on component elements. Min 0.6ha	Kindergarten/M&CH Centre Activity spaces, kitchen, storage, amenities area, outdoor play area	A community centre should be provided as early as possible in the development
PAG facility	1program: 20,000 people	Suitable space located in a community centre	Part of a community centre	Activities room Kitchen/Office Amenities	10,000 people
Library	1 library: 30,000 people 45sqms: 1,000 people	Dedicated facility in a prominent community, commercial or recreation hub. Could be integrated with other community/recreation facilities.	1.5-2ha (single storey)	Offices Book storage areas Reading, IT and study areas Children's activity space Meeting rooms Social area/café space	12,000 people
Youth space/ centre	1 per 8,000 people 1 per 40,000 people	Dedicated centre located in a prominent commercial/community hub or near a secondary school complemented by local level spaces at community activity centres, recreation centres or sports pavilions that are suitable for youth activities	Dedicated facility 0.2ha Other spaces in community centres	Activity areas Consulting rooms	Dedicated centre 20,000 people Local level spaces – 3,000 people
Community garden	1 garden: 10,000 people 100m^2 - 1000 people	A dedicated area of around 0.1ha. The garden could have multiple settings – e.g., located within an active or passive reserve, adjacent to a community activity centre or neighbourhood house or near a school. The garden should have access to kitchen facilities	0.1ha	Level area Shed and shelter Access to toilets, kitchen	3,000 people
Men's shed	1 shed: 60,000 people	Dedicated space for located in a community activity centre	0.1ha	Workshop areas Kitchen	5,000 people
Community arts space/facility	1 space: 8,000 people 1 facility centre: 30,000 people	Dedicated arts space in a prominent location complemented by multi-purpose spaces at community centres that can be used for arts activities. The dedicated space could be standalone or integrated with other facilities. It could be located at an education facility.	Spaces – part of community centres Dedicated centre – 0.6ha	Offices, wet and dry studio spaces Exhibition/small performance area Meeting rooms	30,000 people

Activity	Provision ratio	Facility models for Council provided facilities			
		Setting and hierarchy	Land area	Elements/fields	Population trigger
Performing arts centre	Municipal - 1 centre: 150,000 people Regional – 1 per 400,000 people	Dedicated centre located in prominent commercial/community civic hub	1ha	Theatres Foyer spaces Offices Changerooms Kitchen/Amenities	60,000 people
Regional art Gallery	1 centre: 400,000 people	Dedicated municipal level centre located in prominent commercial/community civic hub	1ha	Foyer spaces Display area Store Workshop Offices Kitchen/Amenities	60,000 people
Regional Museum	1 centre: 400,000 people	Dedicated municipal level centre located in prominent commercial/community civic hub	1ha	Foyer spaces Display areas Store Workshop Offices Kitchen/amenities	60,000 people
RECREATION					
Playspace	Local: 1:4,000 people Sub-regional: 1: 15,000 people	Sub-regional venue in a prominent location complemented local venues equitable distributed in public settings across the township.	0.1 to 0.5ha	Sub-regional – Social, environmental elements, loose materials, rotating, fine motor, preschool, school and teen elements, adult and child interaction, climbing, car, accessible, bicycle park, accessible path, shared path, perimeter path Local – all of the above extend bicycle parking and service by a shared trail.	Local: 1,000 people Sub-regional: 8,000 people
Australian rules football	1 oval: 5,000 people	Reserve capable of accommodating at least 2 senior size playing fields, associated infrastructure and an appropriate buffer to surrounding properties. One field venues may be provided if the development area is small and/or bounded by significant barriers. Junior size oval/s could be provided if Council determines that venues will be permanently assigned for junior sport. The pavilion will have at least two change areas per oval, umpires' rooms, social areas, first aid room, kiosk/kitchen, official rooms, externally accessible toilets, storage etc. The change and amenities areas will be e suitable for male and female use.	Single oval – 4-5ha 2 oval venue – 8ha	Playing fields: Preferred: 160mX140m Preferred NS orientation Irrigated, drained and lit Suitable grasses for football Note: smaller size fields may be allowed if the fields are to be permanently allocated as a lower grade senior or junior field.	Oval 1 and pavilion at 3,000 people Oval 2 at 6,000 people

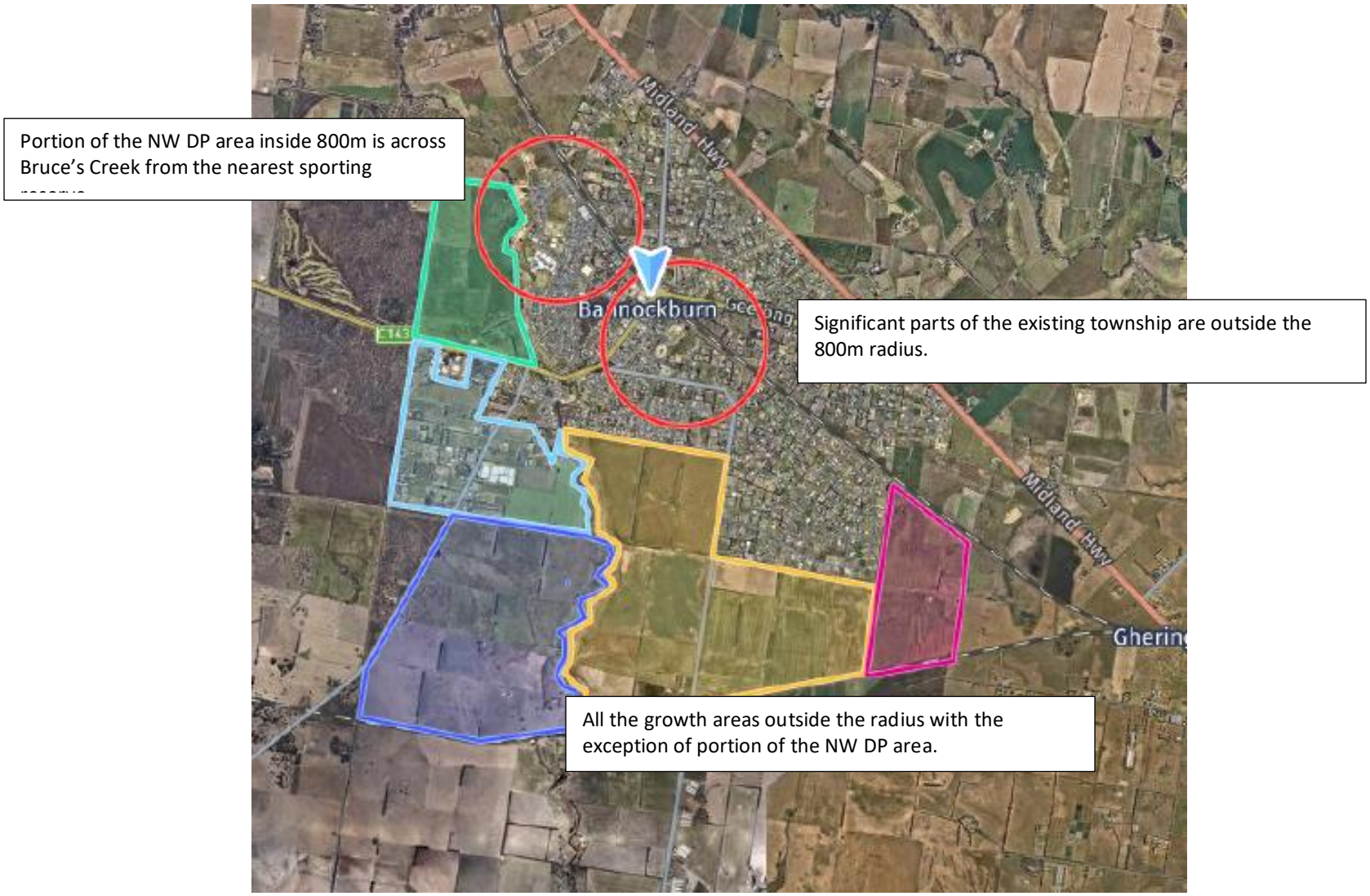
Activity	Provision ratio	Facility models for Council provided facilities			
		Setting and hierarchy	Land area	Elements/fields	Population trigger
		Reserve will be centrally and prominently located in local catchment area, preferably near schools and/or activity centres and location which is accessible to residential areas but where the impact on residential amenity is minimized. The pavilion and playing fields will comply with AFL Victoria's Facility Design Guidelines.			
Cricket	1 field:4,000 people	Reserve capable of accommodating at least 2 senior size playing fields, associated infrastructure and an appropriate buffer to surrounding properties. One field venues may be provided if the development area is small and/or bounded by significant barriers. Junior size oval/s could be provided if Council determines that venues will be permanently assigned for junior sport. The pavilions have at least two change areas per oval, umpires' rooms, social areas, first aid room, kiosk/kitchen, official rooms, externally accessible toilets, storage etc. The change and amenities areas are designed so that they are suitable for women. Centrally and prominently located in local catchment area, preferably near schools and/or activity centres and in sites which are accessible to residential areas. The pavilion and playing fields to comply with Cricket Australia's Facility Guidelines.	Single oval – 4-5ha 2 oval venue – 8ha	Playing fields: Preferred: 150mX130m Irrigated, drained and lit Suitable grasses for football Note: smaller size fields may be considered if permanently allocated as a junior field. Pavilion	Oval 1 and pavilion at 3,000 people Oval 2 at 6,000 people
Soccer	1:5,000 people (grass field)	Reserve capable of accommodating the equivalent of at least 2 full size senior size fields, associated infrastructure and an appropriate buffer to surrounding properties and roads. The size and configuration of the fields may vary. For a senior venue, full size fields are provided. For a junior/senior venue, a mix of senior, medium and small fields for small-sided games are provided. Fields at schools may be used for community soccer. In the main, the fields are dedicated to soccer. Some may be used for lower grade senior and junior cricket with the pitch in the gap between 2 parallel soccer fields. The pavilion has at least 2 change areas per field, social rooms, umpires rooms, first aid room, official rooms, externally accessible toilets etc. The pavilion and playing fields comply with Football Federation Victoria's Design Specifications. The change and amenities areas are designed so that they are suitable for male and female use. Centrally and prominently located within the local catchment area. Preferably sited near schools and/or activity centres and in	2 fields – 3-5ha	Playing fields: Min:100mX 65m for senior fields Irrigated, drained and lit Suitable grasses for soccer Suitable synthetic surface for soccer Pavilion Note: smaller size fields may be considered if permanently allocated for junior and small sided games	Field 1 at 2,000 people Field 2 at 6,000 people

Activity	Provision ratio	Facility models for Council provided facilities			
		Setting and hierarchy	Land area	Elements/fields	Population trigger
		sites which are accessible to residential areas but where the impact on residential amenity is minimized. The pavilion and playing fields to comply with Football Victoria's Facility Guidelines.			
Outdoor tennis	1 court: 5,000 people	A venue with 4-10 lit courts, clubhouse and carparking. The clubhouse could have meeting space areas suitable for general community use. Centrally and prominently located in local catchment area, preferably near schools and/or activity centres and in sites which are accessible to residential areas.	4-10 court facility: 0.6-2ha	Courts - synthetic grass, synthetic clay, clays or acrylic resin surfaces Irrigated, drained, lit and suitably fenced Pavilion	4 courts and pavilion – 10,000 people Additional 6 courts – 25,000 people
Outdoor bowls	1 green: 10,000 people	Venue with at least 2 lit greens, clubhouse and carparking with land for an additional 2 greens. Centrally and prominently located in a district catchment area, preferably near schools and/or activity centres and in sites which are accessible to residential areas. The clubhouse could have meeting space areas suitable for general community use.	0.6ha	20mX40m greens Synthetic grass or natural grass Pavilion	1 green facility – 8,000 people 2 green facility – 14,000 people
Indoor courts	1 court: 10,000 residents	Indoor multipurpose centre with 2-8 courts multi-lined for high and low-ball sports. Centrally and prominently located in a district catchment area, preferably near schools and/or activity centres and in sites which are accessible to residential areas. The centre could have meeting space areas suitable for general community use.	0.6-3ha facility	Courts Change areas Foyer Café Training rooms Activity spaces	2 courts – 12,000 people Additional single courts every 10,000 people
Athletics	Regional 1: 150,000 Sub-regional 1: 50,000	Venue with a lit synthetic track, field events areas, pavilion (suitable for male and female athletes), spectator viewing areas, social area etc; carparking; and associated infrastructure. The facility typically serves a municipal population. Centrally and prominently located within the region served by the facility, preferably in a recreation precinct which accommodates a number of sports. The clubhouse could have meeting space areas suitable for general community use.	5ha	Synthetic track Field events area Pavilion	Regional 40,000 people Bub-regional 25,000
Baseball/ softball	1 facility: 150,000 people	A venue with 5 fields – 7 fields (2 lit); an extensive pavilion with multiple changerooms (suitable for women), social area etc; carparking; and associated infrastructure. Centrally and prominently located within the region served by the facility, preferably in a recreation precinct which accommodates a number of sports. The pavilion could have meeting space areas suitable for general community use.	5 fields – 7ha	5 fields Pavilion	3 fields and pavilion -35,000 people Additional 2 fields – 80,000 people Additional 2 fields - 110,0000 people

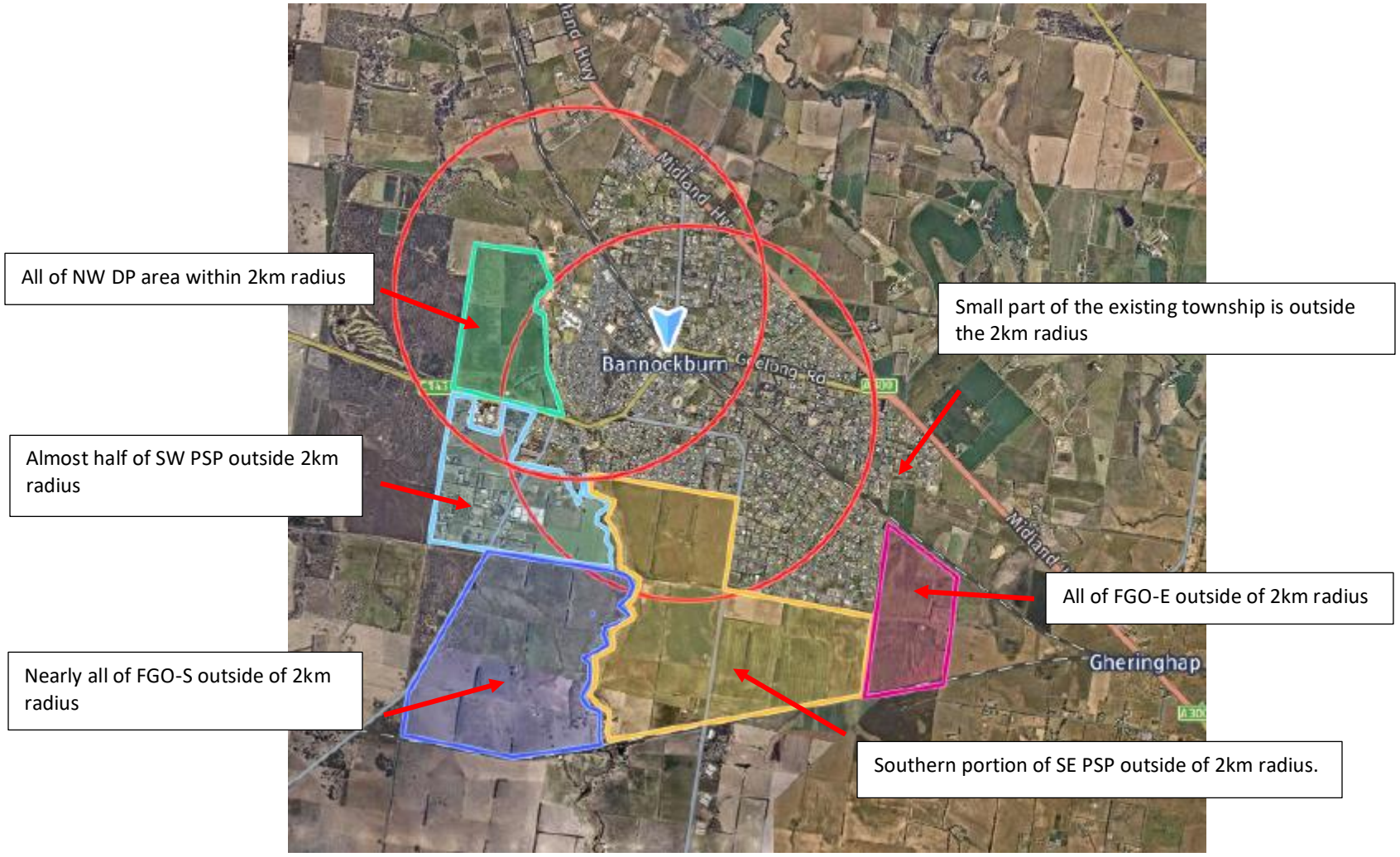
Activity	Provision ratio	Facility models for Council provided facilities			
		Setting and hierarchy	Land area	Elements/fields	Population trigger
Hockey	1: 60,000	Venue with 2 fields (both synthetic and lit); a pavilion with 4 changerooms (suitable for male and female players), social area etc; carparking; and associated infrastructure. The facility typically serves a municipal population. Centrally and prominently located within the region served by the facility, preferably in a recreation precinct which accommodates a number of sports The pavilion and playing fields to comply with Hockey Victoria's Facility Guidelines.	3.5ha	2 lit and fenced synthetic grass fields Pavilion	1st field and pavilion – 30,000 2nd field - 60,000
Cycling – combined Velodrome BMX Criterium facilities	1: 400,000	Venue with a velodrome, criterium track, BMX track, pavilion (suitable for male and female cyclists), social area etc; carparking; and associated infrastructure. The facility typically serves a regional population. Centrally and prominently located within the region served by the facility, preferably in a recreation precinct which accommodates a number of sports.	8ha	250m loop velodrome 1000m loop criterium circuit 350 BMX track	80,000 people
Multipurpose courts	1: 10,000 people	Centre with 2-4 courts multi-lined for high and low-ball sports. Centrally and prominently located preferably near schools and/or activity centres and in site/s which are accessible to residential areas.	0.5-1.5ha	Courts Café Change areas Meeting rooms Function space	2 courts – 8,000 people Additional court every 4,000 people
Indoor aquatic centre	1: 40,000 people	Medium size indoor facility with learn to swim, toddlers and recreation pools, gym, fitness rooms and activity spaces. Centrally and prominently located in a district catchment area, preferably near schools and/or activity centres and in a site which is accessible to residential areas.	1-1.5ha	Pools Café Change areas Meeting rooms Function space	25,000 people

Appendix D – Distance analysis, existing provision

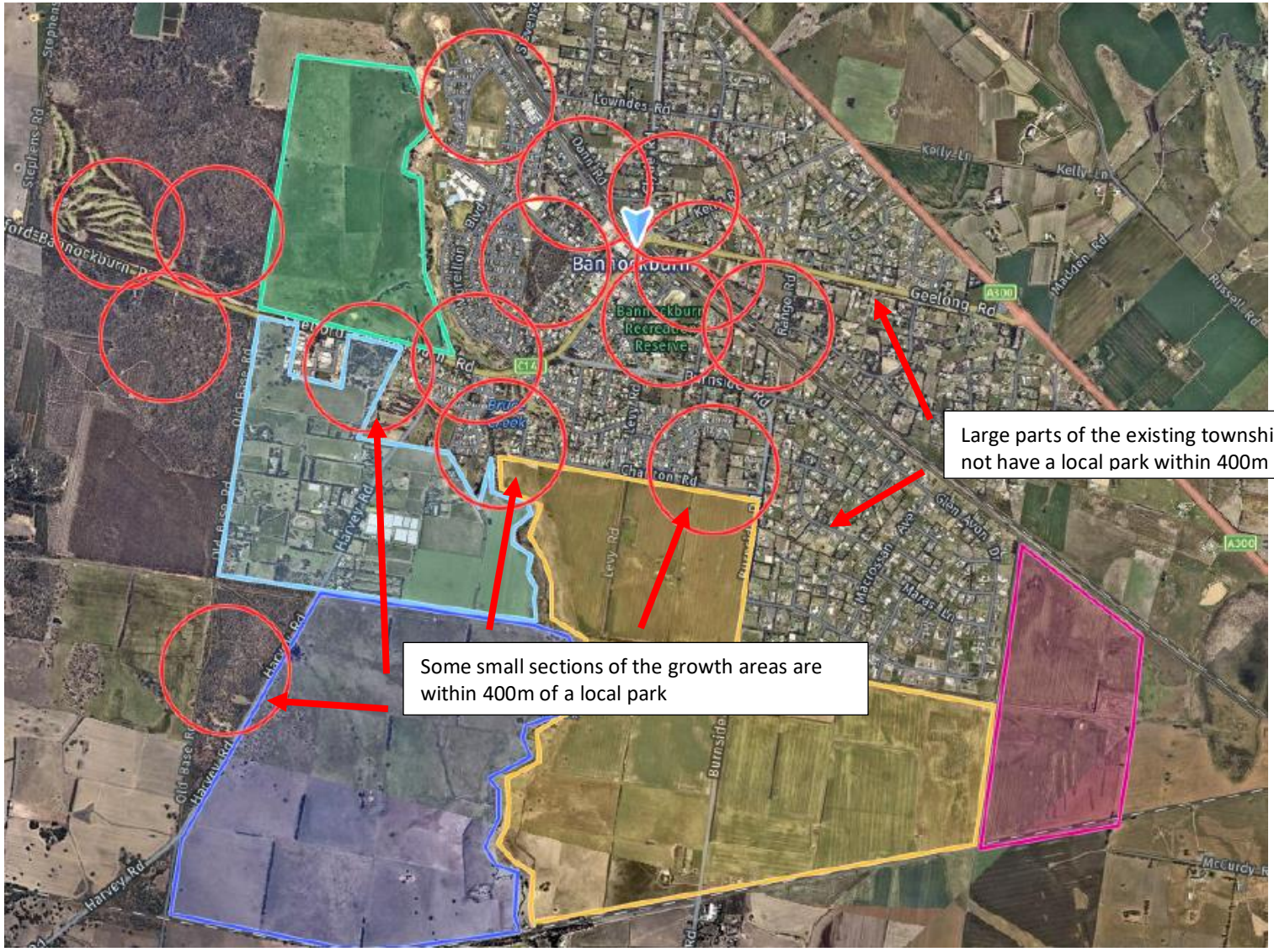
Sports fields – Existing provision: Sporting reserve within 800m distance of all households



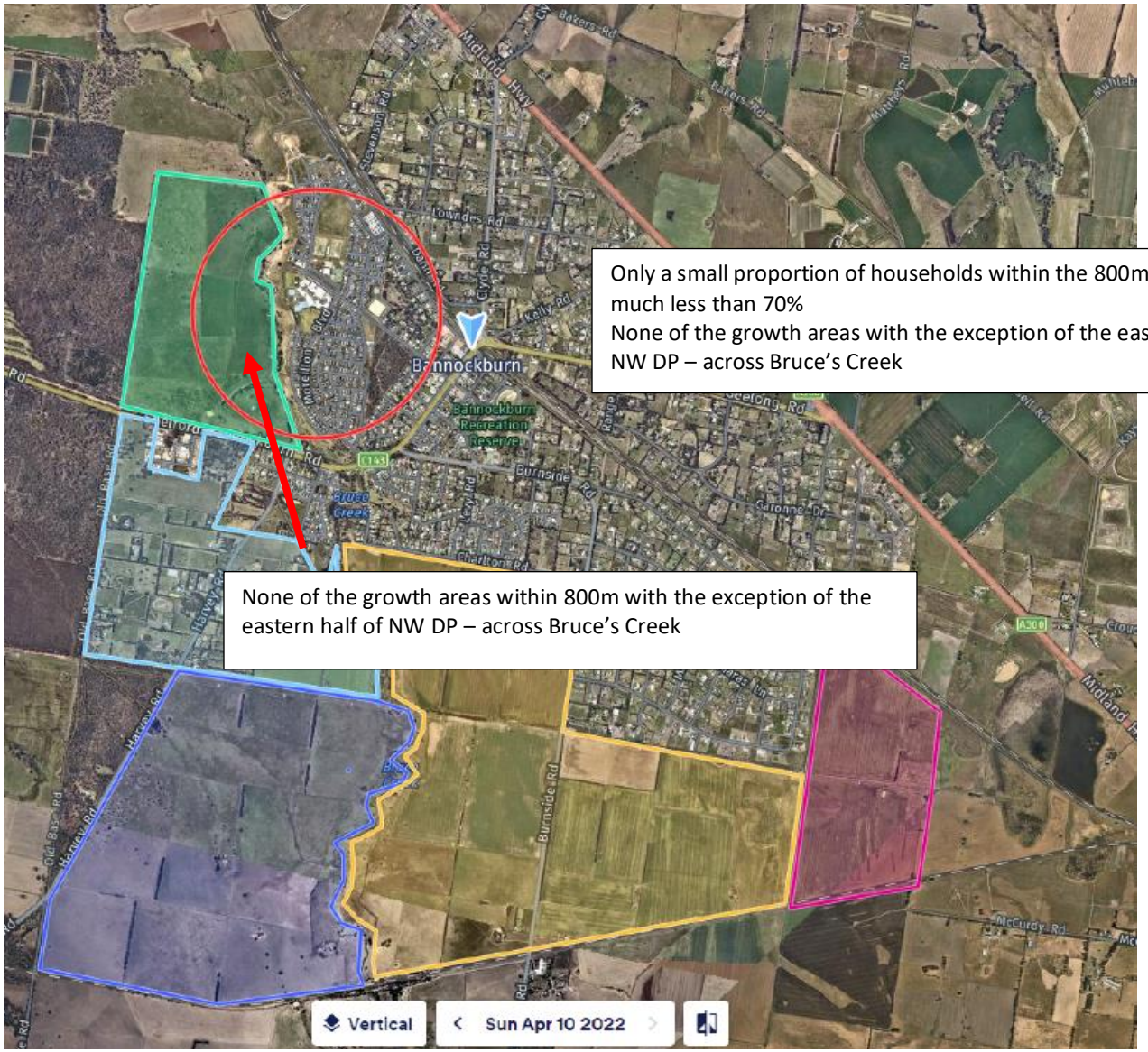
Sports fields – Existing provision: A sporting reserve within 2kms of all households



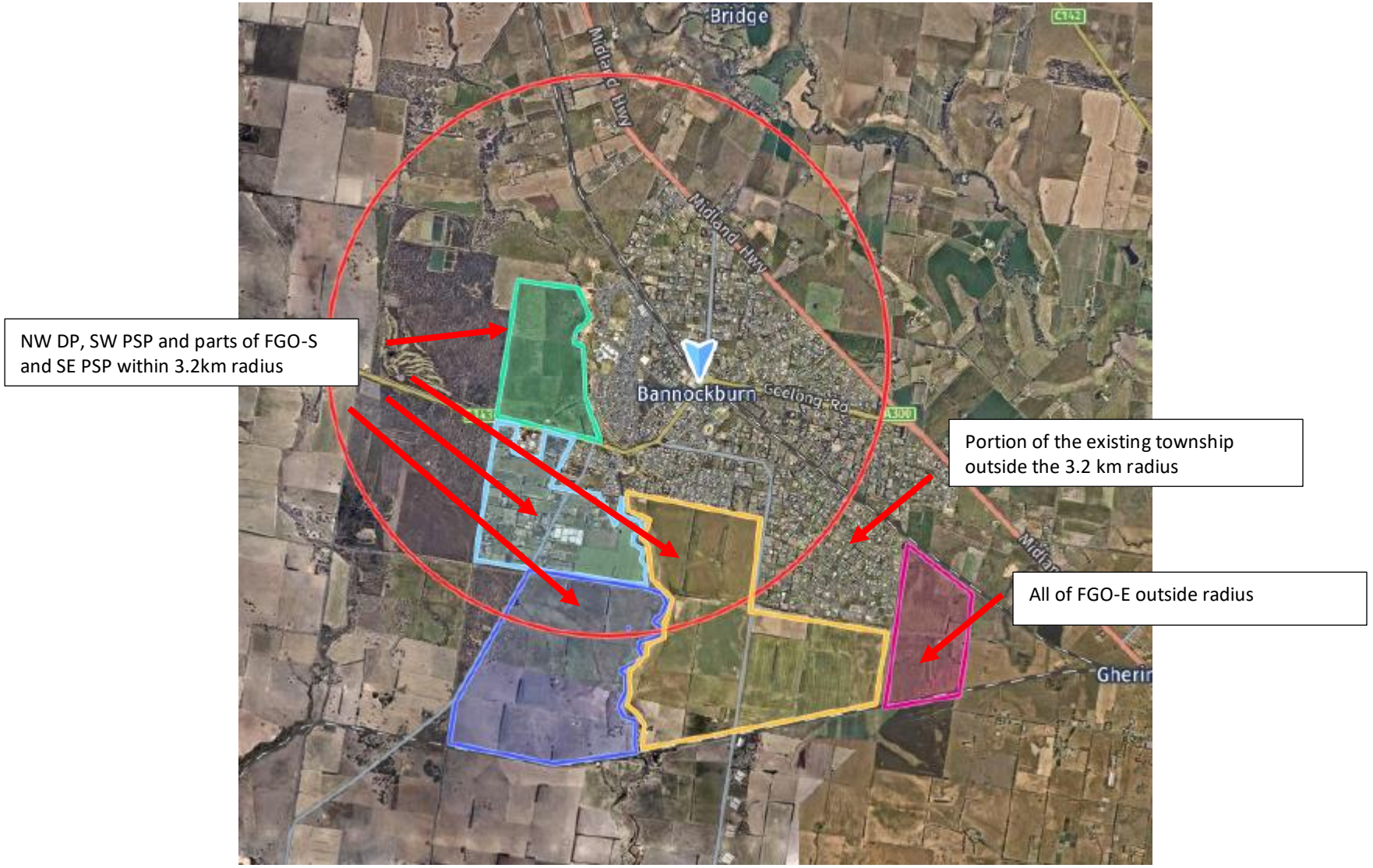
Local parks - Existing provision: Local park within 400m walkable distance of all households



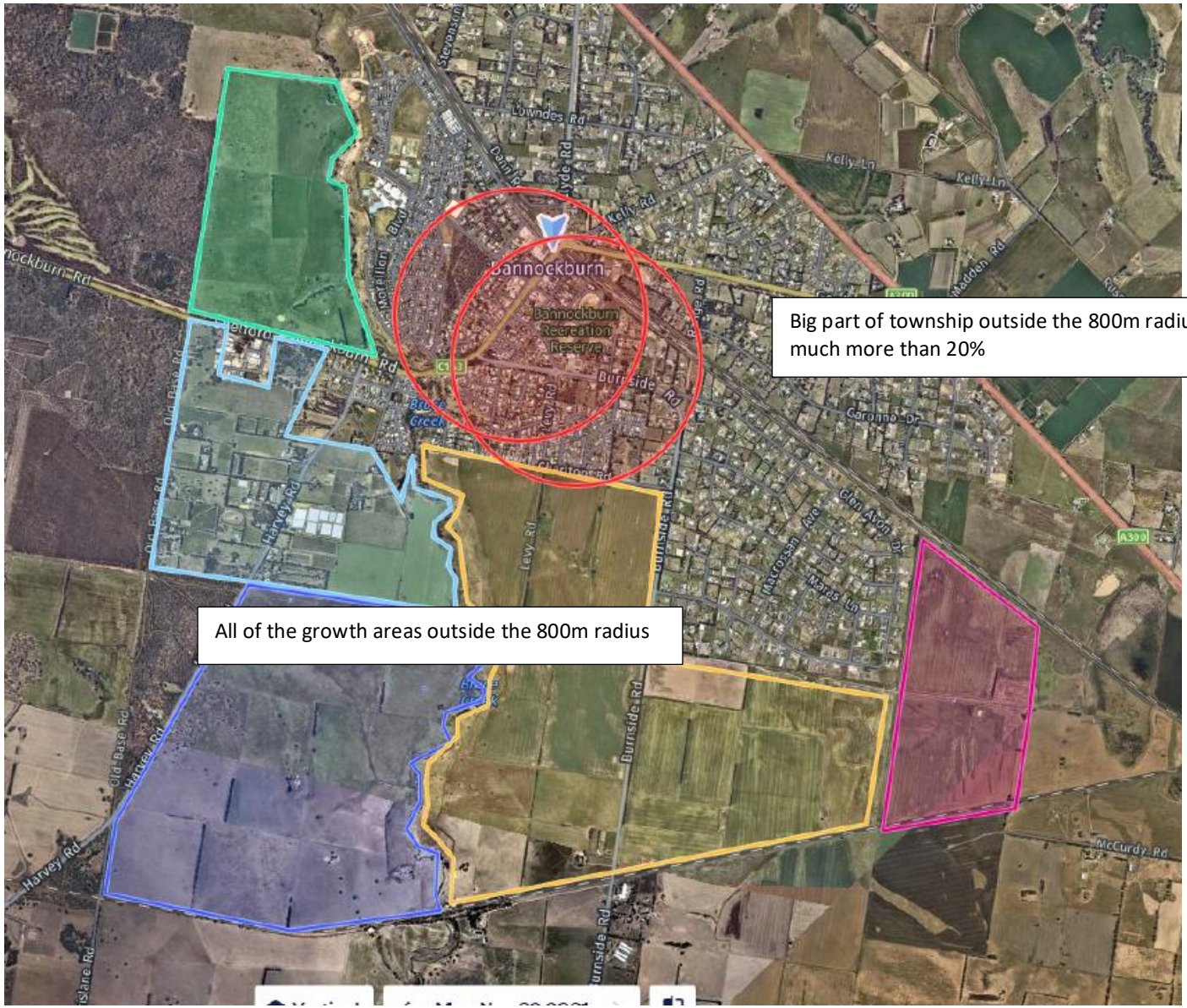
Government primary school - Existing provision: 70% of dwellings in the primary school catchment within 800m of the primary school



Government secondary school - Existing provision: 100% of dwellings within 3.2kms of a government secondary college

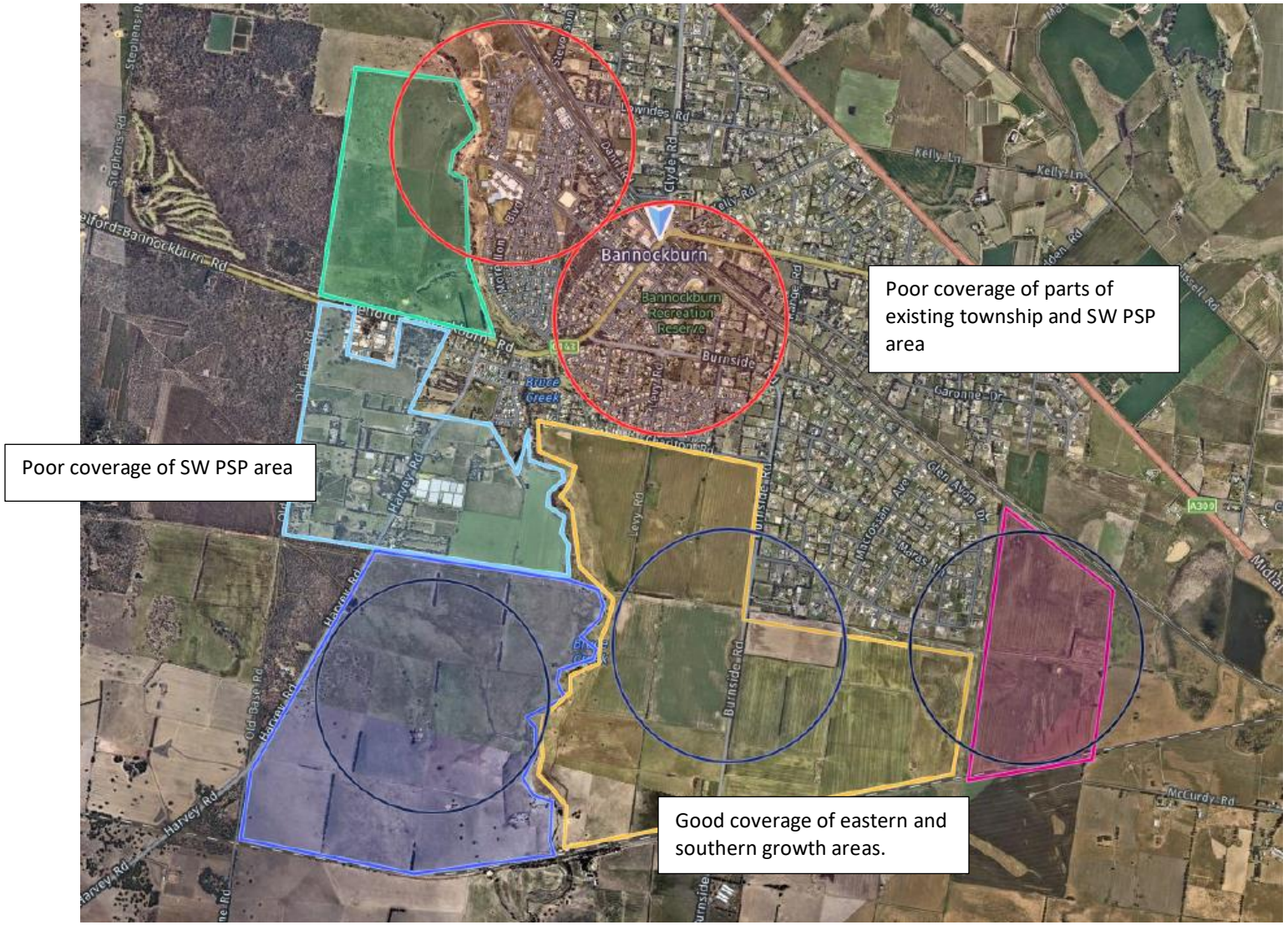


Community centre - Existing provision: 80% of dwellings within 800m of a centre

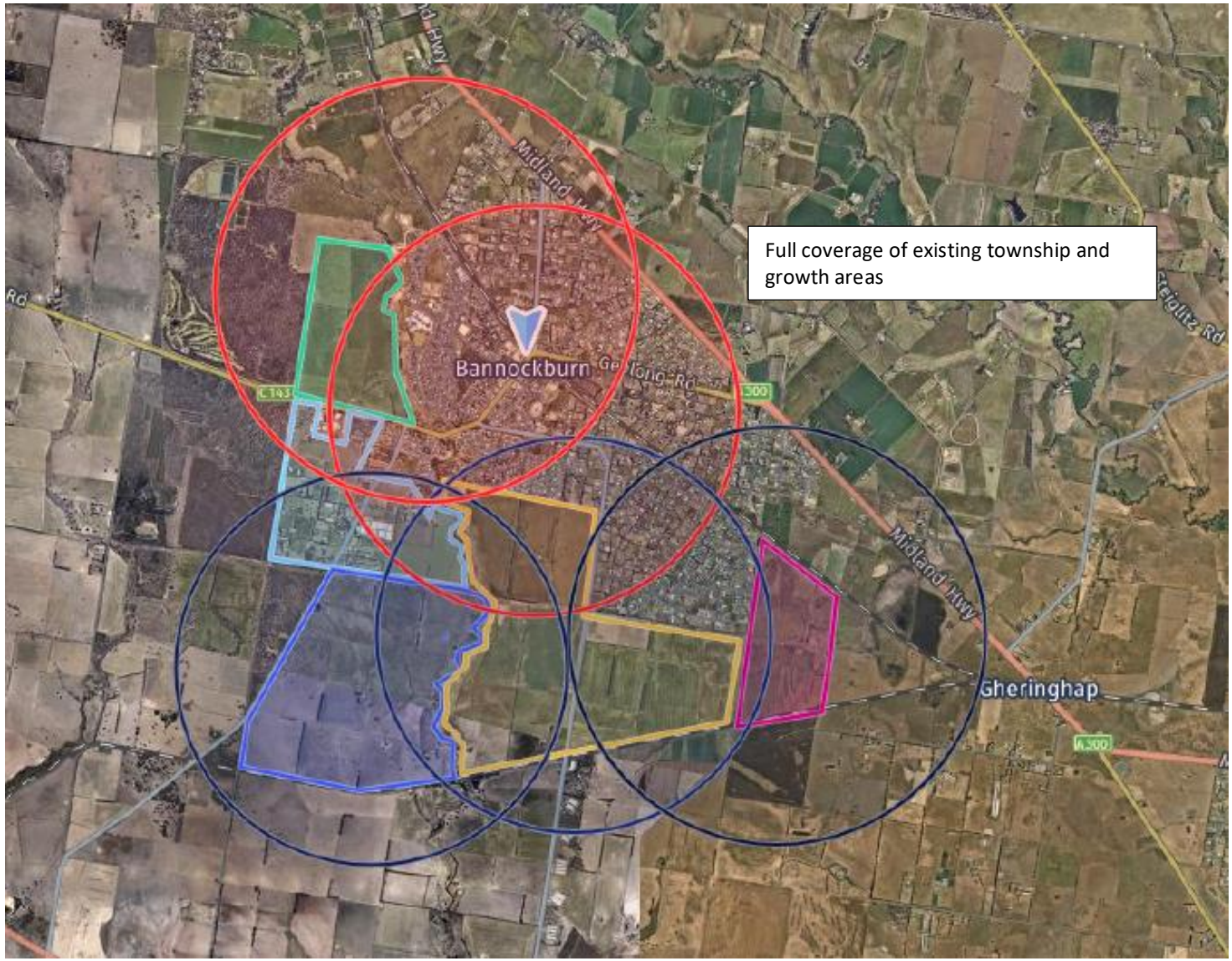


Appendix E – Distance analysis, provision recommended in this assessment

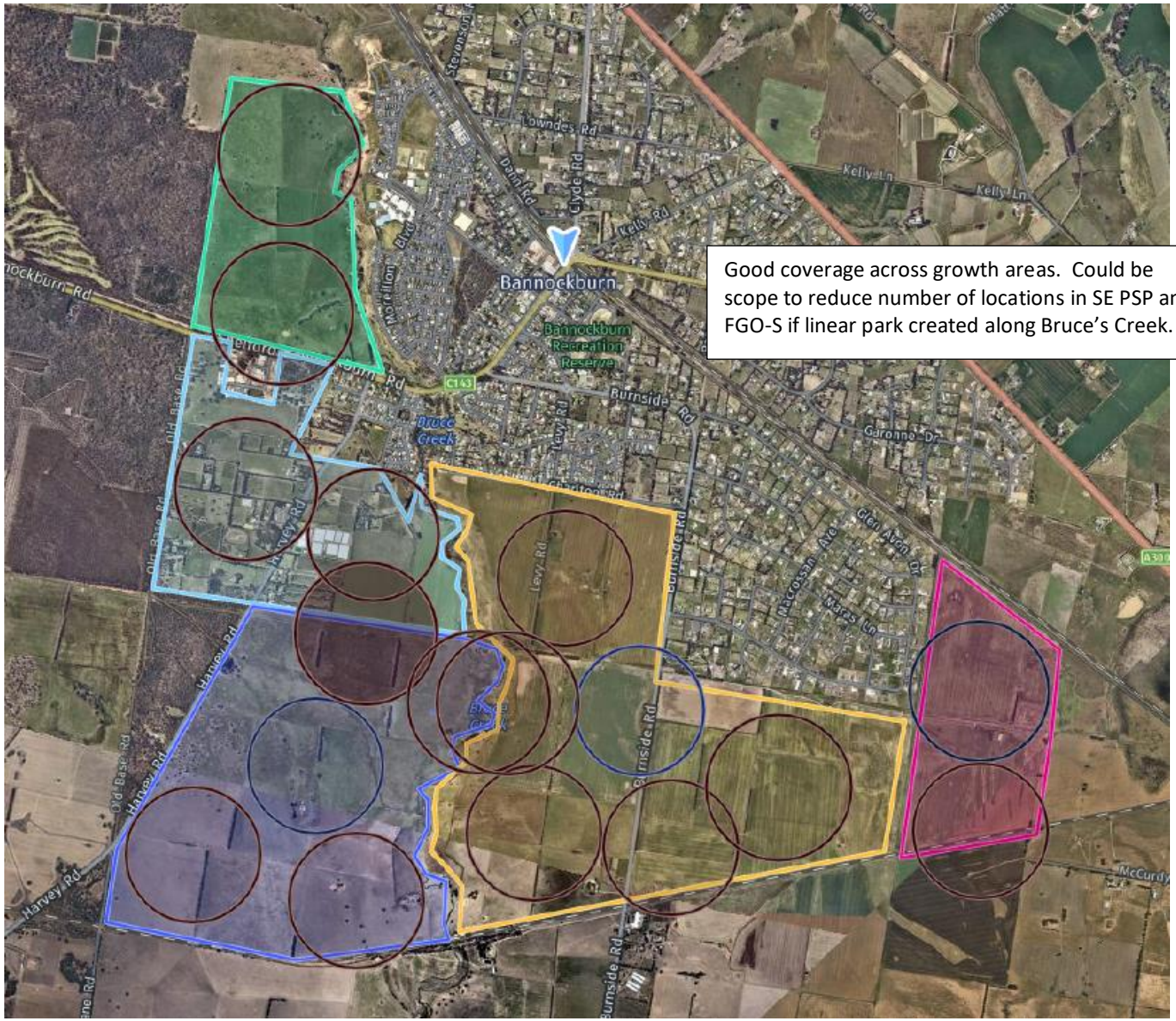
Sports fields – Suggested provision: Sporting reserve within 800m distance of all households



Sports fields – Suggested provision: Sporting reserve within 2kms of all households



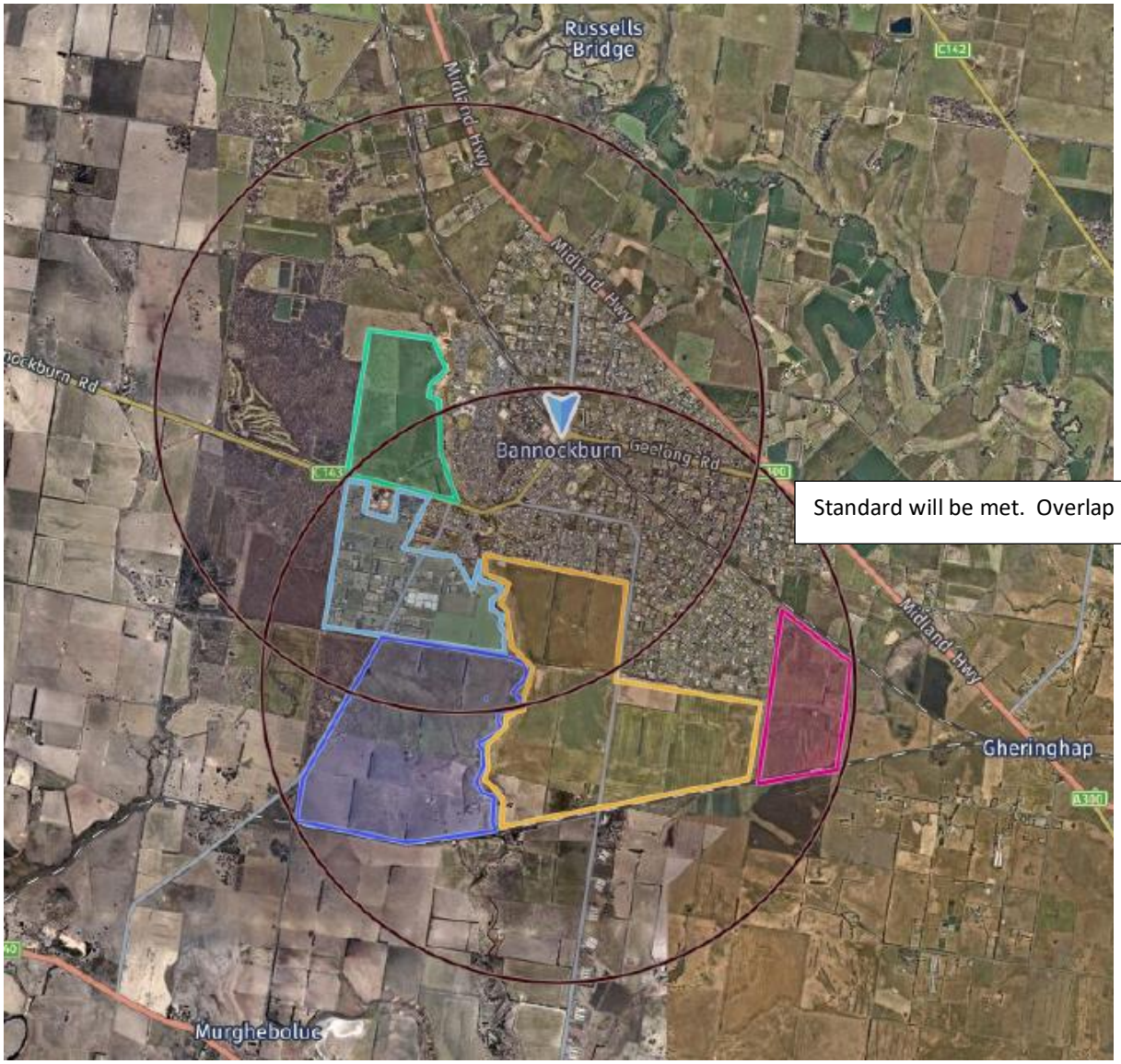
Local parks – Suggested provision: Local park within 400m walkable distance of all households



Government primary school – Suggested provision: 70% of dwellings in the primary school catchment within 800m of the primary school



Government secondary school – Suggested provision: 100% of dwellings within 3.2kms of a government secondary college



Standard will be met. Overlap will occur

Community centre – Suggested provision: 80% of dwellings within 800m of a community centre

