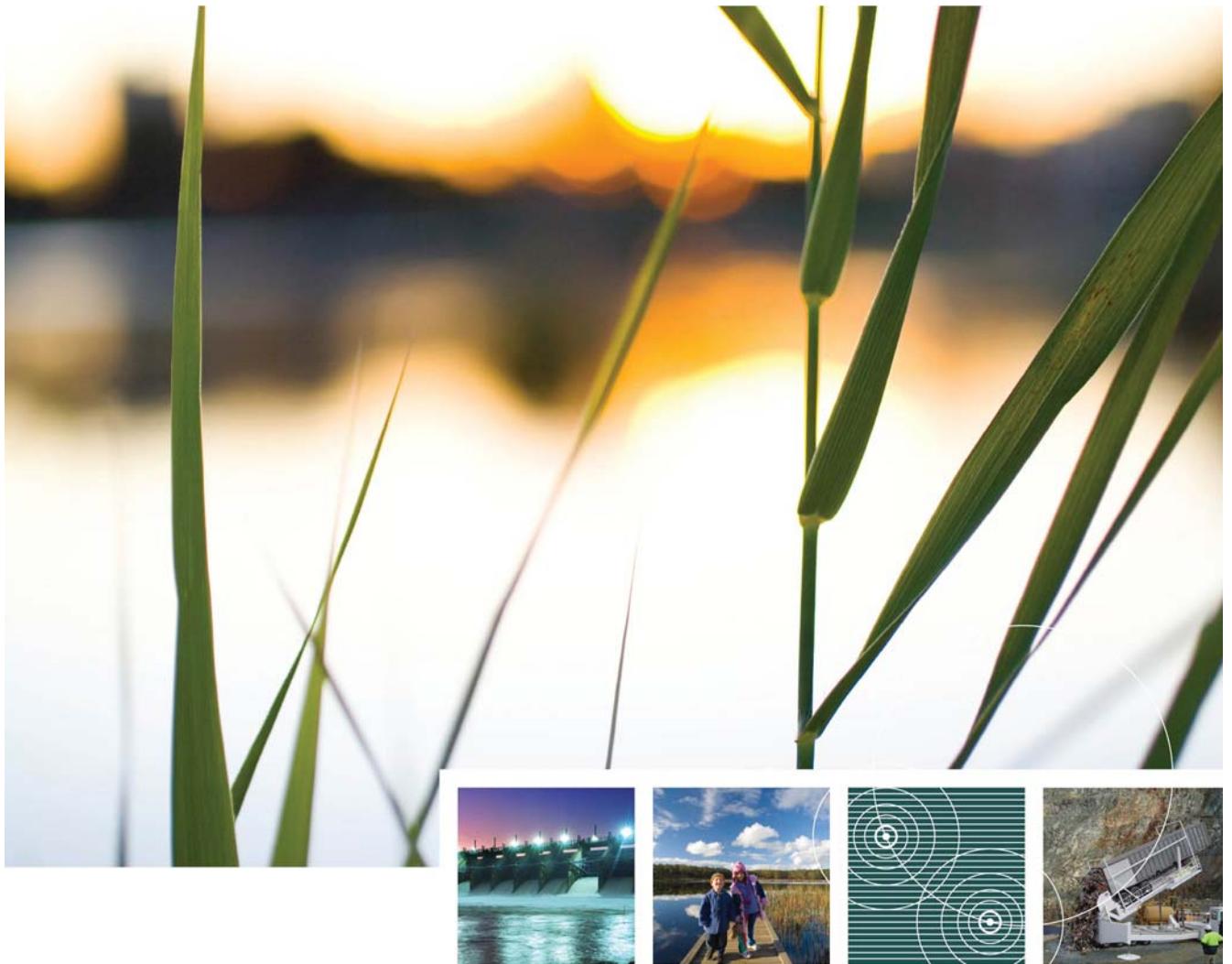


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Shepparton North East Growth Area ODP and DCP

Open Space and Recreation Assessment

Commercial-in-Confidence

Nordic Pty Ltd

21 November 2008

D R A F T

Open Space and Recreation Assessment

Prepared for

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Executive Summary

This report provides an assessment of the preferred provision of open space and recreation facilities in the Shepparton North East Growth Area and makes recommendations to be incorporated into the Outline Development Plan for the area.

Open space and recreation facilities play an important role in enhancing the liveability and attractiveness of urban development, and provide community and personal health benefits for residents and visitors of neighbourhoods. State and Local policies strongly support open space provision and provide useful guidance towards how these facilities are provided in new urban areas.

The Shepparton North East Growth Area is currently used for farming purposes and there is no public open space within the area. The existing urban areas neighbouring the subject site to the south and the west contain a mix of small parks and reserves whilst regional open space and recreation needs are catered for by the Mercury Sports Complex (located at the John McEwen Reserve), located 1.5 km west of the subject site on the Goulburn Valley Highway.

Based on the size of the Shepparton North East Growth Area of 168.5 hectares and the anticipated population of 4,140 residents, development of the site will best be served by three Neighbourhood Parks and one Local Park. The exact location of these spaces will be determined during the Outline Development Plan process, however this report suggests likely locations for these facilities. The subject area will not support the development of larger open space such as district or regional parks nor provision of a football/cricket oval. However tennis, basketball and netball courts can be supported in the Shepparton North East Growth Area.

Recommendations

The open space in the Shepparton North East Growth Area should:

- Be designed to achieve a high level of access with local neighbourhoods, retail and community facilities and the broader Shepparton open space network;
- Support a seamless and connected pedestrian and cycle network in the site and surrounding area linking homes, open space and other important community destinations;
- Be linked by vegetation and habitat links in the street network;
- Incorporate some of the stormwater infrastructure into public open space, in particular the proposed stormwater drainage swale;
- Allow a diversity of recreation opportunities commensurate with the land area and future population of the subject site; and
- Allow potential infrastructure sharing (pending further investigation) with local primary schools located in the subject site, which can expand the range of organised junior sports opportunities.

1.0 Introduction

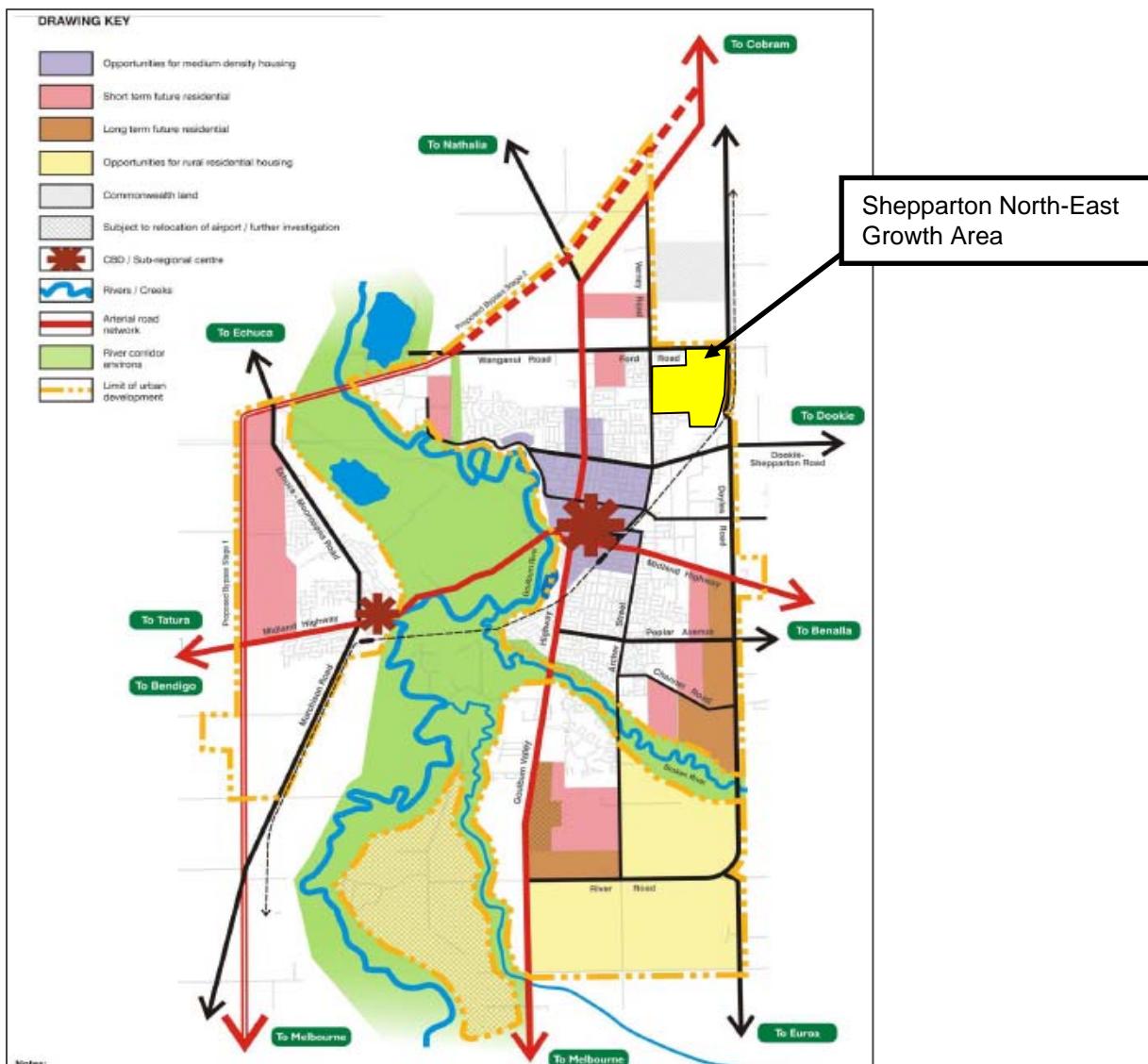
1.1 Project Background

Maunsell AECOM (Maunsell) is project managing numerous specialist studies required to support the preparation of an Outline Development Plan (ODP) and Development Contributions Plan (DCP) reports for Shepparton North-East Growth Area.

The Shepparton North-East Growth Area has been earmarked by City of Greater Shepparton (Shepparton) to be developed as a residential estate to support the growing town. The North-East Growth Area has a site area of 165 hectares which will be developed by a private developer. Figure 1 below identifies the subject site which comprises the entire Shepparton North-East Growth Area.

In order to support the preparation of the ODP and DCP, a technical study assessing the demands for open space and recreation facilities is required.

Figure 1 Location of the Shepparton North-East Growth Area



1.2 Project Purpose

This report will assess existing and future demands for open space and recreation facilities in the northern part of Shepparton and recommend community facilities for the Shepparton North-East Growth Area. The most appropriate location and arrangement for the provision of the open space and recreation facilities in the development site will be identified in this report. The report will firstly provide strategic planning justification for the provision of recreation and open space facilities before examining existing open space infrastructure in the area. Finally the report will make recommendations that guide the future needs of the area from a recreation and open space perspective.

The report is designed to inform the development of an ODP that will support rezoning of the subject site to residential. In particular, the report will provide guidance regarding:

- Access;
- Connectivity and linkages;
- Diversity of recreational opportunities;
- Potential use of GMW drainage infrastructure; and
- Consistency with the Shepparton North East Growth Area Surface Water Management Strategy

It was originally intended that this report would include analysis of cultural heritage, ecological and landscape values of the Shepparton North East Growth Area. However, a separate assessment being developed by ENSR Australia Pty Ltd will address the implications upon cultural heritage and ecological values. Discussion of the landscape values of the area is to be incorporated in the Urban Design Report as part of the ODP.

1.3 Project Methodology

The assessment of open space and recreation facilities involves the following tasks:

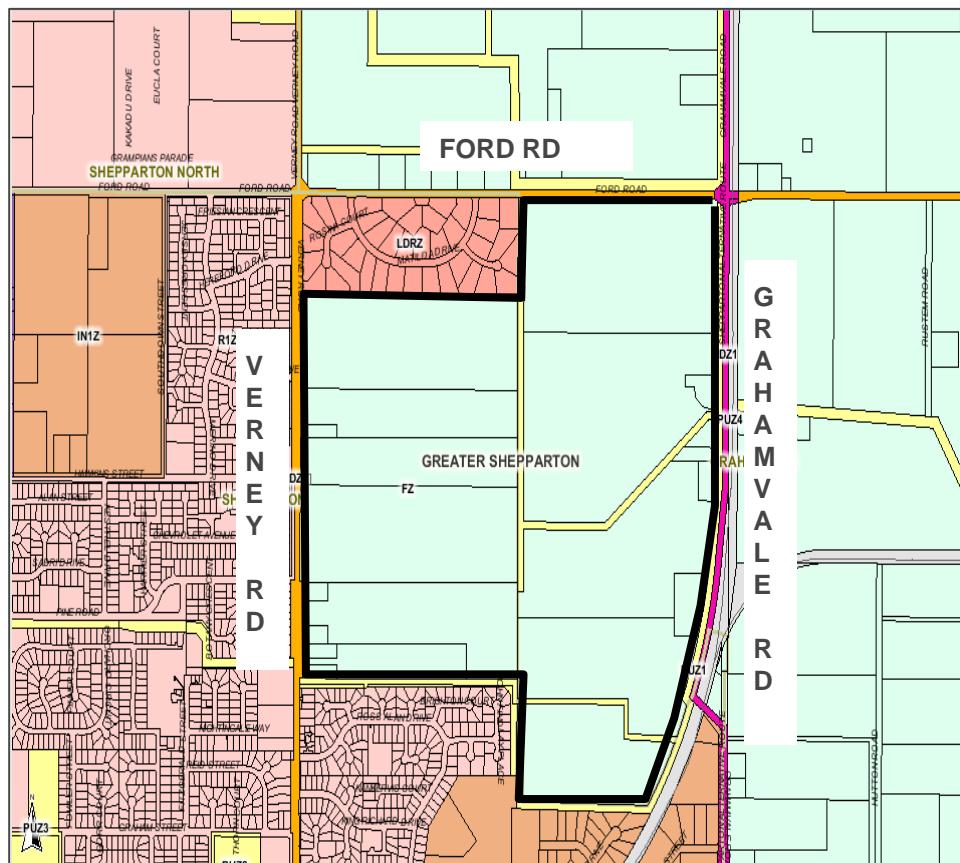
- Review legislation and policy relevant to the assessment of open space and recreation infrastructure;
- Document existing open space and recreation infrastructure in the local area using the Council and community databases and township maps;
- Interview key recreation services staff at the City of Greater Shepparton to gather details about the current provision of open space and recreation infrastructure in the local area, issues and future demand;
- Undertake an assessment that determines the need for open space infrastructure in the local area and the most appropriate infrastructure for the development site considering the site context.

2.0 Project Overview

2.1 Subject Site

The Shepparton North East Growth Area is shown below in Figure 2 and is bordered by Verney, Ford and Grahamvale Roads to the west, north and east respectively, and by existing residential and industrial development to the south.

Figure 2 Shepparton North East Growth Area



The area is generally flat and does not feature any notable natural landmarks or other physical features. The area has been cleared for farming purposes and is now mostly used for orchards. A total of 14 dwellings currently exist on the subject site. An existing low-density residential development located at the corner of Verney and Ford Roads frames the north-western corner of the site but is not included in the study area for this purpose.

A number of irrigation and drainage channels border the site on its eastern, southern and northern sides. An irrigation channel enters the site from the eastern boundary before splitting into two dead-end branches on a north-south alignment through the centre of the site.

There are two schools located in the Shepparton North East Growth Area. The first is Grahamvale Primary School, located on the eastern boundary of the site and with direct access to Grahamvale Road. The other school is the Shepparton Christian Community School associated with the Assembly of God Church on Verney Road, on the western boundary of the site.

This site forms the primary study area for which the provision of open space and recreation facilities is based upon. However, the wider area has also been assessed to determine the type of open space and recreation facilities required for the Shepparton North East Growth Area.

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West of Verney Road is an existing residential area. Further west is the Goulbourn Valley Highway (Numurkah Road), which is Shepparton's primary north-south arterial. South of the development site is another existing residential area and industrial area which both border the subject site. The industrial area includes various light industrial businesses, including motor repairs. It is likely that the residential areas bordering the development site will form part of the catchment area of new community facilities due to their close proximity.

The Melbourne-Tocumwal Railway runs parallel to Grahamvale Road and carries freight rail traffic. Grahamvale Road carries truck and other traffic in an unofficial bypass of Shepparton, whilst further east is farming land, mainly cultivated as orchards.

3.0 Legislation and Policy

Consideration of relevant legislation and policy provides guidance for the provision of open space and recreation facilities for the Shepparton North-East Growth Area. The following documents have been reviewed:

- State Planning Policy Framework
- State Policies:
 - Growing Victoria Together
 - Melbourne 2030
 - Safer Design Guidelines for Victoria
- Local Planning Policies from the Greater Shepparton Planning Scheme
- City of Greater Shepparton Policies:
 - Greater Shepparton 2030 Strategy Plan (2006)

3.1 State Planning Policy Framework (SPPF)

The State Planning Policy Framework (SPPF) is found in all planning schemes across Victoria and provides high-level guidance for the use and development of land in the state. The SPPF includes the following of relevance to the provision of open space and recreation facilities in the North East Growth Area:

Clause 11 Introduction, Goals and Principles

Seven statements of principle are provided in this clause. The following principles are most relevant to the Shepparton North East Growth Corridor.

Clause 11.03-1 Settlement

This clause identifies that planning in regards to settlements needs to ascertain the needs of existing and future communities, such as land for housing, employment, recreation and open space, community facilities and infrastructure. Further to this, planning should contribute towards:

- *Health and safety.*
- *Diversity of choice.*
- *Adaptation in response to changing technology.*
- *Economic viability.*
- *A high standard of urban design and amenity.*
- *Energy efficiency.*
- *Prevention of pollution to land, water and air.*
- *Protection of environmentally sensitive areas and natural resources.*
- *Accessibility.*
- *Land use and transport integration.*

Clause 11.03-4 Infrastructure

Planning for the development of community infrastructure should be done in a way that is equitable and accessible. Strategic planning should encourage effective and efficient use of existing urban infrastructure. Funding of infrastructure through development contributions should be considered by planning authorities.

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Clause 11.03-6 Social Needs

Planning for accessible community facilities and resources is essential for meeting the social needs of the community. As stated in this clause, community resources include affordable housing, places of employment, areas of recreation and open space, and a range community support facilities to cater for diverse communities. Quality urban design should be employed when planning for these facilities, to ensure safe and social environments are developed.

Clause 12 Metropolitan Development

Although this clause is specifically developed for Metropolitan Melbourne, some principles can be translated into planning for urban areas outside Melbourne. The relevant principle is:

Clause 12.05 A Great Place to Be

The objective of this clause is to:

- *To create urban environments that are of better quality, safer and more functional, provide more open space and an easily recognisable sense of place and cultural identity.*

Strategies to achieve this include urban design, neighbourhood design and character, safety, and cultural identify.

Clause 15.10 Open Space

The objective of the policy is:

- *To assist creation of a diverse and integrated network of public open space commensurate with the needs of urban communities and rural areas.*

Planning authorities should plan for regional open space networks to be used for recreation and conservation of natural and cultural environments.

Planning and responsible authorities should ensure that open space networks:

- Are linked through the provision of walking and cycle trails and rights of way;
- Are integrated with open space contributions from abutting subdivisions; and
- Incorporate, where possible, links between major parks and activity areas, along waterways and natural drainage corridors, connecting places of natural and cultural interest, as well as maintaining public accessibility on public land immediately adjoining waterways and coasts.

Planning and responsible authorities should ensure that land is set aside and developed in residential areas for local recreational use and to create pedestrian and bicycle links to commercial and community facilities.

Clause 16 Housing

Clause 16.01 Residential development for single dwellings

The objectives of this clause are to:

- *Subdivisions in locations with access to physical and community infrastructure and providing a range of lot sizes, a convenient and safe road network, appropriate pedestrian and cycle paths, sufficient useable public open space and low vulnerability to fire.*
- *Residential development that is cost-effective in infrastructure provision and use, energy efficient, incorporates water-sensitive design principles and encourages public transport use.*
- *Opportunities for increased residential densities to help consolidate urban areas.*

Relevance to Project: The SPPF places a high value on the liveability of new communities, especially in the provision of high-quality community facilities such as parks and open space.

3.2 State Government Policy

Growing Victoria Together (2001)

Growing Victoria Together outlines a vision for Victoria to achieve by 2010. Key goals for Victoria are outlined in the document and include the creation of innovation leading to thriving industries generating high quality jobs, protection of the environment for future generations and have caring, safe communities in which opportunities are fairly shared. Although it does not specifically mention open space and recreation, a strategic focus found within *Growing Victoria Together* is to build cohesive communities and reduce inequalities in Victoria. This includes place-making that supports families and providing a safe, active, socially and culturally inclusive environment.

Melbourne 2030: Planning for Sustainable Growth

Melbourne 2030: Planning for Sustainable Growth presents the Victorian Government's vision and long-term plan for ensuring that Melbourne's growth is accommodated and managed in ways that are sustainable. Many of the principles involved can be applied to development of the Shepparton North-East Growth Area. The aims are to be achieved through the nine key directions.

Direction 5 of *Melbourne 2030* outlines strategies to achieve a great place to live. A key initiative to achieve this is:

- Direction 5.6 Improve the quality and distribution of open space and ensure long-term protection of public open space

Safer Design Guidelines for Victoria

The Department of Sustainability and Environment's *Safer Design Guidelines for Victoria* were developed to help facilitate planning for safer urban environments and create more liveable and attractive neighbourhoods. When planning for the Shepparton North East Growth Area the following design objectives should be considered:

Parks and Open Space

- **Objective 4.1:** to maximise natural surveillance of parks and open spaces to encourage use and support people's perceptions of safety.
- **Objective 4.2:** to encourage the use of parks by a range of users at all times of the day to improve the quality of life for the community and improve perceptions of safety in public places.
- **Objective 4.3:** to ensure lighting is carefully integrated to further enhance visibility and natural surveillance of parks and open spaces.
- **Objective 4.4:** to ensure landscaping maintains sightlines of paths in parks and open spaces and allows for natural surveillance.

Walking and Cycling Paths

- **Objective 5.1:** to co-locate pedestrian, cycle and vehicle movement routes, where practical, to maximise safety and natural surveillance opportunities.
- **Objective 5.2:** to provide convenient paths with generous proportions to encourage walking and cycling and promote natural surveillance.
- **Objective 5.3:** to maintain long sightlines along paths and into adjacent spaces to maximise visibility.

The document notes that 'people use parks and open spaces if they feel safe and comfortable. Parks and open space become safer as more people use them, which also increases perceptions of safety. Provision for both active and passive recreation within parks encourages a range of age groups.' Regarding paths, the document states that 'walking and cycling are more inviting when paths and pedestrian routes are highly visible and offer shade and seating for rest stops.'

Schools as Community Facilities: Policy Framework and Guidelines

The policy framework by the Department of Education and Training promotes the partnership between schools and local communities through shared community facilities. It has been documented that 'health, wellbeing, safety, safety and economic security of all community members' can be enhanced

when communities are closely linked with local schools. Opportunities for school and community partnerships include:

- *Opening school facilities up for use as community recreation facilities; and*
- *Sharing sporting facilities.*

Relevance to Project: *Growing Victoria Together* and *Melbourne 2030* seek to build community cohesion and urban liveability through provision of appropriate facilities, including open space. The *Safer Design Guidelines for Victoria* provide clear guidance for higher amenity in the design of parks and open space through incorporation of safety principles.

3.3 Local Planning Policy Framework

3.3.1 Municipal Strategic Statement

The Municipal Strategic Statement in the Greater Shepparton Planning Scheme sets out the objectives and implementation strategies to achieve improved open space and recreation facilities in Shepparton.

Clause 21.03 Vision, Sustainability Principles and Strategic Directions

The vision for Greater Shepparton is:

As the Food Bowl of Australia, a Sustainable, Innovative and Diverse Community

High-level sustainability principles and strategic directions are set out to achieve the vision. The relevant Strategic Direction is Community Life, where it seeks to “enhance social connectedness, physical and mental health and well being, education and participatory opportunities in order to improve liveability and provide a greater range of community services.”

Clause 21.05 Community Life

The main community issues for Greater Shepparton include the funding, maintenance and planning of recreational and open space facilities.

Clause 21.05-2 Objectives

The clause sets out the following relevant objectives:

- To provide an equitable and efficient distribution of community facilities and services, and that appropriate service linkages are provided to facilitate user access.
- To ensure that facilities, services and policies are appropriate to the sporting and recreation needs of the community.
- To protect and enhance the network of public open space that contributes to the amenity of the municipality and advances the image of the community.
- To address community safety in the planning and management of the urban environment.
- To provide accessibility in public spaces and new developments.
- To promote integrated local planning that incorporates consideration of the social, built physical, environmental and economic domains and interaction between the domains.

Clause 21.05-3 Strategies

The clause sets out the strategies and actions to achieve the vision where it relates to open space and recreation. The strategies include:

- Protect and enhance the network of public open space that contributes to the amenity of the municipality and advances the image of the community.
- Develop Walking/Bicycle and Public Transport networks that provide options to those who have not, or prefer not to use a motor car.

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- Encourage development on only one side of the road where land is adjacent to public open space (and where appropriate).
- To provide for passive surveillance of open space and limit the 'privatisation' of public open space.
- To ensure that new subdivisions include flood free areas of public open space (where possible).
- Encourage new development and redevelopments of existing areas to include community gathering spaces, such as village greens and local public open spaces.
- Encourage the provision of linear links between existing and proposed open space areas and between urban areas.
- Encourage links to the Goulburn and Broken Rivers shared path network to promote environmental assets.
- Provide quality areas of open space when new housing subdivisions are planned.
- Ensure recreation areas are designed with safety considerations.
- Integrate open space planning / landscape treatments with environmental improvements of the stormwater drainage system.
- Promote public art as part of the urban design process.
- Ensure the rezoning and/or development of land is linked to the approval of a legal agreement, such as a pre-development agreement, for the funding of necessary physical infrastructure and community services as identified in Development Plans.

Clause 21.05-4 Implementation

The following actions to implement the Strategic Direction are relevant in the planning and provision of recreation and open space facilities:

- Provide accessibility in public spaces and new developments.
- Ensure that Disability Discrimination Act (DDA) compliance is achieved.
- Promote clustering of community facilities to enable multi use and sharing.
- Promote provision and accessibility to public open spaces in new growth areas and in redevelopment of existing areas.
- Encourage parks and facilities to cater for a range of recreational activities.
- Ensure the maintenance, design and location of playgrounds in the municipality make them safer and more responsive to the needs of the community.
- Establish a hierarchy of parks in the municipality designed to cater for the leisure and sporting needs of residents. The hierarchy is to be comprised of local parks without playgrounds, local parks with playgrounds, town parks, regional parks, bush reserves, sports reserves and land reserved for municipal purposes.
- Apply benchmarks to identify the number and location of parks to be provided within each category of open space in the hierarchy.
- Improve the image and appearance of public parks and spaces.
- Encourage the creation of safe streets, public parks and spaces, and integration with Victoria Police' community safety programs.
- Ensure reasonable access to community services with a program of transport integration to service these facilities.
- Encourage public facilities to be located on or near to a public transport route or bicycle/walking path.

Relevance to Project: The MSS provides strategic justification for appropriate provision of recreation and open space facilities. Key points include providing good access to local open space facilities and links to regional open space networks. Furthermore, open space links should be integrated with drainage infrastructure where possible. The costs of reserving and developing open space and recreation facilities should be agreed upon as part of the rezoning process.

3.4 City of Greater Shepparton Open Space and Recreation Policies

3.4.1 Greater Shepparton 2030 Strategy

The Greater Shepparton 2030 Strategy recognises the importance of open space and recreation facilities to improve the amenity and liveability of neighbourhoods and to make a positive contribution to the physical and mental health of those who live, work and visit those communities. The Strategy sets out two objectives for open space and recreation:

Objective 1: To ensure that facilities, services and policies are appropriate to the sporting and recreation needs of the community. To achieve the objective, the following strategies apply:

- 1.1 Promote provision and accessibility to public open spaces in new growth areas and in redevelopment of existing areas.
- 1.2 Encourage parks and facilities to cater for a range of recreational and sporting activities.
- 1.3 Ensure the maintenance, design and location of playgrounds in the municipality make them safer and more responsive to the needs of the community.
- 1.4 Encourage development on only one side of the road where land is adjacent to public open space (and where appropriate), to provide for passive surveillance and limit the 'privatisation' of public open space.
- 1.5 Establish a hierarchy of parks in the municipality designed to cater for the leisure and sporting needs of residents.

Objective 2: To protect and enhance the network of public open space that contributes to the amenity of the municipality and advances the image of the community. Strategies to support the objective include:

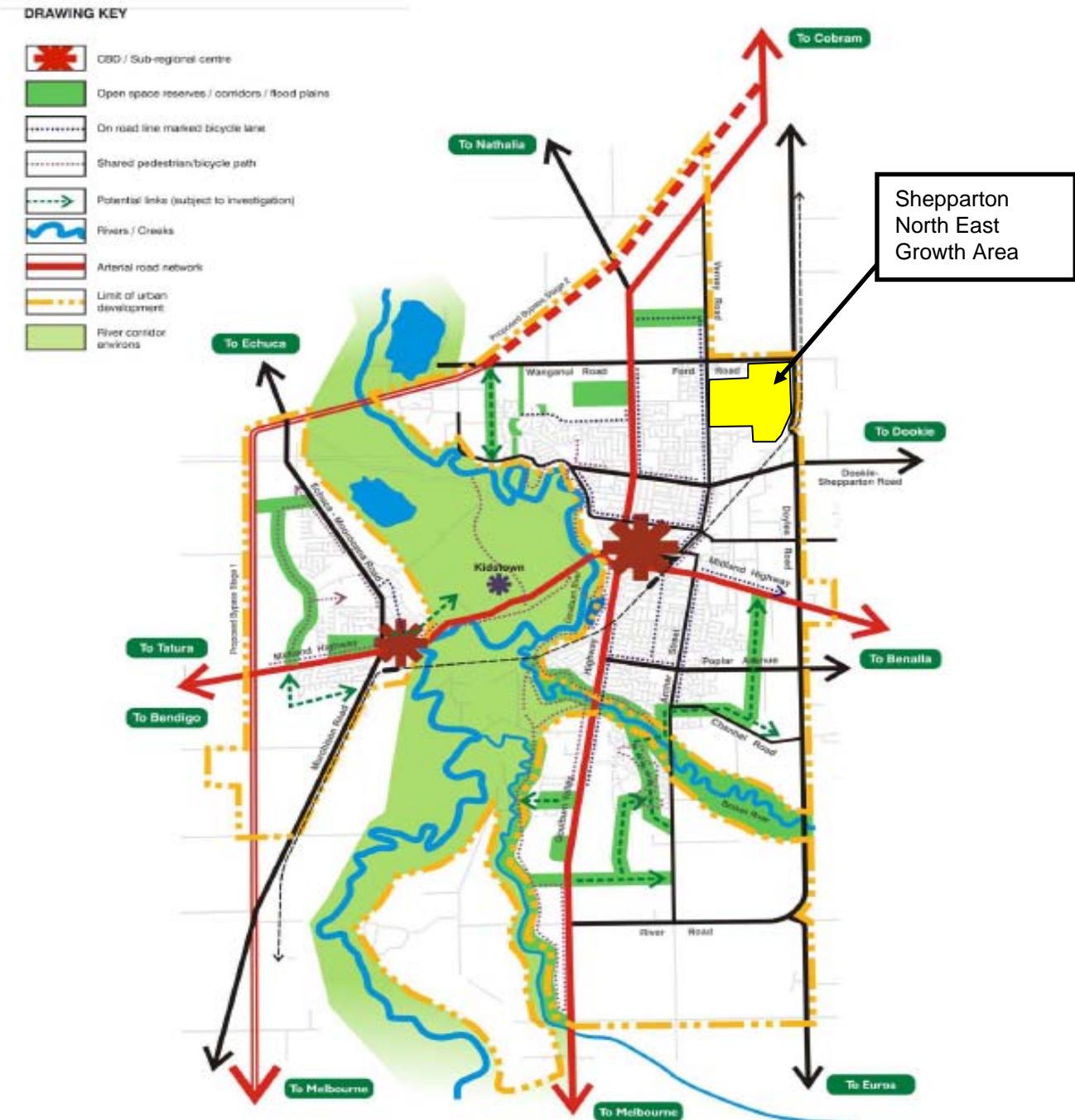
- 2.1 Encourage the provisions of linear links between existing and proposed open space areas and between urban areas.
- 2.2 Ensure the provisions of quality areas of open space when new housing subdivisions are planned.
- 2.3 Improve the image and appearance of public parks and spaces.
- 2.4 Encourage development on only one side of the road where land is adjacent to public open space (and where appropriate), to provide for passive surveillance and limit the 'privatisation' of public open space.
- 2.5 Protect open space areas from pest plants and animals.
- 2.6 Integrate open space planning /landscape treatments with environmental improvements of the stormwater drainage system.
- 2.7 Enhance the image of sporting facilities and recreational reserves

As shown in Figure 3 below there are no existing or proposed regional open space parks or corridors in the Shepparton North East Growth Area. An on-road marked bicycle lane along the western boundary of the area is proposed along Verney Road.

Relevance to Project: Greater Shepparton 2030 reinforces the requirement for provision of recreation and open space facilities appropriate to the likely population and its needs. Open space should be designed to provide passive surveillance and high levels of access from the street network, and not be hidden behind dwellings.

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Figure 3 Open Space/Shared Path Framework Plan, Greater Shepparton 2030 Strategy



GREATER SHEPPARTON **2030** OPEN SPACE / SHARED PATH FRAMEWORK PLAN
Shepparton, Mooroopna & Kialla

0 0.5 1 1.5 2 2.5 3 3.5 Kilometres



3.4.2 Open Space and Recreation Strategy

The City of Greater Shepparton completed an Open Space and Recreation Strategy in 1998. Advice received from Council officers indicates that it has been superseded by the relevant sections of the Greater Shepparton 2030 Strategy. Accordingly there is no discussion of this document.

4.0 Open Space and Recreation Analysis

4.1 Population

In order to provide recommendations about the provision of open space and recreation facilities it is necessary to take into consideration the ultimate population of the Shepparton North East Growth Area.

As indicated in the *Greater Shepparton Housing Strategy (Final Draft Version 2, 2008)* Greater Shepparton is experiencing strong population growth (approximately 800 persons per year)¹, which is particularly being driven by internal and overseas migration and growth in the agricultural sector. The Shepparton North East Growth Area is therefore well placed to help cater for Greater Shepparton's population growth.

The Shepparton North East Growth Area site is 168.5 hectares in size, of which 104.95 hectares are available for residential development. Based on a mix of lot sizes between 400 sq m (medium density housing) and 650 sq m (conventional single-dwelling), and taking into account the typical household sizes found in Shepparton, a total of 1,836 dwellings and 4,140 residents are anticipated to be accommodated in the Shepparton North East Growth Area.

It is expected that the site's development will be completed by 2020 and development will be completed in two stages. For each five year period the approximate population of the site is as follows:

- By 2015 – 1,585 persons (Stage 1)
- By 2020 – 4,140 persons (Stages 1 and 2)

4.2 Current Open Space and Recreation Facilities

Most of the Shepparton North East Growth Area is currently used for farming and related purposes and does not feature any public open space or recreation facilities. However both of the schools located in the subject area feature open space and recreation facilities for school use.

Some small parks and reserves are found within the existing residential areas to the west and south and are within easy walking distance (400m) of the subject area. However, these parks are neighbourhood parks that in practice are only easily accessible only to surrounding streets and neighbourhoods and would not generally be used by future residents of the Shepparton North East Growth Area.

A larger open space facility is located approximately 1.5 kilometres west of the subject area at Mercury Sports Complex. These facilities serve a wider catchment and include cricket, football, soccer and hockey grounds and netball, basketball and tennis courts together with velodrome, little athletics and equestrian facilities. These are summarised below in Table 1:

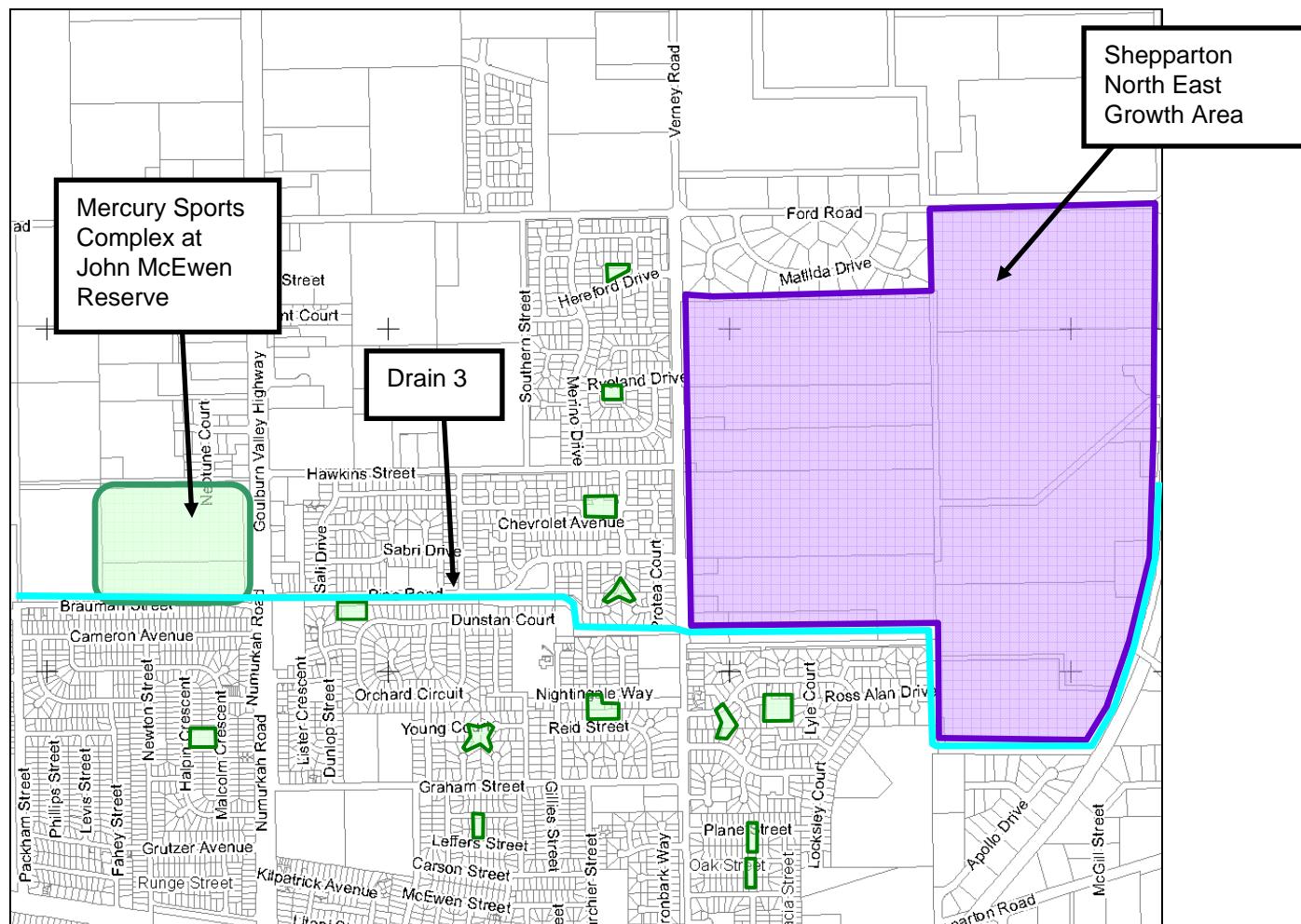
Table 1 List of existing parks and recreation facilities within 400m of subject area

Name	Location	Facilities	Within 400m of subject site?	Local or regional catchment?
Alfred Kleinhart Park	Reid Street	Basketball Ring, Play Equipment, Seating	Yes	Local
Bailey Park	Maple Street	Play Equipment, Seating	Yes	Local

¹ David Lock Associates (2008) *Greater Shepparton Housing Strategy: Final Draft Version 2*. City of Greater Shepparton, Shepparton.

Name	Location	Facilities	Within 400m of subject site?	Local or regional catchment?
Centennial Park	Endeavour Court	Basketball Ring, Play Equipment, Seating	Yes	Local
Ivanhoe Park	King Richard Drive	Basketball Ring, Play Equipment, Seating	Yes	Local
Mercury Sports Complex	Goulburn Valley Highway	Football, cricket, netball, soccer, equestrian	No	Regional

Figure 4 Existing parks and open space around Shepparton North East Growth Area



4.3 Demand for Open Space and Recreation Facilities

The following approaches have been adopted to assess the demand for recreational facilities in the Shepparton North East Growth Area:

- **Facility provision thresholds:** uses population and land area data to infer the current and future needs of a community. Their needs are 'standardised' by the use of benchmarks for facility provision.
- **Needs-based planning:** this approach relies on research into the current needs of the community (both expressed and perceived) through consultation with Council officers.

Both approaches will be taken into account as reliance solely on one or other approach may not serve the development. It is important to note that the ability to deliver recreational facilities will depend on residential population, provision of similar facilities elsewhere and Council's spending priorities.

4.3.1 Facility Provision Thresholds

Indicative 'best practice' thresholds for popular sport and recreation facilities are provided below in Table 2. It must be noted that thresholds provide nothing more than a guide to provision standards. Facility and service delivery, especially for higher order facilities (typically between 10,000 and 100,000 households) is driven by broader government policy and investment decisions. 'Lower-order' facilities (i.e. <10,000) will, in many cases, follow population.

Table 2 Indicative 'Best Practice' Thresholds for Popular Sport and Recreation Facilities

Facility Type	Provision Ratio
Sports Fields	
Cricket / Football Ovals	1:4,600 population
Miscellaneous sports field (hockey, rugby, softball, baseball etc)	1: 33,400 population
Tennis Courts	1: 2,500 population
Lawn Bowls Venues	1:10,000 population (usually built as 3 or more greens together)
Netball Courts	1: 4,000 population
Basketball Court (indoor)	1: 4,000 population
Open Space	
Regional Park	1:314 sq / km (urban area)
District Park	1:13 sq / km (urban area)
Local Park	1:0.8 sq / km (urban area)
Neighbourhood Park	1:0.3 sq / km (urban area)

Source: (SGS Economics and Planning, 2005)

Based on a population estimate of 4,140 residents on the study site, the facility provision thresholds in Table 2 above indicate that the subject area will support the establishment of facilities catering for tennis, basketball and netball.

Given the site area of 168.5 hectares (or 1.68 square kilometres), the open space provisions in Table 2 show that the site would best be served by four small neighbourhood parks and one local park. The subject area will not support the development of district or regional parks due to the land capacity of the area and the population of the subject site and surrounding neighbourhoods.

4.3.2 Needs Based Planning

The needs based planning assessment is based upon consultation with the City of Greater Shepparton. The needs and requirements expressed by Council officers in relation to recreation and open space opportunities include:

- Drainage infrastructure, especially linear infrastructure, provides a good opportunity for the walking/cycling networks in and around the Shepparton North East Growth Area;
- Careful consideration should be given to the size and location of open space, and especially to ensure its integration with other community facilities;
- Preference to avoid small 'pocket' parks in new urban development; and
- Investigation of public and community infrastructure east of the Shepparton North East Growth Area at Lemnos to determine whether future needs might be more suitably addressed within the Growth Area.

4.4 Access

The open space network should be accessible to all residents and visitors of the Shepparton North East Growth Area. Neighbourhood parks must be located around the study site to ensure close proximity to all residents and visitors. Users of the neighbourhood parks should not be expected to cross busy streets to access their nearest open space.

All open space must be designed to accommodate users with limited mobility such as the elderly and disabled people. Designing facilities for these users provides a useful baseline for access to other user groups that are more active and helps ensure a high level of social inclusion can be achieved in the development.

Open space facilities and the street network in the study site must together support a seamless network of pedestrian and cycle links. A particular focus must be making the journey to important community destinations in the subject site on foot or by bike as easy as possible.

Signs should be used to alert users of the proximity of open space facilities, reinforcing the perception of easy access to open space and local community destinations.

4.5 Safety

The layout and design of the open space in the subject site should incorporate design features that enhance safety (and perceptions of safety) for all users. A focus on safety in design does not mean building barriers or other alienating features between parks and the broader development, instead a focus on increased visibility and surveillance will provide higher levels of safety and ensure higher-quality community facilities that build social cohesion and connections.

The *Safer Design Guidelines for Victoria* include the following design objectives for open space and foot/cycle paths:

- Maximise natural surveillance of parks and open spaces to encourage use and support people's perceptions of safety;
- Encourage the use of parks and open space by a range of user groups at all times of the day to improve the quality of life for the community and improve perceptions of safety in public spaces;
- Ensure lighting is carefully integrated to further enhance visibility and natural surveillance of parks and open spaces;
- Ensure landscaping maintains sightlines of paths in parks and open spaces and allows for natural surveillance;
- Co-locate pedestrian, cycle and vehicle movement routes, where practical, to maximise activity and surveillance opportunities;
- Provide convenient paths with generous proportions to encourage walking and cycling and promote natural surveillance; and
- Maintain long sightlines along paths and into adjacent spaces to maximise visibility.

The *Safer Design Guidelines for Victoria* include design suggestions under each of the objectives. These suggestions should be actively used in the design of open space and foot/cycle paths for the Shepparton North East Growth Area.

4.6 Connectivity and Linkages

The parks and open space in the Shepparton North East Growth Area should be designed to achieve a high level of connectivity and linkages with:

Local neighbourhoods

The open space network should be easily accessible by foot and bicycle to the surrounding streets. Vegetation and habitat links in the street network should complement and help link the open spaces.

Local facilities

Open space in the study site should have good links to the retail and community facilities and the local primary schools to take advantage of reduced trip-generation. The Local Park should be located adjacent to the Retail and Community Hub proposed for the subject site and to the Grahamvale Primary School, whether it moves to the Retail/Community Hub or not. School facilities are mostly used during weekdays but sharing of open space infrastructure can achieve much greater utilisation throughout the entire week. Good foot and cycle links should be provided to the Northern Neighbourhood Centre on the Goulburn Valley Highway to provide a realistic alternative to vehicle transport.

Broader open space networks

From Figure 3 above, it is apparent that a gap exists in Shepparton's open space links in the north-eastern part of the city. Development of the open space network in the Shepparton North East Growth Area could fill some of these gaps by including potential links to the Mercury Sports Complex and the Northern Neighbourhood Centre, both located close to the Goulburn Valley Highway. West of the study site, a bike path already exists along Drain 3 (managed by Goulburn-Murray Water) where it parallels Pine Road. Links from this path to the study site should be investigated to provide access to the Mercury Sports Complex whilst another route along Hawkins Street could provide a link to the Northern Neighbourhood Centre.

4.7 Diversity of Recreational Opportunities

The diversity of recreational opportunities for the Shepparton North East Growth Area is linked to the likely demand based on resident and visitor populations. Table 3 below lists the recreational opportunities that should be pursued during the development of the Outline Development Plan and subsequent further development of the Shepparton North East Growth Area. These opportunities reflect the neighbourhood scale of facilities and the likely budgets from Council funds and development contributions.

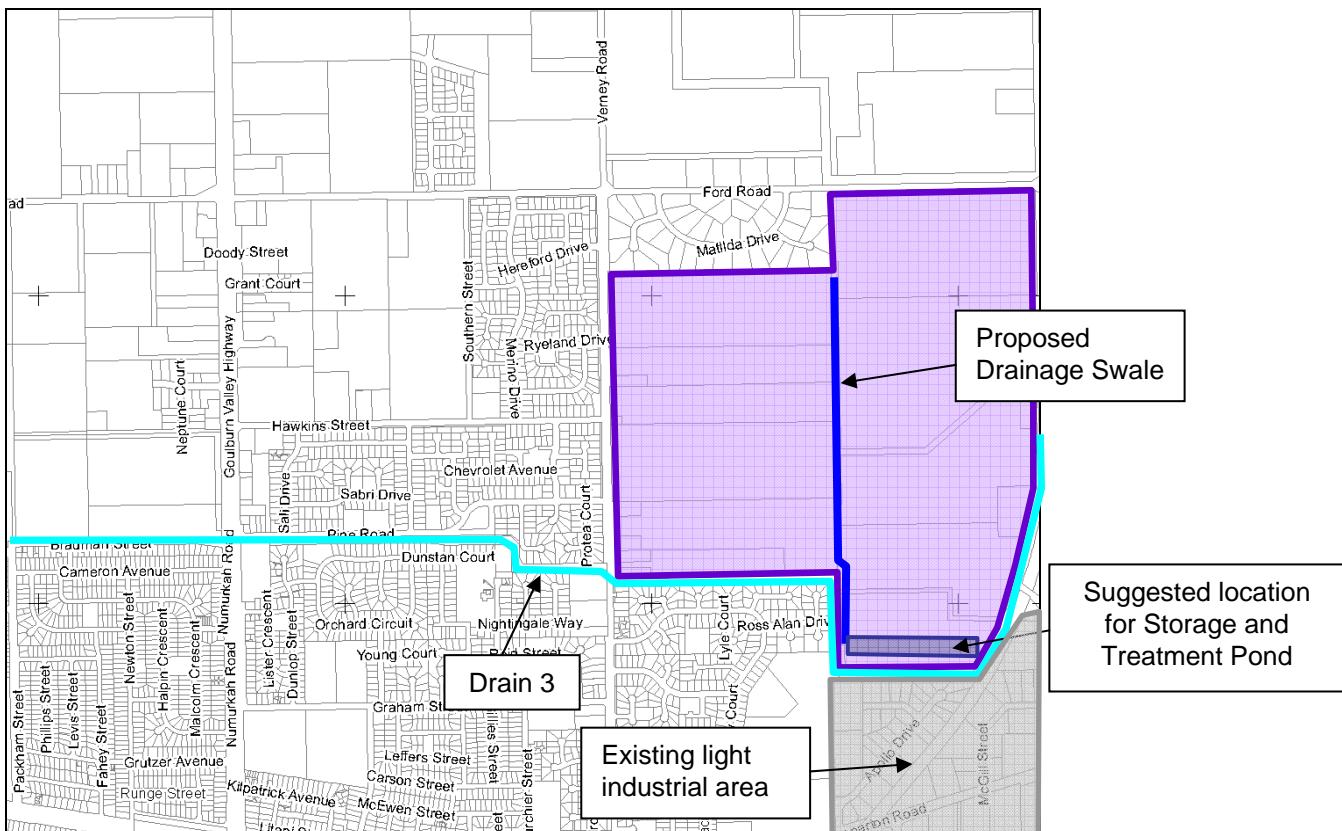
Table 3 Recreational Opportunities for the Shepparton North East Growth Area

Location	Recreational Opportunities
Neighbourhood Parks	Walking Cycling Playground (depending on size of park) Informal games
Local Park	Walking Cycling Playground Basketball/Netball Courts Tennis Courts Informal games
Primary Schools (during non-school times)	Walking Cycling Playground Basketball Ring Informal games Junior Cricket/Football/Soccer/Hockey, depending on provision of facilities by school
Street Network	Walking Cycling Informal games

4.8 Links with drainage infrastructure

The Shepparton North East Growth Area Physical Services Assessment identifies the need for a stormwater treatment and storage pond (including wetlands) of approximately 4.2 hectares in area to accommodate the drainage requirements for the study site. The estimated land area required does not include landscaping nor the requirements for safe batter slopes into the pond. The proposed site for this pond is on the southern boundary of the Shepparton North East Growth Area, near the boundary of existing urban development in the vicinity, as shown in Figure 5 below. The pond is proposed to form a de facto buffer between the site and the industrial areas to the south and it is not proposed to incorporate it into the open space network for the site.

Figure 5 Proposed drainage and stormwater facilities



The Shepparton North East Growth Area Physical Services Assessment also proposes a drainage swale oriented north-south along the site. This could potentially be incorporated in a collector road serving the site, either as a median strip or to the side of the road. The swale is required to be ten metres wide to provide adequate stormwater capacity. The swale provides an opportunity to link open spaces by playing the role of a green corridor in the site. Links should also be incorporated to the regional open space at Mercury Sports Complex to the west using the existing path along Drain 3.

5.0 Recommendations

The following recommendations are justified by State and Local policy which encourage open space in new urban development based on well-regarded thresholds for appropriate facility provision.

Provision of open space

The size and anticipated population of the Shepparton North East Growth Area have influence the provision of appropriate open space facilities. Based on previous experience, typically 5% of the site area should be set aside for Public Open Space. In this instance this gives a total of 8.43 hectares being devoted to public open space.

The preference for no ‘pocket’ parks expressed by the City of Greater Shepparton means that three Neighbourhood Parks should be provided in the Shepparton North East Growth Area instead of four as expressed by the Indicative Best Practice Thresholds. However, the reduction to three Neighbourhood Parks results in each park being slightly larger than otherwise possible, meaning better quality open space will be provided.

The Local Park and three Neighbourhood Parks will provide suitable open space for the study site. The population catchment and land area of the Shepparton North East Growth Area do not support the establishment of higher order parks such as district or regional parks. The Local Park should be located adjacent to the proposed Retail/Community Hub proposed for the subject site and the suggested site for Grahamvale Primary School.

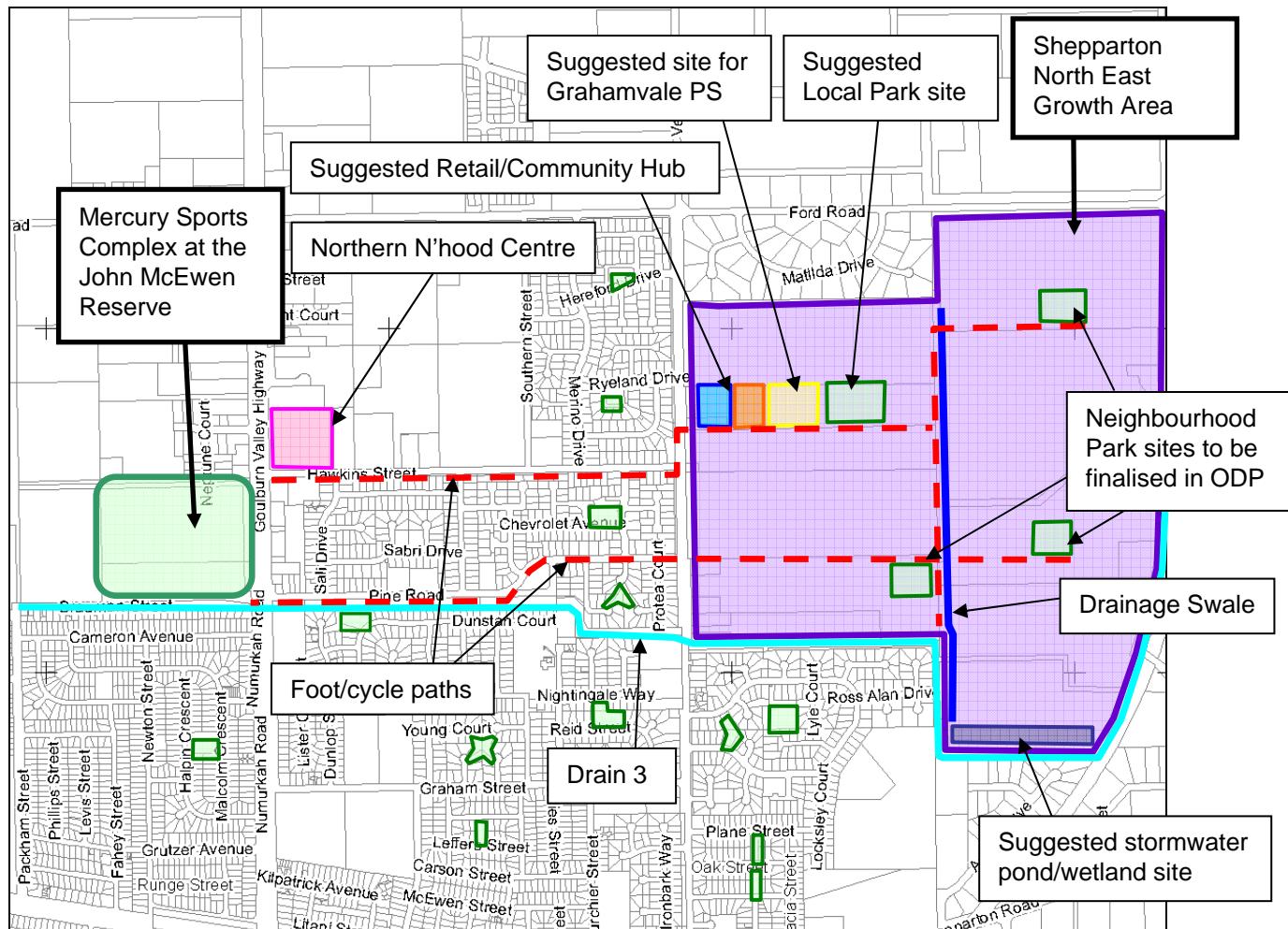
The recommended open space provision is as follows in Table 4 below:

Table 4 Recommended Open Space

Facility Type	Size (ha)	Year	Requirements/Comments
One Neighbourhood Park	1.41	2015 (Stage 1)	Subject to final location in ODP.
One Local Park	4.2	2015 (Stage 1)	Subject to final location in ODP. Should be located near retail/community hub and suggested site for Grahamvale PS.
Two Neighbourhood Parks	1.41 each	2020 (Stage 2)	Subject to final location in ODP.

Figure 6 overleaf shows the suggested locations for public open space in the Shepparton North East Growth Area.

Figure 6 Recommended open space for Shepparton North East Growth Area



Note: Size of open space and other facilities shown is only indicative and is not to scale

Access to open space

The open space in the Shepparton North East Growth Area must be made as accessible as possible by:

- Locating the three Neighbourhood Parks in appropriate sites around the study site to reduce distances to open space from homes;
- Designing the catchments to the Neighbourhood Parks so that users do not have to cross arterial roads to access their closest Neighbourhood Park;
- Locating the Local Park near the retail and community hub and any schools in the study site;
- Ensuring all open space is designed to accommodate users with limited mobility;
- Ensuring open space has exclusive frontage to the side of any bordering street and is not 'hidden' behind dwellings;
- Linking open space with on-street foot and cycle networks;
- Ensuring adequate signs around the study site to alert users to the presence of open space; and
- Investigating shared open space facilities with the schools on the study site.

Connectivity

Open space in the study site should be well linked by:

- Good pedestrian and bicycle networks to the surrounding streets;

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- Being well-linked to local facilities such as the retail and community hub and to schools in the study site;
- Using appropriate vegetation suites to link areas of open space in the Shepparton North East Growth Area; and
- Providing for pedestrian and cycle links to the regional recreational facility at the Mercury Sports Complex and to the northern part of Shepparton generally.

Safety

The design of the open space facilities and links should incorporate, where appropriate, the design objectives and suggestions of the *Safer Design Guidelines for Victoria* to maximise user safety and increase the attractiveness and usefulness of the open space facilities.

Links with drainage infrastructure

Using the north-south drainage swale proposed in the Shepparton North East Physical Services Assessment, a shared foot and cycle path could link the open spaces on the site and provide access to other local community facilities. This could be incorporated in a collector road along the same corridor, either as a median strip or to the side of the road. The foot/cycle paths would need to be designed to avoid negative operational impacts of the swale itself, and be designed with safety and attractiveness in mind. Furthermore, links to the existing path along Drain 3 west of the site should be further investigated.

Diversity of recreational opportunities

Given the provision of open space and the population catchment in and around the Shepparton North East Growth Area, the recreational opportunities recommended for the study site include:

Table 5 Recreational opportunities

Facility Type	Year	Recreational Opportunities
Local Schools	From construction onwards	Walking Cycling Playground Informal games Junior organised sports, dependent on provision of facilities by school and agreement to share facilities
Local Streets within Shepparton North East Growth Area	From construction onwards	Walking Cycling Informal games
Neighbourhood Park	2015 (Stage 1)	Walking Cycling Playground Informal games
Local Park	2015 (Stage 1)	Walking Cycling Playground Basketball/Netball Courts Tennis Courts Informal games
Neighbourhood Parks	2020 (Stage 2)	Walking Cycling Playground Informal games

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As the study site is not large enough to support larger open space facilities, it is not feasible to provide facilities for football, cricket or sports that require large playing fields. However these facilities are already available at the Mercury Sports Complex, approximately 1.5km west of the study site, and accessible by Pine Road and Hawkins Street using pedestrian and cycle links as proposed in this assessment.

Sharing of facilities with schools

Sharing of recreation facilities at Grahamvale Primary School and Shepparton Christian Community School can broaden the range of opportunities for recreation in the Shepparton North East Growth Area, particularly for junior organised sport. It is recommended that agreements with one or both schools be investigated to allow sharing of facilities, bearing in mind the likely ongoing costs associated with maintenance and other matters.

6.0 Conclusion

A wide range of State and Local policies support the establishment of appropriate open space and recreation facilities during development of new urban areas. In conjunction with the site area and estimated population of the Shepparton North East Growth Area, these policies have guided the recommendations found in this report.

The open space in the study site should comprise three Neighbourhood Parks and one Local Park that serve a more local function than the nearby regional facility at the Mercury Sports Complex. The suggested locations of the parks will be refined during development of the Outline Development Plan. The location and design of these parks and other open space should strive to achieve the access and connectivity recommendations made here. Furthermore, the opportunity should be taken to take advantage of open space opportunities within drainage infrastructure such as the north-south drainage swale proposed in the Shepparton North East Growth Area Physical Services Assessment.

In relation to recreational opportunities, the provision of open space and the estimated population largely dictate the options available in the Shepparton North East Growth Area. It is recommended therefore that provision for play equipment together with basketball, netball and tennis facilities be made at the Local Park, play equipment at the Neighbourhood Parks and investigations be made to share organised junior sports facilities at the schools located within the Shepparton North East Growth Area.

6.1 Next steps

The suggested provision of open space will be incorporated into considerations for the Outline Development Plan that will guide future development of the site. Refinement of the suggested locations for the proposed open space will take place as part of this process, particularly in finalising the locations of the three Neighbourhood Parks and the Local Park.

7.0 Bibliography

Australian Bureau of Statistics, 2006 Census QuickStats, Australia, viewed 20 September 2008, <<http://www.censusdata.abs.gov.au>>.

Australian Bureau of Statistics, 2006 Census QuickStats, Greater Shepparton (C) (Local Government Area), viewed 8 October 2008, <<http://www.censusdata.abs.gov.au>>.

City of Greater Shepparton (2006) *Greater Shepparton 2030 Strategy Plan*, Township Structure Plans pp. 25, 27

David Lock Associates (2008) *Greater Shepparton Housing Strategy: Final Draft Version 2*. City of Greater Shepparton, Shepparton.

Department of Education & Training (2005) *Schools as Community Facilities: Policy Framework and Guidelines*. School Resources Division and Strategic Policy and Planning Division.

Department of Sustainability and Environment & Crime Prevention Victoria, *Safer Design Guidelines for Victoria*.

Maunsell AECOM Pty Ltd (2008), *Shepparton North East Growth Area Social Infrastructure Assessment*

Maunsell AECOM Pty Ltd (2008), *Shepparton North East Growth Area Surface Water Management Strategy*

SGS Economics and Planning (2005) *Indicative Best-Practice Thresholds for Popular Sports and Recreation Facilities*.