

BALLARAT WEST growth area plan

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Executive Summary

What is a Growth Area Plan?

A Growth Area Plan is a long term strategic land use plan that provides a basis for more detailed land use planning. The plan not only identifies the location and standards of known infrastructure provision but provides a basis for more detailed infrastructure modelling and planning. In that sense, a Growth Area Plan is an intermediate plan that sets a long term direction, it establishes standards, where they are known, and importantly provides a framework and guidelines for more detailed land use planning.

A Growth Area Plan is not a rezoning or an approval of development but is a basis for preparing plans for future approval and such plans should accord with the general directions of the Growth Area Plan.

The Plan Area

The Growth Area Plan will guide growth within Ballarat West up to and beyond 2030 (refer to Growth Area Plan map). The Growth Area will cater primarily for residential growth and has capacity for over 14,000 new households which should accommodate a population of 35,000 to 40,000.

As part of planning for residential areas, the plan provides for new town centres at Alfredton and Delacombe, community infrastructure, recreation and sports grounds, and direction for the development of a future residential community.

Context

The Plan reflects the broad direction of the Ballarat Municipal Strategic Statement in identifying the west of Ballarat as the principal growth area and has regard to more recent investigation into land use planning including the 'Ballarat Industrial Land Use Strategy' (Connell Wagner 2005) and the 'Ballarat Transport Strategy 2005' (Ratio Consultants). The MSS identifies Ballarat West as the primary growth front due to physical and servicing constraints to the north and east and the existing fragmented land use to the south.

Within the planning hierarchy the Plan is influenced by the Municipal Strategic Statement but in turn the Plan provides a basis for preparing detailed plans for component areas and informing decision making on the rezoning of land and longer term future subdivision.

Opportunities and constraints

The Ballarat West area has limited known physical constraints to development. The plan area slopes gently from the north to the south and is dissected by north-south flowing watercourses. Being high within the catchment the creeks are relatively small and intermittent. A fall towards the west provides a constraint through increased servicing costs beyond the plan area for hydraulic infrastructure provision, particularly sewer.

The specific detail of constraints to development has not been accurately assessed for the plan area. More detailed information will be required for implementation of the plan, in the form of (inter alia) flood mapping, biodiversity assessments, archaeological assessments, etc.

Key elements of the plan

The Plan predominantly provides for the residential growth front for Ballarat and includes the following key elements:

Residential development

- approximately 14,000 residential lots
- new residential growth will occur around centrally located 'town centres' providing for retail, employment, recreational and other services
- the two main growth centres are Alfredton and Delacombe
- some limited residential expansion west of Sebastopol

Employment

- limited expansion of the existing Carngham Road industrial area
- a reliance upon employment opportunities in the existing Ballarat urban area and the north western industrial area
- a focus on town centres providing local retail and service jobs

Transport

- recognises the existing arterial network as Remembrance Drive, Carngham Road, Glenelg Highway, and Dyson Drive
- a network of collector roads to serve the new development area
- a public transport network reliant on bus with the collector road network located to provide direct and equally spaced bus routes

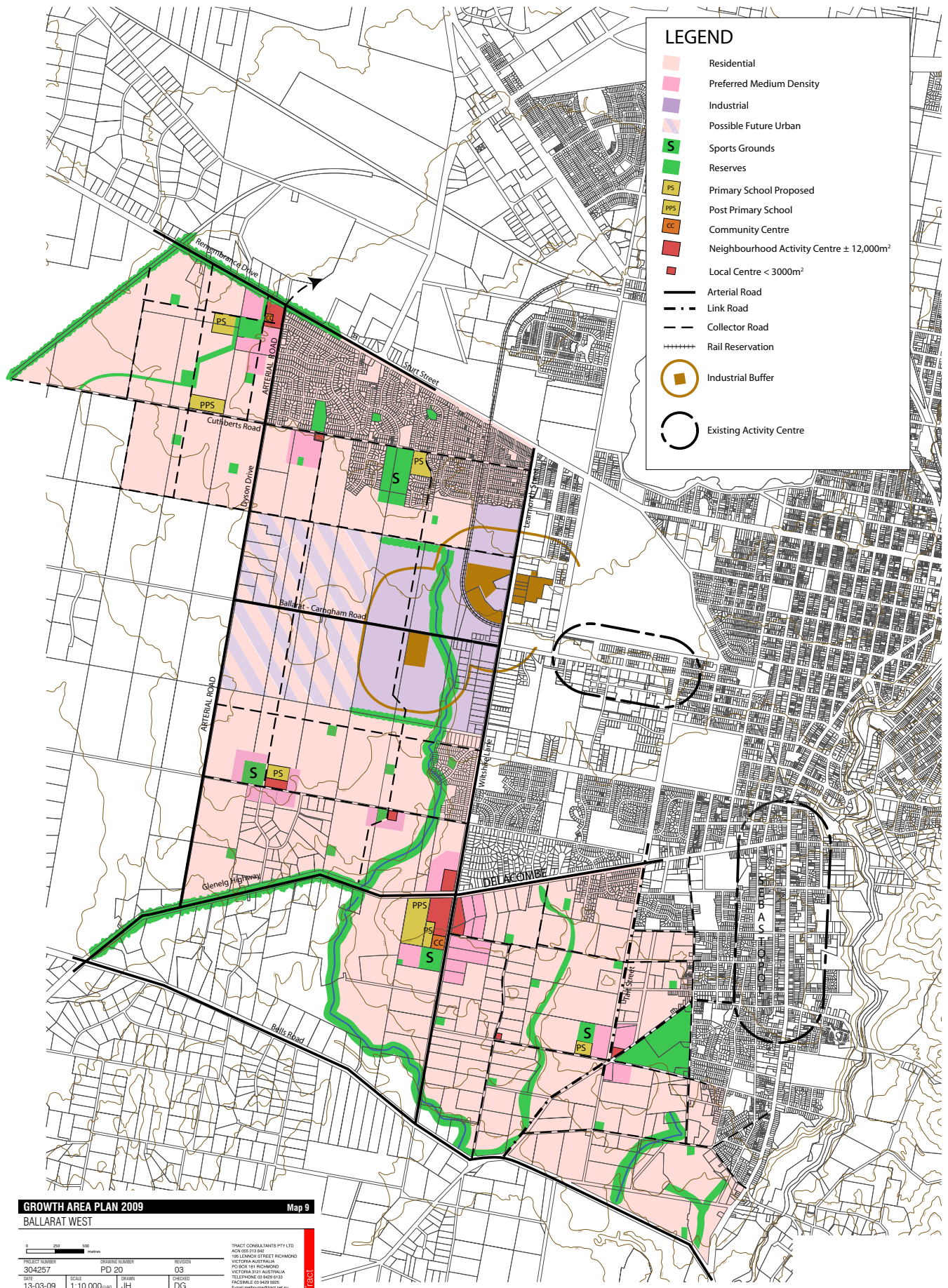
Social infrastructure

- town centres to function as not only retail centres but to provide a diverse range of private and public services, offices, medical facilities and government services
- Council provided community centres to be located within town centres or co-located with schools
- an open space network that aims to provide a dispersed network of large local parks
- a sports reserve distribution that co-locates sports grounds with schools and allows for higher order sports facilities to be developed in Victoria Park
- opportunity to utilise the floodways, creeks and water courses as linear open space

Implementation

The plan will be recognised by the Ballarat Planning Scheme. The plan will provide a guideline and a basis for the preparation of more detailed development plans to support the future rezoning and subdivision approvals. The plan will also be used by major servicing and infrastructure authorities to further refine planning for infrastructure.

For this reason the plan should not be seen as rigorously binding. It is a long term vision extending beyond 2030. From time to time Council policy will change and greater knowledge will be gained with regard to the plan area. This additional knowledge will need to be considered as part of any planning process. This Growth Area Plan is therefore the second stage of the planning process that now envisages more detailed planning at the local level.



1 Introduction - Purpose of this Plan

The Ballarat West Growth Area Plan provides the framework for further planning of the key growth area west of Ballarat. The area covered by the plan includes Alfredton, Delacombe and Sebastopol and rural land to their west and southwest. This area is expected to cater for Ballarat's urban growth for at least 30 years. The plan presents a snapshot of the key physical and infrastructure implications for expanded urban development and then presents a plan for how that development should occur.

The Growth Area Plan responds to the Ballarat Municipal Strategic Statement and the incorporated Ballarat Strategy Plan (1998), which nominates an area west of the existing urban area for further expansion (see **Appendix 1: MSS Extract**).

The plan is required to establish a clear policy direction, describing key land use elements and infrastructure requirements as a basis for more detailed plans applying to component areas.

The plan is informed by the most recent available data and accepted standards, where they exist, for major infrastructure and key urban elements.

In preparing this plan the information available for major infrastructure items, including standards for local service provision, has in some cases been limited. Further research will be required to address the provision of future infrastructure.

It is very much a “chicken and egg” situation with regard to planning. Agencies require some concept of where development is to occur, at what density and what population will exist before they can undertake detailed infrastructure planning. Equally it is not possible to prepare a detailed plan without the basic parameters being established. This plan is the starting point and should be interpreted as a guideline to development not only of the urban area itself but of infrastructure planning to serve that urban area.

It is therefore imperative that this plan is interpreted as a guideline document and that further planning policy, infrastructure planning and land use planning occur based on the broad directions of this plan.

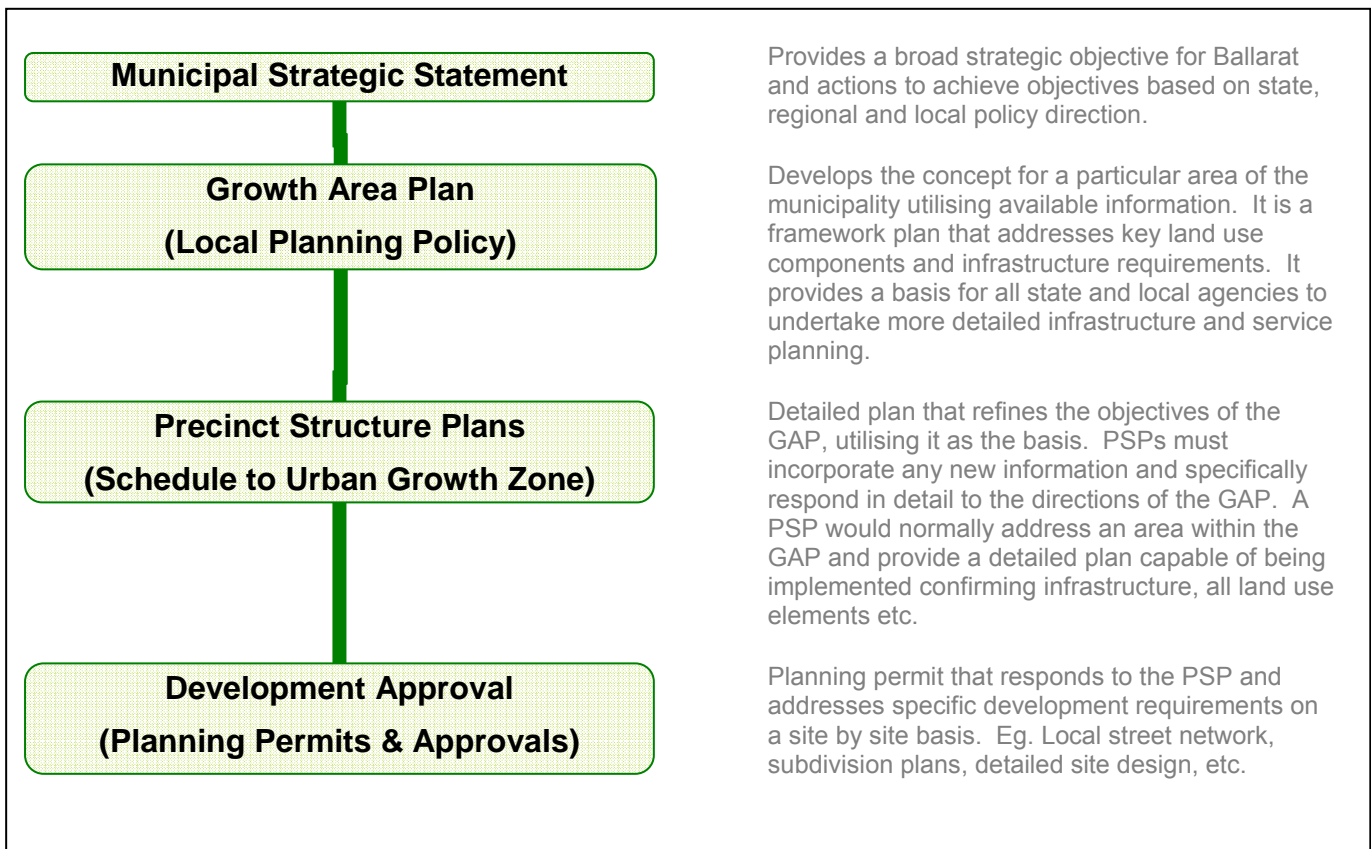
2 Growth Area Plans – Place in the Planning Framework

2.1 Growth Area Plans in the Planning Hierarchy

This Growth Area Plan provides the framework and broad conceptual direction to facilitate more detailed planning for the development of individual land holdings. The plan area will need more detailed planning especially by agencies and government which will need to be addressed at future stages in

the planning process. The plan is therefore indicative and based upon available data at the time of preparation. **Figure 1** identifies the four stages in the strategic planning process from Municipal Strategic Statement through Growth Area Plan, Precinct Structure Plan and planning permit.

Figure 1



2.2 Planning Context

The following State and Local Planning Policy has been given due regard in the preparation of the Growth Area Plan.

2.2.1 State Policy

Clause 14 – “Settlement”

This policy broadly identifies the requirements for long term planning population growth.

Clause 14 encourages:

- Planning for a minimum of 10 years growth.
- Consolidation in existing urban areas.
- Planning through Structure Plans and Precinct Structure Plans.
- A hierarchy of plans.

Clause 15 – “Environment”

A particular emphasis of Clause 15 is to give regard to natural catchments and the inputs of catchment authorities.

Clause 17 – “Activity Centres”

A strong emphasis of Clause 17 is to encourage the planning for activity centres which, in addition, provides for retail facilities encouraging:

- A variety of land uses including retail, office, education, community facilities and recreation.
- Pedestrian and public transport access.
- Minimised impacts on adjoining residential areas.

Melbourne 2030: Planning for Sustainable Growth

Melbourne 2030, the State government’s metropolitan plan for Melbourne, contains guidance for Ballarat under Direction 3: Networks with Regional Cities.

This direction aims to:

“Promote the growth of regional cities and key towns on regional transport corridors as part of a networked cities model; and Control development in rural areas to protect agriculture and avoid inappropriate rural residential development.”

This State Government direction is one of the main drivers behind planning for urban growth in Ballarat.

Ballarat Corridor Growth Study

As part of Melbourne 2030, the “Ballarat Corridor Sustainable Growth Strategy” has been commissioned by the Department of Sustainability and Environment. It is designed to address the strategic planning implications of the likely population and household growth in the Ballarat corridor over the period to 2031.

Regional Fast Train

The Ballarat-Melbourne Fast Train project was completed in 2006 and has enhanced Ballarat’s links to Melbourne, enabling an increase in the number of people who can work in Melbourne and live in Ballarat. It is also expected to provide a stimulus to growth in Ballarat. The Wendouree Train Station which is under construction in the Walsh Industrial Estate will provide scope to increase public transport availability to the Ballarat West area.

2.2.2 Local Policy

Clause 21 – Municipal Strategic Statement of the Ballarat Planning Scheme (MSS)

The Ballarat MSS outlines a plan for the future physical development of the city with relevant clauses in relation to the study area.

Clause 21.03

The “Overall Framework Plan” includes the Growth Area as a target for residential development. It is the next logical sequential extension to the urban fringe of Ballarat.

Clause 21.04 Environment

Key objectives that this GAP supports are:

- Objective 2 – Energy - to reduce the use of fossil fuels
- Objective 4 – Flora and Fauna – to minimise any adverse impacts of land use and development on native flora and fauna and their habitats.
- Objective 6 – Land Capability – to manage contaminated land
- Objective 10 – Water – to manage the quantity and quality of water entering the catchments within which the City of Ballarat is situated.

Clause 21.05 Settlement

Key objectives that this GAP supports are:

- Objective 1 – Residential – to provide for residential growth in and around the Ballarat urban area in an orderly and efficient manner
- Objective 2 – Industrial – to provide for industrial growth in the Ballarat area in an orderly and efficient manner
- Objective 5 – Liveability – to make services and facilities available and accessible to support the needs of the City’s existing and future community
- Objective 6 – Liveability – to encourage and facilitate opportunities for diversity in residential type, choice and affordability in line with needs and aspirations of the City’s existing and future community
- Objective 7 – Liveability – to create a city that is a safe place to live

- Objective 9 – Character – to protect and enhance the City’s presentation as defined by its built and natural environments
- Objective 11 – Character– to improve the appearance of major entrances to the urban area

The Residential Framework Plan identifies the study area as the primary location for new residential growth in Ballarat. In addition, existing industrial land at Latrobe Street/Carngham Road is identified on the Industrial Framework Plan.

Clause 21.06 Economic Development

Key objectives that this GAP supports are:

- Objective 2 – Industry– to create prosperity through the development of the manufacturing sector
- Objective 5 – Infrastructure – to provide a road network that meets the transport needs of business and industry
- Objective 9 – Retail/Commercial – to facilitate access to commercial services through the development of regional, subregional, district and neighbourhood commercial centres

This clause aims to provide opportunities for economic prosperity by ensuring that business and industry have an adequate and well located land supply which is efficiently connected by transport links. The clause also aims to provide retail and commercial centres that complement each other rather than compete with each other. The industrial land take up needs is, at the time of preparation of this plan, being reviewed by Council. Council Policy provides an existing emphasis for industrial planning in the north west of Ballarat, near the airport precinct.

Local Planning Policies
(Ballarat Planning Scheme)

22.01 Residential

Key objectives of this policy are to ensure that new subdivisions proceed in accordance with Outline Development Plans to ensure efficient staging and to provide a wide range of housing choice.

22.03 Business

Key objectives are to maintain the role of the Ballarat Central Business Area and to facilitate the development of appropriate regional, sub-regional, community and neighbourhood centres commensurate with their identified role to service the needs of the existing and future population of the surrounding communities.

22.05 Industry

Key objectives are to ensure adequate serviced land is available to meet future demand for industrial land, to promote visual upgrading of existing industrial areas through a comprehensive landscape program and provide necessary buffers to surrounding incompatible land uses to protect the ongoing operation of industries.

22.15 South West Sebastopol

The South West Sebastopol ODP was prepared in 1993. It covered that part of the current Growth Area lying between M R Power Park and Bells Road and Albert Street. The parts adjoining existing development zoned Residential 1 were left Rural for longer term development. The policy requires that subdivision generally follow the plan included in the policy and be sequenced in accordance with sewer provision.

This policy and ODP may require review in the light of the preparation of this GAP.

Key Planning Strategies

1998 Ballarat Strategy Plan (incorporated document)

As can be seen from the following extract of the Ballarat Strategy Plan 1998, the subject land is identified for future residential growth, consistent with previous strategies now incorporated into the Ballarat Planning Scheme, at Clause 21.05.

Alfredton is highlighted for future residential development, now reflected in Clause 21.05 of the Ballarat Planning Scheme.

The Ballarat Strategy Plan 1998 (page 106) states the following:

“Carngham Road Industrial Growth Area

Opportunity exists for the development of a medium to long term industrial growth corridor along Carngham Road west of existing development, with ready ability to be service. The area is potentially suitable for industries requiring large buffer distances from sensitive uses due to the relatively low intensity nature of surrounding uses, availability for services, large lot sizes and the ability to create rural buffer areas. If used for industries requiring large buffer distances, then non-compatible industries should not be permitted to establish in the area”.

The relatively low growth rates forecast in the Ballarat Industrial Strategy were queried by the Amendment C88 Panel and should therefore be reviewed before final decisions are made in relation to the future land use of the Carngham Road area.

Ballarat Retail Strategy 2003

Undertaken by Essential Economics, the Ballarat Retail Strategy of 2003 focuses primarily on the existing urban area and zoned land, and recommends floorspace areas to centres. The strategy makes a broad recommendation on potential for development to the west and the need for new centres at Alfredton and Delacombe.

A more specific investigation of the Alfredton area was undertaken in 2006 which identified a range of centres including options for a neighbourhood centre of 6,000 square metres at two possible locations, Dyson Drive and Sturt Street or Cuthberts Road and Dyson Drive. Demand exists for services within the existing community and the Dyson Drive/Sturt Street site could be provided earliest.

Other Council Policies:

Blueprint Ballarat (Draft No. 3)

This draft policy document aims to provide a vision of the future of Ballarat in the next 25 years and identify projects to achieve it. Sections which provide guidance to planning are:

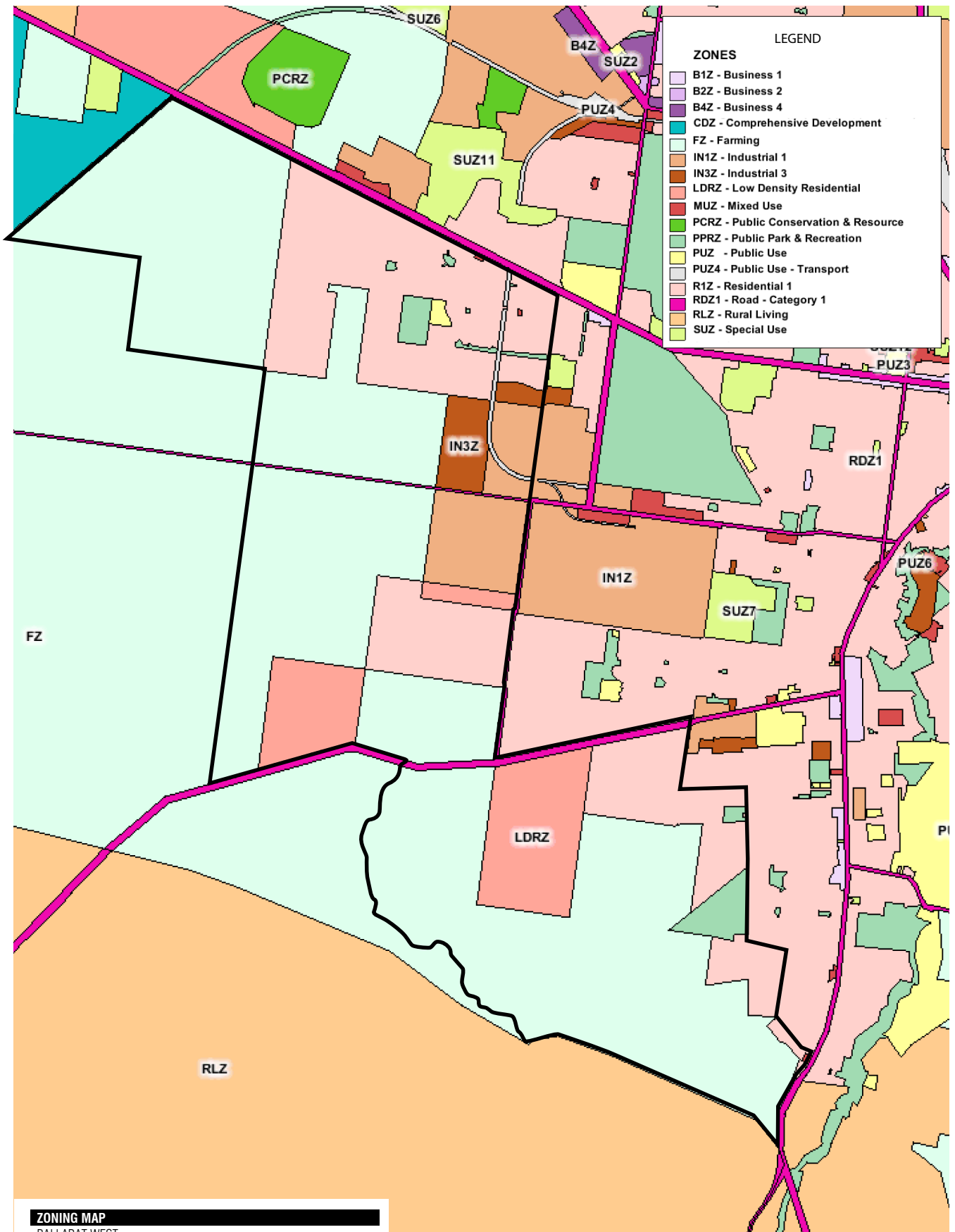
- Section 4.2 Our Services and Infrastructure
- Section 4.3 Our Jobs and Investment
- Section 4.4 Our Health and Resilience
- Section 4.6 Our Environment and Heritage

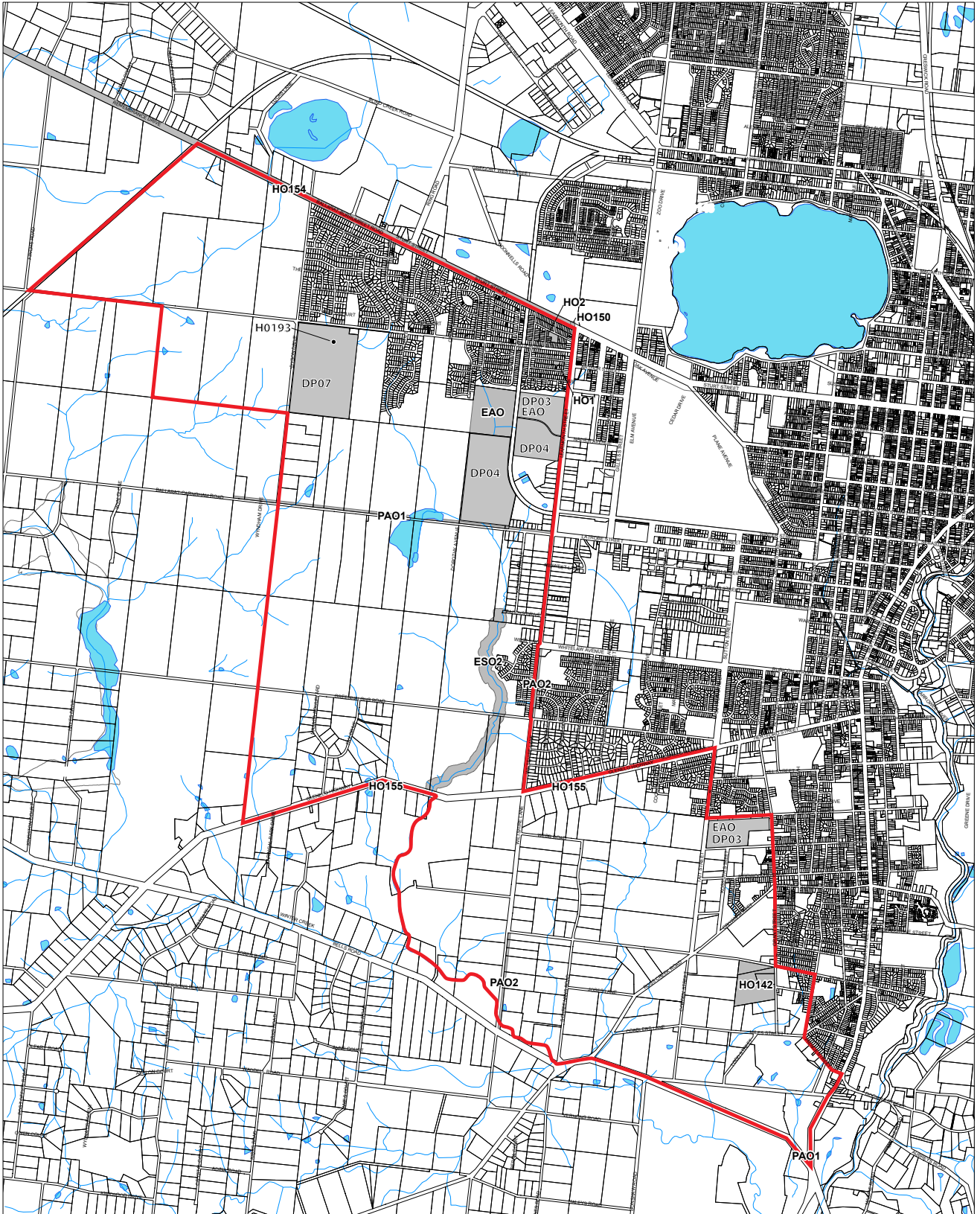
Statutory Planning

The study area contains land in a number of zones. The majority of the study area is within the Farming Zone which is largely expected to be rezoned for urban uses over the next 30 years. Limited vacant Residential 1 Zoned land exists in Alfredton. A small area of Low Density Residential land is located on the north side of the Glenelg Highway, west of Wiltshire Lane and another on the southern side of the Glenelg Highway east of Wiltshire Lane. A significant portion of Alfredton and Delacombe are zoned Industrial 1 adjacent to the intersection of Carngham Road and Wiltshire Lane/ Learmonth Street.

Overlays in the study area are as follows:

- 42.01 Environmental Significance Overlay 2 – Streamside and Watercourse Protection applies to Winter Creek south of industrial area.
- 43.01 Heritage Overlay applies to the Ballarat Avenue of Honour at Remembrance Drive, markers on Glenelg Highway, a Scar tree on land at Cuthberts Road, and Blythewood Grange (former St Joseph's Home building).
- 43.04 Development Plan Overlay applies to land at Cuthberts Road and east of Dyson Drive, a site on the northern side of Carngham Road and west of the railway reserve in Alfredton, and to land at Lot 1 Learmonth Street in Alfredton.
- 45.01 Public Acquisition Overlay applies to land abutting Carngham Road and Wiltshire Lane to enable their duplication, and to land north of the Midland Highway and Colac-Ballarat Road intersection.
- 45.03 Environmental Audit Overlay applies to a site south of Hume Crescent and west of the rail reserve in Alfredton, and to land at Lot 1 Learmonth Street in Alfredton.





OVERLAY PLAN
BALLARAT WEST

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Overlay (tag attached)
*only overlays that directly affect the Study Area are shown

Study Area

3 Plan Area

3.1 Regional Context

The Growth Area forms the south western portion of the Ballarat urban area. The Growth Area is convenient to the centre of Ballarat with the outermost points of the study area located within approximately eight kilometres of the centre of the Ballarat Central Activity District.

Rural land separates the Growth Area from the rural township of Cardigan Village, approximately nine kilometres to the west. A proposal exists for the Lake Federation Resort development located adjacent to the north west of the Growth Area. Lake Federation plans for up to 3,200 dwellings, approximately 10,500 square metres of commercial floor space, hotel accommodation, community facilities and golf courses. The development has not commenced yet and the Growth Area Plan has given regard to its potential for development. The Lake Federation Resort targets a new market for Ballarat.

Extensive rural residential areas of the Golden Plains Shire are located to the south of the Growth Area.

The Growth Area adjoins key east west regional roads with the Glenelg and Midland Highways in the southern portion of the area and Burrumbeet Road/ Remembrance Drive / Sturt Street adjoining the northern boundary. These roads provide access to Ballarat's hinterland, other regional cities and Melbourne. Ballarat is also a key hub for Western Victorian rail and coach services.

3.2 Location and Size

The Growth Area includes the suburbs of Alfredton, Delacombe and Sebastopol and adjoining rural land to the west (refer Map 2).

The Growth Area is within two distinct precincts. The northern area is delineated by Burrumbeet Road/Remembrance Drive/Sturt Street to the north, Skipton Rail Trail and Dyson Drive generally to the west, Glenelg Highway to the south and Learmonth Street/Wiltshire Lane to the east. The southern area is delineated by Bells Road to the south, local streets within Sebastopol to the east, Winter Creek to the west and Glenelg Highway to the north.

The total land area included in the GAP is approximately 18 square kilometres.

3.3 Current Land Uses

Industrial

The Delacombe industrial area is generally bound by Sutton Street to the east, Winter Street to the north, Whitelaw Avenue to the south while extending across Wiltshire Lane/Learmonth Street and into the study area to the west. The area is largely within the Industrial 1 Zone with a small pocket of service businesses facing the Ballarat Saleyards across Learmonth Street being “Mixed Use Zone”, and some Industrial 3 Zoned land immediately to the west and north of the Industrial 1 Zone. There is a high degree of variety in terms of industrial uses with a mixture of manufacturing, warehousing, food processing and other industrial types. A number of businesses in the area require substantial buffers (i.e. the Icon Industries site and the Garden Recycling Centre). These buffers require extensive setbacks resulting in a considerable amount of undeveloped land existing which is capable of accommodating non sensitive uses occurring around these operations. Overall, the area is only partially developed.

Commercial and retail development

Very few service businesses are located within the study area itself. This may be a result of the relatively easy access that current residents in the area have to the Ballarat CBA and retail areas in Albert Street, Sebastopol.

Neighbourhood centres, e.g. corner shops, are located throughout the established residential areas.

In Sebastopol and Sebastopol North, the Albert Street retail strip in conjunction with the Ballarat CBA, has so far catered for the local population’s retail and commercial needs.

Residential

The residential area of Alfredton is a relatively new addition to the urban fabric of Ballarat and is located in the north of the Growth Area. Having grown consistently and at a strong rate along the south side of Sturt Street (Remembrance Drive), this area now extends south beyond Cuthberts Road, east to Victoria Park and west to Dyson Drive. Development in this area is characterised by predominantly detached dwellings.

The other main location of existing residential development is in Sebastopol. This area has developed over a number of decades with newer subdivisions occurring on the western fringe. Residential development is predominantly detached dwellings.

Low Density Residential /Rural Living

Low density and rural living development is located between the Glenelg Highway and Greenhalghs Road; south of Delacombe; west of Sebastopol; and along Dyson Drive north of the Ballarat-Carnham Road.

Agricultural Land

The Growth Area has been identified as good quality agricultural land, particularly in the north of the area. As indicated in Section 5.2, past rural land quality mapping has identified the land as “high quality”. The most dominant land use is grazing with limited occasional cropping. The land ownership patterns in the south are small and fragmented with most of the land used for “rural living” or “lifestyle farming”. Agricultural activity of the greatest value is likely to occur in the north of the plan area. While the quality of land is good, current activity is moderate.

Education

In Alfredton, existing schools are: Alfredton Primary School (Cuthberts Road), St Thomas More Catholic Primary School (Cuthberts Road) Ballarat High School (Sturt & Gillies Streets) and Begonia Park School (Gillies Street). Delacombe contains: Delacombe Primary School (Greenhalghs Road) and a Catholic Primary School (Whitelaw Avenue), while Sebastopol contains Sebastopol Primary School, Sebastopol Secondary College and St James Catholic Primary School.

Four other major private secondary schools are readily accessible from the study area. They are St Patrick's College (Redan), Ballarat & Clarendon College (Redan), Ballarat & Queens Grammar (Wendouree) and Loreto College (Lake Wendouree).

Tertiary institutions with a presence in Ballarat include Ballarat University and Australian Catholic University (home campus).

Community

Community centres are not present in Alfredton and Delacombe. The City of Ballarat has stated the need for additional facilities, particularly focused on younger people, in Delacombe and Sebastopol.

Health

Hospitals in Ballarat include Ballarat Base Hospital and St John of God Health Care.

There is at present no demonstrated demand for additional major health services in Ballarat West. It is expected that some medical centres will likely establish in the area as the market demands.

Child Care

Child care facilities include Sebastopol Child Day Care Centre (Vickers Street) and Alfredton Child Care Centre (Elaine Avenue). These are private facilities.

Recreation Facilities

Within the Growth Area Alfredton Recreation Reserve contains an oval and tennis courts along Cuthberts Road and is large enough for additional sporting and leisure activities.

Recreation opportunities in localities adjoining the study area include: Victoria Park (cycling, multi-sports ovals, and equestrian activities), the Doug Dean Reserve in Delacombe (an oval and walking track), the Marty Busch Reserve, Sebastopol (two ovals, a velodrome and a BMX track) and Morsehead Reserve.

Additional facilities include Bray Raceway (harness racing, greyhounds), Trekardo Park (soccer), Western Oval, Ballarat Golf Course, Prince of Wales Park (baseball, oval), Lake Wendouree (walking cycling, botanic gardens) and a golf driving range located on Learmonth Street.

To the north west of the GAP is the Skipton Rail Trail providing scope for a connecting link to Ballarat to the east and the trail to the south west.

4 Existing Conditions

While the general nature of constraints to urban development is known, the plan area has limited documented or detailed plotted information on constraints. As discussed previously, this plan will be a driver for more detailed modelling of constraints. Prior to development occurring (most likely at Development Plan stage) a confirmed response to each constraint will need to be established.

4.1 Topography/Drainage

The upper reaches of Winter Creek commence at a number of points in Alfredton. Other tributaries to Winter Creek are located in Sebastopol. They flow generally south through the Growth Area before flowing east to the Yarrowee River which is part of the Barwon River catchment. The "River Health Strategy Summary Report" (Corangamite CMA) notes that its waterway condition is poor and is characterised by degraded riparian vegetation.

From the 10 metre contour information available for the area and site assessment the majority of the land is gently sloping. The main topographical features in this relatively flat landscape are:

- Winter Creek becomes a distinct valley near the Glenelg Highway;
- an escarpment in the south eastern corner of the Growth Area at the corner of Bells Road and Midland Highway; and
- mullock heaps from the gold mining era in Sebastopol.

Flood mapping to date has not been based on survey information to the required level of detail to accurately identify flood prone land for planning purposes. Indicative locations of the 1 in 100 year flood have been provided by the City of Ballarat.

The Winter Creek Catchment Study (July 1999) undertook flood modelling and provided recommended flood mitigation measures for the two key arms of Winter Creek. Retarding basins along with channel widening were recommended for various reaches of the creek. The site identified for a flood control retarding basin for the 1 in 100 year flood at the end of Hume Crescent in Alfredton is currently under development for this purpose.

4.2 Soils

According to the Ballarat Strategy Plan 1998 (p.45-46), Rural Land Mapping Projects undertaken in the 1970's indicate land between Alfredton and the Ballarat Carngham Road is of 'High Quality'. This land has been under development for residential purposes, however, and some is used for rural living. The remaining land is used for extensive grazing.

The remainder of the Growth Area has been rated as being of Average Quality.

4.3 Remnant Native Vegetation

While biodiversity mapping has been undertaken for the Ballarat region, it is at a broad level and primarily identifies remnant vegetation restricted to tree stands and water course environments. The detail of mapping is unlikely to satisfy the net gain assessment criteria for new development.

Prior to development in the Growth Area, flora and fauna studies will be required.

4.4 Urban Design/Landscape Attributes

Entry Corridors

The study area interfaces with three major routes leading into central Ballarat from the west and south. The Ballarat Entrances Strategy 2006 has made specific reference to the key western entrances.

1. The urban corridor formed along the Remembrance Drive entry space provides a good urban address and arrival into Ballarat, linking western Ballarat's most recognisable urban features including: the Avenue of Honour, Arch of Victory, Lake Wendouree, Victoria Park and the traditional mixed use strip in Sturt Street. These features help to explain the attraction of new housing in the Alfredton area.

Residential demand in the Alfredton area has been strong for many years and at the time of the preparation of this GAP a shortage of zoned urban land exists in Alfredton.

2. The Glenelg Highway presents more of a low key entry into Ballarat, intersecting with the Midland Highway at the northern end of the Sebastopol commercial centre. It has an undulating rural character. Entry into developed areas of Ballarat is currently not structured, with the gradual appearance of suburban development beyond Wiltshire Lane. There is an opportunity to utilise positive aspects of the road's existing landscape character to better define the entry into Ballarat with a potential improved image to new residential areas and the city of Ballarat as a whole. Potential exists to replication the entrance treatment provided on Remembrance Drive.

3. The Midland Highway presents a relatively unstructured urban edge to the southern approach to Ballarat. A highly visible site at the south eastern extreme of the study area boundary presents an opportunity to mark the arrival into Ballarat. Although it is a significant hub of commercial activity, Central Sebastopol lacks a clear identity. Growth to the west in the study area should be seen as an opportunity to regenerate this area.

Industrial Precinct Street Character

Roads in and around the Delacombe industrial precinct could benefit from visual enhancement. The Street Life program for the Delacombe Industrial Area has branded the area the "South West Precinct". The program is identifying ways of enhancing the aesthetics of the precinct including: signage to define the precinct, streetscape improvements in Latrobe Street and developing walking and cycling tracks.

Wiltshire Lane/Learmonth Street is a significant north south link between Remembrance Drive and the Glenelg Highway via the existing industrial core. Its central landscape reserve presents an opportunity for visual enhancement that could benefit the address of new development to the west.

Residential Street Character

Recent development to the north of the study area in Alfredton is characterised by a suburban network of streets which is relatively impermeable, providing limited opportunities for integration with future development. This questions whether any forward planning has taken place for a potential residential Alfredton South. The character of the street network to the west of Sebastopol provides better opportunities for integration of future subdivision.

Built form

Generally the housing stock in existing areas to the north at Alfredton is of greater quality than that in the south east at Sebastopol. In both areas there is little variety or hierarchy in building stock, resulting in typically homogenous neighbourhoods.

Industrial buildings in the vicinity of Carngham Road are generally of poor quality and vary greatly in their relationship to the street. General subdivision patterns are inefficient, resulting in some “left over” land.

Landscape Opportunities

Local parks provided in existing recent developments have been generally ill considered and lack variety of character and quality of embellishment.

The landscape character of undeveloped areas is generally an open rural character. There is little native vegetation. Windrows provide local landmarks. There are opportunities to build upon these landmarks as identifiers of local parks and roadways.

Variations in the topography are generally subtle though local variations, e.g. near Winter Creek, and can be enhanced through responsive design and incorporation into the public open space network. The “Landscape Guidelines for Development in the City of Ballarat” (Revised Sept 2000) indicate that most of the area would be landscaped with native species being new residential, commercial and industrial areas.

4.5 Access (Main Road Routes)

The plan area is serviced by a network of existing roads which can be upgraded to serve new development. Primary arterials: Sturt Street (Declared Main Road), Gillies Street, Wiltshire Lane (north of Glenelg Highway), Ballarat/Carngham Road (Declared Main Road), Glenelg Highway.

Secondary arterials: Cherry Hill Lane (formerly Wiltshire Lane) south of Glenelg Highway, Bells Road, Whitelaw Avenue (east of Wiltshire Lane), Tait Street, Grant Street.

Collectors: Learmonth Street, Cuthberts Road, Greenhalghs Road, Elaine Avenue.

Good access to central Ballarat and employment activity around Latrobe Street is provided from Alfredton and Delacombe, Burrumbeet Road/ Remembrance Drive/ Sturt Street, Wiltshire Lane/Learmonth Street and Latrobe Street/ Carngham Road.

The intersection of Learmonth Street and Sturt Street is noted as a particularly problematic intersection with traffic congestion at peak times.

Wiltshire Lane provides an important north-south link from the Glenelg Highway to Remembrance Drive. Gillies Street (just east of the Growth Area) potentially provides a link between industry and the Western Freeway via Remembrance Drive and the Ring Road or Ballarat-Maryborough Road.

4.6 Existing Subdivision Patterns

The low density subdivisions in the Growth Area present a constraint to future development as they provide difficulties in land assembly and location of major infrastructure.

4.7 Aboriginal Heritage

According to the “Ballarat Region Conservation Strategy 1999-2004: a strategy for sustainable living” (Ballarat City Council, 1999, 2nd Ed), the Wathaurong people were the original occupants of the Ballarat area including land south towards the coast. The name Ballarat means ‘resting place’ with Wendouree meaning ‘be off’. Over 100 significant indigenous sites are known in the Ballarat district including notable landmarks such as Mt Buninyong and Mt Warrenheip. This study does not specifically mention the Growth Area and no other sources of pre-European aboriginal heritage in the study area have been sourced as part of this GAP.

More detailed studies will need to be undertaken prior to approval of any new development in this area. The process normally undertaken is to have an assessment of archaeological significance undertaken as part of the planning approvals process for development. The outcome of any finding will need to be considered as part of future development.

4.8 European Heritage

The Arch of Victory at the intersection of Sturt Street and Learmonth Street is a significant local landmark and, while it is located in an established area, it forms part of the character of Ballarat West. Victoria Park is also an important historical feature.

The Avenue of Honour in Remembrance Drive is the longest planted memorial drive in the world and is experienced regularly by many residents and visitors to Ballarat. The Avenue sets a high precedent for the quality of major roads in the area.

Some small distance markers are located on the Glenelg Highway within the study area.

These places are protected by the Heritage Overlay in the Ballarat Planning Scheme and by their listing on the Victorian Heritage Register. Any upgrades or alterations near these roads will need to respect these heritage values.

Victoria Park is a long established landmark park. Developed for both formal and informal recreation, the main features of the park include extensive planting of exotic trees typical of early Australian parks, sports grounds, through roads and heritage features referencing the park’s history.

Notable throughout the plan area are small but significant stands of exotic trees, dominated by Monterey Pines and Lombardy Poplars. Apparently linked to farm house or outbuilding sites, or remnant windrows these remnant trees provide one of the most significant landscape features capable of being incorporated into main and local street network.

4.9 Buffer to Existing Industrial Land Use

A number of industries within the existing Delacombe industrial area have special requirements due to the nature of their operations.

Protecting existing industrial operations from sensitive use encroachment and also protecting rights to expansion provides one of the major challenges to planning for both industrial and residential growth.

Many of the sites occupied by industrial operations with buffer requirements are large, even though the operation occupies a relatively small area within the site.

While applying buffers to the site boundary is desirable, where sites are large this may result in, for example, 500 metre setbacks that result in real setbacks of up to 1,100 metres from the actual operations. In the north of the Delacombe area, if applied as described above, buffers would include existing residential development in addition to that proposed for Delacombe North.

In approving expansion of industrial operations on large sites, it will be necessary

to recognise the proximity of existing and proposed residential development and in approving extensions allowing for buffers to be incorporated within the site or more specifically within the industrial area.

The Carngham Road industrial area is not designated as an area for industry with special locational requirements (similar to, for example, Altona and Laverton North). The location and expansion of such industry must occur in a manner that has regard to the size of the industrial area and its location within Ballarat.

In considering any proposal for rezoning of land or applications for approval of a development plan, consideration should be given to buffers referred to in the following documents, namely:

- Recommended Buffer Distances for Industrial Residual Air Emissions AQ 2/8
- Clause 52.10 of the Planning Scheme
- Any other relevant EPA Guideline or SEPP

4.10 Mining

As a result of previous mining activities, a number of mullock heaps and disused mine shafts still exist within the study area. These are predominantly found within the Sebastopol section of the area, particularly south of Miles Street. The South West Sebastopol Outline Development Plan (1993) assumes that land affected by mining would be developed for residential purposes subject to appropriate rehabilitation of the affected land. Prior to development of sensitive uses in these areas, Environmental Audits should be undertaken and investigation into the appropriate treatment of former mine shafts.

Victoria Park contains an example of a mullock heap with a heritage marker and information about the history of mining in the area.

4.11 Mining Relics

The history of the Ballarat area is strongly associated with the goldmining industry. The visible elements of many of the mining sites are now, largely, obscure. Prominent workings and mining sites have been identified in the south of the plan area but may occur more widely. All mining relics and any sites are protected under the Heritage Act 1995 and a detailed audit is required prior to development.

4.12 Land Contamination

An Environmental Audit Overlay exists on a parcel of Residential 1 land in the southeast of Alfredton.

Prior to development of land containing mullock heaps, appropriate environmental investigations and rehabilitation will need to be undertaken.

There is potential for land to be contaminated by other sources including farming and other industrial activity. Detailed records on land use are not available, therefore a cautious approach needs to be taken.

4.13 Existing Open Space

Key open space areas in the Growth Area are Alfredton Recreation Reserve and M R Power Park. M R Power Park is largely undeveloped but includes an equestrian area.

Victoria Park is a major underutilised open space which is in proximity to the Growth Area. Opportunities to link the Growth Area to this asset should be identified such as along the disused rail reserve. Opportunities have been identified in the Ballarat Open Space Strategy "to expand the Alfredton Recreation Reserve South and develop a linear reserve along Winter Creek and develop the railway line as a linear reserve." The strategy also identifies the retention basin constructed as part of the 'Lawrie estate' (at the head of Winter Creek) to be public land. This has potential as a key open space node along a future Winter Creek open space corridor.

The Yarrowee River potentially provides a regional open space asset convenient to the south eastern portion of the Growth Area.

Potential exists to improve access to both the former Skipton Rail Trail and Winter Swamp as part of an enhanced open space network to serve the new development front.

At the time of preparation of this Growth Area Plan, Council is undertaking a review of open space needs which may result in a specific standard for open space.

4.14 Telecommunications

The study area is served by the Alfredton, Sebastopol and Haddon Exchange Servicing Areas. There is a large quantity of infrastructure installed in the built up areas and less infrastructure in the rural areas. Installation of new infrastructure is more economical if subdivisions progress from the exchange building outwards. This should occur in most of the Growth Area as the Alfredton Exchange is located near Cuthberts Road and the rail reserve. It serves the Growth Area up to midway between Ballarat-Carngham Road and Greenhalghs Road. The Sebastopol Exchange services the Sebastopol portion of the GAP as well as land west of Wiltshire Lane.

The remainder of the Growth Area is served by the Haddon Exchange which is located west of Finchs Road which will be less economical if development progresses from the developed areas in a westerly direction.

Telstra has a shared trench arrangement with the power authority so that as power is installed within new subdivisions, Telstra installs its infrastructure, where possible in the same trench.

4.15 Electricity & Gas

4.15.1 Gas Supply

TRU Energy is the gas supply authority for the Growth Area. Existing gas distribution mains extend into the plan area along Burrumbeet Road, Carngham Road and the Glenelg Highway. This plan area is capable of being serviced through augmentation of the existing network.

The supply of the plan area is a commercial obligation of TRU Energy to ensure that new urban development within supply areas is serviced. No detailed planning for the gas network through the plan area has yet been undertaken as the authority will largely respond to this plan in developing the system.

4.15.2 Electricity Supply

Similarly, the power supply authority has the obligation to supply new development areas particularly where they are contiguous to existing urban development. This is part of the normal commercial operation of the company and they will need to upgrade and augment the system to serve the plan area. Full detail planning of the supply network will be responsive to this plan upon its adoption.

4.16 Hydraulic Infrastructure

The Plan does not address water supply (responsibility of Central Highlands Water), however it must address the provision of infrastructure to convey water to future development.

Central Highlands Water is the responsible agency for water supply and sewerage management within the plan area. At the time of preparation of this report the authority has only undertaken preliminary planning for the growth area. Agencies supplying major urban infrastructure require some degree of certainty to undertake detailed planning. Effectively this Growth Area Plan provides the basis for more detailed planning which will deliver more certainty on cost, timing and location of the infrastructure provision.

Even though only preliminary planning has been undertaken to date, Central Highlands Water has an understanding of the implications and capacity to serve the plan area. The following reflects the current position of Central Highlands Water with regard to provision of Hydraulic Infrastructure.

4.16.1 Water Supply

The Growth Area is capable of being supplied with water. This will necessitate the extension of existing water mains and construction of new water mains to service the Growth Area. Specific detail and diameter of the supply mains are not known at this stage but are likely to be of a size that will be able to be accommodated within road reservations, particularly the main road reserves.

4.16.2 Sewer

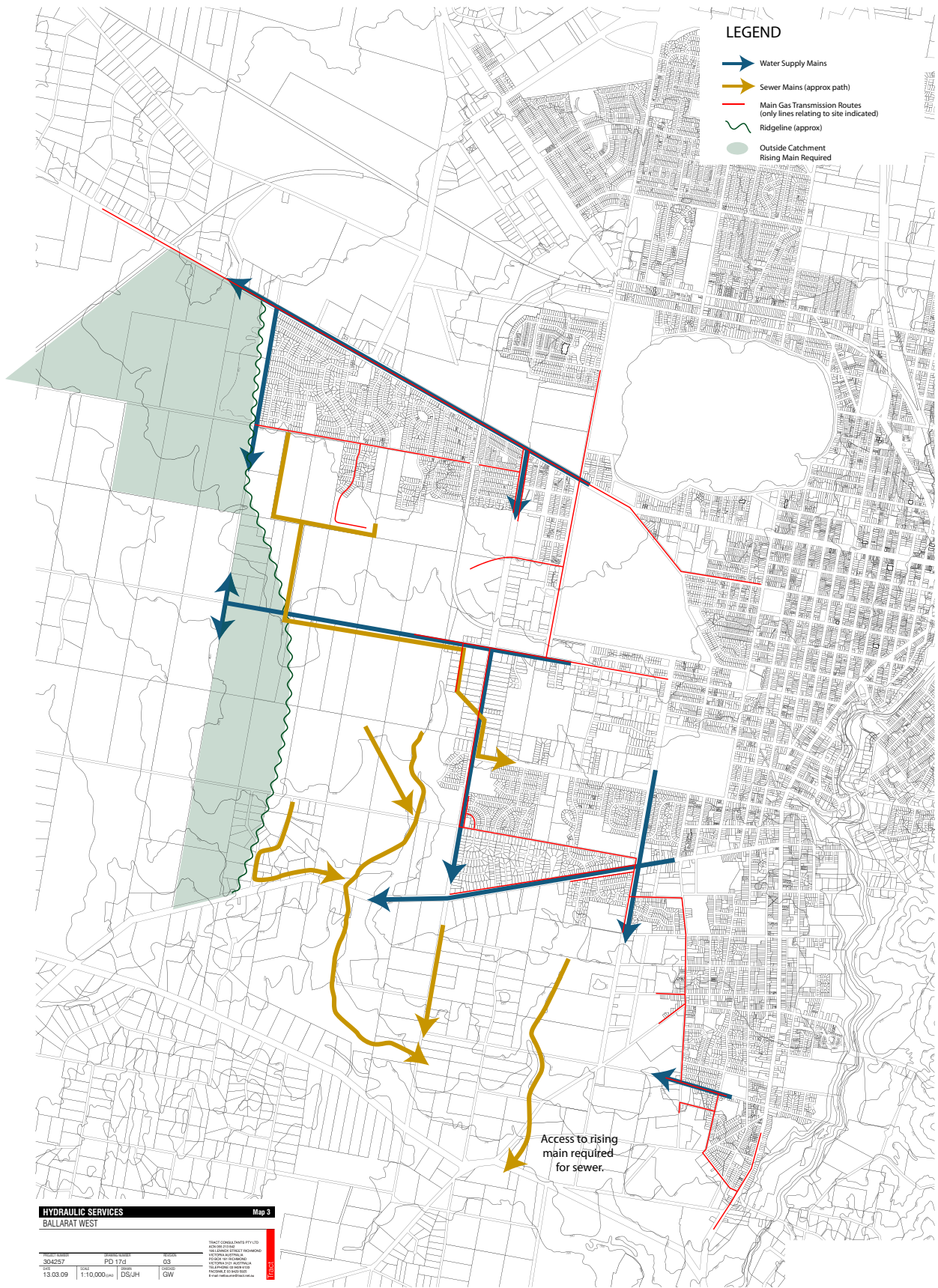
The sewerage network can be extended to serve the plan area and sewerage mains will need to follow natural drainage lines as the servicing network is gravity fed. Sewerage mains will need to extend along Winter Creek and the other south flowing water courses to eventually connect into the Ballarat South Treatment Plant.

Because of the sewerage network is gravity fed some issues will exist in servicing the western portion of the plan area west of the rise generally running north south. Refer to map 3 for details of the likely boundary of the supply areas.

This issue is created because the western portion of the plan falls to a separate catchment and is outside the main likely to follow Winter Creek. This will necessitate the construction of pumping stations and rising mains to cross the higher ground.

4.17 Drainage

One per cent (1%) floodline widths vary from a minimum of 100 metres to 250 metres for most of the creek or watercourse length. As flood mapping is indicative, no firm position on flood levels have been established. It will be necessary, as part of future planning, to determine and map flood prone land in detail.



5 Principles of Ecological Sustainable Development

5.1 Overview

The concept of “Ecologically Sustainable Development” (ESD) is to create urban communities that are as environmentally sustainable as possible. The concept applies to more than the initial observation of protecting biodiversity and ensuring that water quality from runoff is clean but extends to minimising greenhouse gas emissions and utilising less resources overall and makes new communities more socially sustainable.

One way towards achieving the outcome is to ensure that new urban communities have the services they need located within them. This minimises the need to travel long distances by car to access services. Ideally, the provision of local services reduces the need to use the car at all for typical everyday activities.

A permeable transport network, in addition to locating services central to the community is essential.

By providing as much direct access as possible through a developing area, non-car travel becomes more attractive, simply because travel distances are less. Even if a car is used, less green house gas is produced when the street network is more permeable.

The types of services that can be provided at the local level, largely within a walkable catchment but with almost all the housing area within one kilometre includes:

- Sports park
- Preschool
- Community meeting rooms
- Shops
- Primary school
- Local offices and services

The design of new urban communities should be able to respond to a changing demographic. Noticeable in all new urban development is a significant increase in “couple only” and single person households. Ballarat’s household size will decrease (as with the rest of Australia) over coming decades. The .id consulting forecasts for Ballarat indicate an overall drop in household size from 2.51 persons per household in 2001 to 2.28 per household by 2021. New developing areas will average 2.5 persons per household by 2021. This is likely to increase demand for diversity in housing, particularly smaller lot sizes (e.g. townhouses, etc.). Preferably, higher density housing will be located close to services.

5.2 Housing Diversity and Affordability

The trend to smaller household size is driven by the ageing of the population, increasing longevity and the slower rate of younger people forming couples. The reduction in the average number of people in each household requires a wider mix of housing types and a greater number of homes for the same number of people.

Ballarat West will supply sufficient urban extension land over the next twenty-five to thirty years, in an urban structure where the housing choice will more closely match our changing demographics, and where the urban fabric will seek to maximise local jobs and access to them. This increased housing supply, in combination with local jobs, should help to alleviate the problematic costs of housing and commuting.

One of the key contributors to housing affordability is competition. By providing more than one location and more than one developer, a competitive market is maintained. It is important to ensure multiple fronts with multiple developers.

5.3 Community Facilities and Services, and their Locations

Neighbourhood and town centres are distributed so that their local population catchments are large enough to justify the development of community and cultural amenities in locales that optimise access and thereby help develop local social cohesion.

Neighbourhood centres should offer, as a minimum, a local childcare centre or other local community facility and a bus stop.

Depending on the populations they serve, the town centres should support provision of a wide range of community services, including community centres, small libraries, possible cultural facilities and leisure retail businesses.

Regional centres should provide town centre community services and facilities for their own town catchments, plus higher-order cultural and community facilities.

5.4 Schools

Primary schools generally should locate within the neighbourhood, whose populations will generally fill one primary school of about 600 students. This location makes the school highly accessible by walking for the largest number of children (and possibly parents walking their children).

Secondary schools should locate generally within 10 minutes walk from key public transport stops at a town centre. This location is close enough for the students to walk to school from the public transport stop/s, but remote enough so that these eight (8) hectare (DEAT preferred Secondary School size) campuses do not impede walkability for the rest of the pedestrian catchment within a 10 minute walk of the town centre.

5.5 Public Open Spaces

The full spectrum of public open spaces should be provided, distributed and designed to optimise safety within and near them, and access to them, so that they provide for a broad range of community interactions.

Urban plazas provide gathering places in the town centres. Many small playground parks should be distributed across the urban areas such that at least one small park is within a five-minute walk of virtually all residences.

Major existing reserves close to the plan area have the capacity to be enhanced to accommodate much of the recreational needs of the new community. Victoria Park particularly is only partially developed and has the capacity to provide a major, higher order open space facility for the plan area.

Council sports fields should couple with schools for shared usage. Large regional sports facilities should be highly accessible to the user population and locate in flood plains without significant environmental constraints, when available; as such a use need not compete with urban development for land.

Significant creeks should become public parkways, wherever viable, and fronted generally by small streets and/or foot/cycle paths, and overlooked by development. This will ensure the long-term preservation of these important resources for both biodiversity and the community.

Passive surveillance of public open space should be achieved by means of development overlooking all such spaces. Public open space should not be bordered by rear fencing or blank walls. This can ensure safety for individuals within the parks, generally according to the Crime Prevention Through Environmental Design (CPTED) Guidelines.

5.6 Movement Network

The movement network may be the most important factor in ensuring that Ballarat West meets the objectives (as outlined in Part 2) of this Report.

5.6.1 Efficient, Equitable, Achievable, and Sustainable Access

The movement networks for Ballarat West will ensure efficient, equitable, achievable, and sustainable access.

‘Efficient’ means optimised, safe and direct access between points, for all modes of travel including public transport, cycling and walking, so that people who do not or cannot drive have reasonable, efficient and equitable access, and so that travel demand is reduced.

‘Equitable’ means that the movement network will be accessible not just to those of us who can choose to drive, but also for those who do not, for those with disabilities, and for cyclists.

‘Achievable’ means that the State and City will deliver the best possible transport infrastructure that circumstances allow, both for the short term, as well as capacity for significant public infrastructure improvements in the longer term.

‘Sustainable’ means movement networks and systems that are much more energy and resource conserving than current Greenfield development, and which form part of an urban fabric that supports ‘social capital’ as explained above.

5.6.2 Network of “Arterial” Roads “Link Roads” and “Collector” Roads within a Permeable Network

An interconnected network of arterials and ‘neighbourhood connectors’, spaced about 800 metres apart, passes through all town and neighbourhood centres, feeding them with commerce, dispersing traffic and improving access. This network of arterials sufficiently disperses traffic, so that few of them need to carry high volumes at higher speeds. This means these roads can pass through the urban centres, feeding them with custom and optimising access to and through them.

5.6.3 Regional and Local Public Transport

The arterial network will ultimately accommodate local and regional bus services through virtually all neighbourhood and town centres, thereby optimising public transport access and quality of service, while helping to ‘feed’ all these centres.

5.6.4 Optimised and Complementary 'Movement Economies'

'Movement economy' refers to how a destination, such as an urban centre, is located and designed within its movement network environment to take advantage of passing trade.

An urban centre will enjoy an optimised 'movement economy' if:

- the centre is situated to maximise its exposure to traffic coming to it as well as passing through it, and/or
- the centre is highly accessible to its primary catchment, and/or
- when a higher-order destination like a city centre attracts traffic flows toward it, the urban centre locates nearer the 'downstream' end of its catchment to capture more custom en route toward the main city centre.

It is also important for all centres to enjoy an optimal movement economy, rather than for one centre to capture an excessive amount of custom at the expense of other centres in the region.

The network of arterials and collectors spaced about 800m apart, as described, generally delivers both an optimised and a balanced movement economy for all the centres in the system, because the arterials pass through and feed all the centres.

5.6.5 Parallel Routes through Centres

When traffic volumes on an arterial passing through a main street are high (say, in excess of 15,000 vehicles per day (vpd)), and when that arterial passes through a slow-speed main street segment in a town centre, continuous secondary parallel streets ('parallel routes') should be positioned one street block in, ideally on both sides of the main street. This condition disperses the traffic, and allows local traffic to avoid the main arterial when travelling parallel to it. This dispersion of the vehicular traffic will generate several benefits:

- It will decrease the traffic volume on the main arterial, so that it can function well as an ideal two-lane main street with parallel parking along both sides, street trees and wide footpaths.
- The increased traffic volume along the secondary streets through the town centre will encourage secondary businesses to locate on these parallel routes, and thereby deepening the town centre beyond a thin ribbon along the main street only.
- These parallel routes will offer ideal cycling routes along the lower-speed secondary street carriageways themselves, either replacing or supplementing cycle paths in the travel lanes of the main street.

Thus this complex and permeable movement network delivers benefits at all scales to the community, the environment, and economics alike.

5.7 Energy efficiency, Conservation and 'Sense of Place'

Sustainable Urban Development should seek to conserve energy, water and other resources. It should also preserve and celebrate its habitat and built heritage wherever feasible, in order to ensure an urban environment that is 'of its place'.

In future urban areas, this does not mean maximising the land set aside for environmental or cultural protection. Rather, this means balancing urban sustainability with environmental protection, by making appropriate trade-offs to ensure that core urban areas, and most public transport catchments, are not compromised by extensive environmental areas, and that important environmental assets are not compromised by urban development. In Ballarat West, extensive environmental areas, such as Winter Swamp, do not form part of the plan area.

5.7.1 Energy Consumption

The mixed-use urban structure and highly connected movement network of the Ballarat West will significantly reduce energy consumption by means of reducing travel demand.

Lot orientation for solar efficiency is also important to conserving energy. As illustrated in Clause 56 of the Ballarat Planning Scheme, Government will ensure the finer grained street and lot design, so that most lots are well-oriented for solar efficiency, except where other parameters need to be accommodated as well, such as efficient route directions between important destinations to minimise travel distances.

Buildings themselves also should conserve energy far better than most current Greenfield development in Ballarat.

5.7.2 Water Supply

Urban design of new areas can also influence the amount of potable water that is required by a community, and any opportunity to utilise recycled water in residential/industrial areas should be explored. Ballarat City Council is actively seeking to develop alternatives to the use of potable water and all new initiatives proposed should be encouraged in new urban development.

5.7.3 Water Quality

Water-sensitive urban design techniques and technical solutions are also available to ensure that stormwater runoff is cleansed to a high standard before entering streams. Land required for water quality treatment in the Growth Area should be undertaken as a regional approach set aside at low points and beside streams.

Principles under the banner of 'water-sensitive urban design' are now widely practiced, and Ballarat West will incorporate water sensitive urban design techniques.

5.7.4 Habitat and Biodiversity

Ballarat West contains significant conservation values along its creek systems. To achieve sustainable urbanism, a balance is required between urban and natural habitat priorities, to their shared long-term benefit.

6 Defining the Growth Area Plan

6.1 Consultation and Design Processes

The preparation of this plan commenced in November 2004. Key community consultations were carried out including:

- December 2004 - community consultation and scoping workshop
- April 2005 – Steering committee appointment, public information session, “Inquiry by Design” workshop
- May 2005 – presentation of scenarios to Ballarat City Council, appointment of Community Advisory Panel, release of two scenarios in a brochure for public comment
- June 2005– consideration of public comment on proposed scenarios in selecting preferred development scenario
- September 2005 – Draft Local Structure Plan (LSP) on display for public comment. Submissions received and considered.
- December 2006 – Steering Committee / Council workshop to review final draft of LSP.

The Local Structure Plan was directed by a Steering Committee established by the City of Ballarat. The steering committee comprised City of Ballarat Councillors and Council Officers, as well as, representatives of local servicing authorities, Golden Plains Shire and relevant State Government departments.

Following the public meeting and presentation of ‘discussion scenarios’ on the evening of Tuesday 5th April 2005, the steering committee and design team engaged in an intensive three day workshop to refine and enhance the possible development scenarios for Ballarat. Known as the “Inquiry by Design” the workshop brought together infrastructure agencies as well as State and Local Government representatives.

“Inquiry-by-Design” is a stakeholder-collaborative, design-based suite of processes for resolving complex urban revitalisation or town extension projects. Because the factors influencing urban success are highly inter-dependent, the process responds to all project issues and impacts, including environmental, economic and social matters, and at all scales ranging from architecture to the sub-region.

Instead of the conventional planning approach of sequentially reacting to issues or stakeholders, Inquiry by Design simultaneously and integratively tests all issues, in collaboration with locally knowledgeable stakeholders, by means of place-based designing. Place based design is a term used to describe the approach to planning that looks beyond simply land use planning but factors in all aspects influencing a location and will look at what opportunities for design exist.

6.1.1 Outcomes of Consultation and Collaborative Design Processes

The output of the process was two potential scenarios:

“SCENARIO A – Expanded industrial land with medium and long term residential neighbourhood growth in Sebastopol and Delacombe”.

This scenario provided for additional industrial land west of existing industrial land to Dyson Drive. A town centre was provided at the intersection of the Glenelg Highway and Wiltshire Lane. The disused railway line was seen as an opportunity for a new connector road.

“SCENARIO B – New retail and commercial centre to the west of the existing industry with public transport route on disused saleyards rail reserve”. (See Appendix 4: Development Scenarios from Workshop)

This scenario proposed a town centre adjoining the existing industrial land with new residential land to the west, north and south. A small retail centre was proposed at the intersection of Wiltshire Lane and Glenelg Highway. The disused rail reserve was proposed to be retained for future public transport.

6.1.2 Other Options

In addition, as part of the Inquiry by Design, considerable investigation was undertaken into the expansion of Alfredton further to the west, including a preliminary yield analysis and road pattern.

6.1.3 Response

Following informal exhibition in October 2005, the submissions received were considered and the LSP altered to reflect a new option. This proposal, for what is termed Alfredton West, is consistent with one of the options investigated in the Inquiry by Design.

Further discussion with Central Highlands Water indicated that the area could be serviced with water and sewer, with any sewerage system west of the “ridgeline” requiring rising mains. This option has been identified as “Scenario C”.

“SCENARIO C – Further development west of Dyson Drive with limited additional industrial expansion along Carngham Road and the balance of western Carngham Road to remain zoned Rural until additional work is undertaken to assess the most suitable development in this area.

The final LSP (Scenario C) as presented adopts some of the common elements of Scenarios A and B and recognises that there is some current uncertainty regarding the need for more industrial land in the area and also a need to accommodate buffers to existing and future industry. The plan therefore allows for limited expansion of the industrial area, in response to outcomes of the draft “Ballarat Industrial Strategy”.

The final LSP deviates from the exhibited options in Alfredton, responding to the enhanced potential for westerly growth, while recognising the limited potential for industrial growth. Otherwise, the Delacombe and Sebastopol options remain essentially unchanged.

Note: References to the Local Structure Plan (LSP) within this section relate to earlier stages of the preparation of the Ballarat West Growth Area Plan.

6.2 Input by Agencies

Key agencies involved in the design workshop or approached as part of the preparation of this plan were:

- Department of Sustainability and Environment (DSE)
- Central Highlands Water
- Vic Roads
- Department of Education and Training
- Telstra
- Golden Plains Shire
- Department of Primary Industries
- Corangamite Catchment Management Authority

The agencies participating in the workshop provided technical advice with regard to infrastructure and servicing. This enabled the development of a concept for providing physical infrastructure to the area (water supply, sewerage, telecommunications, roads and gas). This concept informed the consideration of the Growth Area boundaries and more specific demographic modelling and social services planning.

A key benefit of the plan is the designation of an urban growth direction, including likely timing of development, which will enable the agencies to develop detailed infrastructure delivery plans.

7 The Growth Area Plan – Key Drivers

7.1 The concept

The Ballarat West Growth Area Plan gives clear guidance as to where future urban growth should be directed. The plan area is large, occupying approximately 18 square kilometres which can potentially accommodate a population in the order of 40,000. It is therefore a plan for Ballarat's growth for more than thirty years. The plan identifies a predominantly residential growth front.

The plan provides a direction for development as distinct residential neighbourhoods based on town centres providing a mix of uses including retail and social infrastructure.

7.2 Principal drivers of the plan

The plan presents a predominately residential growth front for Ballarat with flexibility for expansion of the industrial area in Alfredton and Delacombe.

The plan recognises the limited, detailed analysis of infrastructure needs. While detailed planning of service provision is likely to be more responsive to this Growth Area Plan, the key servicing agencies have confirmed that the plan area can be serviced.

The plan is a strategic direction that provides the basis for more detailed planning by agencies, council and the private sector.

Key Drivers for the Ballarat West Growth Area Plan are:

- ensuring a continuous supply of appropriately zoned residential land;
 - the need to build sustainable new communities with a sense of identity;
 - providing central activity hubs or “town centres” for detail, services and recreational needs;
 - should provide for a range of open space types of accessible locations while recognising the proximity of existing open space assets;
 - placing major services and activity areas on a potential public transport route;
 - recognising that road based public transport is the likely option to serve the plan area;
 - protecting existing industrial operations from potential conflict;
 - that the study area has limited constraints to development and is largely capable of accommodating urban growth;
 - that the study area is of a size that would enable sustainable communities to develop around Alfredton and Delacombe. The objective being to reach a critical population size to support retail, schools and other services; and
 - to encourage higher density residential development through a diversity of housing product to meet the community's changing needs.
- to consolidate previous incorporated and implemented planning strategies;
 - acknowledging areas with qualities which have historically attracted residential development and promoting similar areas for future residential development;

7.3 Flexibility of the plan

The plan must be applied over time having regard to any new policy, standards for infrastructure provision and a greater understanding of the needs of development as it occurs. This ultimately will influence more detailed planning responses. Therefore, changes may be able to be made to the recommended direction of this plan as a result of more detailed planning where that change can be justified with new evidence and upon a more detailed understanding of key opportunities and constraints.

This plan should function as a policy direction and guideline for development and as such will need to be applied flexibly. The plan will also provide a basis for long term infrastructure planning by agencies and may need to be modified to respond to this.

8 Land Budget

The land budget represented in **Table 1** provides an indication of total site area and area occupied by proposed urban land uses within the defined plan area. The allocation of area to land use is indicative and subject to refinement over time as a result of more detailed assessments of constraints e.g. detailed flood mapping etc.

This land budget does not recognise all constraints that can be anticipated in new urban development, such as, local drainage, overland

flow paths and possible easements as detail due to the location and size not been identified.

The table is a representation of land taken up in response to the Growth Area Plan. The primary purpose is to understand land take up by key distinct land uses. The principle purpose is to inform further modelling of population for the plan area as a basis for infrastructure planning.

Table 1: Land Budget - Growth Area Plan

Locality	Gross Area (ha)	Open Space Active*1 (ha)	Open Space (one ha local parks)	Other Open Space to 5%	Schools (ha)	Community (ha)	Main Roads (approx ha)	Below 1% flood line (approx) Average 175m width Creek	Net developable area in hectares
Alfredton	321	10	5	1	3.5	-	8	-	293.3
Alfredton West	288	5	6	3.4	11.5	0.7	4.8	-	256.6
Delacombe North	374.5	5	5	8.7	3.5	-	7.2	31.5	313.6
Delacombe South	508	10	7	8.4	15	0.7	5.6	41	420.3
Sebastopol	205	-	4	6.25 ^{*2}	-	-	7	26.25	161.5
Total Residential	1696.5	30	27	27.75	33.5	1.4	32.6	98.75	1,445.5
Industrial	207	-	-	2.5 ^{*3}	-	4	30	170.5	
Total	1,903.5	30	27	30.25	33.5	1.4	36.6	128.75	1,616

Note:

- *1 Does not include existing M R Power Park in Sebastopol or Victoria Park, both of which have capacity to provide for the plan area.
- *2 Sebastopol open space contribution above local parks could be taken as a cash contribution towards development of M R Power Park. This would increase potential developable land.
- *3 A 20 metre wide linear reserve adjoining industrial area.
- *4 Provision of open space of up to ten percent (10%) of unencumbered land may be required to meet the Strategic Directions of the Ballarat Open Strategy 2008 and the standards of Clause 56 of the Ballarat Planning Scheme.

9 Demographic Forecast

The table at **Table 2** represents a total land area and population forecast by neighbourhood. Assumptions for population are based on the 2021 forecasts by .id Consultants of 2.5 persons per household at densities of between 10 and 12 dwellings per hectare.

Specifically, with regard to density it is assumed that the existing developing neighbourhood of Alfredton and Sebastopol will continue at densities of about 10 lots to the hectare given the advanced state of planning, while future residential areas will achieve higher gross densities of at least 12 dwellings to the hectare or more.

Opportunities to achieve higher densities are more likely to be achieved in areas not yet zoned for urban purposes. Higher density should be encouraged through the Development Plans specifically to include directions for medium density development around the township precincts.

The 12 lots per hectare is an estimate only and it is expected that over time, as the housing market is influenced by demographic changes in household structure and size, higher densities could be achieved.

Note:

The plan forecasts growth beyond 2021 utilising the 2021 household forecast by .id Consulting.

Table 2: Population and Lot Yield by Location for New Development

Location	Area (ha)	Lot Yield*	Population @ 2.5
Alfredton (Undeveloped Land as at 2001)	106	1,272 (12 to ha)	3,180
Alfredton West	256.6	3,080 (12 to ha)	7,680
Delacombe North	313.6	3,763 (12 to ha)	9,408
Delacombe South	420.3	5,045 (12 to ha)	12,610
Sebastopol West	161.5	1,615 (10 to ha)	4,040
TOTAL	1,258	14,775	36,918

*Note:

Council has adopted the recommendation contained in the Panel Report for Ballarat Planning Scheme Amendment C117, that residential densities across the Growth Area should be an average of 15 dwellings per hectare.

10 Building a Sense of Community

10.1 Overview

The Growth Area Plan presents a design that focuses on developing a sense of community through a hierarchy of centres to service a predominantly residential urban area. The response is spatial, responding to the physical dimension of urban development and does not represent any social capacity building of the new community. The underlying premise is to provide opportunities to minimise car based travel, encourage pedestrian activity, to provide services within close proximity to a residential population and provide a range of living opportunities. Areas of traditional demand have also been carefully assessed in the provision of new residential areas.

This is undertaken through a number of different mechanisms.

Central to the concept is the walkable catchment. Generally 400 – 500 metres has been identified as an appropriate distance.

This is the distance people are typically prepared to walk to access a service or a facility. The types of services provided at this level include local convenience shops, public transport stops and local parks.

The next order of services provision occurs at the neighbourhood level, this is generally an area of approximately 3000 residential dwellings supporting a population of 7000 – 9000 population. This forms the basis for a catchment for a sports facility, primary school and kindergarten catchment. In addition at this level lower order retail facilities become more viable. There would be a number of walkable catchments within each neighbourhood area.

With this concept as a basis for planning the new communities, it is imperative that access through and into the new communities is as easy as possible. This can best be achieved through a permeable street network based on arterial roads, which are served by collector roads at separations of approx 800 metres to one kilometre. These main roads are served by local street networks that provide as direct as possible movement through the urban communities. This permeable street network also provides opportunities for the most direct form of pedestrian movement and a fast and efficient public transport system.

The plan ensures that opportunities for local employment are retained and expanded in the town centres and the expansion of the industrial area.

The plan identifies a range of physical and social infrastructure that will need to be provided to ensure that the new communities are adequately serviced and identify standards for that infrastructure provision, indicative costing and a model for the application of a Development Contributions Plan.

The plan envisages the development of three new neighbourhoods including the expansion of Alfredton and Sebastopol.

ALFREDTON/ALFREDTON WEST

The complete development of Alfredton (including Alfredton West) to a “neighbourhood” of approximately 10,000 population bounded by Remembrance Drive to the north, Learmonth Road to the east is envisaged by the plan. Central to this community would be a neighbourhood retail facility and primary and secondary schools and open space.

It is more appropriate to consider the westerly growth of Alfredton than the South as major hydraulic and transport infrastructure in the north will facilitate this location as a first stage of development. Higher costs will be incurred with commencing development in the south, therefore making it less attractive from a development perspective.

ALFREDTON SOUTH

The existing industry has EPA buffer requirements which have been identified on the plan. In acknowledging the buffer requirements and in planning for more appropriate land use where an industrial buffer exists and to allow, long term for some growth of the employment area, the plan proposes a slight west-ward expansion of the industrial area.

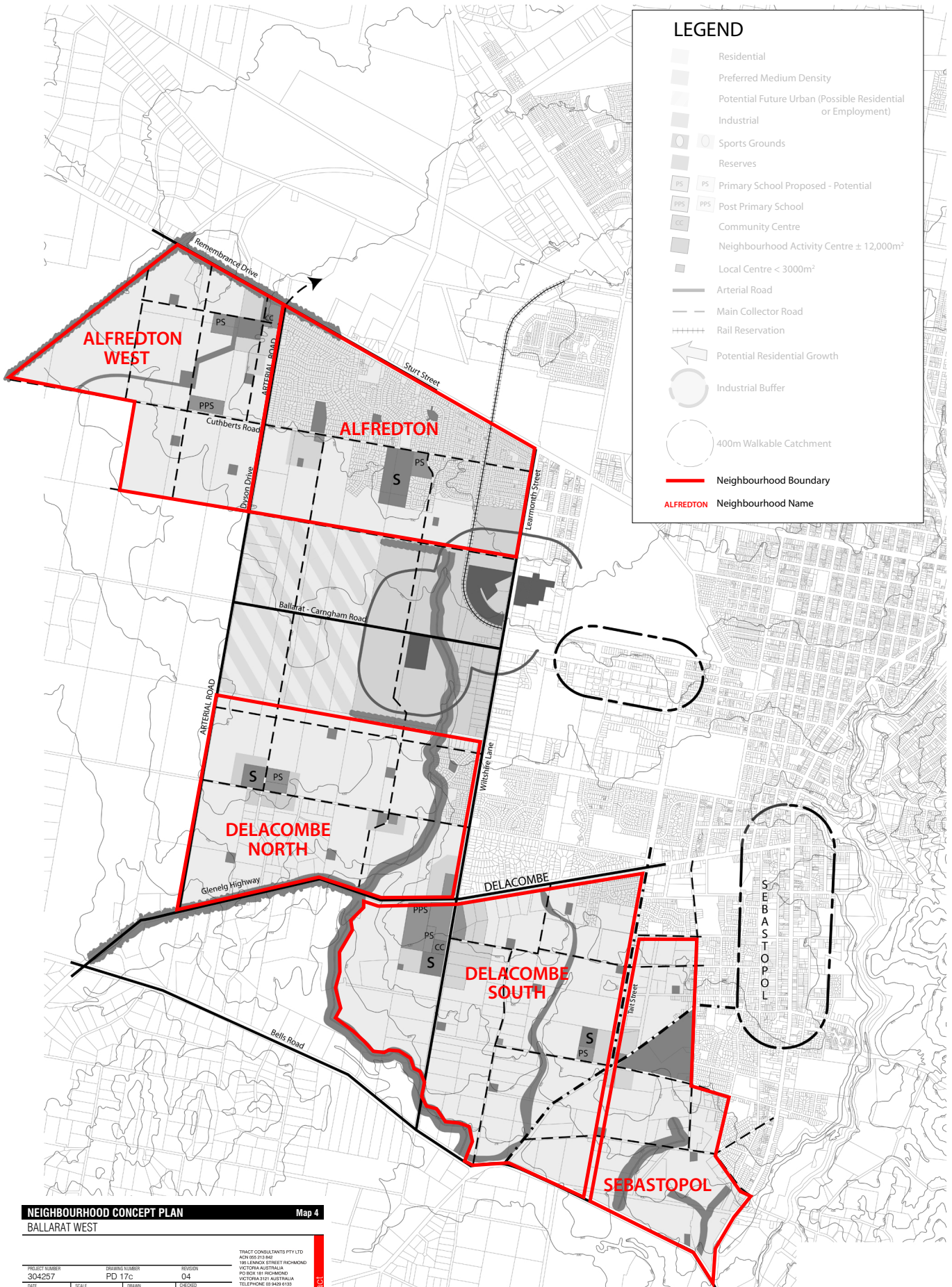
With regard to the balance of the land area south of Alfredton, it is recommended that any future decision on land use be deferred to both the future review of this Growth Area Plan and the industrial land use strategy.

SEBASTOPOL

The expansion of Sebastopol to accommodate a population of approximately 5,000 residents would be strongly reliant upon services in the existing Sebastopol activity centre. It is envisaged that this community will utilise and support the enhancement of social infrastructure already within the Sebastopol, including schools and municipal community facilities. This growth in population should support investment in the upgrading of the M R Power Park for the provision of outdoor active recreation.

DELACOMBE NORTH & SOUTH

The provision of two new residential neighbourhoods both in excess of 7000 population each, north and south of the Glenelg Highway, focused on a new town centre on the intersection of Wiltshire Lane and the Glenelg Highway. Central to each neighbourhood will be higher order active open space facilities, primary school and pre-school based community centres.



NEIGHBOURHOOD CONCEPT PLAN Map 4
BALLARAT WEST

PROJECT NUMBER	DRAWING NUMBER	REVISION
304257	PD 17c	04
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11 Elements of the Growth Area Plan

11.1 Transport

11.1.1 Overview of Transport

The success of a functional and efficient transport network is dependent on the road network, as the provider of the primary public transport, pedestrian/cycle and private transport modes. Ballarat's internal public transport service is provided by bus with no local rail service and trams providing only a tourist function.

Linear trails provide some opportunity for off road cycle movement where residents are within close proximity to the trail but for the most part real commuter movement will utilise the road network.

11.1.2 Road Network

The road network for a new growth front can build upon the existing road network as a basis. Clause 56 of the Ballarat Planning Scheme provides a direction, that when planning for new urban development, arterial roads should generally be separated by approximately a 1.6 kilometres with collector roads approximately 800 metres.

The Ballarat West Transport Strategy (Grogan Richards, 2007) envisages a modified interpretation of this approach responding to both the geography of the plan area and recognising the existing road network.

The plan nominates three road categories. Arterial Roads (identified in Table 3), Link Roads (higher order collectors that provide a cross urban link function), and Collector Roads.

While the existing road network is based on the 1.6 kilometre separation e.g. Carngham Road, Cuthberts Road separation, the network also includes the existing Remembrance Drive and Glenelg Highway which are diagonal roads. The plan presented for the road network seeks to accommodate the Clause 56 principle of separation as much as possible within the constraints provided by the existing network.

The road network is informed by preliminary traffic modelling to determine its place in the road hierarchy. This plan addresses roads only to the arterial road, link roads and collector road level.

Table 3 identifies each of the existing arterial roads specifically and nominates the standards for collector roads including the location and requirement of road reservation provision or widening.

11.1.3 Access to Rail

There is currently no local commuter rail service provided within Ballarat. The provision of the regional fast train to Ballarat CBA will enhance the opportunities for commuter based transport to metropolitan Melbourne and townships on the way to Melbourne and will enhance the role of Ballarat CBA as a transport interchange.

Regional Fast Rail

The recent upgrade of the railway line between Ballarat and Melbourne will be extended to a new railway station to be located north of the Growth Area Plan area near Gregory Street. While this is likely to service the commuting population to Melbourne, the station is likely to form part of the ultimate bus network for wider Ballarat West and integrate with services in the growth area. It has been cited that location was selected because of the growth proposed in Ballarat West.

Table 3: Arterial Roads - Existing and Proposed Upgrades

Road	Existing	Proposed
Remembrance Drive (former Western Highway)	60m reservation 2 lane rural standard	<ul style="list-style-type: none"> - No additional land acquisition - Ultimate 4 lane divided, west of Dyson Drive
Carngham Road	20m reservation Varying standard of construction	<ul style="list-style-type: none"> - No change in response to this plan. Potential long term widening to 40m. - Land acquisition.
Glenelg Highway	60m reservation 2 lane rural standard	<ul style="list-style-type: none"> - No additional land acquisition. - Pavement widening - Tait Street to Midland Highway.
Dyson Drive	20m reservation 1 to 2 lanes rural standard	<ul style="list-style-type: none"> - Land acquisition 40m to west. - Utilise 10m of existing road reserve as service road to existing lots. - Construction of road to 2 lane urban standard.
Learmonth Street/ Wiltshire Lane (north of Glenelg Highway)	Variable widths and construction standards	<ul style="list-style-type: none"> - Carriageway widening.
Wiltshire Lane (south of Carngham Road)		<ul style="list-style-type: none"> - Carriageway widening.

Note: For detail on arterial and collector road standards, refer to “**Ballarat West Local Structure Plan, Transport Infrastructure Planning Strategy**” (Grogan Richards, 2007).

11.1.4 Western Arterial

The Ballarat Road Transport Strategy (Ratio 2007) raises the possibility of an arterial road to move traffic from the Glenelg Highway to the Western Freeway around the outer edge of the urban area. A specific alignment has not been identified but at the time of the preparation of this report is likely to either utilise Dyson Drive (which has the capacity to accommodate projected traffic) or will be sited further to the west. Any decision on this route will be as a result of the separate planning exercise but should not compromise the integrity of this plan.

11.1.5 Transit Corridor/Rail Reserve

A disused branch line exists from Sturt Street through Alfredton to the Ballarat Cattle Saleyards (refer map 4). Such a reservation also provides an opportunity for other forms of transport such as pedestrian and cycle paths. While these options were discussed as part of the workshop informing the development of this plan, none are considered feasible in the short term.

The plan seeks the preservation of the existing corridor for possible long term future transport provision. This would necessitate the management of that reserve in the interim as a linear reserve with an associated pedestrian/cycle track or similar. Regardless of intermediate management, its retention and preservation is recommended as a contingency for long term planning even beyond the anticipated time frame for the development of the plan area.

11.1.6 Bus Routes

The success of public transport within the plan area will depend on the provision of an appropriate bus network.

The arterial road network and collector roads provide the best opportunities for a flexible bus network within the desired 400 metre distance from the majority of residents. For this reason all arterial and collector roads should be designated as possible bus routes. These roads provide the best opportunity of ensuring the separation of services on a grid with approximately 800 metres to 1 kilometre separation. This would allow 90 percent of all dwellings, and therefore all residents, to be within 400 metres of a bus route. The success of the residents' ability to access these bus routes will be determined by the permeability of the local street network.

It is likely that bus routes will vary in response to the gradual growth of the population and its needs over time. For this reason it is not possible to specifically identify bus routes and bus stops at this early planning stage. It is adequate to identify that the arterial and collector road networks will function as the basis for the network with bus stops to be determined as and where services are provided. The locations of these roads conform with the spacing requirements of Clause 56. Specifically bus routes and bus stops should be identified as part of future development plans.

11.1.7 Walkability

One of the fundamental elements to the success of a new community is to ensure that optimum walkability is achieved within new development. This is strongly supported by State policy and through organisations, such as, the National Heart Foundation. Ensuring a permeable street network and the even distribution of local services throughout the new urban area will ensure a higher likelihood of non car based travel.

Provision for pedestrian/bicycle access will strongly relate to local service provision within 400 – 500 metres walking distance of the resident. It is essential that in further refining the provision of local shops, local parks and public transport stops that they are based on the designated walkable catchments identified within this plan.

Subdivision layouts within the Growth Area should provide a permeable local street network which enables convenient access for pedestrians to public transport facilities. A local street network which is based on a broad grid network is best able to achieve the desired level of permeability.

11.1.8 Bicycle Path Network

Cycling is increasingly encouraged as an alternative mode of transport to car use. Most commonly, however, the bicycle is used for recreational purposes. The concept of walkable catchments as outlined in this plan with central facilities provision and permeable street network encourages cycling as a mode of transport.

The road network should provide the opportunity for bicycle use with main roads to provide a dedicated bicycle lane. This should apply to present and future arterial roads and sub-arterial roads.

In addition to the road network, water courses and linear parks provide one of the best opportunities for providing dedicated cycle paths, usually on a shared pedestrian cycle path concept. A reserve along Winter Creek, the main north-south water course through the plan area, can provide this function. Another opportunity exists to link this to the future passenger rail station to the north of the plan area. Alternatively a newly created route through the centre of the plan area should be provided with a dedicated pedestrian cycle path. This provides an opportunity to create an additional transport route off the main roads and a north-south recreational transport link. All water courses and linear parks provide the opportunity to incorporate a linear path network.

11.2 Activity Centres/Town Centres

11.2.1 Traditional Neighbourhood Design Principles

The urban character of Ballarat is that of a regional city. Traditionally urban expansion has been slow and the Ballarat CBA has provided for a significant proportion of retail and services with “big box” and neighbourhood centres in new residential areas, particularly focusing on Wendouree.

The concept of the traditional strip centre with centrally located activities is central to current planning for major urban development across Victoria. Ballarat is in the enviable position of having a higher order activity centre as a CBA central to the urban community. Providing new services for the growth areas should recognise the role of the CBA but ensure local services are provided to the growing communities.

Town centres are more than just retail centres. It is desirable to have new town centres in urban areas function as:

- a community hub;
- social centre;
- places for recreational opportunities;
- a place for employment;
- a transport hub;
- a retail centre;
- a place for other non-retail services (e.g. medical services, child care etc.);
- a representation of place for the surrounding community.

These reflect the mix of uses found at neighbourhood centre level.

The objective is to replicate the success of the traditional strip centre, with a mix of services including retail while providing for a variety of transport modes including the car. This needs to be provided in a hierarchy of centres focusing on the Ballarat CBA as the main centre with neighbourhood and local services provided within the growth area.

Two types of centre are proposed to be provided within Ballarat West. The local centre, within a walkable catchment, and the higher order neighbourhood centre for Delacombe and Alfredton.

11.2.2 Local Centres

Serve small catchments, typically within a walking distance of 400 metres radius for the majority of its catchment. They are composed of, as a minimum, a central local park of 1 hectare, a public transport stop (e.g. bus stop) and a local shop. Local shops are more likely to be provided on the main transport routes through the plan area, located centrally to a large population catchment and co-located with an attractor, such as, a primary school or on a main road.

Local retail centres generally consisting of one to a few shops have been identified within Delacombe North, adjoining the school site, a Glenelg Highway frontage centre, opposite M R Power Park in Sebastopol West and in Cuthberts Road near Dyson Drive.

11.2.3 Neighbourhood Centres

Two neighbourhood centres are proposed to serve the plan area, Delacombe town centre in the South and a new centre in Alfredton.

Delacombe Neighbourhood Centre

This is proposed as the main retail based hub for the two neighbourhoods of Delacombe North and Delacombe South and would function as a higher order neighbourhood centre. The town centre would be located on the Glenelg Highway (predominately to the south) between the two future communities. The concept is to provide:

- a main retail centre of up to 15,000 square metres (this includes a supermarket based centre with speciality shops);
- higher order community centre with – kindergarten – maternal and child health centre – meeting rooms – communal space – public hall;
- a signature park; and
- a gateway entry for Ballarat.

A detailed design will need to be prepared for the town centre which will include:

- intersection of the highway as the main hub or focus;
- a strip centre to the south of the Glenelg Highway on the main north-south collector road;
- section to the north to serve the Delacombe north area for lower order retail need; and
- a community centre integrated with the schools and sports ground to the south of the retail centre.

Schools and open space have been designated on sites that have limited constraints and therefore a higher likelihood of being provided early in the development phase.

This Plan does not provide a detailed design response for the centre. Further planning will need to be undertaken which specifically focuses on the issue of land assembly, a town centre plan and management of the interface between residential and non-residential activity.

Alfredton Neighbourhood Centre

One higher order neighbourhood centre has been proposed for Alfredton with an area of approximately 6,500 square metres of floorspace.

The desirable location in Alfredton is on the northern portion of Dyson Drive near the intersection of Sturt Street.

This “main” town centre should be developed on “traditional neighbourhood design” principles providing a range of services, including retail and community services.

Alfredton is significantly advanced in development and by promoting development to the west of Dyson Drive provides the distinct advantage of being able to centralise the neighbourhood centre.

Regardless of the pace of growth, a supermarket based centre is needed in the short term for the existing Alfredton community (Essential Economics, 2006).

In addition to the retail component, the centre should incorporate:

- Council community centre site of 0.7 hectares
- Local “feature park” for the town centre
- Protection and enhancement of the Avenue of Honour

11.2.4 Other Centres

Ballarat CBA

The Ballarat CBA is the single higher order centre for Ballarat providing local retail and services for its immediate catchment and the main retail, services, recreation and employment node for the whole of Ballarat.

Cuthberts Road

The size of the retail component of this centre will be the subject of further investigation but should range between 2,300 and 3,700 square metres.

In addition to the retail component, the centre includes:

- Community centre site of 0.7 hectares – community centre able to be built in stages.
- Local “feature park” for the town centre

Table 4 indicates a likely hierarchy of retail floor space components for nominated centres within the plan area. The provision of local centres will be better able to be confirmed at development stage.

11.2.5 Higher Order Service Provision

The development of this growth area will most likely see the City of Ballarat reach a population of more than 130,000. The Ballarat CBA and existing service areas will still perform the function as the main centre for population of that size, especially for higher order retail and medical services, and other services provided for the urban community.

Table 4: Likely Floor Space Need: Centres

Location	Retail Floor Space
Alfredton	6,500 sqm
Alfredton – (Cuthberts Road)	up to 3,700 sqm
Delacombe North x2	1,000 sqm – 1,500 sqm
Delacombe Town Centre	15,000 sqm
Sebastopol West	up to 1,000 sqm

11.3 Social Infrastructure

11.3.1 Overview

The plan area provides an additional population up to 40,000 to the City of Ballarat. This will require considerable upgrading and provision of new social infrastructure facilities and involve the provision of additional State Government infrastructure, local infrastructure and private facilities.

The term social infrastructure is broad but it generally refers to the provision of support services for the local community e.g. schools, kindergartens etc. This also extends to the provision of medical facilities and private recreation facilities.

Table 5 identifies a range of government infrastructure normally provided to new communities, the ratio of provision to population and number of facilities required for the plan area. The ratios are indicative only due to a lack of specific modelling for Ballarat. They

have been drawn from ratios of facilities to services applied in growth area planning throughout Victoria. The ratios contained in planning in the municipalities of Wyndham, Cardinia and Whittlesea have been applied to Ballarat West based on similarity of neighbourhood size and principles.

Sources:

- Department of Education and Training Standards
- City of Ballarat – Child care provision and opportunities in the Ballarat area (Community Child Care 2003)
- VicUrban (Aurora Development Plan)
- “Wyndham City Council Community Centre Policy” and support analysis (ASR 2005).

Table 5

Facility	Ratio to Population	No. of Facilities Required	Site Area (ha)	Comments
State Primary School	1:8,000 – 9,000	4	3.5	Includes existing Alfredton school
Catholic Primary School	1:18,000 +	2	Variable – 4	Existing Catholic schools may be able to absorb some demand.
State Secondary School	1:20,000 – 25,000	2	8	
Pre school	1:7,000 – 9,000	5	NA	Integrated community centre with two child care and maternal and child health centres in addition to higher order services – serving a population of 16,000 to 20,000 population each. Centres will be co-located with the two main town centres. Site area of 0.5 to 0.7 hectare.
Maternal & Child Health Rooms	1:7,000 – 9,000	5	NA	
Meeting Rooms	Variable	-	NA	
Adult Education	Variable	-	NA	
Youth Facility	1:16,000 – 20,000	2	NA	
Aged Care	1:16,000 – 20,000	2	NA	
Space for outreach services	Variable	-	NA	
Public Hall (300m ² - 400m ² min.)	1:16,000 – 25,000	2	NA	
Libraries	Variable 1:40,000 – 50,000 (min.)	NIL	-	

11.3.2 Schools

Primary Schools

The Department of Education and Training has a minimum standard of one primary school per 2,500 households, however, a preference exists to provide schools to serve catchments of approximately 3,000 households.

Two schools exist within proximity to the growth area with the capacity to accommodate some of the growth (Alfredton and Delacombe primary schools) and some absorption will occur by existing schools in the Sebastopol area.

The plan area will necessitate the provision of four additional primary schools, one potentially in Delacombe North, two in the Delacombe South/Sebastopol area and one in Alfredton West. The existing primary school in Alfredton has the capacity to serve forecast growth for that catchment.

Primary schools have particular locational requirements which include:

- location central to their catchment;
- located on collector roads with three street frontages;
- co-located with council sports facility; and
- a site area of approximately 3.5 hectares.

Secondary Schools

The provision of state secondary schools is traditionally at a ratio of 1 to 8,000 households, minimum, but a ratio of 1 to 10,000 households is preferred. Existing secondary schools will be able to absorb some of the proposed growth, e.g. Ballarat High School for Alfredton and Sebastopol Secondary College for Sebastopol and parts of Delacombe.

Two new secondary schools are likely to be required. An additional secondary school is likely to be required for Delacombe (combining catchments of Delacombe North and South precincts) and a new secondary school for Alfredton North, which will also serve the existing community.

Secondary schools have the following locational requirements:

- Central to catchment area;
- Located on collector roads and public transport routes with three street frontages; and
- Site area of approximately 8 hectares.

In planning secondary schools, it is also relevant to include a proportion of the catchment extending into the rural hinterland. In the instance of Ballarat West, much of this is rural living.

Changing Standards of Provision

The Department of Education and Training (DEAT) is shifting from the traditional model of provision of primary schools (years 1-6) and secondary schools (years 7-12) with options for also providing a 3 tier system of primary, junior secondary and senior secondary or a year 1 to 9 primary (p9 school) and smaller secondary schools serving larger catchments (years 10-12).

DEAT have not confirmed the type of school provision intended for Ballarat West. Forecast provision within this plan has been based on the traditional model.

Non Government Schools

Most non-government educational providers respond to demand from significantly larger catchments than the government sector. The Catholic Education Office is the only provider of private facilities to have developed standards.

Catholic school standards are provided at a ratio of about 1:2 for government schools.

Several Catholic schools exist within Ballarat and several are within proximity to the growth area. The proposed growth is significant enough to warrant some increase in service provision, and at least an additional Catholic school should be considered for Delacombe, central to the catchment area.

11.3.3 Council Community Centres

There are various models for the provision of community facilities and services provided by Council community centres. Traditionally local government provides kindergartens (pre-school) maternal and child health facilities, meeting rooms, public halls and venues for adult education with services. Traditionally councils have provided kindergarten based centres to serve populations of approximately 7,000 – 9,000 (equal to one to three thousand households or approximately 1 neighbourhood).

Increasingly within metropolitan Melbourne, larger centres are provided serving larger communities combining a higher order range of services. Incorporating two pre-school centres on one site and providing other floorspace allocated at a higher standard. This includes adding a public hall component and dedicated floorspace.

The ultimate dedication of floorspace to each land use will need to be the subject of a more detailed Ballarat specific analysis prior to design of buildings.

The plan makes the assumption that Community centres will be pre-school and maternal and child health centre based. The Growth Area Plan identifies four residential neighbourhoods, each constituting a pre-school catchment. This provides a basis for the identification of centre location and sizes.

The elongated nature of the plan area provides up to four distinct neighbourhoods with two located in the north and two in the south. An alternative option exists to provide two higher order centres with two kindergartens each. This may provide better economies of scale and provide enhanced facilities in each of the town centres.

Key locational criteria for centres includes:

- Located as central as possible to catchment
- Located on a higher order road/bus routes
- Co-located with a town centre or open space
- Forms part of a community hub

Table 6 presents key elements provided under each of the options.

The plan applies the integrated community centre concept. The key advantages are:

- enhancement to town centres;
- wider range of uses able to be accommodated on one site;
- more effective centralised management of centres;
- economies of scale in construction and management; and
- located on public transport route destination.

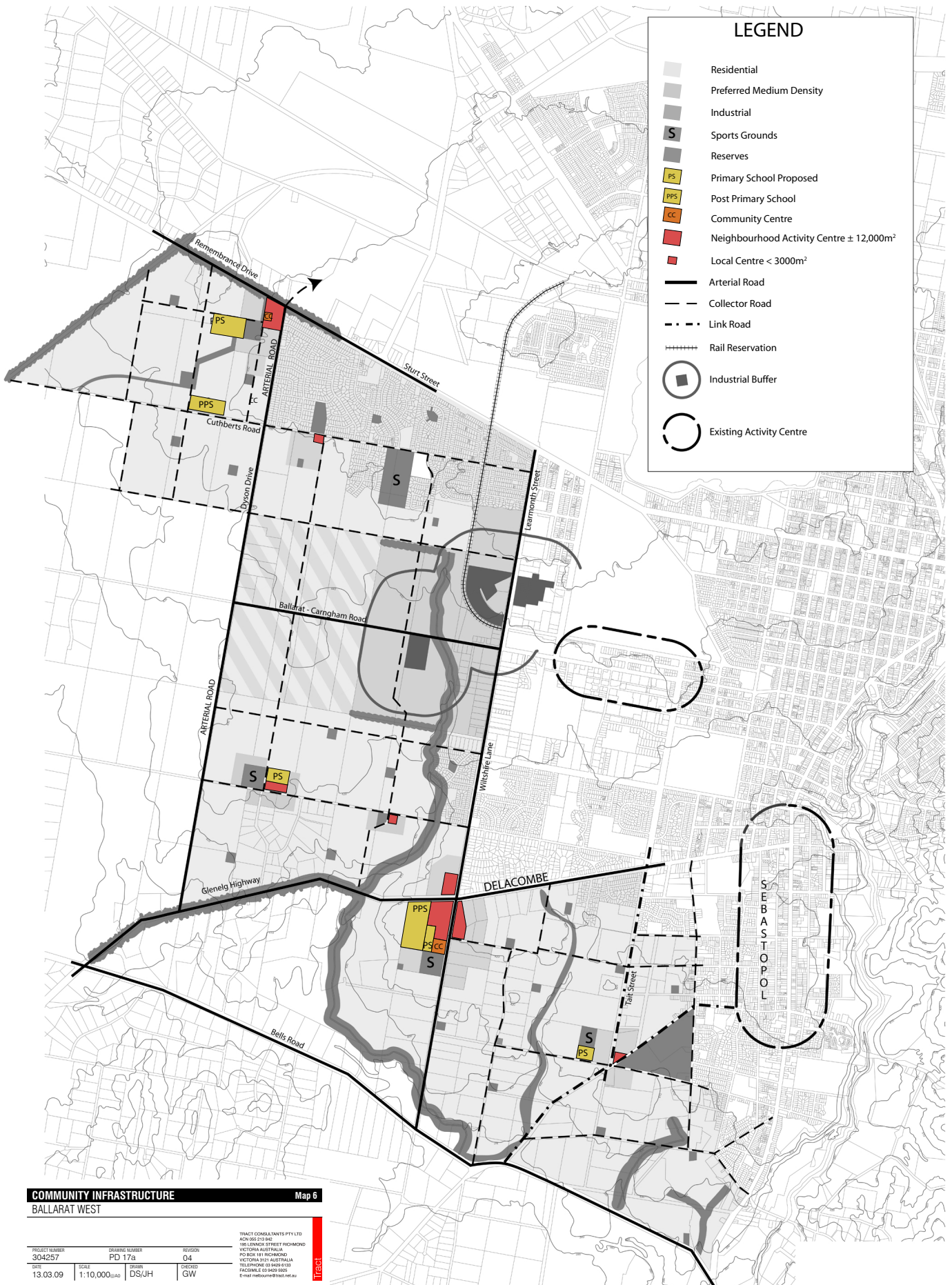
The two sites nominated for the integrated community centres are:

Alfredton West

An option exists to integrate the community centres with a proposed retail activity centre on Dyson Drive/Sturt Street. Given the role and function of the town centre, the community centre could be located at the existing recreation reserve on Cuthberts Road. Specific sites for the centre will need to be further refined in association with detailed planning for the neighbourhood centre precinct, to ultimately determine the centre site.

Table 6: Community Centre Models

Facility Type	Preschool based centre (4 to be provided)	Integrated centre (2 to be provided)
Facilities	1 preschool 1 M & CH Meeting rooms Office and kitchen Storage space	2 preschools 2 M & CH Multi purpose meeting rooms (adaptable floorspace.) Adult education/craft rooms Commercial kitchen Public hall
Floor Area	700 sqm – 800 sqm each	1,500 sqm each
Site Area	0.4 hectare each	0.6 hectare each



Delacombe

A longer term priority than Alfredton, a community centre site will need to alternate with the activity centre and should form part of any integrated design for the township when it occurs.

Sebastopol

New residents in the Sebastopol area are likely to integrate with the existing Sebastopol community, which will necessitate the upgrading of existing community facilities within Sebastopol rather than the provision of a new community centre building. The population growth will necessitate the provision of an additional kindergarten and maternal and child health centre plus public space. A further investigation into opportunities for providing improved services needs to be undertaken for Sebastopol.

11.3.4 Other/Private Services

The future community in Ballarat West will generate demand for a diverse range of services. It is not possible to forecast with any certainty exactly what those services will be as this will largely depend on the needs of the community at the time and the ability of the market to respond to those needs.

However, a community of this size would typically generate demand for medical facilities, both general practitioners and specialists, recreational facilities and services and home based services. This Plan does not need to specifically refer to locations for this range of services as this will largely be delivered on an as needs basis. The main activity centres provide an opportunity to enhance the role and function of that centre with the provision of medical facilities and services and other non-retail based private facilities.

11.3.5 Higher Order Community Facilities

A large range of Council and Government provided services will need to be enhanced to serve this community, including swimming centres, local libraries, etc. The growth area in itself does not reach critical mass for the specific provision of any one of these services based on current known standards. A contingency should be made for the possibility of providing the facilities in association with the main town centre, however, the existing Ballarat urban area provides these services. Without further detailed investigation it is not possible to specify exactly what higher order services are needed and whether these need to be provided specifically for the growth area or as enhancement to existing services. This should be a priority for further planning for the growth area.

The Ballarat "Child care provision opportunities in the Ballarat area" report (2003) estimated demand for long day care to increase by approximately 150 EFTs to 2021. This applies particularly to long day care and private child care facilities. The trend is indicative for kindergartens and municipal services.

Overall demand is anticipated to remain relatively static due to the balance of ageing population in established Ballarat and demand increasing in the new growth areas.

This may suggest a revision of service provision of existing centres and the development of new child care facilities in the new growth areas.

The Growth Area Plan addresses urban growth beyond previous forecasts to 2021 and service provision will need to be planned in detail in response to this plan.

11.4 Open Space and Sports Provision

11.4.1 Overview

In planning for urban growth it is important to provide adequate open space, including active open space and sports facilities. This includes both outdoor and indoor facilities.

The Subdivision Act 1988 allows for a maximum of five percent (5%) of the developable area to be allocated as open space as part of the approval of subdivisions. Clause 56 of the planning scheme provides only limited direction on open space provision with a guideline for provision of local parks (of 1 hectare minimum area) to be within a walkable catchment of 400 metres from all new dwellings. Only a notional direction on active open space is provided.

As part of the planning for Ballarat West it is important that clear direction is provided for the provision of:

- major parks and sports facilities;
- local parks;
- indoor facility needs; and
- method of acquisition and land assembly.

The Ballarat Open Space Strategy states in its opening paragraph “The City of Ballarat arguably boasts the largest amount of open space, per head of population, in Victoria.” (p1, Ballarat City Council: 1998). The strategy provides a basis for planning open space provision. In planning for the significant growth forecasts in this plan, the above observations should be taken into consideration but matched with:

- the need to provide local parks close to all residents;
- the need for sports facility provision to be close to the catchment community;
- reduce the need for all active open space to be provided as part of development by co-locating and sharing sports grounds with schools;
- recognition that much of the existing open space in Ballarat is not within close proximity of the plan area; and
- much of the existing open space consists of large, passive parks.

Note:

Provision of open space of up to ten percent (10%) of unencumbered land may be required to meet the Strategic Directions of the Ballarat Open Space Strategy and the Standards of Clause 56 of the Ballarat Planning Scheme.

11.4.2 Distribution and Management of Open Space

Clause 56 and the provisions of the Subdivision Act 1988 provide a minimum standard and direction for the provision of open space within new development.

In most new urban growth areas, open space provision is higher than five percent (5%) due to the need to provide adequate open space for sports facilities and well distributed local parks. Ballarat is in the process of planning for open space provision. Options for providing for possible additional active open space over and above what is identified in this plan includes the utilisation of capacity in existing reserves or providing an additional higher order sports facility.

Subject to any future review of Council's open space needs, the five percent (5%) open space contribution required under the Subdivision Act should be adequate to provide open space needs of the growth area providing that contributions are used to assemble and provide open space in the appropriate location in accordance with this Plan.

In attempting to provide adequate distribution of open space each stage in the planning process will need to specify in increasing detail, how open space will be provided. Contributions to open space will need to be managed to ensure the distribution identified in the Plan is realised.

The plan presents a hierarchy of open space reserves from notional locations of one hectare local parks, higher order open space and sports fields to utilisation of floodway and undeveloped areas with some recreational opportunity.

11.4.3 Local Parks

Ratio of Provision

To provide an opportunity for passive recreation (walking, kick to kick, playground, BBQ, picnic, sitting area) generally within 400 metres of most residential dwellings.

Clause 56 of the Ballarat Planning Scheme recommends that parks of approximately one hectare in area should be located within 500 metres of all residences, although standards currently being provided in new development vary widely (e.g. from 0.7 hectare to 2+ hectares). Parks should have regard to any natural features on the site, including remnant vegetation and exotic plantings that may enhance the design and appearance.

Application within the Plan

The objectives of Clause 56 are supported and notional locations for one hectare parks have been identified based on walkable catchments. The specific siting and detailed planning of local parks should be refined as part of subsequent planning stages and should generally be distributed as shown in the Growth Area Plan maps.

11.4.4 Sporting Facilities

The City of Ballarat does not have specific standards for the provision of active open space, however, there are standard practices in siting and designating areas for future sports facilities. These include:

- The site must be large enough to accommodate sports fields and ancillary uses, e.g. tennis courts, club house facilities, car parking, etc. This usually requires a minimum site area of 3.5 hectares for a football/cricket oval without any major embellishments.
- Facilities should be central to their catchment population.
- Where possible sports grounds should be co-located with schools.

Ratio of Provision – Outdoor Sports Facilities

Standards of provision throughout Australia and even Victoria vary, with standards currently being applied to several growth fronts within metropolitan Melbourne varying considerably. For example the ratio of football/cricket oval to population provision varies from 1:2,500 to 1:5,450.

At the time of preparation of this plan, VicUrban have proposed ratios of provision to the Aurora development in Whittlesea, which has utilised the standards generally applied across the Whittlesea/Plenty Valley growth corridor. **Table 7** below identifies the ratio of facility provision to population, and calculates the number of facilities required for the forecast population in the Ballarat West growth area.

As a result, higher order sports facilities may be provided in addition to local sports. An assumption made at the time of this plan's preparation is that additional potential at Victoria Park could be utilised or an additional dedicated regional facility.

Table 7: Standards for sports facility provision

Facility	Ratio to Population	Within plan area	Site area per facility
VicUrban Standard Outdoor			
Football Cricket	1:5,450	8	3.5 hectare (3 hectare if co-located)
Soccer	1:6,400	7	2 hectare (1.6 hectare if co-located)
Tennis Courts	1:2,140	20	E0.1 hectare each
Miscellaneous (Basketball, Hockey etc)	1:20,000	1-2	1 hectare
Lawn Bowl Green	1:20,000	1-2	Variable
Indoor			
Basketball	1:4,720	9	
Netball	1:4,720	9	Variable
Aquatic Centre	1:60,000+	Nil	4 per 1 hectare indoor facility
Fitness Centre	1:60,000+	Nil	

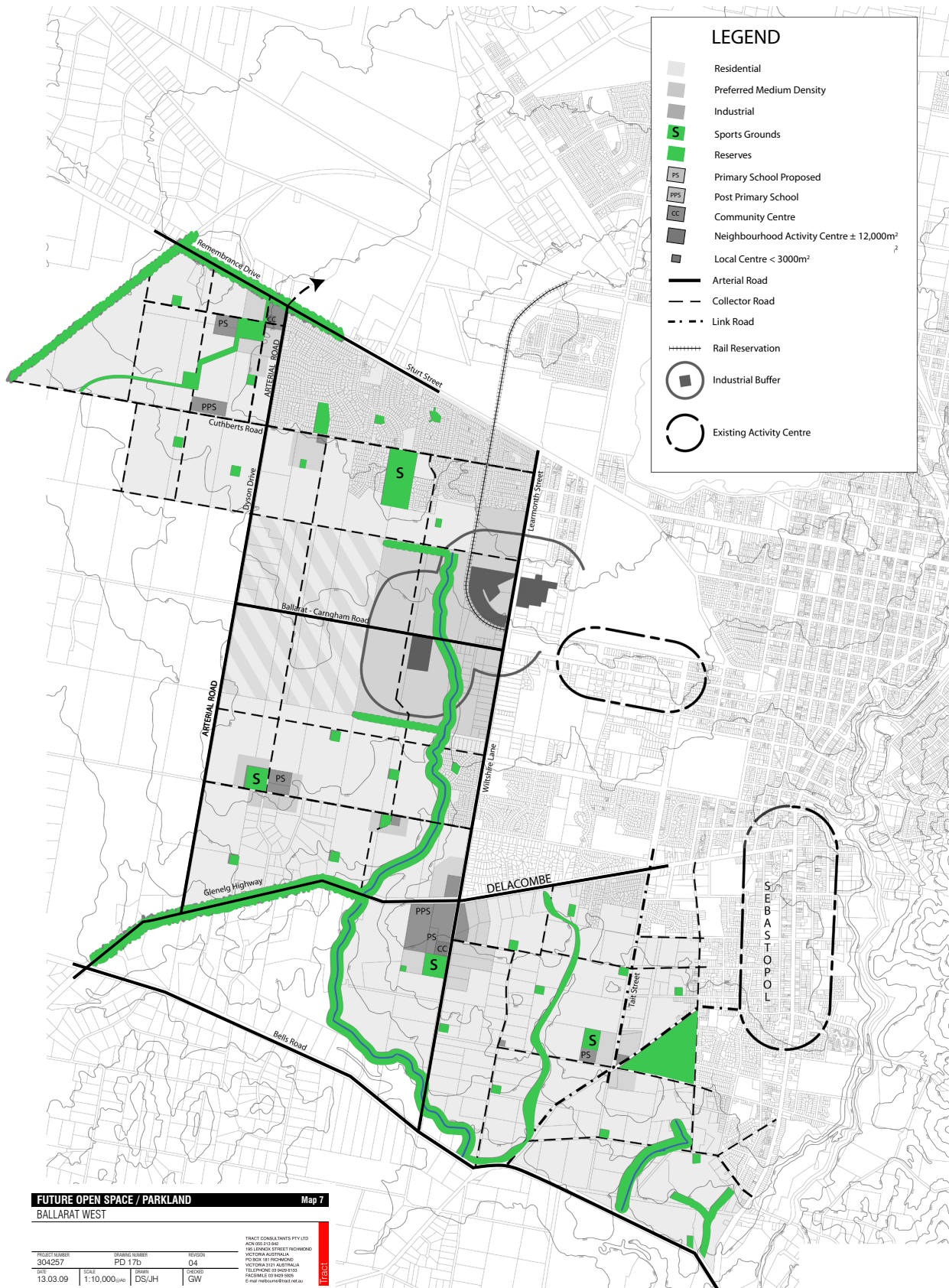
The above does not reflect the highest ratio of facility to population but given that the previously highlighted opportunities to further enhance existing reserves close to or within the plan area, the above provides reasonable criteria for providing sports facilities. This may be reviewed and amended by future open space policy development.

The most notable reserves for enhancement include the M R Power Park to the west of Sebastopol and to the east of the growth area. Specific function of these reserves is best determined by local needs as the surrounding areas develop.

In meeting criteria for the siting of sports reserves, a sizeable reserve should be created to allow for at least the optimum football/cricket oval (which could be utilised for soccer or rugby, etc.), with enough space to allow for possible siting of tennis courts, outdoor hard

courts, car parking and club house facilities or a combined football and social facility. A passive open space component with possible links to open space trails, should also be provided to enhance the amenity of the park and provide easier non-car access.

The provision of five hectare reserves, co-located with the primary schools in conjunction with some enhancement and development of new facilities in Victoria Park and M R Power Park should meet the criteria outlined in the standards.



11.4.5 Linear Reserves

Linear Reserves and Water Courses

Floodways provide opportunity for linear open space. While their use as open space is limited by the water course role for flood management and the protection of remnant habitat, floodways present an opportunity to create green space and provide a vista or outlook for the urban area. Water courses contribute to landscape value and provide a functional and aesthetic service in the urban environment.

There is a need to treat all water courses as an asset and to design subdivisions to respect and address any reserve.

The most notable water course within the growth area is Winter Creek. While some sections are relatively flat and shallow, the upper reaches of the creek have a defined incised valley with notable escarpments and geographical features that can be enhanced.

Winter Creek has also been designated as a main north south pedestrian/cycle route through the growth area and the construction of a bicycle path on a reserve outside the flood area has been identified as development infrastructure to be funded through development contributions. This is over and above the open space contributions.

Residential/Industrial Interface

The expansion of the industrial area also presents an opportunity to create a soft interface to the residential area adjoining.

The provision of a linear reserve of approximately 20 metres in width creates an opportunity to separate residential and industrial land use and create a landscape buffer opportunity. Road access between the residential and industrial areas should be kept to a minimum to prevent industrial traffic entering residential areas. For example, access points should be limited to arterial and collector roads (Carngham Road).

Utilising the open space contribution of five percent (5%) of developable land from the industrial area should provide a reservation of 12 to 13 metres for the main north south section of the reserve, requiring only minor augmentation from the residential area to reach the 20 metre width. An example of a typical section of the reserve is provided in **Figure 2**.

Buffer to the Avenue of Honour

The growth of Alfredton to the west of Dyson Drive will necessitate protective measures from visual intrusion of the Avenue of Honour.

The approach taken within Alfredton, of providing a wide separator between the highway and development with all development having a service road frontage establishes a precedent.

For a significant part of the Sturt Street frontage a windrow exists which may be able to be incorporated into any visual buffer treatment. Even if the trees are not viable, an enhanced reservation could be utilised for replacement screen planting and linear trail.

The specific detail of the design and width of any reservation should be the subject of a visual impact and landscape plan prepared for the Avenue of Honour as part of any future development plan. Principles as a basis for detailed planning may include:

- The creation of a 20 metre wide linear reserve south of the existing highway reservation.
- Retain existing trees within the reservation.
- Reservation to function as an enhanced separator to Sturt Street and new development.
- Reservation to contain pedestrian/cycle trail.
- All new development adjoining the reserve should be accessed by a service road with full frontage to the reserve.
- Design criteria to protect the heritage values.

11.4.6 Land Assembly

Many smaller development sites occur throughout the Growth Area due to fragmented land holdings. To facilitate proper open space and indoor recreation facilities both direct land contributions and cash-in-lieu contributions are to be made available to developers. This will enable Council to consolidate larger open space and recreation areas where required. Also see Section 15: Development Contributions.

11.4.7 Indoor Sports Facilities

Based on the standards of provisions referred to in **Table 7** up to eight multiple use hard courts need to be provided. This includes two medium sized or one large indoor sports facility generally occupying a site of around one hectare. Detailed planning through Development Plans and town centre planning should recognise a site of one hectare for an indoor sports facility within the Delacombe town centre and at Alfredton.

11.4.8 Open Space Development

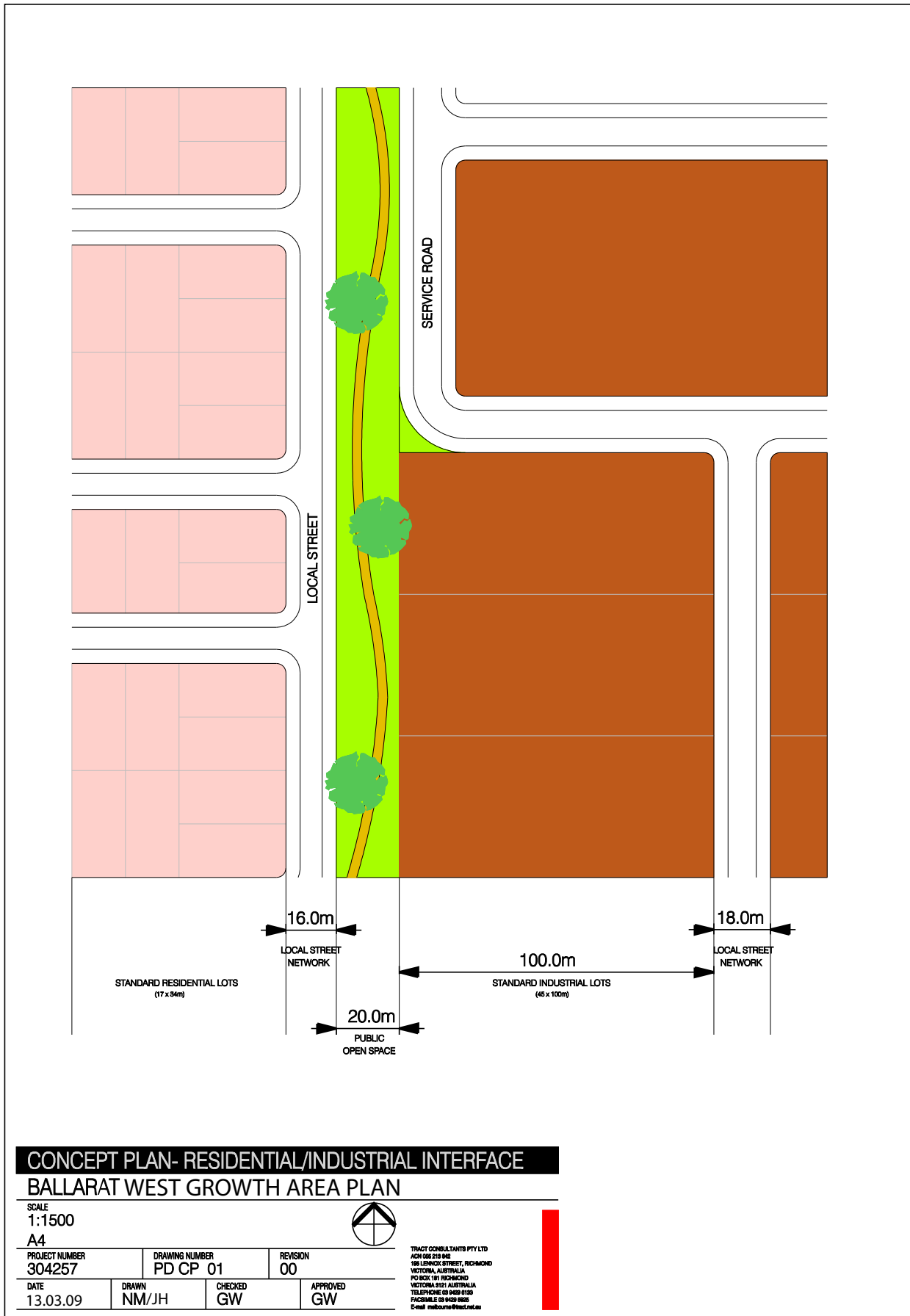
This Plan nominates spaces for development only. Details of the use of each open space will need to be progressively developed as demands of the new communities evolve.

11.4.9 Innovative Provision of Open Space

Planning to a set of criteria, as described above, should not stifle any innovation in the provision of open space. The provision of local parks and the treatment of water courses must be addressed in more detail at Precinct Structure Plan and permit stage. In applying the above standards the full five percent (5%) requirement for open space is not met. This provides scope for the creation of additional open space to provide a better level of service to the residential area, to utilise sites of significance such as stands of remnant trees or natural features and to build enhancements to flood ways and water courses. This has the benefit of not only creating additional open space for the new communities but improving the appearance of the development.

As part of the Precinct Structure Plan stage, the specific locations for the local parks should be able to be identified, they should reflect what is presented in this plan and should seek to identify additional open space where this can better serve the community. This could be supported with more defined standards for the provision of local parks and the design of subdivisions to integrate with parks.

Figure 2



12 Employment

12.1 Overview

Urban Planning needs to provide adequate capacity for employment generating activities. Increasingly urban planners talk about a post industrial economy and the need to shift from traditional, segregated, industrial and residential areas to employment activity occurring within the home and integrated with residential areas and town centres.

This approach does not negate the need for designated industrial areas which provide for uses which are not compatible with residential development, due to amenity implications such as visual impact, odour or noise.

12.2 Ballarat: A Context

The Ballarat Central Business Area with its higher order retail offices and service provision will continue to serve the growing population as the principal central activity centre. There is a need to provide for white collar/office floor space expansion, close to central Ballarat or new locations with high amenity e.g. close to retail, cafes and accommodation with good transport access.

Whilst the CBA will accommodate higher order white collar employment, opportunities exist in the smaller centres within the Ballarat urban area to provide local services. Examples include accountancy offices, legal offices, real estate agents and similar uses.

12.3 Ballarat Industrial Land Demand Analysis

The City of Ballarat has adopted the “Ballarat Industrial Strategy”.

The conclusions of the Strategy was that traditional manufacturing is likely to decline in both take up of land and in the numbers of people employed. The analysis highlighted a shift from manufacturing to services and the integration of both.

A significant trend is the shift in the land required for manufacturing from 10+ hectare lots in the late 1970’s to less than one hectare lots currently.

One industry consistently requiring large areas of land is the logistics/distribution centres. The report cites examples of sites of between 10 and 22 hectares being required. The logistics industry typically locates on or close to major road and highway access points.

The conclusion of the analysis is that the demand for extensive land take up is likely to relate to highway access. However, it must be kept in mind the north/south link along Dyson Drive provides scope to make the Carngham Road area more accessible to the major highways traversing Ballarat.

The Carngham Road industrial area has been set aside for industries in accordance with various former studies, e.g. Ballarat Region Strategy Plan 1990 and the Ballarat Strategy Plan 1998 (note the area previously included the former IN6 Noxious Industrial Zone). As a result, some industries which require substantial buffers have located in the area. Carngham Road does include acceptable buffers for future industries requiring substantial buffers and development of this area needs to be carefully planned be it residential, industrial or a combination of both.

Recent enquiries to Council for large scale industrial sites for Carngham Road have highlighted the need to take a conservative approach. Accordingly the western portion of Carngham Road should remain zoned Rural, until further investigation is undertaken.

12.4 Ballarat West Reserving Land for Future Industry

Overview

The recommendations of this Plan need to recognise changes in employment trends and designation of land for employment purposes that the home will increasingly be a place of business. Local services will need to be enhanced in and around the activity centres and less compatible uses will need to be directed to local industry based employment areas.

Local Services and Retail

The Alfredton and Delacombe activity centres should be more than just retail centres. The centres provide an opportunity to integrate local services (e.g. accountants, legal offices, child care facilities, etc) and should occur as part of the preparation of the Precinct Structure Plans and planning approvals stage.

Prior to any approvals for a change of land use in and around the centres, Precinct Structure Plans should specifically allocate sites for various uses and address the interface between the remainder of the growth front and the activity centre.

Existing Industrial Area

The plan must recognise the existing operations that occur along Wiltshire Lane, Learmonth Street and Carngham Road. Some of the operations within this industrial area have requirements for setbacks or buffers to residential development and the plan needs to recognise these. To protect existing operations an expansion of the industrial area (or at least a non-residential land use) would need to extend up to a further five hundred metres approximately beyond the current zone boundary. This area should be designated as an extension to the existing industrial area.

Expansion of the Industrial Area

The expansion of the industrial area by an additional 80 hectares, (500 metres x 1600 metres) will accommodate a small increase in industrial land supply. Incorporated within the extension is a linear reserve of 20 metres in width between the perimeter of the industrial area and the adjacent residential area. (Refer to Section 10.4.5)

The growth area will need to provide “Industrial” land for small business. These include the types of uses that would not normally locate in major industrial estates. In addition, the plan needs to make provision for the expansion of service industry.

Role of the Growth Area Plan in Planning for Employment

The Growth Area Plan must be responsive to the information available to guide forecasting of industrial land take up and employment trends. It must be recognised that ultimately such forecasts are a “best guess” at what will be the future demand.

This reinforces why it will be necessary to carefully monitor trends in land take up and have a flexible approach to the application of the plans recommendations. New unforeseen opportunities may arise which will require modification of the recommendations of this Plan.

13 Urban Design Principles

13.1 Overview

In the context of the State's planning policy, urban design is regarded as an interactive process, which embraces the notions of strategy, synergy, sustainability, responsiveness, specificity, and quality. (Urban Design Notes: Urban Design Planning note, DOI 1999).

While many of these principles have been employed in developing the elements of the GAP articulated above, the following discussion endeavours to identify strategies and principles which:

- Are responsive to the positive aspects of the "specific image, built form characteristics and development dynamics" of the broader Ballarat context.
- Are specific in that they identify opportunities/ principles to target action beyond general neighbourhood design principles already addressed or contained in State planning policy.
- Are focussed on identifiable urban elements which should aspire to achieve a higher level of quality in terms of their visual and functional resolution.

13.2 Existing Urban Structure

13.2.1 Entry Corridors

The study area forms a significant component of the south-western quadrant of Ballarat. It interfaces with Ballarat via three major routes leading into central Ballarat from the west and south.

The Ballarat Entrances Strategy provides a foundation for planning for the protection and enhancement of key gateways. Entry treatment and planning for the following gateways must give regard to the recommendations of the strategy.

Remembrance Drive: The urban corridor formed along the Remembrance Drive entry space provides a good urban address and arrival into Ballarat, linking western Ballarat's most recognisable urban features including the Avenue of Honour, Arch of Victory, Lake Wendouree, Victoria Park and Sturt Street traditional mixed use strip. These features help to explain the attraction of new housing in the Alfredton area.

The Glenelg Highway presents more of a low key entry into Ballarat, intersecting with the Midland Highway at the northern end of the Sebastopol commercial centre. It has an undulating rural character. Entry into developed areas of Ballarat is currently not addressed in any formal manner, with the gradual introduction to suburban development beyond Wiltshire Lane. There is an opportunity to utilise positive aspects of the road's existing landscape character to better define the entry into Ballarat with a potential improved image to new residential areas and the City of Ballarat as a whole. Potential exists to replicate the entrance treatment provided on Remembrance Drive.

The Midland Highway presents a relatively unstructured urban edge to the southern approach to Ballarat. A highly visible site at the south eastern extreme of the study area boundary presents an opportunity to mark the arrival into Ballarat.

Although a significant hub of commercial activity, Central Sebastopol lacks a clear identity. Growth to the west in the study area should be seen as an opportunity to regenerate this area.

13.2.2 Industrial Precinct Street Character

Roads in and around the Delacombe industrial precinct could benefit from visual enhancement. The Street Life program for the Delacombe Industrial Area has branded the area the “South West Precinct”. The program is identifying ways of enhancing the aesthetics of the precinct including signage to define the precinct, streetscape improvements in Latrobe Street and developing walking and cycling tracks.

Wiltshire Lane/Learmonth Street is a significant north south link between Remembrance Drive and the Glenelg Highway via the existing industrial core. Its central landscape reserve presents an opportunity for visual enhancement.

13.2.3 Residential Street Character

Recent development to the north of the study area in Alfredton is characterised by a suburban network of streets which is relatively impermeable, providing limited opportunities for integration with future development. The character of the street network to the west of Sebastopol provides better opportunities for integration of future subdivision.

13.2.4 Built Form

Generally the housing stock in existing areas to the north at Alfredton is of greater quality than that in the south east at Sebastopol. In both areas there is little variety of hierarchy in building stock, resulting in typically homogenous neighbourhoods.

Industrial buildings in the vicinity of Carngham Road are generally of poor quality and vary greatly in their relationship to the street.

13.2.5 Landscape Opportunities

Local parks provided in existing recent developments have been generally randomly sited and lack variety of character and quality of embellishment.

The landscape character of undeveloped areas is generally an open rural character. There is little native vegetation. Windrows provide local landmarks. There are opportunities to build upon these landmarks as identifiers of local parks and roadways.

Variations in the topography are generally subtle, though local variations e.g. near Winter Creek, can be enhanced through responsive design and incorporation into the public open space network. The “Landscape Guidelines for Development in the City of Ballarat” (Revised September 2000) indicate that most of the area would be landscaped with native species being new residential, commercial and industrial areas.

13.3 Urban Structuring Opportunities

13.3.1 Structuring Strategy

- Develop distinct themes for major streets
- Highlight topographic differences through an integrated public domain
- Identify opportunities to distinguish activity centres in terms of their built form, public domain and linkages.

13.3.2 Glenelg Highway

- Develop a landscape theme consistent with its role as a significant western entry to Ballarat.
- Differentiate it from the Avenue of Honour by building on its less formal undulating character.
- Ensure new development fronts the highway appropriately rather than backing on to it.

13.3.3 Midland Highway

- Promote the regeneration of the Sebastopol mixed use precinct through a detailed Urban Design Framework which acknowledges its role as a significant thoroughfare, and strengthens visual and physical connections west to the study area.

13.3.4 Dyson Drive

- Develop a landscape theme that distinguishes the street as a significant new north south street consistent with that of Learmonth Street/Wiltshire Lane e.g. central median planting.

13.3.5 Wiltshire Lane

- Strengthen existing landscape theme of median planting to establish an address for future residential precinct to the west and future connection to Delacombe Neighbourhood Centre.

13.3.6 Carngham Road

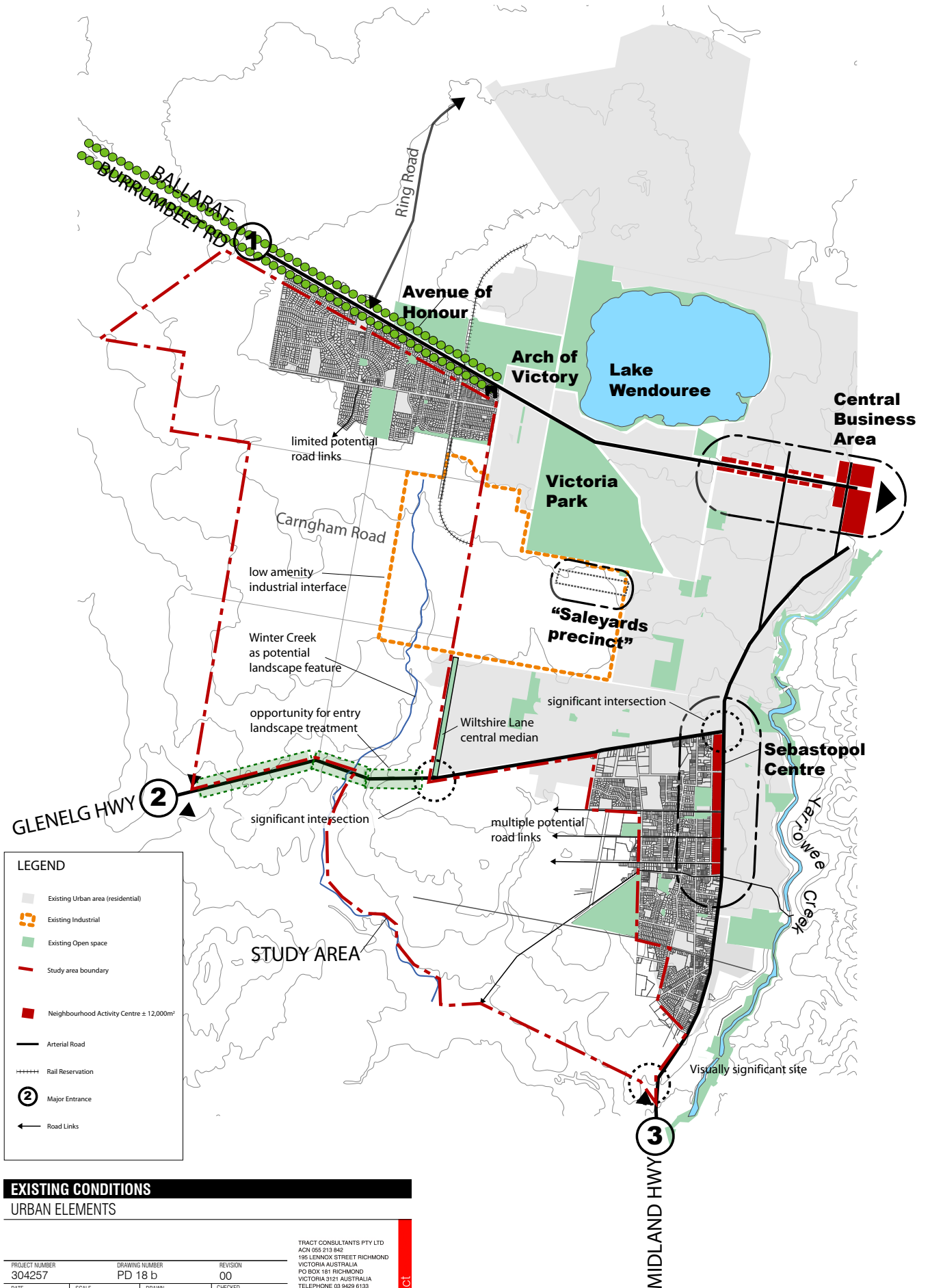
- Develop a landscape theme for Carngham Road that provides consistency from Wiltshire Lane through to Dyson Drive. A Public Acquisition Overlay exists along Carngham Road which provides the opportunity for Council to provide a more substantial and appropriate outcome.

13.3.7 Winter Creek

- Explore opportunities to develop Winter Creek as an integrated public access open space system.
- Where possible ensure the creek is fronted/overlooked by development and ideally lower order streets/pedestrian/bicycle ways.
- Develop design guidelines for creek crossings to aid in unifying its design character.

13.3.8 Landscape General

- Identify key public domain features within Activity Centres as place making opportunities which distinguish the various centres from each other.
- Promote the development of locally specific landscape themes within activity.
- Promote individual centre precincts rather limiting them to a general Ballarat/Ballarat West Character.

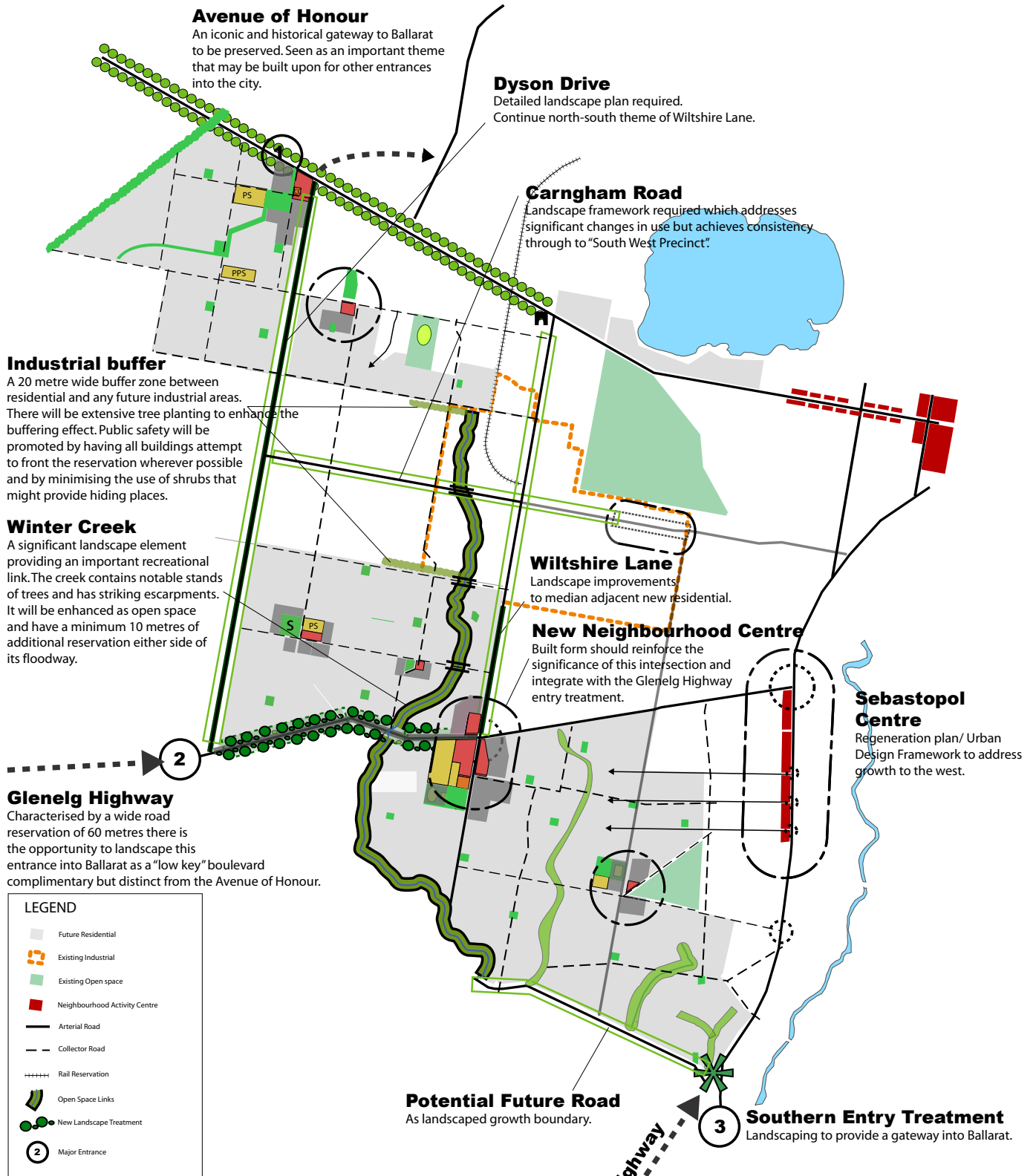


EXISTING CONDITIONS URBAN ELEMENTS

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DATE	SCALE	DRAWN	CHECKED
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TRACT CONSULTANTS PTY LTD
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FUTURE GROWTH URBAN ELEMENTS

PROJECT NUMBER	DRAWING NUMBER	REVISION	
304257	PD 18	00	
DATE	SCALE	DRAWN	CHECKED
13.03.09	1:10,000@A0	JH	DG

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Tract

14 Staging Development

14.1 Overview

The location and the way in which urban development occurs is governed by a number of influences both predictable and unpredictable, including:

- the cost of providing essential urban infrastructure;
- return on investment and the ability to provide essential infrastructure up front;
- the ability to assemble land holdings to a sizeable development parcel; and
- market demand.

It is possible to predict the likely take up of land based on 'knowns' such as staging the infrastructure provision, but other influences such as market demand and the opportunities to assemble viable developable areas are more difficult to predict.

A rigid application of the staging plan runs the risk of not allowing a response to opportunities, constraining the market artificially and potentially creating monopolies. A too rigidly constrained market will have the impact of forcing up house prices and impacting on housing affordability.

A staging plan should give direction on how development should proceed to achieve early provision of service delivery, but recognise the need for a flexible response. It must be able to be applied flexibly and not form a constraint for any new opportunities that are unforeseen.

A document such as a Growth Area Plan cannot envisage all possible scenarios that may emerge, including new opportunities that may have seemed unlikely at the time of its preparation. In recommending a staging mechanism, such as, a staging plan, it should not be seen to stifle new opportunities, should they arise, but present a benefit to the Ballarat community as a whole. Therefore, a staging plan must only function as a guide to development.

In the case of Ballarat West, the key guiding influences are:

- Providing land in locations which is desirable for residential development and has demonstrated demand.
- The ability of proposals to fund hydraulic and other urban infrastructure – this is likely to be incremental and build on existing service provision.
- Land assembly – large lots are more viable as a development opportunity and are likely to attract early investment. Smaller holdings or rural residential subdivisions will need to be aggregated, usually at an increased cost, which normally occurs in the later stages of development in a growth area.
- The need to build a critical mass of population close to the town centres early, to justify investment in building these centres, e.g. retail centres, schools, etc.
- The need to maintain diversity and competition in the market. It is important that staging does not create monopolies in the market and creates opportunities for different market segments to be met. This should extend to more than one locality for development.

14.2 Staging Principles

The future of the Ballarat West Growth Area will rely on appropriate management of the type, rate and location of future growth to achieve an efficient urban form and development pattern for the Growth Area.

Important considerations in determining the future of the Ballarat West community are:

- balancing the requirements of population growth to the provision of services ;
- the potential need for additional growth to off-set an ageing community demographic;
- achieving the best possible use and efficiency from existing and new services to achieve sustainable long-term development, recognising that the provision of services is a long term expense and commitment for any community.
- Managing the environmental consequences of new development in terms of land use, resource allocation and consequential impacts will be important to the long term future of Ballarat West.

The following principles will underpin decisions made regarding the staging to ensure that the fundamental integrity of this plan is maintained, and to provide transparency in the process of monitoring and reviewing staging.

In addition, the principles will be considered in determining whether development proposals which depart from the staging shown on the Staging Plan diagram should proceed. The principles will provide guidance to proponents regarding the level of planning work to be undertaken to support development proposals and guide decision making in relation to the location of land that is to be supported for immediate development for urban purposes within the Growth Area.

Review

The Staging Plan and Principles should be reviewed every five years and should be supported by an assessment of available land supply, additional urban growth needs and associated community infrastructure and services. Consultation will be undertaken with key agencies, including servicing authorities.

Land release

- Land designated for residential purposes should be used efficiently so that it is consumed in a sequential manner to ensure that future residential growth is not directed to areas that are remote and less suitable for urban development.
- Between 10 and 15 years supply of fully serviceable land should be maintained to accommodate projected urban growth. If the land supply falls below a longevity of 10 years, additional land should be released for urban purposes.
- Generally no more than 15 years supply of residential land should be made available at any one time within the Growth Area.
- 'Out of sequence' development should be avoided.
- Any proposals for development outside the growth fronts, including any proposal to change or depart from a staging plan, must provide a detailed assessment of the implications on the funding of infrastructure.

Housing market

- There should be multiple residential development fronts, to provide market competition and increase potential housing supply.
- A range of housing types should be provided in all stages to cater for as many sectors of the market as possible, while delaying the release of sites for housing types that rely on a more advanced market (e.g. apartments) until local demand for them has developed.

Integration

- Development of new areas should occur in an orderly manner having regard to the availability and location of social and physical infrastructure.
- Development should proceed incrementally from the interfaces with existing urban development to ensure maximum connectivity with existing urban areas.
- Development should, to the maximum extent practicable, be integrated with adjoining developments, including the timely provision of connecting roads, walking / cycling paths, and other infrastructure.
- Provide for new development to occur in areas which will integrate well with existing communities and physical infrastructure.
- Staging of development must not create circumstances where future residents might be unreasonably isolated from the core urban area, employment, social and community needs, or public transport.

Community infrastructure

- Early development in each precinct should occur close to existing community infrastructure, to maximise accessibility to services until new facilities can be sustained.
- Development should be concentrated to encourage the growth of whole neighbourhoods in an expeditious manner, thereby reaching the necessary population level to support the early establishment of retail, community and public transport services and sustain their long term provision.
- New community infrastructure, including public open space, should be provided in parallel with the commencement of residential development, to ensure new residents are not socially excluded.
- New communities must be provided with neighbourhood facilities, including open space, that are conveniently located and which can be reached by alternative transport modes, including walking.

Physical Infrastructure

- Proposals for new development should be predicated on a demonstrated capacity to provide essential infrastructure for the incoming population.
- Planning for the provision of urban physical and community infrastructure required by new communities should enable it to be delivered in an efficient, equitable, accessible and timely manner.
- Development in the Growth Area should be planned in a manner that allows for the logical and efficient provision and maintenance of infrastructure, including the setting aside of land for the construction of future transport routes.
- Roads, drainage, reticulated sewerage and water, telecommunications, electricity and gas distribution networks infrastructure represent a significant public investment. It is essential that a full return is received on that investment by maximising their use.
- Development must be planned in a manner which protects existing infrastructure and recognises that existing infrastructure has a limited capacity.
- Early development should be concentrated where it is most cost effective to service, and/or where capacity in existing services is available.
- Development should demonstrate reduced energy usage and greenhouse gas emissions by ensuring that infrastructure is provided in accordance with best practice sustainability principles that improve efficiency in energy use and minimises the use of non-renewable/non-sustainable energy.
- Infrastructure delivery options for the Growth Area should be cost effective to maintain housing affordability and to minimise the cost burden on the wider community for the provision of infrastructure to service development.
- The design and location of physical services infrastructure should contribute to a high quality setting for development.
- Precinct Structure Plans shall confirm that the entire precinct can be serviced in accordance with sound infrastructure planning principles and staging plans, and that:

- the development of the precinct will not compromise the efficient delivery of the servicing; and
- where alternative methods or interim solutions are proposed for the provision of infrastructure, that the proposed solution is realistic and deliverable.

Public transport

- Development should support a direct, efficient and safe public transport system and should not adversely affect the efficient, equitable and accessible operation of public transport services.
- New public transport services should be provided in parallel with the commencement of residential development, to ensure new residents are not socially excluded.
- Early development should occur close to existing public transport services, to maximise accessibility until new services can be sustained.
- Once development has been completed in proximity to existing public transport services, subsequent development should be in proximity to new sub-regional public transport routes.
- It is essential to demonstrate that it is possible to connect new public transport routes to existing and proposed routes.

Roads

- Development should provide efficient and convenient patterns of movement within and beyond the Growth Area.
- Development should begin close to existing arterial roads and extend from them, to provide good accessibility and minimise investment in new roads ahead of schedule.
- Development should have access via a sealed road connecting to the existing arterial and collector road network.
- Road connections to adjoining developments should be completed in a logical and early / timely sequence and not be delayed to achieve an advantage over abutting landowners.

- Development should provide road connections that enable safe and efficient access for emergency, public transport and service vehicles.
- Staging of individual developments should not create road networks which compromise access to, and efficient development of, adjoining land.
- Staging of individual developments should only allow for temporary road access in exceptional circumstances and:
 - If the associated traffic volumes will not exceed those of local street levels.
 - Where the road and access points are constructed to a permanent standard.
 - Not overload the traffic carrying capacity of any collector road or access street within or adjoining the PSP area.
 - Where required for emergency vehicle access.

Identity

- Early development in each precinct should establish an identity for the community, with community facilities at the activity centres being the focus for the new community.

Employment land

- Employment areas should be developed in stages. The boundaries between employment areas and adjoining residential development should be flexible to enable long term/future expansion of these areas.

Staging plan

- A staging plan will be approved from time to time by Council having regard to the various principles set out above. Development should proceed generally in accordance with the staging plan. Any changes to the staging plan should be based on a consideration of the various principles and considerations described above and result in the achievement of a clear net community benefit.

14.3 Proposed Staging for Ballarat West

The following plan represents the likely take up rate based on the above criteria, although it is acknowledged that alternative sequence may be possible within these criteria.

Stage 1

This constitutes an area of approximately 200 hectares, capable of producing 2,000 residential lots.

This will accommodate approximately six – seven years growth at the current take up rates and will see the existing Alfredton growth front, as currently delineated, fully developed.

Stage 2

Stage 2 contains 550 hectares, capable of creating more than 5,500 residential lots.

In addition to Stage 1, should accommodate growth for the next 20 years should no additional growth fronts be established outside this Plan area. Stage 2 includes the Delacombe town centre precinct and designated priority medium-density area.

Stage 3

Stage 3 contains 700 hectares, capable of creating approximately 7,000 residential lots.

This will complete development of the plan area and extend development beyond 30 years, should no additional growth front be identified in Ballarat.

In identifying the staging, is important that a contingency for development outside the current planning area be recognised.

15 Development Contributions

Legislation allows contributions to be collected from new development to fund essential local infrastructure.

The Planning and Environment Act 1987 defines two categories of development contributions. The two categories are:

- Development Infrastructure
e.g. Roads, open space development, pre schools, etc.
 - No limit to the amount which may be levied.
- Community Infrastructure
e.g. Meeting rooms, youth services, public halls, etc.
 - Capped at \$900 per lot.

A strong emphasis is placed by the legislation and supporting Minister's direction of 2003 on the need for the infrastructure levies being justified by a demonstrated demand and relationship to development. Any contribution from new development must be proportional to its utilisation of facilities and, therefore, the establishment of a real link or nexus between the infrastructure and development is required.

Given the size of the plan area, it is clear that demand will be generated through:

- road upgrades and new road construction;
- new community centre buildings; and
- open space enhancements.

To undertake adequate assessment of infrastructure needs and accurately cost items for inclusion in a development contributions scheme, Council will need to:

- confirm and adopt a Standards of Provision;
- identify construction standards per facility; and
- cost standards and adopt them as the basis.

It will then be necessary to develop a "Development Contribution Plan" consistent with the Act and Planning Scheme.

16 Implementation of the Plan

16.1 Context

The Ballarat West Growth Area Plan is intended to provide a broad direction for future urban growth of Ballarat. It identifies the major principles for planning a major growth front and identifying the main infrastructure implications that need to be addressed as part of development. The plan is not comprehensive and can not expect to provide certainty over such a long time frame (extending beyond 30 years) with regard to the detail of planning.

This plan should be interpreted as a guideline for future development and as a basis for:

- More detailed infrastructure planning
- More detailed analysis and monitoring of service requirements of the developing communities
- Providing the framework for preparing detailed Precinct Structure Plans and assessing planning permit applications

This plan makes some changes to the current policy directions of the City of Ballarat and more particularly adds detail to concepts that have been referred to through Council policy.

Therefore, in a planning context this Growth Area Plan will necessitate changes to the Ballarat Planning Scheme as outlined below.

16.2 Changes to Municipal Strategic Statement

The Ballarat Municipal Strategic Statement has anticipated the future growth of Ballarat to the west. Therefore, the changes to the MSS are minimal and relate to the MSS reflecting some of the detail presented in the plan. While further changes may be required, the following key changes are recommended below:

Clause

21.03	Map changes to the Overall Framework Map.
21.05-1	Replace “Outline Development Plan” (ODP) with “Growth Area Plan” (GAP).
21.05-3 & 21.05-5	Replace “Outline Development Plan” with “Growth Area Plan” where referred to in the text.
21.05-6	Modify map to reflect boundaries of the Growth Area Plan.
21.06-1 & 21.06-3	Need to include reference to Alfredton West and Delacombe Activity Centres.
21.06-4	Need to remove reference to the “South-West Sebastopol” policy from “Policy and Exercise of Discretion”.
21.08	Include the Growth Area Plan report as a reference document.
22.12	Need to remove the “South-West Sebastopol” policy.

16.3 Zoning

Land within the Growth Area in the Farming Zone should be rezoned to the Urban Growth Zone.

The Urban Growth Zone will require the preparation of detailed Precinct Structure Plans for the precincts defined in Map 4: Neighbourhood Concept Plan, prior to development of the land.

In order for the Precinct Structure Plans to have effect, the Plans must be introduced as a Schedule to the Urban Growth Zone, through an Amendment to the Planning Scheme.

17 References

- *2001-2021 Population and Household Forecasts for the City of Ballarat, (.id Consulting, 2004)*
- *Ballarat / Alfredton Industrial Area – Industrial Buffer Requirements for Residual Air Emissions (Essential Economic Consultants, 2005)*
- *Ballarat City Council Community Profile (i.d informed decisions)*
- *Ballarat Economic Development Strategy, (Essential Economics, 2003)*
- *Ballarat Entrances Strategy (THA, 2006)*
- *Ballarat Heritage Study Stage 2 (Hansen Partnership Pty Ltd, 2003)*
- *Ballarat Industrial Land Use Strategy (Connell Wagner, 2005)*
- *Ballarat Planning Scheme*
- *Ballarat Region Conservation Strategy 1994-2004 (Ballarat City Council, 1999)*
- *Ballarat Residential Land Supply Analysis, (Oliver Hume Research, 2004)*
- *Ballarat Stormwater Management Plan (The Water Group, 2002)*
- *Ballarat Strategy Plan (City of Ballarat, 1998)*
- *Ballarat West-Transport Infrastructure Planning Strategy (Grogan Richards, 2007)*
- *City of Ballarat Retail Strategy (Essential Economics, 2003)*
- *Draft Ballarat Open Space Strategy (City of Ballarat, 1998)*
- *Draft Road Transport Strategy (Ratio, 2007)*
- *Landscape Guidelines for Development in the City of Ballarat (City of Ballarat, 1999)*
- *LINCS (Linear Network of Communal Spaces) Strategy (City of Ballarat, 1996)*
- *Outline Development Plan for Future Urban Development Area at South-West Sebastopol, (Network Planning Consultants, 1993)*
- *River Health Strategy Summary Report (Corangamite CMA)*
- *Winter Creek Catchment Study (Connell Wagner Pty Ltd, 1999)*

Appendix 1: MSS Extract

BALLARAT PLANNING SCHEME

21.03
26/06/2008
C89(Part 2)

VISION FOR BALLARAT

The Ballarat Council Plan 2003-2006 ("Shaping our Future") has identified that its vision is that in 2022, Ballarat will be a City where:

- Lifelong learning, improved community health and cultural enrichment creates well being;
- The natural environment is managed and improved for current and future generations;
- Cultural heritage and character are enhanced through conservation and innovation in design;
- Quality infrastructure and a skilled workforce enable a prosperous economy creating meaningful jobs;
- Community infrastructure meets changing community needs with high quality accessible social services for all stages of life.

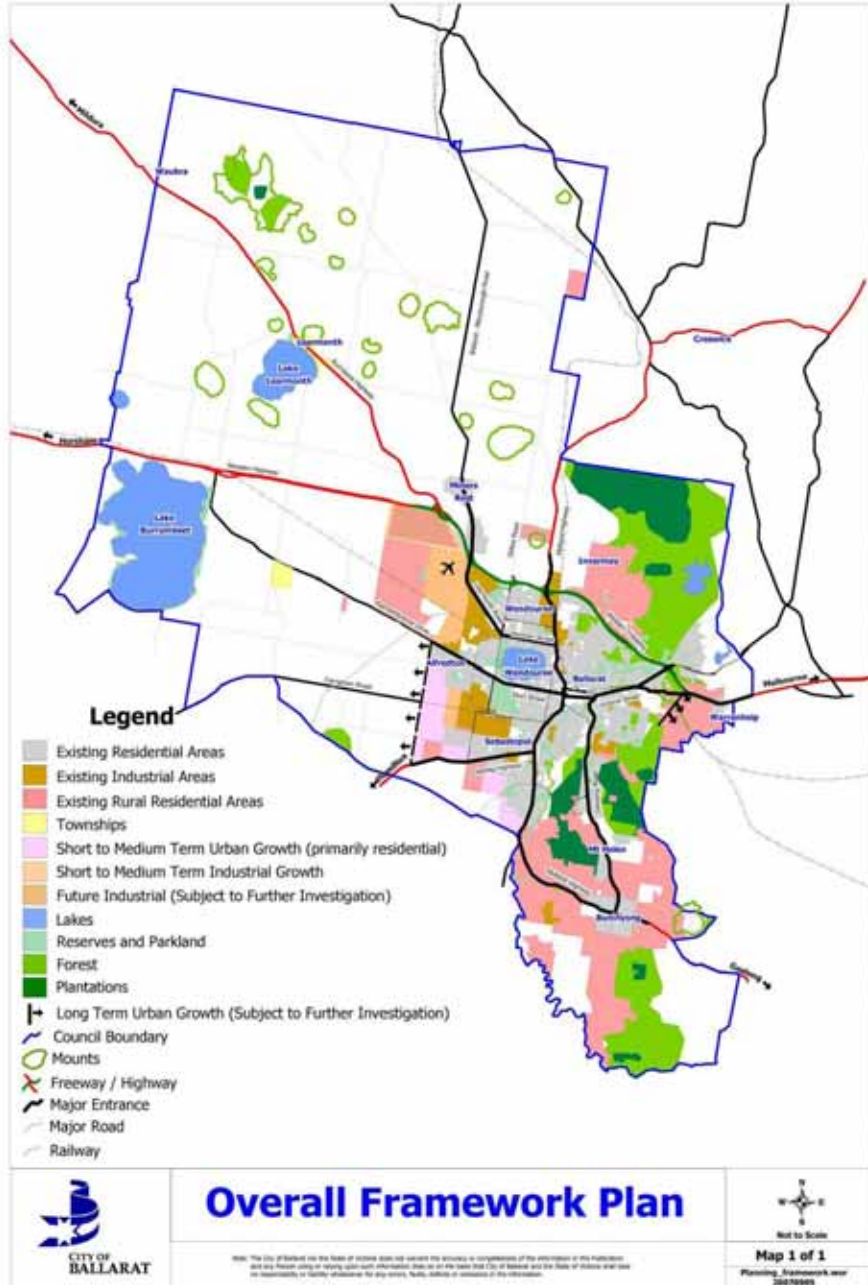
Clauses 21.04 (Environment), 21.05 (Settlement) and 21.06 (Economic Development) of this Municipal Strategic Statement expand upon these issues under the headings of Overview; Key Issues; Objectives; Strategies; and Implementation and (where relevant) Strategic Framework Plans are provided.

The attached Overall Framework Plan for the municipality provides a snapshot of existing facilities and proposed directions for growth.

MUNICIPAL STRATEGIC STATEMENT - CLAUSE 21.03

PAGE 1 OF 2

BALLARAT PLANNING SCHEME



Appendix 2: Explanation of Inquiry by Design and Flow Chart of Process

'Inquiry-by-Design', is a stakeholder collaborative, design-based suite of processes for resolving complex and usually controversial urban revitalisation or town extension projects. Because the factors influencing urban success are highly inter-dependent, the process integratively responds to all project issues and impacts, including environmental, economic and social, and at all scales ranging from architecture to the sub-region.

At least initially, Inquiry-by-Design processes and their outcomes are sometimes positioned as non-binding, as no one can know whether the outcomes will be worthy until after they have been produced. Participants are initially only asked to support the process. Moreover, outcomes are generally recognised to be indicative, i.e., one particular solution for a problem, for which there may be many, so long as they also meet the project objectives.

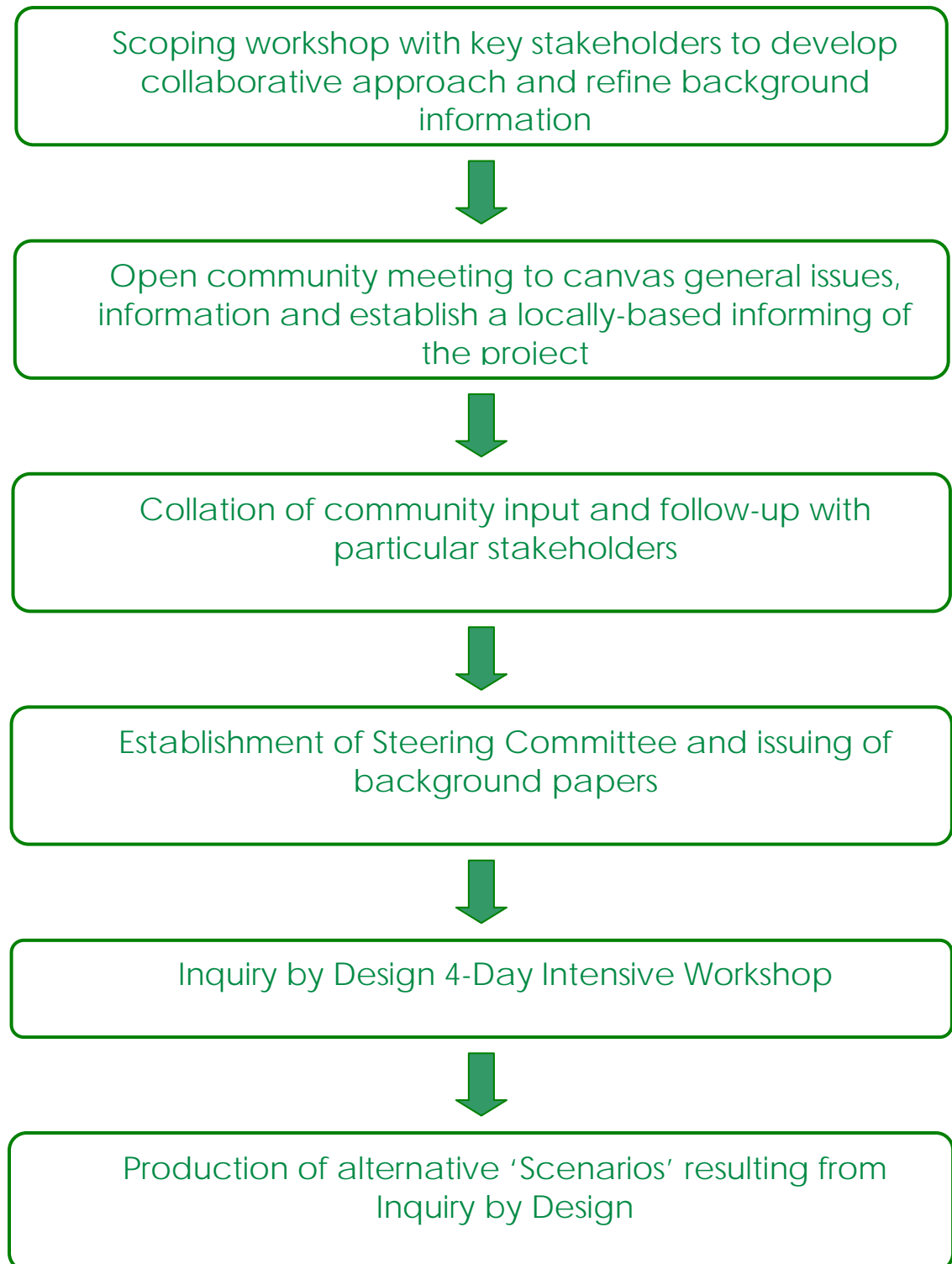
While extensive preparation of existing conditions information is necessary beforehand, the designing takes place collaboratively with the participating stakeholders, as they almost inevitably inform the outcome in ways that could not be anticipated.

Thus, instead of the conventional planning approach of sequentially re-acting to issues or stakeholders, Inquiry-by-Design simultaneously and integratively tests all issues and stakeholders, by means of place-based design.

Recognising the value of 'reflection time', some Inquiry-by-Design processes incorporate an interim period of weeks or more, during which decision-makers and stakeholders can reflect on what they have learned, outstanding questions can be researched, and designs can 'gestate', prior to finalising project proposals.

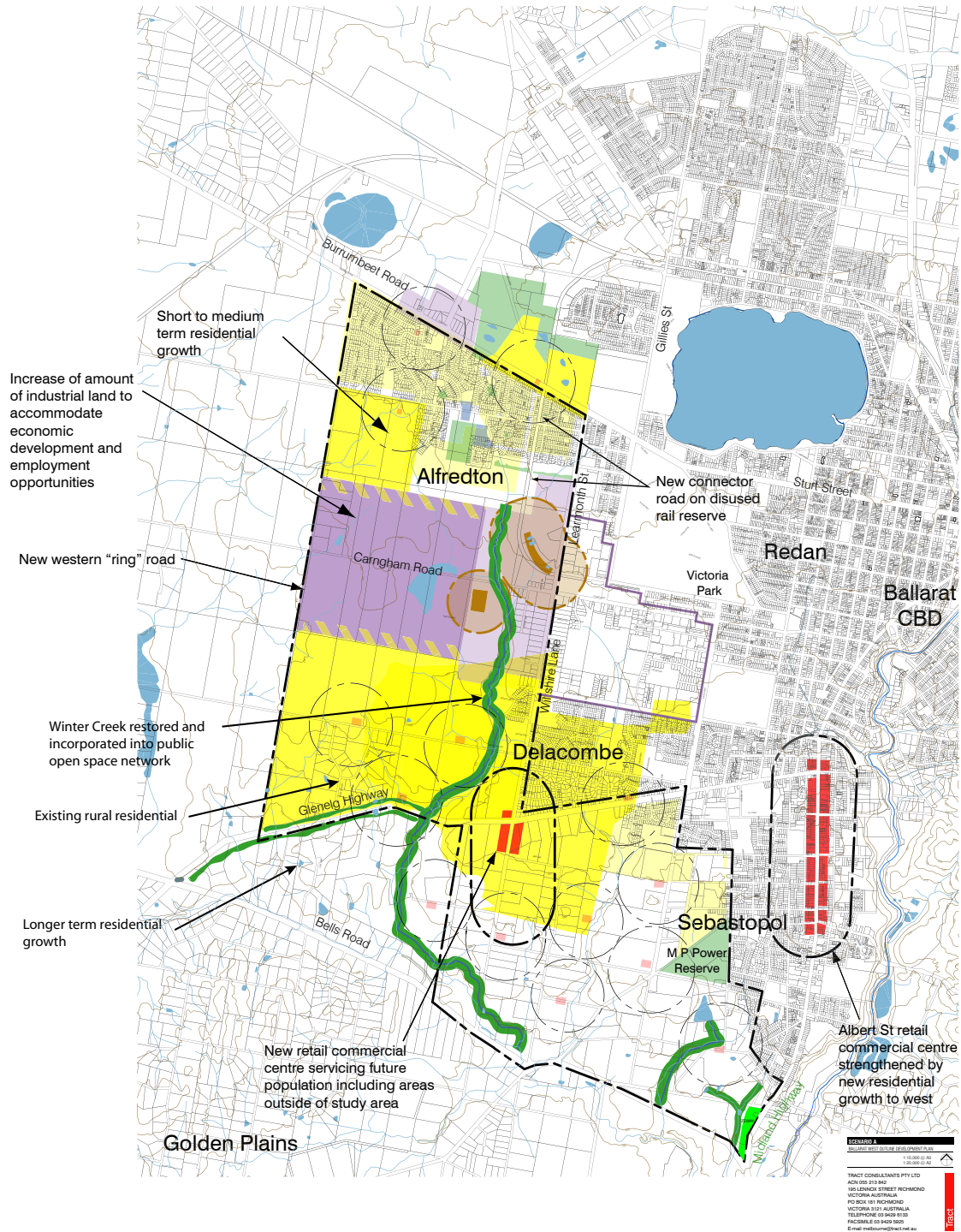
The Workshop process is simultaneously interactive, in contrast to conventional planning processes, which are usually sequentially reactive. A team of design experts is assembled specifically for each workshop project and contracted to produce during the workshop, collaboratively with stakeholders, a range of comprehensive and detailed plans and related documents, with possible refinements and/or development control plans afterwards. Extensive pre-workshop preparation and post-workshop implementation are necessary for project success.

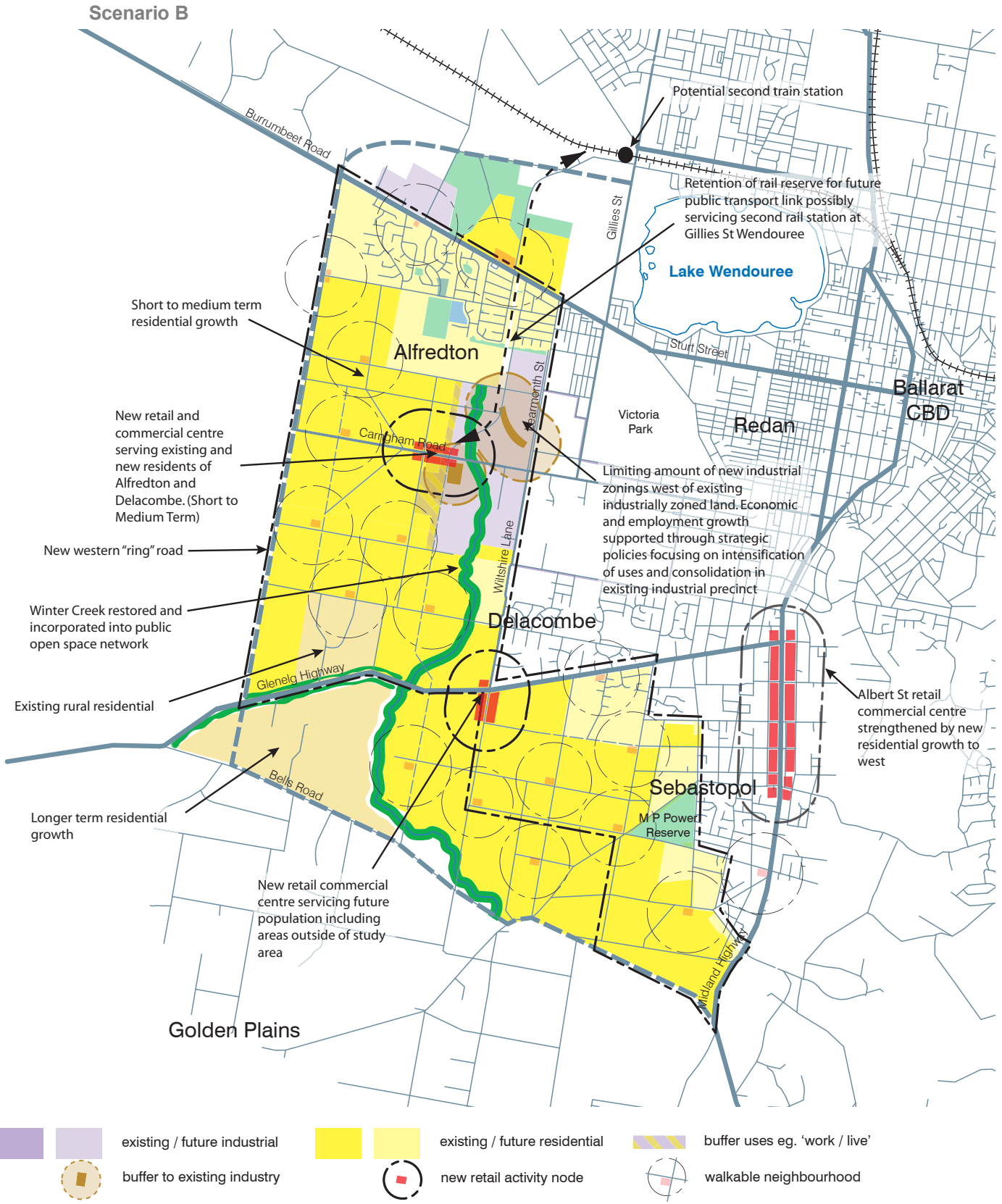
The Inquiry by Design Process for the Ballarat West Local Structure Plan



Appendix 3: Development Scenarios from Workshop

Scenario A





Appendix 4: Summary of Public Submissions

Summary of Community Consultation -
16th December 2004

What did consultation participants like about Ballarat West and what did they consider the strengths of Ballarat West?

- > Good access to services including to employment (such as the industrial area), good infrastructure (particularly water and sewerage), well-drained land
- > Land easy to develop due to topography and lack of environmental constraints
- > No vegetation constraints (no net gain)
- > No catchment constraints
- > Economical topography, good schools, large landholdings & integrated development possibilities
- > Good existing standard of housing
- > Victoria Park
- > Accessible public transport
- > Boulevard entry to city along Remembrance Drive
- > Close to shops and amenities of Central Ballarat, close to centre of city
- > Natural streetscape
- > Semi-rural character
- > Village atmosphere of the three different areas Alfredton, Delacombe & Sebastopol
- > Alfredton specific – Gardens, Golf, City
- > Sebastopol – Strong sense of community, close to country, stable & compact, Widened Albert Street
- > Wetlands north of Sturt Street (Winter Swamp)

What did consultation participants dislike about Ballarat West and what did they consider the weaknesses of Ballarat West?

- > Hard to get to East Ballarat by any mode of transport
- > Hard to integrate existing areas with new development
- > Industrial land and buffers is a constraint to development
- > Lack of water recycling
- > Low water efficiency and water shortages

- > Alfredton is poorly connected within and to surrounds
- > Area generally lacking in social infrastructure
- > Lack of housing variety particularly housing suited to aging people
- > Victoria Park can be unsafe at times
- > Lack of trees seen as absence of landscape
- > Presence of Small 80 acre lots
- > Link to the Western Freeway (bypass) is poor
- > Lake Federation a threat
- > Traffic congestion at Ring Road & Albert Street
- > New residential development will encroach on existing industry
- > Lack of retail centre
- > Poor Telstra services
- > Uncertainty of zoning and planning

What did consultation participants put forward as a vision for Ballarat West?

- > Rehabilitate Winter Creek and make it part of a wider linear trails network
- > Create wide road reserves with narrower pavements to allow for landscaping
- > Create a mixed-use locality similar to the mix of uses in Central Ballarat
- > Minimise car use
- > Opportunity to get it right
- > Mandate strong water management and Water Sensitive Urban Design using Canadian Lakes as an example
- > Heavy industry as a hub on Latrobe Street with residential villages surrounding and complementing
- > A mix of housing types should be provided including provision of aged housing
- > provision of a Community Centre for Sebastopol West
- > Create a Southern Bypass to relief the area from through traffic;
- > Create two areas with different identities – Sebastopol & Delacombe/Alfredton
- > Stage development in different areas

Summary of Public Submissions in May- June 2005

- > Alfredton/Delacombe is a logical urban growth extension
- > expectations of higher amenity are present in country areas/cities such as Ballarat that may preclude mixing of land uses – particularly mixing of residential and industrial
- > the airport is a more suitable site for additional industrial land
- > consideration should be given to the capacity of Ballarat water supply to cater for the projected extra population growth
- > Development of Victoria Park will be advantageous to the new growth area
- > Marking Winter Creek as a linear open space is a positive move however management and control of the creek area should begin immediately to make rehabilitation easier
- > links to other nearby linear trails are mentioned in the text but not included in the plan
- > additional industrial land will provide employment benefits for the new residential areas and support the existing industrial businesses
- > Sebastopol West and Delacombe South should be encouraged to develop first as this would strengthen Albert Street and not require the up front costs of a new town centre
- > A new retail centre is needed in Alfredton
- > New residents should have nearby walking access to everyday services and open space areas

Submission of Ballarat West Outline Development Plan Advisory Group

May-June 2005

Comments on proposed scenarios

The Ballarat West Outline Development Plan Advisory Group makes the following comments on the two proposed scenarios presented at the 4 May 2005 meeting. This follows on from comments made during the meeting which are to be read in conjunction with this submission and are attached.

The initiative undertaken by Ballarat City Council to prepare the ODP identifying the long term development strategy for the Ballarat west area is supported. There was no consensus of opinion from the Advisory Group as to which option was more strongly preferred than the other.

General comments on the ODP are:

- > the need for the ODP to be generally consistent with other relevant strategies;
- > while the group recognises the broad nature of the ODP, the plan also needs to consider in more detail:
 - land supply and staging
 - buffers to existing and proposed industry
 - servicing constraints and funding
 - justification for road and rail corridors and costing prepared prior to inclusion in strategy plans;
- > Council also needs to ensure that site specific proposals are dealt with in a manner that does not adversely affect the recommendations of the ODP; and
- > the Plan also needs to give consideration to the protection of land for its future use, given that some development may not occur for many years. Planning mechanisms achieve this purpose.

Specific Issues

Traffic Issues

The creation of a link along Dyson Drive and utilisation of the rail reserve and the proposal to develop a second railway station has merit and requires further investigation. One comment was made that the road and rail corridors need to be justified and costed prior to their inclusion in strategy plans as they could affect future development.

Improvements to traffic linkages both north-south and east-west may also impact upon the location choices for commercial activity centres.

Industrial growth versus full residential growth

Further analysis of the supply and demand of industrial land and of existing/potential constraints to developing this land, is required. The expansion of the Delacombe industrial estate needs balanced consideration for the following reasons:

- > the existing Delacombe & Alfredton site has significant buffers to existing residential development;
- > much of the area is designated for 'noxious' use in the current planning scheme; and
- > a number of noxious and /or industries requiring substantial buffers are already located in this precinct and future noxious industries should be located in this area.

The recent example of finding a suitable location for the abattoir proposal highlights the need for well conceived long term strategic planning in order to minimise interface issues.

Alfredton has had significant growth in the past and should be strongly promoted for future residential growth. Dyson Drive should not be seen as a barrier to growth but as a boundary to separate industrial and residential uses. Dyson Drive can be used as a link to the northern by pass which would provide significant benefit to Ballarat.

Alfredton has a number of advantages which will continue to encourage residential development, being:

- > access to the northern by-pass; and
- > proximity to community infrastructure, schools and the Lake Federation Resort development site. However, the potential separation of the Delacombe/Sebastopol communities from Alfredton could exacerbate the perception of division between these communities.

Further analysis is required to support the assumption that new residents will travel to Wendouree or Mitchell Park to access industrial areas for employment opportunities or that the bulk of the population will be self employed or work based from home. Locating the employment nodes close to places of residence is important. Delacombe & Alfredton have/has the potential to be the industrial hub for the city. Some businesses cite that proximity to employees is a factor in locational choice for business. This also has the advantage that employees without vehicles can access employment.

Scenario B was seen to have advantages from a liveability point of view that can allow improved social and transport/ access linkages between communities and allow for the potential to develop community hubs to serve retail growth and community needs.

Given the long term view of the project, the opportunity to create the correct industrial/residential buffers at an early stage will help in providing better planning certainty.

Development Contributions

The introduction of a development contributions plan is generally supported.

Note: References to an Outline Development Plan or ODP in these Appendices relate to the early stages of the preparation of the Ballarat West Growth Area Plan (GAP).