

CRANBOURNE NORTH STAGE 2 · PRECINCT STRUCTURE PLAN

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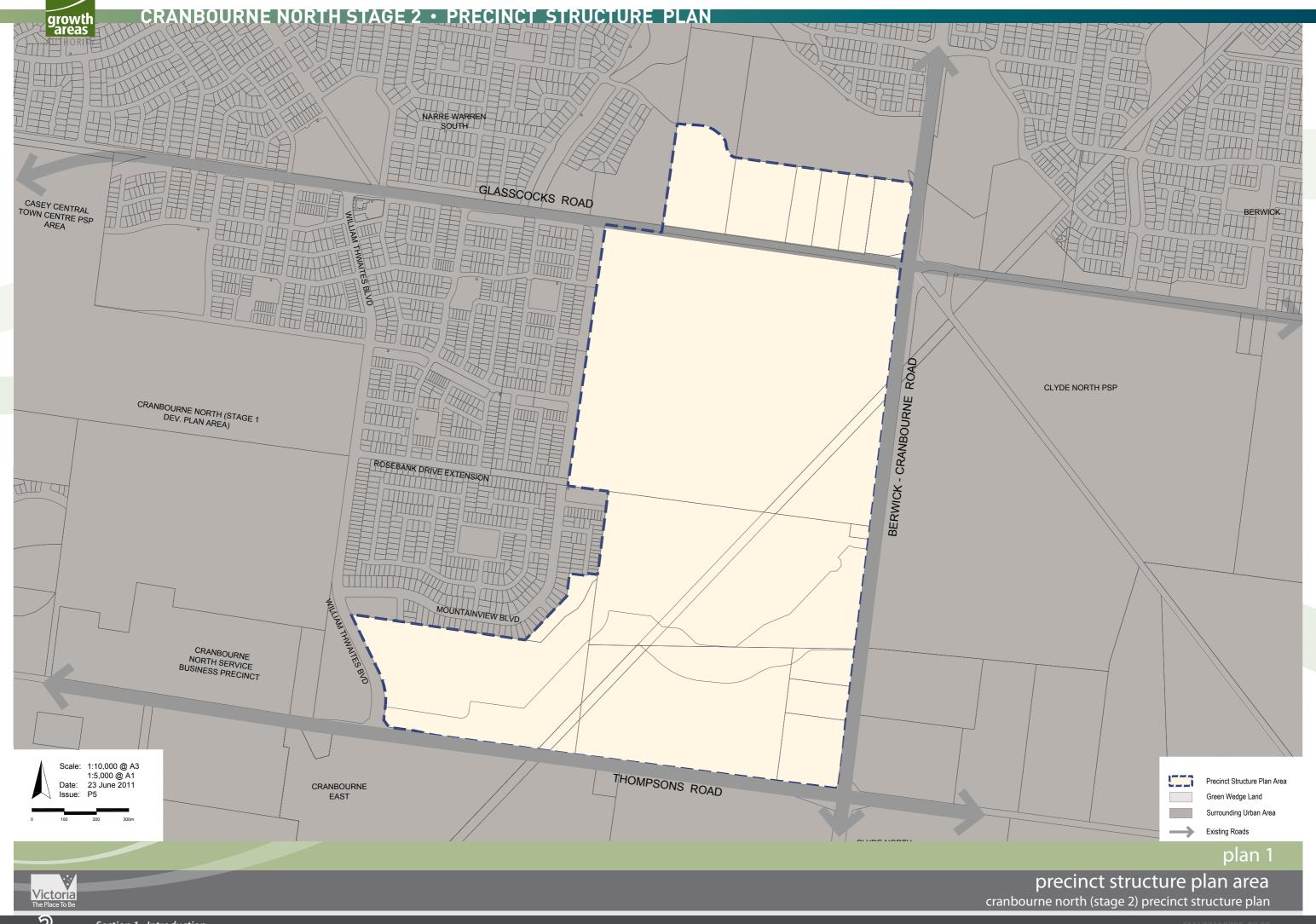


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1.0 INTRODUCTION

1.1 ROLE OF THE PRECINCT STRUCTURE PLAN

The Cranbourne North Stage 2 Precinct Structure Plan (the "PSP") has been prepared by the Growth Areas Authority with the assistance of the City of Casey, Government agencies, service authorities and major stakeholders.

The Cranbourne North Precinct Structure Plan Development Contributions Plan has been prepared concurrently with this document. It sets out the requirements for development proponents to make a contribution toward infrastructure required to support the development of the Cranbourne North precinct.

This PSP also includes the Cranbourne North Stage 2 Native Vegetation Precinct Plan which sets out requirements for the protection and management of native vegetation within the PSP area (refer Section 4.4.6 of the PSP).

The PSP is a long-term plan to guide future urban development. It describes how the land is expected to be developed and how and where infrastructure and services are planned to support development.

The PSP:

- Is a strategic plan which guides the delivery of a quality urban environment in accordance with the Victorian Government Guidelines.
- Enables the transition of non-urban land to urban land,
- Sets the vision for how land should be developed and the objectives to be achieved,
- Outlines projects required to ensure that future residents, visitors and workers within the area can be provided with timely access to services and transport necessary to support a quality, affordable lifestyle,
- Details the form and conditions that must be met by future land use and development,
- Provides the basis for the use and development controls that apply in the schedule to the Urban Growth Zone and planning permits which may be granted under the Schedule to the Zone, and
- Provides developers, investors and local communities with certainty about future development.

The PSP is informed by:

- The State Planning Policy Framework set out in the Casey Planning Scheme,
- The Growth Area Framework Plans (Department of Sustainability and Environment, 2006) and the Precinct Structure Planning Guidelines (Growth Areas Authority, 2009), and
- The Local Planning Policy Framework of the Casey Planning Scheme.

1.2 LAND TO WHICH THE PRECINCT STRUCTURE PLAN APPLIES

The land to which the PSP applies is illustrated in Plan 1 and shown on the Casey Planning Scheme maps as Schedule 5 to the Urban Growth Zone. The PSP applies to approximately 186 hectares of land.

The Cranbourne North Stage 2 PSP area is part of a broader Cranbourne North area which is bounded by Glasscocks Road to the north, Narre Warren–Cranbourne Road to the west, Thompsons Road to the south and Berwick–Cranbourne Road to the east. The boundaries of this broader study area are shown on Plan 3.

Planning and development of land in the surrounding area is being progressed in 4 stages as follows:

- Stage 1: Cranbourne North Development Plan Area. This is land that was made available for urban development through Amendment C77 to the Casey Planning Scheme. Stage 1 excluded the Casey Central Town Centre in the west and generally followed the interim urban growth boundary in the east. The interim urban growth boundary was the UGB that was in place prior to November 2005. The preparation of the Cranbourne North Development Plan provided a strategic framework for the balance of the Cranbourne North study area.
- Stage 2: Cranbourne North Stage 2 PSP. This is the land to which this PSP applies (refer Plan 1).
- Stage 3: Cranbourne North Service Business Development Plan Area. This is land that is proposed to be made available for urban development through Amendment C113 to the Casey Planning Scheme.
- Stage 4: Casey Central Town Centre. The Growth Areas Authority and Casey City Council are working together to prepare a precinct structure plan for this remaining area of land in the western part of the broader study area. This PSP is currently under preparation.

1.3 IMPLEMENTATION

The PSP is implemented by:

- Development proponents who develop land generally in accordance with this PSP,
- The Victorian Government and Casey City Council by funding, delivering and managing a range of infrastructure and services to support the development of the precinct, and
- Non-government service providers and individuals, such as volunteers who manage and deliver services.

The PSP is implemented through the Casey Planning Scheme including:

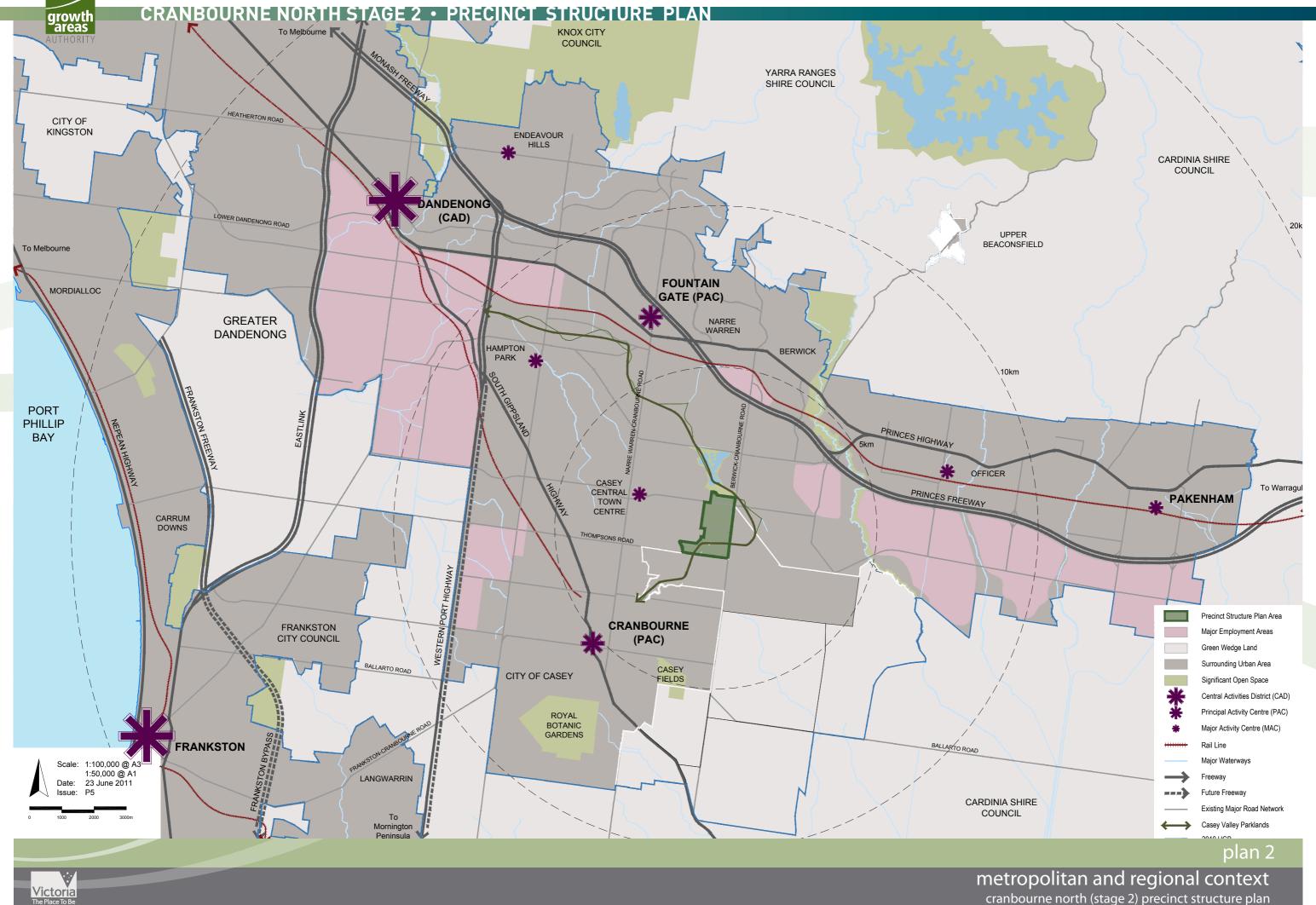
- Schedule 5 to the Urban Growth Zone in Clause 37.07,
- The Cranbourne North Precinct Structure Plan Development Contributions Plan incorporated in the Scheme at Clause 45.06,
- The Cranbourne North Stage 2 Native Vegetation Precinct Plan incorporated in the Scheme at Clause 52.16,
- Open space requirement under Clause 52.01 of the Scheme, and
- Other requirements of the Casey Planning Scheme.

1.4 FURTHER REFERENCE MATERIAL

A Glossary and other information such as technical studies supporting the preparation of this Precinct Structure Plan are listed in Section 6.0 – Other Information.

1.5 MONITORING AND REVIEW

The Growth Areas Authority and Casey City Council will jointly monitor the implementation of the PSP. Its effectiveness will be evaluated regularly, at least every five years. The PSP may be revised and updated following review.



Section 2 - Context



2.0 LOCAL CONTEXT AND SITE DESCRIPTION

2.1 METROPOLITAN AND REGIONAL CONTEXT

The Cranbourne North Stage 2 PSP area is located approximately 40 kilometres south east of Melbourne in the Casey-Cardinia Growth Area as shown in Plan 2.

The Casey-Cardinia Growth Area includes the suburbs of Cranbourne, Berwick, Narre Warren, Lynbrook and Lyndhurst in the City of Casey, and Officer and Pakenham in Cardinia Shire, and has existing infrastructure and resources that make it attractive for continued urban development.

The growth area benefits from its proximity to major road and rail transport infrastructure connecting to the Dandenong Transit City as well as Gippsland, Phillip Island, the Mornington Peninsula and greater Melbourne. Nearby significant natural features include the Dandenong Ranges however, areas of poorly drained and flood prone land in the Western Port catchment will ultimately constrain further long-term outward expansion.

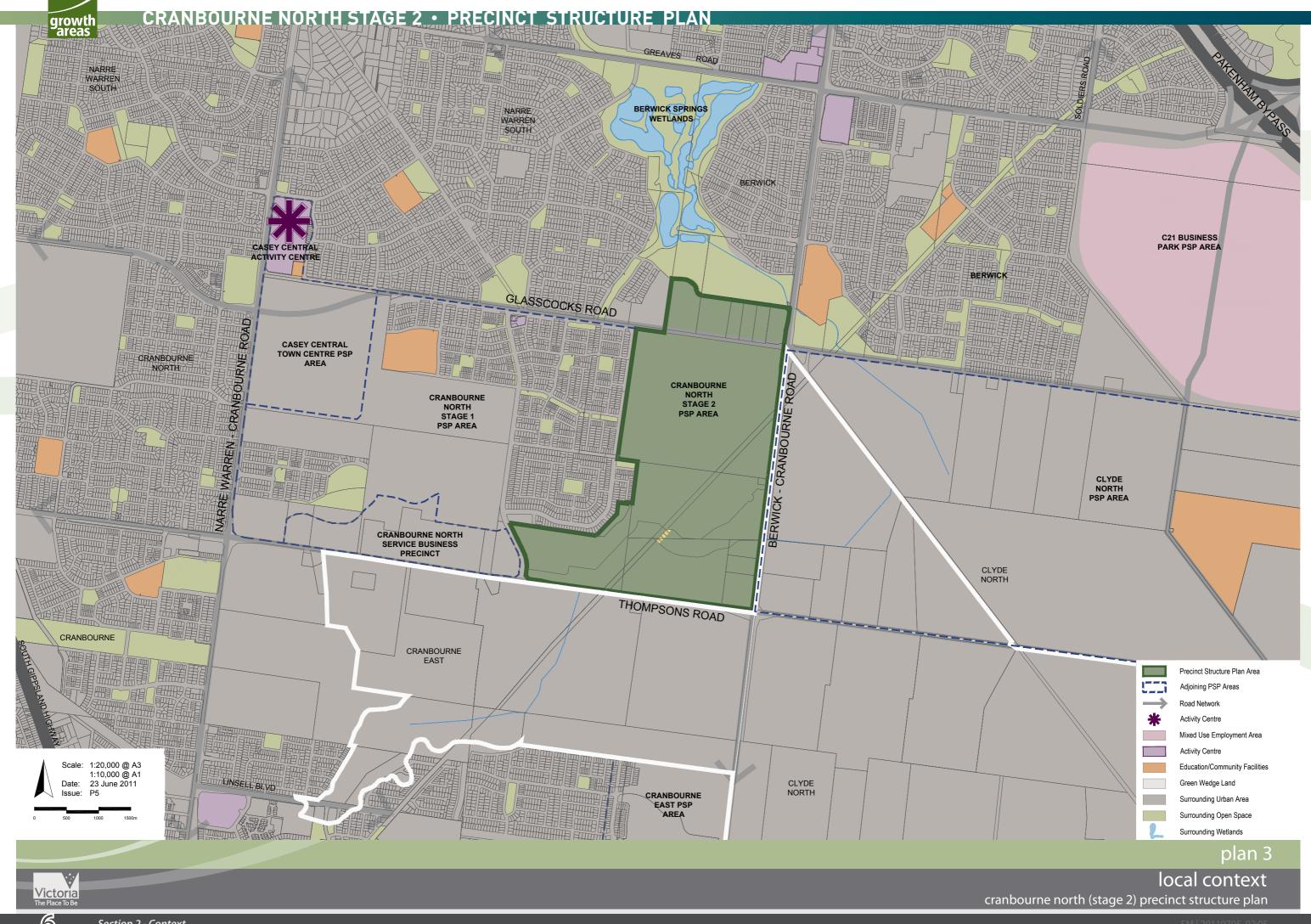
Future and existing major employment precincts are expected to provide numerous employment opportunities for future residents of the Growth Area. These include the Dandenong and Frankston Central Activities Districts (CADs) which are planned to provide for additional employment to service the growth area over time. The two designated Principal Activity Centres (PACs) in the City of Casey, the Cranbourne Town Centre and the Narre Warren - Fountain Gate CBD, will also provide for the future Cranbourne North community. In addition, new employment areas are planned for Cranbourne West, Cranbourne East (along Ballarto Road), the Minta Farm business park adjacent to the PSP area and in Officer to the east within Cardinia Shire.

The Cranbourne area is served by the Cranbourne metropolitan railway line, which branches from the Pakenham rail line at Dandenong. The rail network is supported by a bus network that is expanding with urban growth.

The PSP area is located to the south of the Princes Freeway, a major regional transport route and to the west of Narre Warren-Cranbourne Road, which is a major north-south arterial providing access between the Princes Freeway to the north and the South Gippsland Highway to the south. Both routes provide the major road transport links to central Melbourne, the wider metropolitan network and interstate routes.

The amenity of the area is promoted by environmental features such as Cardinia Creek corridor, significant regional attractions including the Royal Botanic Gardens Cranbourne (RBGC) and direct access to tourism and recreation in the Dandenong Ranges, Gippsland, Phillip Island and the Mornington Peninsula. To the south, along the Western Port coastline, are the internationally significant RAMSAR listed wetlands, which are home to numerous important migratory bird species and other wildlife.

Section 2 - Context





2.2 LOCAL CONTEXT

2.2.1 HISTORY

The PSP area is located in the territory of the Bun wurrung (also Boonwurrung or Bunurong) language group. The Mayune balug clan of the Bun wurrung group occupied the immediate area of the precinct. There is little ethnographic information on the lifestyles of the Mayune balug clan at the time of Eurpoean settlement.

Eurpoean settlement of the Cranbourne region began during the 1830s when the land was cleared and many of the local swamps were drained for pastoral use. The surrounding area has a long history of market gardening, grazing and orther agricultural uses. The historic homestead of 'Tulliallan' remains on the land south of Glasscocks Road. Ground disturbance as a result of clearing and post-contact agricultural practices is also high in most areas.

More recently the land has been used for rural residential purposes and some agricultural use.

2.2.2 SURROUNDING NEIGHBOURHOODS

As a growth area, the region has developed as an urban area over recent years. A number of residential estates and established areas exist within the immediate surrounding context of the PSP area (refer to Plan 3). These are described below:

- Cranbourne North (between South Gippsland Highway and Narre Warren – Cranbourne Road): An existing residential neighbourhood with an approximate population of 10,000 people (2006). It has a higher percentage of people living in separate houses and a higher percentage of children compared to the City of Casey average.
- Narre Warren South: An existing residential neighbourhood with an approximate population of 25,000 people, and community facilities including state and non government schools.
- Berwick: An existing residential neighbourhood with an approximate population of 15,000 people (2006). It has a number of government and non-government schools.

Section 2 - Context



2.2.3 DEVELOPMENT AND PROPOSED NEIGHBOURHOODS

There are three developing or proposed new communities within the immediate surrounding context of the PSP area (refer to Plan 3). These are described below:

- Cranbourne North Stage 1: The area is developing into a new residential area with a mix of community services, recreational facilities and convenience retail centres in addition to Casey Central. The total number of lots is expected to be 2,034 providing for a population of approximately 5,600 (based on 2.8 persons per household).
- Clyde North PSP Area: The Clyde North PSP Area is expected to have an ultimate population of approximately 18,000 people, with two Local Town Centres, both State and a Christian School and other community facilities.
- Cranbourne East PSP Area: The Cranbourne East PSP Area is expected to have an ultimate population of between 17,000 and 20,000 people, and provide three Local Town Centres, both state and Catholic school and other community facilities.

2.2.4 TRANSPORT AND MOVEMENT

The existing arterial road network is based on the traditional Melbourne grid network, with Glasscocks Road in the north and Thompsons Road in the south being 1 mile (1.6 km) apart and forming the two primary eastwest arterial road boundaries. This aids in creating good neighbourhood distinction as well as establishing population catchment boundaries. Road connections from Cranbourne North Stage 1 include a mid-block east-west connector street and a north south connector road (Mountain View Boulevard) that loops around to the west and connects to William Thwaites Boulevard. Berwick-Cranbourne Road is the major north-south arterial road and has recently been upgraded to a four lane arterial with central median.

Reference to Berwick-Cranbourne Road and Narre Warren-Cranbourne Road being planned as part of the PPTN network.

The Thompsons Road route is recognised as having an increasingly important strategic function as a major east-west traffic and freight corridor in the south-east growth area. Planning is progressing with provisions to extend the route across the Cardinia Creek, through the proposed employment areas south of Officer and Pakenham ultimately intersecting with Koo Wee Rup Road via Greenhills Road. Ultimately, provision is being made to develop the route as a future 6-lane arterial road from Carrum Downs to Pakenham with connections to the freeway network via Mornington Peninsula Freeway, EastLink, Western Port Highway (possible future freeway), and Koo Wee Rup Road (possible future freeway).

The precinct is located south of Pakenham Rail Line and east of the Cranbourne Rail Line, which are both part of the Principal Public Transport Network (PPTN). The nearest railway station is Cranbourne Railway Station (Cranbourne Rail Line), located approximately 3.3km south-west of the precinct. The Cranbourne East Rail Extension project proposes to extend the Cranbourne Rail Line to Cranbourne East and construct a new railway station in Cranbourne East in the future.

Local bus services currently operate in the vicinity of the precinct. Some of these services are planned to be extended into the PSP area as the precinct develops, demand for services grwons and funding is made available. Glasscocks Road and Berwick-Cranbourne Road are proposed PPTN bus routes and Thompsons Road has also bee identified as a future key public transport route.

2.2.5 RETAIL AND SERVICES

Eden Rise Shopping Centre is located at the south east corner of Clyde Road and O'Shea Road. This centre has a current floor area of around 6,500 sq m, which is to be expanded with a second stage development, resulting in a total overall floor area of approximately 16,300 square metres.

Casey Central Shopping Centre is located at the south east corner of Narre Warren - Cranbourne Road and Littlecroft Avenue. This centre has a current floor area of approximately 7,500 sq m with a second stage of a similar floor space planned for 2010-2011. The expansion of this centre will ultimately form part of the larger Casey Central Town Centre (25,000 sq m retail floor space) as it progresses south to Glasscocks Road as part of the proposed Major Activity Centre.

In addition to the Casey Central Town Centre, the Cranbourne North Stage 1 PSP area includes one proposed Local Town Centre at the corner of William Thwaites Boulevard and Glasscocks Road. A second Town Centre was originally planned at the corner of William Thwaites Boulevard and Mountain View Boulevard, however investigations for the Cranbourne North Stage 2 PSP resulted in moving this Town Centre to the south to provide it with a Thompsons Road frontage.

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2.2.6 EDUCATION

Primary Schools

There are currently three existing public primary schools in the local area, including Strathaird Primary School, Cranbourne Carlisle Primary School, and Hillsmeade Primary School. Further to this, there is a proposed public primary school within the local area, the proposed Casey Central Primary School, located north of the PSP area.

Secondary Schools

There are three existing State secondary schools in the area. The first is Kambrya College which caters for a catchment that is still growing. The second is the Casey Central Secondary College which is located within the Cranbourne North Stage 1 area and opened in 2010. The third is Lyndhurst Secondary College which currently enrols over 1,100 students.

Independent Schools

St Catherines Catholic Primary School is located on Clyde Road to the north of Glasscocks/Grices Road. St Francis Xavier College Junior Campus is also co-located at this northern site (Senior Campus located on Princes Highway in Beaconsfield). Beyond the PSP area, Hillcrest Christian College, Beaconhills College, Casey grammar School and the Berwick campus of Haileybury are all located within 5kms of the PSP area.

2.2.7 COMMUNITY FACILITIES

The Cranbourne Town Centre includes significant existing and proposed social, health and community infrastructure, including the Cranbourne Integrated Care Centre, which provides a range of day care health services to the local population.

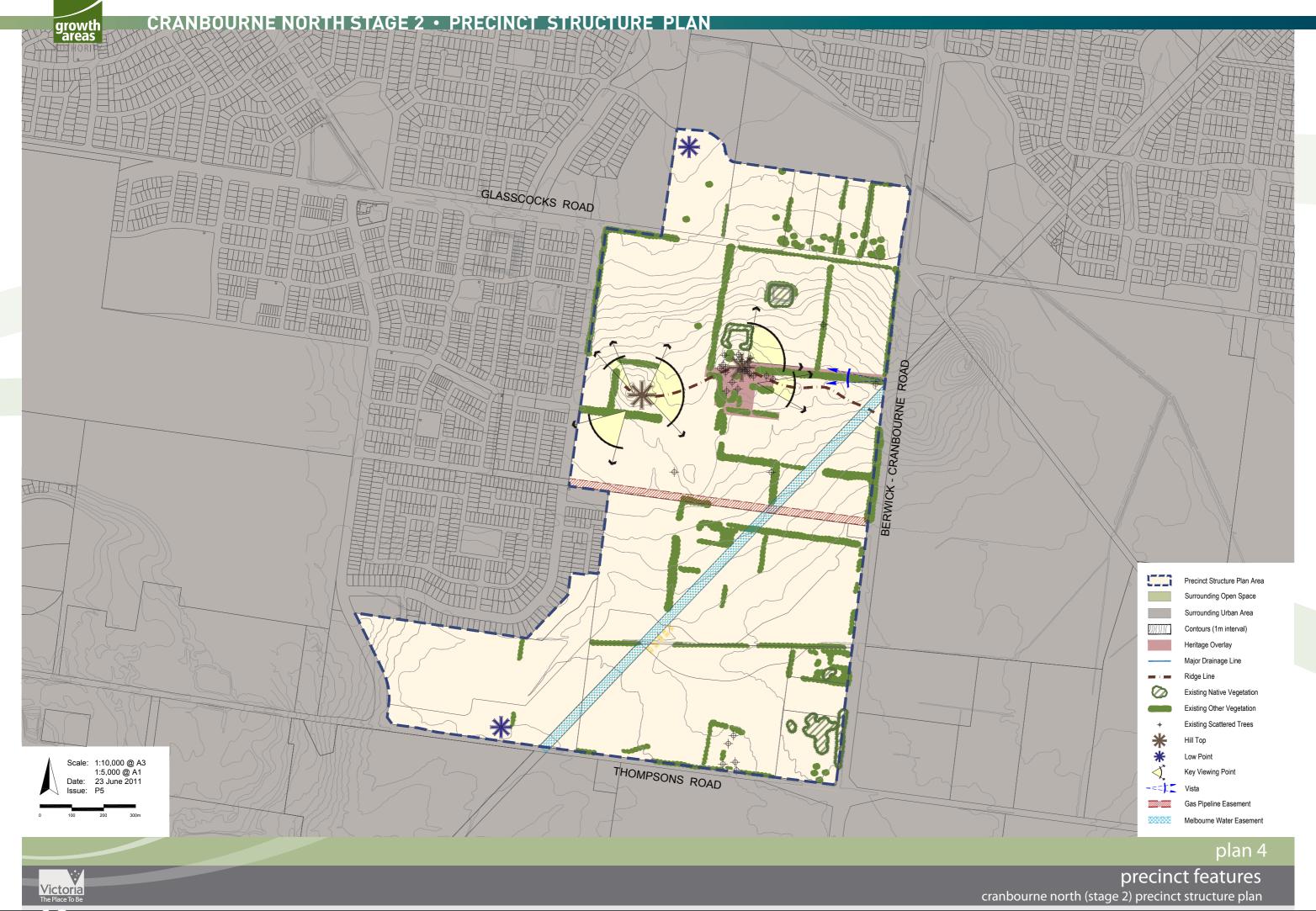
The Balla Balla Centre located adjacent to the library in the Casey Complex in Cranbourne East provides meeting space for community groups. Additional Council community services are proposed in Cranbourne North Stage 1 Development Plan area adjacent to the Primary School.

A community facility is also located abutting the Casey Central Shopping Centre site.

2.2.8 OPEN SPACE AND RECREATION

The region is well-served by major active and passive recreation facilities within close proximity to the Cranbourne North Stage 2 PSP area, including:

- The Royal Botanic Gardens Cranbourne (RBGC),
- Berwick Springs Wetlands linear corridor in Berwick / Narre Warren South which will connect to the precinct in the future,
- Cardinia Creek Parklands, a large waterway based parkland from Berwick to Clyde Nroth, that will be further developed as part of the Clyde North, Minta Farm and Officer Precinct Structure Plans,
- Casey Fields which provides for regional active club-based sports, and
- Indoor Sports Facilities including the expansive and multifunctional Casey Indoor Sports Complex and recently completed Casey RACE indoor aquatic and recreation centre.





2.3 PRECINCT FEATURES

2.3.1 LAND USE AND SUBDIVISION PATTERN

The precinct comprises 14 allotments of varying sizes. Many of the rural lots contain dwellings, agricultural sheds and general small farm facilities.

2.3.2 EASEMENTS

A Melbourne Water Corporation water main easement runs diagonally across the site from Grices Road in the north (east of Berwick-Cranbourne Road) to Thompsons Road in the south. This water main supports two pipelines within a 30m easement.

There is also an existing high pressure gas transmission main located within a 20m wide easement traversing the site in an east-west direction. The transmission main is owned and operated by Gasnet Australia and has special requirements in respect of development in its vicinity including both vertical and horizontal clearances from the main, as well as, general location of other infrastructure and residential dwellings.

2.3.3 TOPOGRAPHY AND LANDFORM

Land in the north-eastern corner of the precinct adjacent to Glasscocks Road consists of low lying land subject to flooding as part of a floodway area associated with Ti-Tree Creek to the north of the precinct, part of the Port Philip catchment.

The remainder of the precinct comprises gently rolling hills, providing for low level viewpoints across the landscape. The foothills of the Dandenong Ranges are recognised by the Casey Municipal Strategic Statement for the regional role they provide as an aesthetic green backdrop and form an expansive northern canvas to the southern sections of Casey. The foothills provide context to the locality and are particularly prominent from the hilltop within the PSP area.

2.3.4 BIODIVERSITY

Planted exotic species account for the majority of trees across the site. Windrows are a landscape feature, particularly associated with the historic homestead of 'Tulliallan' with the most common species being Monterey Cypress, and Bracelet Honey Myrtle. Trees north of Glasscocks Road were generally located around dams and within house yards or as perimeter windrow plantings and consisted of ornamental and native plantings of Oaks, Silver Elms and Manna Gums.

Whilst degraded treeless vegetation dominates the precinct in the form of grazing land, the precinct retains a range of biodiversity values that links to biodiversity assets of the wider landscape. Approximately 1.5 hectares of native vegetation occurs as small scattered patches confined primarily to the farm dams in the north and roadside remnants in the south-east of the precinct. Habitat zones within the precinct include Tall Marsh (within farm dams in the north of the precinct), a Swampy Woodland remnant within the Berwick-Cranbourne Road roadside reserve, one small patch of Swamp Scrub, and Tree-less Plains Grassy Woodland comprising regenerating indigenous herbs and grasses within paddocks in the south-east of the precinct.

Habitat for threatened species is confined primarily to farm dams, drainage lines and roadsides within the PSP area. Scattered trees are not present within the precinct. Large non-indigenous eucalypt trees along fence-lines & roadsides are common and contain hollows and canopy habitat. This is particularly valuable for threatened woodland birds. The large areas of agricultural land within the PSP area have limited habitat value for fauna. The ponding system to the north of Glasscocks Road (outside the PSP boundary) is acknowledged as a significant habitat area and there is opportunity to recreate this type of drainage system in the south portion of the PSP area.

2.3.5 CATCHMENTS AND DRAINAGE

The PSP area is located within the Ti-Tree Creek catchment, which is controlled and managed through Melbourne Water's Ti-Tree Creek Drainage Scheme. The Creek supports a series of existing wetlands and a large retarding basin along the northern boundary of the PSP area (north of Glasscocks Road) and is anticipated to be completed as an open waterway in accordance with the established Ti-Tree Creek Drainage Scheme. Approximately two-thirds of the PSP area will drain to this northern wetland/retarding basin system via future development east of Berwick-Cranbourne Road.

The remaining one-third of the PSP area, north of the hilltop towards Glasscocks Road, drains generally north to Glasscocks Road, and will be catered for in existing and proposed local drainage pipelines.

2.3.6 ABORIGINAL CULTURAL HERITAGE

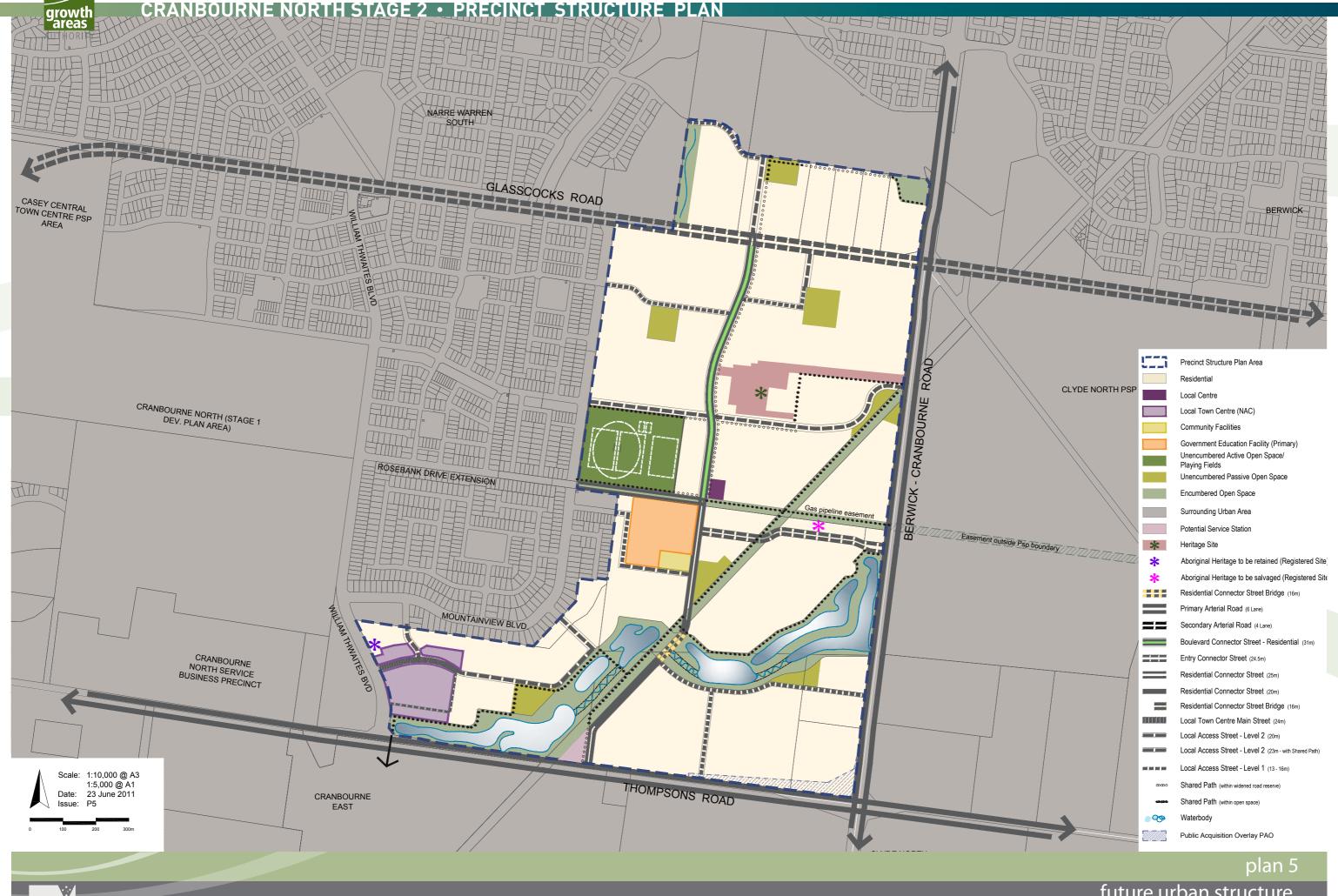
The traditional owners of the precinct were clans of the Boon Wurrung and Bunurong people. The Wurrundgri people represent the traditional Boon Wurrung and Bunurong owners and have made application for Registered Aboriginal Party (RAP) status with Aboriginal Affairs Victoria.

A Cultural Heritage Management Plan (CHMP) has been prepared for part of the PSP area, and aboriginal culture heritage has been found artefact scatter at two registered aboriginal sites VAHR 7921-1158 and VAHR 7921-0989. Site 7921-1158 is to be salvaged and site 7921-0989 retained as part of this PSP. This cultural heritage will be managed in accordance with the recommendations of the approved CHMP.

The remaining PSP area will need to prepare a CHMP.

2.3.7 POST-CONTACT HERITAGE

The PSP area contains one property at 1/805 Berwick-Cranbourne Road known as 'Tulliallan' which has local historical and aesthetic significance. This property contains a 1860s era cottage, with an avenue of elm trees along the original driveway from Berwick-Cranbourne Road. Both the cottage (including its curtilage) and the driveway are included in the Heritage Overlay (HO152) in the Casey Planning Scheme.



future urban structure cranbourne north (stage 2) precinct structure plan

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3.0 VISION AND URBAN STRUCTURE

3.1 VISION

Cranbourne North Stage 2 will build upon the strengths and assets of the existing and planned Cranbourne North community, and will compliment the vision for Stage 1 of a community built upon the principles of sustainability, economic vibrancy and social cohesion articulated in the Cranbourne North Development Plan.

Cranbourne North Stage 2 will:

- Integrate and connect with the wider Cranbourne North community and maximise the use of nearby existing and planned services and amenities.
- Be compact and walkable with strong connections to nearby amenities, schools, community facilities, parklands and employment opportunities through an integrated pedestrian, cycling and trail network.
- Build upon existing heritage and open space character and assets by retaining the existing heritage site with hilltop views.
- Creating a pervious linear open space and waterway network linked by pedestrian and cyclist trails that will connect to the wider Ti Tree Creek Reserve, and provide a unique recreation asset.
- Provide a central community hub incorporating active open space, a primary school and kindergarten facilities. A Local Town Centre in the south-west area of the precinct will form a key retail and employment destination for residents and will compliment the activities of the nearby employment area.

3.2 URBAN STRUCTURE

The vision will be realised through the development of the future urban structure for the precinct as an integrated neighbourhood design.

The Future Urban Structure Plan shows how the precinct will be developed over time to achieve the Victorian Government's and the City of Casey's objectives for sustainable growth.

Sections 3.2.1 to 3.2.7 describe how the Precinct Structure Plan delivers the vision and an integrated neighbourhood design.

3.2.1 ESTABLISH A SENSE OF PLACE AND COMMUNITY

The Cranbourne North Stage 2 PSP establishes a framework for the development of an environmentally, socially and economically sustainable urban structure. The structural elements of the plan are interlinked and combine to create a built environment which supports the development of a strong community and sense of place for the precinct.

A sense of place for residents and visitors will arise from the traditional street and built form patterns, accessibility to shopping, services, amenities and an extensive open space and trail network.

Both the Local Town Centre and Local Centre will support a range of business and retail formats, including space and opportunity for nonretail businesses and local entrepreneurs.

Walking and cycling is accommodated via an extensive network of onroad and off-road paths, and by concentrating houses close to amenities and transport. Residents will have access to a range of parks, including a centrally located recreation reserve, a linear waterway and open space network that connects to a wider network of recreation areas, and smaller localised parks within a few minutes walk from most houses.

The structure of streets, buildings and landscape will create an urban pattern of intimate streets and places that will support walking, cycling and, importantly, social interactions.

3.2.2 GREATER HOUSING CHOICE, DIVERSITY AND AFFORDABILITY

The future urban structure provides for a range of lifestyle opportunities to suit the needs of a variety of household types, sizes and budgets.

The PSP encourages the development of a range of residential densities from conventional to high density. Medium and higher density housing in a variety of styles is promoted near the Local Town Centre and Local Centre, community facilities, public transport corridors, open space and amenities.

3.2.3 CREATE HIGHLY ACCESSIBLE AND VIBRANT ACTIVITY CENTRES

The future urban structure envisaged by the PSP plans for a sustainable network of local shops and services which will provide employment opportunities and community based services.

The PSP includes a Local Town Centre located near the intersection of Thompsons Road and William Thwaites Boulevard which will provide for the retail and service needs of the community. The centre will offer a mix of retail, non-retail commercial, small office and other mixed use employment opportunities.

A smaller Local Centre in the central part of the PSP will provide for most of the daily needs of residents in the immediate vicinity.

Both centres will be highly accessible to local residents through pedestrian and cycling trails and will offer a logical focus for public transport services. A concentration of higher densities around the centres will contribute to their character and feasibility.

3.2.4 PROVIDE FOR LOCAL EMPLOYMENT AND BUSINESS ACTIVITY

Cranbourne North Stage 2 is predominantly a residential neighbourhood that benefits from close proximity to existing and future employment areas associated with the development of the Casey-Cardinia growth corridor including:

- Cranbourne North Service Business Precinct is situated directly to the west of the PSP area,
- Mitna Farm, a proposed mixed-use business and residential area, is located approximately 3 kilometres from the PSP area, and
- Cranbourne Principal Activity Centre will create a wide range of new employment opportunities in service, retail, and hospitality industries.

The Local Town Centre will support a range of local services including retail, medical, financial, legal and personal service, as well as business services and SOHO units for home-based businesses. The primary school and kindergarten facility will also contribute to local employment.

The Local Town Centre is well positioned for ease of access to the wider Cranbourne North community. The Centre's location in close proximity to the arterial road network will provide exposure to passing trade and will reinforce its long term viability and encourage more efficient use of motor vehicles by being situated in a location which is easily accessible from a multi-modal perspective.

The key employment areas will all be located on potential public transport routes, approximately 500 job opportunities should arise from the land uses proposed within the Precinct Structure Plan area.



Employment in the Precinct

There will be significant growth in demand for jobs in the Casey-Cardinia area across a broad range of industry sectors between 2006 and 2031. Table 1 illustrates the comparison between the industries Casey residents work in and the types of employment located in the municipality. It shows that in some sectors such as wholesale trade, transport, postal and warehousing and health and social assistance, there is significant opportunities for Casey residents to work locally. In other sectors it shows that there are fewer opportunities for residents to work within the municipality, indicating that there are opportunities for growth in these sectors.

It is possible to estimate future job creation based on the approximate number of jobs generated by each of the designated land uses in the precinct, including the primary school, community centre, Local Town Centre and Local Centre. Home based businesses could also be supported within the precinct, which would contribute to local employment opportunities. Table 2 illustrates that there is strong job creation potential.

The employment generating land uses within the PSP will have a positive impact on minimising the travel times and distances for some residents. The urban structure encourages the establishment of localised employment by making room for employment generating land uses within the precinct and on adjacent areas. The key employment areas will all be located on public transport routes and will have access to cycling and walking trails to provide safe and direct linkages for alternative modes of transport.

In addition to the jobs created from land uses within the PSP area, future residents of the precinct will benefit from the overall growth in job opportunities in the region. The Cranbourne North Service Business Precinct is located immediately to the west of the precinct along William Thwaites Blvd. Other job opportunities in the region include the proposed Minta Farm business park, the Cranbourne North Service Business Precinct, Cranbourne East Employment area, Narre Warren-Fountain Gate Principal Activity Centre (PAC), and Cranbourne PAC.

Outside the City of Casey, significant areas of employment include the Cardinia Employment Corridor, Dandenong Central Activities District (CAD) and Dandenong South industrial area.

All of these employment precincts are expected to fully develop over the next few decades and generate many thousands of jobs for the region. This will result in residents in the greater south-east having less reliance on centralised employment in the central and inner Melbourne areas. This is expected to have many positive flow-on impacts such as reduced congestion on the metropolitan rail and road network, improved travel times, and reductions in greenhouse gas emissions due to more efficient vehicle movements.

Significant benefits will also flow to families with more leisure and family time being available as well as reduced proportion of family budgets being committed to transport costs.

Table 1: Labour Force to jobs in Casey Comparison

EMPLOYMENT SECTORS	RESIDENT LABOUR FORCE (%)	JOBS IN CASEY (%)	MSD RESIDENT LABOUR FORCE (%)	MSD JOBS (%)
Manufacturing	20	10	13	13
Retail trade	13	19	6	12
Construction	9	10	7	5
Health care & social assistance	8	10	10	10
Transport, postal & warehousing	6	5	5	5
Wholesale trade	7	6	6	6
Education & training	5	11	8	8
Accommodation & food services	4	7	6	6
Public administration & safety	4	3	5	5
Professional, scientific & technical services	4	4	8	9
Other services	4	4	4	4
Financial & insurance services	3	2	5	5
Administrative & support services	3	2	4	3
Inadequately described/Not stated	3	1	3	1
Information media & telecommunications	2	1	3	3
Agriculture, forestry & fishing	1	2	1	1
Arts & recreation services	1	2	2	2
Rental, hiring & real estate services	1	2	1	2
Electricity, gas, water & waste services	1	0	1	1
Mining	0	0	0	0

Table 2: Estimated Employment Potential

LAND USE BASED EMPLOYMENT DEMAND	MEASURE	JOBS	NO/AREA	ESTIMATED JOBS
Kindergarten	Jobs/centre	5	2	10
Primary School	Jobs/school	40	1	40
Medical Centre (outside of Local Town Centre)	Jobs/ practitioner	3	5	15
Private childcare centre (outside of Local Town Centre)	Jobs/100 places	20	1	20
Community Centre	Jobs/centre	10	1	10
Local Town Centre - Retail	Jobs/1000 sq m	25	3500	88
Local Town Centre - Office/Non retail commercial	Jobs/1000 sq m	50	750	38
Home based business	Jobs/ dwelling			270
		TOTAL ESTIN	MATED	490

3.2.5 PROVIDE BETTER TRANSPORT AND MOVEMENT OPTIONS

Travel to Work Statement

The urban structure responds to the need to be more ecologically, socially and economically sustainable. A key element of creating a more sustainable urban structure is the reduction of travel distances, travel time and carbon emissions for travel to work. The travel to work statement outlines how the development of land in the precinct will positively affect the lives of residents and residents of surrounding areas on a daily basis.

The PSP plans to reduce travel distances to work by providing:

• An efficient road and public transport network

The location and distribution of the arterial road network grid promotes efficient movements within the precinct, with strong connections to the surrounding area in all directions, including key destinations such as Casey Central Town Centre. The arterial grid sets the foundations for a highly permeable and connected precinct which connects directly to adjacent urban areas and future precincts in Casey.

The road network supports efficient movement through the distribution of lower order connector streets forming an 800 metre sub grid which connects to and supports the existing Cranbourne North road network, assisting in reducing congestion at arterial/arterial intersections. This provides the basis for the provision of efficient public transport by creating the ability to locate all dwellings within 400 metres of a future public transport service running through the arterial and connector road grid.

A central element of the walking and cycling strategy for the PSP area are connector streets featuring wide road reserves that connect pedestrian and cyclist desire lines to destination points, such as recreation areas, community facilities and local town centres.

 A walkable street structure orientated to promote energy efficient dwelling layout

The one mile (1,600 metre) 800 metre grid creates opportunities for an internal street layout which supports passive solar lot orientation and permeable connected residential neighbourhoods. This facilitates and encourages walking with street connections to functional and viable destinations such as schools, shops and passive and active open space.

• Attractors located to promote walking to frequently used services

The local town centre, school, community facilities and passive and active open space areas are located to maximise the number of residents within a safe and convenient walking distance of these amenities. The cycle and pedestrian network is designed to link residential areas within these key services and facilities to promote walking and cycling.

Local Employment

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The provision of a centralised school and community centre, along with retail and business opportunities within the Local Town Centre generates opportunities for local people to work locally. This has the added benefit of building a sense of place and community.

• Support for Cranbourne North Service Business Precinct

The urban structure is designed to support the establishment of the Cranbourne North Service Business Precinct through strong road and pedestrian and cycling connections to the precinct, and the strategic location of the Local Town Centre.

3.2.6 CLIMATE CHANGE AND ENVIRONMENTAL SUSTAINABILITY

Energy Statement

The future urban structure responds to climate change and environmental sustainability by:

- Reducing travel distances to 'everyday' services and facilities (refer to the Travel to Work Statement),
- Encouraging public transport use by placing higher density housing, commercial uses, a school, community services and leisure and recreation facilities within close proximity of bus stops and public transport routes,
- Encouraging alternative modes of transport by providing walking, cycling, and bus links to new residential neighbourhoods,
- Facilitating efficient transport movement between key destinations by establishing an evenly spaced and permeable network of connector and local roads and pedestrian and bicycle trails,
- Integrating the road network with the linear open space and to facilitate walking and cycling access to key destinations inside and outside the precinct,
- Providing a grid structure of roads that allows subdivision and building layouts to incorporate passive solar orientation, and reduce reliance on fossil fuels for heating, cooling and lighting,
- Encouraging urban design and architecture which demonstrates energy and water efficiency at the permit stage, and
- Connector streets and arterial roads designed to accommodate bus movements.

Water Sensitive Urban Design

Water Sensitive Urban Design (WSUD) features for the open space network will provide for water quality treatment, retardation and high quality self-sustaining landscapes. A significant water sensitive feature of the precinct includes a recreation and drainage corridor which features treatment wetlands incorporating passive recreation areas and facilities and walking and cycling trails.

Further opportunities for on-street and onsite WSUD will be explored during the detailed subdivision design phase of development to comply with Melbourne Water requirements.

Recycled Water

A 'third pipe' system has been mandated throughout the PSP area to ultimately supply recycled water to each residential lot and parklands from the Eastern Irrigation Scheme. The ability to provide suitable quality Class A recycled water to the PSP area is dependent on completion of Melbourne Water's upgrade of the Eastern Treatment Plant which has been estimated for 2013/14.

Native Vegetation

No remnant native vegetation and indigenous vegetation will be required to be retained in the precinct as shown in the NVPP in Section 4.4.6. However the establishment of a wide drainage corridor through the area will assist in creating a distinctive landscape character for the area and enhance biodiversity values. This will be complemented by the use of predominantly native and indigenous species throughout the precinct.

Wetland & Waterway

The wetlands and waterway system proposed between Thompsons Road and Berwick-Cranbourne Road have been designed to meet the following objectives:

- A drainage corridor providing storm water quality treatment features and flood storage capacity is to be a key feature of the precinct. Whilst ther primary function and purpose of this land must be respected and subject to approval from the drainage authority Melbourne Water (MW), there may be opportunities for the drainage reserve/corridor to incorporate shared user paths.
- Ti Tree waterway is designed as a series of pools interspersed with densely vegetated meandering waterway segments, so as to match the natural gradient through the reach and merge with existing culverts under Berwick-Cranbourne Road, whilst maximising aquatic and riparian habitat diversity and landscape/ recreation values;
- The wetlands will have permanent water to the outlines sketched on concept plans. All the online ponds forming the creek system proper will have perennial inflows and outflows and these ponds will also backwater into most wetland areas.
- The waterway design includes an underpass pipeline so as to avoid having to relocate the major water mains. This pipeline will maintain fish passage connectivity and be fully submerged and remote from any public access at all times;
- Other than within part of the 745 Berwick-Cranbourne Road (northerly frontage), the layout maintains or lowers 100 year ARI flood levels for abutting properties and Berwick-Cranbourne Road as prescribed by MW for existing conditions, with all development and floodplain reclamation filling in place;
- The design provides sufficient active flood storage and conveyance capacity to maintain 100 year ARI peak flows at Berwick-Cranbourne Road as per existing conditions with all development and floodplain reclamation filling in place;

- Water quality treatment wetlands are located effectively offline to the main Ti Tree Creek waterway;
- Where it is not feasible to maintain fully offline conditions, some wetland segments are designed to have flood velocities through them which comply in all respects with MW Wetland Design Guidelines (Version 4);
- All spoil generated by excavation of the designed waterway and wetland system will be used to raise lands beyond the reserve boundaries for development purposes;
- The entire corridor will be vegetated with indigenous aquatic/ ephemeral/ terrestrial species to Melbourne Water satisfaction.

3.2.7 DELIVER ACCESSIBLE, INTEGRATED AND ADAPTABLE COMMUNITY FACILITIES

The future urban structure supports walking and cycling links to Casey Central Town Centre and future community facilities located in Cranbourne North Stage 1 and the wider community via a linear open space corridor and dedicated paths as part of the road reserves. These walking and cycling links connect with the green community spine established as part of Cranbourne North Stage 1 development, and a range of community facilities and sporting and recreational activities will be linked along this community spine.

The components of the open space network are the linear creek and wetlands network, local parks, active playing fields, hilltops and high points and views. The Ti-tree Creek corridor and the central drainage reserve provide recreational opportunities beyond the dedicated open space in the PSP.

Community facilities are centrally located to the Cranbourne North (Stages 1 and 2) area, and will be flexible enough to accommodate future growth and change in focus as the community matures. Community facilities are well-connected to active and passive recreation spaces and the broader PSP area via the east-west spine featuring a widened road reserve to accommodate landscaped pedestrian and cyclist corridors.



3.3 LAND USE BUDGET

The Land Use Budget is depicted in Plan 6, and outlined in Table 3 Summary Land Use Budget, with a more detailed property specific Land Use Budget in Table 4.

Land Use Budget Summary

The Cranbourne North Stage 2 PSP covers a total area of 186 hectares. The Net Developable Area ("NDA") is 135.84 hectares representing 71.83% of the PSP Area.

The Land Use Budget demonstrates that the urban structure established by the PSP achieves an average lot density of 15.55 dwellings per Net Developable Hectare ("NDHa"). Overall, based on Net Residential Area, the Cranbourne North Stage 2 Precinct Structure Plan will achieve an average residential lot size of approximately 410 sq m comprising a variety of larger and smaller lots.

The areas designated as a Local Town Centre and Local Centre have been included to calculate NDA, but are discounted for the purpose of calculating anticipated lot yields. Because higher density housing is encouraged in close proximity to both centres, the above housing estimates may be exceeded as higher density housing is developed.

3.4 DEMOGRAPHIC PROJECTIONS

The preparation of the Cranbourne North Stage 2 PSP has assumed an average household size of 2.8 persons (based on Victoria in Future 2008) as the basis for estimating the future population within the PSP area. In the longer term, the household size is forecast to gradually decline towards the current metropolitan average which is around 2.5 people per dwelling.

Based on the above, the future population of the PSP area is estimated at 5,821 people.

Based on demographic data for growth areas in the Cranbourne area, the PSP plans for the following community characteristics:

- a higher proportion of families with young children compared to the metropolitan average,
- a higher proportion of families without children compared to the metropolitan average,
- a higher proportion of population in the 0-9 and 30-39 age groups than the metropolitan average, and
- a lower proportion of population in the 55-65 age group than the metropolitan average.
- a lower proportion of population in the 55-65 age group than the metropolitan average,

The proportion of residents at or reaching retirement age by 2031 is projected to increase significantly in line with the metropolitan average.

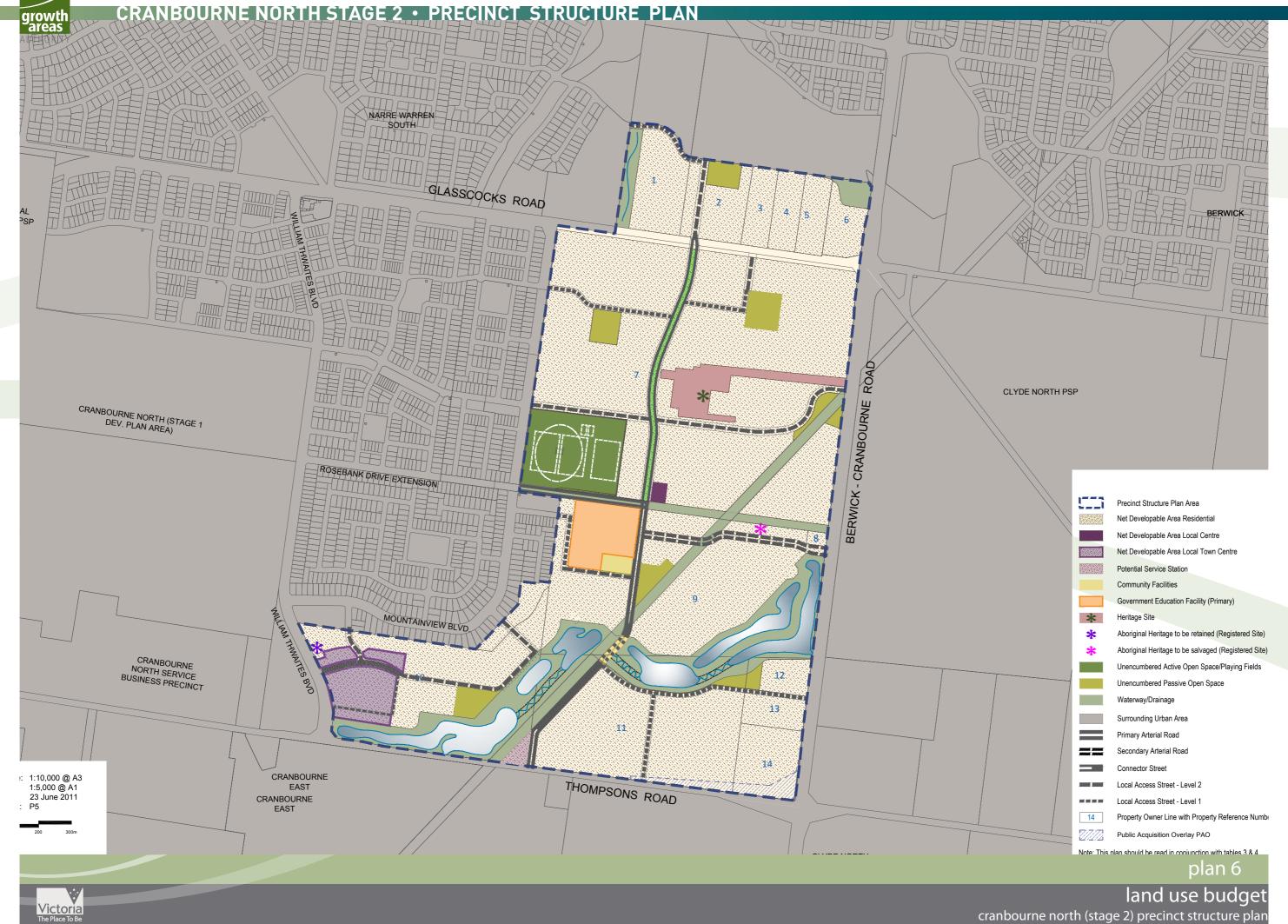
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Table 3: Summary Land Use

DESCRIPTION	Hectares	% of Total Area	% of NDA
TOTAL PRECINCT AREA (ha)	189.13	100.0%	
TRANSPORT			
6 Lane Arterial Roads	3.27	1.73%	2.41%
4 Lane Arterial Roads	1.12	0.59%	0.82%
Sub-total Sub-total	4.39	2.32%	3.23%
COMMUNITY FACILITIES			
Community Services Facilities	0.50	0.26%	0.37%
Sub-total	0.50	0.26%	0.37%
GOVERNMENT EDUCATION			
Government Schools	3.50	1.85%	2.58%
Sub-total	3.50	1.85%	2.58%
OPEN SPACE			
ENCUMBERED LAND AVAILABLE FOR RECREATION			
Gas Easements	2.21	1.17%	1.63%
Water / Sewer Pipe Easement	4.05	2.14%	2.98%
Waterway / Drainage Line / Wetland / retarding	22.90	12.11%	16.86%
Heritage	0.07	0.04%	0.05%
Sub-total Sub-total	29.24	15.46%	21.52%
UNENCUMBERED LAND AVAILABLE FOR RECREATION			
Active Open Space	6.85	3.6%	5.04%
Passive Open Space	5.50	2.9%	4.05%
Sub-total Sub-total	12.35	6.5%	9.09%
TOTALS OPEN SPACE	12.35	6.5%	9.09%
OTHER			
Road Reserves not available for development	3.31	1.75%	2.44%
Sub-total Sub-total	3.31	1.75%	2.44%
NET DEVELOPABLE AREA (NDA) ha	135.84	71.83%	

17

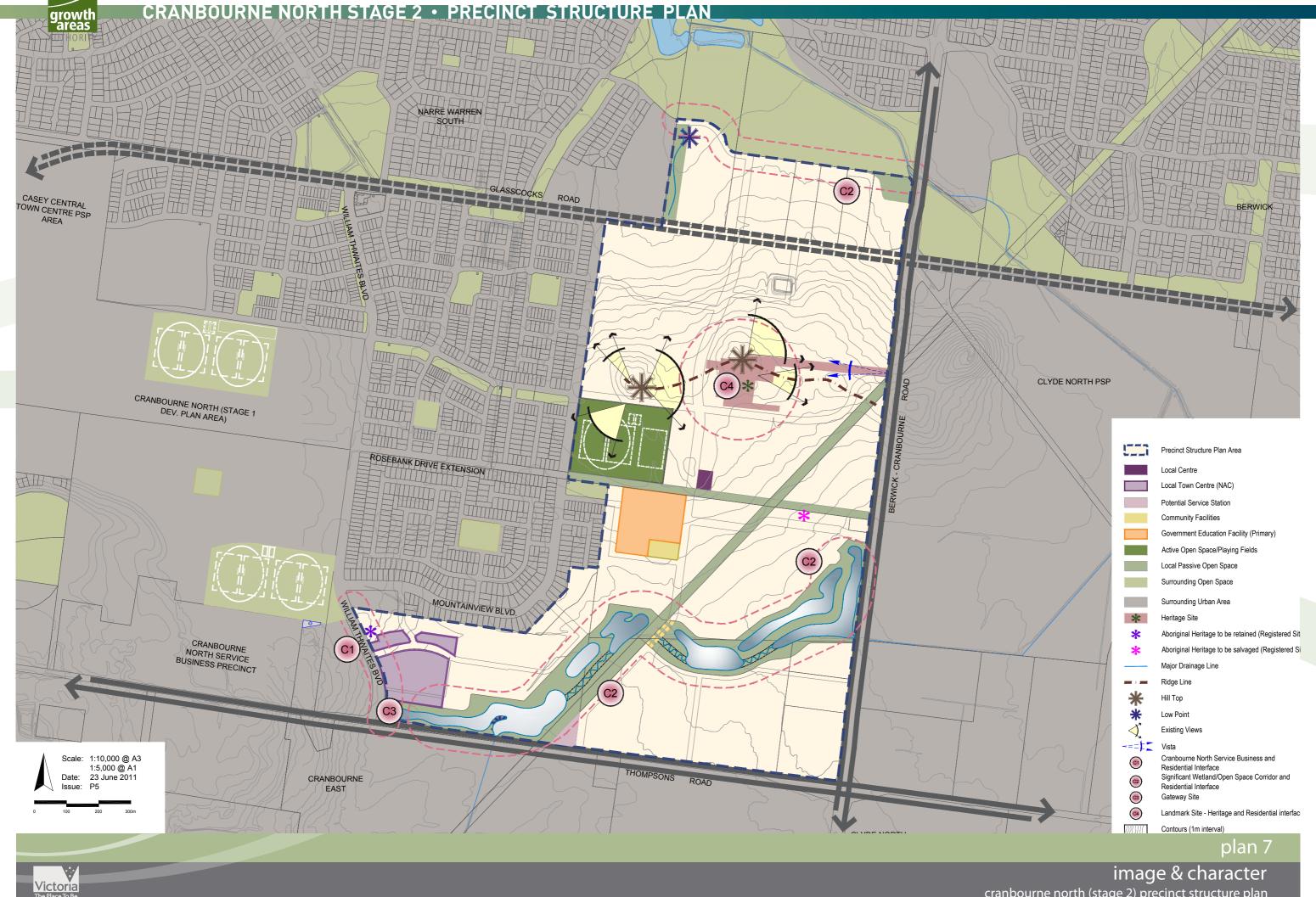


Section 3 - Vision & Urban Structure



Table 4: Detailed Land Budget

	TRANSPORT			COMMUNITY ENCUMBERED LAND AVAILABLE FOR RECREATION				UNENCUI LAND AVAIL RECREA	ABLE FOR	TE OPABLE RES)		KEY PERCENTAGES				TARGET L LAND SLE		
PROPERTY NUMBER	TOTAL AREA (Hectares)	6 LANE ARTERIAL ROAD / WIDENING	4 LANE ARTERIAL ROAD / WIDENING	COMMUNITY FACILITIES	GOVERNMENT EDUCATION	GAS EASEMENTS	WATER / SEWER PIPE EASEMENT	WATERWAY / DRAINAGE LINE /WETLAND / RETARDING	HERITAGE	ACTIVE OPEN SPACE	PASSIVE OPEN SPACE	HERITAGE SITE	TOTAL NET DEVELOPABLE AREA (HECTARES)	NET DEVPT AREA % OF PRECINCT	ACTIVE OS % NDA	PASSIVE OS % NDA	TOTAL PASS & ACTIVE OS %	OPEN SPACE DEL TARGET % FROM OVERALL LAND BUDGET TABLE
PRECINCT																		
Property 1	5.95	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.00	0.00	4.72	79.32%	0.00%	0.00%	0.00%	9.09%
Property 2	4.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	3.83	83.62%	0.00%	19.58%	19.58%	9.09%
Property 3	1.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.93	100.00%	0.00%	0.00%	0.00%	9.09%
Property 4	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.02	100.00%	0.00%	0.00%	0.00%	9.09%
Property 5	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	2.00	99.20%	0.00%	0.00%	0.00%	9.09%
Property 6	2.76	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	1.99	72.21%	0.00%	0.00%	0.00%	9.09%
Property 7	76.41	0.00	1.12	0.00	0.00	2.21	0.99	0.58	0.00	6.85	2.58	3.31	58.75	76.89%	11.66%	4.40%	16.06%	9.09%
Property 8	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	100.00%	0.00%	0.00%	0.00%	9.09%
Property 9	35.17	0.00	0.00	0.50	3.50	0.00	1.71	8.04	0.00	0.00	0.70	0.00	20.72	58.92%	0.00%	3.38%	3.38%	9.09%
Property 10	24.30	0.00	0.00	0.00	0.00	0.00	0.50	6.92	0.07	0.00	0.89	0.00	15.92	65.51%	0.00%	5.61%	5.61%	9.09%
Property 11	23.92	0.62	0.00	0.00	0.00	0.00	0.85	5.13	0.00	0.00	0.30	0.00	17.02	71.16%	0.00%	1.74%	1.74%	9.09%
Property 12	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.27	0.00	1.53	75.44%	0.00%	17.98%	17.98%	9.09%
Property 13	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.02	100.00%	0.00%	0.00%	0.00%	9.09%
Property 14	4.04	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.14	77.84%	0.00%	0.00%	0.00%	9.09%
Sub-total	187.38	1.52	1.12	0.50	3.50	2.21	4.05	22.90	0.07	6.85	5.50	3.31	135.84	72.50%	5.04%	4.05%	9.09%	9.09%
Road Reserve - Glasscocks Rd	1.75	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	9.09%
Sub-total	1.75	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00%	0.00%	0.00%	9.09%
TOTAL PRECINCT	189.13	3.27	1.12	0.50	3.50	2.21	4.05	22.90	0.07	6.85	5.50	3.31	135.84	71.83%	5.04%	4.05%	9.09%	9.09%



Section 4 - Elements



4.0 ELEMENTS

This chapter sets out objectives and planning and design guidelines for the following elements:

- 1. Image and Character
- 2. Housing
- 3. Community Facilities
- 4. Open Space and Natural Systems
- **5.** Employment and Activity Centres
- 6. Transport and Movement
- 7. Utilities and Energy

Each element includes:

Objectives: an objective describes the desired outcome to be achieved in the completed development. Objectives must be met.

Plans: the plans are a spatial expression of the objectives.

Planning and Design Guidelines including figures and tables that:

- must be met; or
- should be met.

Where a planning and design guideline is listed as "must be met" no alternative may be considered.

Where a planning and design guideline is listed as "should be met" an application for an alternative design solution or outcome envisaged by the planning and design guideline, which meets the objective, may be considered to the satisfaction of the responsible authority.

4.1 IMAGE AND CHARACTER

4.1.1 IMAGE AND CHARACTER OBJECTIVES

- To establish a built environment that is functional, safe, aesthetically pleasing and that promotes a strong sense of place for future residents,
- To establish a strong sense of place that responds to and enhances the landscape character and topographical features of the precinct,
- To capitalize on view corridors to and from significant landscape features and ensure development does not detract from visual amenity of the area,
- To respond appropriately to the natural land form of the area,
- To develop a distinctive neighbourhood character with a strong emphasis on elements which contribute to community identity and sense of place,
- To conserve and enhance recognized heritage places,
- To use predominantly native and indigenous plant palette in the landscaping of public spaces, and

4.1.2 IMPLEMENTATION

The objectives for image and character are met by implementation of all the following:

- » Plan 5: Future Urban Structure,
- » Plan 7: Image and Character,
- » Road and street cross sections in the Transport and Movement Element, and
- » Planning and design guidelines set out under 4.1.3.

4.1.3 PLANNING AND DESIGN GUIDELINES

Street Tree Planting

The following planning and design guidelines should be met:

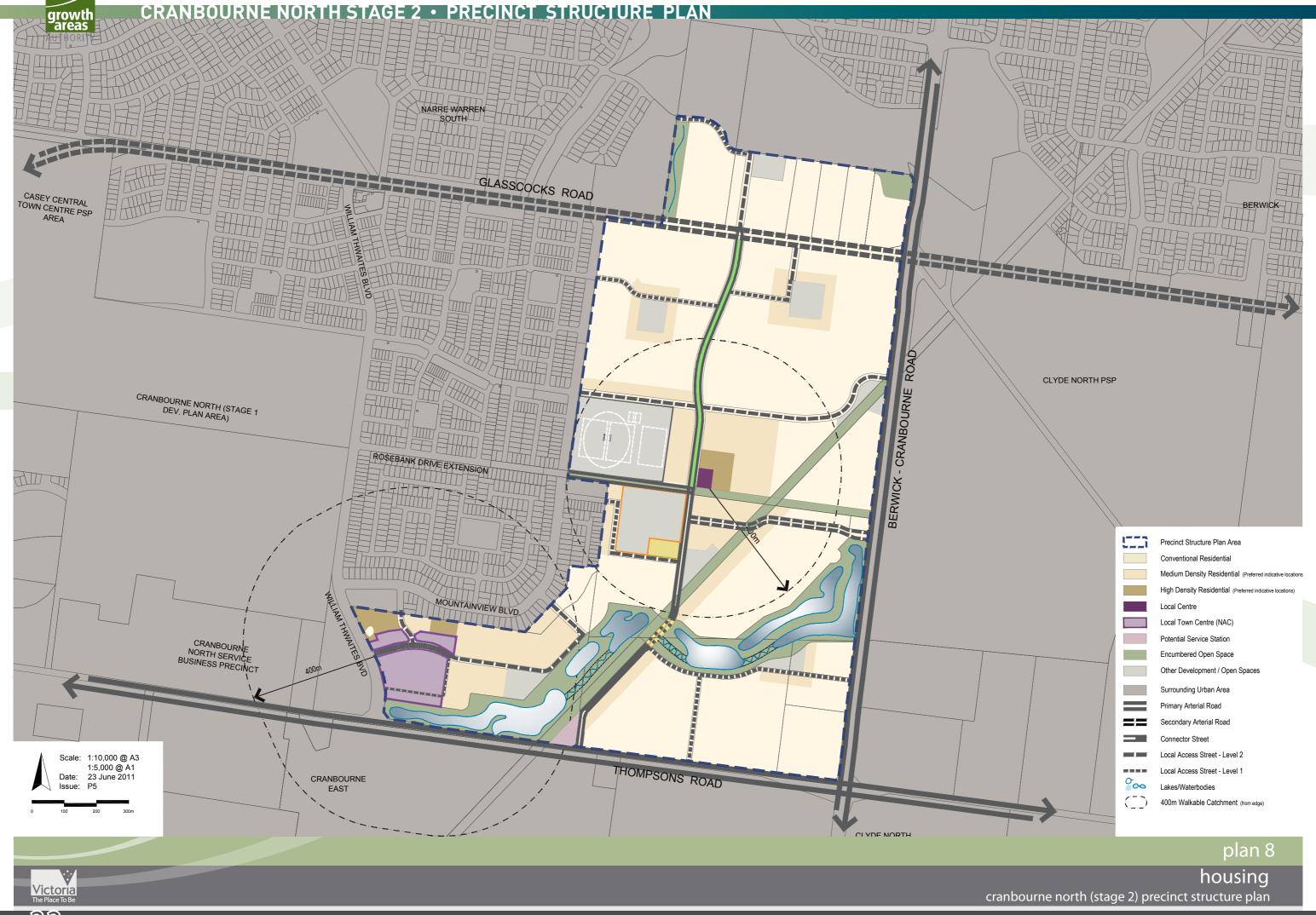
Street trees should:

- Be consistent with the relevant adopted Casey Street Tree Strategies.
- Support the general native and indigenous landscape vision of the precinct, with targeted use of exotic species on some streets and as highlight plantings.
- Be suitable to the scale of the street and the planting space available, with larger tree species chosen for wider roads.
- Form strong avenues and canopies to provide shade and definition to streetscapes.
- Be suitable for local soil and climatic conditions
- Be chosen to provide visual cues and definition to different classes of roads, activity centres, park frontages and key intersection and entrances.
- Use appropriate indigenous trees suitable for the urban environment, particularly where a street links with or adjoins conservation areas. Use of indigenous street trees along the key precinct pedestrian and bicycle trails, within wider road reserves, is also desirable.

Tree planting should consider as appropriate:

- Council's Collector Roads Street Tree Strategy.
- Local Roads Street Tree Strategy .
- Casey Arterial Roads Tree Strategy (CARTS).

Generally later developments will be required to match tree species that have already been approved or planted in roads linking to or adjoining development parcels.





4.2 HOUSING

4.2.1 HOUSING OBJECTIVES

The objectives for housing are:

- To provide a diversity of lot sizes and housing types to satisfy the needs and aspirations of the new community over time,
- To achieve an average of at least 15 dwellings per NDHa throughout the PSP area,
- To provide medium and higher residential housing densities close to the Local Town Centre and Local Centre, open space, community hub, and proposed public transport routes,
- To provide residential neighbourhoods that promote liveability through high urban design standards, creating attractive streetscapes and a distinctive neighbourhood character,
- To provide lot sizes and housing types which are responsive to the character of the natural environment in the area and respond to principles of environmental sustainability,
- To provide integrated housing sites (including for example medium density housing or other specialized housing forms) within or at the interface of the local town centre, and integrate with local and linear open space, and
- To provide an appropriate transition and residential interface to the existing heritage site.

4.2.2 IMPLEMENTATION

The objectives for housing are met by implementation of all of the following:

- » Plan 5: Future Urban Structure,
- » Plan 8: Housing,
- » Table 5: Housing Yield and Distribution,
- » Planning and Design Guidelines set out in 4.2.3, and
- » Plan 10: Open Space.

4.2.3 PLANNING AND DESIGN GUIDELINES

Density requirements

The overall PSP area should achieve a minimum density of 15 dwellings per hectare (Net Developable Area). Indicative dwelling yields and density distributions are shown in Table 5.

Residential development should include a full range of dwelling densities, including 'conventional' density residential lots, 'medium' density residential lots, and 'higher' density residential/specialised housing. These terms are defined in the glossary in Section 6.

Flexibility has purposefully been provided to support alternative lot distribution that promotes greater housing diversity throughout the PSP area where it can be demonstrated that a plan achieves the required density and the balance of objectives in the PSP.

In delivering this outcome, it is anticipated that medium density areas as identified in the Housing Plan will provide predominantly conventional density housing, whilst some medium and high density housing will be provided around the Local Town Centre, Local Centre and open space areas.

Medium and Higher Density Housing

Development of medium and high density housing is encouraged in the following circumstances:

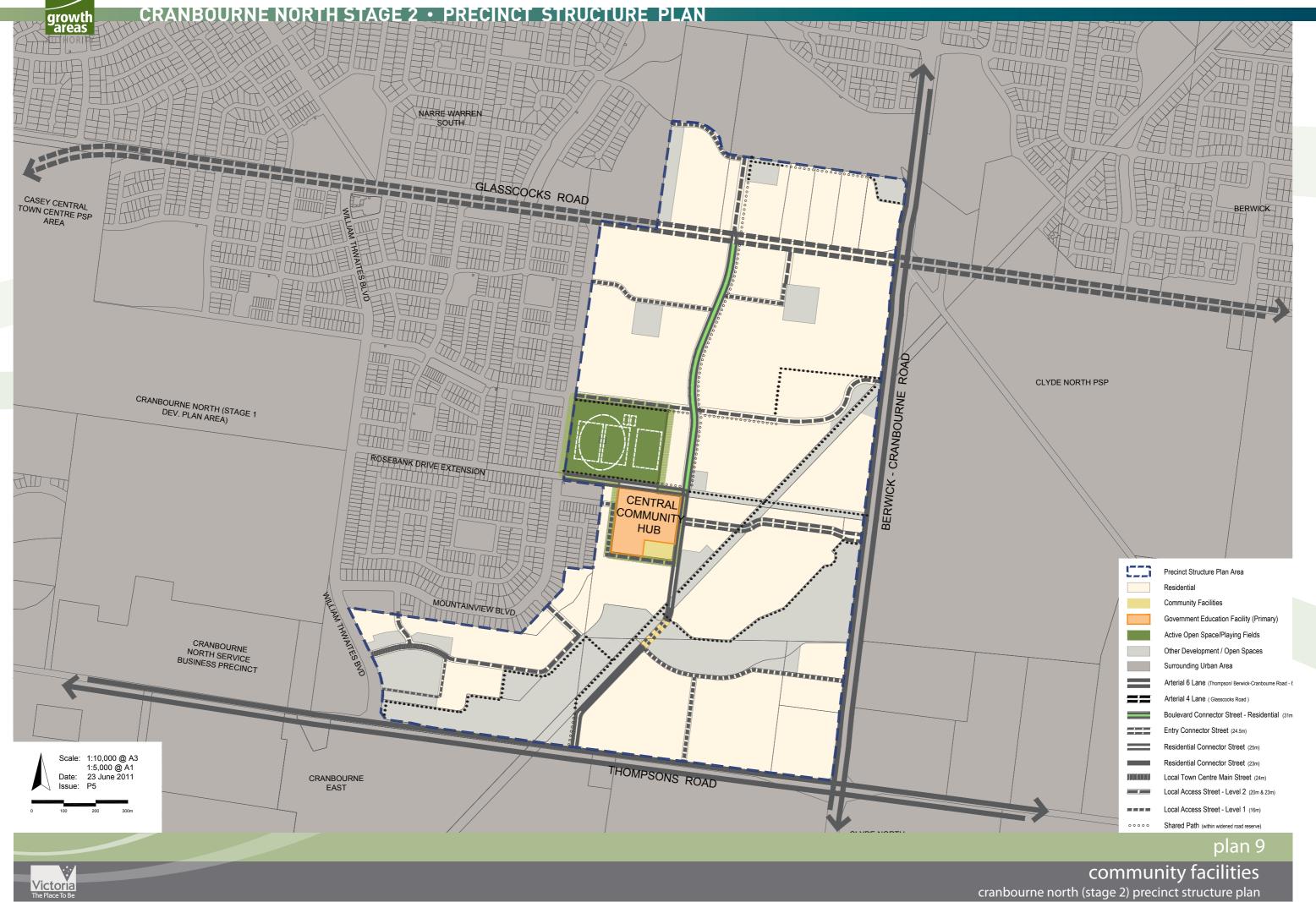
- As part of an integrated development site,
- As part of a specialised housing project such as retirement living or an aged care facility,
- Generally in areas within 400m walkable catchment of the main street core of the local town centre,
- · Overlooking, abutting or within close proximity community hubs,
- Integrated with open space areas and linear reserves; and,
- Be provided in a variety of forms shop top, terrace/townhouse development, smaller 'town' lots, and integrated development sites.

The PSP encourages higher housing densities to be achieved for individual development sites above the minimum requirements specified.

Dwelling and lot densities are distributed across the PSP area as a percentage of the total area available for residential development. Table 5 illustrates how the PSP can achieve the objectives for housing diversity.

Table 5: Housing Yield and Distribution

DESCRIPTION			
RETAIL & EMPLOYMENT	Ha		
Activity Centre (retail / office / mixed use)	4.68		
Sub-total	4.68		
RESIDENTIAL	Ha	Dwell / ha	Dwellings
Residential - Conventional Density Residential	104.65	13	1360
Residential - Medium Density	23.26	25	581
Residential - Medium Density - Retirement	0.00	23	0
Residential - High Density	3.26	35	114
Subtotal Against Net Residential Area (NRA)	131.16	15.7	2056
COMBINED RES/ RETAIL / EMP / OTHER	NDA (Ha)	Dwell / NDha	Dwellings
TOTALS RESIDENTIAL YIELD AGAINST NDA	135.84	15.13	2056





4.3 COMMUNITY FACILITIES

4.3.1 COMMUNITY FACILITIES OBJECTIVES

The objectives for community facilities are:

- To provide a central community hub as one of the focal points for community activity and interaction,
- To support the early provision of facilities such as local parks, playgrounds and community meeting places,
- To support the timely delivery of community facilities such as the primary school, children's services and formal recreation facilities as population thresholds are reached and funding becomes available,
- To plan for a range of adaptable community facilities to meet the needs of local residents,
- To ensure safe and convenient access to community facilities by walking, cycling, public transport and car,
- To generally co-locate community facilities with active and passive open space, and
- To plan and design for community facilities which represent quality architecture and offer flexible designs to accommodate a range of uses and meet the changing needs of the community.

4.3.2 IMPLEMENTATION

The objectives for community facilities are met by implementation of all the following:

- » Plan 5: Future Urban Structure,
- » Plan 9: Community Facilities,
- » Plan 15: Public Transport Network,
- » Table 7: Open Space Values,
- » Figures 1: Community Hub Concept Plan, and
- » Planning and design guidelines set out in 4.3.3.



4.3.3 PLANNING AND DESIGN GUIDELINES

The following planning and design guidelines should be met:

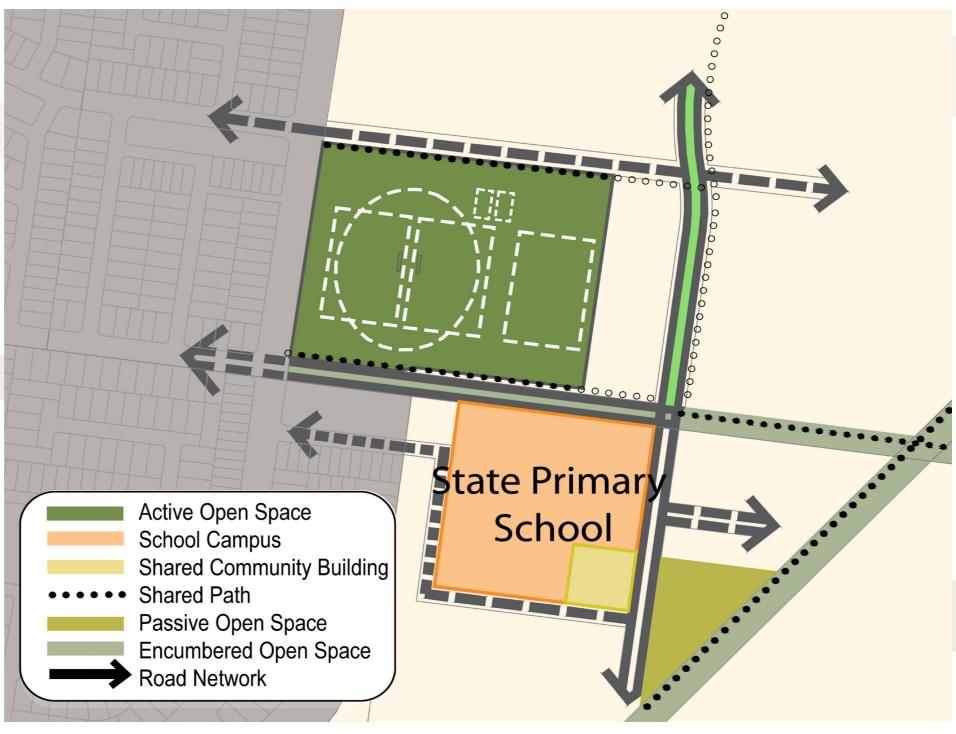
General

- Community facilities should be integrated with other council facilities and/or open space, and be co-located with proposed children's playgrounds, recreation infrastructure and kindergartens, and
- Education and community services (public and private) and other activities (such as childcare centres) should be:
 - · Within and or adjoining community hubs,
 - · Within or on the edge of Local Town Centres, or
 - On either connector streets or arterial roads where access can be provided safely.

Community Hub – Concept Plan

The preliminary concept plan is provided as an indicative design solution. Alternative approaches that meet the objectives for Community Infrastructure may be considered to the satisfaction of the responsible authority.

Figure 1: Community Hub Concept Plan



ည်ကြီ Section 4 - Elements



4.3.4 COMMUNITY FACILITIES DELIVERY STATEMENT

It is important that community facilities are delivered in an integrated and coordinated manner to maximise both early and cost effective provision. The following statements guide these outcomes:

Integrated, efficient and timely facility provision

- Funding opportunities and partnerships will be sought to support the early provision of community facilities.
- The Growth Areas Authority will work closely with the City of Casey through infrastructure working groups to explore and pursue opportunities for partnership approaches to support integrated and timely provision of key community facilities.
- Potential funding sources to be considered include:
 - Cranbourne North Development Contributions Plan.
 - City of Casey Capital Works Program.
 - Development Proponent Funding. This may include an injection of additional funding, or potential for a development proponent to deliver an item in the Development Contribution Plan through in-kind works. Provision of in-kind works requires approval by the City of Casey as the Collecting Agency (refer to the Cranbourne North Development Contributions Plan 2011).
 - State Grants Programs. The State Government has many grant programs with funding potential across a broad range of community facilities and services.
 - Building New Communities Fund. The City of Casey may make application for funding to support the provision of eligible transport, community, environmental, and economic infrastructure and for the acquisition of land for such infrastructure in the precinct.
 - Non-government Organisations. Some community facilities may be able to be delivered by the Council working in partnership with non-government organisations.
 - Community Infrastructure Levy, under section 46K of the Planning and Environment Act 1987.

Community Hub Concept Planning

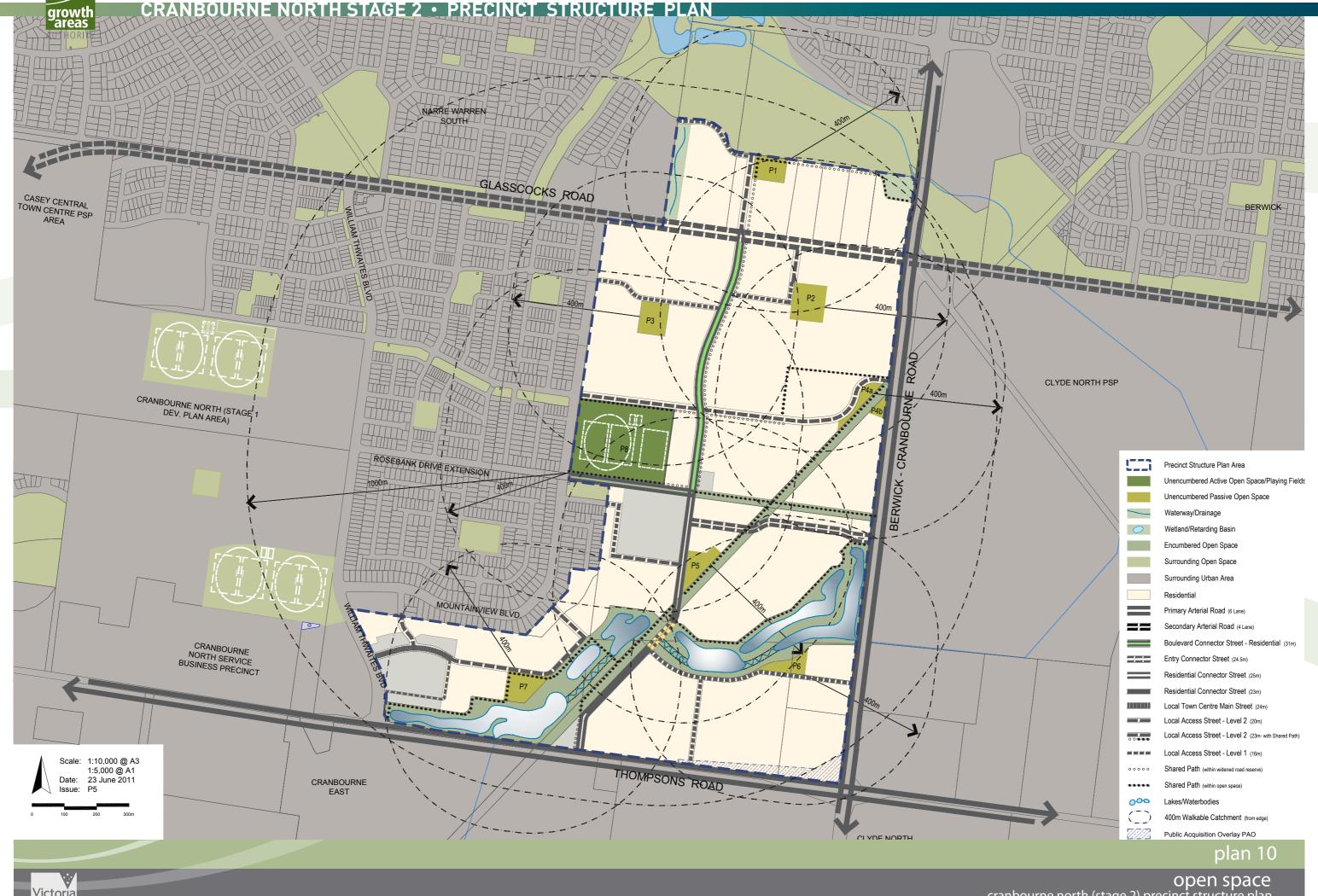
- Delivery of integrated and timely community facilities is a complex and evolving task that takes place in stages over a long period of time given the involvement of many stakeholders with priorities that are subject to change over time. It is expected that models for service delivery will change over time as new approaches are adopted and the PSP has been designed to be flexible enough to adapt to changing circumstances.
- Coordination and delivery will be greatly assisted by the establishment of:
 - A coordinated governance model for the concept and master planning.
 - The development of community hub concept plans.
 - Master plans that provide detail for the delivery of the concept plans.
- The opportunities for integrated facility delivery apply equally to sporting facilities as they do to community centres and schools. Opportunities for shared use of clubhouse and pavilion buildings should be investigated and if appropriate accommodated through flexible facility design and integration through hub master planning.
- Where facilities area associated with schools, they should be designed concurrently to ensure integrated facility delivery and maximise sharing opportunities.

Open Space Improvements

- Individual development proponents are required to provide basic improvements to local parks and passive open space including earthworks, fencing, water tapping, grassing, tree planting, local playgrounds and shared paths and footpaths, furniture and paving.
- The City of Casey may add to these basic improvements over time with the provision of additional facilities through its Capital Works Program.
- The active open space area will benefit from the preparation of master plans by Casey City Council to guide their staged delivery over time. Consistent with the establishment of the community hubs discussed above, these processes will benefit from a governance model being established to support the master planning and the ongoing implementation and management of the reserves consistent with other approaches across the municipality.

Table 6: Community Facilities

	i .	
CENTRAL AREA		
FACILITIES AND SERVICES	LOCATION	RESPONSIBILITY
State Primary School P-6	Central Community Hub	DEECD
Triple Kindergarten	Central Community Hub	Casey City Council
Community meeting space & Non Government organisation (NGO) consulting rooms	Central Community Hub	Casey City Council
Active Open Space: 3 x soccer fields and 1 x cricket oval Cricket Nets Pavilion	Central Community Hub	Casey City Council
Passive Open Space (inc. but not imited to: Skate/BMX facility, Playgrounds, Basket Ball ½ court, BBQ facilities, shelters and walking trail)	Distributed throughout the precinct and generally within 400 m of most residents	Casey City Council / Development proponents



cranbourne north (stage 2) precinct structure plan



4.4 OPEN SPACE AND NATURAL SYSTEMS

4.4.1 OPEN SPACE AND NATURAL SYSTEMS OBJECTIVES

The objectives for open space and natural systems are:

- To provide a variety of open spaces to meet the active and passive recreation needs of the community and,
- To integrate and restore as appropriate environmental, heritage and drainage values and features.
- To establish a network of appropriately sized, connected and distributed open spaces to meet local and district open space needs and generally within 400m or around a 5 minute walk of most residents.
- To establish an attractive urban environment with a strong sense of place.
- To provide for a sustainable future maintenance regime.
- To support the early development of open space through a range of funding sources.
- To facilitate local and regional trail linkages with adjoining precincts and open space features.

4.4.2 IMPLEMENTATION

The objectives for open space and natural systems are met by all of the following:

- » Plan 5: Future Urban Structure,
- » Plan 9: Community Facilities,
- » Plan 10: Open Space,
- » Plan 16: Walking and Trails,
- » Table 7: Open Space values,
- » Cranbourne North Stage 2 Native Vegetation Precinct Plan set out in Section 4.4.5, and
- » Open Space Planning and Design Guidelines set out in Table 8.

Table 7: Open Space values

This table describes the core components of the open space network delivered via the DCP (in the case of active open space) and via the schedule to clause 52.01 of the Casey Planning Scheme (for passive open space). The recommended park types and amenities should be used as a guide, in consultation with council, when developing park concepts. Final park type and design is subject to the approval of Council.

PARK CODE	PARK FUNCTION	UNENCUMBERED AREA	INDICATIVE EFFECTIVE USEABLE AREA	SITE FEATURES/DESCRIPTION
P1	Passive	0.750	extensive wetland parkland to north	Located to the northern boundary of the precinct this park is situated on flat to gently sloping land in a northerly direction. The park is highly accessible, being located at the junction of two of the precincts off road shared paths It also adjoins extensive Berwick Springs wetlands parkland. These characteristics mean that this park is ideally suited to containing more intensive infrastructure suitable for a combination of destination youth and family recreation
P2	Passive	1.15	1.15	Located on a sloping rise adjacent the site of an existing dam, this park presents opportunities to retain some existing mature trees on its western perimeter. This, together with its larger proposed size results in this park being suited to simpler and more passive infrastructure with wider open areas and vistas to support social and family recreation.
Р3	Passive	0.85	0.85	This park is located at the highest point of the precinct and will generally service the western part of the precinct and the eastern portion of Cranbourne North stage 1. It will present opportunities to take advantage of views and vistas to surrounding areas and lends itself to social & family recreation functions.
P4a & P4b	Passive	0.583	1.19	This park consists of two unencumbered land parcels on either side of a Melbourne Water easement. The park is anchored to the off road trail network and Berwick - Cranbourne Road. These factors present an opportunity for some presentation landscape design to frame the easement, with simple infrastructure such as seats providing a resting point. Careful design may enable some youth infrastructure to be included in the park, which would be complementary to highly visible location.
P5	Passive	0.7	1.295	Strategically located along the shared trail network, and adjacent to the primary school and community hub, as well as being proximate to the local convenience centre, this park provides opportunities for more intensive recreation infrastructure. This could include a larger multi-age playground combined with social / family recreation with destination facilities.
P6	Passive	0.57	0.74	This smaller park would suite simple design, planting and infrastructure to support low key and contemplative recreation functions to take advantage of the amenity and vistas created by the large-scale wetlands and waterways it adjoins.
P7	Passive	0.893	1.16	Located 200m of the local town centre, which will have good access to public transport, this park lends itself to including facilities for youths and families with older children. It is also well integrated with the extensive waterway and shared path network in this part of the precinct.
P8	Active	6.851	6.851	This is a larger active reserve, the primary purpose of which is to provide cricket and soccer club based sport. It can also include some passive elements such as walking paths, seats and trees playground facilities



CRANBOURNE NORTH STAGE 2 • PRECINCT STRUCTURE PLAN

Table 8: Open Space Planning and Guidelines

PLANNING AND DESIGN GUIDELINES

GENERAL

- Open spaces should be designed and constructed to a fit for purpose standard with an appropriate mix of facilities.
- Design of open spaces should be contemporary in nature, innovative and draw upon the context, history and the future use
 of the space.
- Passive parks should cater for a broad range of users by providing a mix of spaces and planting to support both structured and informal recreational activities.
- Active recreation reserves should be designed to maximise co-location and sharing opportunities between complementary
 sports and adjoining school facilities. Sharing of Council managed facilities with schools will require a formal management
 agreement.
- Parks should contain both cleared open areas for unstructured activities, as well as areas for shade and shelter.
- The appropriate mix of infrastructure in parks should be provided to the satisfaction of the Responsible Authority.
- Any pedestrian link through a drainage reserve or adjoining the road network should include provision of park seating at appropriate intervals to the satisfaction of the Responsible Authority.

INTERFACE WITH ROAD NETWORK

- Open spaces should have a road frontage to all edges except where these are otherwise addressed by active frontage from careful design of residential, commercial or community facility development.
- Streetscape planting and paths should complement and integrate with the adjoining parkland design.

INTERFACE WITH ADJOINING DEVELOPMENT

- The open space network should be enhanced by careful design of residential, community and commercial development adjacent to it.
- The primary frontage of development that immediately abuts open space areas should address and promote use and surveillance of the parkland.
- Development abutting open space should be well articulated and facilitate passive surveillance with windows, balconies, and pedestrian access points.
- Development should avoid the rear of properties or blank walls abutting parklands.
- Where fencing is required it should be low scale and permeable to facilitate public safety and surveillance.
- Landscaping of adjoining development should complement the park landscape design.

INTERFACE WITH DRAINAGE SYSTEM

- Pedestrian and bicycle paths should be incorporated into the open space drainage system to connect the open space with the street network.
- Pedestrian bridges and boardwalks should be incorporated into the path network of the drainage system to facilitate permeability of neighbourhoods.
- Paths, bridges and boardwalks should be designed to be above the 1:10 year flood level to the satisfaction of the responsible authority.

PARK BUILDINGS

- Park buildings should be sited and designed to integrate with and complement landscaping and should not dominate the parkland.
- Park buildings should be sited to frame park spaces and should avoid splitting up otherwise usable and effective spaces.
- Park buildings should be contemporary in design with orientation, materials and design detail planned to minimise resource use and maximise sustainability performance or heritage themes.
- Selected materials should complement the proposed landscape character.

PUBLIC SAFETY & LIGHTING

- Open spaces should be designed to be safe and comfortable places that encourage use by a wide range of people.
- The use of the design principles known as "Crime Prevention Through Environmental Design" ("CPTED") should guide the design of open spaces and the infrastructure it contains:
- Surrounding land uses should provide passive surveillance to adjoining open space and planting design should promote a highly visible public realm.
- The detailed design of open spaces that immediately abut development should complement and enhance the function and safety of that development.
- Open space path systems should facilitate clear, direct and easy movement to and from key destinations.
- Lighting in open spaces should be restricted to key pedestrian thoroughfares to encourage safe pedestrian movement throughout the network, but discourage inappropriate use of main parkland areas after dark.
- Light fittings should be energy and cost efficient and 'cut-off' type to direct light where it is required and reduce unnecessary spill to sides or above.
- Light fittings should be compact fluorescent or similar that emits white light.

PLANNING AND DESIGN GUIDELINES

LANDSCAPE CHARACTER AND VEGETATION

- A predominantly indigenous and Australian native planting theme supporting the biodiversity values of the precinct should characterise the open space network. Exotic species may be supported in key locations with the approval of the responsible authority.
- Species chosen should be appropriately robust to perform adequately in the local urban environment prior to finalising planting schemes.
- Use of exotic species and Australian native species and cultivars to achieve particular planting effects should be limited to areas requiring highlight planting for entries and key focal points.
- Advice should be sought from qualified Council officers regarding the suitability of proposed species prior to confirming the planting scheme.

OTHER PARK LANDSCAPE ELEMENTS AND INFRASTRUCTURE

- The design and siting of landscape elements and infrastructure should complement the area.
- Park infrastructure such as playgrounds, shelters, BBQs picnic tables, toilets etc should be clustered in nodes. Park planting themes should enhance and complement these nodes.
- Park seating should be provided to the satisfaction of the Responsible Authority.
- Public toilet facilities should be integrated with pavillions and clubhouses where possible.
- Park infrastructure should be contemporary in design.
- Use of bollards and fencing should be well targeted, maximise transparency and generally kept to a minimum.
- Where car parking is required within parks it should be sensitively designed to minimise large areas of hard surfaces and maximise tree and ground level planting. Safe pedestrian access should be integrated within car park designs.
- Bicycle parking should be located in highly visible locations and close to pedestrian desire lines/gathering spaces.

SIGNS

- Parks and sports fields should be clearly signed.
- Generally, signs within parks should be kept to a minimum with locations focussed on key access or interpretation points and major pedestrian / cycle routes.
- Design and materials choice should be contemporary and should complement other park design elements.

WATER SENSITIVE URBAN DESIGN ("WSUD")

- The design and layout of open spaces should maximise water use efficiency, stormwater quality and long term viability of vegetation through the use of WSUD initiatives.
- Where possible WSUD principles should be used to capture stormwater runoff to support planting and landscaping.
- Warm season grasses should be used within passive reserves and sports fields to minimise potable water use.

TRANSFER OF LAND REQUIREMENTS

All parks must be finished to the following level of development to the satisfaction of the Responsible Authority prior to the transfer of land:
Removal of all existing disused structures, foundations, pipelines or stockpiles,

- Cleared of rubbish and environmental weeds, levelled, topsoiled and grassed with warm climate grass (unless a conservation reserve),
- Provision of water tapping, potable and recycled water connection points. Sewer and gas connection points must also be
 provided to land identified as an active reserve,
- Drought resistant plantings,
- Vehicles exclusion devices (fence or other suitable method) and maintenance access points,
- Construction of a 2.5 metre concrete shared path around the perimeter of the reserve, connecting and linking into any other surrounding paths or points of interest, and
- Installation of park furniture including BBQs, shelters, tables, playgrounds and rubbish bins.

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4.4.3 HOW TO MAKE A PUBLIC OPEN SPACE CONTRIBUTION IN THIS PRECINCT

Clause 52.01 of the Casey Planning Scheme specifies a public open space contribution which must be made upon the subdivision of the land. Because the PSP seeks a particular distribution of public open space, all landowners must provide the public open space shown in Plan 10 of the PSP as part of their public open space contribution and make a payment or receive a payment as necessary to ensure that each landowners' open space contribution is the same or equal. This process is referred to as equalisation. Table 4 of this PSP is the Property Specific Land Budget and identifies the amount of open space to be provided as land and the payment in respect of equivalent land area that must be paid by or paid to the land owner.

All land within the Cranbourne North Stage 2 Precinct Structure Plan must make an open space contribution equal to 4.04% of Net Developable Area (NDA).

Where land is required for unencumbered open space purposes as shown in Plan 10 of the PSP and specified in Table 4 of the PSP and that area of land is less or equal to 4.04% of NDA that land is to be transferred to Council at no cost.

Where no land or less than 4.04% of NDA is shown in Plan 10 and Table 4 for unencumbered open space purposes, a cash contribution is to be made to Council to bring each property's total open space contribution up to an amount equal to 4.04% of NDA.

The value of the land for equalisation purposes is to be assessed on an area proportion of the site value, in accordance with Section 18 of the Subdivision Act 1988, of the whole of the land.

Where the land required for unencumbered open space purposes as shown in Plan 10 and Table 4 of the PSP is more than 4.04% of NDA, Council will pay an amount equivalent to the additional land being provided by that property required in order to provide #% of NDA as a public open space contribution but Council will not pay an amount for land which is in excess of the land required to be set aside as specified in Table 4 for Public Open Space.

The value of the land for equalisation purposes is to be assessed on an area proportion of the site value, in accordance with Section 18 of the Subdivision Act 1988, of the whole of the land.

4.4.4 BIODIVERSITY OBJECTIVES

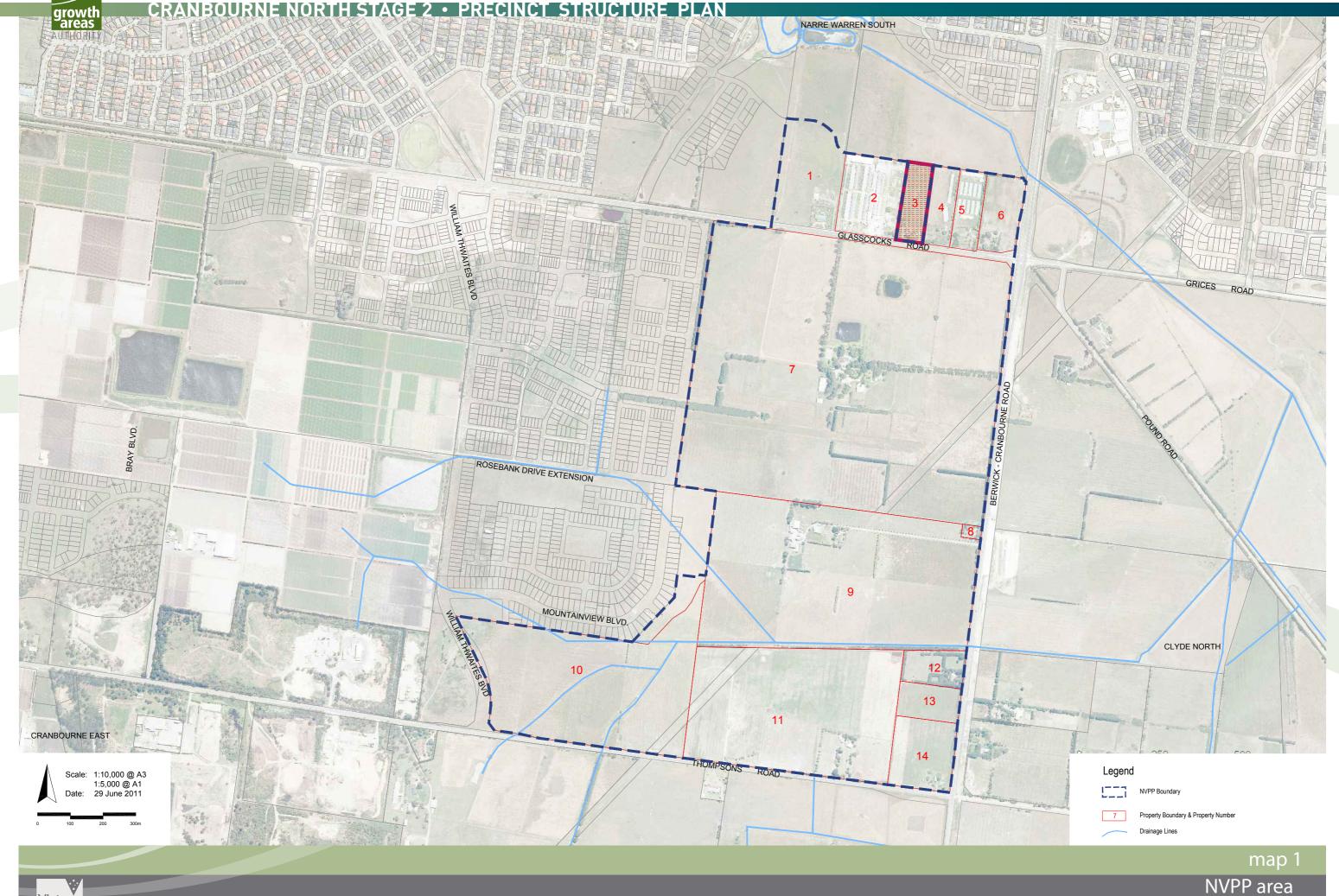
The objectives for Biodiversity are:

- To enhance the biodiversity of the area through the creation of the wetlands area to provide habitat and ecological connectivity throughout the precinct.
- To plan for the long term conservation management of the wetlands drainage area,
- In accordance with Melbourne Water constructed wetlands quidelines, there will be new naturalistic environment created.

4.4.5 IMPLEMENTATION

The objectives for biodiversity are met by all of the following:

- » Section 4.4.4: Biodiversity objectives,
- » Clause 52.16 of the Casey Planning Scheme, and
- » Section 4.4.6: The Cranbourne North Stage 2 Native Vegetation Precinct Plan.



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Victoria
The Place To Be

cranbourne north (stage 2) precinct structure plan



4.4.6 CRANBOURNE NORTH STAGE 2 NATIVE VEGETATION PRECINCT PLAN

This is the Cranbourne North Stage 2 Native Vegetation Precinct Plan listed under the Schedule to Clause 52.16 of the Casey Planning Scheme.

The removal, destruction or lopping of native vegetation in accordance with this Native Vegetation Precinct Plan, does not require a permit provided conditions and requirements specified in this Native Vegetation Precinct Plan are met.

The Cranbourne North Stage 2 Native Vegetation Precinct Plan applies to all land shown in NVPP Map 1.

PURPOSE

The purpose of the Cranbourne North Stage 2 Native Vegetation Precinct Plan is:

- To specify the native vegetation to be protected and the native vegetation that can be removed, destroyed or lopped.
- To ensure that areas set aside to protect native vegetation are managed to conserve ecological values in accordance with the Cranbourne North Stage 2 Precinct Structure Plan.
- To ensure that the removal, destruction or lopping of native vegetation specified to be protected is consistent with conserving the ecological values of these areas and is in accordance with the three-step approach to net gain as set out in Victoria's Native Vegetation Management a Framework for Action, DSE 2002.
- To set out the works or other necessary actions required to offset the removal, destruction or lopping of native vegetation.
- To streamline the planning approvals process through a precinct wide landscape approach to native vegetation protection and management.

VEGETATION PROTECTION OBJECTIVES TO BE ACHIEVED

• To provide native vegetation in more sustainlable locations by offsetting native vegetation removal in the precinct.

NATIVE VEGETATION TO BE PROTECTED

There is no native vegetation to be protected.

NATIVE VEGETATION THAT CAN BE REMOVED, DESTROYED OR LOPPED

The native vegetation described in NVPP Table 1 and shown as native vegetation that can be removed in Map 2 can be removed, destroyed or lopped, subject to the requirements and conditions set out in this NVPP as allowed under Clause 52.16 of the Casey Planning.

OFFSET CALCULATIONS

The offset requirements for native vegetation which can be removed, destroyed or lopped are described in NVPP Table 2.

NVPP Table 1: Habitat Zones that can be removed

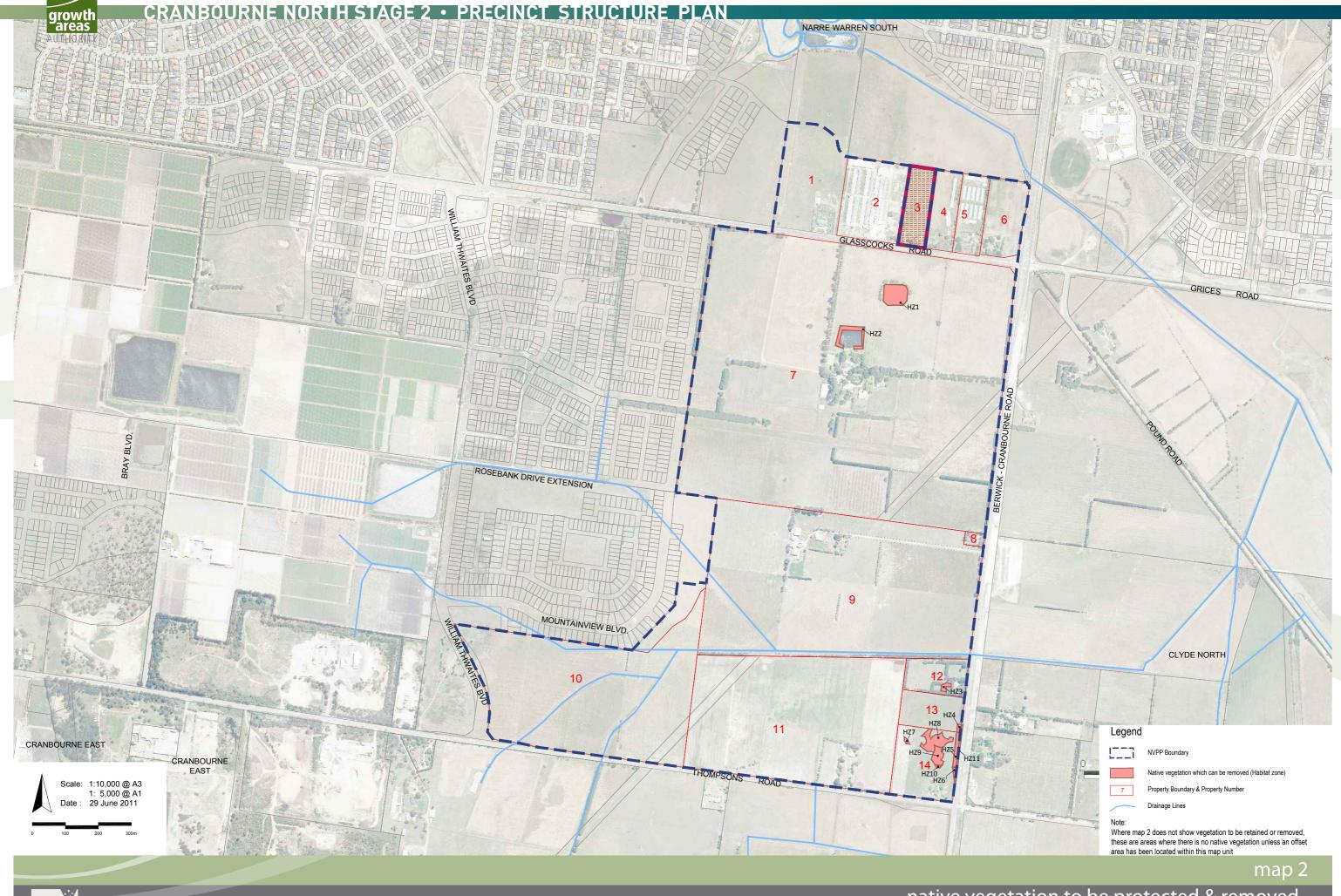
PROPERTY NUMBER	PROPERTY ADDRESS (INCLUDING TITLE NUMBER)	HABITAT ZONE ID	EVC NO. & INITIALS	Size (ha)
7	805 Berwick/Cranbourne Road, Cranbourne North (2\PS518301)	HZ1	EVC 821 TM	0.42
7	805 Berwick/Cranbourne Road, Cranbourne North (2\PS518301)	HZ2	EVC 821 TM	0.21
12	705 Berwick/Cranbourne Road, Cranbourne North (1\LP78965)	HZ3	EVC 53 SS	0.05
13	695 Berwick/Cranbourne Road, Cranbourne North (2\LP78965)	HZ4	EVC 937 SWO	0.03
14	675 Berwick/Cranbourne Road, Cranbourne North (3\LP78965)	HZ5	EVC 937 SWO	0.12
14	675 Berwick/Cranbourne Road, Cranbourne North (4\LP78965)	HZ6	EVC 937 SWO	0.02
14	675 Berwick/Cranbourne Road, Cranbourne North (3\LP78965)	HZ7	EVC 55 PGW	0.02
14	675 Berwick/Cranbourne Road, Cranbourne North (3\LP78965)	HZ8	EVC 55 PGW	0.33
14	675 Berwick/Cranbourne Road, Cranbourne North (3\LP78965)	HZ9	EVC 55 PGW	0.15
14	675 Berwick/Cranbourne Road, Cranbourne North (4\LP78965)	HZ10	EVC 55 PGW	0.01
Road Reserve	Berwick/Cranbourne Road Reserve, Cranbourne North (Road Reserve)	HZ11	EVC 937 SWO	0.09

NVPP Table 2: Offset Requirements for Habitat Zones which can be removed

PSP PROPERTY NUMBER	PROPERTY ADDRESS (INCLUDING TITLE NUMBER)	HABITAT ZONE ID	EVC NO. AND NAME	CONSERVATION SIGNFICANCE	LOSS (HABITAT HECTARES)	NET GAIN MULTIPLIER	GAIN TARGET (HABITAT HECTARES) OFFSET TO BE ACHIEVED
7	805 Berwick/Cranbourne Road, Cranbourne North (2\ PS518301)	HZ1	EVC 821 TM	Very High	0.1176	2	0.2352
7	805 Berwick/Cranbourne Road, Cranbourne North (2\ PS518301)	HZ2	EVC 821 TM	Very High	0.0672	2	0.1344
12	705 Berwick/Cranbourne Road, Cranbourne North (1\ LP78965)	HZ3	EVC 53 SS	Very High	0.0045	2	0.0090
13	695 Berwick/Cranbourne Road, Cranbourne North (2\ LP78965)	HZ4	EVC 937 SWO	Very High	0.0042	2	0.0084
14	675 Berwick/Cranbourne Road, Cranbourne North (3\LP78965)	HZ5	EVC 937 SWO	Very High	0.0168	2	0.0336
14	675 Berwick/Cranbourne Road, Cranbourne North (4\ LP78965)	HZ6	EVC 937 SWO	Very High	0.0028	2	0.0056
14	675 Berwick/Cranbourne Road, Cranbourne North (3\ LP78965)	HZ7	EVC 55 PGW	High	0.0028	1.5	0.0042
14	675 Berwick/Cranbourne Road, Cranbourne North (3\ LP78965)	HZ8	EVC 55 PGW	High	0.0462	1.5	0.0693
14	675 Berwick/Cranbourne Road, Cranbourne North (3\ LP78965)	HZ9	EVC 55 PGW	High	0.0240	1.5	0.0360
14	675 Berwick/Cranbourne Road, Cranbourne North (4\ LP78965)	HZ10	EVC 55 PGW	High	0.0016	1.5	0.0024
Road Reserve	Berwick/Cranbourne Road Reserve, Cranbourne North(Road Reserve)	HZ11	EVC 937 SWO	Very High	0.0126	2	0.0252

NVPP Table Legend

EVC Acronym	EVC full name
EVC	Ecological Vegetation Class
PGW	Plains Grassy Woodland
SS	Swamp Scrub
SWO	Swampy Woodland
TM	Tall Marsh





CONDITIONS FOR REMOVAL OF NATIVE VEGETATION

The native vegetation described in Table 1 and shown in Map 2 as native vegetation that 'can be removed' can be removed, destroyed or lopped under Clause 52.16 of the Casey Planning Scheme subject to the following conditions:

- 1. Only the native vegetation which is identified for removal in the incorporated Native Vegetation Precinct Plan (NVPP) applying to the land may be removed, lopped or destroyed unless a permit also authorises the removal of native vegetation.
- Before the removal, destruction or lopping of any native vegetation within any property (based on the property number in Map 1 of this NVPP), the landowner must provide offsets in relation to all native vegetation within that property which this NVPP allows to be removed. The offsets are to be as set out in the NVPP.
- 3. Where offsets or offset targets cannot be satisfied by an offset payment to the DSE an Offset Management Plan must be prepared to the satisfaction of the DSE and the responsible authority. An Offset Plan (prepared in accordance with the DSE Offset Plan Template (available from www.dse.vic.gov.au)) for achieving the offsets in accordance with Table 2 to the satisfaction of the DSE, must be submitted to and approved by the Responsible Authority.
- 4. Before removal of any native vegetation, the owner of the land from which the native vegetation is to be removed must provide for the long term security of native vegetation offsets to the satisfaction of the DSE in accordance with Victoria's *Native Vegetation Management: A Framework for Action*.
- 5. Where an offset is secured via an agreement, the agreement must be registered on the title of the land and provide for a native vegetation offset in accordance with the endorsed Offset Plan. The land owner must pay the reasonable costs of the preparation, execution and registration of the on-title agreement.
- 6. Offsets must be implemented according to the schedule of works in the Offset Plan, to the satisfaction of the Responsible Authority.
- 7. Before the removal, destruction or lopping of any native vegetation, native vegetation to be removed (in accordance with this Native Vegetation Precinct Plan) must be clearly marked on site to the satisfaction of the Responsible Authority whilst works are being undertaken within the vicinity.
- 8. Any construction stockpiles, fill and machinery must be placed away from areas supporting native vegetation and drainage lines to the satisfaction of the responsible authority.

The Port Phillip and Western Port Native Vegetation Plan states that "Where protection and recruitment is not required by Victoria's Native Vegetation Framework and there is no practical way to achieve protection, a recruitment only option offset may be applied.

THE WORKS, PAYMENT OR OTHER ACTIONS NECESSARY TO OFFSET THE REMOVAL, DESTRUCTION OR LOPPING OF NATIVE VEGETATION

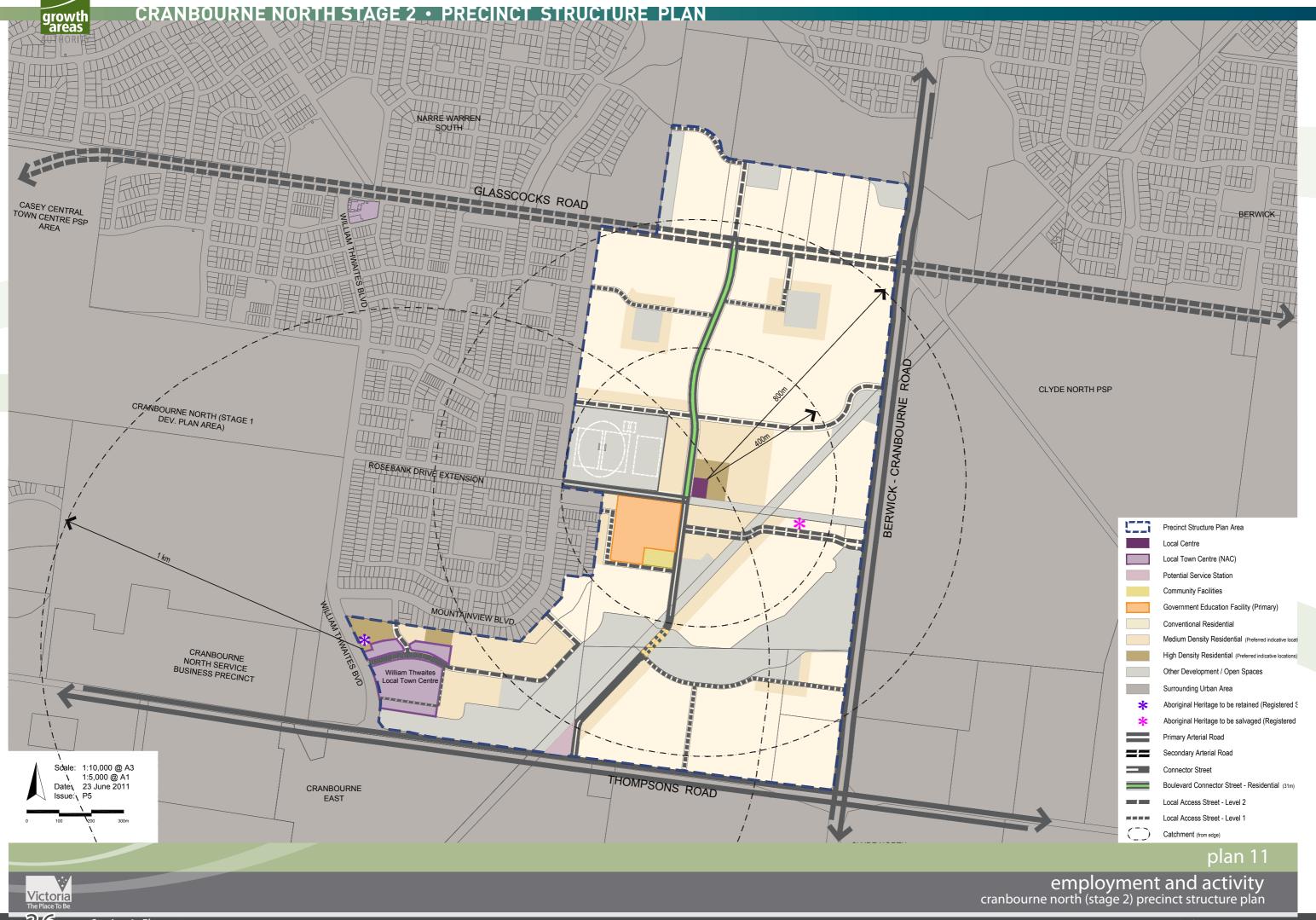
There are no further works, payments or other actions required other than the conditions specified in this plan

PROCEDURES FOR THE COLLECTION OF ANY PAYMENT

No payments are necessary or specified.

REFERENCE DOCUMENT

 Biodiversity Assessment Report: Flora and Fauna Assessment and Mapping – Precinct Structure Plan Area 16 Cranbourne North (Stage 2), (Practical Ecology, July 2010).





4.5 EMPLOYMENT AND ACTIVITY CENTRES

4.5.1 EMPLOYMENT AND ACTIVITY CENTRES OBJECTIVES

The objectives for employment and activity centres are:

- To increase opportunities for employment in the precinct and the broader region, in order to:
 - » Move away from the historical trend of the 'dormitory suburb',
 - » Promote a quality of life and community participation,
 - » Reduce transport costs for households and businesses, and
 - » Reduce the demand on existing metropolitan road and rail transport infrastructure.
 - » To facilitate the development of services and small offices located within and at the edge of the Local Town Centre,
 - » To encourage the development of home based businesses,
- To boost local employment opportunities through:
 - » The development of a network of a Local Town Centre and Local Centre, providing a mix of retail, commercial, leisure and community services activities and,
 - » The establishment of community services network within each neighbourhood along with the provision of other activities (such as childcare centres, mixed business and convenience stores, retirement and aged care facilities) which provide employment as well as services to the local community.
- To make provision for the development of retail, commercial, leisure and other support services required to meet the needs of local workers, business and industry.

4.5.2 IMPLEMENTATION

The objectives for employment and activity centres are met by all of the following:

- » Plan 5: Future Urban Structure,
- » Plan 11: Employment and Activity,
- » Table 9: Hierarchy of town centres, and
- » Table 11: Local Town Centre Planning and Design Guidelines.

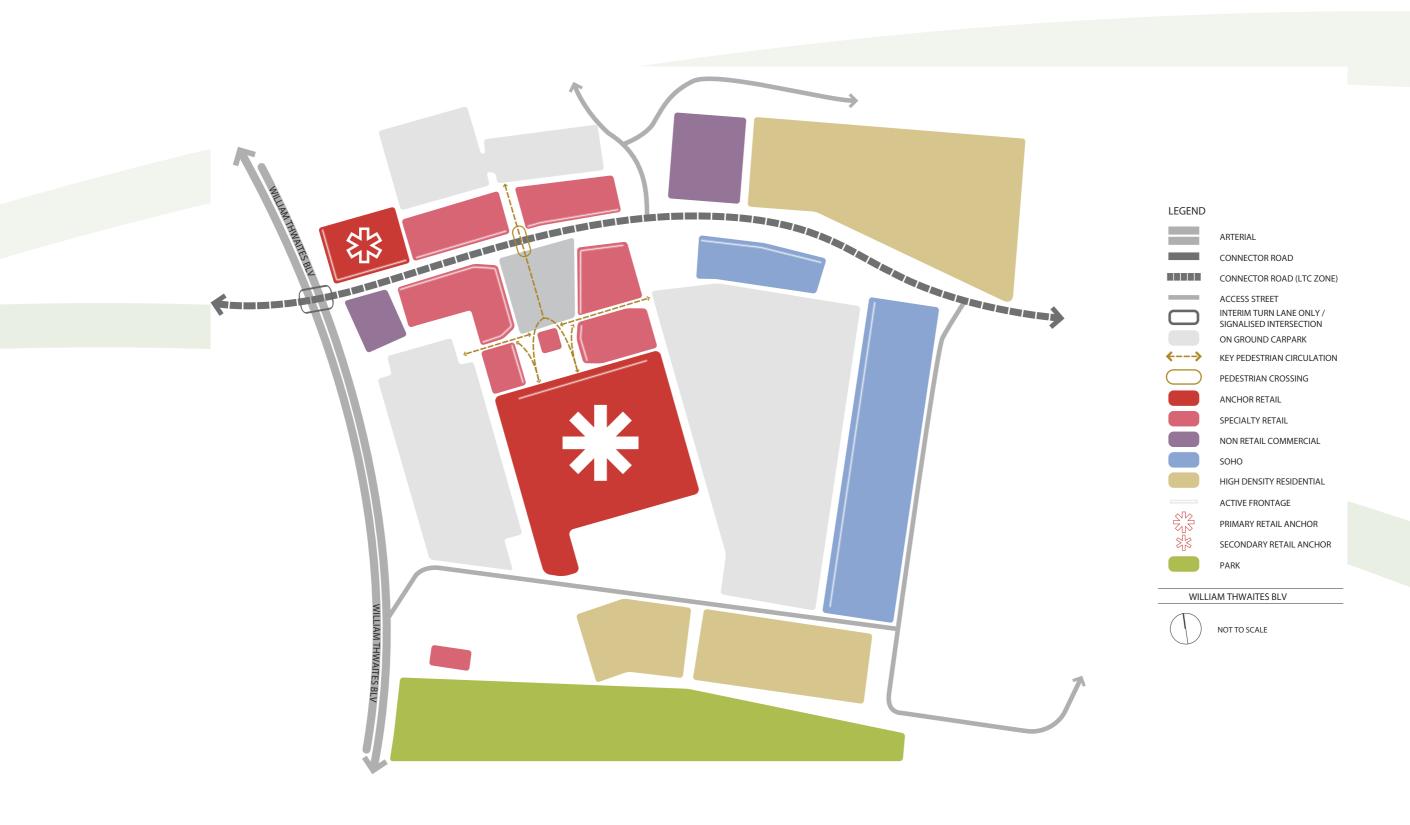
Table 9: Hierarchy of Town Centres

Projected employment opportunities within the Cranbourne North Stage 2 PSP are as follows:

ACTIVITY CENTRE Local Town Centre- Located south-east adjacent to William Thwaites Boulevard	• Indicative Retail floor space up to around 5400m2 • Provides a for a an full line supermarket floorspace of up to 3,800m2 • A range of specialty retail / Non retail / office provision of up to 1,600m2 • Opportunities for a medical centre and private child care
	 Anchors activity along the main east-west main street that runs through the LTC focussed on a public town square of approximately 925m2 Provides an opportunity to locate private services and other employment opportunities. Opportunities for a SOHO and other higher density residential integrated into a true village atmosphere.
Convenience Centre - Located north-east adjacent to north-south connector street opposite the primary school	 Indicative retail floor space up to around 1000m2 Provides for a variety of specialty retail / shops / non retail / offices Provides for a opportunities for a small supermarket in appropriate locations For private child care, taking advantage of proximity to the community hub and school Provide some opportunity to locate private services and other employment.
School and Community Hub	Employment opportunities in the school, kindergarten, childcare and maternal and child health.
Home based employment	\cdot Opportunity for mixed home based employment throughout the precinct via flexibly designed housing and SOHO products



Figure 2: Town Centre Concept



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CRANBOURNE NORTH STAGE 2 • PRECINCT STRUCTURE PLAN



4.5.3 LOCAL TOWN CENTRE PLANNING AND DESIGN GUIDELINES

The following planning and design guidelines should be met when preparing a planning permit application for the Local Town Centre.

A planning permit application in the Local Town Centre should:

- Must generally accord with the layout of land uses and road structure shown in Figure 2.
- Be generally consistent with the role and function for the centre set out in Table 9: Hierarchy of Town Centres,
- Address the whole of the site,
- Address any relevant design guidelines prepared by the Victorian Government or Casey City Council,
- Show how the proposal relates to existing or approved development in the area,
- Include an overall landscape concept for the centre,
- Set out guidelines to positively address environmental sustainability including integrated water management and energy conservation,
- Set out provisions for car parking including the location and design of car parking areas and car parking rates for proposed uses within the centre,
- Set out design guidelines for the provision of advertising signs (if applicable),
- Set our arrangements for the provision of service areas for deliveries and waste disposal including access for larger vehicles and measures to minimise the impact on the amenity of the centre and adjoining neighbourhoods, and
- Show how opportunities for medium and higher density housing and future commercial expansion can be incorporated into the centre.

PUBLIC REALM

- Footpaths widths should be sufficient to provide for pedestrian and mobility access, outdoor dining and gathering spaces along the 'main street' frontages.
- The main street should accord with Cross Section 6 in the Transport and Movement Element.
- Open spaces and squares should be oriented to capture north sun and protect from prevailing winds and weather.
- The design of building frontages should incorporate the use of a consistent covered walkway or veranda to provide for weather protection.
- Screening of centralised waste collection points should minimise amenity impacts with adjoining areas and users of the centre
- Side building facades (excluding shopfronts) and continuous walls, should not exceed 10m without articulation, fenestration, activity or visual interest.
- Street facades and all visible side or rear facades should be visually rich, interesting and well articulated.
- Sites in prominent locations should be identified for significant buildings or landmark structures.
- The town centre structure should provide a permeable network of streets, walkways, and public spaces that provide linkages throughout the centre and designated pedestrian crossing points
- Bus stops should be provided in accordance with the Department of Transport Public Transport Guidelines for Land Use and Development, to the satisfaction of the Department of Transport.
- Urban art should be incorporated into the design of the public realm.
- Streets, public spaces and car parks should be well lit to Australian standards and with pedestrian-friendly (generally white) light. Lighting should be designed to avoid unnecessary spill to sides or above.
- Street furniture should be located in areas that are highly visible and close to or adjoining pedestrian desire lines /gathering spaces and designed to add visual interest to the centre.
- Public toilets should be provided in locations which are safe and accessible and within the managed area of the property
- The design of each building should contribute to a cohesive and legible character for the centre as a whole.
- Materials and design elements should be compatible with the environmental and landscape character of the broader precinct.
- All public spaces should respond appropriately to the design for mobility access principles.

BUILT FORM

- Building design guidelines should set out building heights, materials and architectural features.
- A street network through the centre should facilitate safe pedestrian and cycling links to the surrounding area.
- The design of the town centre should facilitate development with a high degree of community interaction and provide a vibrant and viable mix of retail, recreation and community facilities.
- The built form should define the main street and be aligned with the property boundary.
- Development should complement and enhance the character of the surrounding area by responding appropriately to key visual cues associated with the topography of the site and surrounds.
- Key view lines / sight lines into and out of the activity centre should be incorporated in the overall design to promote way finding and accessibility.
- The centre design should avoid potential land use conflicts between residential and commercial uses by focusing retail operations on the main street and locating residential uses predominantly at the edge of the centre and at upper levels.
- Centre design should seek to minimise amenity and noise impacts resulting from the mix of uses by maintaining separation and transitional areas between retail and housing activities, such as open space, road networks, and community facilities.
- Mechanical plant and services structures roofs should be included within roof lines or otherwise hidden from view.



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INTERFACE WITH THE ROAD NETWORK

- The design of buildings should interface to the public street network.
- Landscaping of all interface areas should be of a high standard as an important element to complement the built form design.
- Corner sites, where the "main street" meets an intersecting and / or arterial road:
 - Should be designed to provide built form that anchors the "main street" to the intersecting road, this could be achieved through the use of a substantial multi - storey building located at the corners
 - Should be developed to have a ground floor retail floor space component to the "main street" frontage.

DISTRIBUTION OF USES

- Supermarket and other commercial or community anchors or secondary anchors within the NAC should be located diagonally opposite one another across the 'main street' to promote 'desire lines' that maximises pedestrian movement along the length of the street.
- Active building frontages should address the 'main street' to maximise exposure to passing trade, and promote pedestrian interaction.
- Shopfronts should have varying widths and floor space areas to promote a diversity of trading opportunities throughout the town centre
- Convienence restaurants should locate at mid-block sites with parking predominately to the side or rear.
- Flexible floor spaces (including floor to ceiling heights) should be incorporated into building design to enable localised non-retail commercial uses to locate the 'main street'.
- A variety of employment and business opportunities should be planned through the provision of a broad mix of land uses and commercial activities.
- The mix of uses should include retail and office at ground level, and office, non-retail commercial and residential above ground level.
- Childcare and medical centres are encouraged within the town
 centre.
- Specialised accommodation (e.g. aged care/nursing home, student accommodation, serviced apartments) is encouraged at the edge or just outside the centres

SUPERMARKET AND OTHER 'LARGE BOX USES'

- Supermarket buildings should not impede the movement of people around the centre.
- The supermarket and secondary anchors should have frontage that directly addresses the 'main street' and / or town square so that the use integrates with and promotes activity within the 'main street' and public spaces / thoroughfares.
- Supermarkets or large format retail uses with a frontage to the 'main street' should use clear glazing to allow view lines into the store from the street. (Planning permits for buildings and works should condition against the use of white washed windows, excessive window advertising and obtrusive internal shelving or 'false walls' offset from the glazing).
- The design and siting of supermarkets and other 'large format retail uses' should provide an appropriate response to the entire public domain. This includes but is not limited to car parking areas, pedestrian routes and streets.

'MAIN STREET' TRAFFIC IN TOWN CENTRE

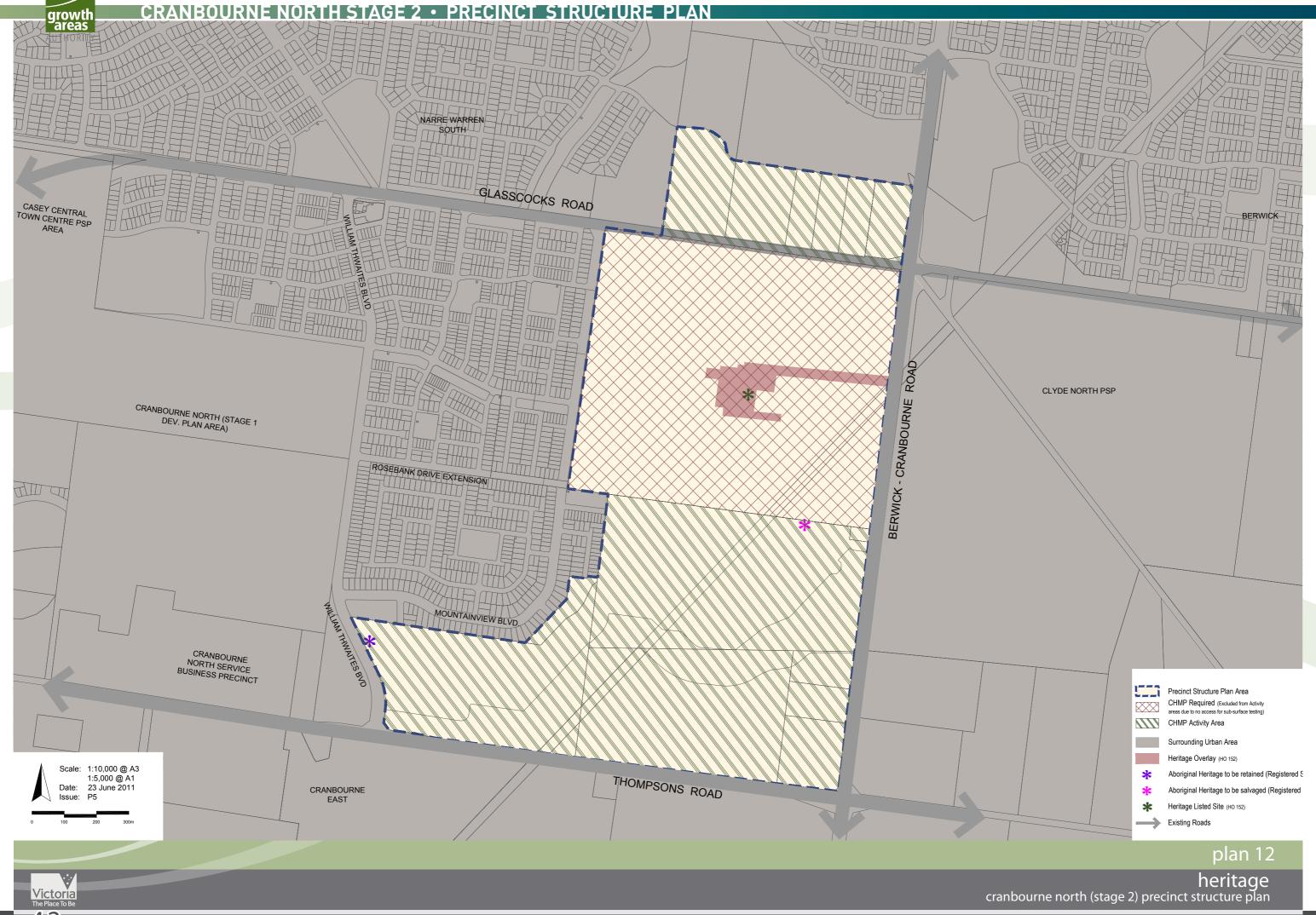
- Traffic should be managed to ensure pedestrian safety.
- The 'main street' cross section must priorities pedestrian movement and accord with Cross Section 6 in the Transport and Movement element.
- A speed environment of 40km/h or less should be designed for.

CAR PARKING

- Car parking areas should be located centrally to the site and to the rear and or side of street based retail frontages.
- Wrapping of car parking edges with built form, to improve street interface, should be maximised.
- Car parking areas should be designed to ensure passive surveillance and public safety through adequate positioning and lighting.
- Car parking areas should be designed to accommodate flexible uses.
- Car parking areas should be designed to provide dedicated safe pedestrian routes.
- On street parking should be provided either as parallel or angle to encourage short stay parking.
- Car parking ingress and egress crossovers should be grouped and limited.
- Vehicle park ingress and egress and car parking areas accommodating heavy vehicle movements should be designed to limit the pedestrian/vehicle conflict.
- Heavy vehicle movements (i.e. loading and deliveries) should located to the rear and or side of street based retail frontages.
- Car parking areas should provide for appropriate landscaping with planting of canopy trees.

PUBLIC AND OTHER TRANSPORT

- Access to bus stops should be designed to incorporate the public transport network outlined in Plan 15 in consultation with the Department of Transport.
- Provision should be made to locate public transport infrastructure /facilities at safe and convenient locations within the activity centre.
- Bicycle parking should be provided within the street network in highly visible locations and close to pedestrian desire lines and key destinations.





4.6 HERITAGE

4.6.1 HERITAGE OBJECTIVES

- To plan for the long term conservation and management of areas set aside for Aboriginal and/or post contact heritage.
- To mitigate development impact on significant Aboriginal and/or post contact heritage values.
- To develop effective measures and planning instruments that ensure long term protection of Aboriginal and/or post contact heritage in designated heritage conservation areas.
- To appropriately integrate areas set aside for the conservation of heritage into the open space system of the precinct.
- Where practical and compatible, to co-locate and integrate Aboriginal heritage conservation areas with land set aside for biodiversity.
- To design relevant areas of the precinct to be respectful of local post contact heritage, where it may not be possible to retain heritage elements.

IMPLEMENTATION

The objectives for heritage are met by implementation of all the following

- Implementation of approved Cultural Heritage Management Plan.
- Implementation of Heritage Overlay (HO152).

4.6.2 ABORIGINAL HERITAGE CONSERVATION PLANNING AND DESIGN GUIDELINES

- Conservation areas must be managed in accordance with the management requirements of an approved Cultural Heritage Management Plan (CHMP).
- Conservation areas should retain current natural landform characteristics by avoidance of cut and fill and minimization of regrading. The conservation areas should be planned, designed and developed for generally low impact facilities and activities that minimize ground disturbance such as:
 - » Mown grass, garden beds and trees.
 - » Walking paths.
 - » Park furniture.

4.6.3 POST CONTACT HERITAGE CONSERVATION PLANNING AND DESIGN GUIDELINES

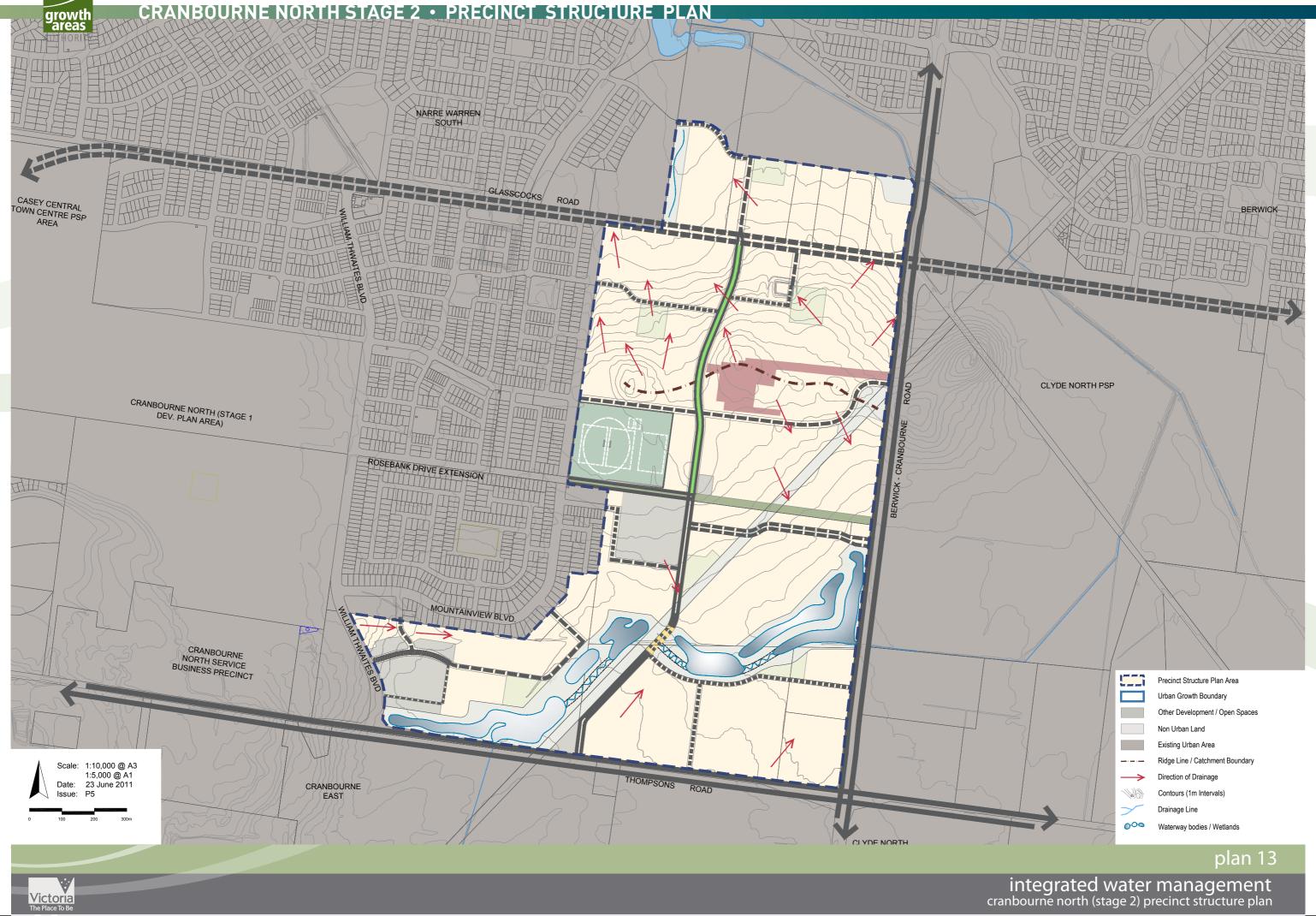
This item refers specifically to the heritage site of local significance at 1/805, Berwick-Cranbourne Road, identified within the Casey Planning Scheme as HO152. This heritage site comprises a circa 1860 cottage and, the avenue of Elm trees/mature plantings along the entrance driveway and land to a distance of five metres from each of these features.

The future development of the site and adjoining land should incorporate the following design elements and interpretation that reference the historic nature of the site.

- The avenue of elms provides a distinctive and significant landscape feature, and therefore should be retained and incorporated as part of a shared trail.
- Adjoining development should have consideration for the historical nature of the heritage cottage and the elm tree planting along the driveway by providing for appropriate interface between new development and the documented heritage significance.

The new local street should:

- Contain tree species that match or (where this not possible for environmental weed or safety reasons) reference the original driveway plantings
- Incorporate wide verges to allow for appropriate new tree planting and to accommodate any retained trees
- Where practical, incorporate any trees that have been classified as worthy of retention by a qualified arborist.
- Be designed and use materials, to innovatively respond to and respect the original character of the driveway. This may include, but is not limited to:
 - » Use of non-standard paving materials or asphalt colours and aggregates.
 - » Incorporation of permeable pavements to maximize viability of any retained trees





4.7 INTEGRATED WATER MANAGEMENT

4.7.1 INTEGRATED WATER MANAGEMENT OBJECTIVES

- To plan for the future drainage needs of the new urban environment.
- To mitigate flooding of urban areas.
- To manage the flows of storm water runoff into the Westernport and Port Phillip catchments.
- To reduce and filter sediment and nitrogen levels
- To enhance the biodiversity and habitat values of the precinct.
- To enhance the landscape character and plant health within the precinct
- To incorporate Water Sensitive Urban Design into the street and public space design elements.

4.7.2 SEWER

The owner of the subject land must enter into an agreement with SEW for the provision of sewerage and fulfill all requirements to its satisfaction, and note the following:

- Every development should be provided with reticulated sewer services.
- Existing Sewer Infrastructure may need upgrading depending on extent of development.

4.7.3 WATER

The owner of the subject land must enter into an agreement with SEW for the provision of potable water supply and fulfill all requirements to its satisfaction.

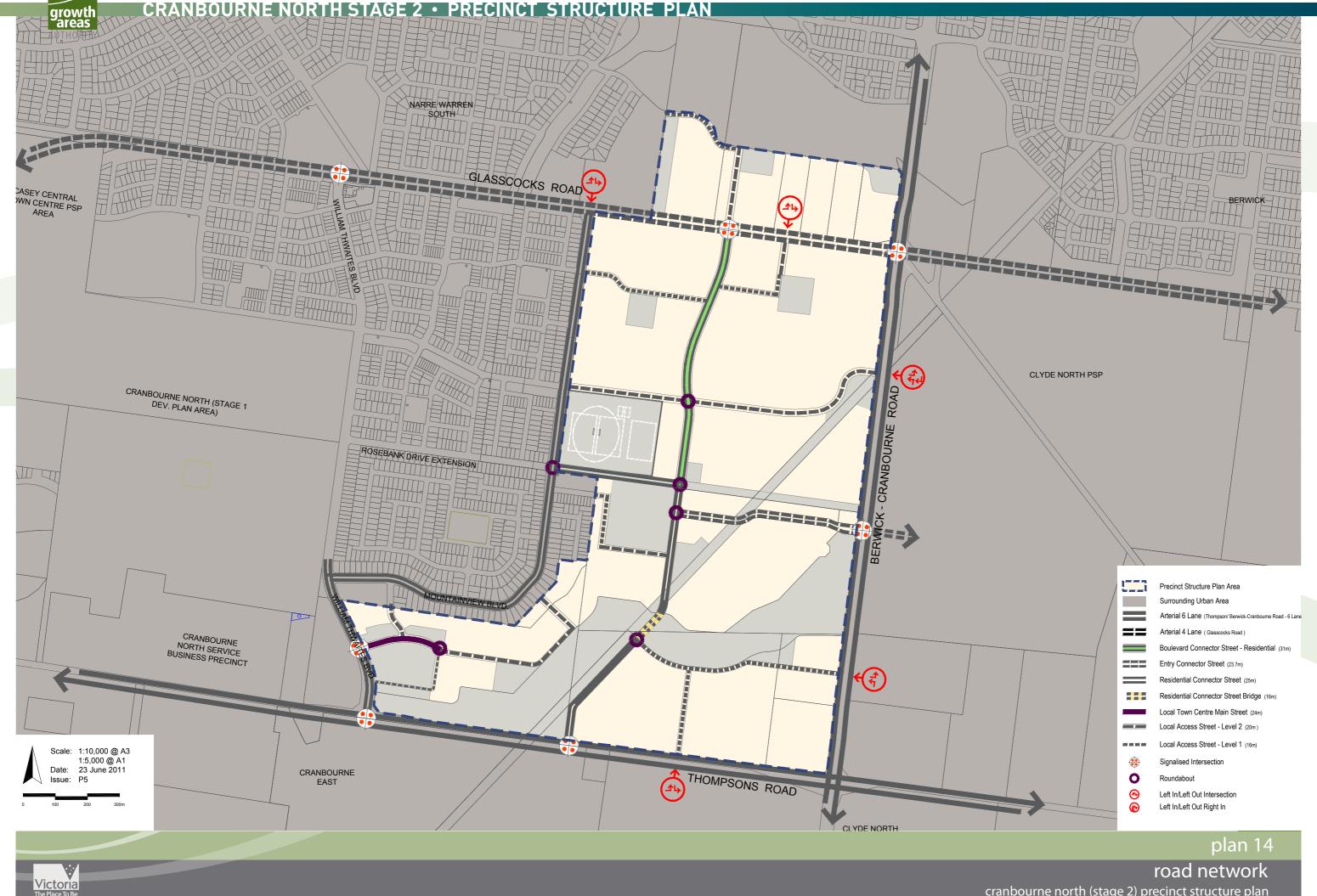
4.7.4 IMPLEMENTATION

The objectives for the integrated water management are met by implementing the following:

- » Planning and design guidelines set out in 4.7.5,
- » Plan 5: Future Urban Structure, and
- » Plan 13: Integrated Water Management Plan.

4.7.5 INTEGRATED WATER MANAGEMENT PLANNING AND DESIGN GUIDELINES

- Drainage systems should provide for a suitable buffer from urban development and contain ephemeral water bodies to enable the replication of natural flows and provide habitat for local species;
- Planting of drainage areas should promote the establishment of habitat for local species;
- Drainage systems should seek to reduce sediment and nutrient flows into the Westernport catchment;
- A drainage scheme should ensure that downstream flows are not increased beyond the capacity of the system.
- WSUD should be incorporated into sections of street network to support strong and healthy canopy tree and ground level planting.





4.8 TRANSPORT AND MOVEMENT

4.8.1 TRANSPORT AND MOVEMENT OBJECTIVES

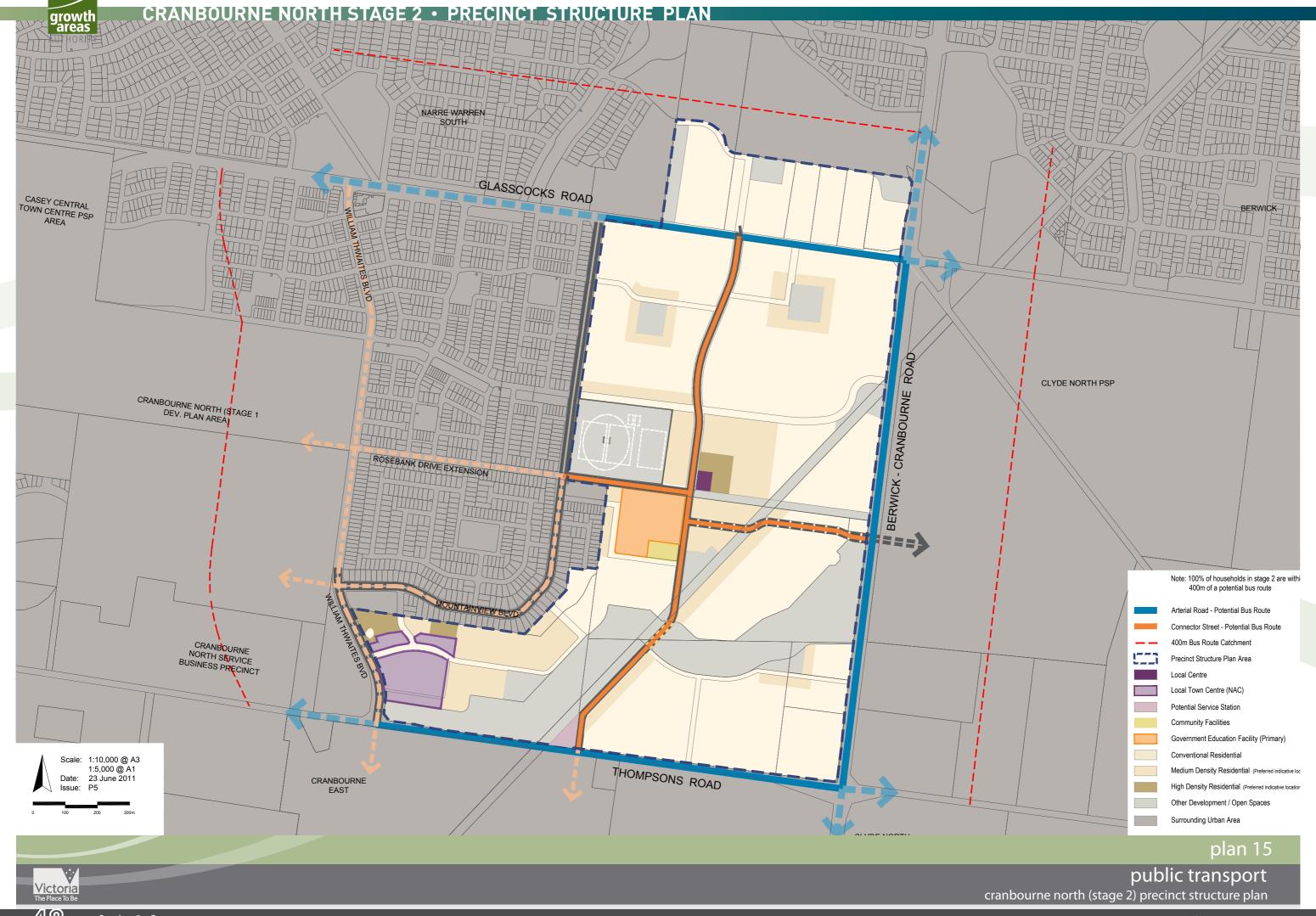
The objectives for transport and movement are:

- To establish an integrated and sustainable transport network that reduces dependency on the use of private vehicles, maximises access to public transport and encourages walking and cycling within the between neighbourhoods,
- To establish a bus network that connects the residential area to the Casey Central Town Centre, railway station at Berwick and Merinda Park as well as the future Cranbourne East Rail Station and other key destinations,
- To establish a connector street network that provides for the safe and efficient operation of bus movements,
- To support the early provision of local bus services and walking and cycling links through the sequential staging of the development of the area,
- To establish an 800 metre spaced grid of arterial roads and connector streets.
- That more than 95% of all households are located within 400 metres of a potential public transport service,
- To support the early provision of safe and efficient pedestrian and bicycle paths and links which are connected to the key features of the precinct and which link to regional networks outside the precinct,
- To provide for the landscaping of roads, transport and movement corridors to help create safe and attractive urban environments,
- To ensure that the transport network provides for the safe and efficient operation of the existing and future arterial road network both in the short and long term,
- To limit access to arterial roads to protect their function and safety,
- To ensure the transport network is planned to provide for the safety of all road users.

4.8.2 IMPLEMENTATION

The objectives for transport and movement are met by implementation of all of the following:

- » Plan 5: Future Urban Structure,
- » Plan 14: Road Network,
- » Plan 15: Public Transport,
- » Plan 16: Walking and Trails,
- » Table 10: Road Hierarchy,
- » Cross Sections in this element, and
- » Planning and design guidelines set out in 4.8.3 including the road and street cross sections.





4.8.3 PLANNING AND DESIGN GUIDELINES

CONNECTOR STREET CONSTRUCTION

The following planning and design guidelines must be met:

- Connector streets (including any culverts) must be constructed by development proponents as part of the subdivision works (prior to the issue of a statement of compliance for the relevant stage).
- The culvert forming part of the north-south connector road may be funded by development propronents where construction is part of the adjacent development is impractical.

CONSTRUCTION OF INTERSECTIONS WITH ARTERIAL ROADS

The following planning and design guidelines must be met:

- All intersections with existing or proposed arterial roads must be designed, constructed and controlled to the satisfaction of the Roads Corporation and the municipal council, with the main design objective being to allow for a minimum 10-year design life having regard to the anticipated traffic growth on the affected roads from both the ultimate development of the Precinct Structure Plan area and the external traffic.
- Staging of subdivisions is to provide for the timely connection of road links between properties and the arterial road network and bus, cycle and walking routes to the satisfaction of the responsible authority.
- Land must be provided for right of way flaring at all arterial road connections to existing and proposed arterial roads for the ultimate design of the intersection in accordance with VicRoads standards.

The following planning and design guidelines should be met:

 Prior to the preparation of planning permit applications which require access to an arterial road as shown on Plan 5 and 14, permit applicants should consult with VicRoads to determine the appropriate extent of Right of Way flaring required for the intersection.

ARTERIAL ROAD CONNECTIONS - GENERAL REQUIREMENTS

The following planning and design guidelines should be met:

- Residential lots fronting the arterial road network should be accessed via internal loop roads rather than by a service road,
- Access to streets connecting to an arterial road should be considered within the context of the requirements of traffic management, safety, urban design and its urban environment,
- Intersection design should provide for the safe and efficient operation of the arterial road and the side road to the satisfaction of VicRoads, with consideration to vehicle speeds, vehicle queues and conflicting movements on approach to and departure from the intersection, and
- Access points (temporary and permanent) to the existing or proposed arterial road network beyond those shown on Plan 14, will be considered on a case by case basis in accordance with VicRoads access management policies.

SHARED PATHWAYS

The following planning and design guidelines must be met:

- Walking and cycling networks, including along arterial road frontages, must be constructed by development proponents as part of subdivision works (prior to the issue of a statement of compliance for the relevant stage),
- Footpaths and cycle paths must be provided with increased width in areas expecting high foot traffic such as near the primary school, community centre, the local town centre and public transport interchanges and bus stops,
- Pedestrian and cycle crossings must be provided at all relevant street intersections and along key desire lines, particularly in the vicinity of bus stops,
- Bicycle lane connections must be designed to allow for the smooth transition between on-road and off-road facilities,
- Pedestrian and cycle paths must be designed and located to maximize passive surveillance and provided in wide road verges with safe crossing points at key locations, and
- The local street network must be designed to provide permeable and safe routes for walking and cycling to the local town centre, community facilities, parks and open space, major trail networks and public transport.

ROAD AND STREET CROSS SECTIONS

The following planning and design guidelines must be met to the satisfaction of the responsible authority:

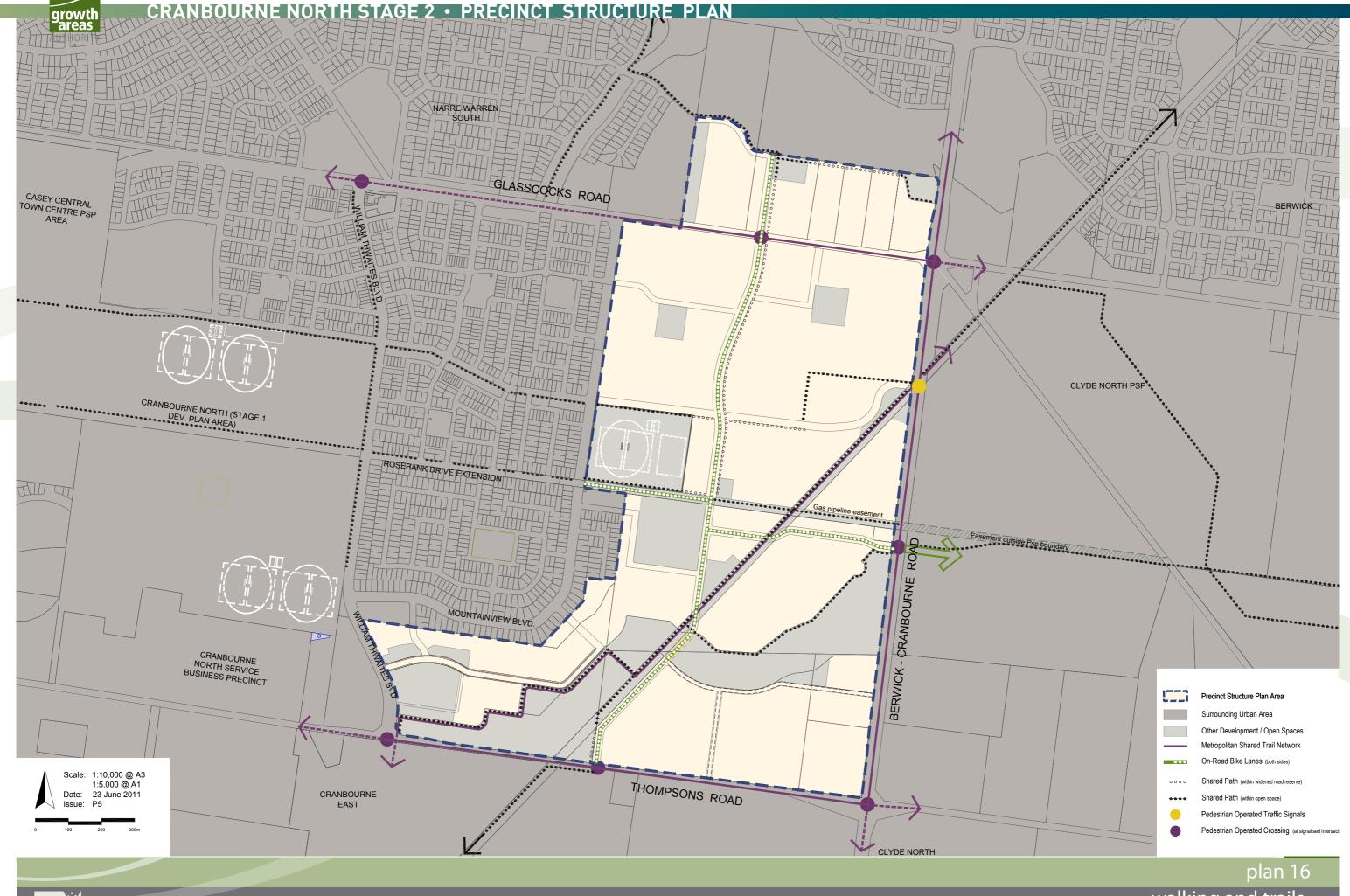
- Lots must be designed to address the road network to the satisfaction of the responsible authority, and
- In accordance with the Casey Arterial Road Tree Strategy (or as amended), a tree reserve must be provided to any arterial road where an internal loop road (or service road) is not provided.

The following planning and design guidelines should be met to the satisfaction of the responsible authority:

- Road and street cross sections should be generally consistent with the cross sections included in this Element,
- Where possible common trenching should be used to accommodate underground utilities and services, and
- Where additional land is required for utilities and services in connector streets, additional trenching may be provided within the 2.3m parking lane.

BUS NETWORK

- Where a requirement for a bus route or bus stop has been nominated by the Director of Public Transport, bus stops must:
- Be constructed by development proponents as part of the subdivision works (prior to the issue of a statement of compliance for the relevant stage) in accordance with the requirements of the Public Transport Guidelines for Land Use and Development to the satisfaction of the Director of Public Transport,
- Be provided with DDA compliant direct and safe pedestrian access connected to an existing pedestrian/shared path, and
- Be designed as an integral part of activity centres and activity generating land uses, such as schools, sports fields and employment areas.



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<u>Victoria</u>

walking and trails cranbourne north (stage 2) precinct structure plan



Table 10: Road Hierarchy

ROAD/STREET	EXISTING RESERVE	ULTIMATE RESERVE	ACCESS MANAGEMENT POLICY	INDICATIVE VEHICLES PER DAY (VPD)	TRAFFIC LANES	MEDIAN	SPEED LIMIT	BUS COMPATIBLE	PROPERTY ACCESS & PARKING	TREE RESERVE	ON ROAD CYCLE LANE	SHARED PATH	RESPONSIBILITY
Berwick-Cranbourne Road (Clyde Road)	40m	40m	AMP 2 limited access (Urban) - Under investigation by VicRoads	40,000	6	Yes	80 km/h	Yes	No	Yes, unless internal loop road provided	Yes	Yes*	VicRoads
Thompsons Road	34m	41m	AMP 2 Limited Access (Urban)	30,000	6	Yes	80 km/h	Yes	No	Yes, unless internal loop road provided	Yes	Yes*	VicRoads
Glasscocks Road	22m	34m	AMP 2 limited access (Urban)	30,000	4	Yes	80km/h	Yes	No	Yes, unless internal loop road provided	Yes	Yes*	Council (Potential VicRoads in future)
Connector Streets	0m	16-3 m	Not applicable	Up to 7,000	2	No	50 km/h	Yes	Yes	No	Yes	No	Council
Residential Connector Street with shared landscaped trail	0m	31m	Not applicable	Up to 7,000	2	No	50 km/h	Yes	Yes	No	Yes	Yes	Council
Access Street Level 2	0m	20m	Not applicable	Up to 3,000	2	No	50 km/h	Yes	Yes	No	Yes**	No	Council
Access Place/Access Street Level 1	0m	16m	Not applicable	Up to 1,000	2	No	50 km/h	Yes	Yes	No	No	No	Council
Access Place with shared landscaped trail	0m	22m	Not applicable	Up to 1,000	2	No	50 km/h	No	Yes	No	No	Yes	Council
Local Town Centre Main Street	0m	24m	Not applicable	Up to 7,000	2	No	40 km/h	No	Yes	No	No	No	Council

Notes:

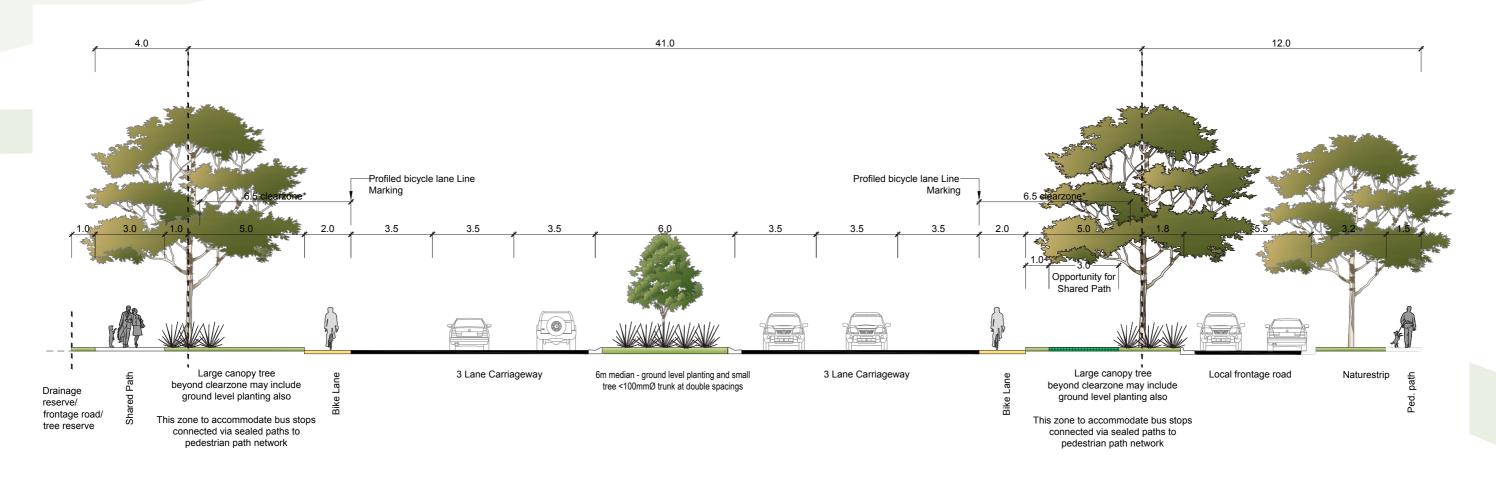
Refer cross sections for more detail regarding requirements, particularly verge, nature strip and planting requirements *4okm/h in school zone

^{**}Shared path located within drainage and / or fire buffer reserves



Cross-Section 1:

41 metre - 6 Lane Primary Arterial + Lot Frontage



Note

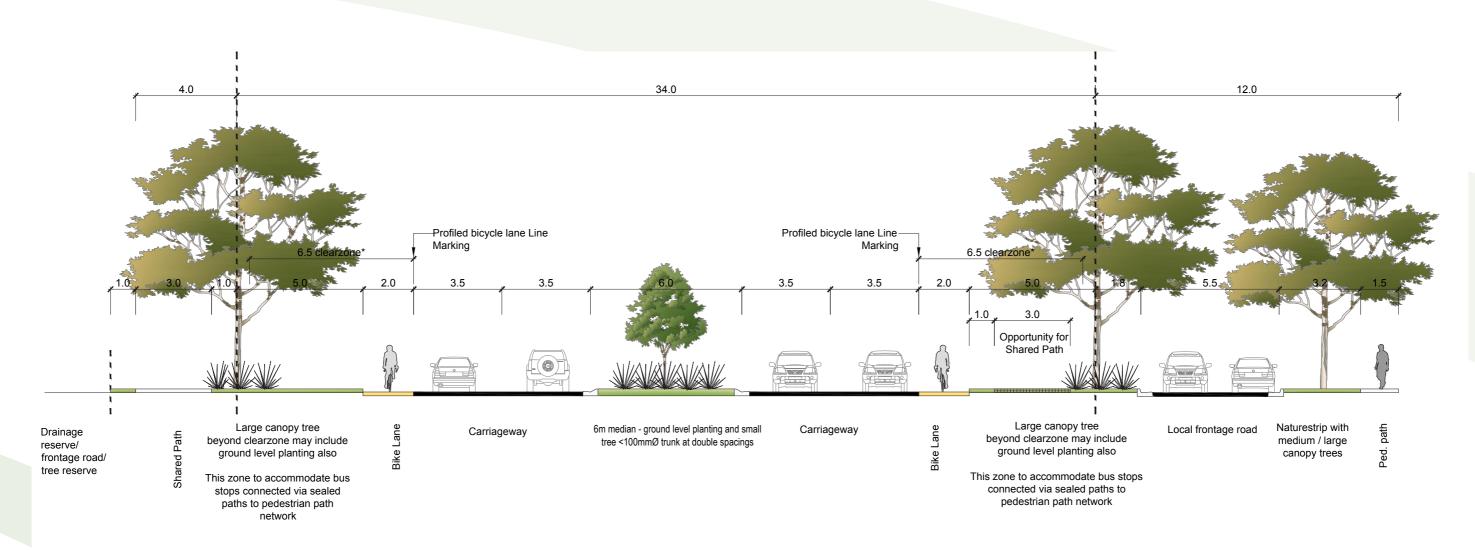
- Includes typical residential frontage roads.
- Investigation and use of physical barriers such as wire rope fencing is encouraged to enable more extensive canopy tree planting.
- *Clearzone assumes 80km/h speed limit >5,000 VPD.

Section 4 - Elements



Cross-Section 2:

34 metre - 4 Lane Arterial + Lot Frontage



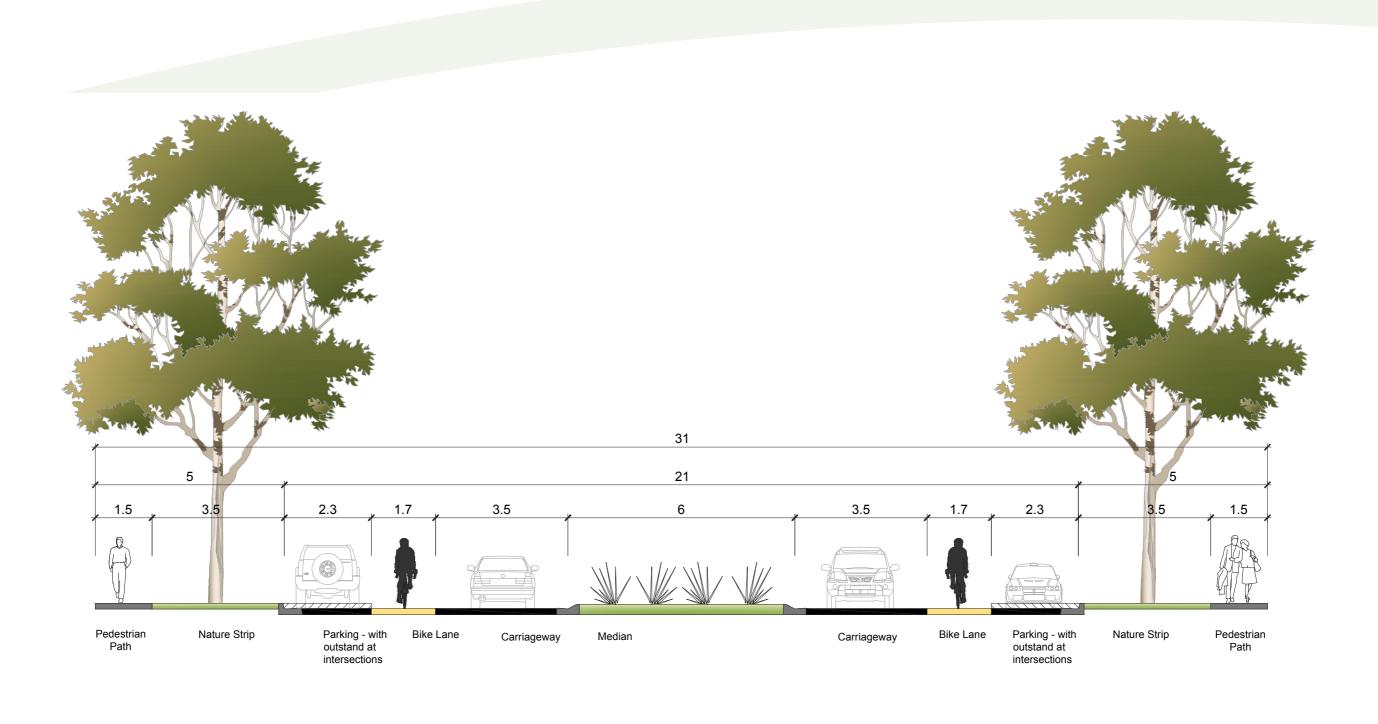
Note

- Includes typical residential frontage roads.
- Investigation and use of physical barriers such as wire rope fencing is encouraged to enable more extensive canopy tree planting.
- *Clearzone assumes 80km/h speed limit >5,000 VPD



Cross-Section 3:

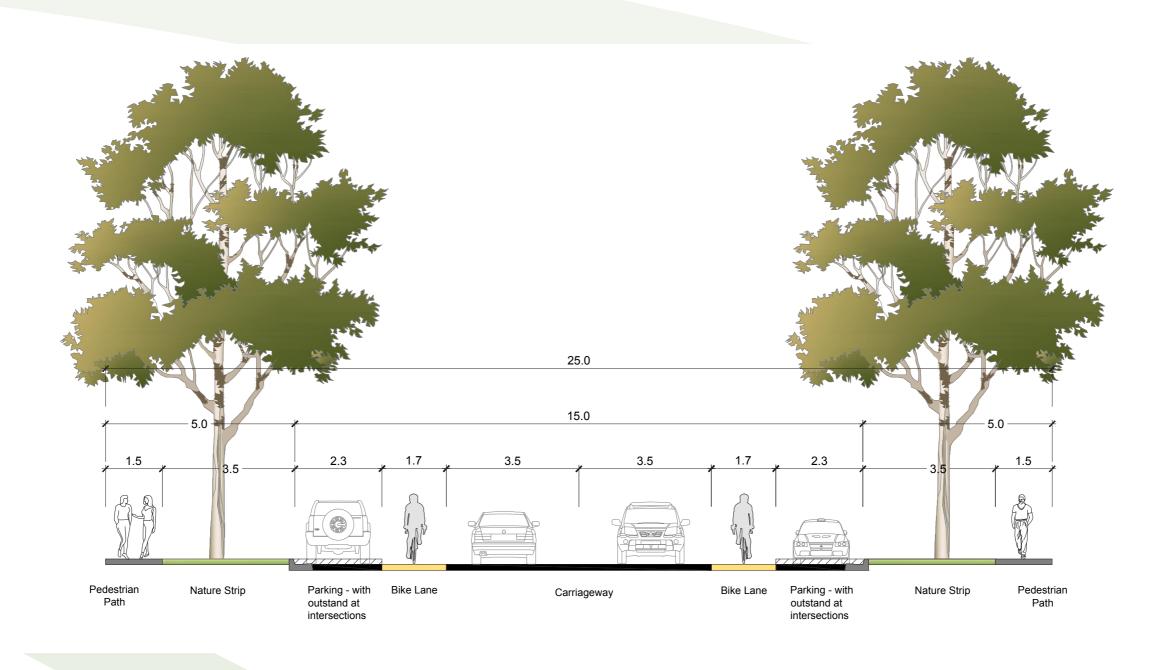
31 metre Connector Boulevard St - Residential





Cross-Section 4:

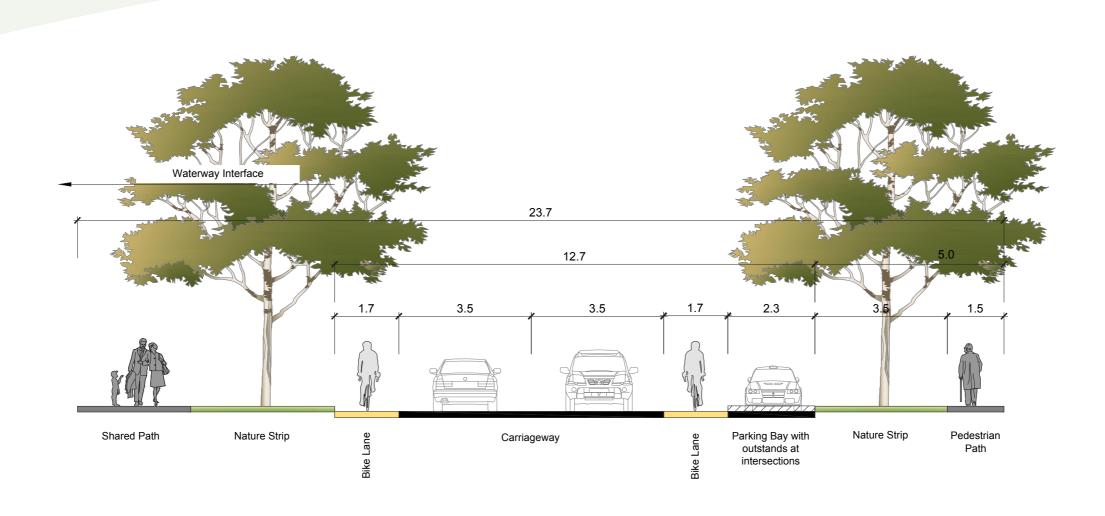
25 metre Connector - Residential





Cross-Section 5:

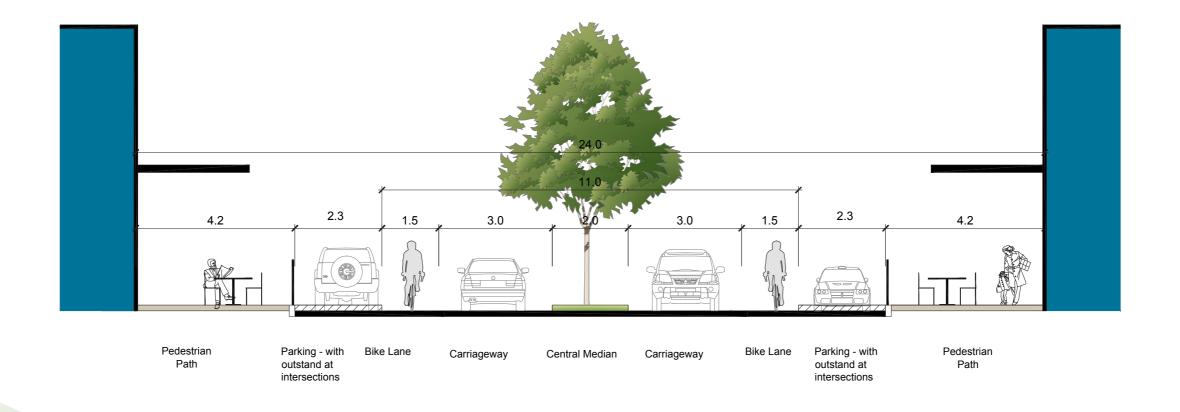
23.7 metre Entry Connector (Stockland)





Cross-Section 6:

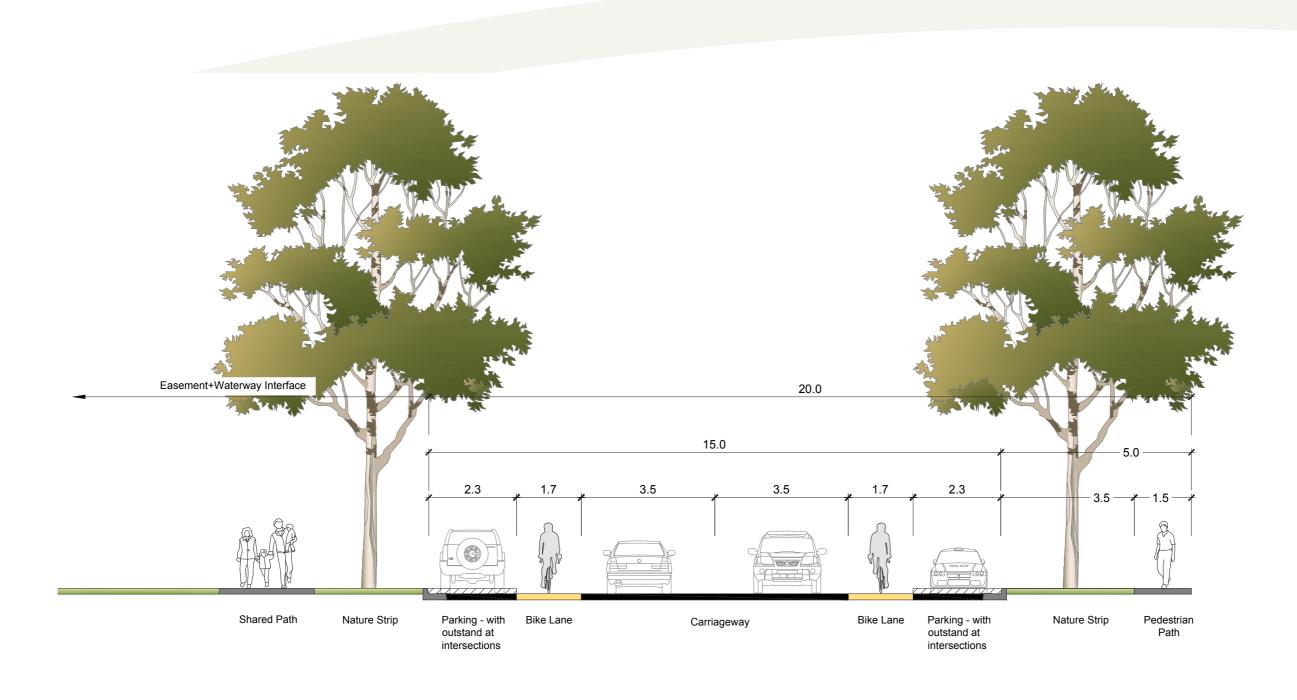
24 metre LTC Street - Residential





Cross-Section 7:

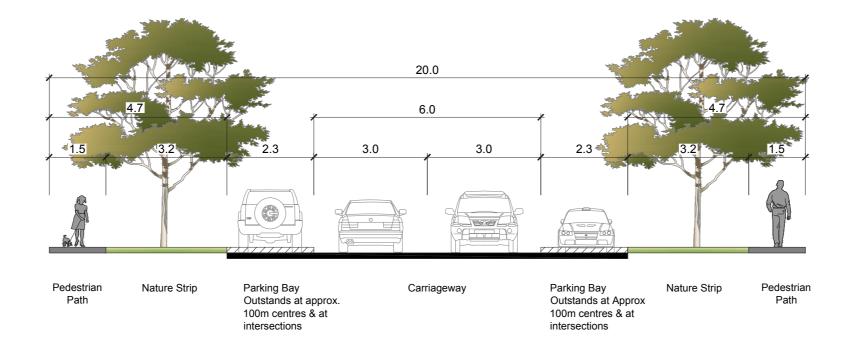
20 metre Connector Waterway Interface





Cross-Section 8:

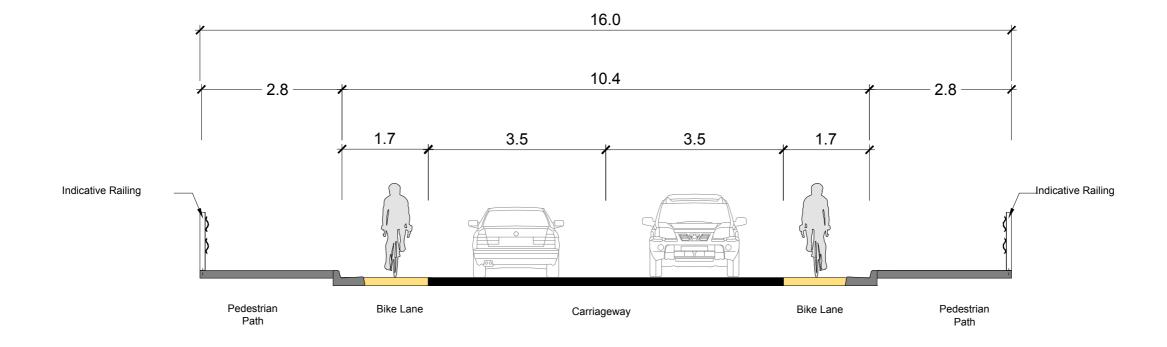
20 metre Access Street L (2)





Cross-Section 9:

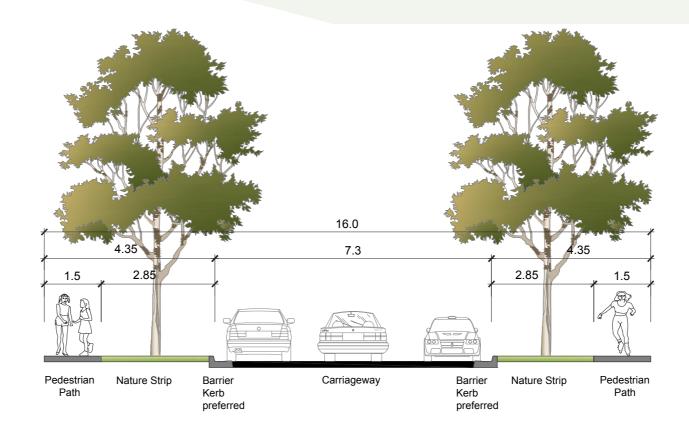
Connector Bridge



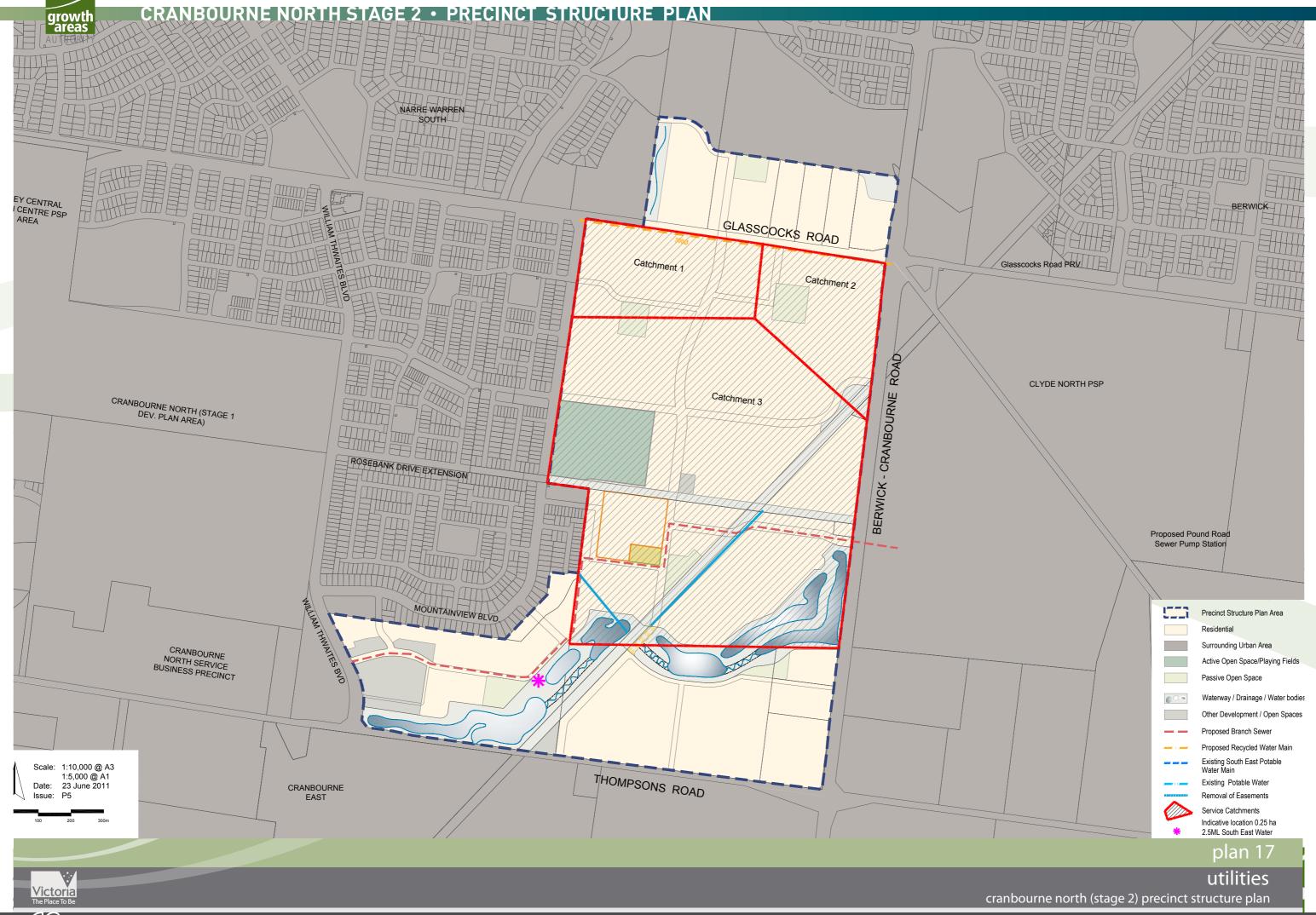


Cross-Section 10:

16 metre Access Place - Street L1



Note: Road reserve on some park frontages could be 13m





4.9 UTILITIES AND DEVELOPMENT STAGING

4.9.1 UTILITIES AND DEVELOPMENT STAGING OBJECTIVES

The utilities and development staging objectives are:

- To ensure development occurs in an orderly and sustainable manner and makes best use of existing infrastructure.
- To provide all developed lots, to the satisfaction of the relevant authority, with:
 - a potable water service,
- electricity,
- a reticulated sewerage service,
- · drainage,
- third pipe,
- gas, and
- · telecommunications.

4.9.2 IMPLEMENTATION

The objectives for utilities and development staging are met by implementation of all the following:

- » Meeting requirements of the relevant service authority/provider,
- » Planning and design guidelines at 4.9.3, and
- » Plan 17: Staging and Utilities

4.9.3 PLANNING AND DESIGN GUIDELINES

Electricity

The following planning and design guidelines must be met:

- All new electricity supply infrastructure (excluding infrastructure to support cables with a voltage greater than 66kv) must be provided underground (excluding substations),
- New substations must be identified at the subdivision design response stage to ensure effective integration with the surrounding neighbourhood and to minimise amenity impacts, and
- The design of subdivision electricity infrastructure must consider the practically of removing existing above ground electricity lines in the local and arterial road network both within and abutting the subdivision and re-routing lines underground through the subdivision.

Development Staging

Generally, staging will be determined by the development program of developers within the precinct and the availability of infrastructure services. Within this context, the following planning and design guidelines must be met:

- Development staging must not create circumstances in which residents will be unreasonably isolated from commercial and community facilities or public transport,
- Development staging must, to the extent practical, be integrated with adjoining developments, including the timely provision of connecting roads and walkway / cycling paths, and
- Access to each new lot must be provided via a sealed road.



5.0 PRECINCT INFRASTRUCTURE PLAN

5.1 INTRODUCTION

This Precinct Infrastructure Plan sets out infrastructure and services required to meet the needs of development of the precinct. The infrastructure and services are to be provided through a number of mechanisms including:

- subdivision construction works by developers,
- development contributions (community infrastructure levy and development infrastructure levy),
- utility service provider requirements, and
- capital works projects by Council, State Government Agencies and Non-Government Organisations.

5.1.1 SUBDIVISION CONSTRUCTION WORKS BY DEVELOPERS

As part of subdivision construction works, new development must meet the cost of delivering the following infrastructure:

- · Connector streets and local streets, including culverts,
- Local bus stop infrastructure,
- Landscaping of all existing and future roads and local streets,
- Intersection works and traffic management measures along arterial roads, connector streets and local streets,

Note: Subject to the approval of the collecting agency, part or all of the cost of works on intersections included in a Development Contributions Plan may be able to be provided as in-kind works in lieu of cash payment.

- Council approved fencing and landscaping (where required) along arterial roads,
- Local pedestrian and bicycle paths along local arterial roads, connector roads and local streets and within local parks, except those in the DCP,
- Basic improvements to local parks / open space including levelling, grassing, tree planting and local paths consistent with the Council's required construction standards.,
- · Local drainage systems, and
- Infrastructure as required by utility services providers including water, sewerage, drainage (except where the item is funded through a Drainage Scheme), electricity, gas, and telecommunications.

DEVELOPMENT CONTRIBUTIONS PLAN

A Development Contributions Plan has been prepared for Cranbourne North in conjunction with this PSP. The Development Contribution Plan is an incorporated document of the Casey Planning Scheme.

5.2 INFRASTRUCTURE AND SERVICES REQUIRED TO SUPPORT DEVELOPMENT OF THE PRECINCT

Table 11 sets out the list of infrastructure and services required within the precinct to support its development, including details of:

- Infrastructure Group and Category,
- Project Title and Description,
- Lead Agency (the agency responsible for the coordination and approval of the project. Other agencies and / or developers may have an involvement in the project), and
- Timing.

Table 12 sets out the list of infrastructure and services required outside the precinct to support its development, including details of:

- Infrastructure Group and Category,
- Project Title and Description, and
- Lead Agency. (The agency responsible for the coordination and approval of the project. Other agencies and / or developers may have an involvement in the project).

5.3 PROJECT CO-ORDINATION

Where practical and compatible, infrastructure projects should be grouped and delivered in a coordinated manner. The State primary school, community hub, playing fields, pavilion and car parking are the projects that could be grouped for co-ordinated delivery.

5.4 DELIVERY AND MONITORING

The Growth Areas Authority and Casey City Council will jointly monitor the implementation of the Precinct Infrastructure Plan.

The Growth Areas Authority has established a Casey Infrastructure Working Group to manage the monitoring, review, implementation and prioritisation of identified projects.

Section 5 - Precinct Infrastructure Plan



Table 11: Infrastructure and services required within the precinct

PROJECT GROUP	PROJECT CATEGORY	TITLE	PROJECT DESCRIPTION	LEAD AGENCY	TIMING: S=2010-14 M=2015-18 L=2020+
ROADS					
Transport	Road	Glasscocks Road	Duplicate from Stage 1 to Berwick-Cranbourne Road (920 metres)	VicRoads	S - M
Transport	Intersection	Glasscocks Road	Signals at intersection of connector road and Glasscocks Road	Casey City Council	M - L
Transport	Intersection	Berwick-Cranbourne Road	Signals at intersection of connector road and Berwick-Cranbourne Road	VicRoads	S
Transport	Intersection	Thompsons Road	Signals at intersection of connector road and Thompsons Road	VicRoads	S
Transport	Intersection	William Thwaites Blvd.	Signals at intersection of Local Town Centre main street and William Thwaites Blvd	Casey City Council	S
PUBLIC TRANSPORT					
Public Transport	Bus	Cranbourne North Bus Services	Progressive extension of local bus services to service the precinct.	Department of Transport	S - L
Public Transport	Bus	Bus stops	Provision of bus stops to be delivered with local street system as part of subdivision construction approvals.	Relevant development proponent	S-L
COMMUNITY					
Education	School	Primary School	Provision of new primary school.	DEECD	S
Community services	Community centre	Land	Central Community Centre. Land acquisition.	Casey City Council	S - M
Community services	Community centre	Construction	Central Community Centre Construction. Construction of Triple kindergarten.	Casey City Council	S - M
OPEN SPACE					
Open space	Passive parks	Passive park construction	Basic improvements to open space including earthworks, grading, seeding, garden beds, paths and trails, local playground construction.	Relevant development proponent	M - L
Open space	Active Open Space	Sports Field	Central Active Playing Fields - Construction of 3 soccer pitches and 1 cricket oval and cricket nets.	Casey City Council	M - L
Open space	Active Open Space	Pavilion	Central Active Playing Fields - Construction of Pavilion to serve active playing field (soccer/cricket).	Casey City Council	M - L

 Table 12:
 Infrastructure and services located outside the precinct

PROJECT GROUP	PROJECT CATEGORY	TITLE	PROJECT DESCRIPTION	LEAD AGENCY	TIMING: S=2010-14 M=2015-18 L=2020+
TRANSPORT					
Transport	Road	Thompsons Road, duplication	Duplication of Thompsons Road between Narre Warren-Cranbourne Road and Berwick-Cranbourne Road	VicRoads	M - L
Transport	Road	Berwick-Cranbourne Road Pedestrian Signals	Berwick-Cranbourne Road and Melbourne Water easement crossing - pedestrian signal construction.	VicRoads	M - L
Transport	Road	Thompsons Road Pedestrian Signals	Thompsons Road and Melbourne Water easement crossing - pedestrian signal construction.	VicRoads	M - L



6.0 OTHER INFORMATION

6.1 ACRONYMS

AFL CAD CBD	Australian Football League Central Activities District
CBD	
	Central Business District
СНМР	Cultural Heritage Management Plan
CIL	Community Infrastructure Levy
DDA	Disability Discrimination Act
DEECD	Department of Education and Early Childhood Development
DIL	Development Infrastructure Levy
DoT	Department of Transport
DSE	Department of Sustainability & Environment
ECV	Environmental Conservation Value
GAA	Growth Areas Authority
На	Hectare
MCH	Maternal & Child Health
MSS	Municipal Strategic Statement
NAC	Neighbourhood Activity Centre
NDA	Net Developable Area
NDHa	Net Developable Hectare
NRHa	Net Residential Hectare
NGO	Non Government Organisation
NVPP	Native Vegetation Precinct Plan
PAC	Principal Activity Centre
PIP	Precinct Infrastructure Plan
PPTN	Principle Public Transport Network
PSP	Precinct Structure Plan
P-6	State School Prep to Year 6
P-12	State School Prep to Year 12
RBGC	Royal Botanic Gardens Cranbourne
Sq m	Square Metres
UGB	Urban Growth Boundary
UGZ	Urban Growth Zone
VPD	Vehicles Per Day
WSUD	Water Sensitive Urban Design

6.2 GLOSSARY

ACTIVE OPEN SPACE

Land set aside for the specific purpose of formal organised/club based sports.

ACTIVITY CENTRE

Provide the focus for services, commercial and retail based employment and social interaction. They are where people shop, work, meet, relax and live. They are well-served by public transport, they range in size and intensity of use. In the growth areas, these are referred to as principal activity centres, major activity centres, neighbourhood activity centres and local centres. For further information refer to Melbourne 2030.

AFFORDABLE HOUSING

Well-located housing appropriate to the needs of a given household, where the cost (whether mortgage repayment or rent) is no more than 30 per cent of that household's income.

ARTERIAL ROAD

A higher order road providing for moderate to high volumes at relatively high speeds typically used for inter-suburban journeys, and identified by declaration under the Road Management Act 2004. All arterials are managed by the State Government.

CO-LOCATION

Adjoining land uses to enable complementary programs, activities and services and shared use of resources and facilities. For example, the colocation of schools and active open space.

COMMUNITY FACILITIES

Infrastructure provided by government or non-government organisations for accommodating a range of community support services, programs and activities. This includes facilities for education and learning (e.g. government and non-government schools, universities, adult learning centres); early years (e.g. preschool, maternal and child health, childcare); health and community services (e.g. hospitals, aged care, doctors, dentists, family and youth services, specialist health services); community (e.g. civic centres, libraries, neighbourhood houses); arts and culture (e.g. galleries, museums, performance space); sport, recreation and leisure (e.g. swimming pools); justice (e.g. law courts); voluntary and faith (e.g. places of worship) and emergency services (e.g. police, fire and ambulance stations).

CONNECTOR STREET

A lower order street providing for low to moderate volumes and moderate speeds linking local streets to the arterial network. Managed by the relevant local council. (See Table C1 in clause 56)

CONVENTIONAL DENSITY HOUSING

Housing with an average density of 10 to 15 dwellings per net developable hectare.

DEVELOPMENT CONTRIBUTIONS PLAN

Document that sets out the contributions expected from each individual landowner to fund infrastructure and services. Refer to Part 3B of the Planning and Environment Act 1987.

ENCUMBERED LAND

Land that is constrained for development purposes. Includes easements for power/transmission lines, sewers, gas, waterways/drainage; retarding basins/wetlands; landfill; conservation and heritage areas. This land may be used for a range of activities (e.g. walking trails, sports fields).

FREEWAY

A high speed and high volume road with the highest level of access control and typically used for longer distance journeys across the metropolitan area and country Victoria. All freeways are managed by VicRoads.

FRONTAGE

The road alignment at the front of a lot. If a lot abuts two or more roads, the one to which the building, or proposed building faces.

GROWTH AREA

Areas on the fringe of metropolitan Melbourne around major regional transport corridors that are designated for large-scale change, over many years from rural to urban use. Melbourne has five growth areas called Casey-Cardinia; Hume; Melton-Caroline Springs; Whittlesea and Wyndham.

GROWTH AREA FRAMEWORK PLAN

Government document that sets long-term strategic planning direction to guide the creation of a more sustainable community in the growth areas.

ဂ်(ဂ်) Section 6 - Other Information



HIGH DENSITY HOUSING

Housing with an average density of more than 30 dwellings per net developable hectare.

HOUSING DENSITY (NET)

The number of houses divided by net developable area.

LINEAR OPEN SPACE NETWORK

Corridors of open space, mainly along waterways that link together forming a network.

LAND BUDGET TABLE

A table setting out the total precinct area, net developable area and constituent land uses proposed within the precinct.

LOCAL CENTRE

An activity centre smaller than a neighbourhood activity centre with a catchment radius of about 400 metres and may include a small supermarket or convenience store of 500 square metres to 1,500 square metres.

LOT

A part (consisting of one or more pieces) of any land (except a road, a reserve, or common property) shown on a plan, which can be disposed of separately and includes a unit or accessory unit on a registered plan of strata subdivision and a lot or accessory lot on a registered cluster plan.

LOWER DENSITY HOUSING

Housing with an average density of less than 10 dwellings per hectare.

MAJOR ACTIVITY CENTRE

Activity centres that have similar characteristics to Principal Activity Centres but serve smaller catchment areas. For further information refer to Melbourne 2030.

MEDIUM DENSITY HOUSING

Housing with an average density of 16 to 30 dwellings per net developable hectare.

NATIVE VEGETATION

Plants that are indigenous to Victoria, including trees, shrubs, herbs, and grasses.

NATIVE VEGETATION PRECINCT PLAN

A plan relating to native vegetation within a defined area that forms part of the precinct structure plan. Native vegetation precinct plans are incorporated into local planning schemes and listed in the schedule to Clause 52.16.

NEIGHBOURHOOD ACTIVITY CENTRE

Activity centres that are an important community focal point and have a mix of uses to meet local needs. Accessible to a viable user population by walking, cycling and by local bus services and public transport links to one or more principal or major activity centres. For further information refer to Melbourne 2030.

NET DEVELOPABLE AREA

Total amount of land within the precinct that is made available for development of housing and employment buildings, including lots, local and connector streets. Total precinct area minus community facilities, schools and educational facilities and open space, arterial roads and encumbered land. Small local parks defined at subdivision stage are included in net developable area. Net Developable Area may be expressed in terms of hectare units (i.e. Net Developable Hectare ("NDHa")).

NET RESIDENTIAL AREA

As per Net Developable Area but excludes neighbourhood activity centres, non-government schools and other existing or permitted non-residential land uses (e.g. golf course sites). Net Residential Area may be expressed in terms of hectare units (i.e. Net Residential Hectare ("NRHa"))

PASSIVE OPEN SPACE

Open space that is set aside for parks, gardens, linear corridors, conservation bushlands, nature reserves, public squares and community gardens that are made available for passive recreation, play and unstructured physical activity including walking, cycling, hiking, revitalisation, contemplation and enjoying nature.

PRECINCT INFRASTRUCTURE PLAN

Section within the precinct structure plan that defines the priority regional and local infrastructure requirements for future planning and investment by council and government agencies.

PRECINCT STRUCTURE PLAN

A statutory document that describes how a precinct or series of sites within a growth area will be developed over time. A precinct structure plan sets out the broad environmental, social and economic parameters for the use and development of land within the precinct.

PRINCIPAL ACTIVITY CENTRE

Activity centres that accommodate a mix of activities that generate higher numbers of trips, including business, retail, services and entertainment. Generally well served by multiple public transport routes and on the Principal Public Transport Network or capable of being linked to that network. Has a very large catchment covering several suburbs and attract activities that meet metropolitan needs. For further information refer to Melbourne 2030.

PRINCIPAL PUBLIC TRANSPORT NETWORK

A high-quality public transport network that connects Principal and Major Activity Centres, and comprises the existing radial fixed-rail network, extensions to this radial network and new cross-town bus routes.

PUBLIC OPEN SPACE

Land that is set aside in the precinct structure plan for public recreation or public resort; or as parklands; or for similar purposes. Incorporates active and passive open space.

SHARED OR JOINT USE

When councils, schools and community service organisations come together to plan, build and in some cases jointly manage a single facility to be used by multiple service providers. E.g. Using a school as a facility for wider community utilisation.

URBAN GROWTH BOUNDARY

A statutory planning management tool used to set clear limits to metropolitan Melbourne's urban development.

URBAN GROWTH ZONE

Statutory zone that applies to land that has been identified for future urban development. The UGZ has four purposes: (1) to manage transition of non-urban land into urban land; (2) to encourage development of well-planned and well-serviced new urban communities in accordance with an overall plan; (3) to reduce the number of development approvals needed in areas where an agreed plan is in place; and (4) to safeguard non-urban land from use and development that could prejudice its future urban development.



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