



GREATER GEELONG PLANNING SCHEME

AMENDMENT C259

ARMSTRONG CREEK HORSESHOE BEND PRECINCT STRUCTURE PLAN AND DEVELOPMENT CONTRIBUTIONS PLAN

WITNESS STATEMENT OF ROB ANDERSON

2 June 2014

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1 WITNESS BACKGROUND

Name: Rob Anderson

Title: Coordinator – Urban Growth Area Planning
(Currently Acting Manager – Planning Strategy and Urban Growth)

Employer: City of Greater Geelong

Address: 100 Brougham Street, Geelong

Role: My role within the City of Greater Geelong is the day to day project management of the Armstrong Creek Urban Growth Area, and has included the preparation of the Armstrong Creek Civil Interagency Infrastructure Delivery Plan and the development of Precinct Structure Plans and Development Contributions Plans.

Qualifications: Bachelor of Engineering, Civil (Hons), 1999

Experience: I have 15 years experience in various roles within the field of Civil Engineering and Strategic Planning, including freeway planning, asset management, capital works project management, infrastructure planning, land use planning, precinct structure planning and the development and implementation of infrastructure funding models (eg: DCPs (Vic) and S94 Plans (NSW)).

Affiliations: APESMA

Declaration: The attached witness statement is provided based on my best known knowledge and background to the Armstrong Creek Urban Growth Area and represents the current position of Geelong City Council relating to growth area planning and the development of the Armstrong Creek Horseshoe Bend Precinct Structure Plan, Development Contributions Plan and Native Vegetation Precinct Plan. The State has been prepared in accordance with Panel’s Victoria guideline No.1

*Refer Appendix 15.9 for complete content of Planning Panels Victoria, Guidelines No1 –
Expert Evidence*

2 ACRONYMS & ABBREVIATIONS

Below is a list of acronyms and abbreviation that are used throughout the report, including their relevant meaning and context.

Acronym / Abbreviation	Meaning	Context
Council	City of Greater Geelong	Local planning authority
DTPLI	Department of Transport, Planning and Local Infrastructure	State planning authority and representative for the Minister for Planning
HBP	Armstrong Creek Horseshoe Bend Precinct	One of seven precincts within the Armstrong Creek Urban Growth Area
HBPSP	Horseshoe Bend Precinct Structure Plan	Document governing the future land use and development of the HB precinct (Amendment C259)
DCP	Development Contributions Plan	Document governing the collection and expenditure of funds to deliver future infrastructure for a specific development area.
HBPDCP	Horseshoe Bend Precinct Development Contributions Plan	Proposed funding mechanism for development related infrastructure within the HB Precinct (included in Amendment C259)
C259	Greater Geelong Planning Scheme Amendment C259	Amendment C259 – Armstrong Creek Horseshoe Bend PSP, DCP and NVPP.
ACUGP	Armstrong Creek Urban Growth Plan	Document governing the future land use and development of the Armstrong Creek growth area, and approved as part of Amendment C138
C138	Greater Geelong Planning Scheme Amendment C138	Amendment C138 – Armstrong Creek Urban Growth Plan
The Scheme	Greater Geelong Planning Scheme	Planning controls governing the subdivision, development and use of land within the City of Greater Geelong

3 INTRODUCTION AND STATEMENT STRUCTURE

I have been asked to provide a report that details the background to the Armstrong Creek Horseshoe Bend Precinct Structure Plan, Development Contributions Plan and Native Vegetation Precinct Plan explaining how they were developed, any background documents that informed their preparation and to address specific issues concerning:

- The process for the development of the Horseshoe Bend PSP, DCP and NVPP.
- How each of the DCP projects were identified and scoped, including an understanding of all key infrastructure required in the Horseshoe Bend Precinct (including those projects not included in the DCP)
- How apportionment was assessed for each DCP project, and
- Any specific matters that may benefit the Panel for Amendment C259

Every attempt has been made to follow a chronological style presentation within the witness statement to improve the reader's understanding of the history and previous planning within the Armstrong Creek growth area, along with the specific development of the Armstrong Creek Horseshoe Bend PSP, DCP and NVPP.

4 AMENDMENT C138 - ARMSTRONG CREEK URBAN GROWTH PLAN

As part of Amendment C138, which introduced the Armstrong Creek Urban Growth Plan into the Scheme, it was acknowledged that further work was required prior to and during the precinct structure planning process to ensure sound strategic planning and decision-making.

In Clause 21.11-3 of the Greater Geelong Planning Scheme (Municipal Strategic Statement) a list of further work was detailed. This action list and their current status is detailed in Table 1 below (The key actions relating to HBP are highlighted in **red**).

Table 1 – Further Work - Clause 21.11-3 – Armstrong Creek Urban Growth Area

List of Further Work	Comments	Status
Prepare a detailed Implementation Plan for the ACUGA, including a rezoning strategy, an integrated infrastructure delivery plan and an infrastructure investment plan.	Refer C170 (Urban Growth Zone), Geelong Planning Work Group and IIDP	Complete
Prepare an Infrastructure Funding Model and Development Contributions Plan for the Urban Growth Area.	Refer Integrated Infrastructure Delivery Plan - IIDP & specific growth area DCPs, including C259 – HBDCP.	Ongoing
Coordinate the preparation of Precinct Structure Plans for development areas within the Urban Growth Area	North East Industrial Precinct, Armstrong Creek East and West Precincts, ACTC and HBP complete.	Ongoing
Coordinate the input of relevant State Government agencies and service providers to ensure the realisation of the development vision for the ACUGA, particularly the provision of appropriate infrastructure and services.	Refer Integrated Infrastructure Delivery Plan - IIDP (Section 6 of this submission). Refer Armstrong Creek Business Case on the Sustainability Victoria website. http://www.sustainability.vic.gov.au/www/html/2844-armstrong-creek.asp	Complete
Develop sustainable water and energy policies prior to the commencement of development.	Recycled water confirmed for the ACUGA. Also, refer Armstrong Creek Business Case on the Sustainability Victoria website. http://www.sustainability.vic.gov.au/www/html/2844-armstrong-creek.asp	Complete

Table 1 Continued.

List of Further Work	Comments	Status
<p>Apply relevant Land Management Overlays (Floodway Overlay and Land Subject to Inundation Overlay) to areas prone to flooding / inundation once post development conditions are established based upon preparation of drainage schemes.</p>	<p>Refer Amendments C206 - ACEP, C207 – NE Industrial Precinct, C240 – ACWP, C267 – ACTC, C259 - HBP</p>	<p>Ongoing</p>
<p>Investigate the opportunity for an integrated approach to the development of Cultural Heritage Management Plans (CHMP) for the entire ACUGA.</p>	<p>Approach was deemed inappropriate during early precinct structure planning due to the size of the growth area and financial and time constraints. There has been a recent change by Aboriginal Affairs Victoria that may allow the preparation of a precinct wide CHMP. This approach has been adopted for the C267 – ACTC due to its small size, with a draft CHMP (complex assessment) prepared for the entire Precinct. The HBP has followed the same model as other residential PSPs within the growth area.</p>	<p>Ongoing</p>
<p>Investigate the establishment of a Cultural Heritage Interpretation Trail.</p>	<p>An extensive trail network is being developed via PSP preparation, and via the Barwon River Parkland Project (Parks Victoria) These trails will be investigate regarding their potential for broader heritage or tourist trails for the ACUGA and broader Geelong region.</p>	<p>Pending</p>

As a key outcome of the further work proposed to implement the ACUGP, a growth area planning model was developed to ensure a sound basis for infrastructure planning that informed all future PSPs, DCPs and long-term financial planning. This planning model is shown in Figure A below.

Armstrong Creek Growth Area Planning Model

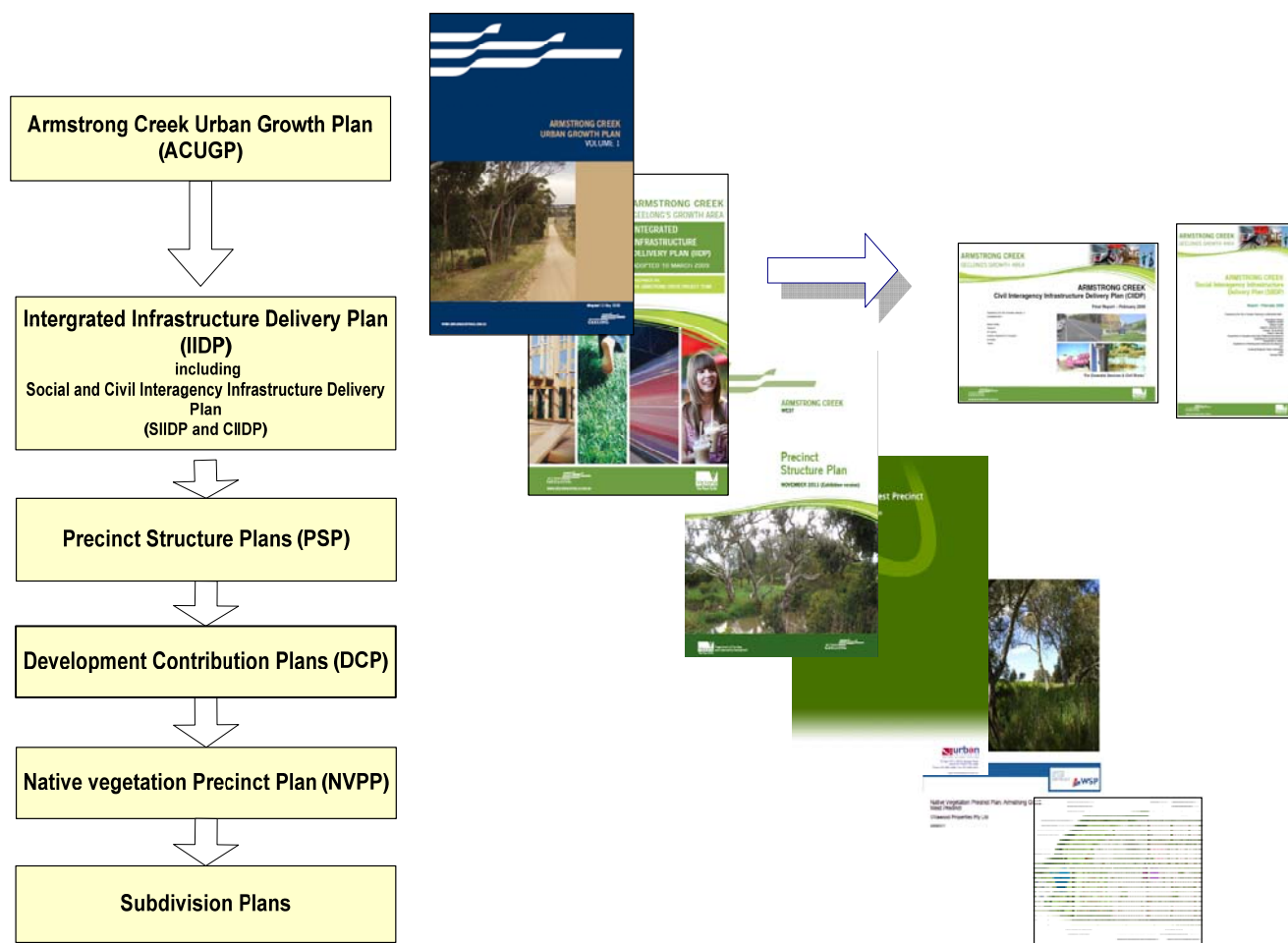


Figure A – Armstrong Creek Growth Area Planning Model

The most notable strategic plans that guide the development of precinct structure planning and the Horseshoe Bend PSP, DCP and NVPP are:

- Armstrong Creek Urban Growth Plan – Framework Plan
- Armstrong Creek Urban Growth Plan – Precinct Plan
- Armstrong Creek Horseshoe Bend Precinct – Urban Structure Plan (exhibition version)
- Armstrong Creek Town Centre Precinct – Urban Structure Plan (pending Minister approval)
- Armstrong Creek East Precinct– Urban Structure Plan
- Armstrong Creek West Precinct – Urban Structure Plan
- Armstrong Creek North-East Industrial Precinct – Urban Structure Plan

The above six plans are shown in Appendix 15.1 – Armstrong Creek Plans

5 HORSESHOE BEND PRECINCT - PLANNING PARTNERSHIPS

5.1 Council's Audit Criteria

As a result of the panel hearing for C138 and a recognition of the further work that was necessary for the implementation phase of the urban growth area, Council developed audit criteria for the development of precinct structure plans within the growth area (Refer Appendix 15.2 – Armstrong Creek Precinct Structure Planning – Preparation Guidelines).

The purpose of the criteria was to ensure that each precinct within the growth area is planned in its entirety, is able to be serviced, and that the developer or consortium of developers has the capacity to deliver the PSP on the ground within a timely manner. The criteria also ensured Council's resources would be effectively used to facilitate the release of land within the growth area.

In summary the audit criteria are:

- A developer or developer consortium must have 70% of the developable land within a defined precinct either in their ownership or under their control in order to prepare a PSP for the whole precinct.
- A developer must be committed to the Armstrong Creek vision, have the capability to prepare the PSP and the capacity to deliver the PSP on the ground (ie: not be over committed in other growth areas). This also includes an ability to assemble a project consultant team and to finance the planning work.
- The precinct must be able to be serviced in accordance with the Armstrong Creek Interagency Infrastructure Delivery Plan (IIDP), February 2009 and not compromise the baseline service provision for the growth area.

Once the audit criteria has been met a Memorandum of Understanding (MoU) is entered into between Council, the Developer/Consortium and the Principal Consultant (refer Appendix 15.2 – MoU template), allowing the PSP process to commence and continue with generally a broad base of support.

The City of Greater Geelong has, in close consultation with the Horseshoe Bend Landholders Group, prepared a Precinct Structure Plan (PSP) and Native Vegetation Precinct Plan (NVPP) for the Armstrong Creek Horseshoe Bend Precinct.

The Development Contributions Plan (DCP) for the Armstrong Creek Horseshoe Bend Precinct was prepared by Urban Enterprises Pty Ltd on behalf of Council.

6 GROWTH AREA INFRASTRUCTURE PLANNING – INTEGRATED INFRASTRUCTURE DELIVERY PLAN (IIDP)

During the course of Amendment C138, the issue of growth area infrastructure planning was raised on several occasions. The outcome of these discussions was the inclusion of a recommendation within the ACUGP Panel Report for a detailed infrastructure plan to be prepared for the growth area prior to the commencement of precinct structure planning.

In March 2009, Council approved the Armstrong Creek Integrated Infrastructure Delivery Plan (IIDP) that details all civil and social infrastructure required to service the growth area.

The IIDP was one of the first of its kind in Victoria. Acknowledging that there are a different views as to its recommendations, the IIDP has been acclaimed for its collaborative approach, specific assessment of future growth area community needs, links between civil and social infrastructure planning, its influence on development staging and its ability to illustrate the estimated funding commitment required by all levels of government and the development industry.

The structure in delivering the IIDP is shown below including all the agencies and government departments who actively participated in the development of the plan. More information on the preparation of the IIDP's is detailed under Sections 6.1, 6.2 and 6.3 of this witness statement.

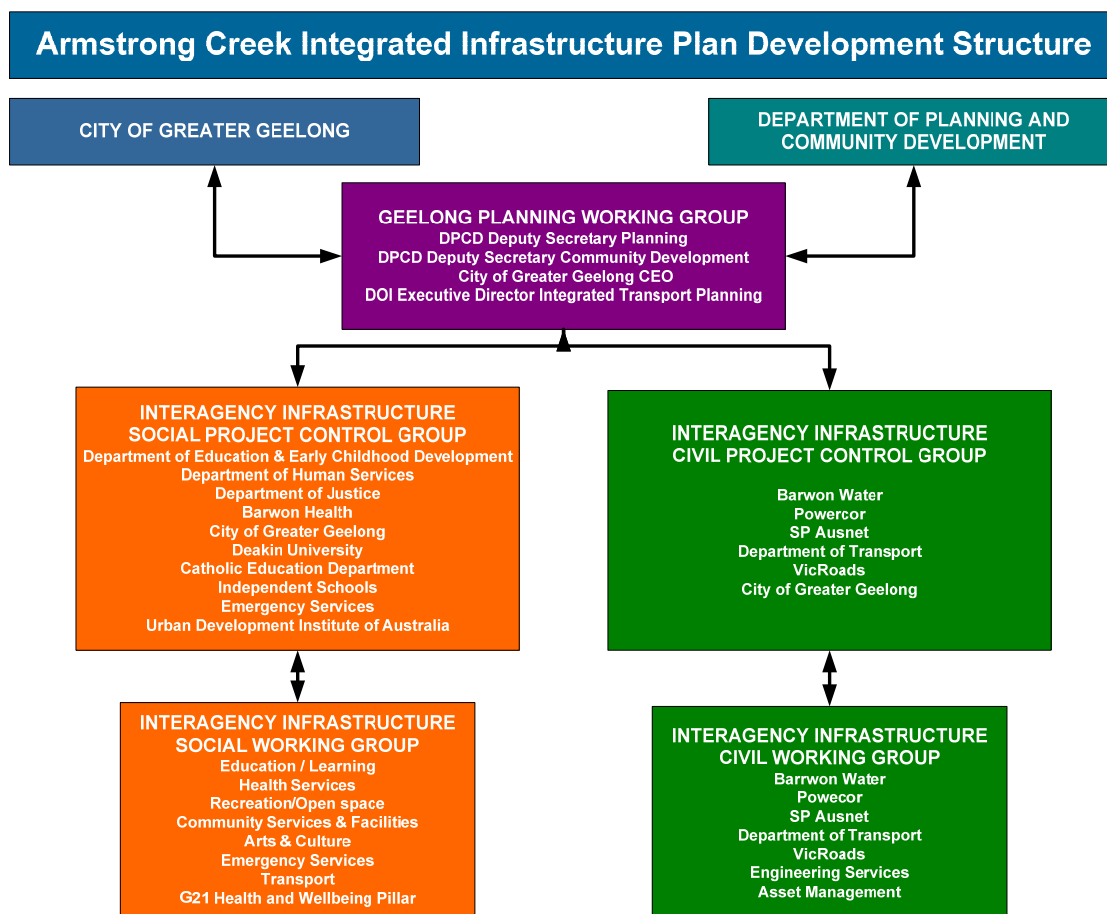


Figure B – IIDP Development Structure

Council recognised a need for guidelines to inform the development industry of Council's expectation relating to subdivision development and the planning and delivery of public infrastructure.

Consequently, the document entitled *Sustainable Communities – Infrastructure Development Guidelines, City of Greater Geelong, October 2010* was developed to build on the existing growth area planning and to provide guidance at a local subdivision scale. These guidelines are seen as the next step in the effective implementation of the IIDP.

6.1 Civil Interagency Infrastructure Delivery Plan

In late 2007 Council coordinated the formation of a Civil Interagency Infrastructure Working Group that assisted Council in preparing a the Civil Interagency Infrastructure Delivery Plan for all civil works and essential services within the Armstrong Creek Growth Area.

The organisations represented on the working group and their respective portfolios are listed below:

Geelong City Council	-	Drainage and Local Roads
Department of Transport	-	Public transport planning & service provider
Barwon Water	-	Sewerage and Water (potable and recycled)
VicRoads	-	Arterial Roads
SPAusNet	-	Gas
Powercor	-	Electricity
Telstra	-	Telecommunications

Over a 12-month period the various organisations worked extensively with Council via meetings, internal strategic planning and joint planning workshops to assist Council in delivering a holistic infrastructure plan for the entire growth area.

One of the significant outcomes of this Civil Interagency Infrastructure Delivery Plan was the development of an indicative precinct staging plan for the growth area to inform the baseline rollout of infrastructure as well as the priority order for infrastructure planning.

6.2 Social Interagency Infrastructure Delivery Plan

In mid 2008 Council co-ordinated the formation of a Social Interagency Infrastructure Working Group (SIIWG) that assisted Council in preparing a Social Interagency Infrastructure Delivery Plan for all social / community infrastructure required for the growth area.

The organisations represented on the working group and their respective portfolios are listed below:

Geelong City Council	-	Various council services (eg: Childcare, Library, Kindergarten, Sport & Recreation, etc)
Department of Planning & Community Development	-	Planning & Community Development (Incl. Sport and Recreation Victoria)
Department of Justice	-	Emergency Services
Department of Education & Early		

Childhood Development	-	State Education providers
Department of Human Services		Public Health & Housing provider
Barwon Health	-	Regional Health Service provider
Catholic and Anglican Education	-	Private Education providers
Deakin University	-	University Education
G21 Geelong Regional Alliance	-	Regional Alliance
Geelong Regional Library Corp.	-	Public library service provider
Urban Development Institute of Aust.-		Urban design industry body

Over an intensive three-month period, the various organisations worked extensively with Council via strategic planning workshops, further meetings and coordination to assist Council in delivering a holistic social infrastructure plan for the entire growth area.

Appendix 15.7 – Hub models , highlighting Horseshoe Bend Facilitates

Population Projection and Planning Assumptions

Determining appropriate population projections for the Armstrong Creek Urban Growth Area was a critical component in understanding the servicing needs of the future community.

Work had already been undertaken within the Armstrong Creek Urban Growth Plan relating to assumed growth rates, population and home occupancy rates. This work was based on figures published in *Victoria in the Future* population forecast prepared by Department of Planning and Community Development (Spatial Analysis Unit) at the time and work undertaken by the G21 Geelong Region Alliance.

The Department of Planning and Community Development (Spatial Analysis Unit) was also requested to participate in the SIWGW to assist with any unique analysis for a growth area such as Armstrong Creek and to confirm the most recent growth and demographic trends for the State, Geelong and Geelong region.

It should be noted that as a starting point, all social infrastructure planning for the Armstrong Creek utilised the *Planning for Community Infrastructure in Growth Areas* (ASR Research P/L, 2008) guidance document. Following that initial assessment of infrastructure needs within Armstrong Creek, and noting that the ASR document was based partly on averages and in other respects on derived benchmarks from Melbourne based councils, a more detailed assessment was undertaken utilising known service benchmarks and requirements within the City of Greater Geelong and the Geelong region.

Additional factors that were also considered in the development of the SIIDP were the then forecasted (and now effective) changes to universal access to kindergarten services (ie: increasing from 10 to 15 hours per week per child), potential changes to staff ratios for early years services (eg: Maternal Child Health, Kindergarten, Childcare, etc) and the assessment of building floor area based on critical 'functional' space, not just basic assessments of metres squared per child often used in guidance documents.

6.3 Integrated Infrastructure Delivery Plan

The outcome of both working groups (civil and social) and their respective infrastructure plans was the preparation and adoption by Council on 10 March 2009 of the consolidated Armstrong Creek Integrated Infrastructure Delivery Plan as part of a total integrated infrastructure package covering all civil and social infrastructure for the total growth area.

The Integrated Infrastructure Delivery Plan includes a summary of all available infrastructure costs and an estimated breakdown of all long term budgetary requirements for applicable funding agents.

A hard copy of the Integrated Infrastructure Delivery Plan has been provided to the Panel.

The Integrated Infrastructure Delivery Plan is not intended to be an explicit representation of developer, agency and government funding requirements. However, it is aimed at providing guidance to these funding groups relating to the types and quantum of infrastructure funding required for a “place based approach” to service delivery within the Armstrong Creek Urban Growth Area.

The “place based funding model” for Armstrong Creek can be seen below.

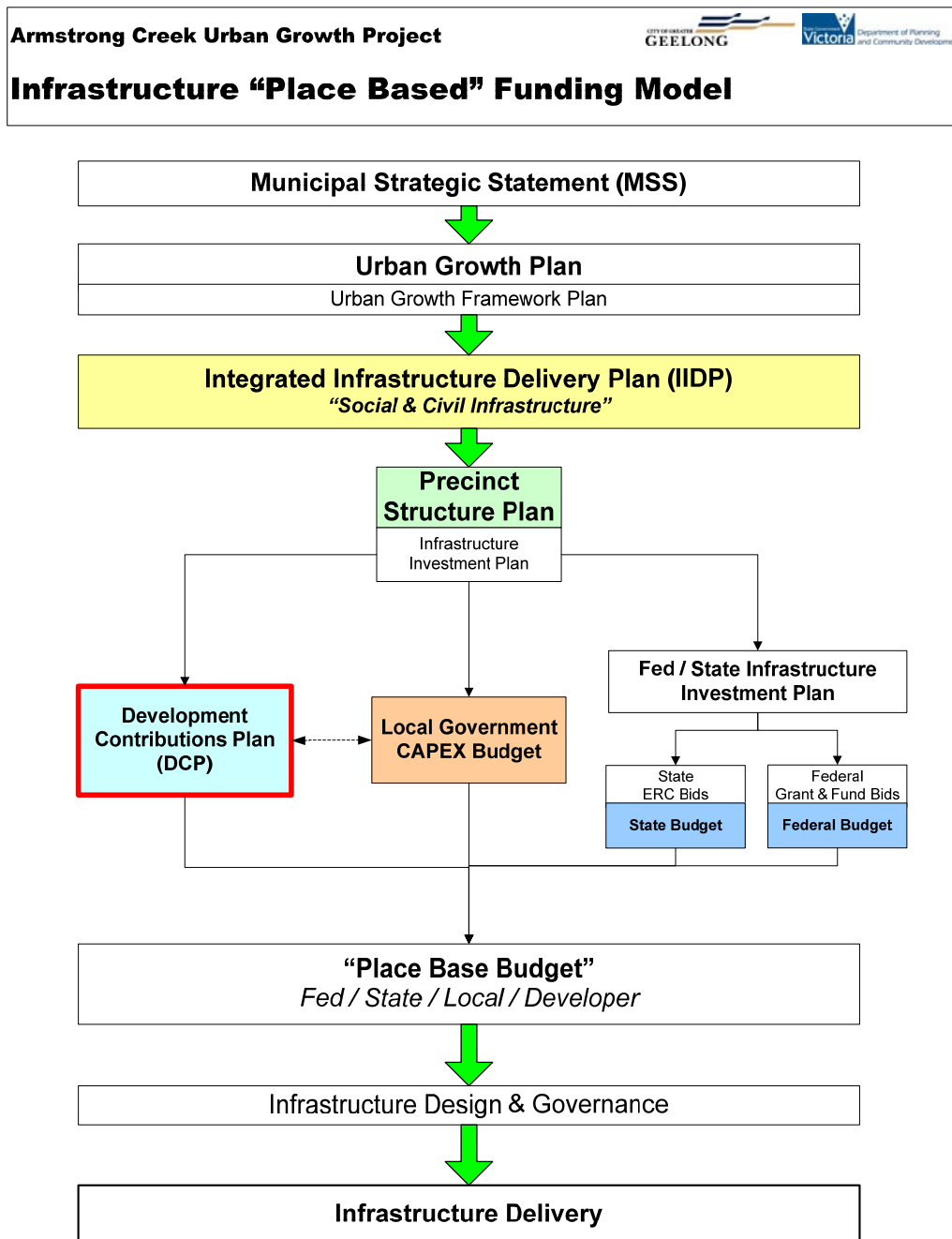


Figure C – Armstrong Creek “Place Based Funding Model”

6.4 Sustainable Communities - Infrastructure Development Guidelines – City of Greater Geelong (October 2010)

The Infrastructure Development Guidelines referred to earlier have also been prepared to facilitate the development of sustainable communities through quality planning, design and construction of infrastructure in the City of Greater Geelong. They will assist with the upgrade and redevelopment of existing infrastructure as well as the establishment of new communities throughout the municipality.

The guidelines note that sustainable communities:

- Are places where people want to live, work and play;
- Meet diverse needs of existing and future residents;
- Offer a high quality of life and promote community connectedness;
- Lead the way with environmental outcomes and maximising natural settings;
- Are safe, inclusive and engaging;
- Possess economic vitality that promotes diverse activity;
- Focus on integrated planning of all aspects of community and liveability;
- Offer good access to quality services and community facilities; and
- Are well connected and welcoming for residents and visitors.

The Infrastructure Development Guidelines are broken into six sections detailing the various asset portfolios typically delivered within new growth area communities. These include:

1. Transport and Movement
2. Landscape and Streetscape
3. Water management
4. Sport, Recreation and Open Space
5. Social and Community Facilities
6. Environmental and Biodiversity

The Infrastructure Development Guidelines outline the various types of infrastructure and the relevant standards and reference documents that should be used in the planning, design and development of infrastructure.

The Infrastructure Development Guidelines have been prepared with a standard format for each type of infrastructure. Within each section:

- The objectives and principles of development are summarised;
- The relevant standards and policies are outlined including legislation, industry standards, policies and guidelines;
- Planning considerations are discussed with particular reference to relevant resource materials that should be used in planning phases; and
- Design and construction guidance and requirements are covered to ensure that there is consistency and compliance with minimum standards of infrastructure development.

7 ARMSTRONG CREEK PRECINCTS – PREVIOUS AMENDMENTS

7.1 Amendment C206 – Armstrong Creek East Precinct Structure Plan (ACEPSP)

The Armstrong Creek East Precinct (ACEP) was the first residential precinct approved for development within the growth area. The ACEPSP was approved on 3 June 2010 via Amendment C206.

Amendment C206 did not include a DCP due to a minor delays in preparing the documentation, and a recognition that the DCP would be the most heavily scrutinised document across the Growth area (ie: setting the precedent for future Armstrong Creek DCPs).

Some of the key components in the preparation of the ACEPSP were:

- A joint ownership in the plan's development (major developer(s), DPCD and Council)
- A PSP that is truly subdivision ready, and easily / transparently facilitates development.
- A PSP that was generally consistent with the Armstrong Creek Urban Growth Plan and Growth Areas Authority PSP Guidelines.

For context, some of the issues raised during the submission process relative to the preparation and assessment of the HBP have been listed below:

- Provision of 1.7m on-road bicycle lanes (exhibited as 1.5m bike lanes)
- The ultimate traffic volumes of critical road and their longer-term augmentation. In the ACEP the notable road for discussion was Horseshoe Bend Road and its potential long-term duplication.
- Concerns about the abuttal of new urban development to existing rural and non-urban areas.
- A request to remove the 40ha minimum area for a planning permit contained within 21.11 of the Greater Geelong Planning Scheme.

7.2 Amendment C214 – Armstrong Creek East Development Contributions Plan (ACEDCP)

As detailed in section 7.1 above, the ACEDCP was excluded from the PSP Amendment process and subject to a standard amendment and panel process.

Amendment C214 was developed under the same model as the ACEP PSP planning, whereby the developer was responsible for all background reports, inclusive of concept designs for various precinct infrastructure projects and then preparing detailed cost estimates to support these designs. The package was reviewed by Council and endorsed as being of sufficient detail to support the preparation of a DCP.

A DCP and supporting amendment documentation was then prepared by Council (C214) and the DCP was subsequently considered by a Panel during May / June 2011.

Notable features of that DCP that are considered relevant to the preparation of the HBPDCP are listed below:

- The establishment of a so-called “ring fence” principle relating to the apportionment of costs. The principle is that Armstrong Creek is largely self-contained in terms of demand for infrastructure and therefore, there is minimal external apportionment outside of the Growth Area (as distinct from between precincts within the growth area). This should not be confused however, with certain projects particularly regional open space, which is provided on a “home of” basis on the assumption of

approximately equal contributions by each of the three residential precincts to the three "home of" facilities – soccer, football and cricket.

- The Integrated Infrastructure Delivery Plan (IIDP), including its two "child" plans, the Civil and Social Interagency Infrastructure Delivery Plans, guided the preparation of the PSP and DCP. This was particularly important for social and recreation infrastructure.
- The design and scope of infrastructure within the DCP reflects what Council considers to be the basic level of service expected by the community for these types of projects / facilities, or the appropriate standards governing their design (e.g. sporting facilities, community facilities etc).

Refer to Section 10.1 of this statement for further information regarding the Armstrong Creek DCP apportionment model.

Amendment C214 received a total of 11 submissions, with the submitter groups being summarised below:

- Five developer / developer consortiums
- Two government agencies (VicRoads and Barwon Water)
- Geelong Cemeteries Trust
- Catholic Education Office
- One private landowner, and
- Housing Institute of Australia (HIA)

The major issues raised by submitters in the C214 panel hearing that have relevance to the HBDCP are summarised below:

- concern that the DCP levy was too high;
- the land valuation methodology;
- the size of Community complexes that provided kindergarten, childcare and maternal child health services; and
- adjustment of DCP costs based on changes in scope (e.g. VicRoads request for additional work at traffic signal sites).

The Panel report for Amendment C214 was completed on 11 August 2011. By and large, the C214 Panel supported the DCP as exhibited albeit with some changes. The notable exception to the exhibited DCP was the Panel's recommendation that active open space projects should only include basic earthworks and fencing within DCP funded costs. The Panel found that embellishments for the provision of the sporting ovals, netball courts, tennis courts etc should be excluded from the DCP.

As relevant to the HBDCP, some of the notable outcomes detailed within the Panel's report include:

- support for the "ring fence" approach adopted by Council relating to 100% infrastructure funding within each precinct, and
- an inability to conclude any strong primary link between the DCP levy and housing affordability.

Acknowledging the views of the Panel, Council did not support this position and made a submission to the Minister for Planning requesting the inclusion of all exhibited projects based on consistency with the Ministerial Direction and State DCP Guidelines, as well as

with other recently approved Growth Areas Authority (GAA, now the Metropolitan Planning Authority (MPA)) DCPs and the current practice of the MPA.

The Minister subsequently agreed with Council's request for the inclusion of all exhibited active open space projects, and Amendment C214 was approved on 12 July 2012.

7.3 Amendment C240 – Armstrong Creek West PSP and DCP (ACEPSP)

The Armstrong Creek West Precinct (ACWP) was the second residential precinct approved comprising an area of 374 hectares of developable land and delivery of an estimated 5,699 dwellings for the growth area.

The amendment was exhibited in September 2011 and reviewed by a Minister appointed Advisory Committee during February / March 2012.

Key submission issues considered by the Advisory Committee included:

- Boundary Road cross section
- Retail floor space (creation of new Neighbourhood Activity Centre)
- DCP matters
- Inclusion of a drainage facilitating missed from the precinct's drainage strategy

As relevant to the ACTC PSP, DCP and NVPP, some of the notable outcomes detailed within the Advisory Committee's report include:

- The creation of a new neighbourhood activity centre (NAC) including 3,000m² of shop floor space, with a potential to expand to 5,000m² longer term.
- The ACWP DCP is not unacceptably and inappropriately high and has no evidence before it to suggest that it will therefore impact unacceptably on housing affordability.
- Continued support for the level of service provision within Community Complexes, providing for kindergarten, childcare and maternal child health.
- Continued support for the "ring fence" approach adopted by Council relating to 100% infrastructure funding within each precinct
- Support for the creation of a 'practical retention' category with the NVPP to allow further assessment of native vegetation losses at a detailed design stage.

A final matter of note was a decision by the Minister to alter the DCP to reduce all intersection costs to include a 10% contingency (exhibited at 20%). This was not contained in any submission to the Advisory Committee nor a recommendation of the Advisory Committee itself, and was not supported by the Council. The adopted DCP includes this 10% reduced contingency, which has been carried over to the ACTC and HB DCPs relating to shared intersections along Surf Coast Hwy.

7.4 Amendment C267 – Armstrong Creek Town Centre PSP and DCP

The Armstrong Creek Town Centre PSP, DCP and NVPP (Amendment C267) was recently adopted by Council on 13 May 2014 and is likely to be approved by the Minister early in the 2014/15 financial year.

The ACTC has two key interface areas with the HBP along its eastern (Barwarre Road) and northern (Boundary Road) boundaries. Both roads are nominated as incorporating greenways and providing a soft landscape interface between more conventional densities contained within the Horseshoe Bend Precinct and the mixed use / higher density housing within the ACTC.

The ACTC Precinct Structure Plan, Native Vegetation Precinct Plan and Development Contributions Plan were exhibited between 6th June 2013 and 8th July 2013 during which time public submissions to the Amendment were sought.

The exhibition of Amendment C267 received a total of 23 submissions.

Submissions included:

- 6 from landowners within the ACTC (includes submissions from the primary retail stakeholders of Coles and Woolworths).
- 8 from landowners within the Armstrong Creek Growth Area
- 1 from a landowner outside the Armstrong Creek Growth Area boundary
- 1 from an industry network group
- 7 from State Government Agencies (Minister for Public Transport and Roads, Barwon Region Water Corporation, Department of Transport, Planning and Local Infrastructure together with VicRoads and Public Transport Victoria, Country Fire Authority, Department of Environment & Primary Industries, EPA, Corangamite Catchment Management Authority).

The Amendment was referred to an independent Panel to consider all submissions, with a hearing held between 6th – 15th November 2013.

The key themes discussed at the Panel hearing included:

- Urban Design and Development
- Retail Uses and Floor Space
- Transport and Movement
- Native Vegetation and Greenways
- Development Contributions
- Other General Matters (including drainage management and Gaming provisions)

The Panel report was received on the 17th January 2014 and released to the public on 17th February 2014. The report included 21 recommendations for changes to the amendment package (inclusive of the Precinct Structure Plan, Development Contributions Plan, Native Vegetation Precinct Plan and general amendment documentation).

As relevant to the HBPDCP, some of the notable recommendations detailed within the Panel's report include:

- Removal of overall and individual retail floor space caps
- Update the exhibition NVPP to align with the new Native Vegetation reforms (policy neutral translation)
- Revise PSPs greenway design guidelines to allow greater flexibility for alternative treatments during detailed design stage.
- In relation to the transit corridor:
 - Change to the DCP to exclude the land from the Levy
 - Change the Urban Growth Zone Schedule to nominate an applied zone of "Farming Zone" to the transit corridor
 - Label the corridor as "regional transit corridor investigation area"

-
- Include an additional project in the DCP to fund intersection works, Boundary Road and Connector Road A, between individual landowners within the ACTC and HBP.
 - Remove all mandatory provisions within the PSP (ie: move all “must” design guidelines with “should”).

Acknowledging the views of the Panel, Council did not support the above recommendations (excluding translating the NVPP) and has submitted the Amendment to the Minister for Planning requesting adoption of a revised PSP and DCP together with an explanation of why Council did not support the Panel's recommendation.

8 AMENDMENT C59 – HORSESHOE BEND PRECINCT

8.1 Amendment C259 Overview

The vision for the Armstrong Creek urban growth area as detailed in the Armstrong Creek Urban Growth Plan (Volume 1) states:

The Armstrong Creek urban growth area will be developed into a sustainable community that sets new benchmarks in best practice urban development. Natural and cultural features will be protected and enhanced to create a distinct urban character. Armstrong Creek will become a highly sought-after location for living, working and recreation, forming an attractive addition to Geelong.

The HBSP also sets its own vision for the precinct, which reinforces seven key themes around:

- *Walkable, connected neighbourhoods.*
- *Promote walking and cycling.*
- *Quality public realm and streets.*
- *Integrated public open space network.*
- *Extension to the Barwon River Parklands.*
- *Create unique clusters of services and facilities in and around activity centres.*
- *Easy access to whole of life community and recreation facilities.*

Amendment C259 is intended to implement these visions themes.

The PSP differs from the Armstrong Creek Urban Growth Plan in only four minor areas, namely:

- refinement to the precinct boundary to align with the modified precincts boundaries for the:
 - North East Industrial Precinct (southern boundary)
 - Armstrong Creek Town Centre (eastern boundary), and
 - Armstrong Creek East West Link Road (north west corner of the precinct)
- A variation to the delivery of residential densities across the Precinct (distributed density targets consistent with the Armstrong Creek West Precinct)
- The relocation of the local activity centre in the north-west corner of the Precinct, further east away from Surf Coast Highway.
- Relocation of the regional active open space and the state government secondary school to the northern boundary of the Precinct.

With these changes, Amendment C259 (HBP PSP, DCP and NVPP) meets the objectives and vision set out in the Armstrong Creek Urban Growth Plan.

8.2 HBPDSP (overview)

The HBPDSP nominates a one single catchment area for the entire precinct that is then broken into two charge areas that reflect the primary use of the Precinct as residential, complemented by small activity centre areas for retail and commercial uses.

These charge areas derive demand units that enable generation of a levy for each area. The demand units are expressed in hectares of Net Developable Area (NDA).

The Main Catchment Area and charge areas are shown below.

HORSESHOE BEND PRECINCT MAIN CATCHMENT AREA

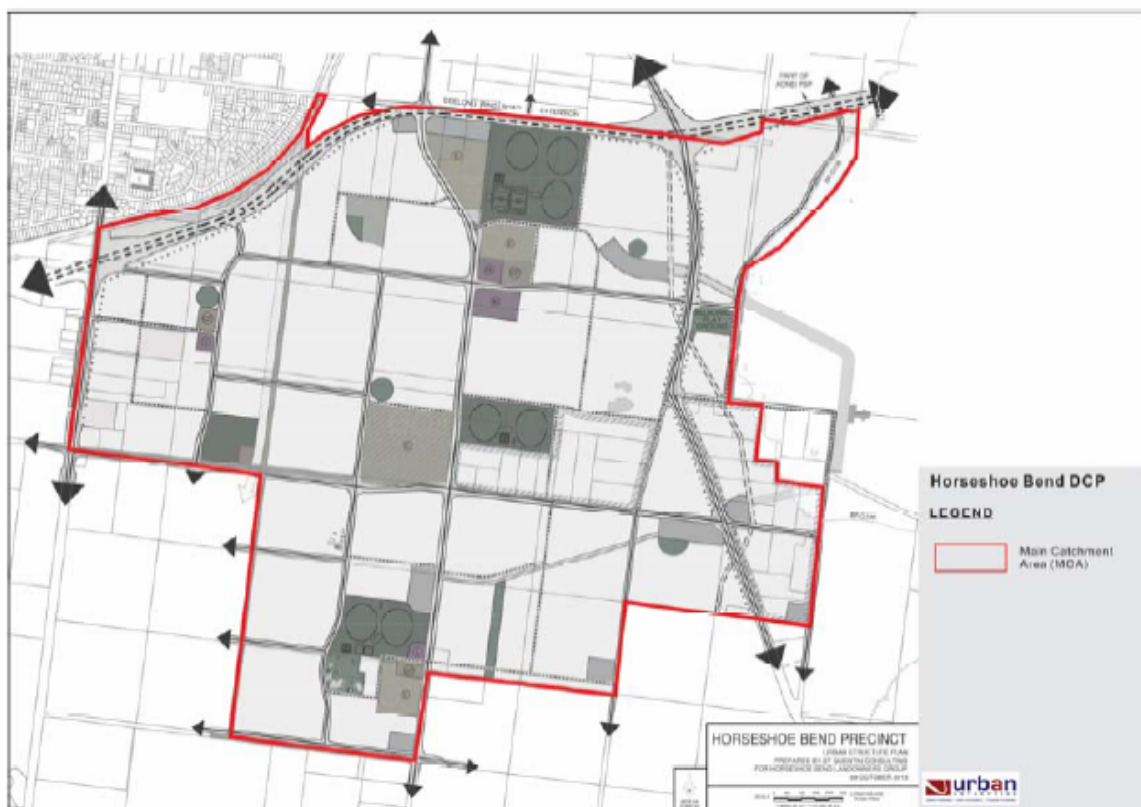


Figure D – Main Catchment Area - Extract from Exhibited HBP DCP (page 4)

The HBPs Net Developable Area (referred below as Demand Units – DIL) and estimated residential dwellings (referred below as Demand Units – CIL) are detailed in Table 2..

Table 2- Extract from Exhibited DCP Overlay –Schedule 6: Demand Units

LEVY CATEGORY	DEMAND UNITS (HA)	DEMAND UNITS (DWELLING)
DIL - Residential	458.315	-
DIL – Activity Centres	4.600	-
DIL Total	462.915	-
CIL Total	-	7,069

The HBPDCP includes a breakdown of costs associated with each infrastructure category (refer Tables 5 and 6, p21 HBPDCP) and identifies the below three levies:

- Development Infrastructure Levy at **\$267,065.75 *** / net developable hectare for Residential development,
- Development Infrastructure Levy at **\$163,752.14 *** / net developable hectare for Activity Centre development, and
- Community Infrastructure Levy at **\$855.53** per dwelling, noting that under the Planning and Environment Act (1987) the levy which is imposed will be limited to \$900 per dwelling

**. Please note - the two above underlined DIL levies have been incorrectly shown in the exhibited DCPO Schedule 5 as being \$267,098.21 (residential) and \$163,786.77 (activity centres). The above figures reflect the correct levies detailed in the exhibited HBPDCP.*

The total cost of shared infrastructure required to service the HBP is summarised below, including any external apportionment.

Table 3 – Extract from Exhibited HBP DCP Overlay –Schedule 5: Summary of Costs

Item	Total cost \$	Actual cost contribution attributable to development \$	Proportion of cost attributable to development %	Time of provision
<i>Land</i>				
<i>Acquisition</i>	\$18,693,931	\$17,665,216	94%	<i>Refer to DCP</i>
<i>Roads and intersections</i>	\$29,105,007	\$23,796,794	82%	<i>Refer to DCP</i>
<i>Trails</i>	\$5,188,220	\$4,951,720	95%	<i>Refer to DCP</i>
<i>Open Space</i>	\$21,925,432	\$18,654,872	85%	<i>Refer to DCP</i>
<i>Community Facilities</i>	\$22,458,588	\$22,458,588	100%	<i>Refer to DCP</i>
<i>Drainage</i>	\$34,120,860	\$34,120,860	100%	<i>Refer to DCP</i>
<i>Planning</i>	\$1,520,484	\$1,520,484	100%	<i>Refer to DCP</i>
<i>Community - CIL</i>	\$6,595,594	\$6,047,733	92%	<i>Refer to DCP</i>
TOTAL	\$139,608,116	\$129,216,267	93%	

Note: Contributions are listed in July 2012 values. Under the DCP the contributions are to be adjusted following annual indexation. These figures exclude GST.

9 HORSESHOE BEND PRECINCT STRUCTURE PLAN

9.1 Consultation and Engagement

The HBP is the third major residential precinct to be planned within the Armstrong Creek Urban Growth Area, and one of four residential precinct in total.

The Precinct, unlike previous precinct planning within the growth area, has a high degree of ownership fragmentation comprising a variety of development experience.

To advance the precinct planning, and satisfy Council 70% land control criteria, a consortium was formed entitled the 'Horseshoe Bend Landowner Group' that would fund the preparation of the PSP, NVPP and background infrastructure design and costing to inform the DCP. Refer Appendix 15.4 – Horseshoe Bend Landowners Group Ownership Map.

At the commencement of this partnership it was acknowledged that consulting with the remaining 30% of landowners within the precinct was of critical importance to Council, along with those landowners who would be directly or indirectly impacted by the HSBPSP due to their abuttal to the precinct.

A 'visioning' workshop was held in November 2011 during which landholders and servicing authorities were invited to assist in the development of a high level vision for the growth of the Horseshoe Bend Precinct.

In December 2011 a Draft Analysis Report was prepared by TRACT Consultants, which formed the basis for a further 'Opportunities and Constraints' workshop for Council officers and representatives from State Government agencies and servicing authorities. This workshop was held in December 2011 with a total of 23 participants in attendance representing VicRoads, Department of Sustainability and Environment (now Department of Environment and Primary Industries), SPAusnet, Powercor, Barwon Water, Department of Human Services and the Department of Education and Early Childhood Development.

Once the draft masterplan package had been developed a non-statutory exhibition was undertaken. A component of the exhibition was two public information sessions which were attended by a total of 53 participants across the two evenings, 35 of whom were landholders within the Horseshoe Bend Precinct.

A total of 15 written submissions to the masterplan were received which raised the following issues:

- Appropriate mechanisms for the retention and protection of remnant vegetation;
- Property specific issues relating to provision of infrastructure including active open space and intersection works;
- Stormwater management; and,
- Appropriate provision for cyclists within road cross sections.

A number of the minor issues could be and were addressed during the refinement of the draft masterplan after the informal consultation period, and every attempt was made to address other concerns where appropriate.

It should also be noted that many of the submissions received during the formal exhibition of Amendment C259 were issues also raised during the informal consultation process. Refer Appendix 15.3 – HBP Submitter Map (C259)

9.2 HBSP Preparation

The preparation of all PSPs within the Armstrong Creek growth area generally go through five key phases as part of the planning partnership formed between the landowner consortium and Council. These five phases are :

1. Precinct background reports (stage 1)– constraint mapping
2. Design Workshops and master planning
3. Informal Consultation
4. Testing the plan (Stage 2 background report) – ultimate conditions
5. Preparing amendment documentation (PSP, DCP, NVPP, Schedules, etc.)

Phase 1 work included the preparation of seven background reports in the specialist fields of drainage, traffic, infrastructure servicing, cultural heritage (Indigenous and European heritage), flora and fauna and geotechnical.

Phase 2 of the process involved the development of a draft masterplan and the engagement with various agencies, Government departments and internal Council units (e.g.: Recreation, Community, Engineering, etc).

Phase 3 has already been discussed under Section 9.1 of this Statement.

During Phase 4 of the process the draft masterplan was refined during additional workshops with the Horseshoe Bend landowners group and specific submitters. Once the final masterplan was endorsed by Council the plan was then tested via Stage 2 background reports, and an assessment of the ultimate land use pattern was made in relation to flooding, traffic volumes, and flora and fauna.

The final Phase of the planning process was the preparation of all documents that formed part of the final amendment including the PSP, NVPP, DCP and relevant Schedules and overlays within the Scheme. The dominant part of this works was the preparation of the DCP, which is discussed in Section 10 of this Report.

The approach to the preparation of the PSP was to utilise the Armstrong Creek West PSP, DCP and NVPP as a template (this being the latest approved package within the growth area) and adjust the documentation according to the unique elements of the Horseshoe Bend Precinct. This way a consistent model would be rolled out across the entire growth area.

This template approach included components such as a consistent colour coding for the Urban Structure Plan, the same guidance tables and wording for planning and design guidelines and consistent road cross sections and background context information at the start of the PSP.

9.3 Design Feature of the Horseshoe Bend Precinct

The summary below seeks to assist in understanding the various design features of the HBP.

Changes to the Framework Plan

The Armstrong Creek Urban Growth Plan - Framework Plan is an incorporated plan under Clause 21.11 of the Greater Geelong Planning Scheme and it is included in the ACUGP (an incorporated document under Clause 81 of the Scheme). Refer Appendix 15.1 – Armstrong Creek Urban Growth Plan - Framework Plan.

The HBP is different to the Framework Plan and the Urban Growth Plan in four minor areas. These are:

- A variation to the delivery of residential densities across the Precinct (distributed density targets consistent with the Armstrong Creek West Precinct)
- The relocation of the local activity centre in the north west corner of the Precinct, further east away from Surf Coast Highway.
- Relocation of the regional active open space and the state government secondary school to the northern boundary of the Precinct.

Precinct Boundary

The Armstrong Creek Urban Growth Plan identifies seven precincts that are to be individually planned via the precinct structure planning process (Appendix 15.1 – ACUGA – Precinct Plan).

The Armstrong Creek Major Activity Centre (now known as the ACTC) illustrated an irregular shape bound by the Surf Coat Hwy, Boundary Road, Burvilles Road and the proposed transit corridor (along its eastern boundary).

After consultation with landowners west of Barwarre Road that straddled the ACTC and Horseshoe Bend Precinct, and Council's concern about the ability to deliver a masterplan that adequately addresses / integrates with the transit corridor, Council agreed to refine the precinct boundary to align with the eastern title boundaries (ie: to establish Barwarre Road as the new eastern boundary of the ACTC). This was formalised as part of Amendment C267.

The second boundary change related to the boundary being realigned in the north-west edge of the Precinct to align to the Armstrong Creek East West Link (aka Geelong Ring Road Section 4D). This significant piece of infrastructure was seen as an appropriate boundary between the HBP and the future Marshall Precinct.

The third and final boundary change was the adjustment of the north-east corner of the Precinct to align with the previously revised boundary of the North East Industrial Precinct (which again utilised the Armstrong Creek East West Link Road as an appropriate precinct boundary).

Distributed Approach to Housing Densities

The ACUGP establishes principles for the development of higher density housing around activity centres, transport hubs and areas of high amenity.

The principles of most relevance to the HBP, and as set out in Section 5.8 (page 46) of the ACUGP, confirm:

- **30 dwellings per hectare** – *high density 30 dwellings per hectare—'higher density housing'—within 400 metres of Marshall Station and the proposed public transport interchanges at Rossack Drive and the Major Activity Centre. This equates to an average lot size of approximately 225 sqm, suitable for generous terrace houses or apartments.*
- **20 dwellings per hectare**—*'medium density housing'—beyond the 'higher density housing' up to 800 metres from Marshall Station and the proposed public transport interchange at Rossack Drive, and within 400 metres of the edge of the Sub-Regional and Neighbourhood Activity Centres. This equates to an average lot size of approximately 360 sqm, suitable for small detached or semi-detached houses (duplexes) with small gardens.*

- **15 dwellings per hectare**—‘conventional density housing’—in the remainder of the residential areas. This equates to an average lot size of approximately 550 sqm, able to comfortably accommodate conventional detached houses.

** Bolding and underline emphasis added by author.*

The HBSPSP proposes a distributed approach to housing densities for housing close to the Armstrong Creek Town Centre and Neighbourhood Activity Centre rather than a uniform 400m concentration of medium density surrounding these activity centres.

This approach is consistent with the recent Armstrong Creek West PSP that implemented a similar model in delivering densities around activity centres within and abutting the precinct.

This approach was seen to allow a more timely delivery of housing in these areas and support higher density housing being driven in areas of highest amenity (e.g. surrounding open space and close proximity to activity centres). This distributed density approach is most notable in sub-precincts A and D where development around the ACTC and the Neighbourhood Activity Centre will be distributed over a larger area (refer p29, HBSPSP, Plan 4 – Housing Density and Diversity)

As part of this housing density assessment, two additional areas were examined in detail relating to nomination of appropriate target densities (known as sub-precinct B and C). These two areas included historic subdivision patterns of small rural living style parcels of approximately 2 - 4 hectares in size.

This fragmentation within sub-precinct B and C, and several encumbrances and irregular shaped parcels was expected to create significant challenges for small scale developers trying to achieve density targets of 15 dwellings per hectare.

The outcome was a decision of Council to adopt a lower density target for these areas, 12 dwellings per hectare, with an additional requirement of a masterplan being prepared prior to any development occurring within the precincts (refer below extract from 4.2.3 - Planning and Design Guidelines – Subdivision and Housing, p27, HBSPSP)

“The following planning and design guidelines must be met.

- *Prior to residential development of existing land parcels within areas nominated on Plan 4 as subprecinct B (Boundary Road) and sub-precinct C (Charlemont Road) a Master Plan must be developed that:*
 - *Creates an integrated road network that provides opportunities for road connections to abutting landholdings;*
 - *Avoids the creation of cul-de-sacs;*
 - *Provides through connections (vehicle, pedestrian and cycle) between sub-precincts D and E and the surrounding parcels to integrate these areas within the broader community; and,*
 - *Provides a service delivery strategy which identifies timing and provision of critical drainage and utility infrastructure.”*

It was also acknowledged that the target density of 12 dwellings per hectare for these two sub-precincts was a minimum, and if appropriate land assembly had occurred then density targets of 15 dwelling per hectare would be encouraged.

Boundary Road

Boundary Road is an important east west link across the Armstrong Creek Growth Area and provides one of only two continuous local road links from east to west across the growth area.

To complement this road, it is proposed that the East West Link Road (continuation of the Geelong Ring Road) will be established in the Horseshoe Bend Precinct to provide a higher speed / traffic volume link and minimise the traffic volume generated along Boundary Road.

The existing Boundary Road reservation also contains a significant amount of indigenous native vegetation currently protected by Vegetation Protection Overlays.

During Council's preparation of the growth area road network that formed part of the Civil Interagency Infrastructure Delivery Plan (IIDP), a decision was made to protect the Boundary Road reserve via the establishment of a greenway and provide road infrastructure outside of the current road reserve. The greenway would be used also for an east-west cycling and pedestrian corridor in the central part of the growth area similar to what the Armstrong Creek waterway corridor achieves in the south of the growth area. It would also establish an important non-car based link between the ACTC, the Armstrong Creek West Railway Station and the Barwon River corridor in the far east.

It was also on this basis that Barwon Water in liaison with Council planned the alignment of its largest water main asset along this road corridor due to its ultimate location being within a green space they could access far more cost effectively than through a road pavement. The water main is between 600 - 750mm in diameter and was constructed in 2011.

The ACWPSP reflects this outcome, in part, by the retention of the most significant areas of vegetation along Boundary Road and an alternative road cross section proposed between Connector Road C and Surf Coast Highway incorporating a dedicated 3m offroad bike path (refer ACWPSP, Appendix 8, Figure G).

The aim of this cross-section is to provide a high quality / high speed cycling link within or outside of greenway areas (refer HBSPSP, p126 and 127, Cross Sections V and W, Boundary Road).

The proposed cross-sections also protect the Barwon Water water main asset located within the existing road for long portions of its length.

The ultimate role of the road is a major connector road (Council road) that can be augmented to improve capacity along its length from Surf Coast Highway to Barwon Heads Road. The ultimate cross section for the road reflects a 4-lane road, if required, however with the road having a significant lengths of restricted access via land use planning (ie: no direction access across greenways) the road is likely to operate at an acceptable level of service even under a 2-lane cross section. However, to ensure this 4-lane cross section can be delivered the road reserve width has been design to protect this opportunity and ensure traffic volumes of between 8 – 14,000 vehicles per day can be managed effectively.

Greenways

As was the case in the Armstrong Creek East and West Precincts, a number of greenways have been proposed within the ACTC. These greenways are located along existing road reserves (Boundary Road and Barwarre Road) and contain significant quantity and quality of indigenous vegetation.

The quality of this vegetation is recognised within the Flora and Fauna Assessment report prepared by Ecology Australia (2 July 2010) and further assessed by Ecology and Heritage Partners supplementary work (letter dated 19 April 2012) that informed the ACTC NVPP.

The objective of protecting significant roadside vegetation within the growth area is articulated within the Armstrong Creek Urban Growth Plan p 17 (vision) and p88 (green web concept). An extract of the Armstrong Creek vision is detailed below.

Armstrong Creek overall vision (Section 2.2 of ACUGP):

The Armstrong Creek urban growth area will be developed into a sustainable community that sets new benchmarks in best practice urban development.

Natural and cultural features will be protected and enhanced to create a distinct urban character. Armstrong Creek will become a highly sought-after location for living, working and recreation, forming an attractive addition to.

Armstrong Creek vision – Natural Environment (Section 2.4 of ACUGP):

“.....Roads with significant vegetation will be protected and revegetated as part of a wider network of linkages providing both wildlife corridors and recreation routes for walking and cycling”

Although greenways were not supported by the Amendment C138 Panel, much of the concerns for these greenways related to a proposal within the original ACUGP (exhibited) that contained proposed greenways across unencumbered areas of land, not the existing road reserves which are heavily encumbered by significant indigenous vegetation.

Sparrovale Wetlands

The HBP is the largest precinct within the Armstrong Creek growth area and is made up of two catchments (north and south of Boundary Road) that merge in their far east to form a single Horseshoe Bend drainage catchment.

The catchment is unique, compared to other PSPs including those within the Armstrong Creek growth area, due to the nature by which is discharges to the Barwon River.

The two minor catchments discharge to two private properties located east of the precinct and outside the growth boundary, one commonly known as ‘Sparrovale’ Farm (109-215 Sparrovale Road, Armstrong Creek)) and the second known as ‘Cold Winds’ Farm (1 – 87 Grove Road, Armstrong Creek).

The two properties are very flat and are bound around their eastern boundary by a flood levee protecting the properties from Barwon River flood event less than a 1 in 10 year flood. It is this levee, and its associated flood gates, that make the sites unique, and results in significant annual flooding of these two properties and regular periods of extended retention of water across the land due to the inability of water to flow through the levy.

In the context of a developed Horseshoe Bend catchment the result would be significant on these properties due to the increased volume of stormwater produced. The result leaves two options for the management of stormwater within the precinct, these being:

1. To retard and treat all stormwater within the precinct, and then place significant easements across the two properties, triggering a compensation claim under the Water Act 1989 for adverse impacts to these properties. This compensation claim is likely to be equal to, or be just less than, the value of the land due to the significant impact of the usability of the land for farming purposes (ie: under water most of the year).The option would also require additional ‘developable’ land within the Precinct that could be better utilised for residential purposes.
2. To retard major storm event within the precinct and then acquire the two properties for the purposes of water quality treatment and efficient discharge and floodplain management.

Council determined that due to the significant impact on the two properties and the limited ability to mitigate any adverse flooding impacts to this area it was more appropriate to progress the second option. This option also has the benefit of minimising the area of land required for stormwater management within the precinct and hence maximising the residential lot yield, along with creating an environmental buffer to the downstream Ramsar wetland and State Game Reserve.

To implement the option 2 strategy, the HBPDCP includes three specific projects to deliver this new wetland asset. These include:

-
- DI_LA_22 and DI_LA_23: Land acquisition of Sparrovale and Cold Winds properties (area below the 1 in 100 year flood line and covered by the existing Flood Overlay);
 - DI_DR_12: Civil works to manage water flows through the site (ie: drain construction, new internal levee, floodgate improvements, etc); and
 - DI_DR_13: Environmental management works (10 year program of works to transition the site from a degraded farmland to a functioning / sustainable wetland asset).

Refer Appendix 15.9 – HBP Stormwater Management Strategy (concept layout plans)

East West Link Road (Geelong Ring Road – Section 4D)

The Armstrong Creek East West Link Road is a new VicRoads arterial road proposed to run from the Surf Coast Highway to Barwon Heads Road, and then progress further east over the Barwon River eventually connecting to Bellarine Highway and Portarlington Road.

VicRoads is currently constructing Baanip Boulevard (Geelong Ring Road Section 4C), with the next section of the road running along the northern Boundary of the HBP.

The two key design features for consideration by the HBSP were:

- The land use interface with the road, and
- The impact the road formation has on drainage catchments.

In relation to land use, the design of the Urban Structure Plan includes a large northern interface of wetland and open space, while the remaining land use abuttal involves residential development along frontage roads.

The vision for the road corridor, as set out in the ACUGP, is to deliver a boulevard style road inclusive of significant scale trees and active frontage development.

The impact on drainage catchments was also considered in detail during the development of the plan, with the final outcome being the creation of a new artificial catchment boundary. The stormwater management strategy has been designed to capture this variation of catchment boundaries, primarily relating to a small area of runoff previously heading north through the Marshall Precinct which now hugs the East West Link Road along its southern boundary and heads east via the proposed drainage assets northern of the neighbourhood activity centre.

10 DEVELOPMENT CONTRIBUTION PLAN – PROJECT DEVELOPMENT

In this part of the report I:

- identify the various HBPDCP projects via reference to each of the respective infrastructure portfolios;
- provide an understanding of the process which assessed the need for these projects, from their origin within the Armstrong Creek Integrated Infrastructure Delivery plan (IIDP), if applicable, through to their inclusion with the HBPPSP and ultimately into the HBPDCP; and
- detail those projects not funded by the HBPDCP that are required to realise the vision for the HBP.

To assist the reader, the land component of all projects has been included under each infrastructure portfolio. The figure below illustrates all land projects within the HBP DCP. The projects comprise land for stormwater management facilities as part of the Precinct's drainage scheme, road infrastructure, community facilities and a transit corridor.

All land value figures are detailed within the land valuation report prepared by Charter Keck Cramer, 8 November 2013 (exhibited as part of Amendment C259)

FIGURE 2 LOCATION OF LAND ITEMS

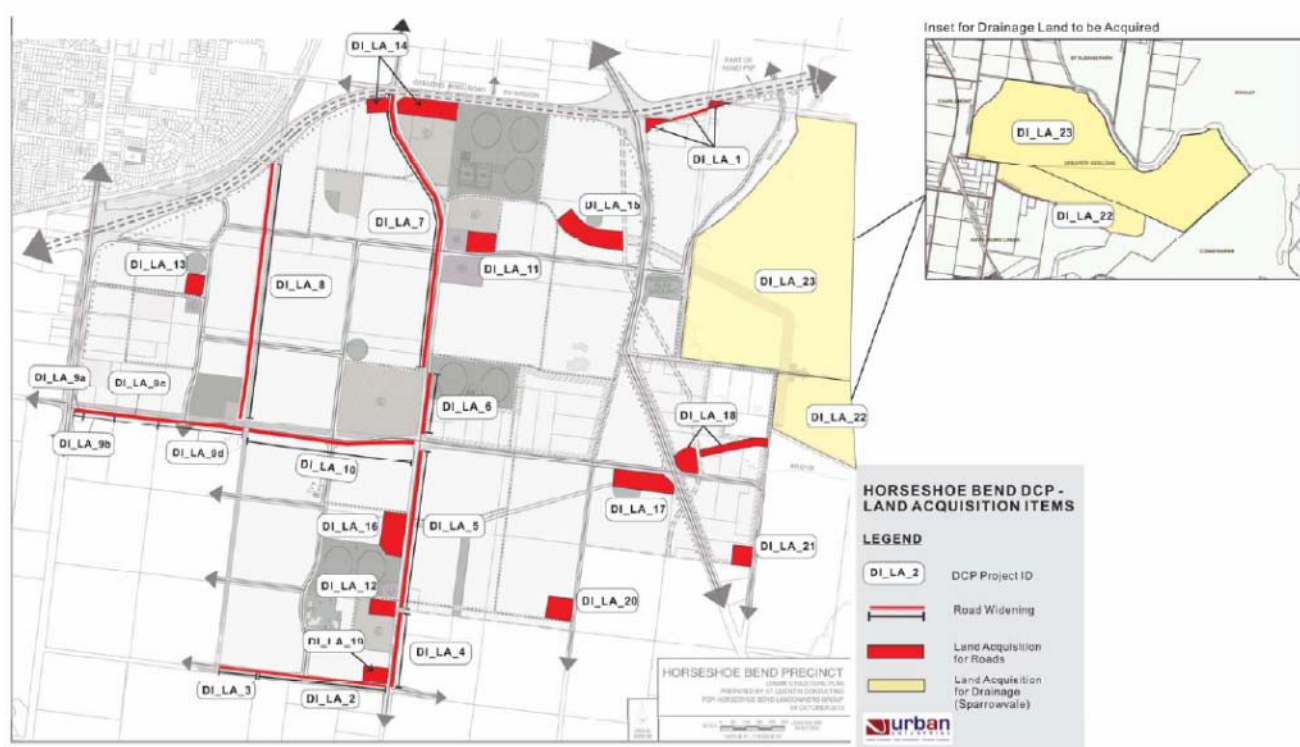


Figure E – HBP DCP – Land Projects (refer to as Figure 2 within the DCP, page 14)

10.1 General Growth Area Apportionment Model

Each precinct within the Armstrong Creek Urban Growth Area has generally been planned to be self-sustaining in relation to the provision and standard of infrastructure. The exception to this is the provision of 'home of' recreation facilities for certain sports categories provided across the growth area. The three 'home of' sporting facilities (ie; regional open space located within the East, West and Horseshoe Bend Precincts) have all been designed within the 10% open space requirements of each residential precinct.

It is acknowledged that many of the facilities within the HBP will be used by other Armstrong Creek residents. This is planned and is expected and this 'externality' is expected to balance out naturally.

In relation to usage from outside the growth area, Council has taken the view that there is likely to be usage both ways. For example, while external residents may make some use of the facilities within Armstrong Creek, it is also just as likely that residents of Armstrong Creek will use some of the facilities in nearby communities.

The cross-usage of neighbouring communities can be easily linked to factors such as children's education location, location of speciality facilities (eg: athletics, aquatic centres, natural assets, etc), visiting friends, children and parents, and the location of primary place of employment.

Council's original vision for the preparation of development contribution plans within Armstrong Creek was to establish a single growth area wide DCP to minimise the "perceived" cross subsidisation issues within multiple precincts and service catchments. However, once Council completed the IIDP, comprising the Social and Civil Interagency Infrastructure Delivery Plans, it became clear that without detailed master planning the development of such a development contributions plan would be extremely difficult to scope and cost with the confidence required to support a DCP, and for these reasons was not practically feasible. When one has regard to the level of detail required for a DCP, such detail is simply not available until precinct planning is complete.

The above concern was particularly relevant to infrastructure such as drainage, road networks, intersection designs and traffic signalisation which require significant analysis and design to support their costing. The drainage and road networks were major points of contention during the development of the Armstrong Creek Urban Growth Plan and many developers did not support a growth area approach to drainage and road network planning. Instead they preferred an approach that was developed and negotiated at a more local level (ie: precinct based).

10.2 Partnership approach with Landowners – DCP preparation

One of the fundamental principles in preparing the DCP was to ensure that the DCP was, as far as it was practical to do so, prepared in a collaborative manner with the Precinct's landowners.

The process adopted for this partnership approach is detailed below:

- The Armstrong Creek East and West DCPs were used as the template / starting point for the development of the HBP DCP.
- A project list was developed covering all infrastructure items within the precinct, based on the HBP PSP - Precinct Infrastructure Plan.
- Concept designs and detailed project estimates were completed for all projects contained within the above project list and reviewed by Council. This excluded the following projects that utilised indexed costings from previously approved Armstrong Creek DCPs to ensure consistency and integration with these neighbouring precincts.
 - DI_RD_4 - Surf Coast Hwy and Boundary Road intersection (indexed from the Armstrong Creek West DCP and consistent with the ACTC DCP)
 - DI_RD_5 - New Boundary Road, ACTC North-South Connector road A and HBP Connector Road E (costs are consistent with the ACTC DCP)
 - DI_RD_11 - Horseshoe Bend Road and New Burvilles Road intersection (indexed from the Armstrong Creek East DCP).

-
- DI_TR_2 and 4 – Shared Path and Greenway Improvement Works adjoining the ACTC (costs are consistent with the ACTC DCP)
 - DI_LA_2 and 4 – Land Acquisition for New Burvilles Road Section1 and widening for Horseshoe Bend Road Section 1 (indexed from the Armstrong Creek East DCP).
 - DI_LA_9 (a-d) – Land Acquisition New Boundary Road (costs are consistent with the ACTC DCP)
- It was made clear that Council would not agree to the exhibition of a DCP unless Council was comfortable with the nature of its content.
 - Council’s consultant, Urban Enterprise, prepared the DCP utilising the concept plans and project estimates prepared by consulting team engaged by the Horseshoe Bend Landowner Group and other specific costs prepared by Council.

Every attempt was made to work through each project and resolve matters of dispute or uncertainty, and for most projects this was the case.

10.3 Guiding Documents

There are many documents that guided the development for the HBP DCP, some of which are listed below:

- Armstrong Creek Urban Growth Plan - Adopted November 2008, amended May 2010 and Sept 2012
- Armstrong Creek Town Centre Development Contribution Plan – Currently Pending Minister Approval (adopted by Council 13 May 2014)
- Armstrong Creek West Development Contribution Plan – February 2013
- Armstrong Creek East Development Contribution Plan – November 2011
- Armstrong Creek Integrated Infrastructure Delivery Plan (including Social IIDP and Civil IIDP), February 2009
- Growth Area Authority PSP Guidelines
- Development Contributions Plan Guidelines (2003)
- Ministerial Directions –
 - Development Contribution Plans
 - Non-Government Schools
- Recently approved PSP / DCP amendments within metropolitan Melbourne

10.4 Roads and Trail Projects

Project Description

The HBP DCP includes a total of twenty six (26) projects relating to the provision of key road and intersection infrastructure that directly service the Precinct.

These projects fall into two distinct groups:

- Traffic Signals (13)
- Land (13)

FIGURE 3 LOCATION OF ROAD AND INTERSECTION ITEMS

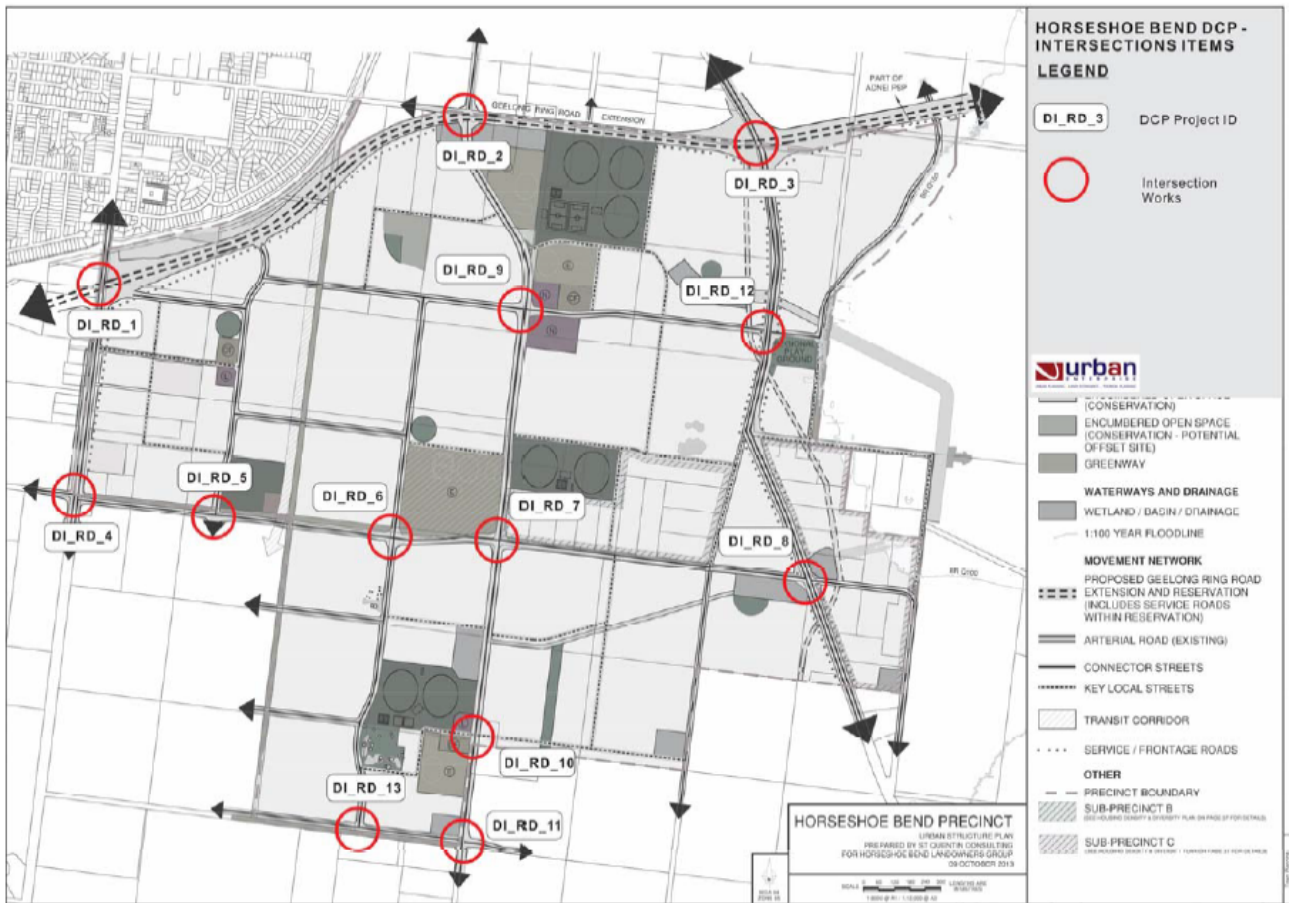


Figure F – HBP DCP – Road and Intersection Projects (refer to as Figure 3 within the DCP, page 15)

Background

During the precinct structure planning process a traffic assessment was undertaken by Cardno Consultants, *Horseshoe Bend Precinct – Movement and Access Background Report*, 10 December 2012, to determine the traffic volumes generated by the precinct and total volumes for the Precinct once the growth area was ultimately developed.

The volumes on connector roads across the precinct range from 3,800 and 14,000 vpd, reinforcing the need for a strong network of connector roads that supported good access in, out and through the Horseshoe Bend Precinct.

The Precinct is also well serviced by current and future arterial roads, including;

- Surf Coast Highway,
- Barwon Heads Road,
- Armstrong Creek East West Link Road (Geelong Ring Road Section 4D), and
- Horseshoe Bend Road

This traffic modelling also highlight the importance of the future East West Link Road in managing east west traffic movements, whereby is this road were delayed in would place pressure on the local road network within the Precinct.

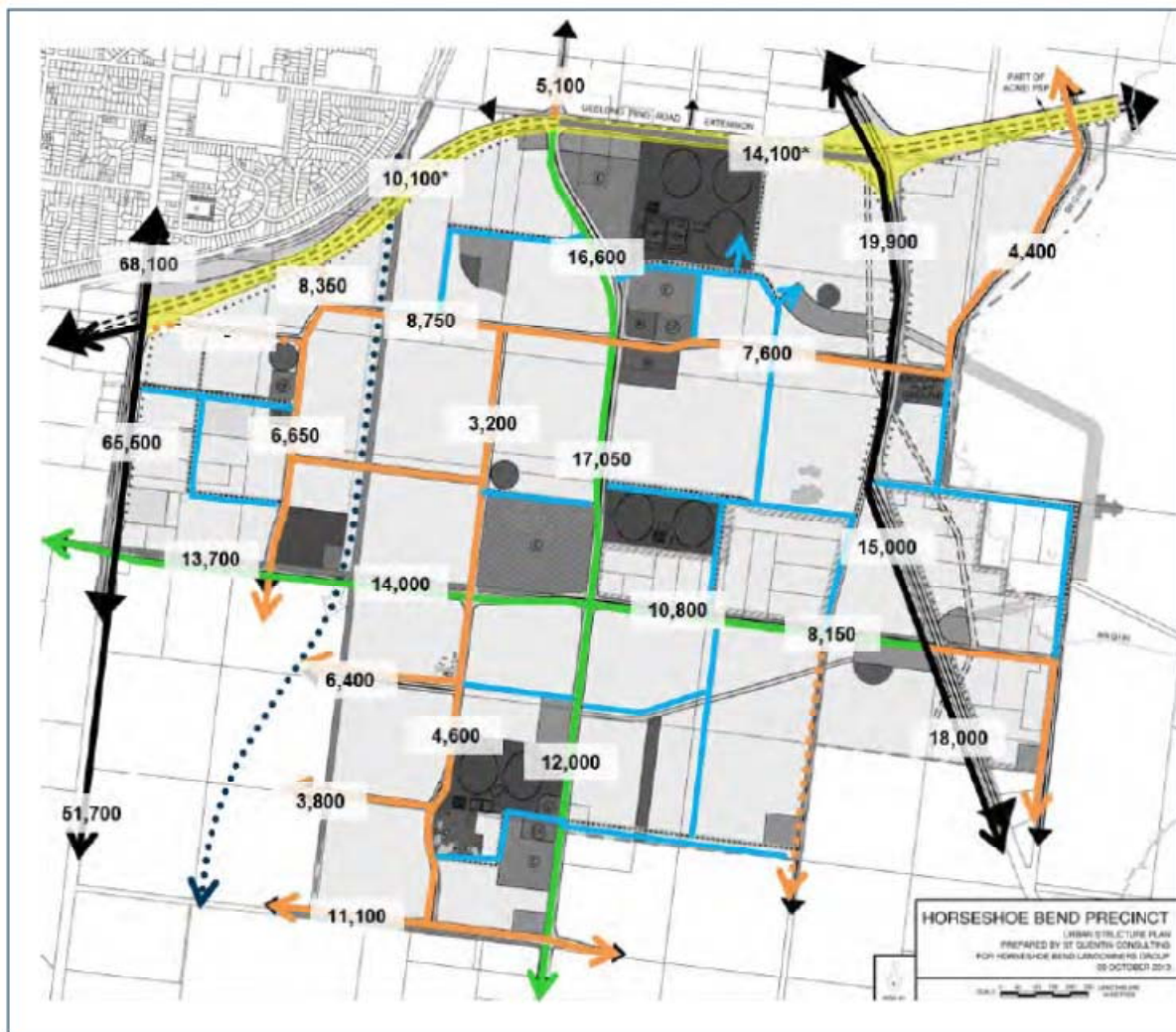


Figure G – HBP Road Hierarchy (extract from Cardno, Traffic Impact Assessment Background Report, Figure 7-2, p8)

The Precinct requires a total of thirteen (13) sets of traffic lights along Surf Coast Highway, Barwon Heads Road, Horseshoe Bend Road, New Boundary Road and New Burvilles Road (these are illustrated on Figure G above)

Many of the intersections along Surf Coast Hwy would be required based solely on the development of the HBP Precinct. However, as a result of the volumes generated by the neighbouring West and ACTC Precincts and the volumes that already exist on these roads, these intersection are funded by abutting precincts. Thus, the DCP includes elements of external apportionment for certain intersections based on the remaining funds being collected from neighbouring Precincts' DCPs. (See *Apportionment* below for further information).

In relation to traffic signals located on connector roads, the DCP includes only the funding of the signalisation of these intersection and not pavement works. This is a consistent model used across the City of Greater Geelong, whereby it is the developers responsibility to fund connector roads.

Signalised intersections are also required to ensure safe pedestrian and cycling networks are provided within the precinct.

The final project identified during the planning for the HBP was the land required for the transit corridor. The transit corridor is approximately 37m wide and runs in a north-south

direction through the Precinct, covering an area of 4.96 hectares along the western side of Barwarre Road.

The transit corridor traverses the Armstrong Creek East, Armstrong Creek Town Centre and Horseshoe Bend Precincts with an aim of ultimately connecting Geelong to Torquay via heavy rail. As part of the Armstrong Creek East PSP (C206) and DCP (C214) Council had several meetings with the then Department of Transport who rejected any proposal for a Public Acquisition Overlay for the future rail corridor, and / or any State Government funding responsibility for the land / project. As such the transit corridor land is funded by the DCP in the East Precinct and ACTC (pending approval) and this model has also been adopted for the Horseshoe Bend Precinct.

All project costs for intersections works have been prepared by Cardno Consultants and they are summarised in the Prowse Quantity Surveyors report dated 21 November 2013 (exhibited as part of Amendment C259).

Costs for projects abutting the HBP and shared with neighbouring precincts have carried over from the Armstrong Creek East, West and Town Centre DCPs and indexed to July 2012 dollars to ensure consistency between DCPs. This model has been utilised for all Armstrong Creek DCPs to ensure intersections shared by two or more precincts adopt the same project cost.

The HBP also requires land for several road projects to facilitate the delivery of future connector and arterial roads. The projects include land for New Boundary Road and New Burvilles Road (aimed at replacing the existing road due to its nomination as a greenway) and the duplication of Horseshoe Bend Road.

All land required for transport related projects has been valued by Charter Keck Crammer (8 November 2013) utilising the 'before and after' valuation methodology.

Apportionment

The apportionment methodology adopted for these projects is consistent with the "ring-fence" principle discussed earlier in this statement, whereby the funding for these projects is 100% attributed to the Precinct, unless the infrastructure abuts or is shared with an adjoining precinct.

The following projects have external apportionment attributed to adjoining precincts. *Note, the various percentages of external apportionment below are taken from Table 8 of the HBP DCP.*

Intersections

- Reserve Road, Horseshoe Bend Road / Drews Road (DI_RD_2)
 - Shared 30% / 70% between the Marshall and Horseshoe Bend Precincts due to intersection adjoining both precincts and a higher proportion of traffic utilising this intersection originating from the Horseshoe Bend Precinct.
- Surf Coast Highway and New Boundary Road (DI_RD_4)
 - Shared 40% / 30% / 30% between the ACWP, HBP and the Horseshoe Bend (respectively) due to the significant amount of residential land east and west of the intersection and the higher density housing within the HBP.
- New Boundary Road, ACTC Connector Road A and HBP Connector Road E (DI_RD_5)

- Shared 50% / 50% between the ACTC and Horseshoe Bend Precinct due to intersection adjoining both precincts and an equitable proportion of traffic utilising this intersection by both precincts.
- Horseshoe Bend Road and New Burvilles Road (DI_RD_11)
 - Shared 50% / 50% between the ACEP and HBP, due to intersection adjoining both precincts and an equitable proportion of traffic utilising this intersection by both precincts.

Land

- Land Acquisition – New Burvilles Road Section 1 (DI_RD_2)
 - Shared 50% / 50% between the HBP and ACEP due to road servicing both precincts and an equitable proportion of traffic utilising this road by both precincts
- Land Acquisition – New Burvilles Road Section 2 (DI_RD_3)
 - Shared 50% / 50% between the HBP and Council.
 - Council has nominated itself as a 50% contributor to this project due to the large DCP exempt land uses within the ACEP (Lutheran College and Geelong Memorial Park Cemetery). This project is not included in the ACEP DCP.
- Land Acquisition – Horseshoe Bend Road Section 1 (New Burvilles Road, north to ACEP boundary) (DI_LA_4)
 - Shared 50% / 50% between the HBP and ACEP due to road servicing both precincts and an equitable proportion of traffic utilising this road by both precincts
- Land Acquisition – Boundary Road, western end (DI_RO_9a, 9b, 9c and 9d)
 - Shared 50% / 50% between the ACTC and Horseshoe Bend Precinct due to road servicing both precincts and an equitable proportion of traffic utilising this road by both precincts

10.5 Trails Projects (shared paths and greenways)

Project Description

The HBP DCP includes four (4) projects under the category of Trails (DI_TR_1, 2, 3 and 4). The project is aimed at providing a 25.8km network of designated shared paths to interconnect the various facilities and neighbourhoods within the Precinct, supported by a series of greenways that facilitate active transport.

These projects fall into two distinct groups:

- Shared Paths (2)
- Greenways (2)

FIGURE 4 LOCATION OF TRAIL ITEMS

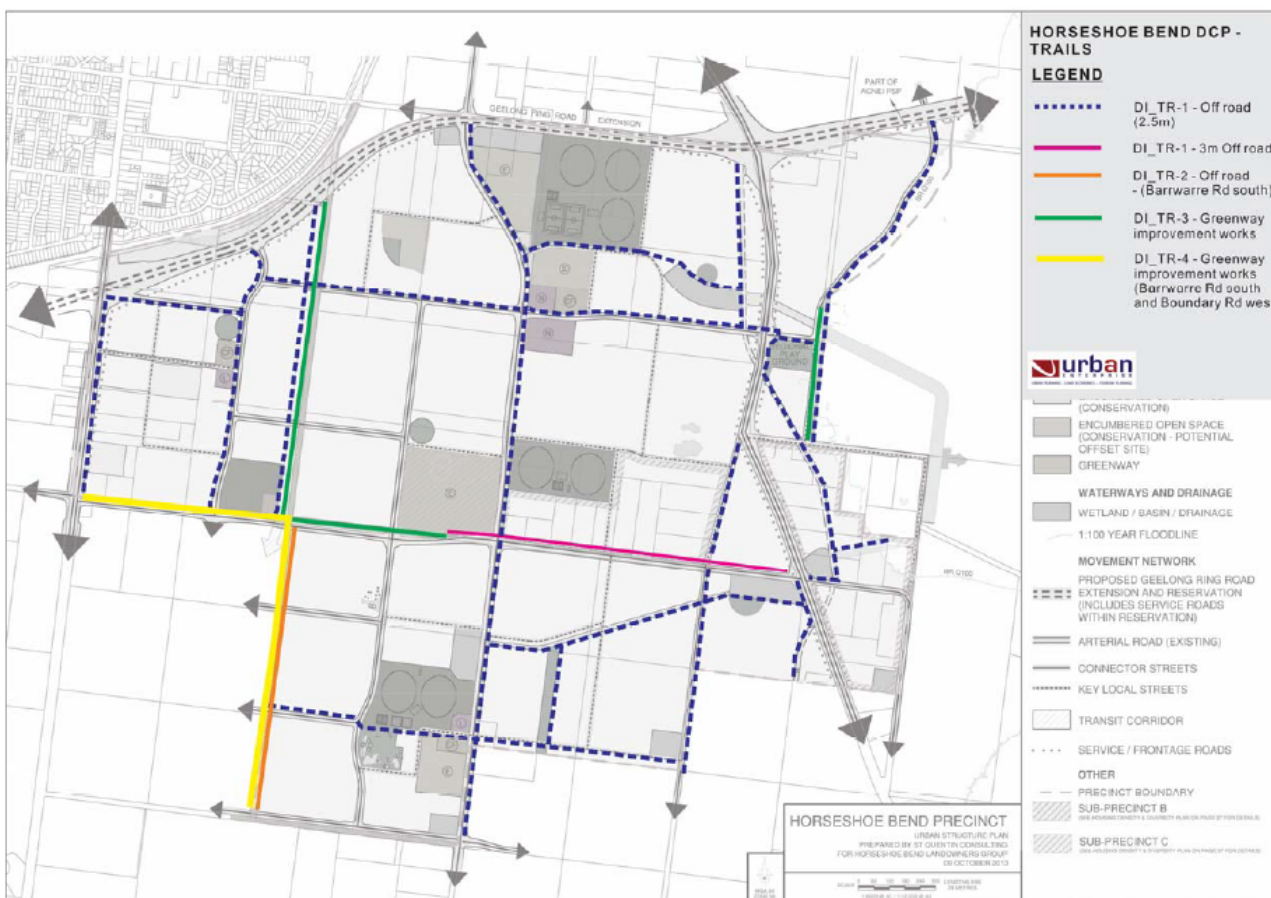


Figure H – HBP DCP – Trail Projects (refer to as Figure 4 within the DCP, page 16)

Project Background

The vision for the Armstrong Creek Urban Growth Area has always been to deliver a sustainable community via elements such as high quality public transport, close proximity to employment opportunities and an attractive network of shared paths to encourage active participation in walking and cycling (for both recreation and commuter purposes).

To deliver on this vision, the HBP aims to maximise the use of encumbered open space corridors to create these links, including drainage corridors and outfall sewerage easements. In addition to these links the network has been strengthened via the establishment of shared path greenways along Barwarre Road, Boundary Road, Burvilles Roads and Sparrowvale Road.

The final element of the network is the interconnections of the above shared paths to key community facilities such as active open space reserves, schools and activity centres.

The standard of the proposed shared path network has been nominated as a 2.5m wide concrete path, being a surface suitable for a broad range of users and a width and standard consistent within Clause 56.06 – *Residential Subdivision: Access and Mobility* of the Greater Geelong Planning Scheme and various best practice guidelines (eg: Austroads standards).

It is acknowledged that the shared path network allocated within the HBP DCP has community benefit across the Precinct. However this doesn't negate the potential need for local shared path arrangements based on subdivision need and development (eg: a school development).

Apportionment

Because the whole of the trail network is physically contained within the HBP and as per Council apportionment principles detailed earlier, Council has allocated 100% of these costs to the HBPDCP, excluding DI_TR_2 (Barwarre Road south shared path) and DI_TR_4 (Barwarre Road South and Boundary Road - Greenway Improvement Works) which are shared 50% / 50% between the HBP and the ACTC as these projects are located along the boundary of the two precincts.

10.6 Open Space Projects

Project Description

The HBP DCP includes a total of eleven (11) projects relating to the provision of active recreation and open space infrastructure that directly services the Precinct.

The projects fall into four distinct groups:

- Active recreation reserves (1 x 8.1ha, 1 x 8.7ha 1 x 4ha and 1 x 16.7ha)
- Pavilions (four in total)
- Playground equipment (six local parks and one regional park)
- Multi Purpose Stadium (2 courts)

FIGURE 5 LOCATION OF OPEN SPACE ITEMS

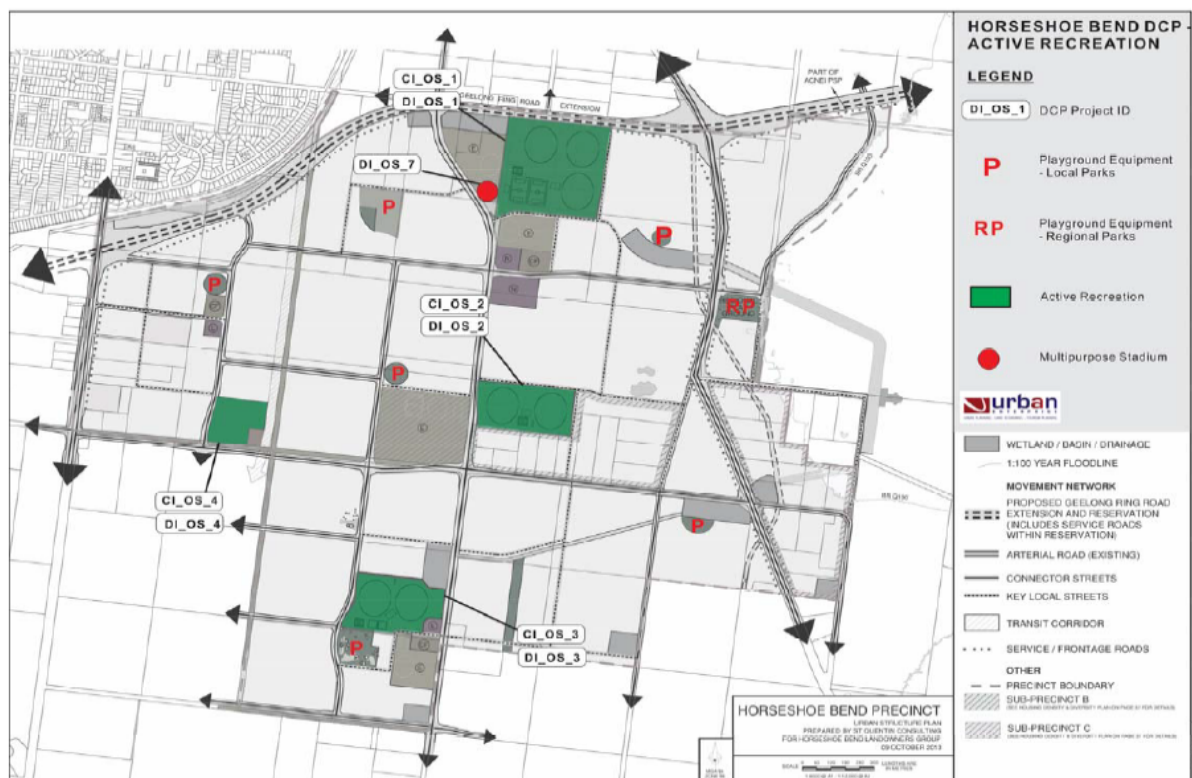


Figure 1 – HBP DCP – Open Space Projects (refer to as Figure 5 within the DCP, page 17)

Project Background

The development of open space and recreation infrastructure has been based on the development of three key documents; being the Social IIDP, HBPSPP and the DCP project cost estimates.

The Social IIDP assessed the population and assumed demographics within the growth area and the servicing requirements for active open space (eg: number of ovals, courts, etc).

The HBSP confirmed the quantum of open space allocation as per the Armstrong Creek Urban Growth Plan's requirement for 10% unencumbered public open space, noting the actual percentage of open space for the Precinct is 10.22% with the 0.22% additional allocation being funded by Council.

The third and final document is the DCP Costings Report prepared by Prowse Quantity Surveyors P/L that details the assumed level of service (ie: quality and quantity) for both active and passive open space infrastructure, including buildings, as well as the specific costs to deliver each project.

The recreation and open space components of the Social IIDP were developed with involvement from Department of Planning and Community Development (DCPD), including Sport and Recreation Victoria, Department of Education and Early Childhood Development (DEECD) and City for Greater Geelong's (CoGG) recreation and open space department to ensure a consistent application of State and Local Government policy relating to the planning of recreation assets.

The outcomes of the Social IIDP confirmed:

- Land area requirements for each facility / reserve (eg: 8ha active recreation reserve to facilitate two ovals)
- Location, collocation and distribution of facilities.
- The quantity of recreation items (eg: courts, ovals, etc)

A summary of the above outcomes can be seen below in Table 2 (extract from Social IIDP, page 28, Table 9) and the Social IIDP, Appendix 4 – Social Infrastructure - Indicative Location Map.

Table 4 – Recreation Items (extract from Social IIDP table 9)

Recreation Item	Precinct				Major Activity	Total
	East	West	H Shoebend	Marshall		
Active Open Space – Local (8 ha)	2	2	2			6
Active Open Space – Regional (18ha)	1	1	1			3
All ability play space	1					1
Athletics Track & Field			1			1
Community Pavilions - Toilet Blocks	2	3	4	1		10
Community Pavilions - Large	1	1	1			3
Community Pavilions - Medium	1	1	1			3
Community Pavilions - Small	1	1	1			3
Football / Cricket Ovals	5	3	5			13
Football / Soccer Fields (joint use)		1	2			3
Hockey / Soccer - Synthetic		4				4
Leisure Facility (Aquatic Centre)					1	1
Multi Purpose Stadium - 4 court					1	1
Multi Purpose Stadiums - 2 court	1	1	1			3
Netball	2	4	7			13
Netball (Multi court facility)	9					9
Seniors Recreation Reserves (bowls, croquet)	1	1	1			3
Soccer - Grass	3	5				8
Tennis Complex - Pavilion & Admin	1	1				2
Tennis Courts	9	9				18

The above quantities confirmed the need for two 8 ha active open space reserves and one 18 ha regional active open space reserve.

The 18 ha reserve was to be located in the north-east corner of the Precinct as per the Armstrong Creek Urban Growth Plan – Framework Plan.

During the precinct structure planning for the HBP this 18ha allocation was split in two to facilitate a 4 hectare stand alone athletics and multipurpose active open space reserve, with the 16.7 ha regional active open space reserve remaining in the north.

The reason for this change was based on two principles. The first being that the athletics facility was the only one within the growth area and there was a preference for a more central location close to the public transport hub within the ACTC, greenway corridors and road connections. The second was the distribution of active open space across the Precinct, with the three other reserves allocated along a Horseshoe Bend Road 'spine' through the Precinct limit active open space in the west (noting land east of Barwon Heads Road can access the ACEP regional open space).

In relation to pavilions, acknowledgment was also made in the Social IIDP relating to the role of community pavilions in setting an expectation to the future users that these facilities will not be exclusive for one or two users, as has historically been the case in the Geelong region. Instead these facilities will be designed and operated to maximise their use for a variety of recreation users including allowance for other future demands or unforeseen growth in specific sports, recreation groups or interest groups.

Apportionment

These open space and recreation infrastructure projects are all deemed to be appropriate to service the population for the HBP, both in their quantity and quality, and as such 100% of their project costs are attributed to the HBPDCP (excluding the Multi Purpose Stadium DI_OS_7 and the Regional Active Open Space Community Pavilion CI_OS_1).

The Multi Purpose Stadium (DI_OS_7) is located on the State Government High School site (years 7 – 12) north of the Neighbourhood Activity Centre (NAC). The project has 30% of its total project cost allocated to the DCP, with the remaining 70% being contributed by the Department of Education and Early Childhood Development (DEECD) and the City of Greater Geelong. This funding model is consistent with previous experience within the Geelong region, including the Armstrong Creek East and West DCPs.

The Regional Active Open Space Community Pavilion (CI_OS_1) will source 20% of the cost of the facility from the neighbouring Marshall Precinct via the Community Infrastructure Levy (capped at \$900 per dwelling).

Each of the Precincts pavilions provides for a basic level of facilities having regard to the assessed community needs carried out as part of the extensive development of the Integrated Infrastructure Delivery Plan and particularly the Social Interagency Infrastructure Delivery Plan.

10.7 Drainage Projects

Project Description

The HBP DCP includes a total of twenty four (24) projects relating to wetlands / drainage works that directly services the Precinct.

The projects can be broken into two categories as detailed below:

- Wetland / Retarding Basin Construction (14 projects)
- Land (10 projects)

FIGURE 7 LOCATION OF DRAINAGE ITEMS

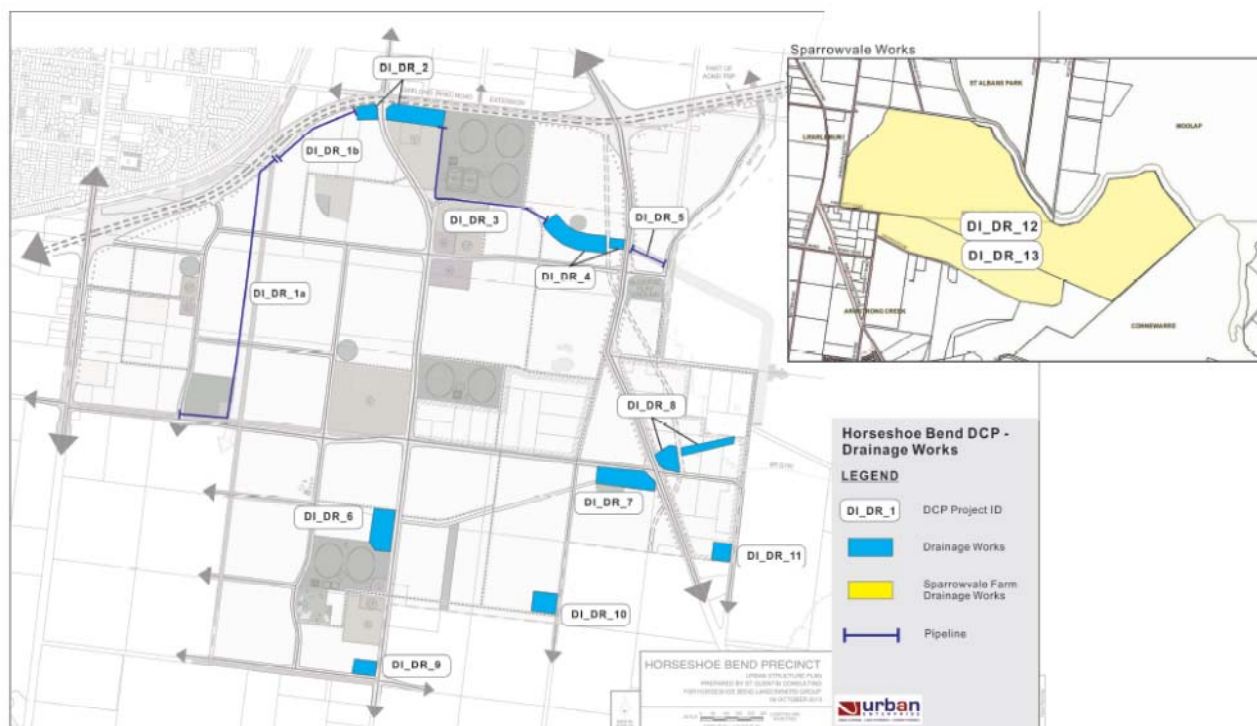


Figure J – HBP DCP – Drainage Projects (refer to as Figure 7 within the DCP, page 19)

Project Background

Council is the drainage authority for the Armstrong Creek growth area and as such is responsible for the collection of funds (drainage levies) for the provision of drainage assets that service a broader catchment area.

Like the Armstrong Creek East and West Precinct DCPs, the DCP for the HBP incorporates the implementation of a detailed drainage strategy which was recommended by the background technical report titled the *Horseshoe Bend Precinct Stormwater Management Strategy* (Neil Craigie, October 2013, version 8).

This adopted stormwater management strategy will provide all of the Precinct's water quality treatment requirements and flood mitigation management. Further background to the strategy is detailed in Section 9.3 of this report.

Notable features of the HBP stormwater management include:

- Adjustment to catchment boundaries in the north due to the proposed East West Link Road (Geelong Ring Road Section 4D)
- The acquisition and construction of the new Sparrowvale wetlands system
- Retardation of major storm events within the Precinct
- Water quality treatment provided end-of-line within the new Sparrowvale Wetlands.

Wetlands / drainage facilities have been positioned to complement the topography of the HBP and create feature gateways treatments into the Horseshoe Bend Precinct and connections with the open space and shared path networks to anchor the sites as places of interest and high amenity.

The Stormwater Management Plan includes the delivery of the following facilities:

- Eight stormwater retarding facilities, including land

- One large scale wetland system to manage end of line water quality treatment (Sparrovale wetlands), including land and 10 year environmental management plan.

The inclusion of the Sparrovale Wetland projects within the precinct represents a significant risk for Council due to its large size and history of land use. The establishment of the facility is planned over 10 years.

The two properties have had a long history of illegal fill activity, along with rubbish dumping which presents significant risks to Council. The Sparrovale property during the 1980s had an enforcement process implemented to stop the operation of an illegal dumping activities and the Cold Winds property is currently under an enforcement order to remove illegal fill on the property.

The two properties also have the following features that require careful management during the delivery of the project. These include:

- neighbour a Ramsar wetland,
- located within a sensitive cultural heritage environment,
- include a flood levee that retains local water within the properties while protecting them from minor Barwon River flood events (less than 1 in 10 years), and
- cover an area of more than 500 hectares (an area equivalent to the entire Armstrong Creek West Precinct).

To deliver a new wetland system such as the proposed Sparrovale wetland project (site of more than 500ha and a wetland area of approximately 200ha) there is a need for a long-term outlook in how the assets can be realistically delivered. All wetland projects of a smaller more traditional scale requires an establishment phase of at least two years to allow the variety of aquatic species to establish and the wetland to function in a sustainable way.

In the case of the Sparrovale wetland, the long-term challenge is to transition a degraded farmland into a functional, integrated and sustainable wetland system. Based on these challenges, Council initiated the preparation of a detailed costing project to isolate the environmental and site management component of the project from the pure civil works.

The costing of the 10 year environmental management plan was prepared in-house by Council staff (engineering, environment and urban growth departments) , utilising skills and feedback from staff from the Department of Environment and Primary Industries (DEPI) and having the costs peer reviewed by an external consultant. This exercise also ensured a greater degree of ownership and assessment of the project by future delivery and operational arms of Council.

The process used to establish these costs included:

- A review of other masterplans and management plans for areas of environmental significance currently managed by Council.
- A series of workshops with key internal staff.
- Discussion with key staff from the Department of Environment and Primary Industries (DEPI) regarding transition of the site and long-term management issues, including interface issues with the Connewarre Wetlands Complex.
- A peer review of scope and cost. This work was undertaken by an external consultant who has undertaken an extensive amount of work along the Barwon River corridor and similar corridors and wetlands across the Victoria.

Another critical factor considered when preparing these costs was the appropriate length of time needed to transition the site from degraded farmland to a functional, integrated and sustainable wetland system. Projects like this have been known to take 20 plus years to establish to a point of being sustainable long-term, however, Council believes that in light of these costs being included in a DCP that the cost should only reflect the capital cost to

transition the site to an established and functional system and not create any confusion regarding the general maintenance or management of the site in perpetuity.

Typically Council requires a minimum 2 years as an implementation / establishment period for other stormwater assets such as retarding basins and smaller scale wetlands (beyond practical completion). However due to this facility being, the primary end-of-line facility for the whole Precinct / catchment, the Precinct being in a state of construction for many years (ie: multiple residential development fronts) and the proposed wetland not reaching an appropriate point of establishment until many years in the future it was determined that a 10 year implementation period was more appropriate.

Attached in Appendix 15.6 is a map showing the scale of the proposed Sparrovale Wetland compared to some of Council's largest existing wetland assets. This highlights the significant scale of the project compared to current assets ranging between 0.5 and 5.4 ha.

Finally, these costs developed by Council do not include contingency amounts as the basis of the estimate include items deemed to cover areas of risk or uncertainty, and hence no contingency was utilised.

All project costs for the new stormwater management infrastructure has been prepared by Cardno Consultants (excluding the Sparrovale wetlands 10 year management plan and implementation works discussed above) and summarised in the Prowse Quantity Surveyors report date 21 November 2013 (exhibited as part of Amendment C267).

Land for wetland / retarding basin infrastructure has been valued by Charter Keck Cramer (8 November 2013) utilising the 'before and after' valuation methodology.

Apportionment

The DCP allocates 100% of all wetland / drainage works to the DCP (inclusive of land), with these costs evenly distributed across all landowners as part of a Precinct wide drainage scheme.

10.8 Community Facility Projects

Project Description

The HBPDSP includes a total of six (6) projects relating to the provision of community facilities that directly service the Precinct.

The projects fall into two categories as detailed below:

- Community Complexes (2 x Local Activity Centre and 1 x Neighbourhood Activity Centre)
- Land required for Community Complexes

FIGURE 6 LOCATION OF COMMUNITY ITEMS

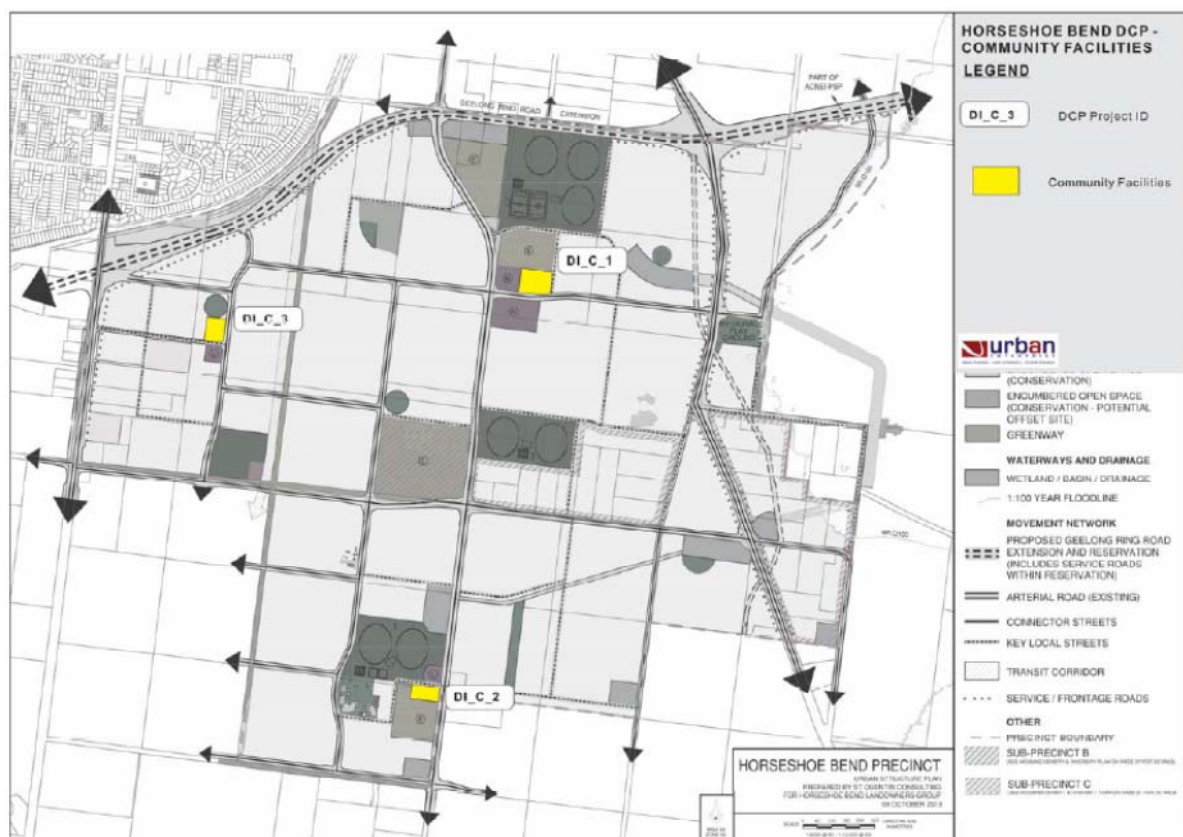


Figure K – HBP DCP – Community Facility Projects (refer to Figure 6 within the DCP, page 18)

Project Background

The Social Interagency Infrastructure Delivery Plan adopted the delivery of a community hub model that provides an opportunity for various facilities and / or services to co-locate and / or share facilities as part of a more integrated service model.

The Social Interagency Infrastructure Delivery Plan determined three simple hub models for the various scale hubs located within the growth area, these being:

- Major Activity Centre Hub
- Neighbourhood Hub
- Local Hub

These three hub models can be seen in Appendix 15.7 (extract from *Social Interagency Infrastructure Delivery Plan – Appendix 13*). These diagrams have also been illustrated to highlight the specific facilities / projects that are applicable to the HBP (others areas outside the HBP are greyed out).

This model has been implemented within the HBP and was tested against the projected population.

A land area for each of these facilities was determined within the Social Interagency Infrastructure Delivery Plan and was incorporated within the approved HBSP.

The community complexes have been sized according to the requirement and dimensions detailed within the Social Interagency Infrastructure Delivery Plan, however testing was done during the costing phase relating to how these configurations are delivered within a building

design. Consideration was given to building elements such as foyers, verandas, overlapping uses (eg: indoor / outdoor play spaces and landscaping) and utility requirements, along with comparisons with other “like” facilities and their actual construction costs.

This testing and final project costing was undertaken by Prowse Quantity Surveyors P/L and is detailed in the letter and project sheets titled HBP – *Developer Contributions Plan Costing (Prowse Quantity Surveyors P/L, 21 November 2013)*.

The composition of the local and neighbourhood community complexes (DCP projects DI_C_1, 2 and 3) are also identified in the Prowse Quantity Surveyors project sheets and reflect the shared use nature and composition of these facilities.

All Land required for the three community complex sites (DI_LA_11, 12 and 13) has been valued by Charter Keck Crammer (8 November 2013) utilising the ‘before and after’ valuation methodology.

Apportionment The three facilities have been scoped in accordance with the servicing requirements determined within the Social Interagency Infrastructure Delivery Plan and provide services that meet the needs of the Precinct’s expected population.

These three facilities have 100% of their costs attributed to the DCP (including land).

10.9 PSP / DCP Preparation

Project Description

The HBP DCP includes a project for the reimbursement of planning costs incurred by the Horseshoe Bend Landowners Group (made up of 10 parties) to facilitate the preparation of the C259 Amendment package.

Project Background

The DCP includes a cost of \$1,520,484 for the preparation of the Amendment C259 – HBSP, DCP and NVPP, consistent with all other DCP across the Armstrong Creek growth area.

The project (DI_P_1) has been funded by the Horseshoe Bend Landowner Group, with funding parties (ie: landowners) being reflected within Table 13 of the HBPDCP. These parties are also visually shown in Appendix 15.4 – Horseshoe Bend Landowners Group - Ownership Map.

Apportionment

All costs associated with the preparation of Amendment 259 have been apportioned to all landowners within the precinct based on the project facilitating the entire Precinct for development.

10.10 Project Costs - Contingency

All projects within the HBPDCP include contingency amounts to cater for a variety of risks that may be encountered when construction occurs (excluding DI_DR_13 – Sparrovale Wetlands - management plan and implementation works). It is assumed that the normal yearly cost increases will be picked up in the adjustment and indexation processes built into the DCP. Contingencies are in respect to the unknowns of a project and areas of risk.

Council has been mindful of issues raised during previous DCP amendments within Metropolitan Melbourne and the concern raised by developers and independent review panels relating to use of high contingency amounts.

To manage this concern most projects include concept designs prepared to inform a detailed project estimate.

A 20% contingency amount was used by the various engineering consultants relating to intersection and drainage projects and reflects the level of certainty Council was able to employ in the costing methodology.

Community buildings such as community complexes and pavilions utilise a contingency of 7.5% consistent with other Armstrong Creek DCPs.

Council was responsible for preparing the cost estimate for project DI_DR_13 – Sparrovale Wetlands Management Plan and Implementation Works due to the complexity and specialist knowledge required to assess the project. During the preparation of the estimate it was acknowledged that a number of the components of the project will have efficiency gains relating to packaging and joint delivery during the 10 year life of the project and that several items specifically relate to the management of risk on the site. Therefore it was agreed that no contingency would be allocated to the project.

In my opinion, the adopted contingency amounts are reasonable.

11 DCP vs. HBP ULTIMATE INFRASTRUCTURE REQUIREMENT

As part of the Armstrong Creek East, West and Town Centre DCP amendments the Panel and several submitters found it useful to have an additional level of detail provided regarding those projects likely to be delivered via the subdivision process (ie: permit conditions) or funded external to the DCP.

Detailed below is a summary of those infrastructure projects noted as being outside the scope of the DCP. The mechanism for delivering these projects has been based on a combination of past experience within the City of Greater Geelong and recent examples within the six growth area councils of metropolitan Melbourne.

11.1 HBP – Infrastructure Delivered via Permit Conditions

The following infrastructure projects within the HBP are proposed to be delivered via planning permit conditions as part of the subdivision / development process.

- All collector and local roads, including (but not limited to) street trees and footpaths
- All local drainage (outside wetlands / drainage works included in the DCP)
- Bus stops
- Activity Centres “Main St” areas, including but not limited to:
 - Wider footpaths
 - Street trees
 - Street furniture
 - Public art
 - Carparking and bus stops
 - Pedestrian crossing
- Town Squares
- Local parks (excluding playground equipment) and improvement of encumbered passive open space (eg: drainage corridors, outfall sewer easement, etc)
- Conservation areas, including all improvements, fencing, paths, etc.
- Greenway improvements (over and above DCP contributions to shared paths and weed management and minor landscaping)

11.2 HBP – Infrastructure Delivered via other Funding Sources

The following infrastructure projects within the HBP are proposed to be delivered via funding sources outside the DCP and permit conditions.

- Duplication of Horseshoe Bend Road (Construction)
- Armstrong Creek East West Link Road (Geelong Ring Road Section 4D). Land and construction funded by VicRoads.
- Regional Community Pavilion
 - DCP provides 1,000m². The SIIDP determine a future long-term need for 1,500m² to provide the role of a host centre for significant regional sporting / recreation events.
- Provision of Citizens Halls detailed within the SIIDP (provide additional meeting and cultural space)

-
- Construction of 2-Court Multi-purpose stadium. Funding from this project is distributed 40% from the Department of Education and Early Childhood, 30% from 30% the HBPDCP and 30% from City of Greater Geelong. The unsecured DEECD funding would be required if a funding agreement can't be reached with DEECD and Council to provide matching funds (this stadium is located on the 7 -12 Government school site)
 - Toilet blocks detailed in the SIIDP (as required)

12 NATIVE VEGETATION PLAN

12.1 HBP Native Vegetation Precinct Plan (NVPP)

Clause 52.16 of the Scheme contemplates a strategically based approach to vegetation removal and the provision of appropriate offsets. This is extremely useful in a growth area scenario.

As part of the package for Amendment C259 a NVPP is included that governs the removal of vegetation without a planning permit and the offsets of native vegetation which are required within the HBP. The exhibited NVPP (Ecology & Heritage Partners, December 2012)) was developed in conjunction with Council and Department of Environment Primary Industries (DEPI) and as far as Council is aware is endorsed by all parties involved.

The NVPP was developed via a series of meetings with Council's environmental officers, members of the Armstrong Creek project team, DEPI staff and Ecology and Heritage Partners representatives who undertook field assessments and the preparation of background technical reports and the NVPP.

The workshops assessed the impacts of the precinct's draft masterplan and determined the most appropriate areas for protection of indigenous / native vegetation and the areas that vegetation is likely to require removal.

The Precinct's most predominant area of vegetation, both in terms of quality and quantity, is along the local roads within the Precinct, with the remainder of the land being subject to intensive grazing and hobby farming activities.

A number of sites were identified, particularly along the Horseshoe Bend Road, where the masterplan design was adjusted to minimise vegetation loss where it was deemed unavoidable (eg: intersections and road crossings).

The HBP NVPP identifies 186 scattered indigenous trees including 56 Small Trees, 49 Medium Old Trees (MOT), 75 Large Old Trees (LOT) and 6 Very Large Old Trees (VLOT). Of these trees, 110 are to be retained and 76 are to be removed (of the trees identified as being able to be removed, 31 are identified as Practical Retention Trees, and as such, it is likely that many more scattered trees will be retained than identified in the HBP NVPP).

A fundamental design principle established by DEPI and Council during the preparation of previous NVPPs within the Armstrong Creek growth area was an attempt to offset vegetation losses within the relevant precinct (i.e. ensure like for like offset of similar species and vegetation classes). This is difficult to achieve in the HBP due to the limited number of sustainable native vegetation patches of a moderate to large size. As such, external offsets will be required..

Another feature of the HBP NVPP is the addition of a third category of vegetation classification, beyond simple "remove" or "retain". This category is referred to as "Practical Retention".

The aim of this new category (developed during the preparation of the Armstrong Creek West NVPP) was to provide an exemption to remove those trees deemed unlikely to be retained based on the current level of planning / concept design, however the provisions then required that every attempt should be made to retain these trees during the detailed subdivision design and delivery process.

This classification ensures the "avoid" principle that formed such a critical part of *Victoria's Native Vegetation Management: A Framework for Action, 2002* (recently superseded by the *Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines, September 2013*) is continued to be applied during the next stage of Precinct's development.

Once detailed design and testing is then done at a subdivision / planning permit stage, the vegetation can then be removed (based on an inability to avoid removal of the tree / vegetation)

As identified in the submission by DEPI, a State wide planning scheme amendment has recently been approved relating to reforms in the assessment and management of native vegetation clearing across Victoria. This amendment was gazetted after the exhibition of the Horseshoe Bend NVPP.

Since the new policy's implementation, Council has been working closely with DEPI staff to understand the implications of these changes on not only the HBP NVPP, but also the various other NVPPs adopted across the City of Greater Geelong. Council has committed to work with DEPI to ensure the HBP NVPP is updated post the Panel Hearing process to align to the requirements of the new policy, assessment process and offset scoring within the NVPP.

Council has also been working with several submitters regarding areas of specific vegetation issues. Council has provided in-principle support to a number of matters relating to 'stags / dead trees' being identified as being retained in the NVPP. This retention is deemed inappropriate due to their high risk to Council if they are retained in a public open space reserve. They are usually relocated to conservation areas for use as habitat.

13 AMENDMENT C259 – ERRORS AND ANOMOLIES

During the continued review of the Amendment documentation and as part of submission considerations there are a few minor errors or anomalies that should be noted by the Panel as part of finalising the amendment package.

These include:

HBPSP

- Boundary Road Cross Section – Horseshoe Bend Road to Barwon Heads Road (Appendix 8, Cross Section - Figure X - Interim, and Figure - Z1 - Ultimate)
The cross section incorrectly labels the southern verge as 6m in the interim and the northern kerb-side verge as 2m. The intent is for the southern kerb to be fixed for both interim and ultimate cross sections, rather than change both kerb lines in the ultimate.
The correct cross section for the interim should be a 5m southern verge and a 3m northern kerb-side verge. Refer Appendix 15.8 for Revised Interim Boundary Road Cross Section – Horseshoe Bend Road and Barwon Heads Road.
- Surf Coast Highway (ultimate) Cross Section (Appendix 8, Figure L)
This cross section should detailed a 2.5m shared path along the service road (east and west sides). This is consistent with the ACWP and ACTC Precincts.

HBPDCP – DCPO Schedule 5

- The schedule contains incorrect development infrastructure levies for residential and activity centres charge areas. The correct levies are reflected in the HBPDCP Table 8, page 29. The correct levies are \$267,065.75 per net developable hectare for Residential development and \$163,752.14 per net developable hectare for Activity Centres

14 CONCLUSION

As far as I am aware and to the extent that it has been possible to do so, the HBP PSP, DCP and NVPP have each been prepared in accordance with their governing Acts and having due regard to the various guidelines, best practice examples and Ministerial Directions.

These plans also aim to support the strategic and policy intent of the Armstrong Creek Urban Growth Plan and an infrastructure funding regime that is fair, affordable and aligns with the vision for the growth area in providing a best practice sustainable development.

The Horseshoe Bend PSP, DCP and NVPP have been prepared in collaboration with the Precinct's Landowner Group and as much as possible has aimed to develop a package that is mutually acceptable to all parties. It is also acknowledged that a number of inevitable points of dispute still exist between Council and landowners relating to specific matters.

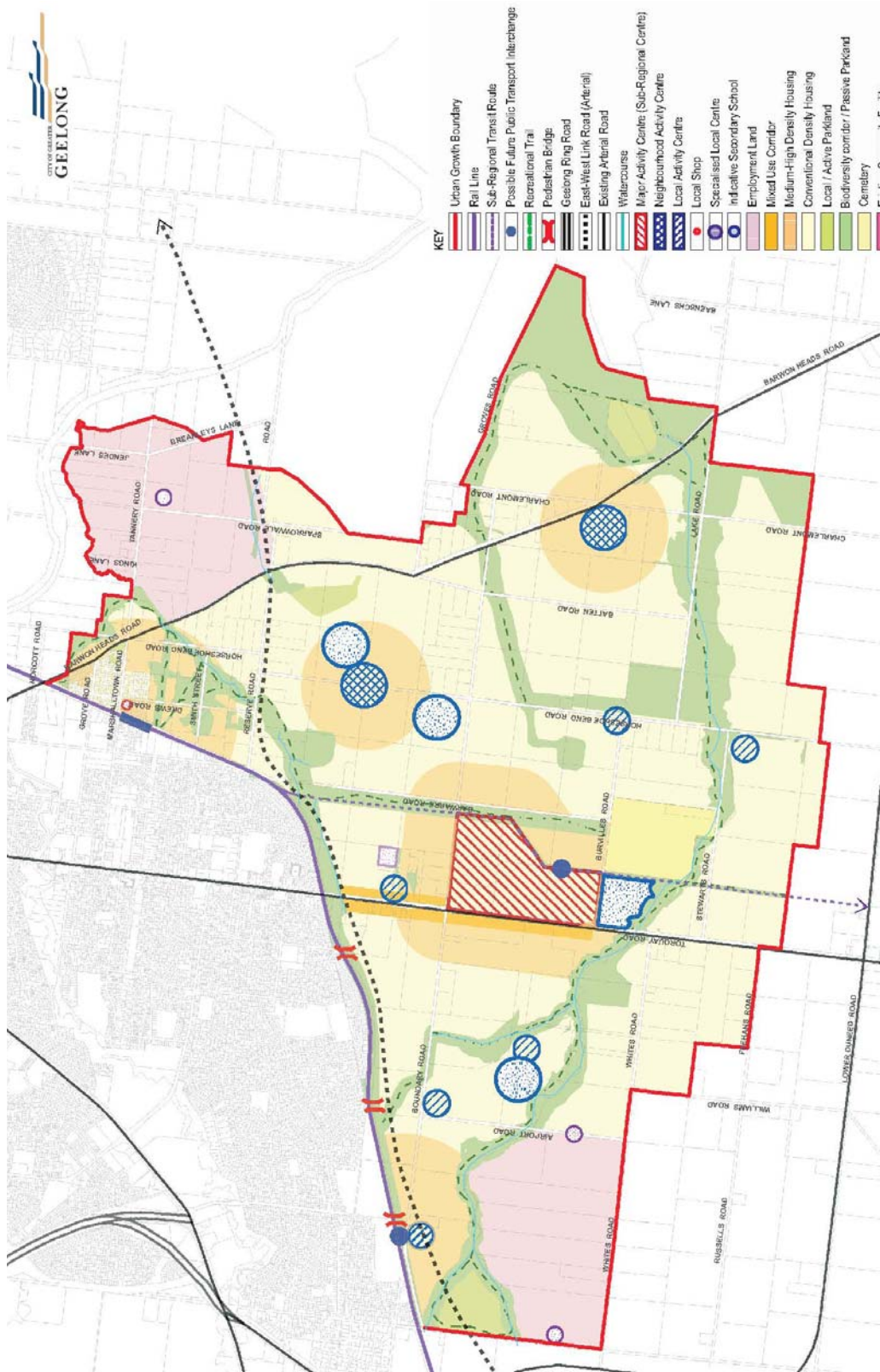
As per Planning Panels Victoria Guide to Expert Evidence, I have made all the inquiries that I believe are desirable and appropriate and no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.

15 APPENDICES

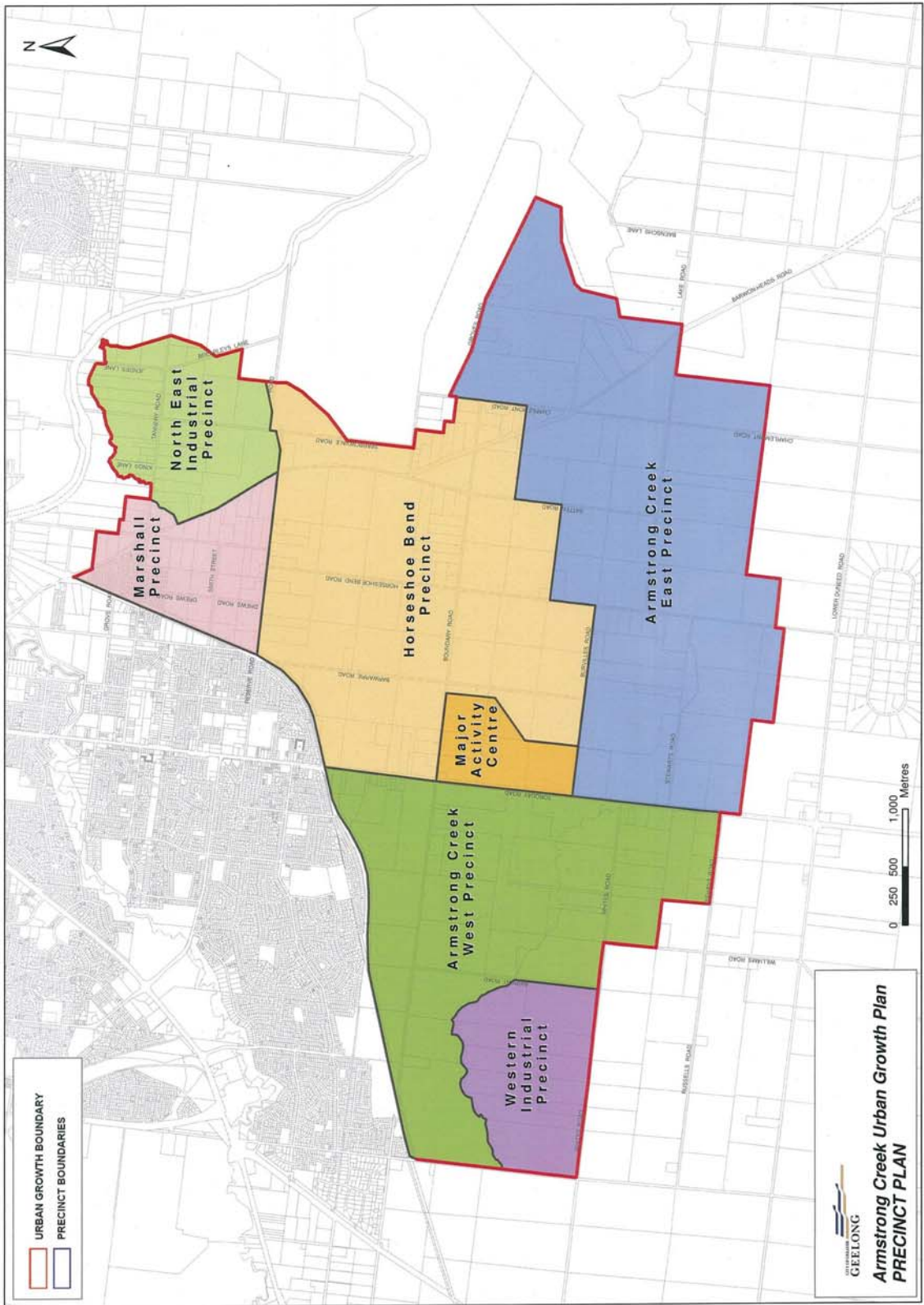
15.1 Armstrong Creek Plans

- Armstrong Creek Urban Growth Area – Framework Plan
- Armstrong Creek Urban Growth Area – Precinct Plan
- Armstrong Creek Horseshoe Bend Precinct – Urban Structure Plan (*exhibited*)
- Horseshoe Bend Precinct – Urban Structure Plan (*pending Minister approval*)
- Armstrong Creek West – Urban Structure Plan
- Armstrong Creek East Precinct – Urban Structure Plan
- Armstrong Creek North-East Industrial Precinct – Urban Structure Plan

ARMSTRONG CREEK URBAN GROWTH PLAN – FRAMEWORK PLAN



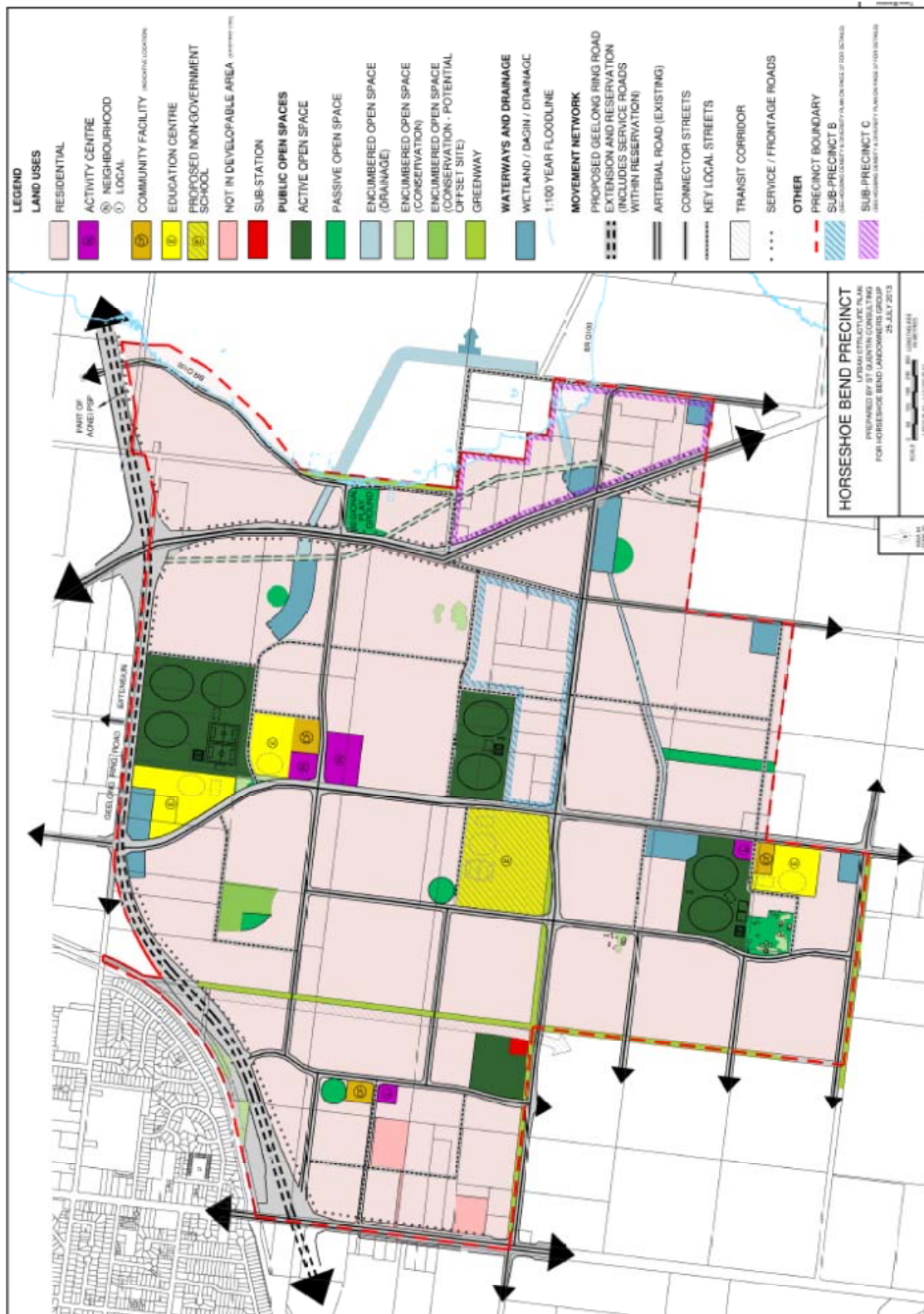
ARMSTRONG CREEK URBAN GROWTH PLAN - PRECINCT PLAN



Prepared by City of Greater Geelong - May 2010

ARMSTRONG CREEK HORSESHOE BEND PRECINCT – URBAN STRUCTURE PLAN

Exhibition Version



ARMSTRONG CREEK TOWN CENTRE - URBAN STRUCTURE PLAN

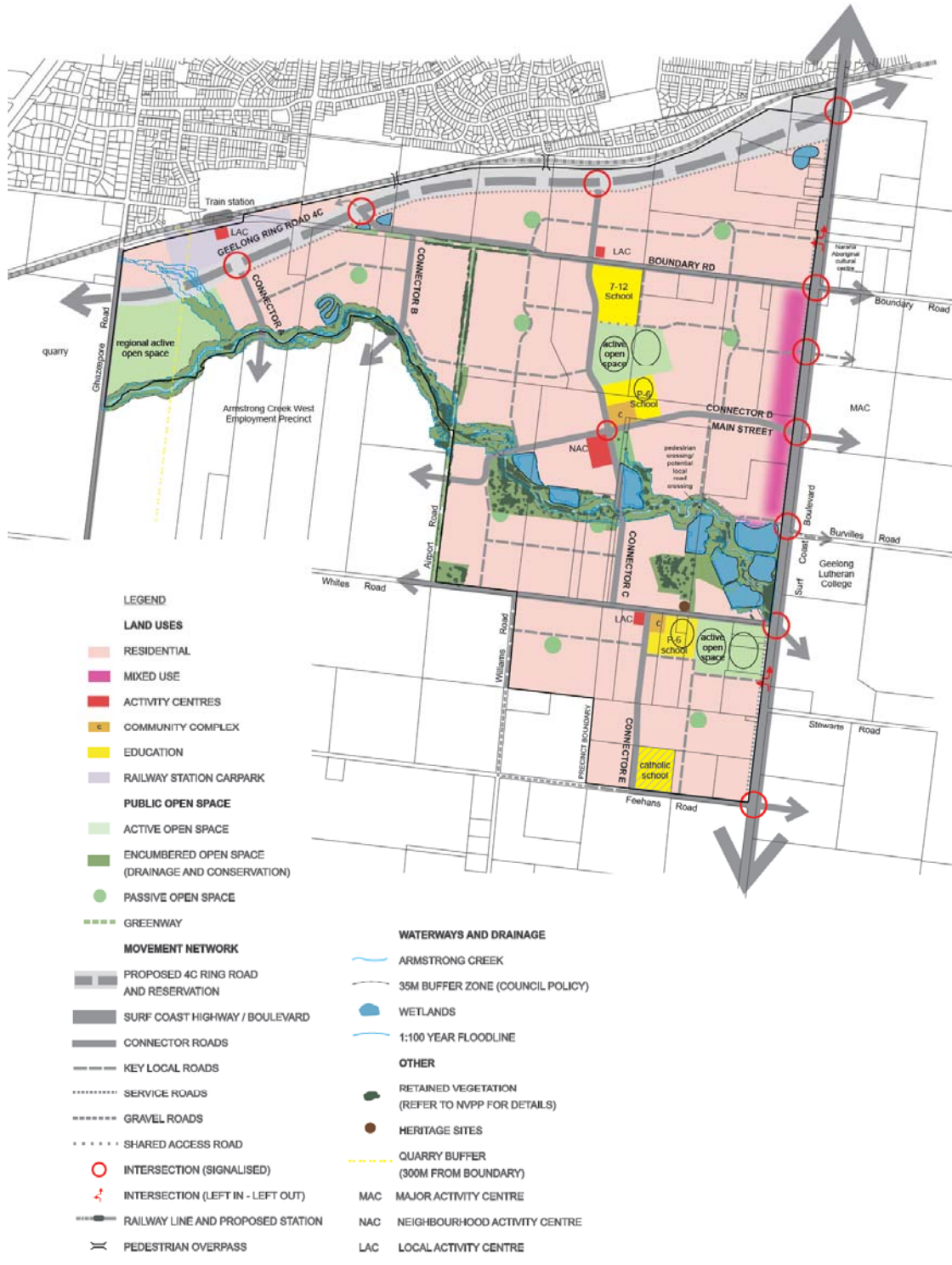


1:8000

Legend

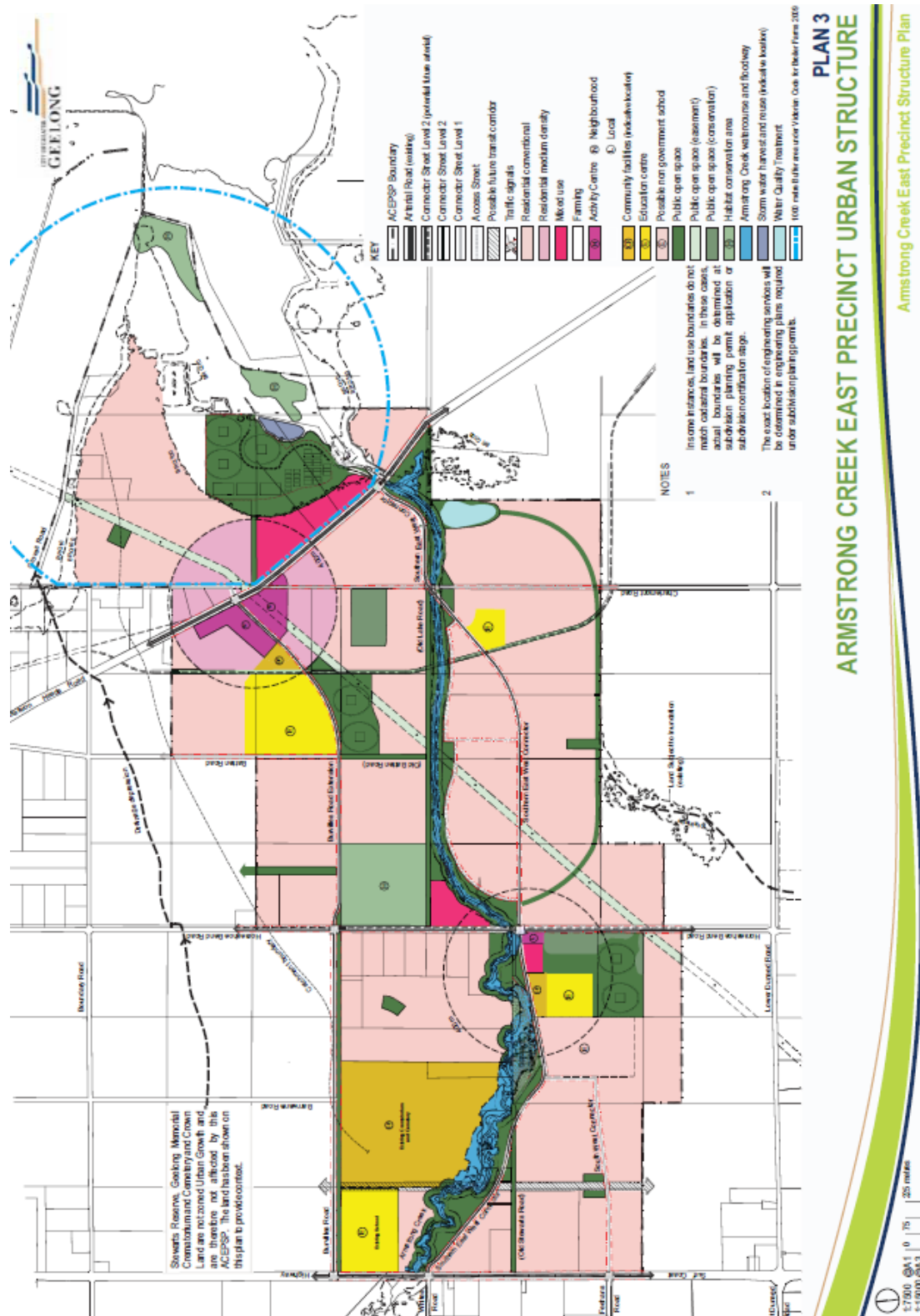
- | | | |
|---|---|----------------------------------|
| ACTCPSP BOUNDARY | EMERGENCY SERVICES | TRANSIT CORRIDOR |
| PRIMARY ROAD NETWORK | COMMUNITY FACILITIES | PRIORITY PEDESTRIAN NETWORK |
| ACCESS STREET
(Generally in accordance) | OPEN SPACE | LONG TERM INTEGRATED TRANSIT HUB |
| RETAIL
(Allowing upper level use) | ENCUMBERED OPEN SPACE
(Storm water quality and management) | INTERIM BUS INTERCHANGE |
| RESTRICTED RETAIL
(Allowing upper level use) | ENCUMBERED OPEN SPACE
(Biodiversity values) | |
| MIXED USE
(Retail, commercial on ground floor) | | |
| MIXED USE
(Primary residential) | | |

ARMSTRONG CREEK WEST PRECINCT - URBAN STRUCTURE PLAN



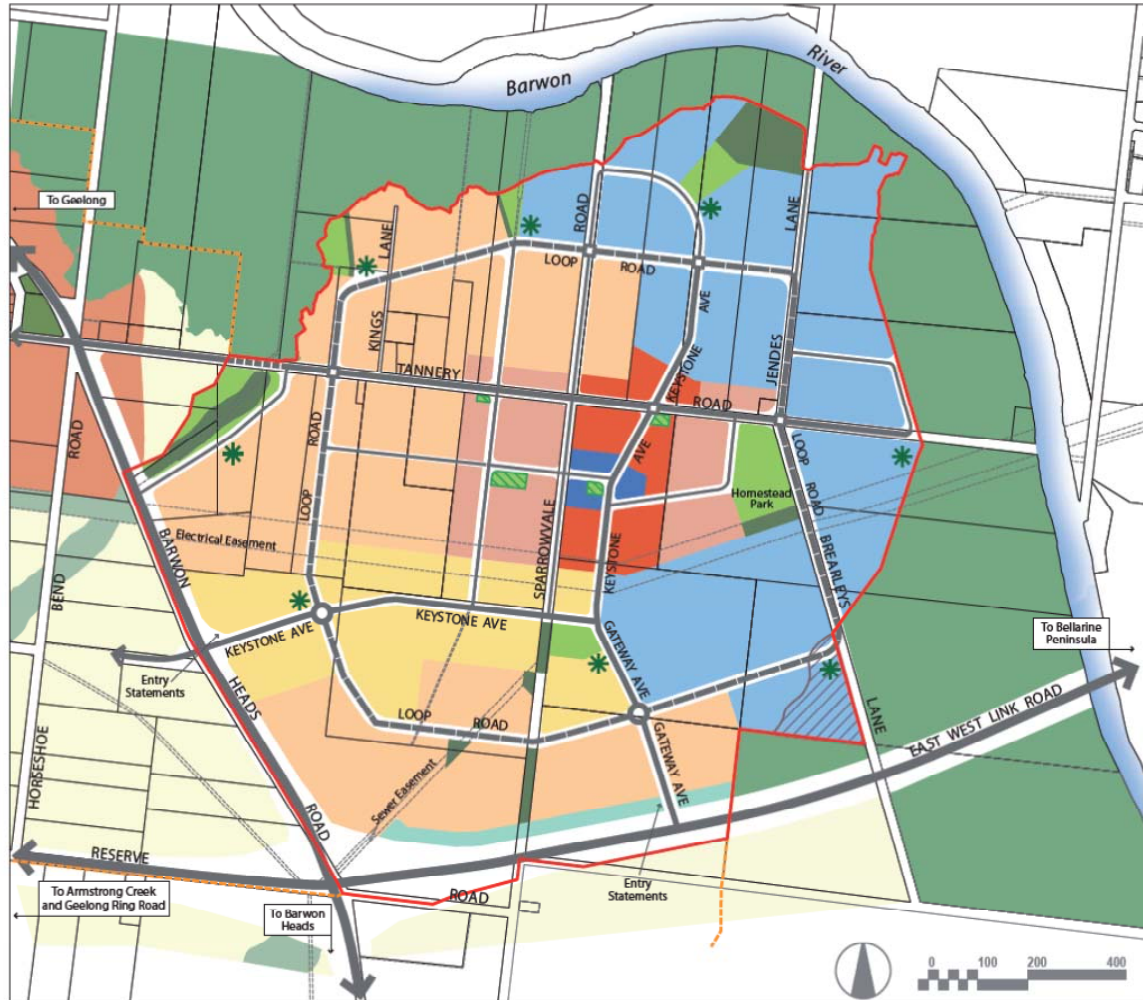
PLAN 3
URBAN STRUCTURE PLAN

ARMSTONG CREEK EAST PRECINCT – URBAN STRUCTURE PLAN



ARMSTONG CREEK NORTH-EAST INDUSTRIAL PRECINCT – URBAN STRUCTURE PLAN

FIGURE 4: NEIP FUTURE URBAN STRUCTURE PLAN



LEGEND

- NEIP Boundary
- Adjoining Precinct Boundaries
- Area subject to 100 Year Flood Event
Development of area is subject to offset. Flood storage to be determined subject to detailed design

ROAD NETWORK

- Proposed East West Link Road & Barwon Heads Road
- Major Access and Circulation Route (Loop Road)
- Primary Road Network
- Local Access Only (Buses Accepted)
- Secondary Road Network

PRECINCTS

- Precinct 1 - Industry North & South
- Precinct 2 - Campus Business
- Precinct 3 - Industry and Mixed Business
- Precinct 4 - Village Frame East and West
- Precinct 5 - Village
- Precinct 6 - Retail Centre (Specialised Activity Centre)

OPEN SPACE

- NEIP Parks
- NEIP Urban Park/Plazas
- * Local Node/Private Plaza

ENCUMBERED OPEN SPACE

- Barwon River Riparian
- East-West Link Drainage/Biodiversity Corridor
- Drainage/Encumbered Parks

15.2 Armstrong Creek Precinct Structure Planning – Preparation Guidelines

- Precinct Structure Plan Process (Sept 2008)
- Initiating the Preparation of a Precinct Structure Plan (Sept 2008)
- Memorandum of Understanding – template (Sept 2008)



ARMSTRONG CREEK GEELONG'S GROWTH AREA

What is required

Council audit against the criteria contained in document 'Initiating a Precinct Structure Plan'

Constraint mapping and report undertaken for the precinct covering CHMP, vegetation, flooding, infrastructure issues. Progresses from a desk top review to detail based on site inspections and investigations.

Developer/ consortium vision for the precinct including:

- Details of vision and alignment with vision for growth area
- Information and advice as to how the vision responds to Council's vision for the precinct set out in the Framework Plan, the Urban Growth Plan (volume 1), and the Integrated Infrastructure Delivery Plan
- Information about target market, with advice provided about the demographic profile being targeted by the developer/ consortium and how it relates to Council's demographic profile of the area.

Detailed plans showing how vision will be achieved via:

- Development cells
- Physical infrastructure (civil and social)
- Interface/ connectivity with adjoining land
- Staging plan
- Investment plan

Partnership meetings/ milestones

1. Project inception meeting- agreement to commence, finalise MOU.
2. Preliminary review meeting (constraints)
3. Final review meeting (constraints)
4. Set up meeting (vision)- Concept
5. Review meeting (vision)- Proposed approach
6. Review meeting- Final draft vision
7. Set up meeting (concept masterplan)
8. Preliminary meeting (draft masterplan, with draft planning controls)
9. Consultation with landholders and stakeholders
10. Review meeting (draft final plan, planning controls, discussion about amendment documents)
11. Final meeting (plan and controls finalised)
12. Start planning scheme amendment phase, submit amendment

September 2008

PRECINCT STRUCTURE PLAN PROCESS



ARMSTRONG CREEK GEEELONG'S GROWTH AREA

Council is committed to a partnership approach with developers to deliver viable Precinct Structure Plans (PSPs) as quickly as possible over the next twelve months. The delivery of new residential communities is Council's number one priority. Council has set three key requirements which will ultimately determine which precincts progress, allowing Council to commit to working with developers who meet the key requirements to ensure an expedited process and a high quality outcome that delivers the intent of the Armstrong Creek Urban Growth Plan. The three key requirements are as follows:

- 1. Control- A developer, or developer consortium, must represent 70% of the developable land across a defined precinct.**
 - Council will calculate the area of land required to meet the 70% target.
 - Council requires a plan of all land in the control of a developer or developer consortium and requires a letter from a solicitor which confirms the land under the developer/ consortium's control.
 - Council will not release this information to other parties and it will not be made available via FOI requests.
- 2. Capacity, capability and commitment- A developer/ consortium must be able to demonstrate their capability and capacity to deliver a PSP 'on the ground', along with a commitment to the timely delivery of a new sustainable community consistent with the vision of the Armstrong Creek Urban Growth Plan and, ultimately, a sustainable community.**
 - A developer/ consortium must present a business plan to Council which includes:
 - Project delivery model including the details of the entity accountable for delivery (e.g. joint venture), decision making and authorisation processes, and access to the requisite resources to invest in both the planning and development phases. Note: Financial specifics are not required, instead Council wants to see that the project delivery model is well thought out and able to be realised.
 - Implementation plan from PSP to construction phases, including time frames..
 - Nominated consultants proposed to deliver the PSP and the co ordinating mechanism proposed for integrating these groups..
 - Council will not release this information to other parties and it will not be made available via FOI requests.

INITIATING THE PREPARATION OF A PRECINCT STRUCTURE PLAN

September 2008



ARMSTRONG CREEK GEEELONG'S GROWTH AREA

3. Servicing- The total precinct must be able to be serviced in accordance with the Integrated Infrastructure Delivery Plan, August 2008 (IIDP), without affecting the baseline staging of service delivery reflected in the IIDP.

- A formal in principle written agreement from all servicing authorities is required to the extent that the whole precinct can be serviced without compromising the delivery of the baseline staging plan reflected in the IIDP. Written agreement must be provided from the following servicing authorities: Barwon Water, Powercor, City of Greater Geelong (drainage and collector roads). Agreement is also required from VicRoads and Department of Transport if the precinct includes railway assets or arterial roads.
- The agreement must state that the servicing authorities can service the precinct in the agreed timeframes.
- Where alternative methods or interim solutions are proposed, documentation must be provided demonstrating the servicing authority's in principle agreement that the proposed solution is realistic and deliverable.

Council's agreement is required in writing prior to the commencement of precinct structure planning. **A developer/ consortium wishing to initiate a PSP in partnership with Council should write to Council as soon as possible, responding to the three key requirements set out above. Letters should be addressed to Meg Ferrer, Armstrong Creek Project Team, PO Box 104, Geelong Vic 3220. It is intended that by the end of November 2008 Council will have agreed and signed off the nominated precincts for work in 2009.**

Once Council has provided agreement in writing to a developer/ consortium, it will write to all property owners in the precinct advising of the partnership in place which will allow detailed planning to commence.

INITIATING THE PREPARATION OF A PRECINCT STRUCTURE PLAN

September 2008

Memorandum of Understanding (draft)

Introduction

As part of their commitment to delivering land for urban development, the Armstrong Creek Project Team, **lead consultant** and **consortia**, have established a partnership which aims to ensure that the detailed planning for the **Precinct** is undertaken in a collaborative manner and delivered as quickly as possible.

This Memorandum of Understanding (MoU) assumes that: Amendment C138 which contains the statutory framework necessary to allow for the development of the Armstrong Creek urban growth area being approved by the Minister for Planning. The Armstrong Creek Urban Growth Plan– Framework Plan being included in the Planning Scheme as an incorporated document and the Armstrong Creek Urban Growth Plan– Volume 1 being included in the planning scheme as a reference document. A local policy which directly relates to the growth area has also been included in the planning scheme at Clause 21.40. A Ministerial Amendment having applied the Urban Growth Zone to the bulk of land in the growth area. The zone has been applied to all land which was formerly in the Farming Zone.

Council's vision for the area is that 'The Armstrong Creek urban growth area will be developed into a sustainable community that sets new benchmarks in best practice urban development. Natural and cultural features will be protected and enhanced to create a distinct urban character. Armstrong Creek will become a highly sought after location for living, working and recreation, forming an attractive addition to Geelong.'

Criteria for Commencement of Precinct Structure Plan Process

The Armstrong Creek Project Team has been established to ensure that planning for the growth area is prioritised and land is released as quickly as possible. The Project Team have audited the developer of the ********* Precinct, **consortia**, and have determined that the criterion set out in the Volume 1 document have been achieved. It has been determined that:

- **Consortia** have control of 70 percent of the precinct
- **Consortia** are committed to, and are capable of, delivering the project on ground generally in line with the principles set out in the Framework Plan and the Volume 1 document.
- **Consortia** have written agreement from the servicing authorities that the precinct can be serviced in line with the IIDP, **[but out of sequence with the IIDP]. (optional)**

On this basis, the Precinct Structure Plan process for the ********* Precinct can commence. This MOU seeks to control the project to ensure that it progresses in a timely manner, with input and commitment of resources from the Armstrong Creek Project Team and an agreement to working in a collaborative manner between the Project Team and **name of lead consultant**.

1. Parties

This Memorandum of Understanding is between Council representing the partnership between the City of Greater Geelong and the Department of Planning and Community Development) and **name of lead consultant** on behalf of **consortia**.

2. Purpose

The purpose of this Memorandum of Understanding (MoU) is to provide a framework within which the parties can work together to deliver a Precinct Structure Plan for the ********* Precinct. The MoU will ensure that key milestones and outputs are agreed and the inputs and commitments from all parties are clearly understood. The MoU emphasises the collaborative manner in which the project will be developed and delivered by the parties.

The MoU reinforces the commitment of both parties having a formal amendment submitted to Council by ********* and having a decision on the amendment and appropriate controls in the planning scheme by *********.

3. Principles/ Operation

The parties agree that the partnership will be guided by the Armstrong Creek Urban Growth Plan– Framework Plan, the Armstrong Creek Urban Growth Plan (Volume 1).

The parties agree that the City of Greater Geelong will be the Planning Authority for the resultant Planning Scheme Amendment.

The parties agree that **lead consultant** has been engaged by **consortia** to undertake the detailed planning for the ********* Precinct, including engaging contractors and delivering a PSP in collaboration with the Project Team.

The parties agree that the Armstrong Creek Project Team will be the key point of contact with Council. The Project Team will liaise with Council departments and officers and provide a whole of Council response to **lead consultant**. The Project Team will also communicate any milestones and issues to the rest of DPCD/ CoGG, as necessary.

The parties agree that **the lead consultant and any sub-consultants** will liaise with the Project Team, where possible, providing a co-ordinated approach on behalf of its consultants. Where consultants need to contact the Project Team, **lead consultant** will have authorised its sub-consultants to contact the Project Team direct. It is agreed that consultants will not independently liaise with Council departments and all contact with Council will be through the Project Team.

The parties agree that the Project Team will engage the relevant working groups which have been established to provide guidance about the project and communicate any issues back to **lead consultant**.

The parties agree that a regular meeting schedule will be developed in advance and committed to. The agreed meeting schedule can be found at **Attachment 1**. The meetings will be held on a fortnightly basis (or other timeframe, as agreed) and will be used to action items that have arisen during the fortnight and agree on a way forward.

The parties agree that a workshop will be held to work on the vision for the precinct. The parties agree that a detailed constraints map will provide parameters for the design workshop which will be held over an agreed period. Following completion of the design workshop, all ideas and concepts arising from the workshop will be critically analysed before being incorporated into the draft Precinct Structure Plan (PSP).

The parties agree that the yet to be released Precinct Structure Plan Guidelines being developed by the Growth Areas Authority, or other guidelines developed by Council, will be used to develop the PSP for the ********* Precinct, unless otherwise specified by Council, and a CHMP (or other agreed process) for the entire precinct will inform the PSP.

The parties agree that the Precinct Structure Plan process will progress in line with the CoGG document 'Precinct Structure Plan Process' (**see Attachment 2**).

The parties agree that the Precinct Structure Plan for the **Precinct** will be sufficiently detailed to enable subdivision applications to be issued without further negotiation and via a streamlined permit application process. It is agreed that a comprehensive and detailed plan will be delivered to the standard normally associated with a Development Plan (**see Attachment 3** for an example). The PSP will lock in the following elements and provide cells for future subdivision:

- Collector roads and major local roads
- Arterial roads
- Connections to road network outside the precinct
- Pedestrian and cycling networks
- Different land uses
- Allocation of land for community/ recreation facilities (if required)
- Staging plan
- Open space networks (passive and active)
- Essential services strategy
- Retarding basins, quality treatment plant proposals and all stormwater infrastructure.

The parties agree that such an approach will provide flexibility for **consortium** in relation to the final subdivision layout provided that the objectives of Clause 56 of the Greater Geelong Planning

Scheme have been achieved, and to the extent possible opportunities for future innovation will be planned for in the PSP in order to avoid the need for substantial modifications plans at a later date.

The parties agree that any documents which contain privileged or commercially sensitive information will be kept confidential and will not be released to the public.

The parties agree that opportunities for innovation in sustainability, particularly relating to water, materials and energy use, and best practice development will be investigated and pursued where possible.

The parties agree that where there are disagreements about particular elements of the PSP, but the overall concept is satisfactory to the parties, the plan will be progressed and their will be an opportunity for arguments to be put to an independent review body.

4. Milestones/ Deliverables

The parties agree that the key milestones for the PSP are:

- Council audit against the criteria contained in the document 'Initiating a Precinct Structure Plan.'
- Detailed constraint mapping.
- Developer vision for the project.
- Workshop for the precinct.
- Detailed plans for the precinct-
 - Concept masterplan.
 - Preliminary draft masterplan, with draft planning controls.
- Consultation with landowners and stakeholders (non statutory consultation).
- Detailed plans
 - Draft final plan, with draft planning controls.
 - Final plan, with planning controls and rezoning (if required).
- Commence statutory phase.
- Formal consultation phase.
- Panel phase (if required).
- PSP included in Greater Geelong Planning Scheme.

5. Review Points

The parties agree that there are review points and meetings associated with each of the above key milestones (refer to Attachment 2).

6. Protocols for Working Together

This is a commitment made in good faith based on the commitment of the parties to effective communication and collaboration.

7. Term

This MoU will be current until *****.

8. Variation

The MoU may be varied by the parties with written agreement.

9. No legal effect

The parties acknowledge that the MoU is not intended to have legal effect and does not create legal relationships, rights, or obligations between the parties.

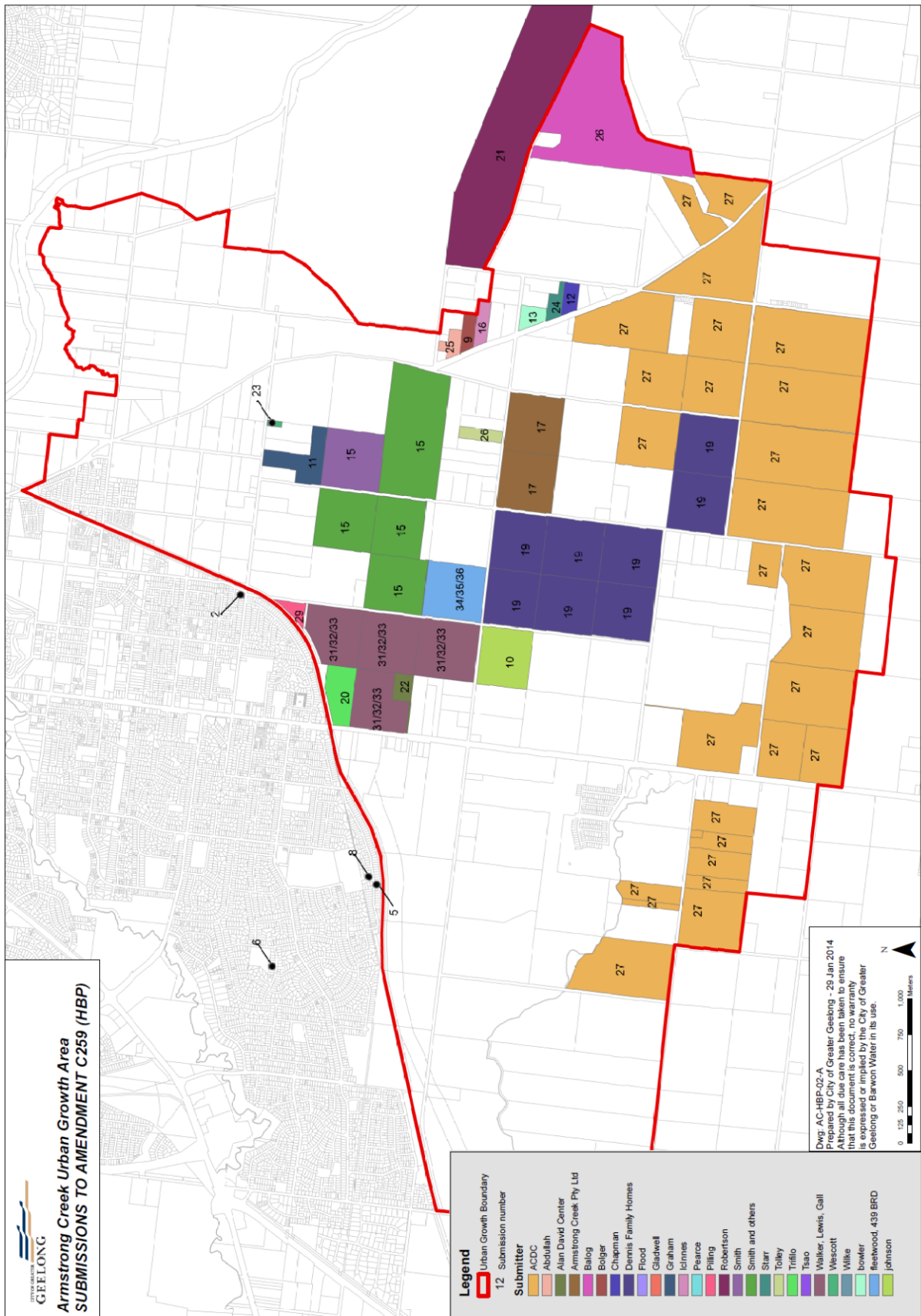
10. Signed by the parties

CoGG

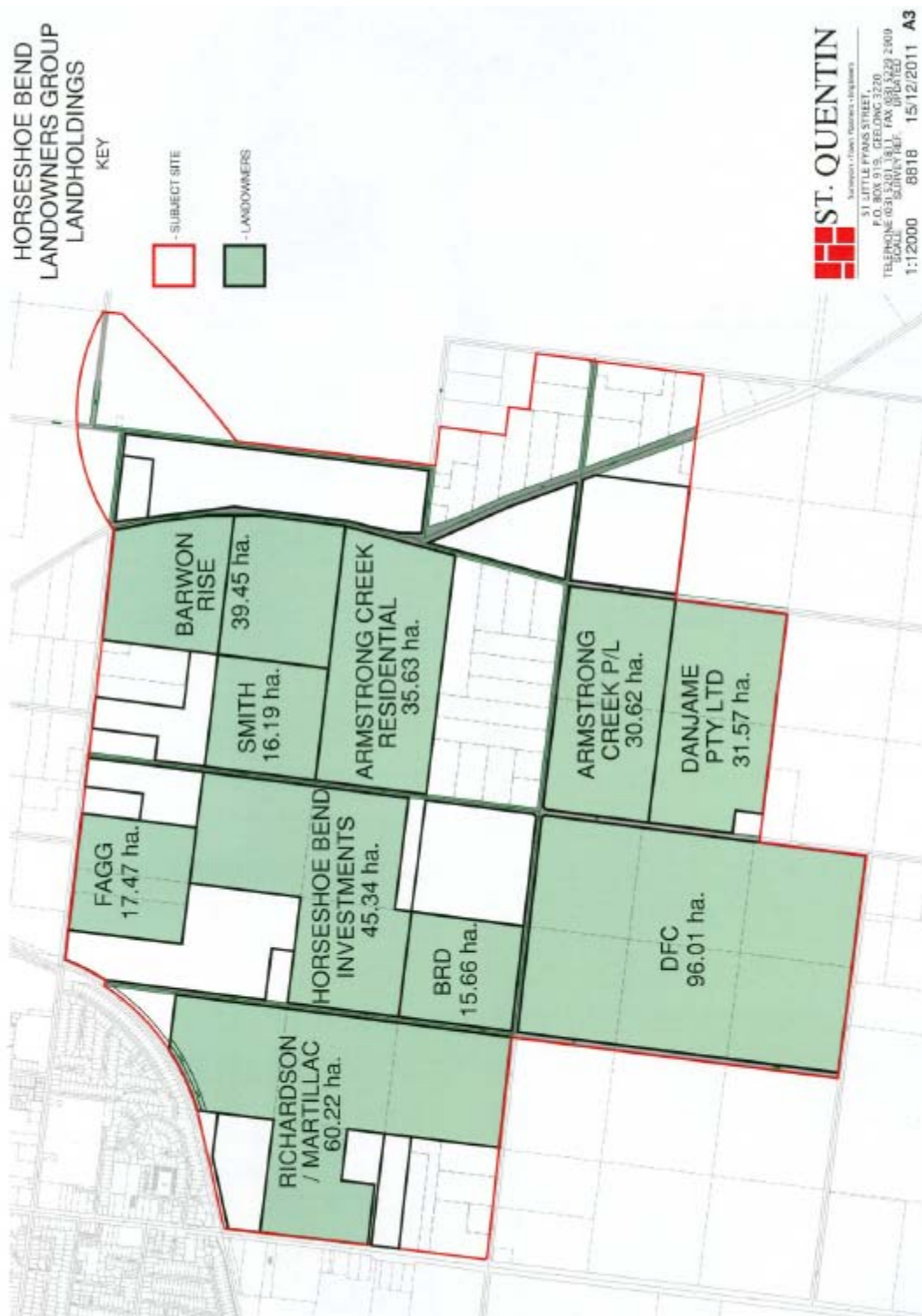
Lead consultant

Consortia

15.3 Amendment C259 – HBP – Submitter Location Map

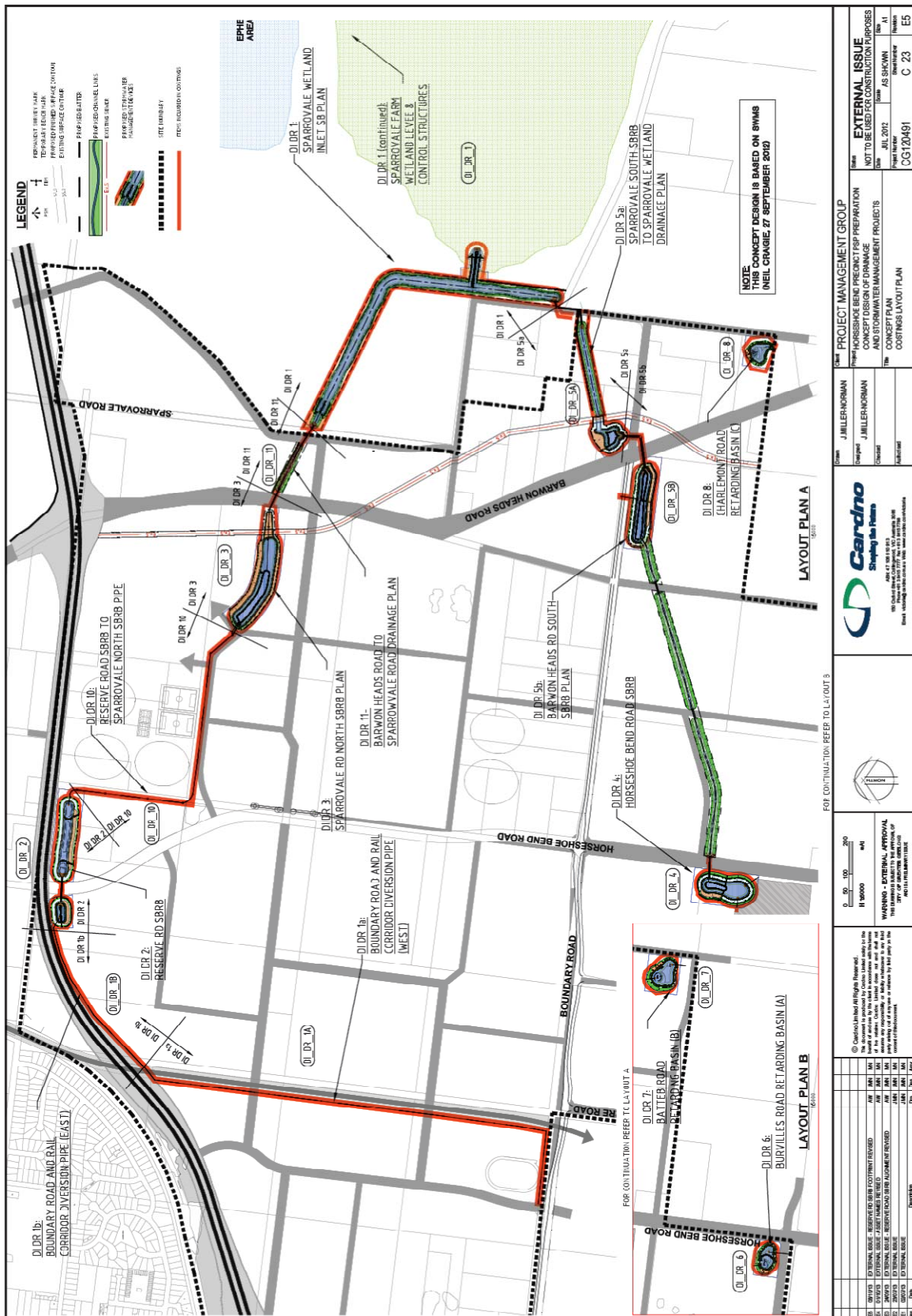


15.4 Horseshoe Bend Landowners Group – Ownership map



15.5 HBP Stormwater Management Strategy

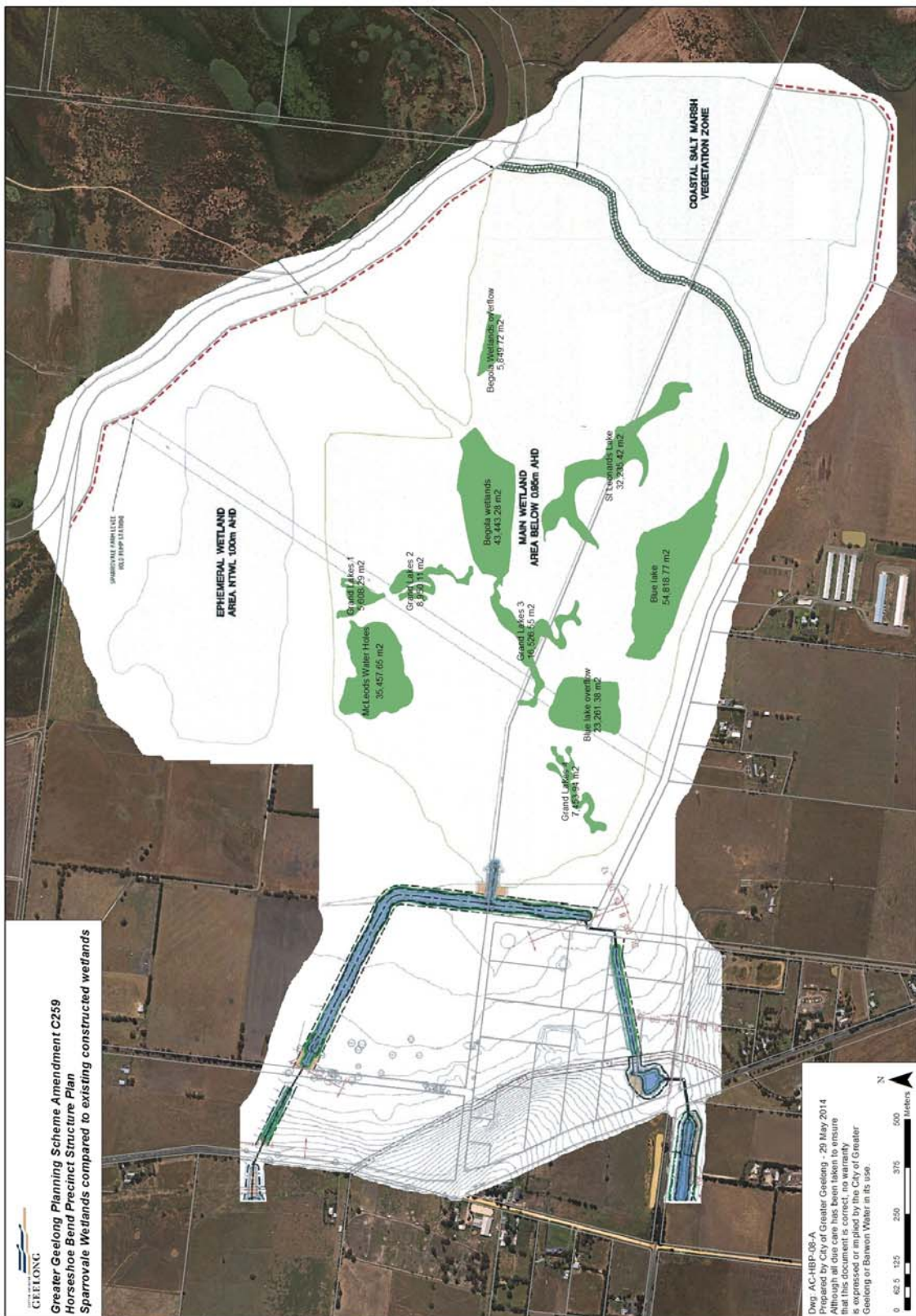
Cardno Consultants, HBPDCP Costing Layout Plans



<p>© Cardno Limited All Rights Reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Cardno Limited.</p> <p>WARNING - EXTERNAL ISSUE THIS DRAWING IS SUBJECT TO THE APPROVAL OF THE LOCAL AUTHORITY. NOT VALID FOR CONSTRUCTION</p>	<p>Scale: 1:5000 0 50 100 200 400 METERS</p>	<p>FOR CONTINUATION: REFER TO LAYOUT 3</p>	<p>Project Management Group Project: HORSeshoe Bend Precinct PSP PREPARATION Concept Design of Drainage and Stormwater Management Projects Title: CONCEPT PLAN COSTING LAYOUT PLAN</p>	<p>External Issue NOT TO BE USED FOR CONSTRUCTION PURPOSES</p>
<p>DATE: 27/09/13 DRAWN BY: AS SHAWMA CHECKED BY: J MILLER-NORMAN PROJECT NUMBER: C0120491 SHEET NUMBER: C 23 SHEET TOTAL: E5</p>	<p>DATE: JUL 2012 DRAWN BY: AS SHAWMA CHECKED BY: J MILLER-NORMAN PROJECT NUMBER: C0120491 SHEET NUMBER: C 23 SHEET TOTAL: E5</p>	<p>FOR CONTINUATION: REFER TO LAYOUT 3</p>	<p>Project Management Group Project: HORSeshoe Bend Precinct PSP PREPARATION Concept Design of Drainage and Stormwater Management Projects Title: CONCEPT PLAN COSTING LAYOUT PLAN</p>	<p>External Issue NOT TO BE USED FOR CONSTRUCTION PURPOSES</p>

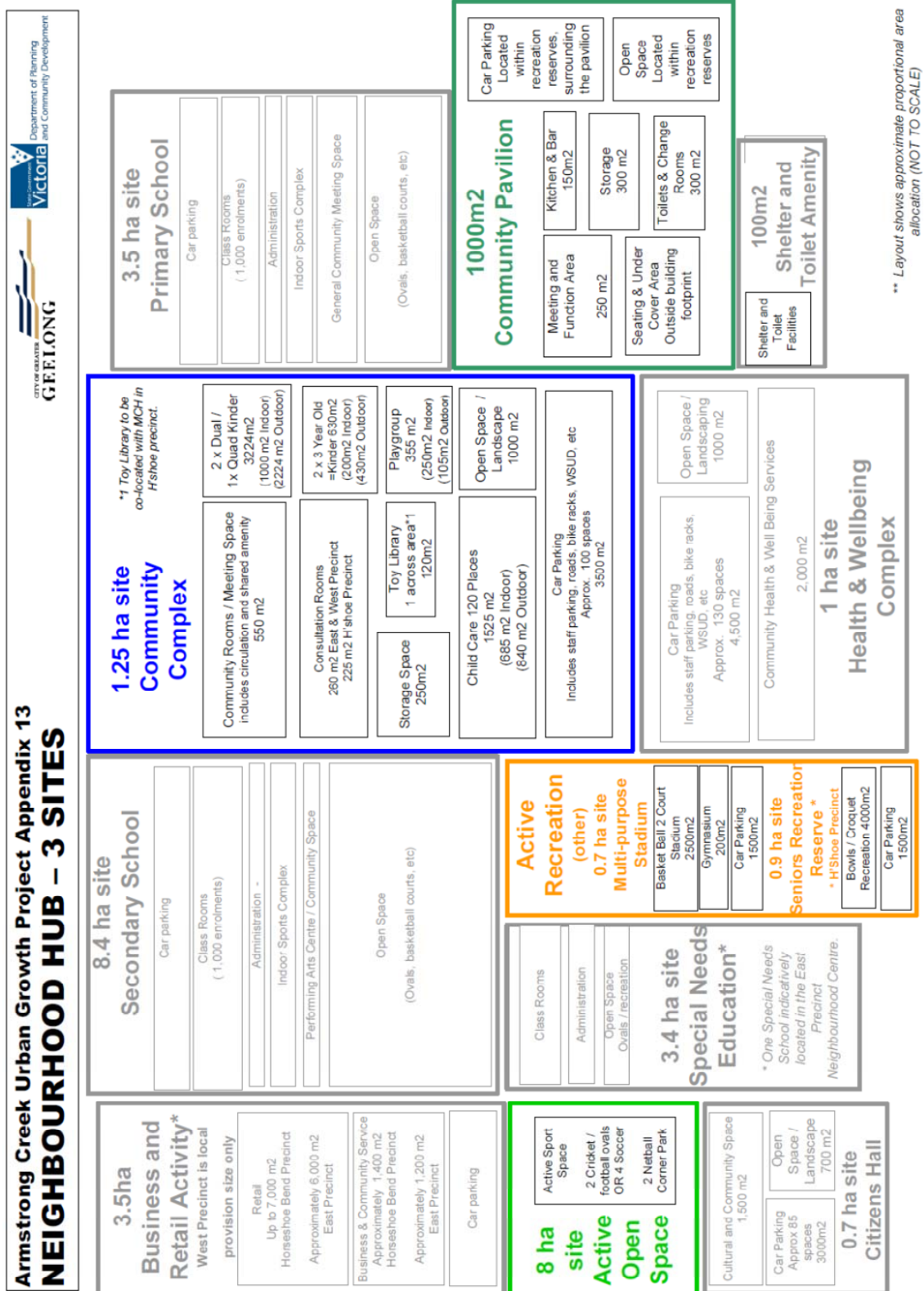
15.6 Sparrovale Wetlands – Comparison with other City of Grater Geelong Wetland Assets

The green areas overlays some of Council's largest wetland areas

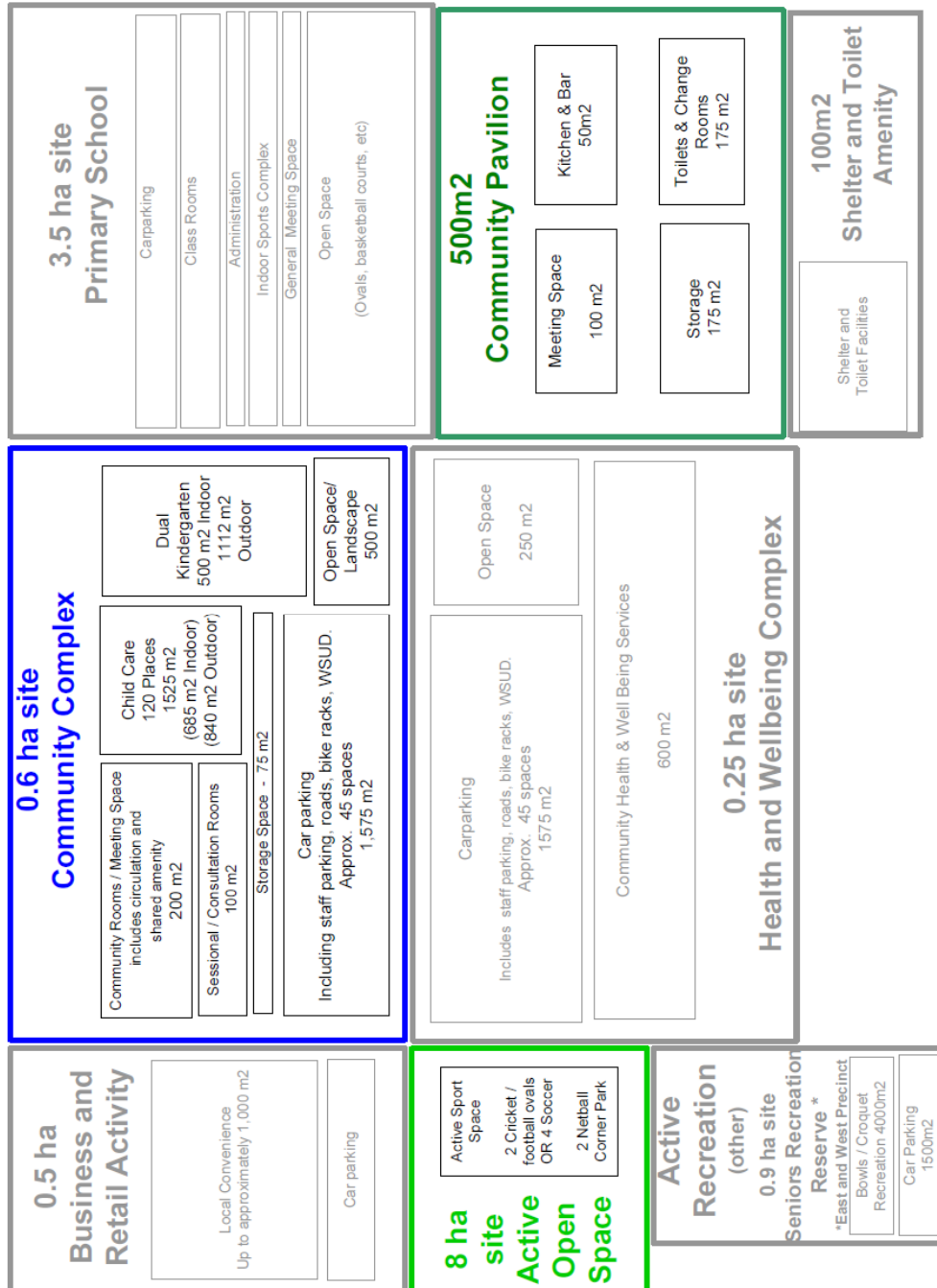


15.7 Armstrong Creek Social Interagency Delivery Plan – Appendix 13 Hub Models

- Hub models have been highlighted to reflect HBP facilities



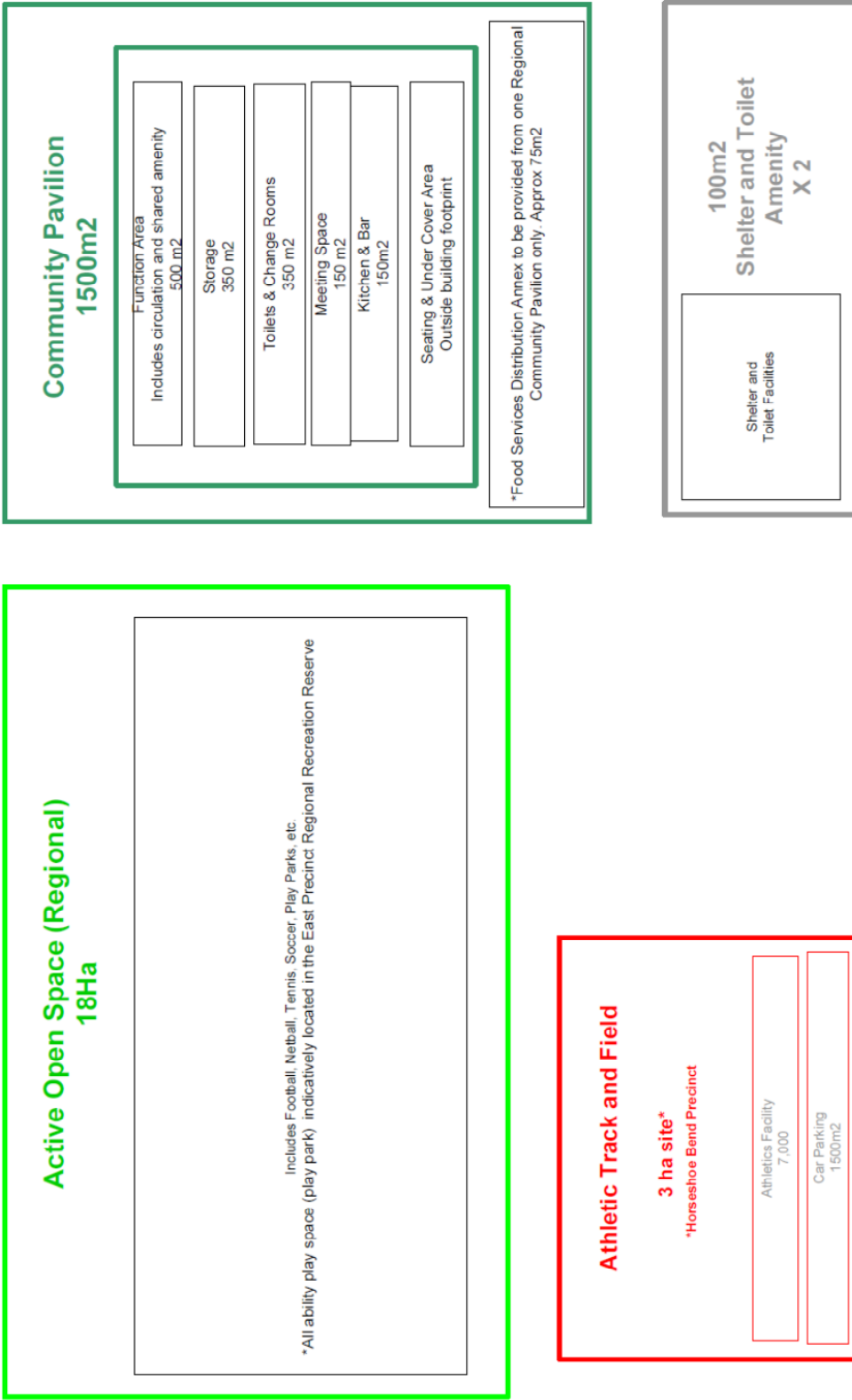
Armstrong Creek Urban Growth Project Appendix 13
LOCAL HUB – 4 SITES



** Layout shows approximate proportional area allocation (NOT TO SCALE)



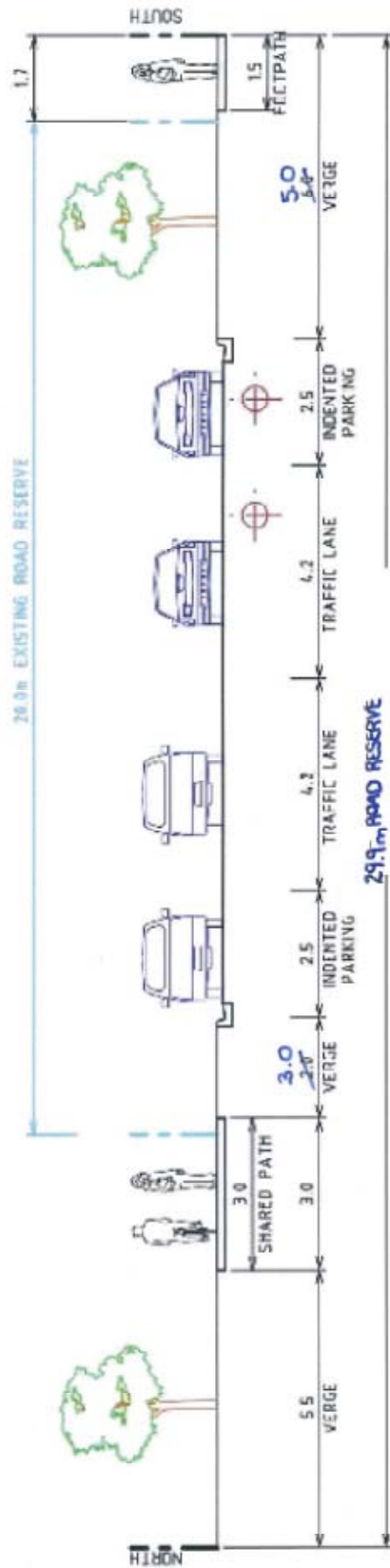
Armstrong Creek Urban Growth Project Appendix 13
REGIONAL RECREATION RESERVE HUB – 3 SITES



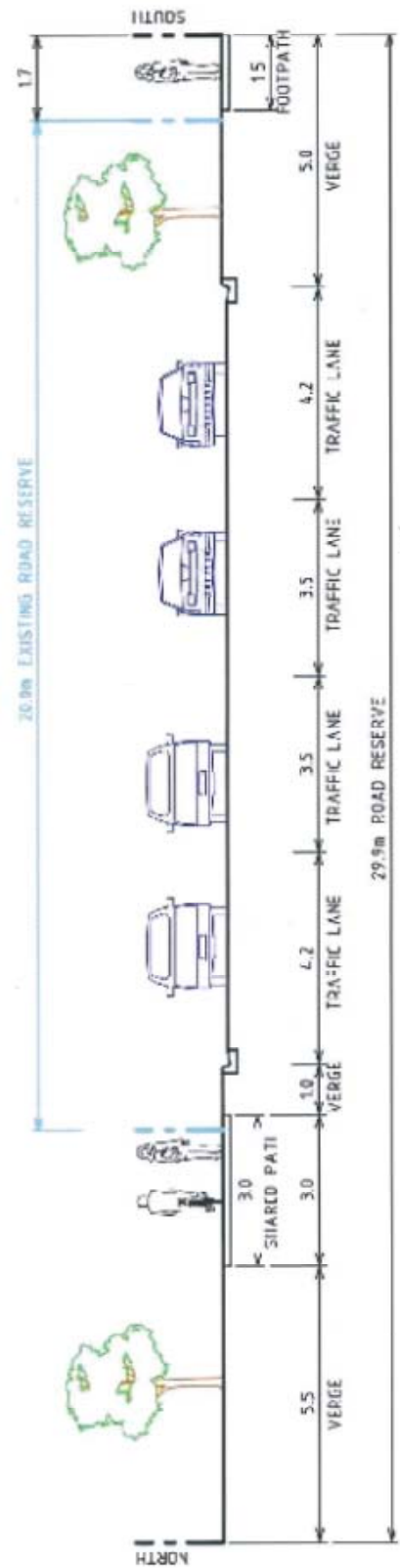
** Layout shows approximate proportional area allocation (NOT TO SCALE)

15.8 Boundary Road Cross Section Error – Horseshoe bend Road to Barwon Heads Road

Boundary Road -Horseshoe Bend Road to Barwon Heads Road (interim)



Boundary Road -Horseshoe Bend Road to Barwon Heads Road (ultimate)



15.9 Planning Panels Victoria, Guidelines No 1 – Expert Evidence

Name and Address of Expert

Robert Michael Anderson
100 Brougham Street
GEELONG VIC 3220

Expert's Qualifications

Bachelor of Civil Engineering (Hons) – 1999

Affiliations:

Member of APESMA

Experience:

I have 15 years experience working as a Civil Engineer and Project Manager and have broad experience relating to strategic land use and infrastructure planning.

My background experience includes four years working for VicRoads, primarily in freeway planning and design, three and half years with Wagga Wagga City Council as Senior Infrastructure Engineer managing an extensive asset portfolio, subdivision planning, design and capital works program and twelve months with Downer EDI Works as a construction Project Manager.

The last seven years I have worked for Geelong City Council leading the infrastructure and strategic planning component of the Armstrong Creek project, with the last 3 years spent in the role of Coordinator - Urban Growth Area Planning.

My role at Geelong City Council includes the project management of the Armstrong Creek Urban Growth Area, including precinct structure planning and development contribution plan preparation and administration.

I have also appeared as an expert witness for Amendments C214 - Armstrong Creek East Precinct Development Contributions Plan, C240 – Armstrong Creek West Precinct Structure Plan and Development Contributions Plan and C267 – Armstrong Creek Town Centre Precinct Structure Plan and Development Contribution.

Areas of Expertise:

Strategic infrastructure and land use planning, infrastructure design, development contributions (NSW and VIC), asset management and project management.

Expertise to Prepare this Report:

I am the senior member of the Armstrong Creek project team whose primary role is the preparation and implementation of Precinct Structure Plans, Development Contributions Plans and Native Vegetation Precinct Plans, and general growth area facilitation and promotion.

I have been intimately involved in the development and preparation of the documentation forming part of Amendment C259 – Horseshoe Bend Precinct Structure Plan, Development Contributions Plan and Native Vegetation Precinct Plan.

I am therefore qualified to prepare this report and expert witness statement.

Instructions:

My instructions were to provide a report that provides background to the Horseshoe Bend Precinct Structure Plan, Development Contributions Plan and Native Vegetation Precinct Plan explaining how they were developed, any background documents that informed their preparation and to address specific issues concerning:

- The process for the development of the Horseshoe Bend Precinct PSP, DCP and NVPP.
- The basis for several major design elements of the PSP – Urban Structure Plan (plan 4)
- How each of the DCP projects were identified and scoped, including an understanding of all key infrastructure required in the Horseshoe Bend Precinct (including those projects not included in the DCP)
- How apportionment was assessed for each DCP project, and
- Any specific matters that may benefit the Panel for Amendment C259

Facts, Matters and Assumptions Relied Upon:

I have relied on the following for my assessment:

- Horseshoe Bend Precinct Structure Plan (November 2013);
- Horseshoe Bend Precinct Development Contributions Plan (November 2013);
- Horseshoe Bend Native Vegetation Precinct Plan (October 2013);
- Amendment documents for C259 to the Greater Geelong Planning Scheme;
- Horseshoe Bend Precinct Development Contributions Plan Costing, Prowse Quantity Surveyors (21 November 2013), which includes concept design and costing information prepared by:
 - Cardno Consultants – Intersections Costing (22 October 2013)
 - Cardno Consultants – Wetland / Drainage Infrastructure costing (3 October 2013)
 - City of Greater Geelong – Sparrovale Wetland Management Plan and 10 Year Implementation Works (1 October 2013)
- Horseshoe Bend Precinct - DCP Land Valuation, Charter Keck Cramer (8 November 2013).
- Armstrong Creek East Precinct Structure Plan (Amendment C206);
- Armstrong Creek East Precinct Development Contributions Plan (amendment C214);

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- Armstrong Creek West Precinct Structure Plan & Development Contributions Plan (amendment C240);
 - Armstrong Creek Town Centre Precinct Structure Plan & Development Contributions Plan (amendment C267);
 - Greater Geelong Planning Scheme.
 - My extensive familiarity with the site and the surrounding area;
 - My involvement in the day-to-day preparation and review of the Armstrong Creek PSPs, DCPs, NVPPs and Amendment documentation.
 - Relevant experience.

Documents Taken into Account:

See above.

Identity of Persons Undertaking the Work:

Robert Anderson.

Summary of Opinions:

Refer to Section 12 - Conclusion.