

Horseshoe Bend Precinct Development Contributions Plan

SEPTEMBER 2014 | CITY OF GREATER GEELONG

FINAL

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1. INTRODUCTION

1.1. BACKGROUND

This Horseshoe Bend Precinct Development Contributions Plan (DCP) has been developed to support the funding of infrastructure in the Horseshoe Bend Precinct (HBP).

The Horseshoe Bend Precinct Structure Plan (PSP) has been prepared by St Quentin Consulting in conjunction with the City of Greater Geelong (CoGG).

The PSP sets the long - term strategic framework for the development of the Precinct in relation to:

- Land use (such as residential and commercial development of varying densities and types, open space and community facilities);
- Transport (such as the road network and proposed public transport); and
- Open space and environmentally sensitive areas.

This DCP applies to the entire Precinct as a single area and requires contributions from all landowners/developers in the Precinct. Public land is excluded from the Net Developable Area and therefore development contributions.

Improved social, economic, environmental and urban design outcomes are achieved through the provision of infrastructure early in the development of a new community. The delivery of key infrastructure in a timely and efficient manner is fundamental to sustainable outcomes in urban growth areas such as the Armstrong Creek Urban Growth Area.

1.2. INFRASTRUCTURE DELIVERY

The Armstrong Creek Integrated Infrastructure Delivery Plan (2009) identifies a range of civil and social infrastructure required as part of the development of the Armstrong Creek Urban Growth Area (ACUGA). The ACUGA includes 7 precincts: Marshall Precinct, North East Industrial Precinct, Horseshoe Bend Precinct, Major Activity Centre Precinct (now known as the Armstrong Creek Town Centre), Armstrong Creek West Precinct, Western Industrial Precinct and Armstrong Creek East Precinct.

These infrastructure items were identified to support the entire Armstrong Creek Urban Growth Area. Although the catchment areas for individual infrastructure items may overlap or cross Precinct boundaries, the overall infrastructure provision for the Growth Area is appropriate for the total projected development, population and employment levels. Therefore, each Precinct is required to contribute via development contributions towards local infrastructure items located within the Precinct.

This DCP will collect levies to ensure that the infrastructure set out in the Integrated Infrastructure Delivery Plan relevant to the Precinct is funded to enable CoGG to provide the infrastructure. However, this DCP is not the sole source of funding for all infrastructure in the Precinct. The full range of infrastructure identified will only be delivered if infrastructure is provided by a variety of funding sources.

The infrastructure items will be provided through a number of mechanisms including:

- Subdivision and development construction works by developers;

- Development contributions (Community Infrastructure Levy and Development Infrastructure Levy as shown in this DCP);
- Utility service provider contributions; and
- Capital works projects by Council, state government agencies and community groups.

Decisions have been made about the type of infrastructure which will be funded by this DCP, and these decisions are in line with all *Ministerial Directions for Development Contributions*.

This DCP document has been developed in accordance with the provisions of Part 3B of the *Planning and Environment Act (1987)* and the Victorian State Government *Development Contributions Guidelines (2007)*.

1.3. THE DCP AREA

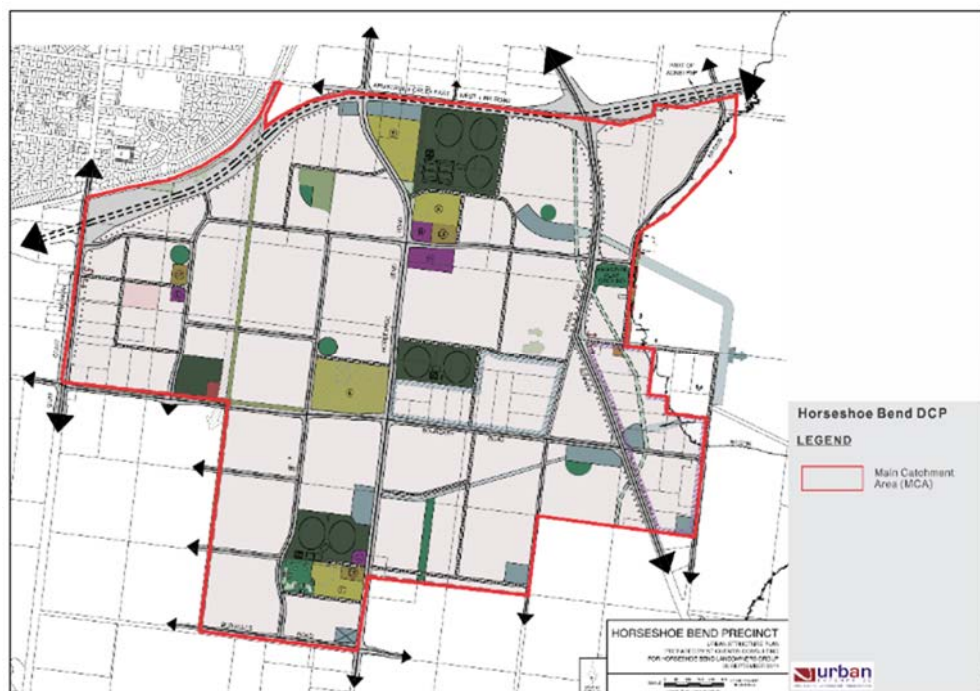
The Horseshoe Bend Precinct, otherwise referred to in this report as the Main Catchment Area (MCA), consists of land identified in Figure 1 below.

The Precinct is generally bounded by:

- Geelong Ring Road to the north;
- Burvilles Road and the Armstrong Creek East Precinct to the south;
- Surf Coast Highway and the Armstrong Creek Town Centre Precinct to the west; and
- Sparrowvale Rd and Harriott Rd to the east (old Charlemont Road).

Levies apply based on likely usage of infrastructure and future land use.

FIGURE 1 HORSESHOE BEND PRECINCT MAIN CATCHMENT AREA



Source: Horseshoe Bend Precinct Structure Plan

1.4. **DCP TIMEFRAME**

For the purposes of the DCP a 20 year life has been adopted. This period commences from the date that the DCP is incorporated into the Greater Geelong Planning Scheme.

2. STATUTORY FRAMEWORK

2.1. PLANNING AND ENVIRONMENT ACT 1987

Part 3B of the *Planning and Environment Act 1987* outlines the statutory provisions relating to development contributions. In summary, Part 3B provides for, amongst other things:

- The inclusion of a DCP in the planning scheme, for the purpose of levying contributions for the provision of works, services and facilities (section 46I);
- The provision to impose either a development infrastructure levy or a community infrastructure levy (section 46J);
- The contents required of a DCP (Section 46K);
- The setting of limits in respect of a community infrastructure levy. In the case of the construction of a dwelling, the community levy must not exceed \$900 per dwelling (section 46L);
- The provision for the Minister to issue written directions relating to the preparation and content of a DCP (section 46M);
- The collection of a development infrastructure levy, by way of a condition on a planning permit either requiring the payment of a levy within a specified time, or entering into an agreement to pay the levy within a specified time (section 46N).

2.2. STATE PLANNING POLICY CONTEXT

The Minister's Direction dated 15 May 2003 outlines what may be funded with a development contribution levy, namely:

- Acquisition of land for roads, public transport corridors, drainage, public open space, community facilities;
- Construction of roads, including bicycle, footpaths and traffic management devices;
- Construction of public transport infrastructure, including fixed rail infrastructure, railway stations, bus stops and tram stops;
- Basic improvements to public open space, including earthworks, landscaping, fencing, seating and playground equipment;
- Drainage works;
- Buildings and works for maternal and child health centre, child care centre, kindergarten or a combination of these.

A second Minister's Direction was released on 25 January 2012, which specifies that: "*a development contributions plan must not impose a development infrastructure levy or a community infrastructure levy in respect of the development of land for a non-government school.*"

GUIDELINES

The Victorian State Government has published a set of documents which make up the *Development Contributions Guidelines (2007)*. The *Development Contributions Guidelines (2007)* are available through the Department of Transport, Planning and Local Infrastructure (DTPLI) website. These

documents provide guidance as to how DCPs are to be prepared and administered including the matters that DCPs are to consider.

3. LOCAL STRATEGIC CONTEXT

3.1. LOCAL PLANNING CONTEXT

A number of strategic planning documents have been prepared by, or on behalf of CoGG that identify the need, standard and costs for the infrastructure items that are included in this DCP.

The strategic documents that have informed the provision of infrastructure items to be financed by the DCP are:

- *Horseshoe Bend Precinct Structure Plan*, St Quentin Consulting (November 2013);
- *Armstrong Creek Integrated Infrastructure Delivery Plan*, City of Greater Geelong (2009);
- *Armstrong Creek Social Integrated Infrastructure Delivery Plan*, City of Greater Geelong (2009);
- *Transport and Engineering Planning for Horseshoe Bend Precinct*, Cardno (2013)
- *Horseshoe Bend Precinct Traffic Impact Assessment*, Cardno (2013);
- *Sustainable Communities - Infrastructure Development Guidelines*, City of Greater Geelong (October 2010);
- *Horseshoe Bend Precinct Costing Summary*, Prowse QS (1 Sept 2014);
- *Horseshoe Bend Precinct Stormwater Management Plan*, Neil M Craigie (October 2013);
- *Charter Keck Cramer Land Valuations* (October 2013) and Addendum letter (24/09/2014).

Some infrastructure items are shared across multiple Armstrong Creek Precincts, therefore existing approved DCPs and supporting documents have been used in the preparation of this DCP, including:

- *Armstrong Creek East Precinct Structure Plan and Development Contributions Plan*, City of Greater Geelong (November 2011);
- *Armstrong Creek West Precinct Structure Plan and Development Contributions Plan*, City of Greater Geelong (February 2013);
- *Armstrong Creek Town Centre Precinct Structure Plan and Development Contributions Plan*, City of Greater Geelong (Exhibition Version 2013).

This DCP has been prepared in close consultation with Council officers from relevant departments of the City of Greater Geelong. Council officers have also provided strategic planning information and advice regarding costs for this DCP where appropriate.

4. NEED AND NEXUS

4.1. INTRODUCTION

Council has identified a need for each of the community and development infrastructure items that have been included in this DCP. Council has identified that each item is needed in order to provide for the wellbeing, health and safety of the future community.

The cost apportionment methodology adopted in this DCP relies on the nexus principle. The Main Catchment Area (MCA) for this DCP is deemed to have a nexus with an infrastructure item if the occupants of the MCA are likely to make use of the infrastructure item.

In order to fairly levy developers achieving varying densities while maintaining financial certainty for Council, a standard 'per hectare of net developable land' demand unit is used for the Development Infrastructure Levy (DIL).

A standard 'per dwelling' demand unit is used for the calculation of the Community Infrastructure Levy (CIL).

The land area within the MCA and the projected dwelling yield are outlined in this section.

4.2. LAND BUDGET

Table 1 shows the budget of allocated land uses for the MCA. A detailed land budget by title boundary is shown in Appendix A, along with a map showing the location of each title within the MCA.

TABLE 1 LAND BUDGET SUMMARY

	Ha
Total Precinct Area	637.695
Roads and Transport	58.722
Encumbered land available for recreation	36.878
Education	22.282
Existing Uses	4.505
BW Air Treatment Facility	0.224
Proposed PAO (Sub-Station & PPV Site)	0.616
Redundant Sewer Easement	0.118
Gross Developable Area	514.350
Active Open Space - unencumbered	38.472
Passive Open Space - unencumbered	8.949
Community facilities	2.850
Net Developable Area	464.079
Residential	459.079
Activity Centres	5.000

Source: Horseshoe Bend Precinct Structure Plan

4.3. RESIDENTIAL DWELLING YIELD

The Horseshoe Bend Precinct is expected to contain dwellings at a range of densities including conventional density, and medium and higher densities within close proximity to the retail, commercial and community facilities. Table 2 shows the dwelling projections for the Precinct by sub-precincts.

The PSP provides details regarding residential development assumptions.

TABLE 2 DWELLING PROJECTIONS

	Residential NDHa	Dwellings/Ha	No. of Dwellings
Sub-Precinct A	72.284	17	1,229
Sub-Precinct B	24.852	12	298
Sub-Precinct C	23.779	12	285
Sub-Precinct D	66.663	18	1,200
Sub-Precinct E	271.501	15	4,073
Total Precinct	459.079		7,085

Source: Horseshoe Bend Precinct Structure Plan

4.4. COMMERCIAL DEVELOPMENT PROJECTIONS

The Horseshoe Bend Precinct will include one Neighbourhood Activity Centre (NAC) and two Local Activity Centres (LAC). Floorspace estimates for these Activity Centres are preliminary - as such for the purposes of this DCP all developable residential and commercial land will be levied based on Net Developable Area.

Table 3 shows the Net Developable Area allocated to the 1 NACs and 2 LACs (see detailed Land Budget in Appendix A for locations).

TABLE 3 ACTIVITY CENTRE PROJECTIONS

	NDHa
Neighbourhood Activity Centre (1)	4.000
Local Activity Centre (2)	1.000
Total Activity Centres	5.000

Source: Horseshoe Bend Precinct Structure Plan

4.6. DEMAND UNITS

In this DCP, one dwelling equates to one demand unit for the CIL, and 1ha of NDA equates to one demand unit for the DIL. The total number of demand units is shown in Table 4.

TABLE 4 DEMAND UNITS

Levy Category	Unit	Demand Unit
DIL	NDA - Residential	459.079
DIL	NDA - Activity Centres	5.000
DIL	NDA Total	464.079
CIL	Dwellings	7,085

Source: Urban Enterprise, 2014

5. INFRASTRUCTURE ITEMS TO BE FUNDED BY THE DCP

5.1. DISTINCTION BETWEEN COMMUNITY AND DEVELOPMENT INFRASTRUCTURE

In accordance with the *Planning and Environment Act* (1987) and the Minister's Direction on Development Contributions, the DCP is required to make a distinction between "development" and "community" infrastructure.

Items of infrastructure of a community or social nature are to be classified as community infrastructure, whilst all other infrastructure required under the DCP is classified as development infrastructure.

Contributions relating to community infrastructure are to be made by the land owner at the time of building approval. Contributions relating to community infrastructure will be paid for at a "per-dwelling" rate. The *Planning and Environment Act* (1987) stipulates that the amount that may be contributed under a community infrastructure levy is no more than \$900 for each dwelling. If this cap is increased by the State Government in the future, Council may collect the un-capped Community Infrastructure Levy specified in this DCP up to the new cap amount.

CoGG strongly encourages landowners/developers to pay the Community Infrastructure Levy before the Statement of Compliance stage.

Contributions relating to development infrastructure are to be made by developers at the time of subdivision. Contributions relating to development infrastructure will be paid at a per-hectare of Net Developable Area rate in respect of the subdivision or development of land.

5.2. EXTERNAL DEMAND

The strategic planning undertaken to determine the requirement for infrastructure items within the DCP area has identified that some of the infrastructure items within the DCP generate usage demand from outside the Precinct - in many cases, items are part funded through DCPs for other Armstrong Creek Precincts.

Additional information including the apportionment of costs for each infrastructure item is provided in Appendix B: DCP project infrastructure sheets.

In all other cases where there is external demand not recovered by a DCP, funds will be sought from alternative sources, including general rates, and Federal and State government funding.

5.3. COMMUNITY INFRASTRUCTURE ITEMS

Strategic planning undertaken by the CoGG has identified a requirement for the following community infrastructure item:

- CI_OS_1 - Regional Active Open Space - Community Pavilion;
- CI_OS_2 - Central Active Open Space - Community Pavilion;
- CI_OS_3 - Southern Active Open Space - Community Pavilion;
- CI_OS_4 - Western Active Open Space - Community Pavilion.

Details regarding these items are provided in Table 7 of this document.

5.4. DEVELOPMENT INFRASTRUCTURE ITEMS

Strategic planning undertaken by the CoGG has identified a requirement for 73 development infrastructure items. These development infrastructure items can be divided into seven infrastructure categories, being:

- Land;
- Roads and Intersections;
- Trails;
- Open Space;
- Community Facilities;
- Drainage; and
- Planning.

The project number and description of each item has been summarised in Table 7.

5.5. INFRASTRUCTURE LOCATION MAPS

The location of each infrastructure project is shown on the maps in Figures 2 - 7.

Appendix B - DCP Infrastructure Project Sheets provides further detail on each of these projects in terms of the costing, apportionment and strategic justification of each item.

FIGURE 2 LOCATION OF LAND ITEMS

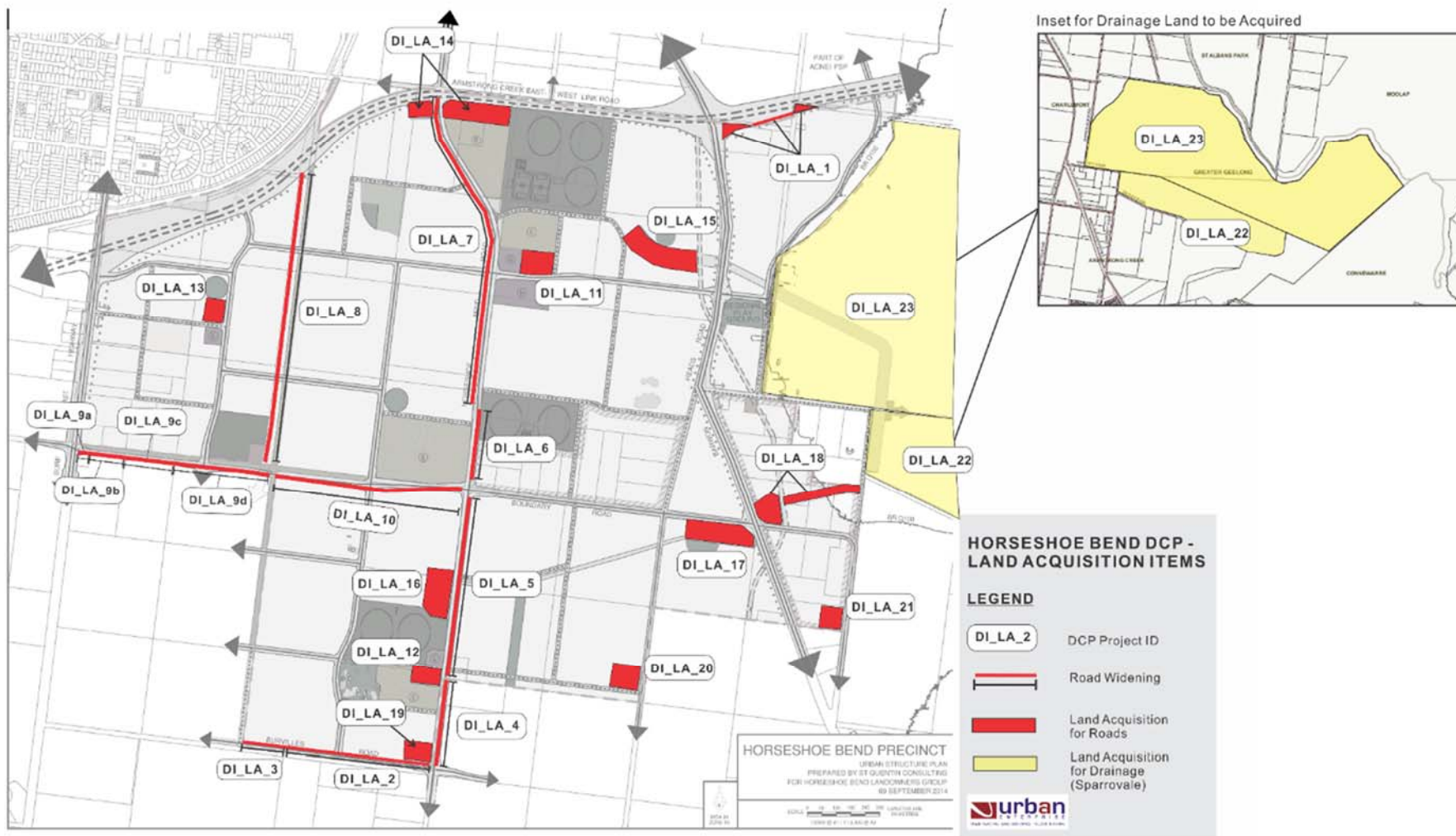


FIGURE 3 LOCATION OF ROAD AND INTERSECTION ITEMS

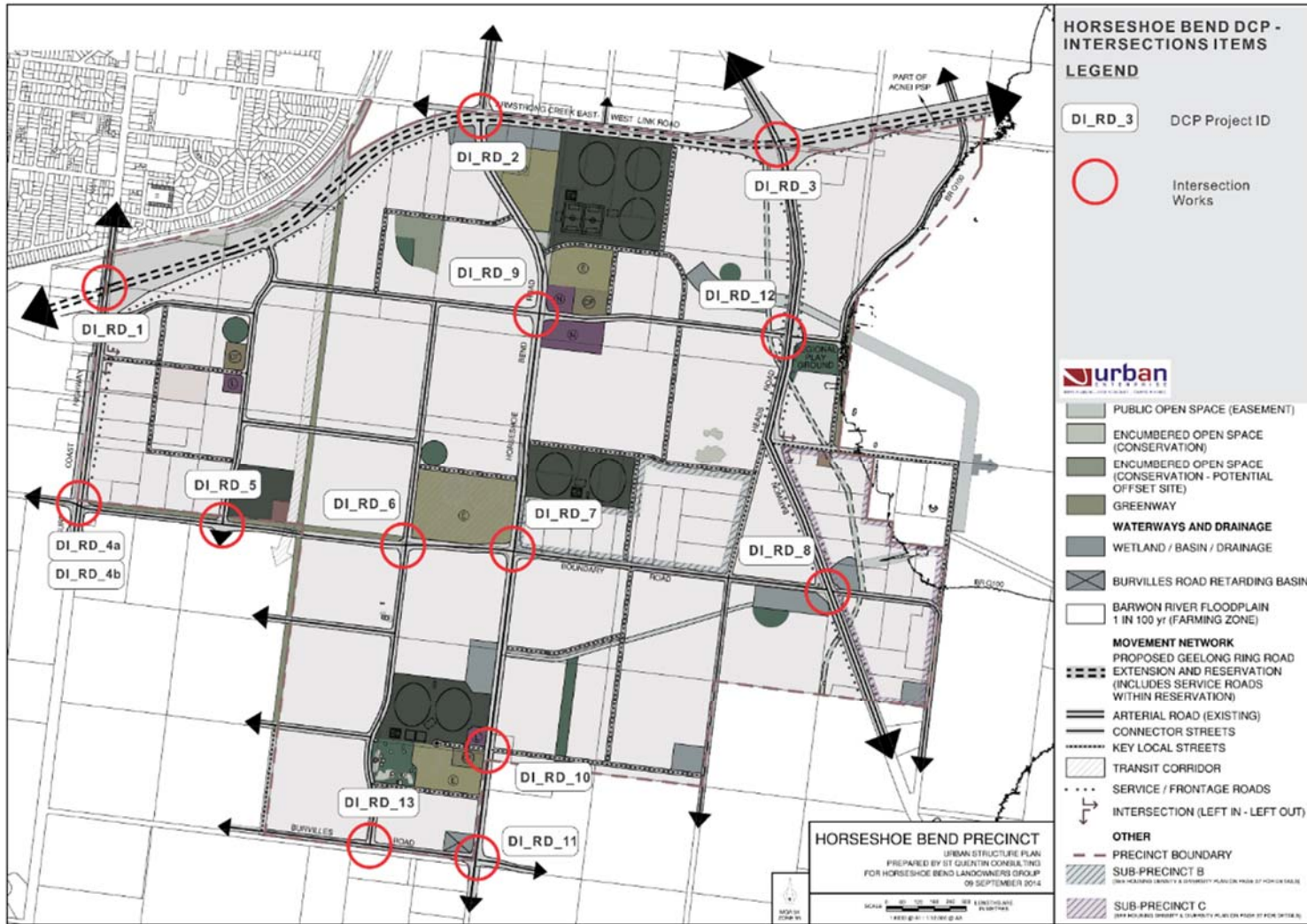


FIGURE 4 LOCATION OF TRAIL ITEMS

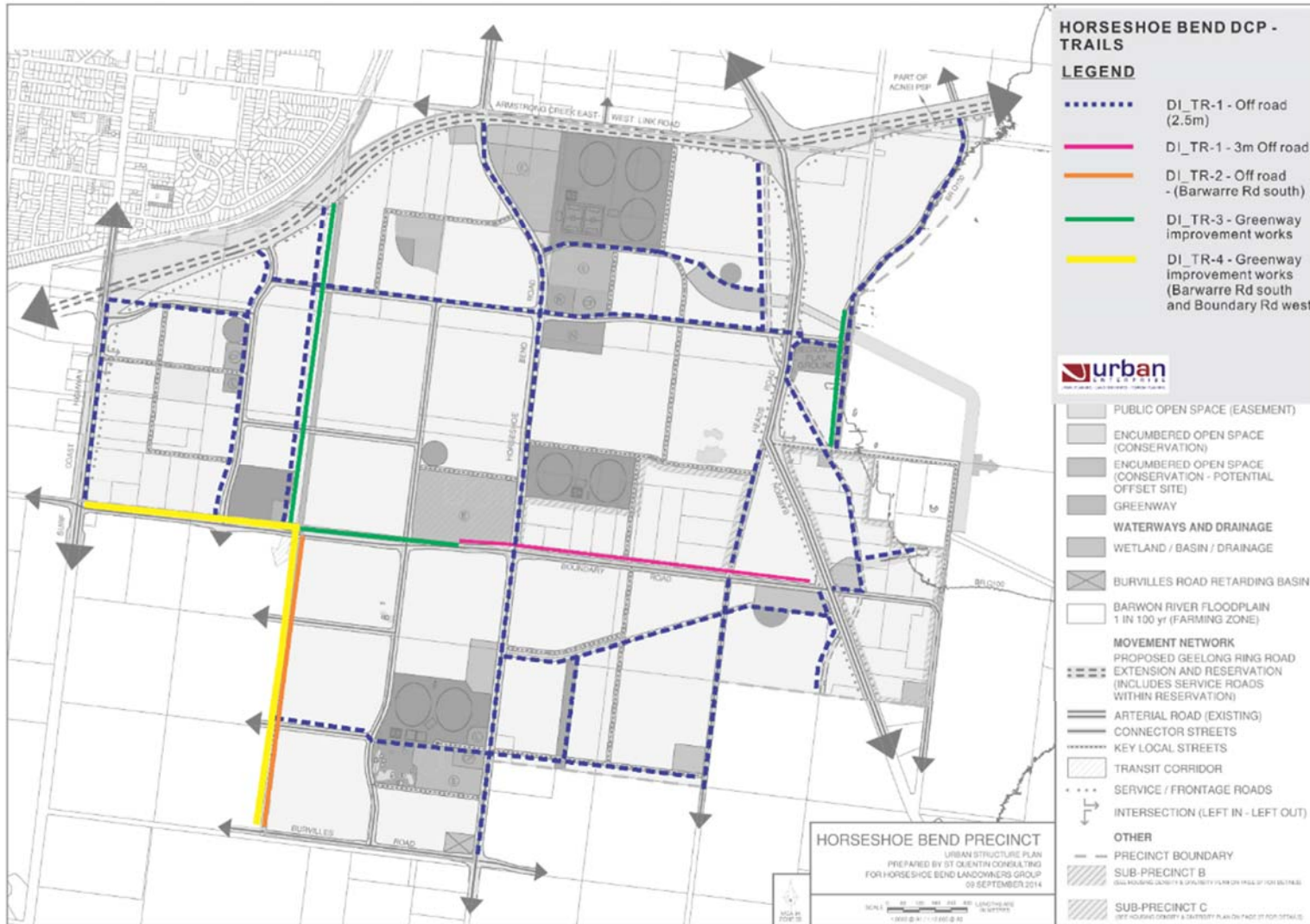


FIGURE 5 LOCATION OF OPEN SPACE ITEMS

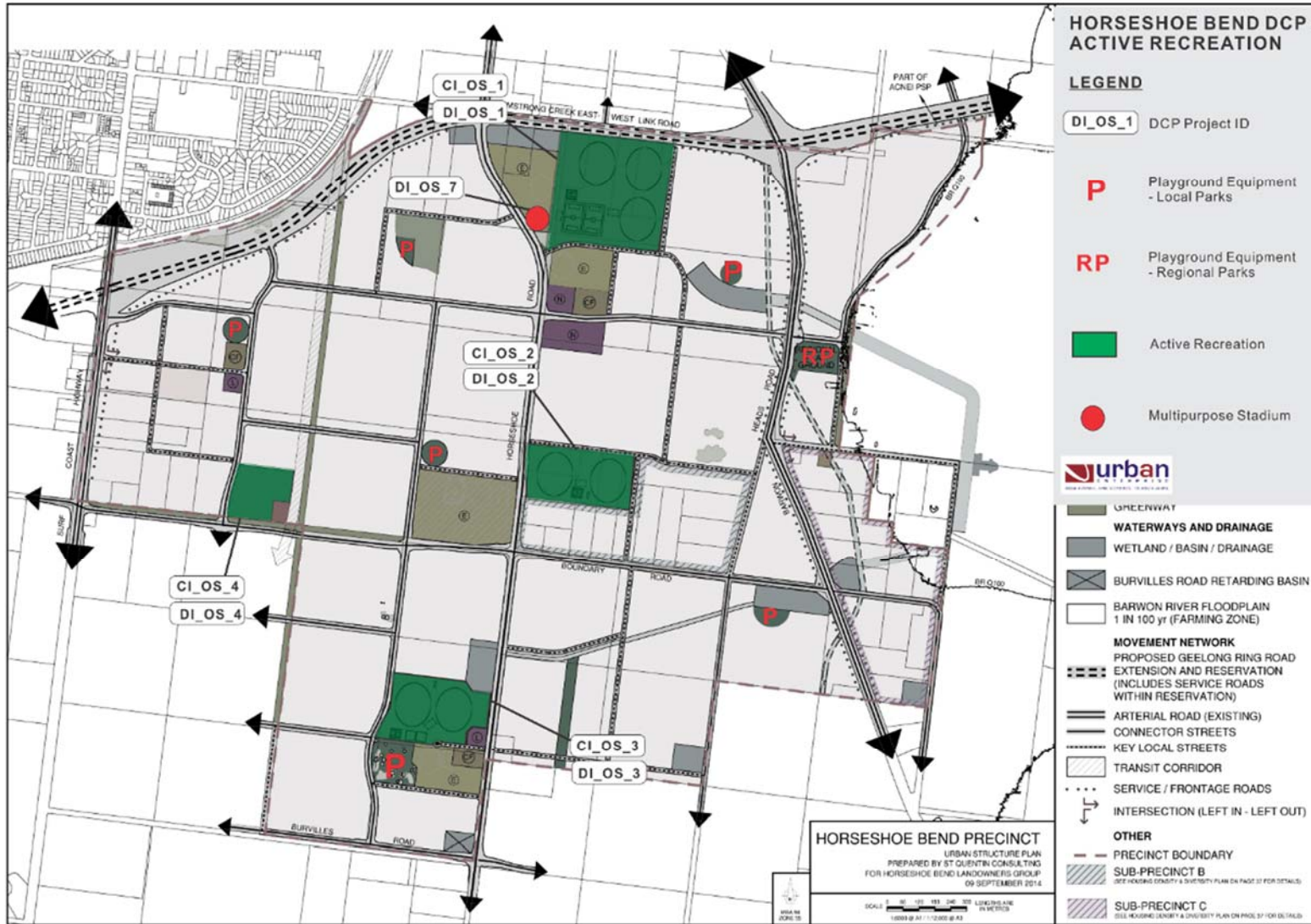


FIGURE 6 LOCATION OF COMMUNITY ITEMS

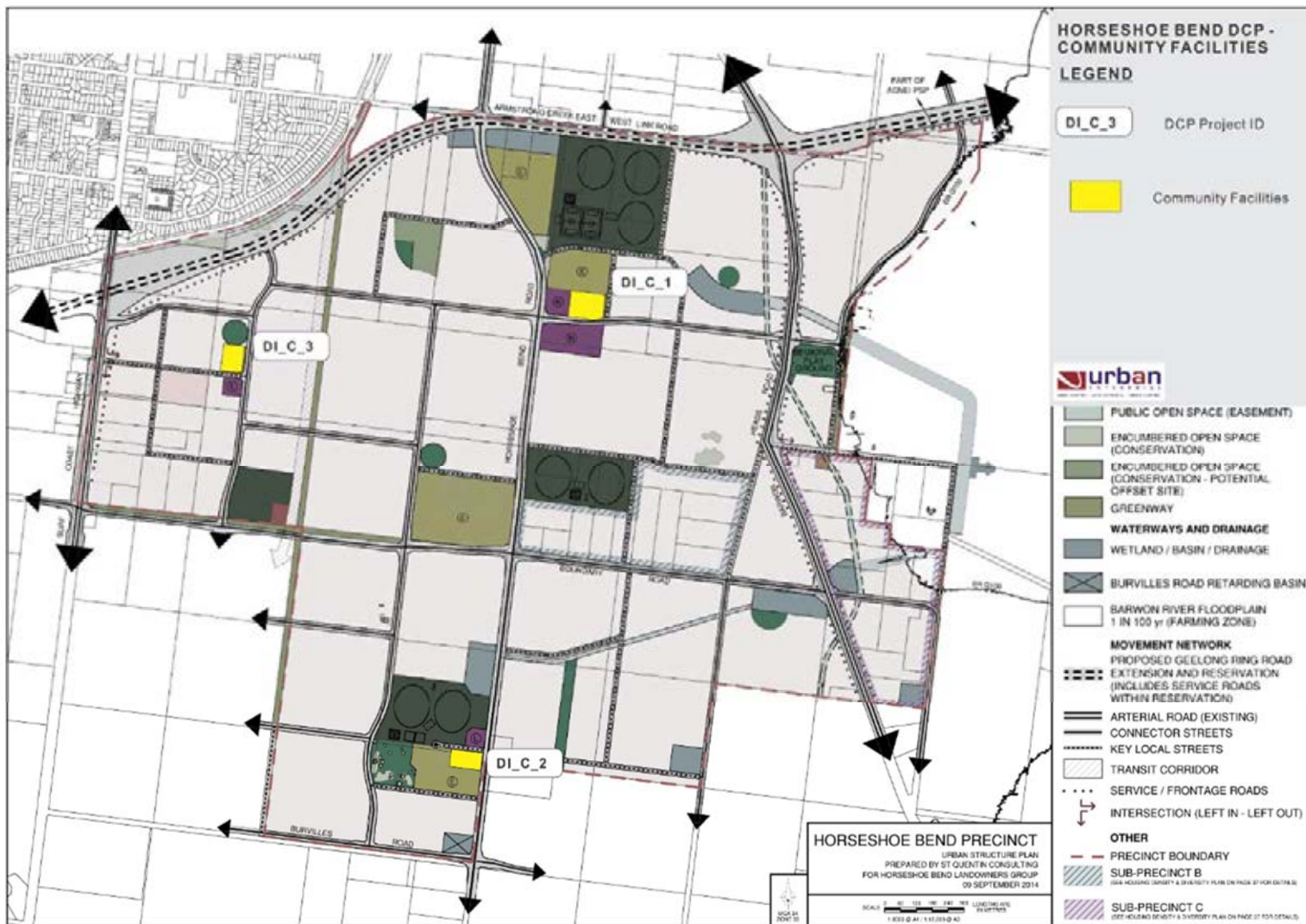
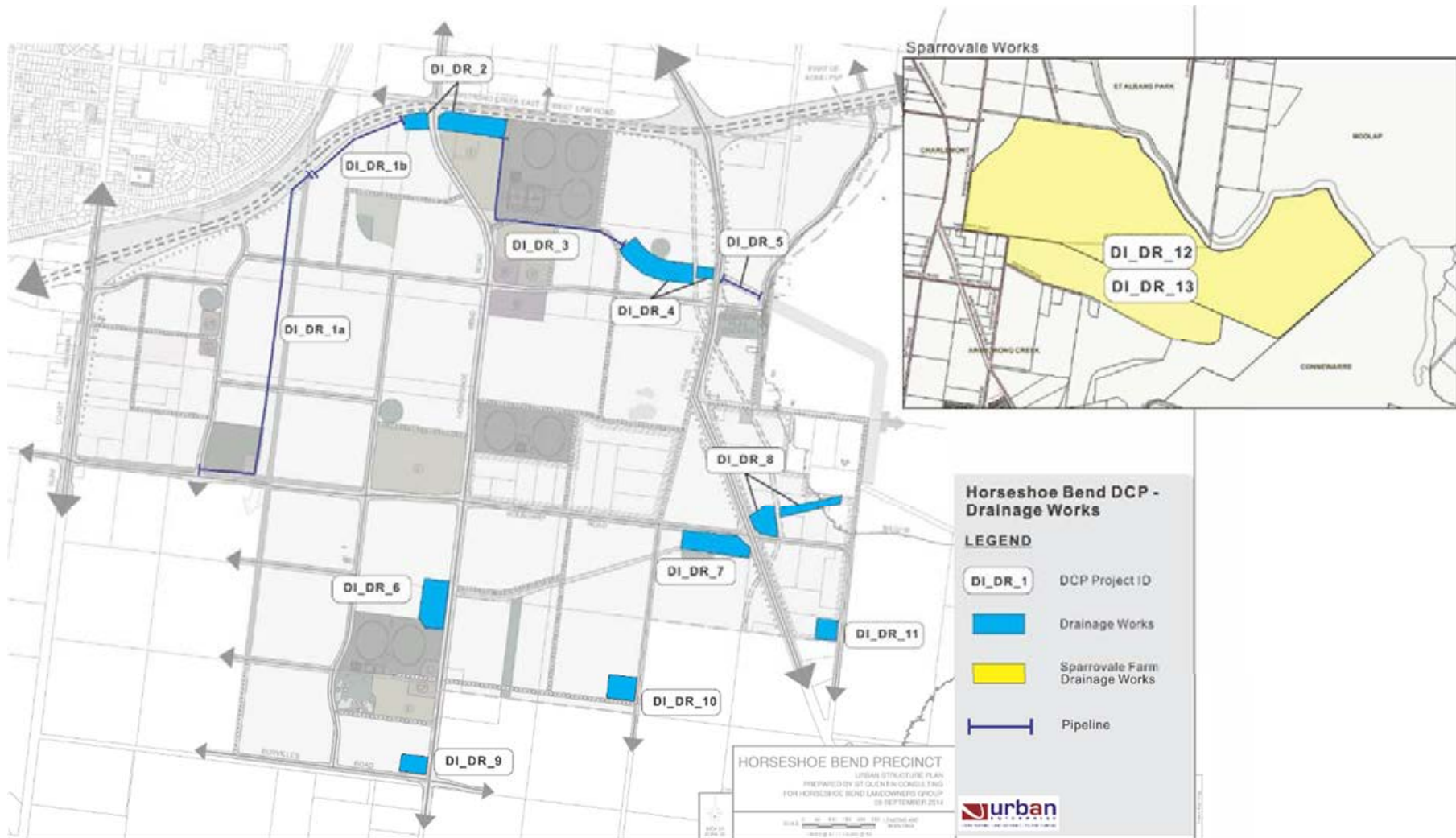


FIGURE 7 LOCATION OF DRAINAGE ITEMS



6. CALCULATION OF LEVIES

6.1. METHOD OF CALCULATING LEVIES

The DCP Infrastructure Project Sheets in Appendix B identify the levies assigned to each infrastructure item. The method of calculation is described in this section.

6.1.1. PROJECT COSTS

Each item in the DCP has a cost specified for either capital works or land. These costs are listed in Appendix B - DCP Infrastructure Project Sheets. The costs have been calculated as at July 2012 and will be indexed annually in accordance with the method specified in this DCP.

6.1.2. EXTERNAL USAGE

For some infrastructure projects there is a proportion of usage generated from areas external to the MCA of the DCP. For each item in the DCP, the proportion of usage attributable to the external area has been specified in the DCP Infrastructure Project Sheets.

The proportion of costs attributable to external use is subtracted from the total project cost of an infrastructure item to give the cost attributable to the MCA for each infrastructure item.

6.1.3. COST APPORTIONMENT METHODS

The cost of each of the infrastructure items has been apportioned based upon the likelihood that an item will be used by residents of the main catchment area of the DCP.

The method and justification for the cost apportionment that has been used for each infrastructure item is outlined in the DCP Infrastructure Project Sheets (Appendix B).

6.2. DEVELOPMENT CONTRIBUTION RATES PER DEMAND UNIT

A summary of the community and development contributions that are required to be made are outlined in Table 4 and Table 5. These contributions are in July 2012 dollars. Table 5 and Table 6 will be indexed annually in accordance with the method specified in this DCP.

The required Community Infrastructure Levy (CIL) is outlined in Table 5. The Community Infrastructure Levy is subject to the \$900 cap per dwelling if the indexed amount exceeds \$900 during the life of the DCP.

The required Development Infrastructure Levy payable by infrastructure type per demand unit is outlined in Table 6.

All development is subject to the Development Infrastructure Levy including but not limited to retail, commercial and residential. Only residential dwellings are subject to the Community Infrastructure Levy.

It should be noted that the development infrastructure levy in this DCP includes contributions towards drainage items as the City of Greater Geelong is the drainage authority.

TABLE 5 COMMUNITY INFRASTRUCTURE LEVY PER DWELLING

Cost to MCA (\$)	Dwellings	Levy per dwelling (\$)
6,047,733.20	7,085	853.60

Source: Urban Enterprise, 2014

TABLE 6 DEVELOPMENT INFRASTRUCTURE LEVY PER DEMAND UNIT

	Cost to MCA (\$)	Residential DIL (\$)	Commercial DIL (\$)
Land	\$18,273,016	\$39,405.02	\$36,599.41
Roads and Intersections	\$24,258,782	\$52,272.96	\$52,272.96
Trails	\$4,951,720	\$10,786.20	\$0.00
Community	\$22,158,973	\$48,268.32	\$0.00
Open Space	\$18,162,007	\$39,561.83	\$0.00
Drainage	\$34,543,335	\$74,434.17	\$74,434.17
Planning	\$1,440,000	\$3,102.92	\$3,102.92
Total	\$123,787,833	\$267,831.43	\$166,409.45

Source: Urban Enterprise, 2014

7. DCP ADMINISTRATION

7.1. INDEXATION OF LEVIES

Land values and construction costs listed in this DCP are in July 2012 dollars. They will be indexed annually according to the following specified method:

The Development Contribution for each demand unit must be adjusted as follows:

- In relation to the costs associated with all infrastructure items other than land, the cost must be adjusted and the contribution amounts recalculated according to the following method:
 - The capital costs of each infrastructure item must be adjusted by reference to the Producer Price Indexes Australia, Victoria (*Table 17. Output of the Construction industries, subdivision and class index numbers - Road and Bridge Construction Victoria (for roads, bridges, trails, drainage and open space items)*) and Building Construction Victoria (for buildings) published by the ABS (Series 6427.0) or similar index;
 - The revised infrastructure costs and the adjustment of the contributions must be calculated as at 1 July in each year.
- In relation to the cost of land required under the DCP, the land value must be adjusted by adopting a revised land value for each parcel to be acquired based on the same valuation principles.
- The revised land value and the adjustment of the contributions must be calculated as of 1 July in each year.
- Within 14 days of the adjustments being made, the Responsible Authority must publish a notice of the amended contributions on its website.

If the Community Infrastructure Levy (CIL) cap (currently \$900 per dwelling) is ever increased, the Responsible Authority reserves the right to increase the CIL in this DCP to allow for cost escalation in accordance with the indexation methods in this DCP up to the new CIL cap. The higher levy will be collected from the date the new CIL cap is introduced.

7.2. VALUATION OF LAND

Valuations for land to be acquired under this DCP were provided by a qualified independent valuer (Charter Keck Cramer). Land to be acquired was valued based on the 'before and after method' assuming that all usual services (reticulated water, sewerage, electricity, gas, drainage, telecommunications) will be available when the development proceeds.

7.3. COLLECTING AGENCY

The City of Greater Geelong is the Collecting Agency pursuant to section 46K of the *Planning and Environment Act (1987)*.

7.4. DEVELOPMENT AGENCY

The City of Greater Geelong is the development agency for all infrastructure items pursuant to section 46K of the *Planning and Environment Act (1987)*.

7.5. COLLECTION OF LEVIES

The Community Infrastructure Levy will be collected by the City of Greater Geelong at the Building Approval Stage in accordance with section 46(0) of the *Planning & Environment Act* (1987). However, developers/landowners are strongly encouraged to pay the Community Infrastructure Levy before the issue of a Statement of Compliance to simplify collection of development contributions, reduce the administrative burden on CoGG and facilitate the early provision of community infrastructure.

The Development Infrastructure Levy will be collected by the City of Greater Geelong as follows:

- For the subdivision of land, before the issue of a Statement of Compliance under the Subdivision Act 1988 in respect of the subdivision creating any new lot;
- In relation to the development of commercial land (or residential land not requiring subdivision), a planning permit condition must require the payment of the development contribution prior to the commencement of works unless there is an agreement with the Responsible Authority to secure the payment of the development contribution by some other means or other timeframe.

The Development Infrastructure Levy will be collected by the Responsible Authority (City of Greater Geelong) before the issue of a Statement of Compliance. A statement of compliance must not be issued until the development infrastructure levy is paid.

The Responsible Authority will impose conditions on a planning permit for subdivision or for the development of commercial land to collect the levies generally as follows:

FOR SUBDIVISIONS OF RESIDENTIAL LAND

A development infrastructure levy must be paid to the Responsible Authority in accordance with the provisions of the approved Development Contribution Plan for the land within the following specified time, namely after Certification of the relevant plan of subdivision but not more than 21 days prior to the issue of a Statement of Compliance in respect of that plan.

Where the subdivision is to be developed in stages the development infrastructure levy for that stage only may be paid to the Responsible Authority within the time specified provided that a Schedule of Development Contributions is submitted with each stage plan of subdivision. The schedule must show the amount of development contributions payable for each stage and paid in respect of prior stages to the satisfaction of the Responsible Authority.

FOR A PERMIT FOR THE DEVELOPMENT OF COMMERCIAL LAND

Unless some other arrangement has been agreed to by the Responsible Authority in a section 173 agreement, prior to the commencement of any development, the development infrastructure levy must be paid to the Responsible Authority in accordance with the provisions of the approved DCP for the land.

NO PERMIT REQUIRED FOR THE DEVELOPMENT OF LAND

Where no planning permit is required for the development of land, unless some other arrangement has been agreed to by the Responsible Authority in a section 173 agreement, prior to the commencement of any development, the development infrastructure levy must be paid to the Responsible Authority in accordance with the provisions of the approved DCP for the land.

7.6. ADMINISTRATIVE PROCEDURES

The City of Greater Geelong's Financial Services Department will undertake ongoing accounting and review of this DCP in terms of:

- The relevance of projects listed in the DCP;
- The level of contributions collected;
- The construction costs of infrastructure projects;
- The land costs of infrastructure projects;
- Updating the DCP to reflect any relevant amendments to the *Planning and Environment Act* (1987), or any new Ministerial Directions relating to development contributions.

The City of Greater Geelong Strategic Planning Department will be required to undertake a formal review of this DCP every five years during the lifespan of the DCP.

Funds collected through development contributions will be held in a specific interest-bearing reserve account in accordance with the provisions of the *Planning and Environment Act* (1987). All monies held in this account will be used solely for the provision of infrastructure as itemised in this DCP.

If Council resolves not to proceed with any of the infrastructure projects listed in this Development Contribution Plan, the Responsible Authority will comply with section 46(Q) of the *Planning & Environment Act* (1987).

7.7. METHOD OF PROVISION

Responsibility for the delivery of infrastructure works as described in this DCP resides with the City of Greater Geelong.

Infrastructure works may be provided by developers with a credit provided against their development contribution, subject to the agreement of the Responsible Authority. The process by which developers may receive this credit is outlined in Section 8 - Implementation Strategy.

8. IMPLEMENTATION STRATEGY

8.1. INTRODUCTION

This section provides further details of the implementation of the DCP following on from the Method of Provision outlined in Section 7, particularly with regards to the provision of Land and Works In-Kind.

8.2. PROVISION OF LAND AND WORKS IN-KIND

As outlined in Section 7, payment of development contributions is to be made in cash.

Alternatively, infrastructure works and land may be provided by developers with a credit provided against their development contribution, subject to the agreement of the Responsible Authority.

Council may enter into Section 173 Agreements with landowners to formalise details of infrastructure items to be provided in-kind. All development and community infrastructure can be provided in-kind under this agreement.

Where a developer intends to construct a building under this DCP in-kind, this must first be agreed to by the Responsible Authority. Any buildings constructed in-kind must be to the satisfaction of the Responsible Authority.

In determining whether to agree to the provision of works in lieu of cash the Responsible Authority will have regard to the following:

- Only works or land identified in the DCP can be provided in lieu of cash;
- Works must be provided to a standard that generally accords with the DCP unless agreed between the Responsible Authority and the developer;
- Detailed design must be approved by the Responsible Authority and generally accord with the standards outlined in the DCP unless agreed by the Responsible Authority and the developer;
- The construction of works must be completed to the satisfaction of the Responsible Authority.
- The impact on the DCP must be cost and revenue neutral.

Where the Responsible Authority agrees that works are to be provided by a developer in lieu of cash contributions:

- The credit for the works provided shall equal the value identified in the DCP taking into account the impact of indexation, with the exception of projects DI_LA_19 and DI_DR_9 (if relocated). If DI_LA_19 and DI_DR_9 vary in relation to scope and location, as contemplated in the Horseshoe Bend Precinct Structure Plan, and the alternative is approved to the satisfaction of the Responsible Authority and Development Agency, the credit for these works will be equal to an agreed value of these works up to, and no more than, the value detailed in the Horseshoe Bend Development Contributions Plan, taking into account the impact of indexation;
- The credit for the works provided shall equal the value identified in the DCP taking into account the impact of indexation;
- The value of works provided in accordance with the principles outlined above, will be offset against the development contributions liable to be paid by the developer;

- The developer will not be required to make cash payments for contributions until the value of any credits for the provision of agreed works-in-kind are exhausted;
- Where credit for works-in-kind can't be offset against future levy payments, the developer shall be reimbursed by the Responsible Authority for any excess credit at the time of provision in the DCP;
- Where a developer chooses to bring forward works ahead of the scheduled time in the DCP, this can be done provided the impact on the DCP is cost and revenue neutral;
- Where a developer is in credit against their development contributions liability, this credit will be indexed annually in accordance with the annual increase in the Development Contributions Levy.

8.3. PROJECT DI_RD_4A – SURF COAST HIGHWAY AND BOUNDARY ROAD INTERSECTION (STAGE 1)

This project is included in the Horseshoe Bend DCP to facilitate 'out of sequence' development in the Precinct.

The project is expected to be delivered early in the life of the Precinct's development, and delay the need to deliver project DI_RD_4b - Surf Coast Highway and Boundary Road Intersection (interim). Note this intersection project is also included in the Armstrong Creek West and Town Centre DCPs.

If the 'interim' project DI_RD_4b, is delivered before the Stage 1 project, DI_RD_4a, then this would supersede to need for the Stage 1 project. In this situation the funds collected for the Stage 1 project will be redistributed to one or more Community and / or Recreation projects contained with the Horseshoe Bend DCP at the full discretion of the Collecting Agency (City of Greater Geelong).

8.4. LAND

Council wishes to obtain land required under the DCP, as an off-set against a developer's development contributions. As with works-in-kind, the provision of land would be agreed in an agreement between the developer and the Responsible Authority pursuant to Section 173 of the *Planning and Environment Act (1987)*. The value of the off-set for providing land will equal the value shown in the DCP, subject to indexation.

8.5. INFRASTRUCTURE ALLOCATION AND STRATEGIC JUSTIFICATION

Table 7 provides a summary of the infrastructure items in the DCP, the determination of cost apportionment to the MCA and the strategic justification for the item.

8.6. DETAILED CALCULATION OF INFRASTRUCTURE LEVIES

Tables 8 and 9 provide details of the levy calculations for each infrastructure item.

TABLE 7 INFRASTRUCTURE ITEMS, COST APPORTIONMENT AND STRATEGIC JUSTIFICATION

Project ID	Project Summary	Capital Cost	Cost apportionment	Strategic Justification
Roads				
DI_LA_1	Land Acquisition for Geelong Ring Road - Section 4 (Barwon Heads Road - precinct boundary east)	\$150,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for provision of the Geelong Ring Road Section 4.
DI_LA_2	Land Acquisition for Burvilles Road Section 1 (Horseshoe Bend Road - Crematorium boundary)	\$670,000	50% apportioned to the Armstrong Creek East Precinct, remainder to be apportioned based on NDA between all landowners in the Precinct.	New road identified in transport and engineering planning as required for both the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).
DI_LA_3	Land Acquisition for Burvilles Road Section 2 (Crematorium boundary to Barwarre Road)	\$193,000	50% apportioned to the City of Greater Geelong, remainder to be apportioned based on NDA between all landowners in the Precinct.	New road identified in transport and engineering planning as required for both the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).
DI_LA_4	Land Acquisition for Horseshoe Bend Road Section 1 (Burvilles Rd to East Precinct boundary)	\$261,250	50% apportioned to the Armstrong Creek East Precinct, remainder to be apportioned based on NDA between all landowners in the Precinct (ACEP DCP cost - \$220,000 indexed from July 2010 to July 2012 based on PPI).	Acquisition required to facilitate the future upgrade of the Horseshoe Bend Road as identified in transport and engineering planning for the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).
DI_LA_5	Land Acquisition for Horseshoe Bend Road Section 2 (East Precinct boundary to Boundary Road)	\$500,000	To be apportioned based on NDA between all landowners in the Precinct.	Acquisition required to facilitate the future upgrade of Horseshoe Bend Road as identified in the traffic impact assessment for the Precinct (Cardno 2013).
DI_LA_6	Land Acquisition for Horseshoe Bend Road Section 3 (Boundary Rd - Catholic school northern limit)	\$251,000	To be apportioned based on NDA between all landowners in the Precinct.	Acquisition required to facilitate the future upgrade of the Horseshoe Bend Road as identified in transport and engineering planning for the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).
DI_LA_7	Land Acquisition for Horseshoe Bend Road Section 4 (Catholic school northern boundary - Geelong Ring Road)	\$1,655,000	To be apportioned based on NDA between all landowners in the Precinct.	Acquisition required to facilitate the future upgrade of Horseshoe Bend Road as identified in the traffic impact assessment for the Precinct (Cardno 2013).
DI_LA_8	Land Acquisition for transit corridor	\$2,291,000	To be apportioned based on NDA between all landowners in the Precinct.	Land acquisition required to facilitate future development of a major transit corridor for the Armstrong Creek Urban Growth Area.
DI_LA_9a	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (412 Torquay Road)	\$189,210	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).

Project ID	Project Summary	Capital Cost	Cost apportionment	Strategic Justification
DI_LA_9b	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (350 - 360 Boundary Road)	\$177,923	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).
DI_LA_9c	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (362 - 380 Boundary Road)	\$255,998	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).
DI_LA_9d	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (382 - 420 Boundary Road)	\$461,650	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).
DI_LA_10	Land acquisition for Boundary Road (Barwarre Road to Horseshoe Bend Road)	\$750,000	To be apportioned based on NDA between all landowners in the Precinct.	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).
DI_RD_1	Intersection - Surf Coast Highway, Geelong Ring Road 4C and Connector Road G (construction of eastern 4th leg and modification of signalised intersection)	\$1,629,112	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).
DI_RD_2	Intersection - Reserve Road/Horseshoe Bend Road/Drews Road	\$3,693,806	30% apportioned to the Marshall Precinct, remainder to be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).
DI_RD_3	Intersection - Barwon Heads Road and Reserve Road (construction of western 4th leg and modification of signalised intersection)	\$1,664,382	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment for the Precinct and the North East Industrial Precinct (Cardno 2013, GTA 2009).
DI_RD_4a	Intersection - Surf Coast Highway and Boundary Road (Stage 1) - Contribution to out of sequence development	\$600,000	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport and engineering planning for Precinct and the Armstrong Creek West Precinct (GTA 2011, Cardno 2013).
DI_RD_4b	Intersection - Surf Coast Highway and Boundary Road	\$3,206,649	40% apportioned to the Armstrong Creek West Precinct and 30% to the Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct (ACWP DCP cost - \$2,977,603. Indexed from July 2011 to July 2012 based on PPI).	Intersection identified in transport and engineering planning for Precinct and the Armstrong Creek West Precinct (GTA 2011, Cardno 2013).
DI_RD_5	Intersection - New Boundary Road, ACTC North South Connector Road and Connector E	\$662,106	50% apportioned to the Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport and engineering planning for Precinct and the Armstrong Creek Town Centre Precinct (Cardno 2012, Cardno 2013).
DI_RD_6	Intersection - New Boundary Road and Connector F (between Barwarre Road and Horseshoe Bend Road) - Signals only	\$498,000	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).

Project ID	Project Summary	Capital Cost	Cost apportionment	Strategic Justification
DI_RD_7	Intersection - Boundary Road and Horseshoe Bend Road	\$2,639,460	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).
DI_RD_8	Intersection - Boundary Road and Barwon Heads Road	\$3,653,060	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).
DI_RD_9	Intersection - Horseshoe Bend Road and Connector A	\$3,270,949	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).
DI_RD_10	Intersection - Horseshoe Bend Road and LAC access - Signals Only	\$498,000	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).
DI_RD_11	Intersection - Horseshoe Bend Road and New Burvilles Road	\$3,173,911	50% apportioned to the Armstrong Creek East Precinct, remainder to be apportioned based on NDA between all landowners in the Precinct (ACEP DCP cost - \$2,843,781. Indexed from July 2010 to July 2012 based on PPI).	Intersection identified in transport and engineering planning for the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).
DI_RD_12	Intersection - Barwon Heads Road and Connector A	\$3,842,152	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).
DI_RD_13	Intersection - New Burvilles Road and Connector F - Signals Only	\$498,000	To be apportioned based on NDA between all landowners in the Precinct.	Intersection identified in transport impact assessment (Cardno 2013).
Community Facilities				
DI_C_1	Community Complex - NAC - Construction	\$9,329,999	To be apportioned based on NDA between all landowners in the Precinct.	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.
DI_LA_11	Community Complex - NAC - Land	\$525,000	To be apportioned based on NDA between all landowners in the Precinct.	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.
DI_C_2	Community Complex - LAC (south) - Construction	\$7,904,200	To be apportioned based on NDA between all landowners in the Precinct.	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.
DI_LA_12	Community Complex - LAC (south) - Land	\$379,000	To be apportioned based on NDA between all landowners in the Precinct.	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.
DI_C_3	Community Complex - Local (west) - Construction	\$4,924,774	To be apportioned based on NDA between all landowners in the Precinct.	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.

Project ID	Project Summary	Capital Cost	Cost apportionment	Strategic Justification
DI_LA_13	Community Complex - Local (west) - Land	\$384,000	To be apportioned based on NDA between all landowners in the Precinct.	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.
Open Space				
CI_OS_1	Regional Active Open Space (northern) - Community Pavilion	\$2,739,304	20% apportioned to the Marshall Precinct, remainder to be apportioned based on NDA between all landowner in the Precinct.	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).
DI_OS_1	Regional Active Open Space (northern) - Play Fields	\$5,736,231	To be apportioned based on NDA between all landowners in the Precinct.	Active open space land, fields and facilities required to serve the new resident population in line with Growth Area Guidelines (identified in Precinct Structure Plan).
CI_OS_2	Central Active Open Space - Community Pavilion	\$1,156,409	To be apportioned based on NDA between all landowners in the Precinct.	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).
DI_OS_2	Central Active Open Space - Play Fields	\$3,347,100	To be apportioned based on NDA between all landowners in the Precinct.	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).
CI_OS_3	Southern Active Open Space - Community Pavilion	\$1,538,693	To be apportioned based on NDA between all landowners in the Precinct.	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).
DI_OS_3	Southern Active Open Space - Play Fields & Bowling Greens	\$4,136,590	To be apportioned based on NDA between all landowners in the Precinct.	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).
CI_OS_4	Western Active Open Space - Community Pavilion	\$1,161,188	To be apportioned based on NDA between all landowners in the Precinct.	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).
DI_OS_4	Western Active Open Space - Play Fields and Athletics	\$2,310,418	To be apportioned based on NDA between all landowners in the Precinct.	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).
DI_OS_5	Play Ground Equipment - Local Parks	\$740,000	To be apportioned based on NDA between all landowners in the Precinct.	Passive open space facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).
DI_OS_6	Play Ground Equipment - Regional Park	\$490,000	To be apportioned based on NDA between all landowners in the Precinct.	Passive open space facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).

Project ID	Project Summary	Capital Cost	Cost apportionment	Strategic Justification
DI_OS_7	NAC - Multiple Purpose Stadium (2 courts)	\$4,672,228	40% apportioned to the DEECD and 30% to the City of Greater Geelong, remainder to be apportioned based on NDA between all landowners in the Precinct.	Stadium identified by DEECD and Council as required to serve the new resident population and school requirements.
Project ID	Project Summary	Capital Cost	Cost apportionment	Strategic Justification
Trails				
DI_TR_1	Shared Path Network - Off road	\$4,340,220	To be apportioned based on NDA between all landowners in the Precinct.	Shared path network identified in the Precinct Structure Plan to provide linkages between open space, community facilities, residential and commercial areas.
DI_TR_2	Shared Path Network - Off road (Barwarre Road South)	\$225,500	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	Shared path network identified in the Precinct Structure Plan to provide linkages between open space, community facilities, residential and commercial areas.
DI_TR_3	Greenway Improvement Works	\$375,000	To be apportioned based on NDA between all landowners in the Precinct.	Greenways identified in the Precinct Structure Plan to provide linkages between open space, community facilities, residential and commercial areas and protection of native vegetation.
DI_TR_4	Greenway Improvement Works - (Barwarre Road South and Boundary Road West)	\$247,500	50% apportioned to the Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	Greenways identified in the Precinct Structure Plan to provide linkages between open space, community facilities, residential and commercial areas and protection of native vegetation.
Drainage				
DI_DR_1a	Drainage Works - Boundary road to the pipeline crossing of the Transit Corridor - Construction of Pipeline	\$3,443,862	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_DR_1b	Drainage Works - Transit Corridor to Reserve Road Retarding Basin - Construction of Pipeline	\$1,514,970	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_DR_2	Drainage Works - Reserve Road Retarding Basin - Construction	\$2,939,394	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_LA_14	Drainage Works - Reserve Road Retarding Basin - Land	\$1,569,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).
DI_DR_3	Drainage Works - Reserve Road Retarding Basin to Barwon Heads Road Retarding Basin - Construction of pipeline	\$5,121,147	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_DR_4	Drainage Works - Barwon Heads Road Retarding Basin - Construction	\$3,608,956	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).

Project ID	Project Summary	Capital Cost	Cost apportionment	Strategic Justification
DI_LA_15	Drainage Works - Barwon Heads Road Retarding Basin - Land	\$1,125,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).
DI_DR_5	Drainage Works - Barwon Heads Road to Sparrovale road - Construction	\$1,234,867	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_DR_6	Drainage Works - Horseshoe Bend Road Retarding Basin - Construction	\$2,039,344	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_LA_16	Drainage Works - Horseshoe Bend Road Retarding Basin - Land	\$955,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).
DI_DR_7	Drainage Works - Barwon Heads Road South Retarding Basin - Construction	\$3,628,948	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_LA_17	Drainage Works - Barwon Heads Road South Retarding Basin - Land	\$1,000,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).
DI_DR_8	Drainage Works - Barwon Heads Road to Harriot Road Retarding Basin - Construction	\$2,648,680	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_LA_18	Drainage Works - Barwon Heads Road to Harriott Road Retarding Basin - Land	\$1,800,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).
DI_DR_9	Drainage Works - Burvilles Road Retarding Basin - Construction	\$695,308	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_LA_19	Drainage Works - Burvilles Road Retarding Basin - Land	\$378,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).
DI_DR_10	Drainage Works - Batten Road Retarding Basin - Construction	\$830,640	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_LA_20	Drainage Works - Batten Road Retarding Basin - Land	\$475,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).
DI_DR_11	Drainage Works - Harriott Road Retarding Basin - Construction	\$614,662	To be apportioned based on NDA between all landowners in the Precinct.	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).
DI_LA_21	Drainage Works - Harriott Road Retarding Basin - Land	\$500,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).
DI_LA_22	Sparrovale Wetlands - Land (1 - 87 Grove Road, Armstrong Creek)	\$752,500	To be apportioned based on NDA between all landowners in the Precinct.	Land required for Horseshoe Bend Stormwater Management Plan as detailed by Neil Craigie (Oct 2013).

Project ID	Project Summary	Capital Cost	Cost apportionment	Strategic Justification
DI_LA_23	Sparrovale Wetlands - Land (109 -215 Sparrovale Road Charlemont)	\$1,729,000	To be apportioned based on NDA between all landowners in the Precinct.	Land required for Horseshoe Bend Stormwater Management Plan as detailed by Neil Craigie (Oct 2013).
DI_DR_12	Sparrovale Wetlands - Construction	\$2,472,557	To be apportioned based on NDA between all landowners in the Precinct.	Works required to provide Stormwater Management for the Precinct as detailed by Neil Craigie (Oct 2013).
DI_DR_13	Sparrovale Wetlands - Management Plan and Implementation Works	\$3,750,000	To be apportioned based on NDA between all landowners in the Precinct.	Works assessed by Council as being required to provide Stormwater Management for the Precinct as detailed by Neil Craigie (Oct 2013). These environmental management works aim to establish and manage the Sparrovale Wetlands (Sparrovale and Cold Winds properties) for the first 10 years of the Precinct's life to effectively transition the site from a degraded farmland to a functional, integrated and sustainable wetland system.
Planning				
DI_P_1	PSP/DCP Preparation	\$1,440,000	To be apportioned based on NDA between all landowners in the Precinct.	Item required for comprehensive planning for the Precinct. Funded by Horseshoe Bend Landowners Group (Refer to Appendix B Table 13 for funding contribution breakdown).
TOTAL		\$140,265,807		

TABLE 8 DEVELOPMENT INFRASTRUCTURE LEVY CALCULATION BY INFRASTRUCTURE ITEM

Project ID	Category	Project Summary	Capital Cost	External	Cost to MCA	Demand Units	Levy per Ha	Dev. type contributing
Roads								
DI_LA_1	Road	Land Acquisition for Geelong Ring Road - Section 4 (Barwon Heads Road - precinct boundary east)	\$150,000	0%	\$150,000	464.08	\$323.22	All development
DI_LA_2	Road	Land Acquisition for Burvilles Road Section 1 (Horseshoe Bend Road - Crematorium boundary)	\$670,000	50%	\$335,000	464.08	\$721.86	All development
DI_LA_3	Road	Land Acquisition for Burvilles Road Section 2 (Crematorium boundary to Barwarre Road)	\$193,000	50%	\$96,500	464.08	\$207.94	All development
DI_LA_4	Road	Land Acquisition for Horseshoe Bend Road Section 1 (Burvilles Rd to East Precinct boundary)	\$261,250	50%	\$130,625	464.08	\$281.47	All development
DI_LA_5	Road	Land Acquisition for Horseshoe Bend Road Section 2 (East Precinct boundary to Boundary Road)	\$500,000	0%	\$500,000	464.08	\$1,077.40	All development
DI_LA_6	Road	Land Acquisition for Horseshoe Bend Road Section 3 (Boundary Rd - Catholic school northern limit)	\$251,000	0%	\$251,000	464.08	\$540.86	All development
DI_LA_7	Road	Land Acquisition for Horseshoe Bend Road Section 4 (Catholic school northern boundary - Geelong Ring Road)	\$1,655,000	0%	\$1,655,000	464.08	\$3,566.20	All development
DI_LA_8	Road	Land Acquisition for transit corridor	\$2,291,000	0%	\$2,291,000	464.08	\$4,936.66	All development
DI_LA_9a	Road	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (412 Torquay Road)	\$189,210	50%	\$94,605	464.08	\$203.86	All development
DI_LA_9b	Road	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (350 - 360 Boundary Road)	\$177,923	50%	\$88,962	464.08	\$191.69	All development
DI_LA_9c	Road	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (362 - 380 Boundary Road)	\$255,998	50%	\$127,999	464.08	\$275.81	All development
DI_LA_9d	Road	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (382 - 420 Boundary Road)	\$461,650	50%	\$230,825	464.08	\$497.38	All development
DI_LA_10	Road	Land acquisition for Boundary Road (Barwarre Road to Horseshoe Bend Road)	\$750,000	0%	\$750,000	464.08	\$1,616.10	All development
DI_RD_1	Intersection	Intersection - Surf Coast Highway, Geelong Ring Road 4C and Connector Road G (construction of eastern 4th leg and modification of signalised intersection)	\$1,629,112	0%	\$1,629,112	464.08	\$3,510.42	All development
DI_RD_2	Intersection	Intersection - Reserve Road/Horseshoe Bend Road/Drews Road	\$3,693,806	30%	\$2,585,664	464.08	\$5,571.60	All Development

Project ID	Category	Project Summary	Capital Cost	External	Cost to MCA	Demand Units	Levy per Ha	Dev. type contributing
DI_RD_3	Intersection	Intersection - Barwon Heads Road and Reserve Road (construction of western 4th leg and modification of signalised intersection)	\$1,664,382	0%	\$1,664,382	464.08	\$3,586.42	All Development
DI_RD_4a	Intersection	Intersection - Surf Coast Highway and Boundary Road (Stage 1) - Contribution to out of sequence development	\$600,000	0%	\$600,000	464.08	\$1,292.88	All development
DI_RD_4b	Intersection	Intersection - Surf Coast Highway and Boundary Road	\$3,206,649	70%	\$961,995	464.08	\$2,072.91	All development
DI_RD_5	Intersection	Intersection - New Boundary Road, ACTC North South Connector Road and Connector E	\$662,106	50%	\$331,053	464.08	\$713.35	All development
DI_RD_6	Intersection	Intersection - New Boundary Road and Connector F (between Barwarre Road and Horseshoe Bend Road) - Signals only	\$498,000	0%	\$498,000	464.08	\$1,073.09	All development
DI_RD_7	Intersection	Intersection - Boundary Road and Horseshoe Bend Road	\$2,639,460	0%	\$2,639,460	464.08	\$5,687.52	All development
DI_RD_8	Intersection	Intersection - Boundary Road and Barwon Heads Road	\$3,653,060	0%	\$3,653,060	464.08	\$7,871.63	All development
DI_RD_9	Intersection	Intersection - Horseshoe Bend Road and Connector A	\$3,270,949	0%	\$3,270,949	464.08	\$7,048.26	All development
DI_RD_10	Intersection	Intersection - Horseshoe Bend Road and LAC access - Signals Only	\$498,000	0%	\$498,000	464.08	\$1,073.09	All development
DI_RD_11	Intersection	Intersection - Horseshoe Bend Road and New Burvilles Road	\$3,173,911	50%	\$1,586,956	464.08	\$3,419.58	All development
DI_RD_12	Intersection	Intersection - Barwon Heads Road and Connector A	\$3,842,152	0%	\$3,842,152	464.08	\$8,279.09	All development
DI_RD_13	Intersection	Intersection - New Burvilles Road and Connector F - Signals Only	\$498,000	0%	\$498,000	464.08	\$1,073.09	All development
Community Facilities								
DI_C_1	Community facilities	Community Complex - NAC - Construction	\$9,329,999	0%	\$9,329,999	459.08	\$20,323.30	Residential Only
DI_LA_11	Community facilities	Community Complex - NAC - Land	\$525,000	0%	\$525,000	459.08	\$1,143.59	Residential Only
DI_C_2	Community facilities	Community Complex - LAC (south) - Construction	\$7,904,200	0%	\$7,904,200	459.08	\$17,217.52	Residential Only
DI_LA_12	Community facilities	Community Complex - LAC (south) - Land	\$379,000	0%	\$379,000	459.08	\$825.57	Residential Only
DI_C_3	Community facilities	Community Complex - Local (west) - Construction	\$4,924,774	0%	\$4,924,774	459.08	\$10,727.51	Residential Only

Project ID	Category	Project Summary	Capital Cost	External	Cost to MCA	Demand Units	Levy per Ha	Dev. type contributing
DI_LA_13	Community facilities	Community Complex - Local (west) - Land	\$384,000	0%	\$384,000	459.08	\$836.46	Residential Only
Open Space								
DI_OS_1	Open space	Regional Active Open Space (northern) - Play Fields	\$5,736,231	0%	\$5,736,231	459.08	\$12,495.08	Residential Only
DI_OS_2	Open space	Central Active Open Space - Play Fields	\$3,347,100	0%	\$3,347,100	459.08	\$7,290.90	Residential Only
DI_OS_3	Open space	Southern Active Open Space - Play Fields & Bowling Greens	\$4,136,590	0%	\$4,136,590	459.08	\$9,010.63	Residential Only
DI_OS_4	Open space	Western Active Open Space - Play Fields and Athletics	\$2,310,418	0%	\$2,310,418	459.08	\$5,032.72	Residential Only
DI_OS_5	Open space	Play Ground Equipment - Local Parks	\$740,000	0%	\$740,000	459.08	\$1,611.92	Residential Only
DI_OS_6	Open space	Play Ground Equipment - Regional Park	\$490,000	0%	\$490,000	459.08	\$1,067.35	Residential Only
DI_OS_7	Open space	NAC - Multiple Purpose Stadium (2 courts)	\$4,672,228	70%	\$1,401,668	459.08	\$3,053.22	Residential Only
Trails								
DI_TR_1	Trails	Shared Path Network - Off road	\$4,340,220	0%	\$4,340,220	459.08	\$9,454.19	Residential Only
DI_TR_2	Trails	Shared Path Network - Off road (Barwarre Road South)	\$225,500	50%	\$112,750	459.08	\$245.60	Residential Only
DI_TR_3	Trails	Greenway Improvement Works	\$375,000	0%	\$375,000	459.08	\$816.85	Residential Only
DI_TR_4	Trails	Greenway Improvement Works - (Barwarre Road South and Boundary Road West)	\$247,500	50%	\$123,750	459.08	\$269.56	Residential Only
Drainage								
DI_DR_1a	Drainage	Drainage Works - Boundary road to the pipeline crossing of the Transit Corridor - Construction of Pipeline	\$3,443,862	0%	\$3,443,862	464.08	\$7,420.85	All Development
DI_DR_1b	Drainage	Drainage Works -Transit Corridor to Reserve Road Retarding Basin - Construction of Pipeline	\$1,514,970	0%	\$1,514,970	464.08	\$3,264.47	All Development
DI_DR_2	Drainage	Drainage Works - Reserve Road Retarding Basin - Construction	\$2,939,394	0%	\$2,939,394	464.08	\$6,333.82	All Development

Project ID	Category	Project Summary	Capital Cost	External	Cost to MCA	Demand Units	Levy per Ha	Dev. type contributing
DI_LA_14	Drainage	Drainage Works - Reserve Road Retarding Basin - Land	\$1,569,000	0%	\$1,569,000	464.08	\$3,380.89	All Development
DI_DR_3	Drainage	Drainage Works - Reserve Road Retarding Basin to Barwon Heads Road Retarding Basin - Construction of pipeline	\$5,121,147	0%	\$5,121,147	464.08	\$11,035.08	All Development
DI_DR_4	Drainage	Drainage Works - Barwon Heads Road Retarding Basin - Construction	\$3,608,956	0%	\$3,608,956	464.08	\$7,776.60	All Development
DI_LA_15	Drainage	Drainage Works - Barwon Heads Road Retarding Basin - Land	\$1,125,000	0%	\$1,125,000	464.08	\$2,424.16	All Development
DI_DR_5	Drainage	Drainage Works - Barwon Heads Road to Sparrovale road - Construction	\$1,234,867	0%	\$1,234,867	464.08	\$2,660.90	All Development
DI_DR_6	Drainage	Drainage Works - Horseshoe Bend Road Retarding Basin - Construction	\$2,039,344	0%	\$2,039,344	464.08	\$4,394.39	All Development
DI_LA_16	Drainage	Drainage Works - Horseshoe Bend Road Retarding Basin - Land	\$955,000	0%	\$955,000	464.08	\$2,057.84	All Development
DI_DR_7	Drainage	Drainage Works - Barwon Heads Road South Retarding Basin - Construction	\$3,628,948	0%	\$3,628,948	464.08	\$7,819.68	All Development
DI_LA_17	Drainage	Drainage Works - Barwon Heads Road South Retarding Basin - Land	\$1,000,000	0%	\$1,000,000	464.08	\$2,154.81	All Development
DI_DR_8	Drainage	Drainage Works - Barwon Heads Road to Harriot Road Retarding Basin - Construction	\$2,648,680	0%	\$2,648,680	464.08	\$5,707.39	All Development
DI_LA_18	Drainage	Drainage Works - Barwon Heads Road to Harriott Road Retarding Basin - Land	\$1,800,000	0%	\$1,800,000	464.08	\$3,878.65	All Development
DI_DR_9	Drainage	Drainage Works - Burvilles Road Retarding Basin - Construction	\$695,308	0%	\$695,308	464.08	\$1,498.25	All Development
DI_LA_19	Drainage	Drainage Works - Burvilles Road Retarding Basin - Land	\$378,000	0%	\$378,000	464.08	\$814.52	All Development
DI_DR_10	Drainage	Drainage Works - Batten Road Retarding Basin - Construction	\$830,640	0%	\$830,640	464.08	\$1,789.87	All Development
DI_LA_20	Drainage	Drainage Works - Batten Road Retarding Basin - Land	\$475,000	0%	\$475,000	464.08	\$1,023.53	All Development
DI_DR_11	Drainage	Drainage Works - Harriott Road Retarding Basin - Construction	\$614,662	0%	\$614,662	464.08	\$1,324.48	All Development
DI_LA_21	Drainage	Drainage Works - Harriott Road Retarding Basin - Land	\$500,000	0%	\$500,000	464.08	\$1,077.40	All Development
DI_LA_22	Drainage	Sparrovale Wetlands - Land (1 - 87 Grove Road, Armstrong Creek)	\$752,500	0%	\$752,500	464.08	\$1,621.49	All Development
DI_LA_23	Drainage	Sparrovale Wetlands - Land (109 -215 Sparrovale Road Charlemont)	\$1,729,000	0%	\$1,729,000	464.08	\$3,725.66	All Development
DI_DR_12	Drainage	Sparrovale Wetlands - Construction	\$2,472,557	0%	\$2,472,557	464.08	\$5,327.88	All Development
DI_DR_13	Drainage	Sparrovale Wetlands - Management Plan and Implementation Works	\$3,750,000	0%	\$3,750,000	464.08	\$8,080.52	All Development
Planning								

Project ID	Category	Project Summary	Capital Cost	External	Cost to MCA	Demand Units	Levy per Ha	Dev. type contributing
DI_P_1	Other	PSP/DCP Preparation	\$1,440,000	0%	\$1,440,000	464.08	\$3,102.92	All Development
Total DIL					\$ 123,787,833.30		\$267,831.43	

TABLE 9 COMMUNITY INFRASTRUCTURE LEVY CALCULATION BY INFRASTRUCTURE ITEM

Project ID	Category	Project Summary	Capital Cost	External	Cost to MCA	Demand Units	Levy (per dwelling)
CI_OS_1	Open space	Regional Active Open Space (northern) - Community Pavilion	\$2,739,304	20%	\$2,191,443	7,085	\$309.31
CI_OS_2	Open space	Central Active Open Space - Community Pavilion	\$1,156,409	0%	\$1,156,409	7,085	\$163.22
CI_OS_3	Open space	Southern Active Open Space - Community Pavilion	\$1,538,693	0%	\$1,538,693	7,085	\$217.18
CI_OS_4	Open space	Western Active Open Space - Community Pavilion	\$1,161,188	0%	\$1,161,188	7,085	\$163.89
Total CIL					\$6,047,733.20		\$853.60

8.7. DCP SUMMARY TABLES

The following summary tables serve as a quick reference guide. For more detail on any of these items refer to the appropriate section of this document. All dollar values shown in this table are current as of July 2012 and are subject to indexation and review in accordance with the methods outlined within Section 7 of this document.

TABLE 10 SUMMARY OF LAND USE

Land Use	Net Developable Area
Residential Development	459.079
Activity Centres	5.000
Total	464.079

TABLE 11 SUMMARY OF LEVIES PAYABLE (JULY 2012 VALUES)

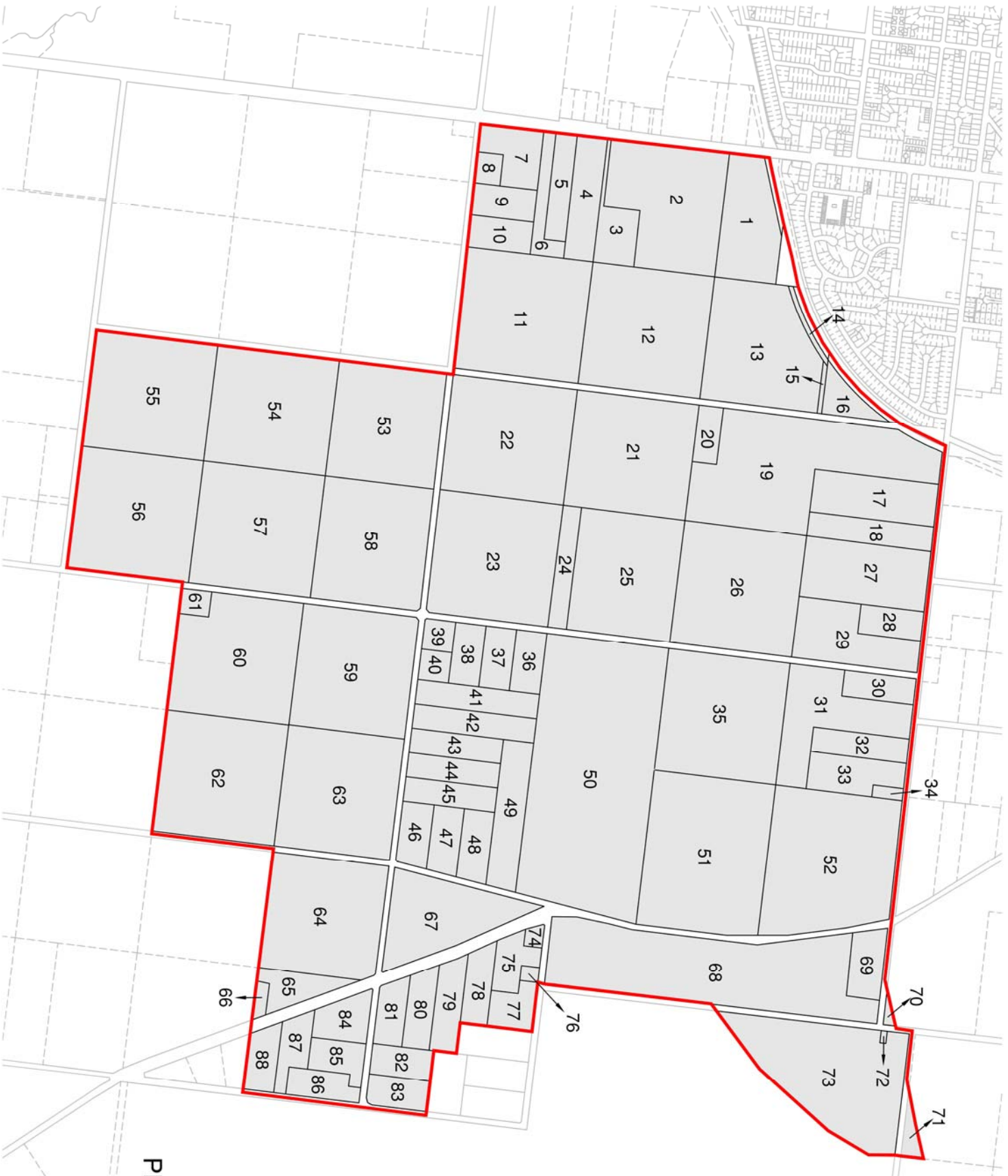
	Levy to be Collected
DIL (Residential land)	\$267,831.43
DIL (Activity Centres)	\$166,409.45
CIL (per dwelling)	\$853.60

TABLE 12 SUMMARY OF COSTS APPORTIONED AND FUNDS TO BE COLLECTED (JULY 2012 VALUES)

	Internal	External	Total
Development Infrastructure			
Total DIL Cost Apportioned	\$123,787,833	\$9,882,380	\$133,670,213
Total DIL Funds to be Collected under the DCP	\$123,787,833	\$0	\$123,787,833
Community Infrastructure			
Total CIL Cost Apportioned	\$6,047,733	\$547,861	\$6,595,594
Total CIL Funds to be Collected under the DCP	\$6,047,733	\$0	\$6,047,733
All Infrastructure			
Total Cost Apportioned	\$129,835,567	\$10,430,241	\$140,265,807
Total Funds to be Collected under DCP	\$129,835,567	\$0	\$129,835,567

APPENDICES

Appendix A. DETAILED LAND BUDGET & PROPERTY BOUNDARY MAP

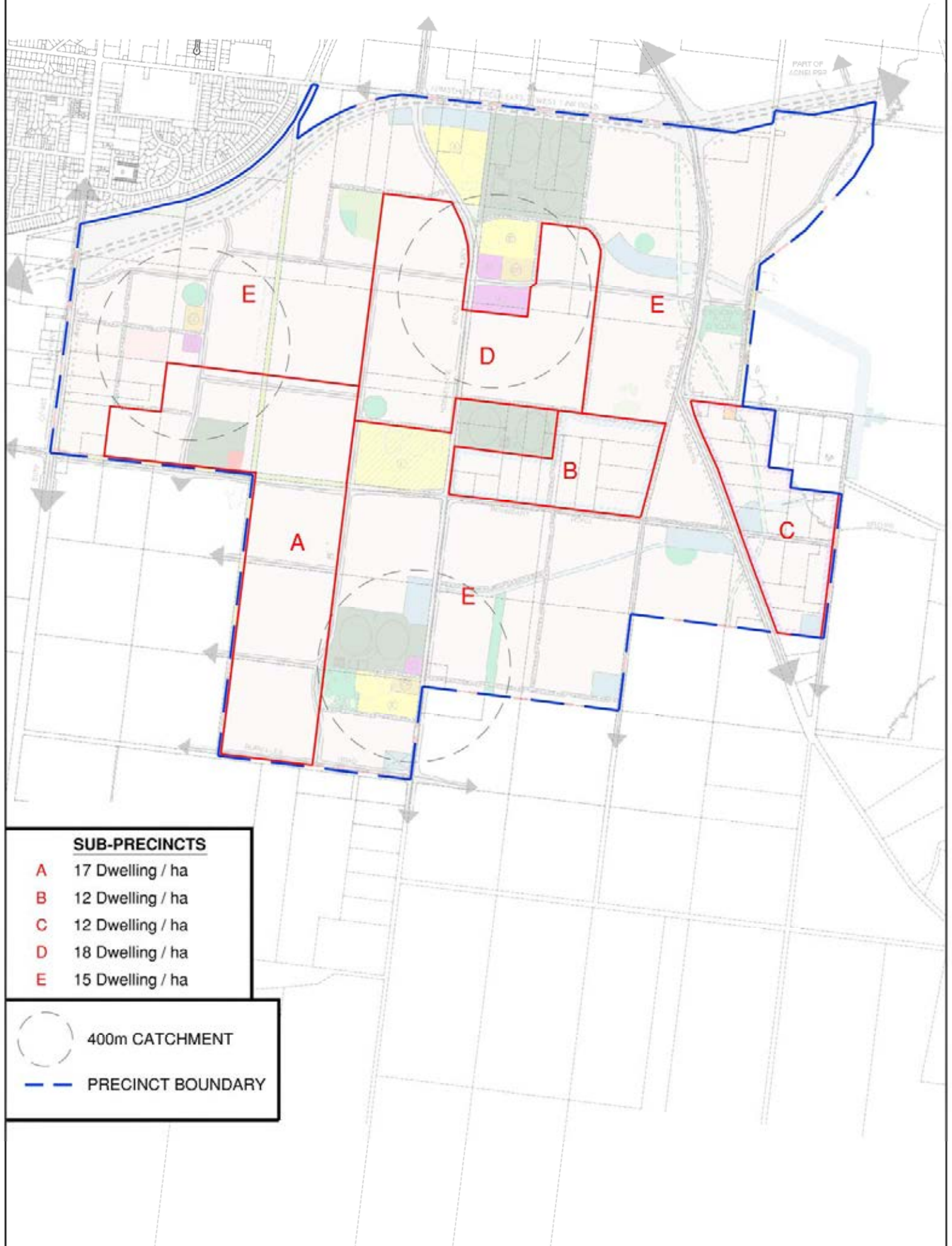


PROPERTY IDENTIFICATION



Surveyors • Town Planners • Engineers

51 LITTLE FYANS STREET,
 P.O. BOX 919, GEELONG 3220
 TELEPHONE (03) 5201 1811 FAX (03) 5229 2909
 SCALE SURVEY REF. UPDATED
 1:12000 8818 28/05/2012 A3



Appendix B. DCP INFRASTRUCTURE PROJECT SHEETS

DI_LA_1	Land Acquisition for Geelong Ring Road - Section 4 (Barwon Heads Road - precinct boundary east)	
Description	Land acquisition for provision of Geelong Ring Road - Section 4 - area to be acquired 0.266 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$150,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	Land required for provision of the Geelong Ring Road Section 4.	
External Usage Discount	0%	
Project Cost to MCA	\$150,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$323.22	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

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DI_LA_2	Land Acquisition for Burvilles Road Section 1 (Horseshoe Bend Road - Crematorium boundary)	
Description	Land acquisition for the new Burvilles Road reservation Section 1 - area to be acquired 1.404 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$670,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	New road identified in transport and engineering planning as required for both the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$335,000	
Apportionment of Costs	50% apportioned to the Armstrong Creek East Precinct, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$721.86	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

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DI_LA_3	Land Acquisition for Burvilles Road Section 2 (Crematorium boundary to Barwarre Road)	
Description	Land acquisition for the new Burvilles Road reservation from the Geelong Crematorium Property - area to be acquired 0.4 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$193,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	New road identified in transport and engineering planning as required for both the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$96,500	
Apportionment of Costs	50% apportioned to the City of Greater Geelong, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$207.94	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_LA_4	Land Acquisition for Horseshoe Bend Road Section 1 (Burvilles Rd to East Precinct boundary)	
Description	Land acquisition for the widening of Horseshoe Bend Road reserve by 13.6m on the eastern side of existing road reserve, from Burvilles Rd to East Precinct Boundary - total area to be acquired 0.55 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$261,250	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	Acquisition required to facilitate the future upgrade of the Horseshoe Bend Road as identified in transport and engineering planning for the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$130,625	
Apportionment of Costs	50% apportioned to the Armstrong Creek East Precinct, remainder to be apportioned based on NDA between all landowners in the Precinct (ACEP DCP cost - \$220,000 indexed from July 2010 to July 2012 based on PPI).	
Demand Units	464.08	
Levy Amount	\$281.47	
Costing Source	Armstrong Creek East Precinct DCP (Westlink Consulting Revaluation June 2012)	

The Project Cost is expressed in July 2012 dollars.

DI_LA_5	Land Acquisition for Horseshoe Bend Road Section 2 (East Precinct boundary to Boundary Road)	
Description	Land acquisition for the widening of Horseshoe Bend Road reserve by 13.6m on the eastern side of existing reserve from the East Precinct Boundary to Boundary Rd - total area to be acquired 1.005 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$500,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	Acquisition required to facilitate the future upgrade of Horseshoe Bend Road as identified in the traffic impact assessment for the Precinct (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$500,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,077.40	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

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DI_LA_6	Land Acquisition for Horseshoe Bend Road Section 3 (Boundary Rd - Catholic school northern limit)	
Description	Land acquisition for the widening of Horseshoe Bend Road reserve by 13.6m on the east side of existing road reserve, from Boundary Rd to Northern Limit of Catholic School - total area to be acquired 0.446 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$251,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	Acquisition required to facilitate the future upgrade of the Horseshoe Bend Road as identified in transport and engineering planning for the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$251,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$540.86	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

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DI_LA_7	Land Acquisition for Horseshoe Bend Road Section 4 (Catholic school northern boundary - Geelong Ring Road)	
Description	Land acquisition for the widening of Horseshoe Bend Road reserve by 14.9m on the western side of existing road reserve, from Catholic School northern boundary to north boundary of NAC and 34.4m New Road reserve from NAC to GRR - total area to be acquired 3.253 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$1,655,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	Acquisition required to facilitate the future upgrade of Horseshoe Bend Road as identified in the traffic impact assessment for the Precinct (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,655,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$3,566.20	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

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DI_LA_8	Land Acquisition for transit corridor	
Description	Land acquisition for Future Public Transport Corridor (Rail) - Width 37m, Length 875m, Total area to be acquired 4.629 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$2,291,000	
Indicative Provision Trigger	As subdivision occurs for land parcels or when land is required for transit corridor.	
Strategic Justification	Land acquisition required to facilitate future development of a major transit corridor for the Armstrong Creek Urban Growth Area.	
External Usage Discount	0%	
Project Cost to MCA	\$2,291,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$4,936.66	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_LA_9a	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (412 Torquay Road)	
Description	Land acquisition for the new Boundary Road from Surf Coast Hwy to Barwarre Road (412 Torquay Road - total area to be acquired 0.1113 ha)	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$189,210	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$94,605	
Apportionment of Costs	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$203.86	
Costing Source	Armstrong Creek Town Centre DCP	

The Project Cost is expressed in July 2012 dollars.

DI_LA_9b	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (350 - 360 Boundary Road)	
Description	Land acquisition for the new Boundary Road from Surf Coast Hwy to Barwarre Road (350 - 360 Boundary Rd - total area to be acquired 0.3389 ha)	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$177,923	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$88,962	
Apportionment of Costs	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$191.69	
Costing Source	Armstrong Creek Town Centre DCP	

The Project Cost is expressed in July 2012 dollars.

DI_LA_9c	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (362 - 380 Boundary Road)	
Description	Land acquisition for the new Boundary Road from Surf Coast Hwy to Barwarre Road (362 - 380 Boundary Rd - total area to be acquired 0.4785 ha)	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$255,998	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$127,999	
Apportionment of Costs	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$275.81	
Costing Source	Armstrong Creek Town Centre DCP	

The Project Cost is expressed in July 2012 dollars.

DI_LA_9d	Land Acquisition - Boundary Road - Surf Coast Hwy to Barwarre Road (382 - 420 Boundary Road)	
Description	Land acquisition for the new Boundary Road from Surf Coast Hwy to Barwarre Road (382 - 420 Boundary Rd - total area to be acquired 0.9233 ha)	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$461,650	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when works are required.	
Strategic Justification	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$230,825	
Apportionment of Costs	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$497.38	
Costing Source	Armstrong Creek Town Centre DCP	

The Project Cost is expressed in July 2012 dollars.

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DI_LA_10	Land acquisition for Boundary Road (Barwarre Road to Horseshoe Bend Road)	
Description	Land acquisition for the new Boundary Road reservation from Barwarre Road to Horseshoe Bend Road - total area to be acquired 1.558 ha	
	Infrastructure Type	Infrastructure Category
	Development	Road
Project Cost	\$750,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel.	
Strategic Justification	New road identified in transport impact assessment as required for the Precinct (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$750,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,616.10	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_RD_1	Intersection - Surf Coast Highway, Geelong Ring Road 4C and Connector Road G (construction of eastern 4th leg and modification of signalised intersection)	
Description	Construction of signalised Intersection - Surf Coast Highway, Geelong Ring Road 4C and Connector Road 'G' (construction of eastern 4th leg and modification of signalised intersection)	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$1,629,112	
Indicative Provision Trigger	Upon connection of Connector 'G' to Surf Coast Hwy.	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,629,112	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$3,510.42	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_2	Intersection - Reserve Road/Horseshoe Bend Road/Drews Road	
Description	Construction of signalised intersection - Reserve Road /Horseshoe Bend Road/Drews Road	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$3,693,806	
Indicative Provision Trigger	Upon connection of the new Horseshoe Bend Road to Reserve Road.	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	30%	
Project Cost to MCA	\$2,585,664	
Apportionment of Costs	30% apportioned to the Marshall Precinct, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$5,571.60	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_3	Intersection - Barwon Heads Road and Reserve Road (construction of western 4th leg and modification of signalised intersection)	
Description	Construction of signalised intersection - Barwon Heads Road and Reserve Road (construction of western 4th leg and modification of signalised intersection)	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$1,664,382	
Indicative Provision Trigger	Once development occurs in the vicinity of the intersection or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport impact assessment for the Precinct and the North East Industrial Precinct (Cardno 2013, GTA 2009).	
External Usage Discount	0%	
Project Cost to MCA	\$1,664,382	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$3,586.42	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_RD_4a	Intersection - Surf Coast Highway and Boundary Road (Stage 1) - Contribution to out of sequence development	
Description	Intersection - Surf Coast Highway and Boundary Road (Stage 1) - Contribution to out of sequence development. Signalisation of existing intersection.	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$600,000	
Indicative Provision Trigger	First subdivision requiring access via Boundary Rd or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport and engineering planning for Precinct and the Armstrong Creek West Precinct (GTA 2011, Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$600,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,292.88	
Costing Source	Contribution determined by City of Greater Geelong, as part of Amendment C259	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_4b	Intersection - Surf Coast Highway and Boundary Road	
Description	Construction of signalised intersection - New Boundary Road and Surf Coast Highway	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$3,206,649	
Indicative Provision Trigger	When new Boundary Road is connected to Surf Coast Highway or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport and engineering planning for Precinct and the Armstrong Creek West Precinct (GTA 2011, Cardno 2013).	
External Usage Discount	70%	
Project Cost to MCA	\$961,995	
Apportionment of Costs	40% apportioned to the Armstrong Creek West Precinct and 30% to the Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct (ACWP DCP cost - \$2,977,603. Indexed	
Demand Units	464.08	
Levy Amount	\$2,072.91	
Costing Source	As per Armstrong Creek West Precinct DCP	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_5	Intersection - New Boundary Road, ACTC North South Connector Road and Connector E	
Description	Construction of signals only - New Boundary Road, ACTC North South Connector Road and Connector E	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$662,106	
Indicative Provision Trigger	Upon connection of the 4th leg of the intersection or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport and engineering planning for Precinct and the Armstrong Creek Town Centre Precinct (Cardno 2012, Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$331,053	
Apportionment of Costs	50% apportioned to the Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$713.35	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_6	Intersection - New Boundary Road and Connector F (between Barwarre Road and Horseshoe Bend Road) - Signals only	
Description	Construction of signals only - New Boundary Road and Connector F (between Barwarre Road and Horseshoe bend Road)	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$498,000	
Indicative Provision Trigger	Upon connection of Connector F to New Boundary Rd.	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$498,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,073.09	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_7	Intersection - Boundary Road and Horseshoe Bend Road	
Description	Construction of signalised intersection - Boundary Road and Horseshoe Bend Road.	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$2,639,460	
Indicative Provision Trigger	First subdivision in the vicinity of the intersection or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$2,639,460	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$5,687.52	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_RD_8	Intersection - Boundary Road and Barwon Heads Road	
Description	Construction of signalised intersection - Boundary Road and Barwon Heads Road	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$3,653,060	
Indicative Provision Trigger	First subdivision in the vicinity of the intersection or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$3,653,060	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$7,871.63	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_9	Intersection - Horseshoe Bend Road and Connector A	
Description	Construction of signalised intersection - Horseshoe Bend Road and Connector A	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$3,270,949	
Indicative Provision Trigger	Upon connection of Connector A to Horseshoe Bend Road or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$3,270,949	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$7,048.26	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_10	Intersection - Horseshoe Bend Road and LAC access - Signals Only	
Description	Construction of signals only - Horseshoe Bend Road and LAC access	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$498,000	
Indicative Provision Trigger	Upon connection of the LAC access to Horseshoe Bend Rd or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$498,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,073.09	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_RD_11	Intersection - Horseshoe Bend Road and New Burvilles Road	
Description	Construction of signalised intersection - Horseshoe Bend Road and New Burvilles Road	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$3,173,911	
Indicative Provision Trigger	First subdivision within the vicinity of the intersection or at the discretion of the Responsible Authority.	
Strategic Justification	Intersection identified in transport and engineering planning for the Precinct and Armstrong Creek East Precinct (Cardno Grogan Richards 2009, SMEC Urban 2010, Cardno 2013).	
External Usage Discount	50%	
Project Cost to MCA	\$1,586,956	
Apportionment of Costs	50% apportioned to the Armstrong Creek East Precinct, remainder to be apportioned based on NDA between all landowners in the Precinct (ACEP DCP cost - \$2,843,781. Indexed from July 2010 to July 2012 based on PPI).	
Demand Units	464.08	
Levy Amount	\$3,419.58	
Costing Source	Armstrong Creek East DCP	

The Project Cost is expressed in July 2012 dollars.

DI_RD_12	Intersection - Barwon Heads Road and Connector A	
Description	Construction of signalised intersection - Barwon Heads Road and Connector A	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$3,842,152	
Indicative Provision Trigger	Upon connection of Connector A to Barwon Heads Rd or at the discretion of the	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$3,842,152	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$8,279.09	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_RD_13	Intersection - New Burvilles Road and Connector F - Signals Only	
Description	Construction of signals only - New Burvilles Road and Connector F	
	Infrastructure Type	Infrastructure Category
	Development	Intersection
Project Cost	\$498,000	
Indicative Provision Trigger	Upon connection of Connector F to New Burvilles Rd.	
Strategic Justification	Intersection identified in transport impact assessment (Cardno 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$498,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$1,084.78	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_C_1	Community Complex - NAC - Construction	
Description	Construction of Community Complex - NAC	
	Infrastructure Type	Infrastructure Category
	Development	Community facilities
Project Cost	\$9,329,999	
Indicative Provision Trigger	No later than 2,500 dwellings or at the discretion of the Responsible Authority.	
Strategic Justification	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.	
External Usage Discount	0%	
Project Cost to MCA	\$9,329,999	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$20,323.30	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_11	Community Complex - NAC - Land	
Description	Land Acquisition for Community Complex - NAC - Total area to be acquired 1.25 ha	
	Infrastructure Type	Infrastructure Category
	Development	Community facilities
Project Cost	\$525,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for the development of the facility is reached.	
Strategic Justification	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.	
External Usage Discount	0%	
Project Cost to MCA	\$525,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$1,143.59	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_C_2	Community Complex - LAC (south) - Construction	
Description	Construction of Community Complex - LAC (south)	
	Infrastructure Type	Infrastructure Category
	Development	Community facilities
Project Cost	\$7,904,200	
Indicative Provision Trigger	No later than 4,000 dwellings occupied or at the discretion of the Responsible Authority.	
Strategic Justification	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.	
External Usage Discount	0%	
Project Cost to MCA	\$7,904,200	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$17,217.52	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_12	Community Complex - LAC (south) - Land	
Description	Land Acquisition for Community Complex - LAC (south) - Total area to be acquired 0.8 ha	
	Infrastructure Type	Infrastructure Category
	Development	Community facilities
Project Cost	\$379,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for the development of the facility is reached.	
Strategic Justification	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.	
External Usage Discount	0%	
Project Cost to MCA	\$379,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$825.57	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_C_3	Community Complex - Local (west) - Construction	
Description	Construction of Community Complex - Local (west)	
	Infrastructure Type	Infrastructure Category
	Development	Community facilities
Project Cost	\$4,924,774	
Indicative Provision Trigger	No later than 6,000 dwellings occupied or at the discretion of the Responsible Authority.	
Strategic Justification	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.	
External Usage Discount	0%	
Project Cost to MCA	\$4,924,774	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$10,727.51	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_13	Community Complex - Local (west) - Land	
Description	Land Acquisition for Community Complex - Local (west) - Total area to be acquired 0.8 ha	
	Infrastructure Type	Infrastructure Category
	Development	Community facilities
Project Cost	\$384,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for the development of the facility is reached.	
Strategic Justification	Community land and facilities required to serve the new resident population in line with growth area guidelines and identified in Precinct Structure Plan.	
External Usage Discount	0%	
Project Cost to MCA	\$384,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$836.46	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

CI_OS_1	Regional Active Open Space (northern) - Community Pavilion	
Description	Construction of Multi-purpose pavilion for community use and potentially local cricket, football and soccer clubs	
	Infrastructure Type	Infrastructure Category
	Community	Open space
Project Cost	\$2,739,304	
Indicative Provision Trigger	No later than 5,000 dwellings occupied or at the discretion of the Responsible Authority for early provision.	
Strategic Justification	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	20%	
Project Cost to MCA	\$2,191,443	
Apportionment of Costs	20% apportioned to the Marshall Precinct, remainder to be apportioned based on NDA between all landowner in the Precinct.	
Demand Units	459.08	
Levy Amount	\$4,773.56	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_OS_1	Regional Active Open Space (northern) - Play Fields	
Description	Construction of 3 AFL / cricket ovals, 3 netball courts, car parking and associated facilities	
	Infrastructure Type	Infrastructure Category
	Development	Open space
Project Cost	\$5,736,231	
Indicative Provision Trigger	No later than 5,000 dwellings occupied or at the discretion of the Responsible Authority for early provision.	
Strategic Justification	Active open space land, fields and facilities required to serve the new resident population in line with Growth Area Guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$5,736,231	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$12,495.08	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

CI_OS_2	Central Active Open Space - Community Pavilion	
Description	Multi purpose pavilion for community use and potentially local cricket, football and soccer clubs	
	Infrastructure Type	Infrastructure Category
	Community	Open space
Project Cost	\$1,156,409	
Indicative Provision Trigger	No later than 3,500 dwellings or at the discretion of the Responsible Authority for early provision.	
Strategic Justification	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$1,156,409	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$2,518.98	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_OS_2	Central Active Open Space - Play Fields	
Description	Construction of 2 AFL / soccer fields, 2 netball courts, car parking and associated facilities	
	Infrastructure Type	Infrastructure Category
	Development	Open space
Project Cost	\$3,347,100	
Indicative Provision Trigger	No later than 3,500 dwellings or at the discretion of the Responsible Authority for early provision.	
Strategic Justification	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$3,347,100	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$7,290.90	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

CI_OS_3	Southern Active Open Space - Community Pavilion	
Description	Multi purpose pavilion for community use and potentially local cricket, football and soccer clubs	
	Infrastructure Type	Infrastructure Category
	Community	Open space
Project Cost	\$1,538,693	
Indicative Provision Trigger	No later than 2,000 dwellings or at the discretion of the Responsible Authority for early provision.	
Strategic Justification	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$1,538,693	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	7,085.00	
Levy Amount	\$217.18	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_OS_3	Southern Active Open Space - Play Fields & Bowling Greens	
Description	Construction of 2 ovals and 2 netball courts, plus 2 synthetic bowling greens and associated civil works	
	Infrastructure Type	Infrastructure Category
	Development	Open space
Project Cost	\$4,136,590	
Indicative Provision Trigger	No later than 2,000 dwellings or at the discretion of the Responsible Authority for early provision.	
Strategic Justification	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$4,136,590	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$9,010.63	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

CI_OS_4	Western Active Open Space - Community Pavilion	
Description	Construction of multi purpose pavilion for use by community and sporting groups	
	Infrastructure Type	Infrastructure Category
	Community	Open space
Project Cost	\$1,161,188	
Indicative Provision Trigger	No later than 6,000 dwellings or at the discretion of the Responsible Authority for early provision.	
Strategic Justification	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$1,161,188	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	7,085.00	
Levy Amount	\$163.89	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_OS_4	Western Active Open Space - Play Fields and Athletics	
Description	Construction of junior oval/soccer field, including athletics track, event space and associated facilities.	
	Infrastructure Type	Infrastructure Category
	Development	Open space
Project Cost	\$2,310,418	
Indicative Provision Trigger	No later than 6,000 dwellings or at the discretion of the Responsible Authority for early provision.	
Strategic Justification	Active open space land, fields and facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$2,310,418	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$5,032.72	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_OS_5	Play Ground Equipment - Local Parks	
Description	Local Parks - Playground Equipment (6 no).	
	Infrastructure Type	Infrastructure Category
	Development	Open space
Project Cost	\$740,000	
Indicative Provision Trigger	As subdivision occurs.	
Strategic Justification	Passive open space facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$740,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$1,611.92	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_OS_6	Play Ground Equipment - Regional Park	
Description	Play equipment for regional park (east of Barwon Heads Road)	
	Infrastructure Type	Infrastructure Category
	Development	Open space
Project Cost	\$490,000	
Indicative Provision Trigger	No later than 5,000 dwellings or at the discretion of the Responsible Authority.	
Strategic Justification	Passive open space facilities required to serve the new resident population in line with growth area guidelines (identified in Precinct Structure Plan).	
External Usage Discount	0%	
Project Cost to MCA	\$490,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$1,067.35	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_OS_7	NAC - Multiple Purpose Stadium (2 courts)	
Description	Construction of 2 courts multipurpose stadium. Located on State Secondary School site abutting the Northern Active Open Space.	
	Infrastructure Type	Infrastructure Category
	Development	Open space
Project Cost	\$4,672,228	
Indicative Provision Trigger	5,000 dwellings or once the relevant school enrolment trigger for this type of facility is reached.	
Strategic Justification	Stadium identified by DEECD and Council as required to serve the new resident population and school requirements.	
External Usage Discount	70%	
Project Cost to MCA	\$1,401,668	
Apportionment of Costs	40% apportioned to the DEECD and 30% to the City of Greater Geelong, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$3,053.22	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_TR_1	Shared Path Network - Off road	
Description	Construction of off road trails- 2.5m concrete shared path (20,570m, \$3,291,200), 3.0m concrete Boundary Road (2,758m,\$524,020) and within Greenways (2,500m, \$525,000)	
	Infrastructure Type	Infrastructure Category
	Development	Trails
Project Cost	\$4,340,220	
Indicative Provision Trigger	Progressive implementation as subdivision occurs.	
Strategic Justification	Shared path network identified in the Precinct Structure Plan to provide linkages between open space, community facilities, residential and commercial areas.	
External Usage Discount	0%	
Project Cost to MCA	\$4,340,220	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$9,454.19	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_TR_2	Shared Path Network - Off road (Barwarre Road South)	
Description	Construction of off road trails along Barwarre Road greenway between Boundary Road and Burvilles Road	
	Infrastructure Type	Infrastructure Category
	Development	Trails
Project Cost	\$225,500	
Indicative Provision Trigger	Progressive implementation as subdivision occurs.	
Strategic Justification	Shared path network identified in the Precinct Structure Plan to provide linkages between open space, community facilities, residential and commercial areas.	
External Usage Discount	50%	
Project Cost to MCA	\$112,750	
Apportionment of Costs	50% apportioned to Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$245.60	
Costing Source	As per Armstrong Creek Town Centre DCP (Prowse Quantity Surveyors May 2013)	

The Project Cost is expressed in July 2012 dollars.

DI_TR_3	Greenway Improvement Works	
Description	Greenway improvements within Horseshoe Bend Precinct. Includes weed management and minor landscape works (approx. 2500m at \$150 per linear metre)	
	Infrastructure Type	Infrastructure Category
	Development	Trails
Project Cost	\$375,000	
Indicative Provision Trigger	Progressive implementation as subdivision occurs.	
Strategic Justification	Greenways identified in the Precinct Structure Plan to provide linkages between open space, community facilities, residential and commercial areas and protection of native vegetation.	
External Usage Discount	0%	
Project Cost to MCA	\$375,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$816.85	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_TR_4	Greenway Improvement Works - (Barwarre Road South and Boundary Road West)	
Description	Greenway improvement works (Barwarre Rd South and Boundary Rd West, includes weed management and minor landscape works.	
	Infrastructure Type	Infrastructure Category
	Development	Trails
Project Cost	\$247,500	
Indicative Provision Trigger	Progressive implementation as subdivision occurs.	
Strategic Justification	Greenways identified in the Precinct Structure Plan to provide linkages between open space, community facilities, residential and commercial areas and protection of native vegetation.	
External Usage Discount	50%	
Project Cost to MCA	\$123,750	
Apportionment of Costs	50% apportioned to the Armstrong Creek Town Centre, remainder to be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	459.08	
Levy Amount	\$269.56	
Costing Source	As per Armstrong Creek Town Centre DCP (Prowse Quantity Surveyors May 2013)	

The Project Cost is expressed in July 2012 dollars.

DI_DR_1a	Drainage Works - Boundary road to the pipeline crossing of the Transit Corridor - Construction of Pipeline	
Description	Construction of drainage item: Pipeline from Boundary Road to the crossing of the pipeline of the Transit Corridor	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$3,443,862	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$3,443,862	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$7,420.85	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_DR_1b	Drainage Works -Transit Corridor to Reserve Road Retarding Basin - Construction of Pipeline	
Description	Construction of drainage item: Pipeline from the Transit Corridor to Reserve Road Retarding Basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$1,514,970	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,514,970	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$3,264.47	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_DR_2	Drainage Works - Reserve Road Retarding Basin - Construction	
Description	Construction of drainage item: Reserve Road Retarding Basin and associated landscape works	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$2,939,394	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$2,939,394	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$6,333.82	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_LA_14	Drainage Works - Reserve Road Retarding Basin - Land	
Description	Acquisition of 2.801 hectares of land to allow for the establishment of the Reserve Road Retarding Basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$1,569,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for works is reached.	
Strategic Justification	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,569,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$3,380.89	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

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DI_DR_3	Drainage Works - Reserve Road Retarding Basin to Barwon Heads Road Retarding Basin - Construction of pipeline	
Description	Construction of drainage item: Pipeline from Reserve Road Retarding Basin to Barwon Heads Road Retarding Basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$5,121,147	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$5,121,147	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$11,035.08	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_DR_4	Drainage Works - Barwon Heads Road Retarding Basin - Construction	
Description	Construction of drainage item: Barwon Heads Road Retarding Basin and associated landscape works	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$3,608,956	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$3,608,956	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$7,776.60	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_15	Drainage Works - Barwon Heads Road Retarding Basin - Land	
Description	Acquisition of 2.617 hectares of land to allow for the establishment of the Barwon Heads Road Retarding Basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$1,125,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for works is reached.	
Strategic Justification	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,125,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$2,424.16	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_DR_5	Drainage Works -Barwon Heads Road to Sparrovale road - Construction	
Description	Construction of drainage item: Drainage Works from Barwon Heads Road to Sparrovale Road and associated landscape works	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$1,234,867	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,234,867	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$2,660.90	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_DR_6	Drainage Works - Horseshoe Bend Road Retarding Basin - Construction	
Description	Construction of Drainge Works - Horseshoe Bend Road Retarding Basin and associated landscape works	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$2,039,344	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$2,039,344	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$4,394.39	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_16	Drainage Works - Horseshoe Bend Road Retarding Basin - Land	
Description	Acquisition of 2.0 ha of land to allow for the establishment of the Horseshoe Bend Rd Retarding Basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$955,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for works is reached.	
Strategic Justification	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$955,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$2,057.84	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_DR_7	Drainage Works - Barwon Heads Road South Retarding Basin - Construction	
Description	Construction of Drainage Works - Barwon Heads Road South Retarding Basin and associated landscape works	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$3,628,948	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$3,628,948	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$7,819.68	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_17	Drainage Works - Barwon Heads Road South Retarding Basin - Land	
Description	Acquisition of 2.248 ha of land to allow the establishment of the Horseshoe Bend Road retarding basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$1,000,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for works is reached.	
Strategic Justification	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,000,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$2,154.81	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

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DI_DR_8	Drainage Works - Barwon Heads Road to Harriot Road Retarding Basin - Construction	
Description	Construction of Drainge Works - Barwon Heads Road to Harriott Road retarding basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$2,648,680	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$2,648,680	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$5,707.39	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

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DI_LA_18	Drainage Works - Barwon Heads Road to Harriott Road Retarding Basin - Land	
Description	Acquisition of 2.153 ha of land to allow for the establishment of the drainage works from Barwon Heads road to Harriott road	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$1,800,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for works is reached.	
Strategic Justification	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,800,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$3,878.65	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_DR_9	Drainage Works - Burvilles Road Retarding Basin - Construction	
Description	Construction of Drainge Works - Burvilles Road Retarding Basin and associated landscape works	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$695,308	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$695,308	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,498.25	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_19	Drainage Works - Burvilles Road Retarding Basin - Land	
Description	Acquisition of 0.800 ha of land to allow the establishment of Burvilles Road retarding basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$378,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for works is reached.	
Strategic Justification	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$378,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$814.52	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

DI_DR_10	Drainage Works - Batten Road Retarding Basin - Construction	
Description	Construction of Drainge Works - Batten Road Retarding Basin and associated landscape works	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$830,640	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$830,640	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,789.87	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_20	Drainage Works - Batten Road Retarding Basin - Land	
Description	Acquisition of 1.139 ha of land to allow the establishment of the Batten Road Retarding Basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$475,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for works is reached.	
Strategic Justification	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$475,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,023.53	
Costing Source	Charter Keck Cramer Land Valuation Report (Sept 2014)	

The Project Cost is expressed in July 2012 dollars.

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DI_DR_11	Drainage Works - Harriott Road Retarding Basin - Construction	
Description	Construction of Drainage Works - Harriott Road Retarding Basin and associated landscape works	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$614,662	
Indicative Provision Trigger	As required to service catchment or as development occurs in the vicinity.	
Strategic Justification	Waterways improvement works required for Precinct as identified by Neil M Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$614,662	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,324.48	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

DI_LA_21	Drainage Works - Harriott Road Retarding Basin - Land	
Description	Acquisition of 0.810 ha of land to allow for the establishment of the Harriott Road Retarding Basin	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$500,000	
Indicative Provision Trigger	As subdivision occurs for relevant land parcel or when the trigger for works is reached.	
Strategic Justification	Land required for wetlands and retarding basins as identified by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$500,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,077.40	
Costing Source	Charter Keck Cramer Land Valuation Report (Oct 2013)	

The Project Cost is expressed in July 2012 dollars.

DI_LA_22	Sparrovale Wetlands - Land (1 - 87 Grove Road, Armstrong Creek)	
Description	Acquisition of 1 - 87 Grove Road for environmental and drainage works. Total area to be acquired - 87.30 ha	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$752,500	
Indicative Provision Trigger	Prior to the upgrade of culverts under Barwon Heads Road (being the outlet from Barwon Heads Road south retarding basin DI_DR_7 or Barwon Heads Road retarding basin DI_DR_4) or at the discretion of the Responsible Authority.	
Strategic Justification	Land required for Horseshoe Bend Stormwater Management Plan as detailed by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$752,500	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$1,621.49	
Costing Source	Charter Keck Cramer Land Valuation Report (Oct 2013)	

The Project Cost is expressed in July 2012 dollars.

DI_LA_23	Sparrovale Wetlands - Land (109 -215 Sparrovale Road Charlemont)	
Description	Acquisition of Sparrovale Farm for environmental and drainage works. Total area to be acquired - 419.80 ha	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$1,729,000	
Indicative Provision Trigger	Prior to the upgrade of culverts under Barwon Heads Road (being the outlet from Barwon Heads Road south retarding basin DI_DR_7 or Barwon Heads Road retarding basin DI_DR_4) or at the discretion of the Responsible Authority.	
Strategic Justification	Land required for Horseshoe Bend Stormwater Management Plan as detailed by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$1,729,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$3,725.66	
Costing Source	Charter Keck Cramer Land Valuation Report (Oct 2013)	

The Project Cost is expressed in July 2012 dollars.

DI_DR_12	Sparrovale Wetlands - Construction	
Description	Construction of various works associated with the delivery of the Sparrovale wetland to service the Horseshoe Bend Precinct	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$2,472,557	
Indicative Provision Trigger	Prior to the upgrade of culverts under Barwon Heads Road (being the outlet from Barwon Heads Road south retarding basin DI_DR_7 or Barwon Heads Road retarding basin DI_DR_4) or at the discretion of the Responsible Authority.	
Strategic Justification	Works required to provide Stormwater Management for the Precinct as detailed by Neil Craigie (Oct 2013).	
External Usage Discount	0%	
Project Cost to MCA	\$2,472,557	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$5,327.88	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

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DI_DR_13	Sparrovale Wetlands - Management Plan and Implementation Works	
Description	Delivery of a comprehensive environmental management and implementation program that is stage delivered over a period of approximately 10 years to effectively transition the site from a degraded farmland to a functional, integrated and sustainable wetland system	
	Infrastructure Type	Infrastructure Category
	Development	Drainage
Project Cost	\$3,750,000	
Indicative Provision Trigger	Upon completion of Sparrovale Wetlands Construction DI_DR_12.	
Strategic Justification	Works assessed by Council as being required to provide Stormwater Management for the Precinct as detailed by Neil Craigie (Oct 2013). These environmental management works aim to establish and manage the Sparrovale Wetlands (Sparrovale and Cold Winds properties) for the first 10 years of the Precinct's life to effectively transition the site from a degraded farmland to a functional, integrated and sustainable wetland system.	
External Usage Discount	0%	
Project Cost to MCA	\$3,750,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$8,080.52	
Costing Source	Council estimate (1/10/13)	

The Project Cost is expressed in July 2012 dollars.

DI_P_1	PSP/DCP Preparation	
Description	PSP/DCP Preparation	
	Infrastructure Type	Infrastructure Category
	Development	Other
Project Cost	\$1,440,000	
Indicative Provision Trigger	Complete	
Strategic Justification	Item required for comprehensive planning for the Precinct. Funded by Horseshoe Bend Landowners Group (Refer to Appendix B Table 13 for funding contribution breakdown).	
External Usage Discount	0%	
Project Cost to MCA	\$1,440,000	
Apportionment of Costs	To be apportioned based on NDA between all landowners in the Precinct.	
Demand Units	464.08	
Levy Amount	\$3,102.92	
Costing Source	Prowse Quantity Surveyors 1 Sept 2014	

The Project Cost is expressed in July 2012 dollars.

Table 13 - DI P 1 Funding Contribution Breakdown

Table 13 shows the breakdown of the cost of item DI_P_1 as funded by the owners of the parcels shown. This table is included for the purposes of calculating credits for this item.

Property Number(s)	Percentage of PSP costs (%)
2, 11, 12, 13, 14 & 15	15.514%
21,26 & 26	11.683%
50	9.177%
32	4.173%
22	4.034%
59 & 63	7.888%
60 & 62	8.133%
17, 18 & 27	4.501%
53, 54, 55, 56, 57 & 58	24.734%
51 & 52	10.163%

Appendix C. INTERSECTION LAYOUT PLANS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE EXISTING ASPHALT	100	SQ YD
2	REMOVE EXISTING CONCRETE	100	SQ YD
3	REMOVE EXISTING CURB	100	LINEAR FT
4	REMOVE EXISTING SIDEWALK	100	LINEAR FT
5	REMOVE EXISTING TRAFFIC ISLAND	100	SQ YD
6	REMOVE EXISTING SIGNAGE	100	LINEAR FT
7	REMOVE EXISTING LIGHT FIXTURES	100	LINEAR FT
8	REMOVE EXISTING UTILITIES	100	LINEAR FT
9	REMOVE EXISTING FENCE	100	LINEAR FT
10	REMOVE EXISTING LANDSCAPING	100	SQ YD
11	REMOVE EXISTING TREES	100	LINEAR FT
12	REMOVE EXISTING BUSHES	100	LINEAR FT
13	REMOVE EXISTING GRASS	100	SQ YD
14	REMOVE EXISTING SOIL	100	SQ YD
15	REMOVE EXISTING SAND	100	SQ YD
16	REMOVE EXISTING GRAVEL	100	SQ YD
17	REMOVE EXISTING ASPHALT	100	SQ YD
18	REMOVE EXISTING CONCRETE	100	SQ YD
19	REMOVE EXISTING CURB	100	LINEAR FT
20	REMOVE EXISTING SIDEWALK	100	LINEAR FT
21	REMOVE EXISTING TRAFFIC ISLAND	100	SQ YD
22	REMOVE EXISTING SIGNAGE	100	LINEAR FT
23	REMOVE EXISTING LIGHT FIXTURES	100	LINEAR FT
24	REMOVE EXISTING UTILITIES	100	LINEAR FT
25	REMOVE EXISTING FENCE	100	LINEAR FT
26	REMOVE EXISTING LANDSCAPING	100	SQ YD
27	REMOVE EXISTING TREES	100	LINEAR FT
28	REMOVE EXISTING BUSHES	100	LINEAR FT
29	REMOVE EXISTING GRASS	100	SQ YD
30	REMOVE EXISTING SOIL	100	SQ YD
31	REMOVE EXISTING SAND	100	SQ YD
32	REMOVE EXISTING GRAVEL	100	SQ YD
33	REMOVE EXISTING ASPHALT	100	SQ YD
34	REMOVE EXISTING CONCRETE	100	SQ YD
35	REMOVE EXISTING CURB	100	LINEAR FT
36	REMOVE EXISTING SIDEWALK	100	LINEAR FT
37	REMOVE EXISTING TRAFFIC ISLAND	100	SQ YD
38	REMOVE EXISTING SIGNAGE	100	LINEAR FT
39	REMOVE EXISTING LIGHT FIXTURES	100	LINEAR FT
40	REMOVE EXISTING UTILITIES	100	LINEAR FT
41	REMOVE EXISTING FENCE	100	LINEAR FT
42	REMOVE EXISTING LANDSCAPING	100	SQ YD
43	REMOVE EXISTING TREES	100	LINEAR FT
44	REMOVE EXISTING BUSHES	100	LINEAR FT
45	REMOVE EXISTING GRASS	100	SQ YD
46	REMOVE EXISTING SOIL	100	SQ YD
47	REMOVE EXISTING SAND	100	SQ YD
48	REMOVE EXISTING GRAVEL	100	SQ YD
49	REMOVE EXISTING ASPHALT	100	SQ YD
50	REMOVE EXISTING CONCRETE	100	SQ YD
51	REMOVE EXISTING CURB	100	LINEAR FT
52	REMOVE EXISTING SIDEWALK	100	LINEAR FT
53	REMOVE EXISTING TRAFFIC ISLAND	100	SQ YD
54	REMOVE EXISTING SIGNAGE	100	LINEAR FT
55	REMOVE EXISTING LIGHT FIXTURES	100	LINEAR FT
56	REMOVE EXISTING UTILITIES	100	LINEAR FT
57	REMOVE EXISTING FENCE	100	LINEAR FT
58	REMOVE EXISTING LANDSCAPING	100	SQ YD
59	REMOVE EXISTING TREES	100	LINEAR FT
60	REMOVE EXISTING BUSHES	100	LINEAR FT
61	REMOVE EXISTING GRASS	100	SQ YD
62	REMOVE EXISTING SOIL	100	SQ YD
63	REMOVE EXISTING SAND	100	SQ YD
64	REMOVE EXISTING GRAVEL	100	SQ YD
65	REMOVE EXISTING ASPHALT	100	SQ YD
66	REMOVE EXISTING CONCRETE	100	SQ YD
67	REMOVE EXISTING CURB	100	LINEAR FT
68	REMOVE EXISTING SIDEWALK	100	LINEAR FT
69	REMOVE EXISTING TRAFFIC ISLAND	100	SQ YD
70	REMOVE EXISTING SIGNAGE	100	LINEAR FT
71	REMOVE EXISTING LIGHT FIXTURES	100	LINEAR FT
72	REMOVE EXISTING UTILITIES	100	LINEAR FT
73	REMOVE EXISTING FENCE	100	LINEAR FT
74	REMOVE EXISTING LANDSCAPING	100	SQ YD
75	REMOVE EXISTING TREES	100	LINEAR FT
76	REMOVE EXISTING BUSHES	100	LINEAR FT
77	REMOVE EXISTING GRASS	100	SQ YD
78	REMOVE EXISTING SOIL	100	SQ YD
79	REMOVE EXISTING SAND	100	SQ YD
80	REMOVE EXISTING GRAVEL	100	SQ YD
81	REMOVE EXISTING ASPHALT	100	SQ YD
82	REMOVE EXISTING CONCRETE	100	SQ YD
83	REMOVE EXISTING CURB	100	LINEAR FT
84	REMOVE EXISTING SIDEWALK	100	LINEAR FT
85	REMOVE EXISTING TRAFFIC ISLAND	100	SQ YD
86	REMOVE EXISTING SIGNAGE	100	LINEAR FT
87	REMOVE EXISTING LIGHT FIXTURES	100	LINEAR FT
88	REMOVE EXISTING UTILITIES	100	LINEAR FT
89	REMOVE EXISTING FENCE	100	LINEAR FT
90	REMOVE EXISTING LANDSCAPING	100	SQ YD
91	REMOVE EXISTING TREES	100	LINEAR FT
92	REMOVE EXISTING BUSHES	100	LINEAR FT
93	REMOVE EXISTING GRASS	100	SQ YD
94	REMOVE EXISTING SOIL	100	SQ YD
95	REMOVE EXISTING SAND	100	SQ YD
96	REMOVE EXISTING GRAVEL	100	SQ YD
97	REMOVE EXISTING ASPHALT	100	SQ YD
98	REMOVE EXISTING CONCRETE	100	SQ YD
99	REMOVE EXISTING CURB	100	LINEAR FT
100	REMOVE EXISTING SIDEWALK	100	LINEAR FT

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 2. ALL DIMENSIONS TO CENTERLINE UNLESS OTHERWISE NOTED.
 3. ALL DIMENSIONS TO CENTERLINE UNLESS OTHERWISE NOTED.
 4. ALL DIMENSIONS TO CENTERLINE UNLESS OTHERWISE NOTED.



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1" = 50' 0"

0' 10' 20' 30' 40' 50'

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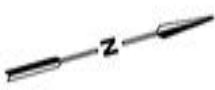
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DATE	DESCRIPTION
03/20/13	PRELIMINARY DESIGN
03/11/13	REVISION

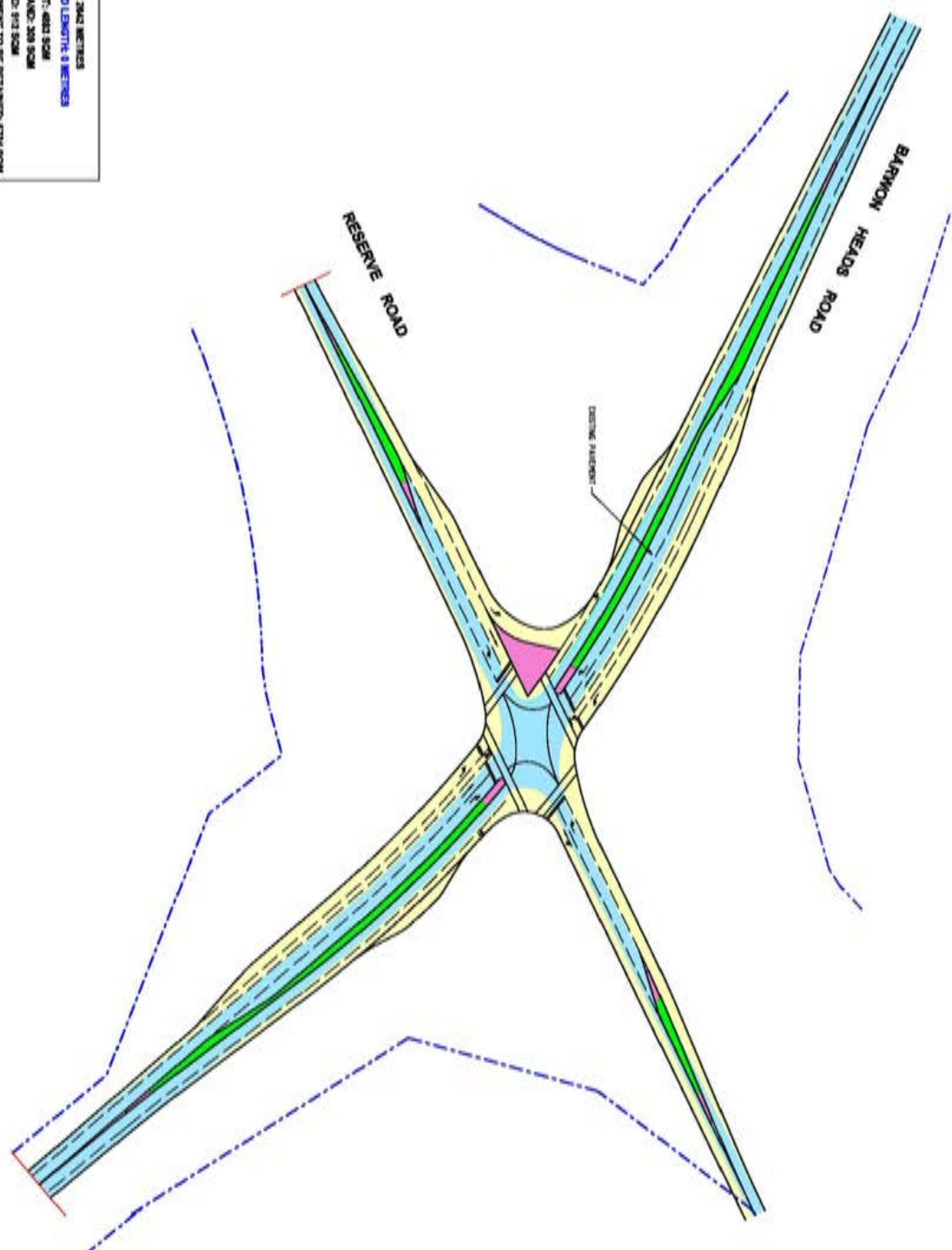
HORSESHOE BEND LAND OWNERS GROUP
 ASSISTING CHIEF HORSESHOE BEND PROJECT
 CITY OF GREATER GEORGE
 BARROW HEADS ROAD / RESERVE ROAD
 PROPOSED INTERSECTION LAYOUT - INTERSECTION
 (COSTING - SITE D420-3)

PROJECT NUMBER	CG111786
DATE	3/20/13
SCALE	1/2" = 50'
STATUS	T
DESIGNER	12
CHECKER	PS

	EXISTING PAVEMENT TO BE RETAINED - 57CM SOUM
	TRAFFIC ISLAND - 912 SOUM
	CONCRETE ISLAND - 303 SOUM
	NEW PAVEMENT - 483 SOUM
	NEW LENGTH - 2942 METERS
	REMOVE LENGTH - 8 METERS



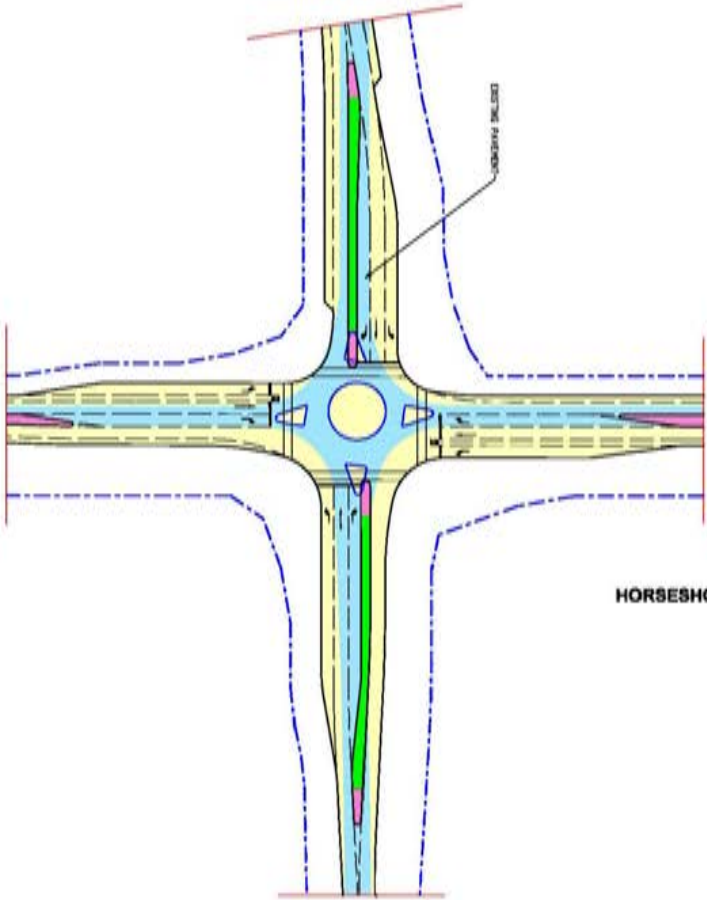
RELAY: MAP REF: 100 23



NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
01	GENERAL PAINTWORK	50	LS	100	5000
02	GENERAL PAINTWORK	50	LS	100	5000
03	GENERAL PAINTWORK	50	LS	100	5000
04	GENERAL PAINTWORK	50	LS	100	5000
05	GENERAL PAINTWORK	50	LS	100	5000
06	GENERAL PAINTWORK	50	LS	100	5000
07	GENERAL PAINTWORK	50	LS	100	5000
08	GENERAL PAINTWORK	50	LS	100	5000
09	GENERAL PAINTWORK	50	LS	100	5000
10	GENERAL PAINTWORK	50	LS	100	5000
11	GENERAL PAINTWORK	50	LS	100	5000
12	GENERAL PAINTWORK	50	LS	100	5000
13	GENERAL PAINTWORK	50	LS	100	5000
14	GENERAL PAINTWORK	50	LS	100	5000
15	GENERAL PAINTWORK	50	LS	100	5000
16	GENERAL PAINTWORK	50	LS	100	5000
17	GENERAL PAINTWORK	50	LS	100	5000
18	GENERAL PAINTWORK	50	LS	100	5000
19	GENERAL PAINTWORK	50	LS	100	5000
20	GENERAL PAINTWORK	50	LS	100	5000
21	GENERAL PAINTWORK	50	LS	100	5000
22	GENERAL PAINTWORK	50	LS	100	5000
23	GENERAL PAINTWORK	50	LS	100	5000
24	GENERAL PAINTWORK	50	LS	100	5000
25	GENERAL PAINTWORK	50	LS	100	5000
26	GENERAL PAINTWORK	50	LS	100	5000
27	GENERAL PAINTWORK	50	LS	100	5000
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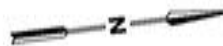
FOR COSTING PURPOSES ONLY

— NEW LENGTH: 10M METRES
 — NEW REMOVED LENGTH: 10M METRES
 — NEW PAVEMENT: 20M SQM
 — CONCRETE ISLAND: 20M SQM
 — TRAFFIC ISLAND: 20M SQM
 — EXISTING PAVEMENT TO BE RETAINED: 20M SQM



HORSESHOE BEND ROAD

BOUNDARY ROAD



SCALE: 1:100

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1:150
 1:100
 1:50
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 1:2
 1:1

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Simplifying the Future

Scale	20%
Sheet	20%
Client	MM
Project	

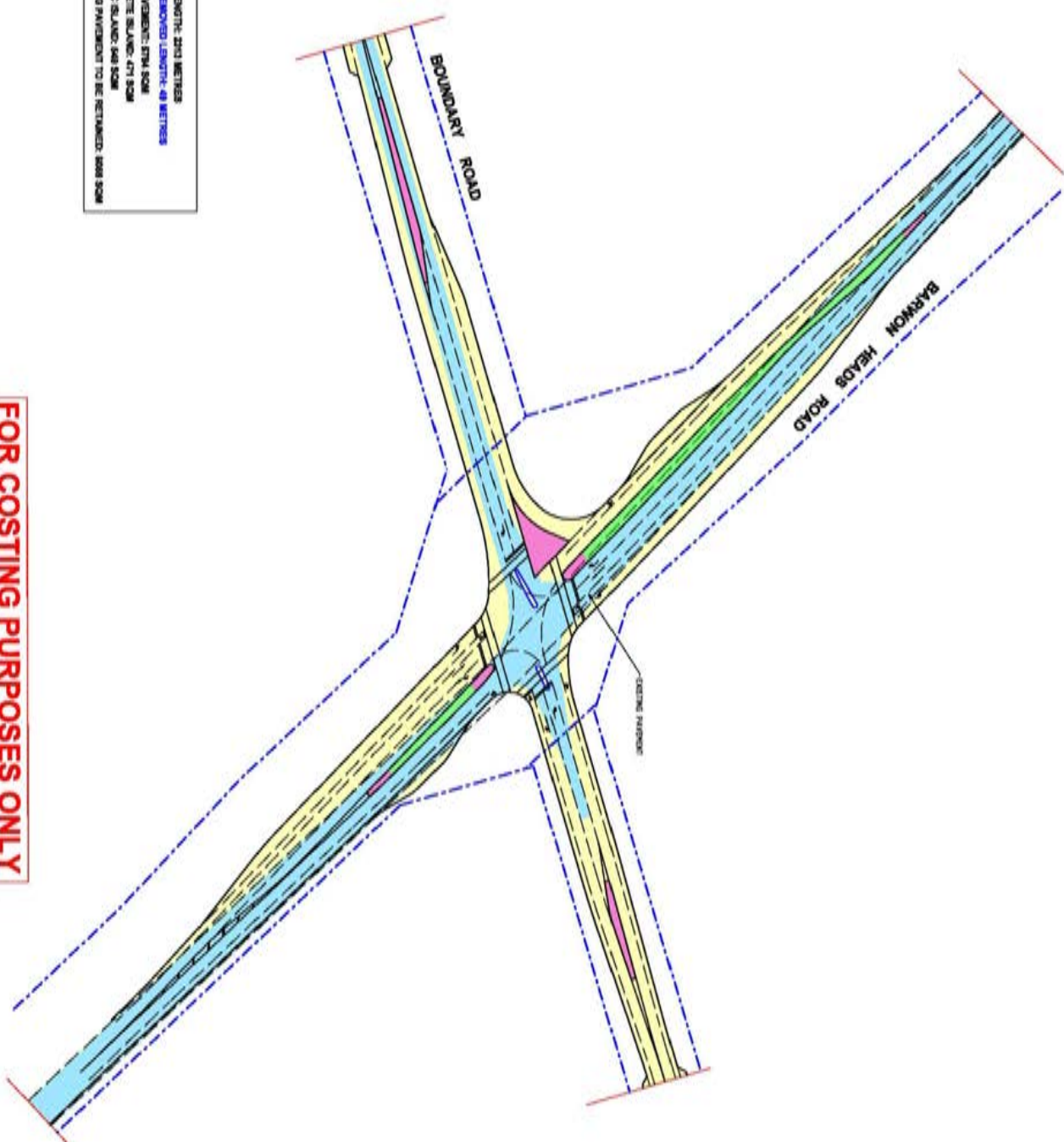
HORSESHOE BEND LAND OWNERS GROUP
 HASTINGS/DEER HORSESHOE BEND PROJECT
 CITY OF GRANBY (BELOW)
 HORSESHOE BEND ROAD / BOUNDARY ROAD
 PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN
 (COSTING - SITE 2480-7)

Project No.	03111786
Revision	1
Date	15
Scale	1:100
Sheet	15
Project	PS

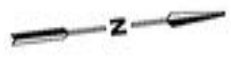
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02	CONCRETE	1	100%
03	PAVING	1	100%
04	LANDSCAPE	1	100%
05	UTILITIES	1	100%
06	STRUCTURE	1	100%
07	MECHANICAL	1	100%
08	ELECTRICAL	1	100%
09	PLUMBING	1	100%
10	HAZARDOUS WASTE	1	100%
11	DEMOLITION	1	100%
12	ASBESTOS	1	100%
13	ENVIRONMENTAL	1	100%
14	ARCHITECTURAL	1	100%
15	INTERIOR	1	100%
16	EXTERIOR	1	100%
17	MECHANICAL	1	100%
18	ELECTRICAL	1	100%
19	PLUMBING	1	100%
20	HAZARDOUS WASTE	1	100%
21	DEMOLITION	1	100%
22	ASBESTOS	1	100%
23	ENVIRONMENTAL	1	100%
24	ARCHITECTURAL	1	100%
25	INTERIOR	1	100%
26	EXTERIOR	1	100%
27	MECHANICAL	1	100%
28	ELECTRICAL	1	100%
29	PLUMBING	1	100%
30	HAZARDOUS WASTE	1	100%
31	DEMOLITION	1	100%
32	ASBESTOS	1	100%
33	ENVIRONMENTAL	1	100%
34	ARCHITECTURAL	1	100%
35	INTERIOR	1	100%
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40	HAZARDOUS WASTE	1	100%
41	DEMOLITION	1	100%
42	ASBESTOS	1	100%
43	ENVIRONMENTAL	1	100%
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45	INTERIOR	1	100%
46	EXTERIOR	1	100%
47	MECHANICAL	1	100%
48	ELECTRICAL	1	100%
49	PLUMBING	1	100%
50	HAZARDOUS WASTE	1	100%

FOR COSTING PURPOSES ONLY

— KERB LENGTH: 200 METRES
— KERB REMOVED LENGTH: 48 METRES
— NEW PAVEMENT: 27M SQM
— CONCRETE ISLAND: 471 SQM
— TRAFFIC ISLAND: 848 SQM
— EXISTING PAVEMENT TO BE RETAINED: 8008 SQM



REVISION: 06/06/13

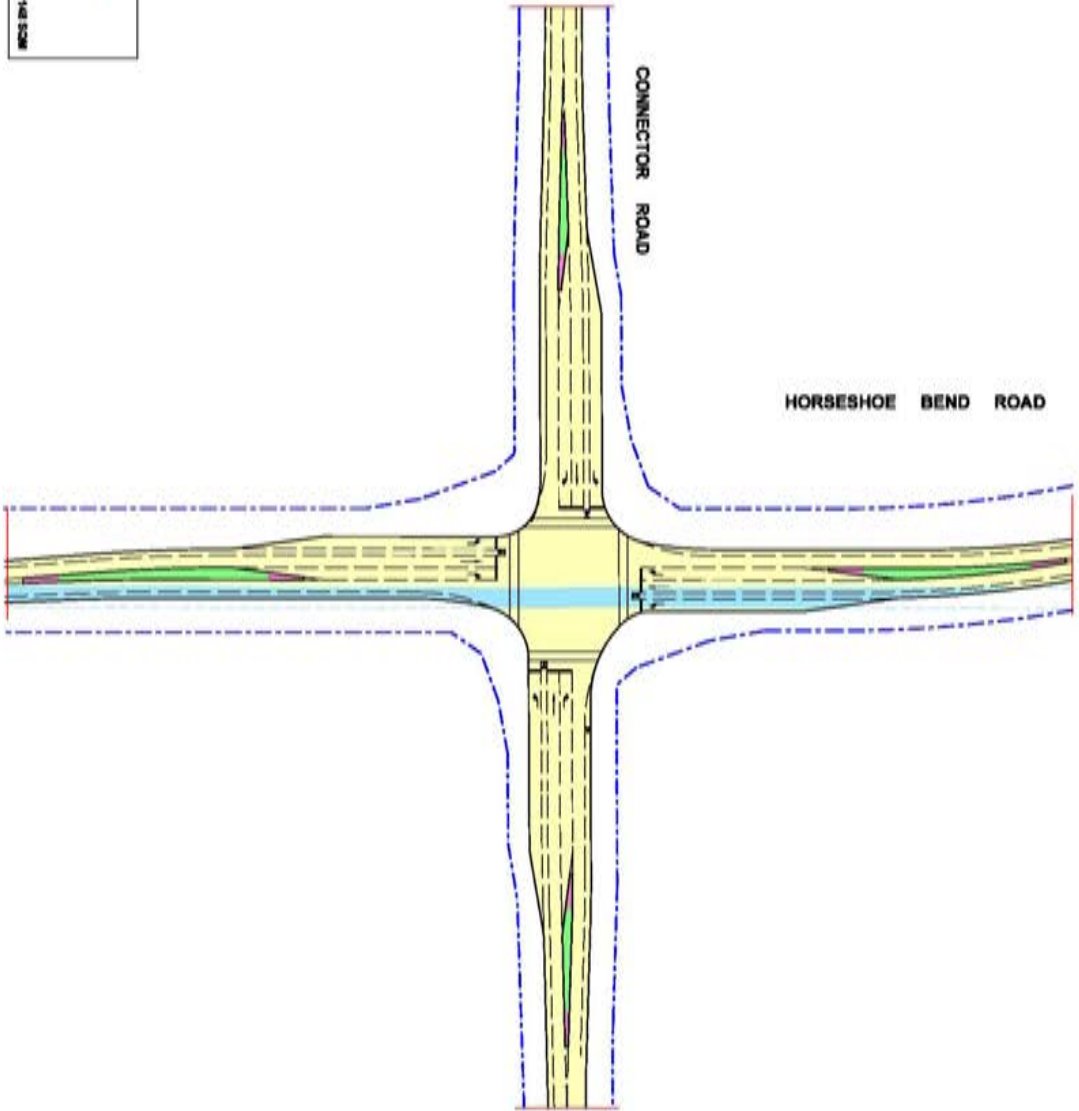


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 Shaping the future
 100, 101 & 102, 103 & 104, 105 & 106, 107 & 108, 109 & 110, 111 & 112, 113 & 114, 115 & 116, 117 & 118, 119 & 120, 121 & 122, 123 & 124, 125 & 126, 127 & 128, 129 & 130, 131 & 132, 133 & 134, 135 & 136, 137 & 138, 139 & 140, 141 & 142, 143 & 144, 145 & 146, 147 & 148, 149 & 150, 151 & 152, 153 & 154, 155 & 156, 157 & 158, 159 & 160, 161 & 162, 163 & 164, 165 & 166, 167 & 168, 169 & 170, 171 & 172, 173 & 174, 175 & 176, 177 & 178, 179 & 180, 181 & 182, 183 & 184, 185 & 186, 187 & 188, 189 & 190, 191 & 192, 193 & 194, 195 & 196, 197 & 198, 199 & 200, 201 & 202, 203 & 204, 205 & 206, 207 & 208, 209 & 210, 211 & 212, 213 & 214, 215 & 216, 217 & 218, 219 & 220, 221 & 222, 223 & 224, 225 & 226, 227 & 228, 229 & 230, 231 & 232, 233 & 234, 235 & 236, 237 & 238, 239 & 240, 241 & 242, 243 & 244, 245 & 246, 247 & 248, 249 & 250, 251 & 252, 253 & 254, 255 & 256, 257 & 258, 259 & 260, 261 & 262, 263 & 264, 265 & 266, 267 & 268, 269 & 270, 271 & 272, 273 & 274, 275 & 276, 277 & 278, 279 & 280, 281 & 282, 283 & 284, 285 & 286, 287 & 288, 289 & 290, 291 & 292, 293 & 294, 295 & 296, 297 & 298, 299 & 300, 301 & 302, 303 & 304, 305 & 306, 307 & 308, 309 & 310, 311 & 312, 313 & 314, 315 & 316, 317 & 318, 319 & 320, 321 & 322, 323 & 324, 325 & 326, 327 & 328, 329 & 330, 331 & 332, 333 & 334, 335 & 336, 337 & 338, 339 & 340, 341 & 342, 343 & 344, 345 & 346, 347 & 348, 349 & 350, 351 & 352, 353 & 354, 355 & 356, 357 & 358, 359 & 360, 361 & 362, 363 & 364, 365 & 366, 367 & 368, 369 & 370, 371 & 372, 373 & 374, 375 & 376, 377 & 378, 379 & 380, 381 & 382, 383 & 384, 385 & 386, 387 & 388, 389 & 390, 391 & 392, 393 & 394, 395 & 396, 397 & 398, 399 & 400, 401 & 402, 403 & 404, 405 & 406, 407 & 408, 409 & 410, 411 & 412, 413 & 414, 415 & 416, 417 & 418, 419 & 420, 421 & 422, 423 & 424, 425 & 426, 427 & 428, 429 & 430, 431 & 432, 433 & 434, 435 & 436, 437 & 438, 439 & 440, 441 & 442, 443 & 444, 445 & 446, 447 & 448, 449 & 450, 451 & 452, 453 & 454, 455 & 456, 457 & 458, 459 & 460, 461 & 462, 463 & 464, 465 & 466, 467 & 468, 469 & 470, 471 & 472, 473 & 474, 475 & 476, 477 & 478, 479 & 480, 481 & 482, 483 & 484, 485 & 486, 487 & 488, 489 & 490, 491 & 492, 493 & 494, 495 & 496, 497 & 498, 499 & 500, 501 & 502, 503 & 504, 505 & 506, 507 & 508, 509 & 510, 511 & 512, 513 & 514, 515 & 516, 517 & 518, 519 & 520, 521 & 522, 523 & 524, 525 & 526, 527 & 528, 529 & 530, 531 & 532, 533 & 534, 535 & 536, 537 & 538, 539 & 540, 541 & 542, 543 & 544, 545 & 546, 547 & 548, 549 & 550, 551 & 552, 553 & 554, 555 & 556, 557 & 558, 559 & 560, 561 & 562, 563 & 564, 565 & 566, 567 & 568, 569 & 570, 571 & 572, 573 & 574, 575 & 576, 577 & 578, 579 & 580, 581 & 582, 583 & 584, 585 & 586, 587 & 588, 589 & 590, 591 & 592, 593 & 594, 595 & 596, 597 & 598, 599 & 600, 601 & 602, 603 & 604, 605 & 606, 607 & 608, 609 & 610, 611 & 612, 613 & 614, 615 & 616, 617 & 618, 619 & 620, 621 & 622, 623 & 624, 625 & 626, 627 & 628, 629 & 630, 631 & 632, 633 & 634, 635 & 636, 637 & 638, 639 & 640, 641 & 642, 643 & 644, 645 & 646, 647 & 648, 649 & 650, 651 & 652, 653 & 654, 655 & 656, 657 & 658, 659 & 660, 661 & 662, 663 & 664, 665 & 666, 667 & 668, 669 & 670, 671 & 672, 673 & 674, 675 & 676, 677 & 678, 679 & 680, 681 & 682, 683 & 684, 685 & 686, 687 & 688, 689 & 690, 691 & 692, 693 & 694, 695 & 696, 697 & 698, 699 & 700, 701 & 702, 703 & 704, 705 & 706, 707 & 708, 709 & 710, 711 & 712, 713 & 714, 715 & 716, 717 & 718, 719 & 720, 721 & 722, 723 & 724, 725 & 726, 727 & 728, 729 & 730, 731 & 732, 733 & 734, 735 & 736, 737 & 738, 739 & 740, 741 & 742, 743 & 744, 745 & 746, 747 & 748, 749 & 750, 751 & 752, 753 & 754, 755 & 756, 757 & 758, 759 & 760, 761 & 762, 763 & 764, 765 & 766, 767 & 768, 769 & 770, 771 & 772, 773 & 774, 775 & 776, 777 & 778, 779 & 780, 781 & 782, 783 & 784, 785 & 786, 787 & 788, 789 & 790, 791 & 792, 793 & 794, 795 & 796, 797 & 798, 799 & 800, 801 & 802, 803 & 804, 805 & 806, 807 & 808, 809 & 810, 811 & 812, 813 & 814, 815 & 816, 817 & 818, 819 & 820, 821 & 822, 823 & 824, 825 & 826, 827 & 828, 829 & 830, 831 & 832, 833 & 834, 835 & 836, 837 & 838, 839 & 840, 841 & 842, 843 & 844, 845 & 846, 847 & 848, 849 & 850, 851 & 852, 853 & 854, 855 & 856, 857 & 858, 859 & 860, 861 & 862, 863 & 864, 865 & 866, 867 & 868, 869 & 870, 871 & 872, 873 & 874, 875 & 876, 877 & 878, 879 & 880, 881 & 882, 883 & 884, 885 & 886, 887 & 888, 889 & 890, 891 & 892, 893 & 894, 895 & 896, 897 & 898, 899 & 900, 901 & 902, 903 & 904, 905 & 906, 907 & 908, 909 & 910, 911 & 912, 913 & 914, 915 & 916, 917 & 918, 919 & 920, 921 & 922, 923 & 924, 925 & 926, 927 & 928, 929 & 930, 931 & 932, 933 & 934, 935 & 936, 937 & 938, 939 & 940, 941 & 942, 943 & 944, 945 & 946, 947 & 948, 949 & 950, 951 & 952, 953 & 954, 955 & 956, 957 & 958, 959 & 960, 961 & 962, 963 & 964, 965 & 966, 967 & 968, 969 & 970, 971 & 972, 973 & 974, 975 & 976, 977 & 978, 979 & 980, 981 & 982, 983 & 984, 985 & 986, 987 & 988, 989 & 990, 991 & 992, 993 & 994, 995 & 996, 997 & 998, 999 & 1000.

Client	OSB
Design	OSB
Drawn	AW
Checked	AW
Scale	1:250
Date	21.04.13
Project	HORSESHOE BEND LAND OWNERS GROUP PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN (COSTING - SITE PLAN)
Drawn By	AW
Checked By	AW
Scale	1:250
Date	21.04.13
Project	HORSESHOE BEND LAND OWNERS GROUP PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN (COSTING - SITE PLAN)
Drawn By	AW
Checked By	AW
Scale	1:250
Date	21.04.13
Project	HORSESHOE BEND LAND OWNERS GROUP PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN (COSTING - SITE PLAN)
Drawn By	AW
Checked By	AW
Scale	1:250
Date	21.04.13
Project	HORSESHOE BEND LAND OWNERS GROUP PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN (COSTING - SITE PLAN)
Drawn By	AW
Checked By	AW
Scale	1:250
Date	21.04.13
Project	HORSESHOE BEND LAND OWNERS GROUP PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN (COSTING - SITE PLAN)
Drawn By	AW
Checked By	AW
Scale	1:250
Date	21.04.13
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Drawn By	AW
Checked By	AW
Scale	1:250
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Scale	1:250
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Date	21.04.13
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Drawn By	AW
Checked By	AW
Scale	1:250
Date	21.04.13
Project	HORSESHOE BEND LAND OWNERS GROUP PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN (COSTING - SITE PLAN)
Drawn By	



FOR COSTING PURPOSES ONLY

NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	NEW PAVEMENT	70	M	1.00	70.00
2	CONCRETE ISLAND	50	M	1.00	50.00
3	TRAFFIC ISLAND	400	M	1.00	400.00
4	EXISTING PAVEMENT TO BE RETAINED	1140	M	1.00	1140.00
TOTAL					1660.00

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1:100
 1:200
 1:500
 1:1000

WARNING
 BEWARE OF UNEXPECTED SERVICES
 THE INFORMATION ON THIS PLAN IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A CONTRACT.

1:100
 1:200
 1:500
 1:1000

Cardno
 Supply the Future

1000
 2000
 3000
 4000
 5000
 6000
 7000
 8000
 9000
 10000

DATE: 04/04/2015
 TIME: 9:30:37 AM
 USER: beth.cho

PROJECT: HORSESHOE BEND ROAD OWNERS GROUP
 CLIENT: NATIONAL CREW HORSESHOE BEND PROJECT
 CITY OF GREATER GEORGETOWN
 PROJECT: HORSESHOE BEND ROAD / CONNECTOR ROAD
 PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN
 COSTING - SITE PLAN

PRELIMINARY
 NOT TO BE USED FOR CONSTRUCTION PURPOSES

DATE: 04/04/2015
 TIME: 9:30:37 AM
 USER: beth.cho

PROJECT: HORSESHOE BEND ROAD OWNERS GROUP
 CLIENT: NATIONAL CREW HORSESHOE BEND PROJECT
 CITY OF GREATER GEORGETOWN
 PROJECT: HORSESHOE BEND ROAD / CONNECTOR ROAD
 PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN
 COSTING - SITE PLAN



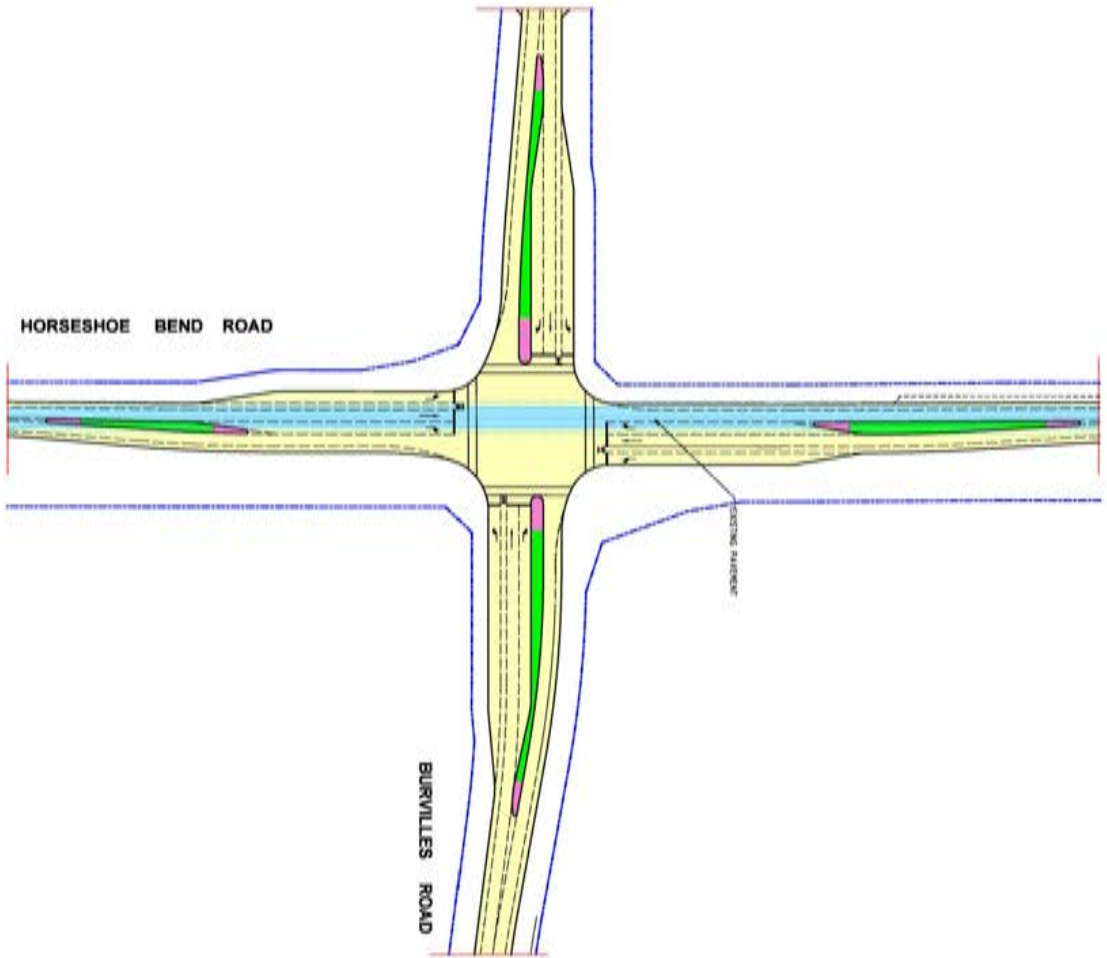
NO.	DESCRIPTION	QTY	UNIT
1	NEW PAVEMENT - 15M METERS	15	M
2	NEW PAVEMENT - 9M METERS	9	M
3	CONCRETE ISLAND - 175 SQM	1	SQM
4	TRAFFIC ISLAND - 875 SQM	1	SQM
5	EXISTING PAVEMENT TO BE RETAINED - 194M SQM	194	SQM

— NEW PAVEMENT - 15M METERS
 — NEW PAVEMENT - 9M METERS
 — CONCRETE ISLAND - 175 SQM
 — TRAFFIC ISLAND - 875 SQM
 — EXISTING PAVEMENT TO BE RETAINED - 194M SQM

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 1786 HORSESHOE BEND ROAD, SUITE 100
 WILSONVILLE, OR 97158
 TEL: 503.535.1234
 WWW.CJDESIGN.COM

WARNING
 BOARD OF SUPERVISOR SERVICES
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Project	DSE
Client	DSE
Contract	1786

HORSESHOE BEND LAND OWNERS GROUP
 1786 HORSESHOE BEND ROAD, SUITE 100
 WILSONVILLE, OR 97158
 TEL: 503.535.1234
 WWW.CJDESIGN.COM

Project	1786
Client	DSE
Contract	1786
Sheet	14
Scale	PS

SCALE: 1/4" = 10'

NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	CONCRETE	100	M ²	100	10000
2	ASPHALT	200	M ²	200	40000
3	TRAFFIC ISLAND	1	NO.	10000	10000
4	PAVEMENT	100	M ²	100	10000
5	CONCRETE	100	M ²	100	10000
6	ASPHALT	200	M ²	200	40000
7	TRAFFIC ISLAND	1	NO.	10000	10000
8	PAVEMENT	100	M ²	100	10000
9	CONCRETE	100	M ²	100	10000
10	ASPHALT	200	M ²	200	40000
11	TRAFFIC ISLAND	1	NO.	10000	10000
12	PAVEMENT	100	M ²	100	10000
13	CONCRETE	100	M ²	100	10000
14	ASPHALT	200	M ²	200	40000
15	TRAFFIC ISLAND	1	NO.	10000	10000
16	PAVEMENT	100	M ²	100	10000
17	CONCRETE	100	M ²	100	10000
18	ASPHALT	200	M ²	200	40000
19	TRAFFIC ISLAND	1	NO.	10000	10000
20	PAVEMENT	100	M ²	100	10000

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WARNING
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1:100
 1" = 100'

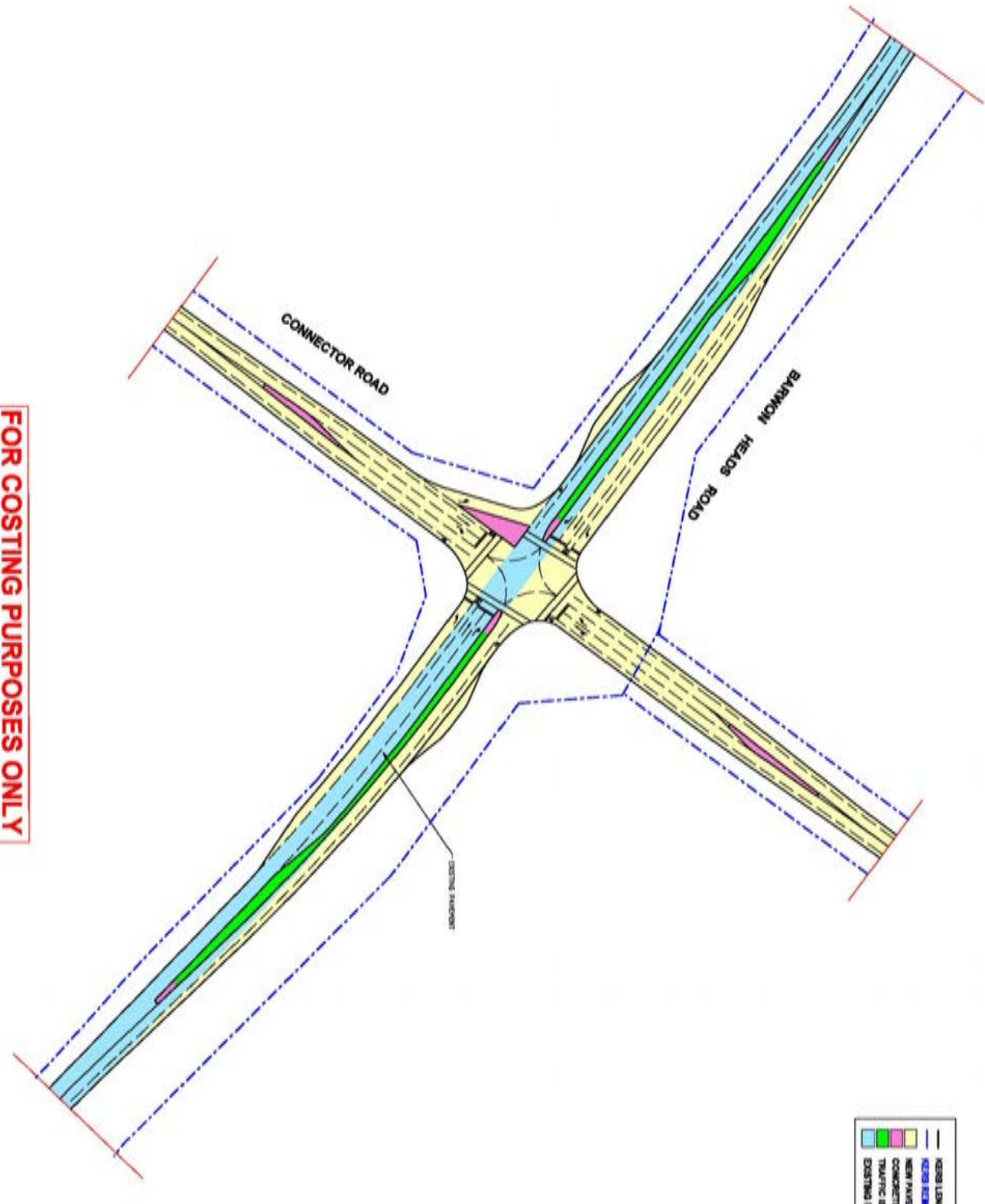


Client	DOB
Cardno	DOB
Cardno	DOB

HORSESHOE BEND LAND OWNERS GROUP
 PROPOSED INTERSECTION LAYOUT - INTERIM DESIGN
 COSTING - SITE 34-0-12

DATE	11/21/15
SCALE	1:250
PROJECT	1
DATE	08/15
PROJECT	1
DATE	08/15

FOR COSTING PURPOSES ONLY



NEW PAVEMENT - 2000 METRES	NEW PAVEMENT - 7000 METRES
CONCRETE ISLAND - 200 SQM	CONCRETE ISLAND - 200 SQM
TRAFFIC ISLAND - 200 SQM	TRAFFIC ISLAND - 200 SQM
EXISTING PAVEMENT TO BE RETAINED - 4000 SQM	EXISTING PAVEMENT TO BE RETAINED - 4000 SQM

Appendix D. HBP CONCEPT DESIGNS DRAINAGE AND STORMWATER MANAGEMENT PROJECTS

