



# Greater Geelong Settlement Boundary

## Long Term Boundary Review for Urban Geelong

Draft for consultation - March 2022

# Contents

We Acknowledge the Wadawurrung People as the Traditional Owners of the Land, Waterways and Skies of Greater Geelong. We pay our respects to their Elders, past and present.

Chapter One	Introduction	3
Chapter Two	The Geelong Settlement Strategy	6
Chapter Three	Distinctive Areas and Landscapes – Surf Coast and Bellarine Peninsula	9
Chapter Four	The Long Term Boundary Review – Scope and Guiding Principles	13
Chapter Five	Methodology	16
Chapter Six	Assessments	28
6.1	Armstrong Creek South West	31
6.2	Armstrong Creek South Central	50
6.3	Sparrovale	74
6.4	Moolap	86
6.5	Waurm Ponds North	113
6.6	Waurm Ponds South	127
6.7	Lara North	138
6.8	Lara South	155
6.9	Avalon	174
Chapter Seven	Recommendations	181
Appendix 1	Assessment of investigation areas against Principle 5 of the Settlement Boundary Review – Results	191
Appendix 2	Settlement Boundary and the Planning Policy Framework	192

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# Chapter One

## Introduction

The City of Greater Geelong is reviewing the existing settlement boundary for urban Geelong.

The current settlement boundary is identified in the Housing and Settlement Framework Plan at Clause 21.06 of the Greater Geelong Planning Scheme (refer Figure 1).

At the completion of this review, the existing settlement boundary will be converted to a long term settlement boundary via future amendment(s) to the Greater Geelong Planning Scheme.

This Background Report contains an assessment of the existing and potential alternative settlement boundary locations for urban Geelong. It identifies an investigation area for each section of the existing Geelong Settlement Boundary and it assesses the preferred location for a long term settlement boundary against the principles and suitability criteria contained within the Geelong Settlement Strategy.

The long term boundaries for townships on the Bellarine Peninsula are being determined by the Distinctive Area and Landscape project.

The eastern edge of urban Geelong and the southern edge of the Armstrong Creek Growth Area are being investigated as part of this review. A protected settlement boundary will be defined for these areas as part of the Bellarine and Surf Coast Statement of Planning Policy under the Distinctive Area and Landscape project.

The content of this Background Report is as follows:

- The Geelong Settlement Strategy/ Amendment C395:
- Distinctive Areas and Landscapes – Surf Coast & Bellarine Peninsula
- The Long Term Boundary Review Scope and Guiding Principles
- Review Methodology
- Settlement Boundary Assessments:
  - » Armstrong Creek South West
  - » Armstrong Creek South Central
  - » Sparrovale
  - » Moolap
  - » Waurm Ponds North
  - » Waurm Ponds South
  - » Lara North
  - » Lara South
  - » Avalon
- A consolidated set of findings in relation to the Settlement Boundary.

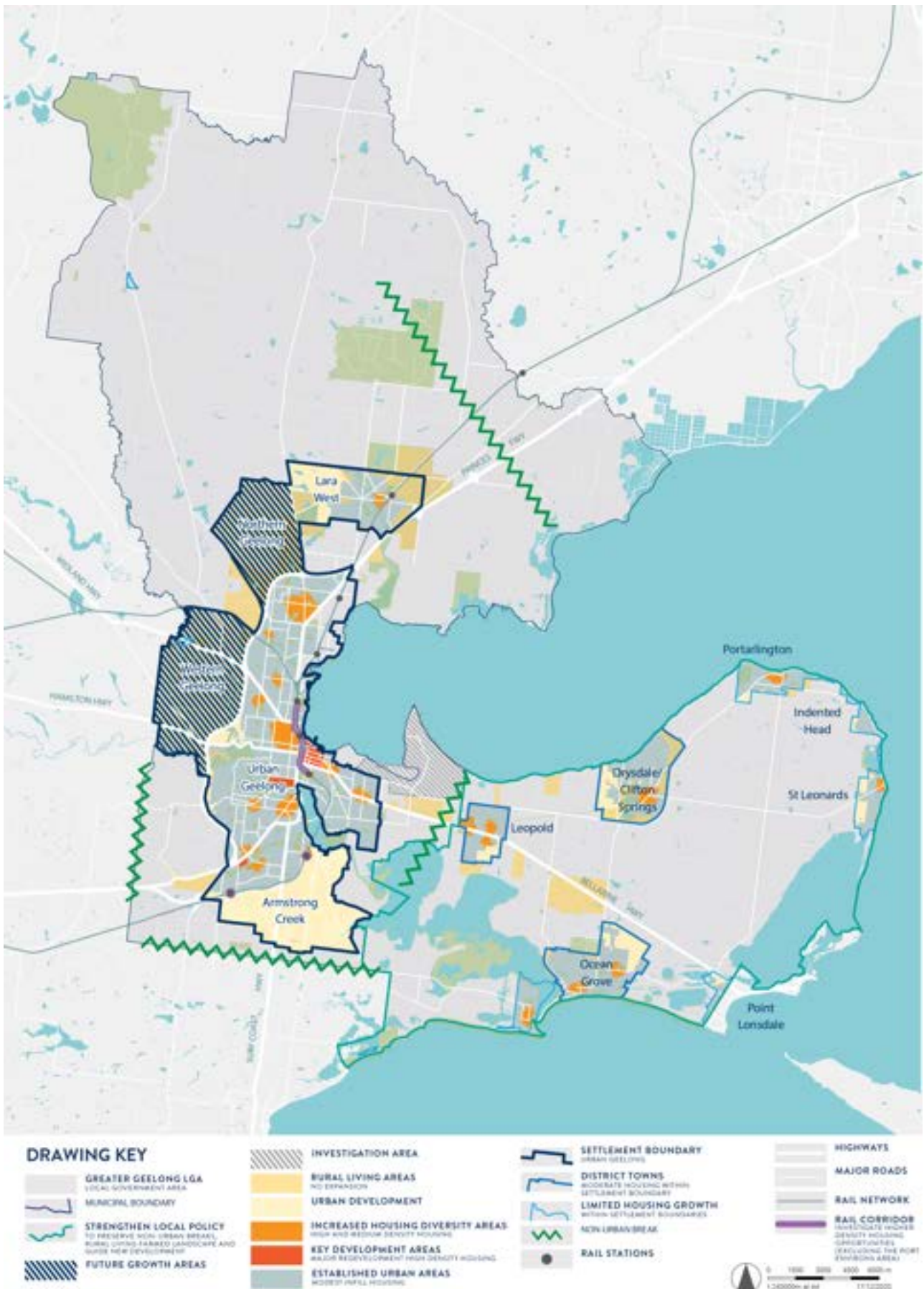


Figure 1. Housing and Settlement Framework Plan, Clause 21.06 of Greater Geelong Planning Scheme.

# Chapter Two

## The Geelong Settlement Strategy

The Greater Geelong Settlement Strategy was adopted by Council on 25 August 2020. It addresses housing needs across the municipality over the period to 2036.

The Strategy includes the following Principles and Directions relating to the future growth of the Geelong and townships within the municipality:

#### Principle

Contain growth within identified locations across the municipality.

#### Directions

- a) Pursue options to implement long term settlement boundaries for Greater Geelong.
- b) Implement long term boundaries based generally on existing urban areas and areas already identified in policy.
- c) Establish a consultation process to review the appropriateness of this boundary and deal with any significant anomalies or logical inclusions.
- d) Work with the state government and neighbouring councils to consider a regional approach to housing and settlement boundaries.

#### Principle

Maintain the unique identity of Greater Geelong and its townships.

#### Directions

- a) Maintain the non-urban breaks between Geelong and Melbourne (Wyndham), Geelong and the Surf Coast, urban Geelong and the Bellarine Peninsula, and the townships on the Bellarine Peninsula.
- b) Assess areas with special local environmental or landscape values and consider options to help preserve and manage these breaks into the future.
- c) Work with the state government on the Bellarine Peninsula Distinctive Areas and Landscapes process and the development of a Statement of Planning Policy for the Bellarine Peninsula.



TABLE 11: Estimated years of broad-hectare and major infill land supply, 1 November 2017

	GROWTH SCENARIO				
	Long term historic (A)	Current/ Official (B)	Strong growth (C)	G21 Aspirational (D)	Growth Surge (E)
Zoned	28	24	18	14	12
Unzoned(Potential)	5	4	3	2	1
<b>Sub-Total (excl NWGGA)</b>	<b>32</b>	<b>28</b>	<b>21</b>	<b>16</b>	<b>13</b>
Northern Growth Area (Lovely Banks)	12	10	8	6	4
Western Growth Area (Batesford)	13	11	9	7	5
<b>Total Identified Supply</b>	<b>57</b>	<b>49</b>	<b>38</b>	<b>29</b>	<b>22</b>

Source: Spatial Economics Pty Ltd

Notes: Assumed 74% of the supply comes from major infill (remnant broad-hectare and broad-hectare) and no increase in supply from dispersed infill

Figure 2. Greater Geelong Settlement Strategy (August 2020) and Table 11: Estimated years of broad-hectare and major infill land supply (p.54).

The Geelong Settlement Strategy has been given effect via Amendment C395 to the Greater Geelong Planning Scheme (the Planning Scheme), gazetted on 6 May 2021.

Amendment C395 inserted new policies into the Planning Scheme to give effect to both the Settlement Strategy and the Northern and Western Geelong Growth Areas (NWGGA) Framework Plan.

Clause 21.06 of the Planning Scheme was updated by this Amendment to include a new Housing and Settlement Framework Plan for urban Geelong and the Bellarine Peninsula townships (see Figure 1).

Amendment C395 set the broad strategic directions for residential growth, but did not include in its scope a detailed review or evaluation of existing settlement boundaries. With the exception of NWGGA, the settlement boundaries shown in the Housing and Settlement Framework Plan at Clause 21.06 were adopted from those that were already in the Planning Scheme prior to Amendment C395.

Amendment C395 introduced the following Objectives and Strategies relation to the spatial distribution of growth in the municipality:

“21.06-2 Spatial distribution of growth and land supply:

Objective:

Contain growth within identified locations across the municipality.

Strategies:

Ensure development occurs within designated settlement boundaries.

Deliver defensible long-term settlement boundaries via a consultative boundary review process

21.06-8 Implementation

Further work:

Undertake a consultative settlement boundary review process.”

# Chapter Three

## Distinctive Areas and Landscapes – Surf Coast and Bellarine Peninsula

In 2018, the Victorian Government passed legislation to recognise and safeguard the areas and landscapes that are identified as being distinctive, and to achieve better coordinated decision-making by government agencies, local councils and other key parties.

The Planning and Environment Amendment (Distinctive Areas and Landscapes) Act 2018, enables the government to declare a distinctive area and landscape subject to meeting strict criteria.

The Surf Coast and Bellarine Peninsula have each been declared as Distinctive Areas and Landscapes.

A draft Statement of Planning Policy has been prepared for each of these areas. Each Statement of Planning Policy includes a long-term vision of at least 50 years, policy objectives and strategies, and a strategic framework plan for guiding the future use and development of land in the declared areas.

The legislation provides for these plans to identify long-term settlement boundaries to ensure that development does not inappropriately encroach into valued natural and rural landscapes.

Once implemented, Parliament must ratify any future changes the settlement boundaries. This is the same process in place for Melbourne's Urban Growth Boundary.

The southern edge of urban Geelong around the Armstrong Creek growth area is affected by the Surf Coast DAL. The draft Surf Coast SPP proposes that the southern boundary of Geelong become a protected settlement boundary once the City of Greater Geelong undertakes a review process (i.e this Long Term Boundary review). The Surf Coast DAL was the subject of Advisory Committee hearings in 2020, however the Committee's report has not yet been released and the draft SPP is yet to be finalised and approved.

"The northern boundary of the declared area abuts the Armstrong Creek Urban Growth Area in Geelong. A protected settlement boundary will be needed for this area to ensure greater protection of the green break between Geelong and Torquay–Jan Juc, which has been identified as a landscape of regional significance.

The resolution of the location of this settlement boundary will be informed by strategic planning work led by the City of Greater Geelong in consultation with DELWP and other relevant agencies once Amendment C395 – Settlement Strategy and the Northern and Western Geelong Growth Areas Framework Plan has been given effect.

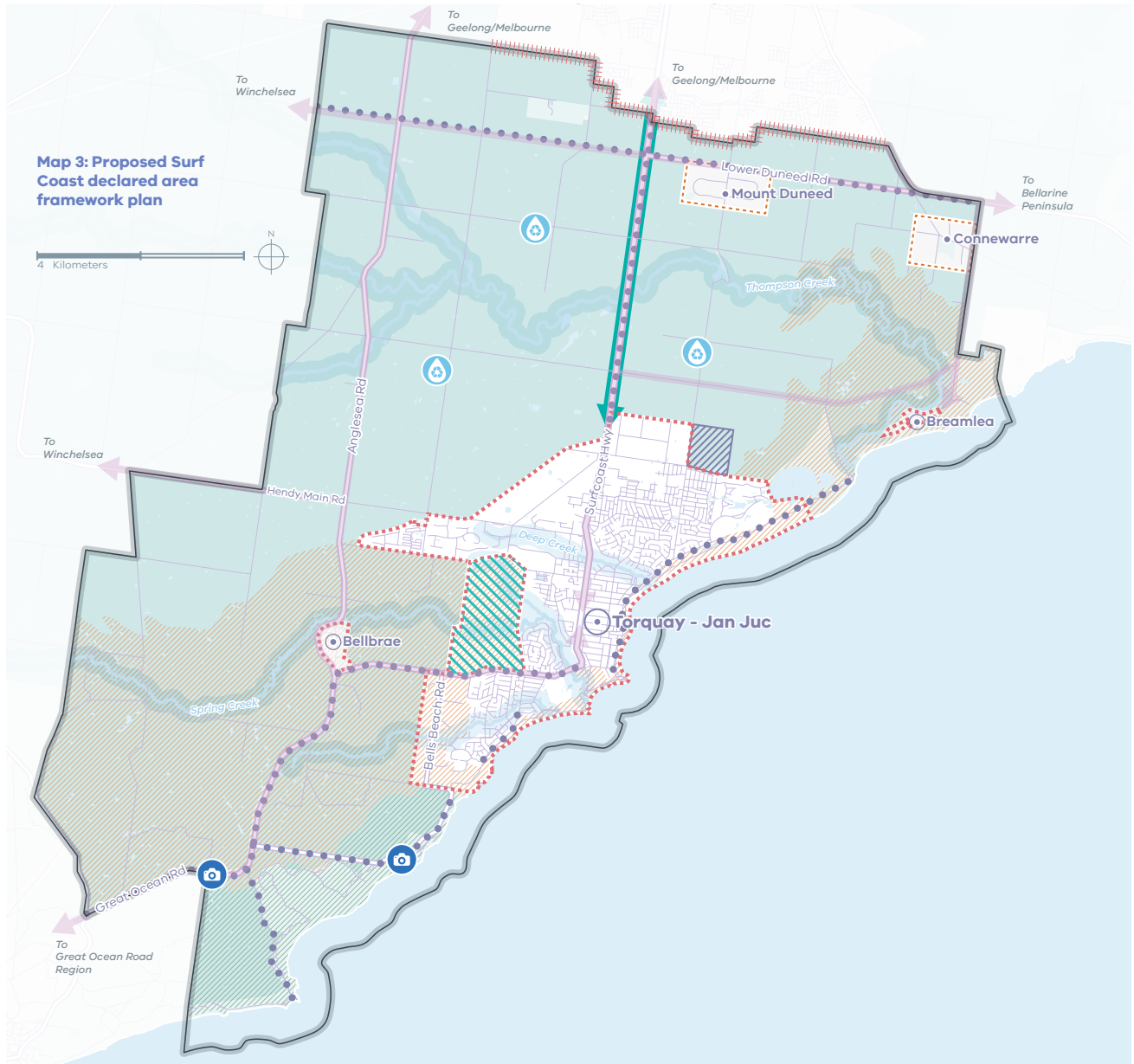
This work should include consideration of urban - rural transition areas that support the regionally significant landscape setting."

The eastern edge of urban Geelong is affected by the Bellarine Peninsula DAL. The draft Bellarine Peninsula SPP proposes that the eastern boundary of Geelong become a protected settlement boundary once the City of Greater Geelong undertakes a review process (i.e. this Long Term Boundary review). It notes the following in relation to this boundary:

"The Armstrong Creek Urban Growth Area, Moolap and the eastern Geelong suburbs of Whittington and St Albans Park. Protected settlement boundaries will be needed for these areas, to ensure the green break between urban Geelong and the Bellarine Peninsula is preserved and significant landscape and environmental values are protected.

The resolution of this protected settlement boundary will be informed by further strategic planning work led by the City of Greater Geelong in consultation with DELWP and other relevant agencies. This work should include consideration of urban rural transition areas that support the regionally significant landscape setting."<sup>1</sup>

<sup>1</sup> Draft Bellarine Peninsula SPP, page 58.



Map 3: Proposed Surf Coast declared area framework plan

**Surf Coast Declared Area Framework Plan**

**Settlements**

- District town – A regional centre with a large diverse population, employment and housing base, and which has strong relationships with surrounding settlements
- Village - A small settlement with a small population
- Hamlet/Locality - A cluster of rural residential dwellings
- Protected settlement boundary
- Options proposed for consultation
- Further investigation required
- Settlement boundary
- Protected settlement boundary to be implemented subject to local strategic planning work

**Landscapes and the environment**

- Landscapes – Conserve and enhance the declared area's significant landscapes with the greatest protection provided in areas of highest significance\*
- Nationally significant landscape: Bells Beach to Point Addis
- State-significant landscape: Torquay Coast, Coastal Saltmarsh and Woodland
- \*Areas not designated as nationally or state significant are the regionally significant Mount Duneed Plain and Surrounds landscape
- Road corridor views – Manage the development of infrastructure to maintain views to the rural hinterland and/or coast
- Waterways and biolinks – Conserve and restore native vegetation along waterway corridors and biolinks.

**Aboriginal cultural heritage and historic heritage**

- Landmarks – Ensure that Bells Beach and the Great Ocean Road are accessible, well maintained and sustainably managed

**Tourism, agriculture, natural resources and infrastructure**

- Green breaks – Potential location for agricultural, natural resources and/or nature-based tourism land uses that protect and enhance significant landscape features
- Armstrong Creek Transit Corridor Study Area – Potential location of a sustainable public transport link connecting Torquay-Jan Juc with Geelong and beyond
- Movement network – Support a sustainable transport network that enhances the declared area's distinctive attributes
- Support recycled water use
- Highway
- Main Road
- Local Road
- Surf Coast Declared Area

Figure 3. Draft Surf Coast SPP – Map 3, proposed declared framework area plan (p.27).



**LEGEND**

- Regional city
- District town  
*A large town providing a diversity of housing, services and employment for a large, diverse population, which has a strong relationship with surrounding villages and rural areas*
- Village  
*A small settlement with a small population, which integrates with its rural and natural surrounds*
- - - - - Protected settlement boundary
- - - - - Declared area boundary
- ~ ~ ~ ~ ~ Protected settlement boundary to be defined subject to strategic planning work
- Local Government Area
- Urban area
- Rural living

**Aboriginal cultural heritage and historic heritage**

*The entire declared area and beyond is Wadawurrung Country. The declared area's Aboriginal cultural heritage values must be conserved, strengthened and promoted in partnership with the Wadawurrung.*

**Landscapes and environment**

*Landscapes - Conserve and enhance the declared area's significant landscapes with the greatest protection provided in areas of highest significance\**

■ **State significant landscape: Bellarine Peninsula Southern Coast**

*\*Note: Areas not designated as state significant are the regionally significant Swan Bay, Lake Connearre and Barwon River, and Bellarine Northern Coast and Central Hills landscapes*

● ● ● ● **Road corridor views**  
*Manage the development of infrastructure to maintain views to the rural hinterland and/or coasts*

■ **Significant view**  
**Waterways**  
*Conserve and restore native vegetation along waterway corridors*

- Lakes
- Ramsar wetlands
- Parks and reserves
- Golf course

**Tourism, agriculture, natural resources and infrastructure**

- **Green breaks**  
*Potential location for agricultural, natural resources and/or nature-based tourism land uses that protect and enhance significant landscape features*
- Strategic water assets
- Support recycled water use
- Aquaculture
- Sub regional theme park
- Sport and recreation precinct
- Airfield
- Safe harbour
- - - - - Ferry route
- Highway
- Main road
- - - - - Rail Trail
- Movement network  
*Support a sustainable transport network that enhances the declared area's distinctive attributes*

Figure 4. Draft Bellarine Peninsula SPP – Map 3, proposed declared framework area plan (p.24).

# Chapter Four

## The Long Term Boundary Review – Scope and Guiding Principles

## 4.1 Review Scope

The Geelong Settlement Strategy defines the intended scope of the Long Term Boundary Review process, as follows:

“A long term settlement boundary should be largely based on existing residential zones and strategic plans, as these have been developed over a number of years, with extensive community consultation and peer review.

We expect the process to define a long term settlement boundary would be similar in approach to the ‘logical inclusions’ process used to refine Melbourne’s urban growth boundary. This would include:

- establishing assessment and decision criteria such as land that: supports an enduring and robust long term boundary, assists infrastructure provision to land already identified for residential development and is contiguous with an existing urban area.
- confirming the appropriateness of current boundaries for urban Geelong and district towns on the Bellarine Peninsula (no changes to other towns).
- a consultation and submissions process.
- referrals to infrastructure and service agencies.
- independent oversight and
- consultations with the Minister for Planning.”<sup>1</sup>

## 4.2 Guiding Principles

The Geelong Settlement Strategy identifies the following broad principles to guide the Long Term Boundary review:<sup>2</sup>

- Land supply is not a consideration.
- Land must be contiguous with urban residential areas – GRZ, RGZ, NRZ or UGZ.
- It is unlikely that the Northern and Western Growth Areas would be included given they have recently been the subject of a specific investigation process.
- Land must deliver a benefit to existing or identified residential land/development through for example more efficient infrastructure provision or utilisation.
- Land must be able to rely on existing facilities and services and not create the need for additional or new community infrastructure or significant council investment that would be required for a new residential node.

The Geelong Settlement Strategy states that the suitability for urban development should consider the following factors:

- flooding risks, climate change, environmental issues including acid sulphate soils;
- accessibility, including the feasibility and cost of providing adequate public transport and roads access;
- impacts of any proposed boundary changes on the economic provision of other development fronts;
- urban services including both utility and community services.
- impacts of any proposed changes on the establishment of logical and enduring settlement boundaries;
- physical boundaries including consideration of natural features, location of major roads and reservations for public utilities; and
- potential impacts on significant existing non-urban land uses and activities including agricultural, activities, extractive industry, sensitive land use buffers, tourism and other established and valued land uses.

<sup>1</sup> Geelong Settlement Strategy, page 77.

<sup>2</sup> Ibid.

## The Geelong Settlement Boundary and the DAL Legislation.

State planning policy calls for strategic plans to establish and reinforce settlement boundaries.

The settlement boundary shown for Geelong in Clause 21.06 of the planning scheme represents the longer-term limits for residential growth for the city, and it is based on the findings of the Greater Geelong Settlement Strategy.

The purpose of this settlement boundary review is to determine if there are any locations along the existing settlement boundary (as defined by Clause 21.06) where the boundary to existing or planned residential communities is anomalous or lacks logic from an urban planning or development perspective.

There are a limited number of urban and urban-related uses on the edges (but outside) of the existing settlement boundary shown in Clause 21.06 of the planning scheme, including:

- Deakin University and the Mercy Hospital in Wurn Ponds
- The Heales Road Industrial precinct south of Lara
- Industrial areas near Avalon Airport
- Industrial areas in Point Henry and Moolap

The option exists to re-cast the current Settlement Boundary shown at Clause 21.06 as an urban growth boundary (i.e. not a boundary solely focussed on defining the outer limits of residential growth).

If this were to occur, then it is this report author's view the land within the Heales Road industrial precinct would be included within the boundary, but the land associated with Deakin University, Epworth Hospital and Marcus Oldham Agricultural College and Christian College which are adjacent to the Wurn Ponds urban areas would remain outside of this boundary, and continue to be managed under the provisions of the relevant Public Use and Special Use zones that apply to these areas (noting that the latter area has been assessed as generally unsuitable for inclusion into settlement boundary due to it forming part of the Barrabool Hills and Wurn Ponds valley which comprises important landscape and cultural heritage values, and which also make it difficult to provide utility services to the area – refer to Chapter 6.5 of this report for further discussion).

The industrial areas near Avalon Airport and in Point Henry and Moolap are not contiguous with the urban edge of Geelong and it is this report's authors view that for this reason these areas should not be included within any future urban growth boundary for Geelong.

The term 'settlement boundary' has a specific legislative meaning in the context of Part 3AAB (Distinctive Areas and Landscapes) of the Planning and Environment Act 1987 (the Act).

Section 46AAC of the Act specifies that a Statement of Planning Policy (SPP) for a Declared Area 'may specify settlement boundaries in the declared area or designate specific settlement boundaries in the declared area as protected settlement boundaries.' The Act defines settlement boundary and long term settlement boundary as follows:

- A settlement boundary, in relation to a plan of an area, means the boundary marking the limit of urban development in that area
- A protected settlement boundary means a settlement boundary in a declared area that is protected under a Statement of Planning Policy.

The draft SPP for both the Surf Coast and Bellarine Peninsula DAL areas each state that protected settlement boundaries will be needed for northern and eastern edges of the Surf Coast and Bellarine Peninsula declared areas, to ensure the green break between urban Geelong and the Bellarine Peninsula and Surf Coast area is preserved, and for significant landscape and environmental values to be protected in these areas.

In the context of the DAL legislation and draft SPP for both the Surf Coast and Bellarine Peninsula DAL areas, it will therefore be necessary to determine the total limit of urban development (not just residential development) along the southern and eastern edges of the city of Geelong.

These existing edges currently primarily comprise residential land uses (with the exception of the future employment precinct in the south-west and north east parts of Armstrong Creek, neither of which are proposed to be expanded as an outcome of this review).

Therefore the long term residential settlement boundaries for these locations that are ultimately determined as an outcome of this review can be used to set the long term settlement boundary under the DAL legislation and draft SPPs.

In the case of the existing and future urban land uses areas in Moolap and Point Henry (defined by the SUZ1 and IN1), the State Government has prepared the Moolap Coastal Strategic Framework Plan to guide the long term redevelopment of this area. The existing and potential future urban uses identified under that plan are physically separated from the urban edge of Geelong (and the current settlement boundary) by land which is wetlands under public ownership and also by land zoned for low density residential and rural living purposes.

Because this area is not contiguous with the existing settlement boundary, it has not been considered for inclusion in the settlement boundary for Geelong as part of this review. However, a separate decision will need to be made about whether or not to place a long term settlement boundary around these zones under the DAL legislation and in the context of the DAL policy aspiration to preserve significant landscape and environmental values in this area.

# Chapter Five

## Methodology

The Geelong Settlement Strategy defines both the broad principles and the relevant factors for consideration in determining Geelong's long-term settlement boundary.

The following methodology has been used to assess the settlement boundary options against these principles and factors:

Step 1 – Confirm Investigation Areas having regard to the Long Term Boundary Review Principles.

Step 2 – Establish Assessment Criteria for reviewing the Settlement Boundary.

Step 3 – Assess the Investigation Areas against the Assessment Criteria.

The methodology used in relation to each step is discussed over the following pages.

### Step 1 – Confirm Investigation Areas having regard to the Long Term Boundary Review Principles ('Principles').

The following approach was taken to applying the Long Term Boundary Review Principles ('Principles') contained within the Geelong Settlement Strategy. The principles have been used to establish the investigation areas and the criteria have then been developed to assist in the assessment of the areas against the principles as well as to consider relevant aspects of State Planning Policy.

Principle 1 – Land supply is not a consideration.

The Geelong Settlement Strategy considered a range of population and housing growth scenarios over the period to 2036. It notes that when the estimated dwelling capacity of North and West growth areas is considered, there is adequate capacity within the settlement boundary contained within the Strategy to meet likely future broad-hectare housing needs beyond 2040, even assuming continued rapid population growth.

Therefore no further consideration has been given to the contribution that land might make to Geelong's land supply in assessing the settlement boundary.

Principle 2 – Land must be contiguous with urban residential areas – GRZ, RGZ, NRZ or UGZ.

The Long Term Boundary Review is focussed on the boundaries of existing and future residential settlements within urban Geelong. Its purpose is to determine if there are any locations where the boundary to existing or planned residential communities is anomalous or lacks logic from an urban planning or development perspective.

The term 'settlement boundary' is different to an 'urban growth boundary' insofar as it relates to the boundary of residential communities and not other types of urban land uses such as employment, etc.

For these reasons, for land to be included within an investigation area it must be contiguous with an existing or planned urban residential area (as defined by the GRZ, RGZ or NRZ, or the UGZ which applies any of these zones to land).

The term 'contiguous' has not been applied in a strict or literal manner. In circumstances where the inclusion of only the contiguous lots resulted in an irregularly shaped investigation area, then the investigation area was extended out to the nearest physical feature (and occasionally to a cadastral boundary where no obvious physical feature exists) that would enable a potentially enduring alternative boundary to be identified.

Principle 3 – It is unlikely that the Northern and Western Growth Areas would be included given they have recently been the subject of a specific investigation process.

Given that the Northern and Western Growth Areas have only recently been the subject of a substantial strategic planning and public review process (via Amendment C395), this Review has not reviewed the boundaries of the Northern and Western Growth Areas.

Principle 4 – Land must deliver a benefit to existing or identified residential land/development through for example more efficient infrastructure provision or utilisation.

This Principle has been applied to mean circumstances where including additional developable land within the Settlement Boundary would enable physical infrastructure (such as drainage, water, sewerage, roads, etc.) that is required by residential development on land within the existing settlement boundary to be delivered in a more efficient or cost effective manner.

Principle 5 – Land must be able to rely on existing facilities and services and not create the need for additional or new community infrastructure or significant council investment that would be required for a new residential node.

The Geelong Settlement Strategy seeks to focus future growth into established areas and the identified of Armstrong Creek, Lara, and North and West Geelong. These are the priority locations for both population growth and the provision of community infrastructure.

Principle 5 seeks to ensure that any revisions to the Settlement Boundary do not create additional demands for social infrastructure in locations that are not specifically identified for residential growth.

The methodology used to assess investigation areas against Principle 5 was as follows:

Task 1 – Identify the notional neighbourhood within the existing settlement boundary:

A notional neighbourhood was defined as being a population of circa 6-10,000 people living within a residential area of circa 1.6 square kilometres (which represents an 800m walking catchment). A community of this size within this geographic area is generally understood to align to the Victorian Government policy aspiration for the creation of '20 minute neighbourhoods. They have the potential to achieve a degree of self-containment (i.e. access to local community, education, recreation and shopping facilities) and walkability (i.e. ability walk to a range of neighbourhood scale facilities within a 20 minute return trip).

Task 1 included identifying the geographic boundaries of the notional 1.6km residential neighbourhoods in areas adjoining the existing Settlement Boundary. In defining the notional neighbourhood/s within the existing settlement boundary, account was also taken to the implications of major physical barriers such as arterial roads, rivers, etc.

Task 2 – Identify the population size and community infrastructure within the adjoining neighbourhood.

Task 1 included identifying the existing population size within the notional spatial neighbourhood identified in Task 2.

The population within the notional neighbourhood was calculated in one of the following two ways:

- For areas that are yet to be developed but have precinct structure plans (PSPs) in place, the dwelling and population was based on multiplying the dwelling yields anticipated in PSP land budget by an average household size of 2.8 persons per household (Note that these dwelling yields were checked against recent development approvals in growth areas to determine if there was any significant variation to what was anticipated in the relevant PSP).
- For established residential areas, the population was estimated based on multiplying the total number of residential lots by an average household size of 2.8 persons per household.

The presence of the following basic social and recreational infrastructure within or immediately adjoining each neighbourhood was also identified in this step:

- State Primary School
- State Secondary School
- Active Recreation Reserve
- Community Centre

#### Task 3 – Assessing the adequacy of social and recreational infrastructure.

The notional adequacy of the social and recreational infrastructure contained within or immediately adjoining each neighbourhood was determined by the use of standard population benchmarks.

The population benchmarks adopted for this task were those contained in the publication 'Planning for Community Facilities in Growth Areas' (ASR, 2008).

The assessment identified whether there was any notional over or under-provision of state schools, active recreation or community centres in the given notional neighbourhood.

#### Task 4 – Calculation of the potential additional population within the relevant revised settlement boundary scenario.

The potential additional population within the relevant revised settlement boundary scenario was determined using the following method and assumptions:

- Excluding any land that was known to be undevelopable from the gross land area within the investigation area (eg land within a flood zone, conservation zone, etc.)
- Calculate likely dwelling and population yields for land within the developable portion of the investigation area based on the following assumptions:
  - » 70% net developable area
  - » 15 lots per hectare as an average
  - » 2.8 people per household

#### Task 5 – Determine notional over or under-provision of community infrastructure associated with residential development in the investigation area.

The additional population derived from Step 4 was added to the existing population determined in Task 2.

The notional adequacy of the social and recreational infrastructure to service this total population was determined by the use of the standard population benchmarks described in Task 3.

This assessment identified whether there was any notional over or under-provision of state schools, active recreation or community centres in the given revised notional neighbourhood boundary.

The outputs from the above assessment are contained in Appendix 1 to this report.

## Step 2 – Establish Assessment Criteria for reviewing the Settlement Boundary.

The Geelong Settlement Strategy identifies a range of factors that should be considered when assessing the settlement boundary of urban Geelong. These factors closely align to the relevant State and regional planning policies contained in the Greater Geelong Planning Scheme.

A set of Assessment Criteria were established for this Review which address the relevant factors identified in both the Geelong Settlement Strategy and the relevant State, Regional and Local Policies of the Greater Geelong Planning Scheme (Refer Appendix 2 for full citation of relevant state policies).

The Criteria and the relevant policies that they derive from are as follows:

### 1.0 Settlement Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
1.1 Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (including consideration of natural features, location of major roads and reservations for public utilities)	<p>The suitability for urban development should consider:</p> <p>Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (and) ...</p> <p>physical boundaries including consideration of natural features, location of major roads and reservations for public utilities</p>	<p>Clause 11.01-1R Settlement – G21:</p> <p>Maintain a significant settlement break between the region and Melbourne.</p> <p>Provide for settlement breaks between towns to maintain their unique identities.</p> <p>Clause 21.06-2 Spatial Distribution of Growth:</p> <p>Contain growth within identified locations across the municipality.</p> <p>Minimise the economic, environmental, visual and servicing impacts of residential development on rural areas.</p> <p>Maintain the unique township, landscape, tourism, farming and environmental values of the Bellarine Peninsula.</p>

## 2.0 Managing Growth Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
2.1 Impact on the orderly development of the adjoining urban area	Land must deliver a benefit to existing or identified residential land/development through for example more efficient infrastructure provision or utilisation	<p>Clause 19.03-2S Infrastructure design and provision:</p> <p>Provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p>Integrate developments with infrastructure and services, whether they are in existing suburbs, growth areas or regional towns.</p>
2.2 Impact on management of the sequence of development and the early provision of services		<p>Clause 11.2-3S Sequencing of development:</p> <p>Manage the sequence of development in areas of growth so that services are available from early in the life of new communities.</p>
2.3 Impacts of any proposed boundary changes on the economic provision of other development fronts	<p>The suitability for urban development should consider...</p> <p>Impacts of any proposed boundary changes on the economic provision of other development fronts</p>	<p>Clause 11.02-3S Sequencing of development</p> <p>To manage the sequence of development in areas of growth so that services are available from early in the life of new communities.</p>

## 3.0 Planning for Places – Distinctive Areas and Landscapes

### Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
3.1 Impact on any identified unique features or special characteristics within a declared area		<p>Clause 11.03-5S Distinctive Areas and Landscapes:</p> <p>Recognise the importance of distinctive areas and landscapes to the people of Victoria and protect and enhance the valued attributes of identified or declared distinctive areas and landscapes.</p>

4.0 Environmental & Landscape Values Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
4.1 Impact on the protection of biodiversity values	The suitability of urban development should consider.... environmental issues	Clause 12.01-1S Protection of biodiversity: Assist the protection and conservation of Victoria's biodiversity.
4.2 Impact on the protection of coastal areas & wetlands	The suitability of urban development should consider.... environmental issues including acid sulphate soils	Clause 12.02-1S Protection of the marine and coastal environment: Protect and enhance the marine and coastal environment.  Clause 12.03-1S River corridors, waterways, lakes and wetlands: Protect and enhance river corridors, waterways, lakes and wetlands.
4.3 Impact on the protection of significant landscapes	[refer discussion on boundaries on pp. 78-79]	Clause 12.05-2S Landscapes Protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.
4.4 Impact on the preservation of identified urban breaks	[refer discussion on non-urban breaks on pp. 78-79]	Clause 11.01-1R Settlement – G21 Maintain a significant settlement break between the region and Melbourne.  Provide for settlement breaks between towns to maintain their unique identities.  Require a settlement boundary for all towns.  Clause 21.06-2 Spatial distribution of growth: Maintain the non-urban breaks between Geelong and Melbourne (Wyndham), Geelong and the Surf Coast, urban Geelong and the Bellarine Peninsula, and the townships on the Bellarine Peninsula.

5.0 Environmental Risk Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
5.1 Climate change – impacts of coastal inundation & erosion	The suitability of urban development should consider.... flooding risks, climate change, environmental issues including acid sulphate soils.	<p>Clause 13.01-1S - Natural hazards and climate change:</p> <p>Minimise the impacts of natural hazards and adapt to the impacts of climate change through risk-based planning.</p> <p>Clause 13.01-2S - Coastal inundation and erosion:</p> <p>Plan for and manage coastal hazard risk and climate change impacts.</p>
5.2 Bushfire risks in the location	The suitability of urban development should consider.... environmental issues	<p>Clause 13.02-1S Bushfire planning:</p> <p>Strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.</p>
5.3 Impacts on/of floodplains	The suitability of urban development should consider.... flooding risks, climate change, environmental issues including acid sulphate soils.	<p>Clause 13.03-1S Floodplain management:</p> <p>Assist the protection of:</p> <ul style="list-style-type: none"> <li>•Life, property and community infrastructure from Flood hazard, including coastal inundation, riverine and overland flows.</li> <li>•The natural flood carrying capacity of rivers, streams and floodways.</li> <li>•The flood storage function of floodplains and waterways.</li> <li>•Floodplain areas of environmental significance or of importance to river, wetland or coastal health.</li> </ul>
5.4 Impacts on/of contamination land	The suitability of urban development should consider.... environmental issues	<p>Clause 13.04-1S Contaminated and potentially contaminated land:</p> <p>Ensure that contaminated and potentially contaminated land is used and developed safely.</p>

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
5.5 Impacts on/of erosion & landslip	The suitability of urban development should consider.... environmental issues	<p>Clause 13.03-2S Erosion and landslip</p> <p><u>Objective:</u> To protect areas prone to erosion, landslip or other land degradation processes.</p> <p><u>Strategies:</u> Identify areas subject to erosion or instability in planning schemes and when considering the use and development of land.</p> <p>Prevent inappropriate development in unstable areas or areas prone to erosion.</p> <p>Promote vegetation retention, planting and rehabilitation in areas prone to erosion and land instability.</p>
5.6 Impacts on/of salinity, acid sulfate soils	The suitability of urban development should consider.... environmental issues	<p>Clause 13.03-3S Salinity:</p> <p>Minimise the impact of salinity and rising water tables on land uses, buildings and infrastructure in rural and urban areas and areas of environmental significance and reduce salt load in rivers.</p>
5.7 Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses	The suitability of urban development should consider.... potential impacts on significant existing non-urban land uses and activities including agricultural, activities, extractive industry, sensitive land use buffers, tourism and other established and valued land uses.	<p>Clause 13.07-1S - Land use compatibility:</p> <p>Protect community amenity, human health and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with potential adverse off-site impacts.</p>
5.8 Impacts on/of major hazard facilities	The suitability of urban development should consider.... potential impacts on sensitive land use buffers, tourism and other established and valued land uses.	<p>Clause 13.07-2S Major hazard facilities:</p> <p>Minimise the potential for human and property exposure to risk from incidents that may occur at a major hazard facility and to ensure the ongoing viability of major hazard facilities.</p>



### 6.0 Natural Resource Management Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
6.1 Impact on the protection of agricultural land	The suitability of urban development should consider... potential impacts on agricultural activities.	<p>Clause 14.01-1S Protection of agricultural land:</p> <p>Protect the state's agricultural base by preserving productive farmland.</p> <p>Clause 14.01-11R Settlement G21:</p> <p>Protect critical agricultural land by directing growth to towns.</p>
6.2 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources	The suitability of urban development should consider... flooding risks, climate change, environmental issues including acid sulphate soils	<p>Clause 14.02-1S Catchment planning and management:</p> <p>Assist the protection and restoration of catchments, waterways, estuaries, bays, water bodies, groundwater, and the marine environment.</p> <p>Clause 14.02-2S Water quality:</p> <p>Protect water quality.</p>
6.3 Impact on protection of extractive resources	**	**

### 7.0 Heritage Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
7.1 Impact on known Aboriginal cultural heritage values		<p>Clause 15.03-2S Aboriginal cultural heritage:</p> <p>Ensure the protection and conservation of places of Aboriginal cultural heritage significance.</p>
7.2 Impact on known post contact heritage values		<p>Clause 15.03-1S Heritage conservation:</p> <p>Ensure the conservation of places of heritage significance.</p>

8.0 Accessibility Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access	The suitability of urban development should consider... accessibility, including the feasibility and cost of providing adequate public transport and roads access	<p>Clause 18.01-1S Land use and transport integration:</p> <p>Facilitate access to social, cultural and economic opportunities by effectively integrating land use and transport.</p> <p>Clause 18.01-2S Transport system:</p> <p>Facilitate the efficient, coordinated and reliable movement of people and goods by developing an integrated and efficient transport system.</p>

9.0 Infrastructure Criteria:

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage	The suitability of urban development should consider... urban services including both utility and community services.	<p>Clause 19.03-2S Infrastructure design and provision:</p> <p>Provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p>Clause 19.02-4S Social and cultural infrastructure:</p> <p>Provide fairer distribution of and access to, social and cultural infrastructure.</p> <p>Clause 19.02-6S Open space:</p> <p>Establish, manage and improve a diverse and integrated network of public open space that meets the needs of the community.</p>



### Step 3 – Assess the Investigation Areas against the Assessment Criteria.

Each of the Investigation Areas was assessed against the abovementioned Assessment Criteria. The assessment was largely undertaken as a desktop exercise based on a review of the following primary sources of information:<sup>1</sup>

- Greater Geelong Planning Scheme
- G21 Regional Growth Plan
- Geelong Settlement Strategy (2021), as well as relevant background reports and submissions.
- Northern and Western Geelong Growth Areas Framework Plan (2021) and relevant background reports
- Draft Surf Coast Distinctive Areas and Landscape Statement of Planning Policy (2021) as well as relevant background reports and submissions
- Draft Bellarine Peninsula Distinctive Areas and Landscape Statement of planning policy (2021) and relevant background reports
- Draft Avalon Corridor Strategy (2021) and relevant background reports
- Lara Structure Plan, Lara West Precinct Structure Plan and relevant background reports
- Armstrong Creek Growth Area Framework Plan, Precinct Structure Plans and relevant background reports
- Moolap Coastal Strategic Framework Plan and relevant background reports
- Geelong Eastern Boundary Review Report (2009)
- Amendment C339 to the Greater Geelong Planning Scheme (which seeks to implement the Lower Barwon and Lower Moorabool Flood Investigation (Dec 2018), Lara Flood Study (March 2020) and part of the Bellarine Peninsula - Corio Bay Local Coastal Hazard Assessment (Dec 2015)).
- Amendment C394 to the Greater Geelong Planning Scheme - Land Subject to Inundation Overlay - Bellarine Peninsula and Corio Bay.

- Assessment of Agricultural Land Capability in Melbourne’s green wedges and peri-urban areas (Agriculture Victoria, October 2018)
- South West Victoria Landscape Assessment Study (Planisphere, 2013)
- Planning for Community Infrastructure in Growth Areas (ASR, 2008)
- Corangamite Catchment Natural Resource Management Planning Portal (<https://www.ccmaknowledgebase.vic.gov.au/nrmpp/>)
- Aboriginal Cultural Heritage Register and Information System (ACHRIS)

The report authors also undertook a site inspection of each investigation area in November 2021.

The observations and findings from the above assessment are contained in Chapter 6 of this report. The criteria has been assessed for each investigation area and given a rating of whether adding the investigation area into the settlement boundary would have a “Positive”, “Neutral”, or “Negative” impact on the satisfaction of the criteria.

<sup>1</sup> Other sources of information specific to each investigation area are referenced in this report where relevant.

# Chapter Six

## Assessments

This chapter comprises the assessment of each investigation area against the scope and guiding principles outlined in Chapter 4 and the methodology detailed in Chapter 5.

The chapter proceeds as follows:

1. Armstrong Creek South West
2. Armstrong Creek South Central
3. Sparrovale
4. Moolap
5. Waurm Ponds North
6. Waurm Ponds South
7. Lara North
8. Lara South
9. Avalon

### Geelong Growth Investigation Areas

All Investigation Areas

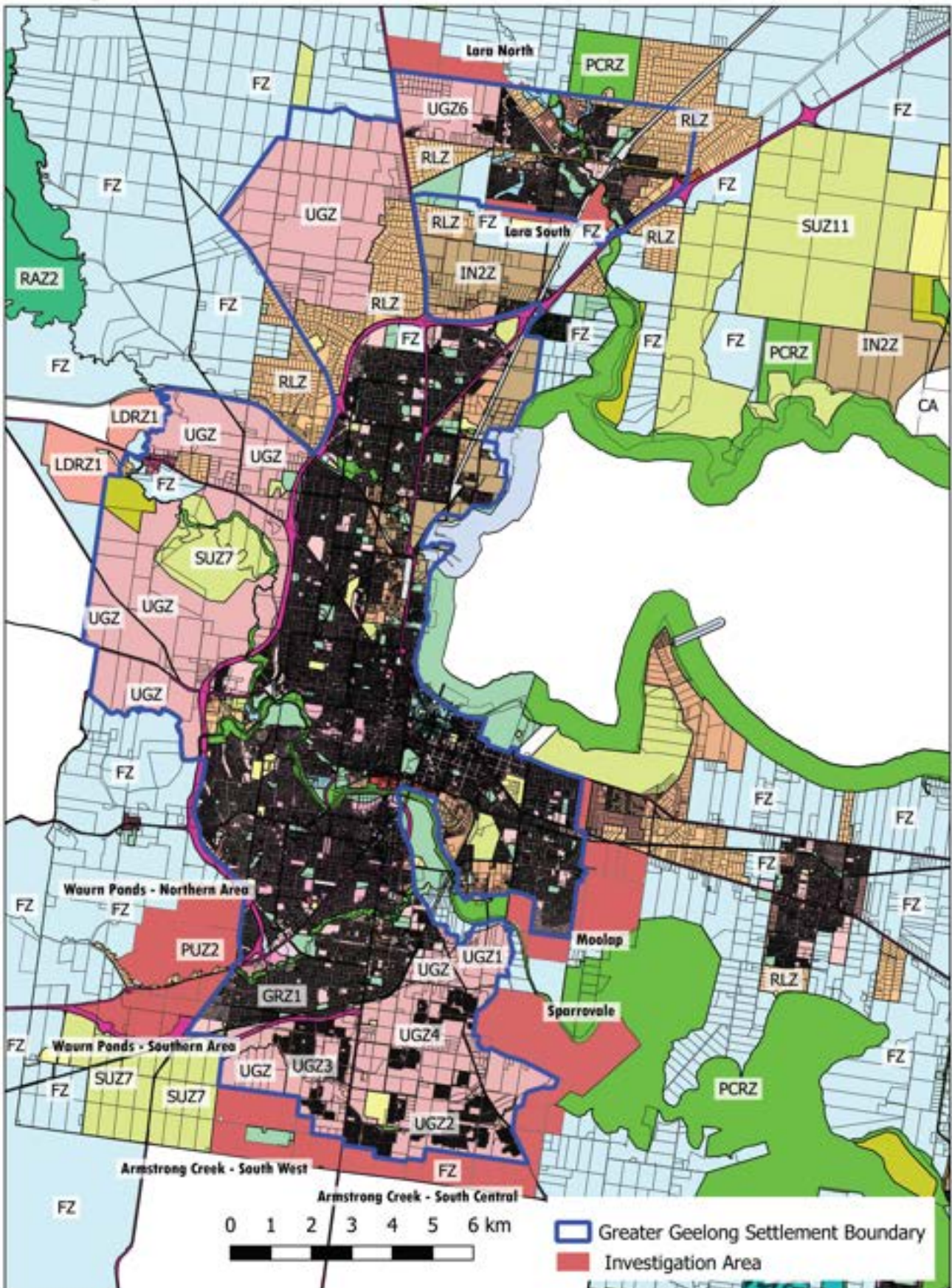


Figure 5. Overall Geelong Settlement Boundary Investigation Areas

6.1

Armstrong Creek  
South West

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

432.953 ha (gross land area).

## 1.2 Definition of investigation area:

The investigation area in Armstrong Creek South West (i.e. west of the Surf Coast Highway) is defined by the land parcels which are contiguous with the Urban Growth Zone land contained within the existing settlement boundary (refer Figures 6 and 7).

The land south-east of the Whites/Airport Road intersection adjoins land that is being developed for residential purposes under the Armstrong Creek West Precinct Structure Plan (PSP). This land therefore satisfies Principle 2 of the Long Term Boundary Review in that it is contiguous with urban residential areas.

The land south-west of the Whites/Airport Road intersection adjoins land that is identified as Employment Land in the Armstrong Creek Urban Growth Plan. This land therefore does not satisfy Principle 2 of the Long Term Boundary Review in that it is not contiguous with urban residential areas.

Notwithstanding the above, all of the land bound by the Surf Coast Highway, Mt Duneed Road Ghazeepore Road and the existing Settlement Boundary has been included within the investigation area, on the basis that this will enable a more holistic consideration of the landscape characteristics associated with Mt Duneed that must inform the boundary review.

The land to the west of Ghazeepore Road has been excluded from the investigation area on the basis that this land is not contiguous with urban residential areas (land east of Ghazeepore Road is identified for employment and regional open space purposes under the Armstrong Creek Urban Growth Plan).

## 1.3 Current Zoning and Overlays:

The land within the investigation area is primarily zoned Farming Zone (refer Figure 8).

The Mt Duneed Recreation Reserve is zoned Public Park and Recreation and the small land area in the northern part of Ghazeepore Road is zone Special Use Zone 7 (Earth and Energy Resources Industry).

The following overlay controls apply to land within the investigation area:

- Vegetation Protection Overlay (roadside locations)
- Environmental Significance Overlay (Russells Road)
- Heritage Overlay (cemetery, and 'Hillside' residence)
- Specific Controls Overlay (Community care facility on Russells Road)
- Public Acquisitions Overlay (Anglesea Road widening)

(refer Figures 9 and 10).

A photo montage of the existing site context of the investigation area is shown at Figure 11.

Geelong Growth Investigation Areas  
Armstrong Creek South West



Figure 6. Armstrong Creek South West – Aerial Cadastral Plan.

Geelong Growth Investigation Areas  
Armstrong Creek South West Investigation Area



Figure 7. Armstrong Creek South West – Investigation Area Plan.

Geelong Growth Investigation Areas  
Armstrong Creek South West - Zoning

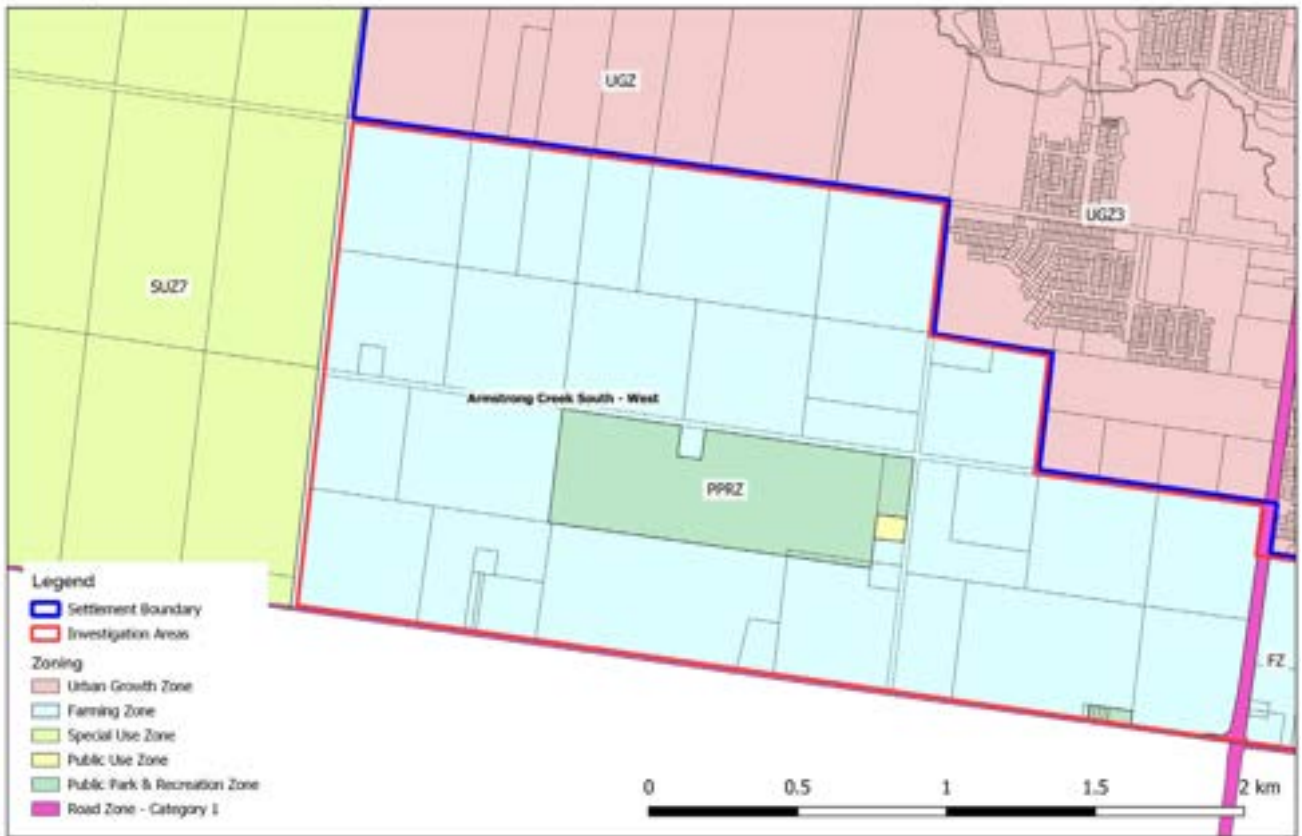


Figure 8. Armstrong Creek South West – Zoning Plan.

Geelong Growth Investigation Areas  
Armstrong Creek South West - Overlays

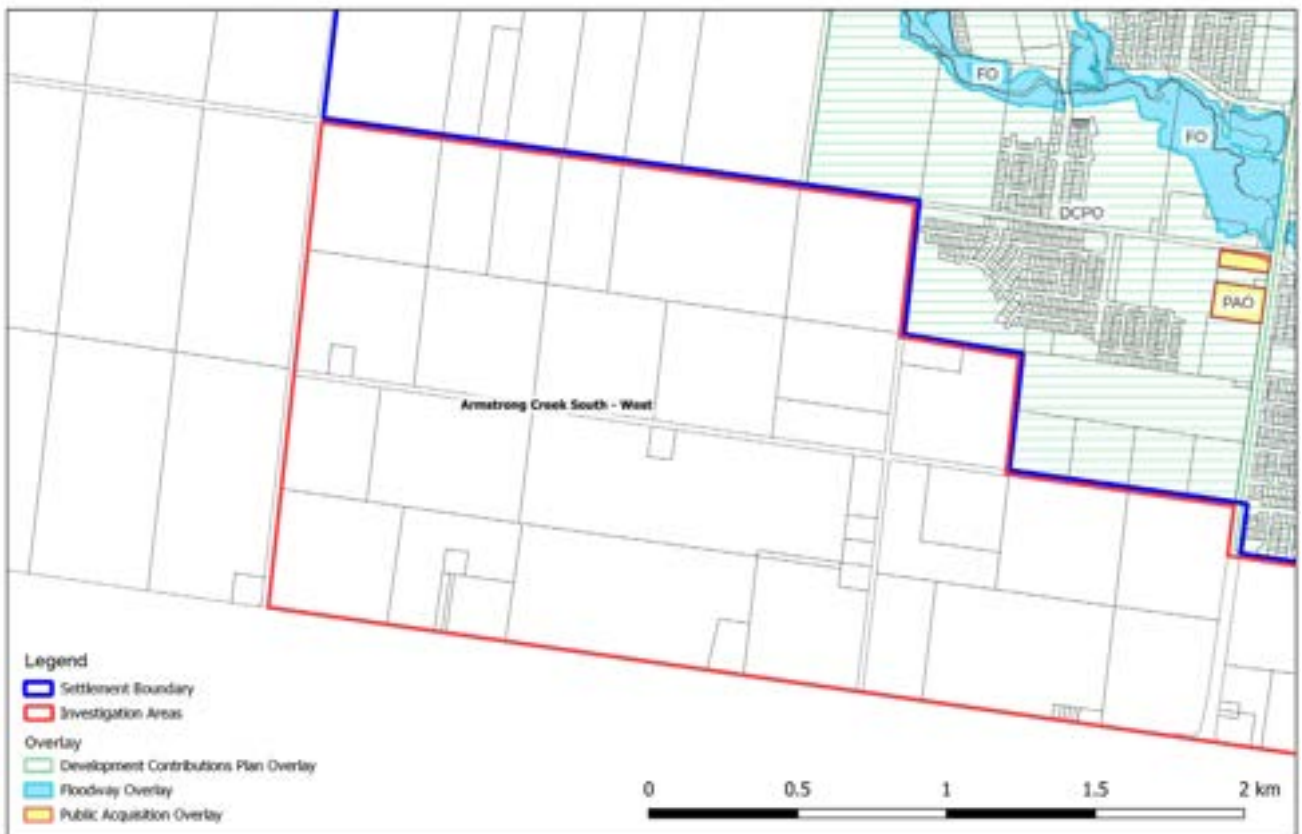


Figure 9. Armstrong Creek South West – Overlays Plan 1.

Geelong Growth Investigation Areas  
Armstrong Creek South West - Overlays



Figure 10. Armstrong Creek South West – Overlays Plan 2.



Figure 11. Armstrong Creek South West – Photo Montage.



### 1.4 Investigation Area & Surrounds:

Mt Duneed is the primary physical feature within the investigation area.

Mt Duneed is a prominent landscape feature which forms part of the wider landscape that delineates urban Geelong from the rural landscapes of the Surf Coast shire.

The rural hamlet at Mt Duneed includes a primary school, recreation reserve, pony club and cemetery located on the hilltop, as well as a series of farming and rural residential properties located across the investigation area. The Mt Duneed Hall reserve is located on the lower southern slope of Mt Duneed road.

The Armstrong Creek Growth Area and Armstrong Creek West PSP area are located to the north of the investigation area (refer Figures 12 and 13). Substantial residential development

has already occurred in this part of the growth area. The land identified for employment purposes (north of Whites Road) is yet to be developed.

Land to the west of the investigation area comprises a circa 1,020 hectare land holding owned by Blue Circle. The north-west parts of this land holding have been used by Blue Circle and Boral for quarrying and concrete production, whereas the south and east parts of this land holding are rural in character and have not been subject to quarrying activities.

It is understood that the land will become surplus to Blue Circle and Boral's operational requirements, the existing cement works will be decommissioned, and site remediation works for the cement plant site and quarry will be undertaken in the coming years.

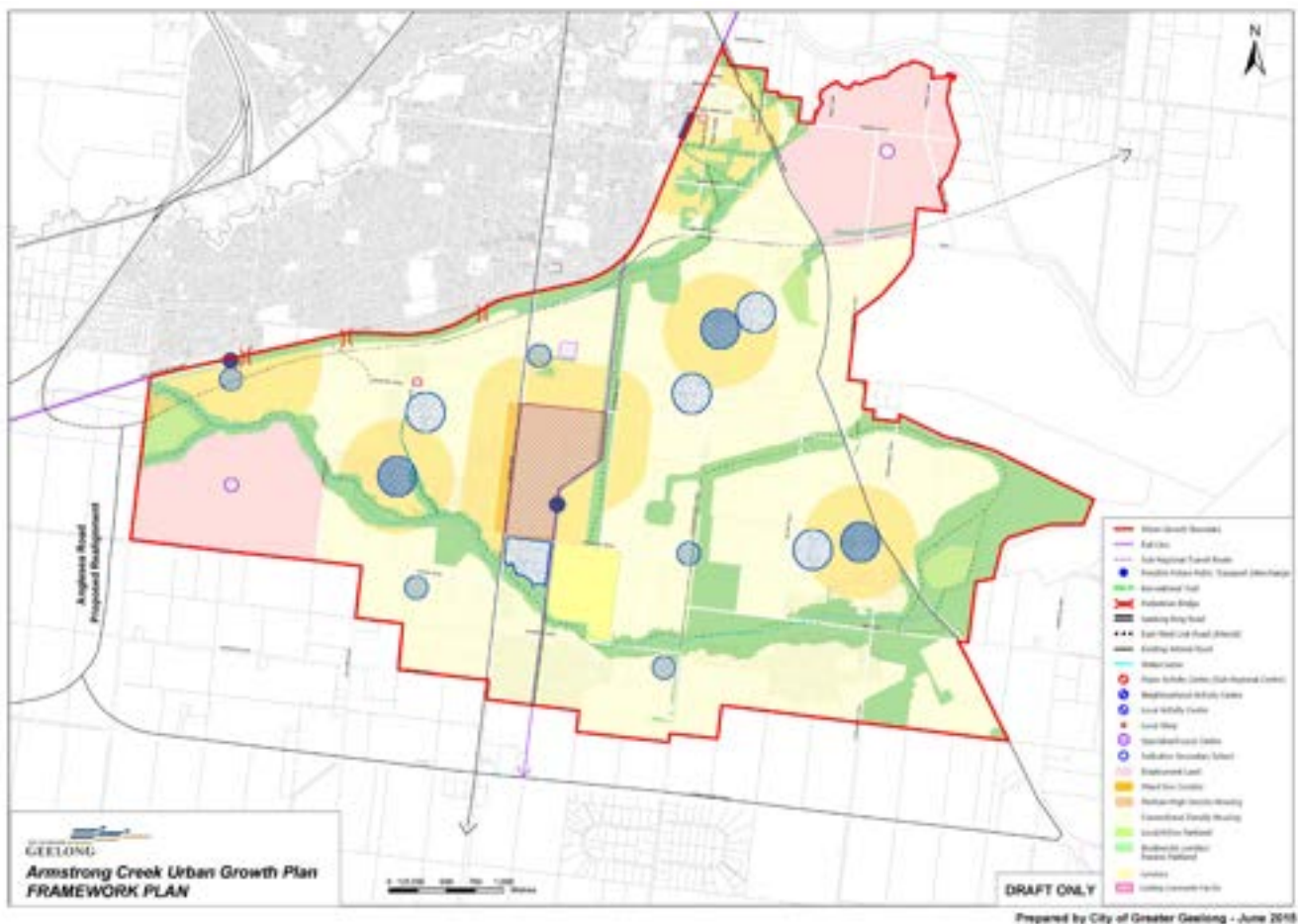


Figure 12. Armstrong Creek Urban Growth Plan (City of Greater Geelong [CoGG], 2015).

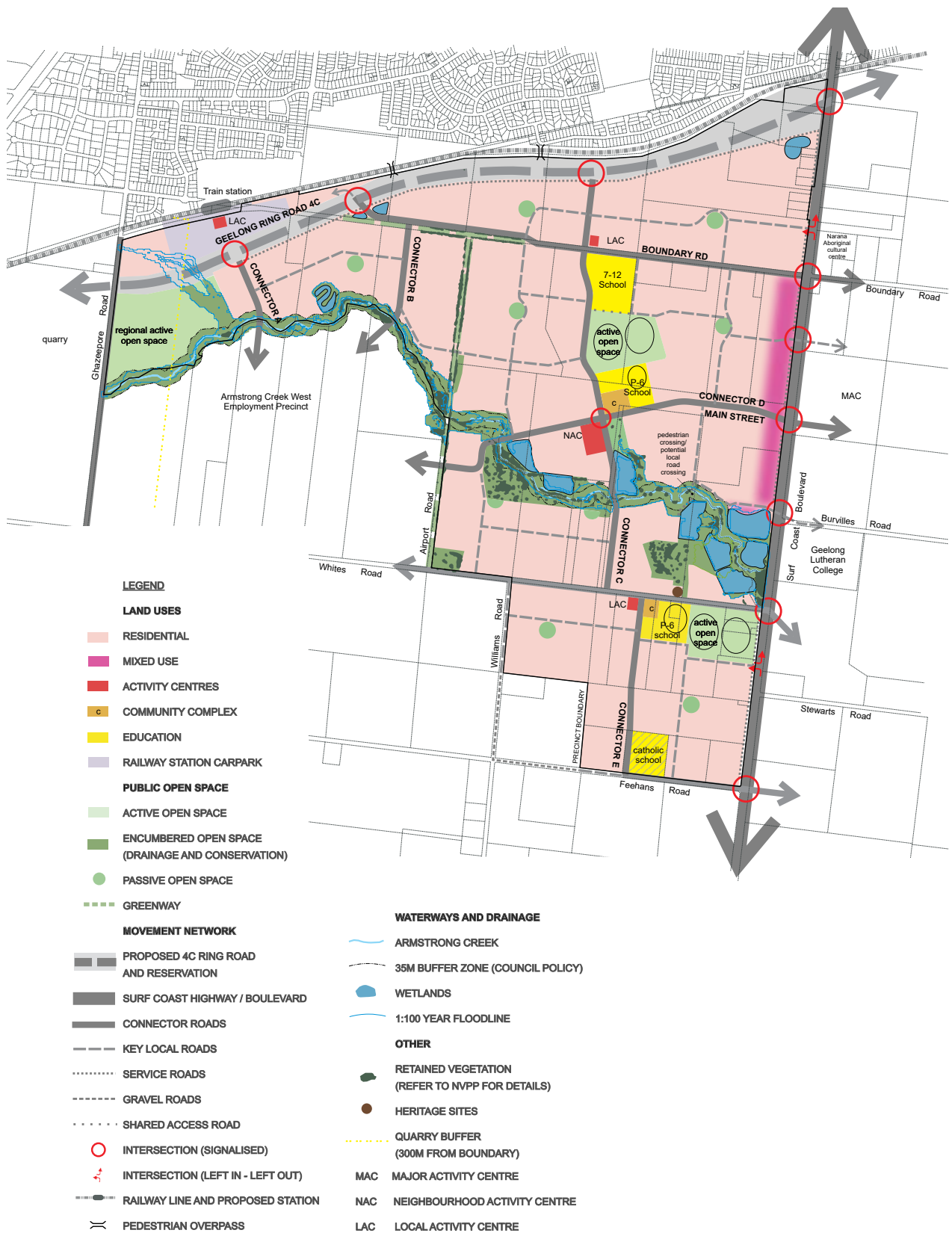


Figure 13. Armstrong Creek West Precinct Structure Plan - Urban Structure Plan (CoGG, 2012).

## 2 - Summary of Recent Submissions in Relation to the Settlement Boundary

### 2.1 Amendment C395 to the Greater Geelong Planning Scheme (Greater Geelong Settlement Strategy)

The following is a summary of submissions made to the City of Greater Geelong in relation to the settlement boundary identified in Amendment C395 (Geelong Settlement Strategy):

#### Boral/Blue Circle:

Boral/Blue Circle have previously submitted that its 1020ha land holding should be designated as a growth area, included within Geelong's urban growth boundary, and rezoned to the Urban Growth Zone.

#### Victorian Planning Authority:

The VPA have previously submitted that the Boral/Blue Circle land within the SUZ7 could be a logical inclusion into Geelong's settlement boundary and that this area is a substantial long term opportunity as a future community of Geelong.

#### 195 Whites Road (Landowner):

The owner of 195 Whites road has previously submitted that this land holding should be included within the Geelong Settlement Boundary on the basis that it adjoins the south western boundary of the Armstrong Creek Urban Growth Zone, it already drains into the existing Armstrong Creek Catchment and does not extend south into the escarpment that acts as a visual buffer between the City of Greater Geelong and the northern boundary of the Surf Coast Shire.

#### 55 & 75 Williams Road (Landowner, Purdies Paddock):

The owner of Purdies Paddock has previously submitted that this land should be included within the Armstrong Creek Urban Growth area.

Their submission was that its inclusion would satisfy the anticipated 'logical inclusions' criteria for being included within the settlement boundary, and that its inclusion would not have any adverse impact on wider landscape values because the land cannot be seen from Mt Duneed Road and is set lower than other land being developed for residential purposes to the north.

### 2.2 Draft Surf Coast Distinctive Areas and Landscapes (DAL) Strategy

A number of landowners made submissions to the Victorian Government in relation to question of whether and how the Geelong Settlement Boundary should be addressed in the DAL Strategy. The following is a summary of submissions made to the draft DALs:

#### Warwick & Julie Peel (address unidentified):

This submitter notes that Mount Duneed and Lower Armstrong Creek Corridor (COGG) has been included in the draft DAL based on the desire of Surf Coast Shire to maintain township separation between Torquay & Geelong. This can still occur without imposing the 50-year overlay of planning restrictions over the land within the City of Greater Geelong. Therefore, the Surf Coast DAL controls should stop at the boundary between Surf Coast Shire and the City of Greater Geelong (along Mt Duneed Road).

#### 150-180 Williams Road, Mt Duneed (Peter and Christine Ashton):

The owner of 150-180 Williams Road, Mt Duneed opposed the inclusion of their land within the Surf Coast DAL Strategy or for the land to be subject to more restrictive planning controls. The submission challenges the proposition that all of the Mt Duneed landform is of such landscape significance to warrant it being kept free from further development.

David & Glennis Branagh (cnr Ghazeepore & Mt Duneed Road):

The owners of the property on the corner of Ghazeepore & Mt Duneed Road opposed the inclusion of their land within the Surf Coast DAL Strategy or for their land to be subject to more restrictive planning controls. The submission stated that the Surf Coast DAL protected settlement boundary should be on the southern side of Mount Duneed Road.

Cnr Surf Coast Highway & Feehans Road (Susan Wardrop):

The owner of the property at the corner of Surf Coast Highway & Feehans Road opposed the inclusion of their land within the Surf Coast DAL Strategy or for the land to be subject to more restrictive planning controls. The submission challenges the proposition that all of the Mt Duneed landform is of such landscape significance to warrant it being kept free from further development.

Whites Road, Mt Duneed (Mr Hall and Ms Higgins):

These submitters requested that properties on the south side of White Road be excluded from the Surf Coast DAL strategy and the Geelong settlement boundary be amended to the higher escarpment ridge lines of Mt Duneed, where the inference of regional significance can be sustained.

Mr Goonan (in relation to properties along Whites Road, Mt Duneed):

These submitters requested that properties on the south side of White Road be excluded from the Surf Coast DAL strategy, and that the settlement boundary extends too far north into Geelong than it needs to.

Whites Road, Mt Duneed (V & M Kelly):

These submitters considered that the inclusion of their land within the Surf Coast Declared Area under the DAL legislation was an error/ They submitted that the Land should be removed from the Declared Area and should not be identified within the proposed Statement of Planning Policy for that area. The submission also noted that If the Land is not removed from the declared area, then the protected settlement boundary should be aligned to include the Land in recognition that the land will be included in the urban growth boundary.

Boral:

This submitter requested that the Boral land within the Surf Coast DAL declared area should be identified as an "investigation area for future urban development".

55 & 75 Williams Road (Landowner, Purdies Paddock):

The owner of Purdies Paddock made a submission supporting the draft SPP provided that it clearly acknowledged that Greater Geelong Council will determine the southern boundary of its urban area at Armstrong Creek via the proposed logical inclusions process.

## 3 - Assessment of Investigation Area Against Suitability Criteria

The following is an assessment of the investigation area against the Long Term Boundary Review Decision Criteria.

### 3.1 - Settlement:

Criteria 1.1: Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (including consideration of natural features, location of major roads and reservations for public utilities).

The existing settlement boundary is located on the lower northern slopes of Mt Duneed, between Ghazeepore Road and the Surf Coast Highway. It follows Whites Road before running south and east along cadastral boundaries and then along Feehans Road.

This settlement boundary was set following the preparation of the Armstrong Creek Framework Plan and the review of the boundary by an independent planning panel in 2008 (Amendment C138 to the Greater Geelong Planning Scheme).

The settlement boundary was broadly based on the principles contained in the planning scheme at the time of maintaining non-urban breaks between settlements, and using natural boundaries as the edge of urban areas.<sup>1</sup>

The finer-grained objectives for setting of the boundary along the southern edge of Armstrong Creek were articulated as follows:

- establish a permanent and natural edge to development;
- maintain the green skyline viewed from within the growth area and from land to its north;
- maintain an attractive green edge to Geelong when approached from the south, south-east and south-west; and
- protect the existing character of Mt Duneed.<sup>2</sup>

The independent panel supported the above objectives and it generally endorsed the settlement boundary proposed by Council at that time, although it generally opted to extend development to the nearest property boundary on the Mt Duneed side of lots that were shown as being bisected by the proposed boundary.

We have reviewed the abovementioned objectives for setting the settlement boundary along the southern edges of Armstrong Creek and we consider that they continue to remain relevant. We have therefore adopted these objectives for the purposes of considering the impact of any proposed changes to the settlement boundary in this location.

The following potential boundary locations have been identified as an alternative to the existing settlement boundary, and assessed against the abovementioned objectives:

#### Option 1 – Mt Duneed Road:

Mt Duneed road is the administrative boundary between the City of Greater Geelong and the Surf Coast Shire. It is also a busy road which provides an alternative means of travel between the Geelong Ring Road, the Surf Coast Highway and the Bellarine Peninsula.

Whilst Mt Duneed Road could act as a permanent edge to urban development, it would not function as a 'natural edge'. It is located on the lower southern slopes of Mt Duneed, and if residential development were to occur on these southern slopes then the existing non-urban character of this area would be lost. The existing character of Mt Duneed would be irrevocably changed, and the longer-distance views to this landscape feature from the south, south east and south-west would be significantly compromised.

<sup>1</sup> Amendment C138 Panel Report, page 73.

<sup>2</sup> Ibid, page 74.

Option 2 – Mt Duneed hilltop and ridgeline:

The relative pros and cons of setting the settlement boundary along Whites road, Feehans Road and the cadastral boundaries between these roads were debated and tested as part of the Amendment C138 process. The settlement boundary in this location was ultimately adopted because it enabled the green skyline viewed from within the growth area and from land to its north to be maintained.

The settlement boundary location ensures that the majority of housing on the north-east slopes of Mt Duneed are located below the 50m contour line. The Mt Duneed slopes above this contour line are kept free of urban development so that they preserve a green skyline viewed from within the growth area and land to its north.

The gradient of the north and north-west slopes of Mt Duneed are less steep and the majority of urban development on these slopes are located below the 60m contour.

If the existing settlement boundary was relocated from Whites Road upslope towards Mt Duneed then the objective of retaining a green skyline viewed from within the growth area and land to its north and north-east would largely be lost.

Two properties are bisected by the 50m and 60m contour lines (Purdies Paddock and the northern part of 10-40 Williams Road – refer Figure 14). The impact of potentially including these properties (or part of them) on retaining the green skyline is a matter that warrants further visual analysis in order to determine whether any change to the settlement boundary should be considered.

The current settlement boundary satisfies this Criteria. Any change to the settlement boundary (other than minor changes) would have a negative impact on the satisfaction of this criteria.

The existing settlement boundary generally remains a logical and enduring settlement boundary. Further investigation of the potential landscape implications of including all or part of Purdies Paddock and the northern part of 10-40 Williams Road is suggested.

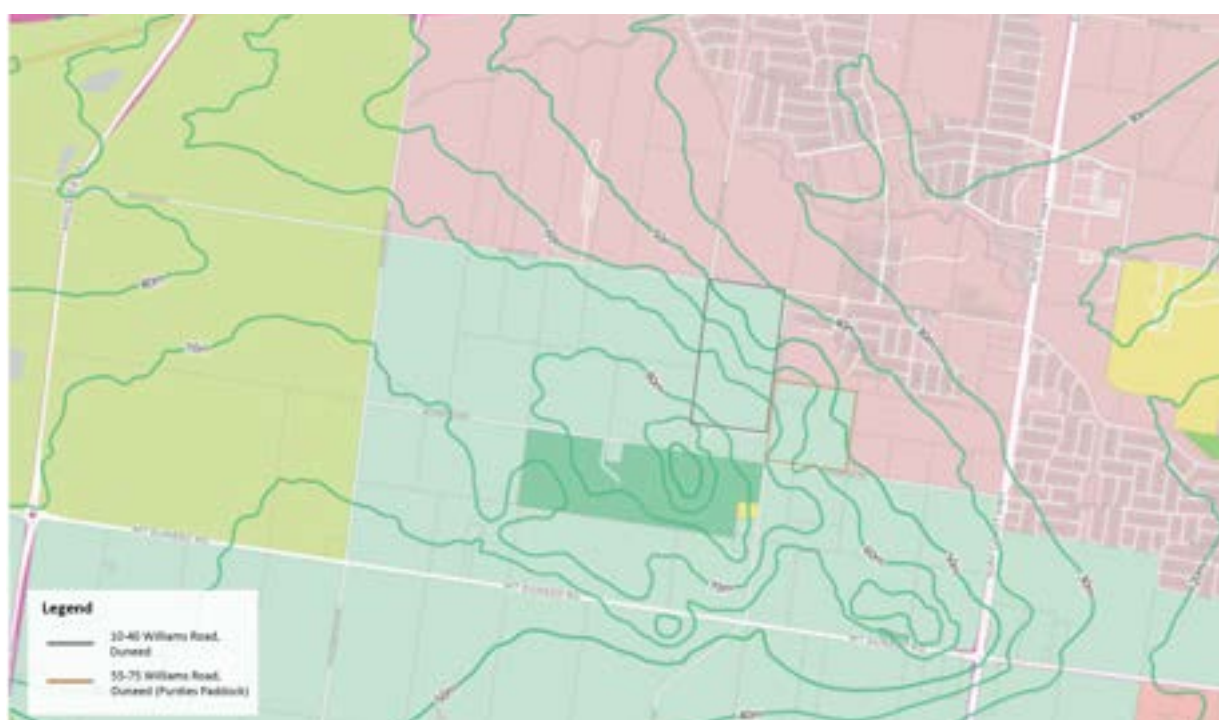


Figure 14. Contour Plan (base map source: Landchecker - see <https://app.landchecker.com.au/properties/@?lng=144.31307285259504&lat=-38.24151602634505>)



### 3.2 - Managing Growth:

Criteria 2.1: Impact on the orderly development of the adjoining urban area.

The inclusion of additional residential land south of Whites Road would have a generally adverse impact on the orderly development of the adjacent urban area, as that area is identified for employment purposes in the Armstrong Creek Urban Growth Plan.

It is unlikely that sufficient land would be established south of Whites Road to create a walkable neighbourhood (including local activity centre, school, etc.), and the western portion of this area is over 2km from the nearest (planned) local activity centre. The interface between residential and employment uses along Whites Road would also need to be managed to avoid land use conflict (including management of commercial and residential traffic movements).

The inclusion of smaller areas of residential land immediately adjacent to Williams Road is unlikely to impact on the orderly development of the adjoining area. However, a more detailed assessment of its impact on the provision of local open space, community services and infrastructure would be necessary to confirm any impacts and associated mitigation actions.

Any change to the settlement boundary (other than minor changes) would have a negative impact on the satisfaction of this criteria.

Criteria 2.2: Impact on management of the sequence of development and the early provision of services.

A substantial proportion of the residential land within the Armstrong Creek West PSP has already been completed or is currently under development. The inclusion of additional residential land south of Whites Road would not have any major impact on the management of sequencing of development or the early provision of infrastructure.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

Criteria 2.3: Impacts of any proposed boundary changes on the economic provision of other development fronts.

A substantial proportion of the residential land within all of the residential PSPs within Armstrong Creek has already been completed or is currently under development. The inclusion of additional residential land south of Whites Road would not have any major impact on the economic provision of existing development fronts, as the additional land is likely to be available to the market in the final phases of other PSP areas exhausting their land supply.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

### 3.3 - Planning for Places – Distinctive Areas & Landscapes:

Criteria 3.1: Impact on any identified unique features or special characteristics within a declared area.

The area is located within a Declared Area under the Distinctive Areas and Landscapes legislation. The area has been assessed under the draft DAL Strategy as forming an important part of the wider Mt Duneed Volcanic Plain Landscape Area, Mt Duneed is an important landscape feature in this part of the Declared Area.

The landscape assessment undertaken as part of the draft DAL Strategy describes the landscape significance of the wider area as follows:

“This area is very important visually and geographically for the role it plays as part of a broader strategic landscape area i.e. as an integral part of the Mount Duneed Volcanic Plain Landscape Area, and as an open rural green break between settlements, and between Geelong and the Great Ocean Road landscapes.

An assessment of the visual significance of the landscape has found that it is of regional significance.

When travelling along Mount Duneed Road/ Lower Duneed Road, the Thompson Valley green break to the north acts as an important ‘distance barrier’, mitigating the visual impact of the southern development front of Geelong.

It also relates visually and geographically to the open landscape to the south of the City of Greater Geelong municipal boundary, the two areas combining to form the whole ‘landscape experience’ when driving along Mount Duneed Road....

If residential development were to occur immediately adjacent to Mount Duneed Road, the rural green break as experienced by most would cease to exist.”<sup>3</sup>

The Landscape Assessment (Volume 2) refines the description of the landscape significance of the wider area as follows:

“The majority of the Mount Duneed Plain and Surrounds landscape is considered to be of low regional significance with areas of higher (moderate regional) significance coinciding with landscape features such as the Thompson Creek corridor, Mount Duneed itself, and the interface with the adjacent landscape of state significance.”

The open rural landscape between Armstrong Creek and Mount Duneed Road is an important part of the larger ‘green break’ that this Landscape Area forms, between the built up areas of Geelong and Torquay.<sup>4</sup>

Any change to the settlement boundary in this area would have a negative impact on the landscape values identified via the draft DAL Strategy for this area, and therefore it would have a negative impact on the satisfaction of this criteria.

<sup>3</sup> Surf Coast DAL Landscape Assessment Review Volume 1, page 129.

<sup>4</sup> Surf Coast DAL Landscape Assessment Review Volume 2, page 7.

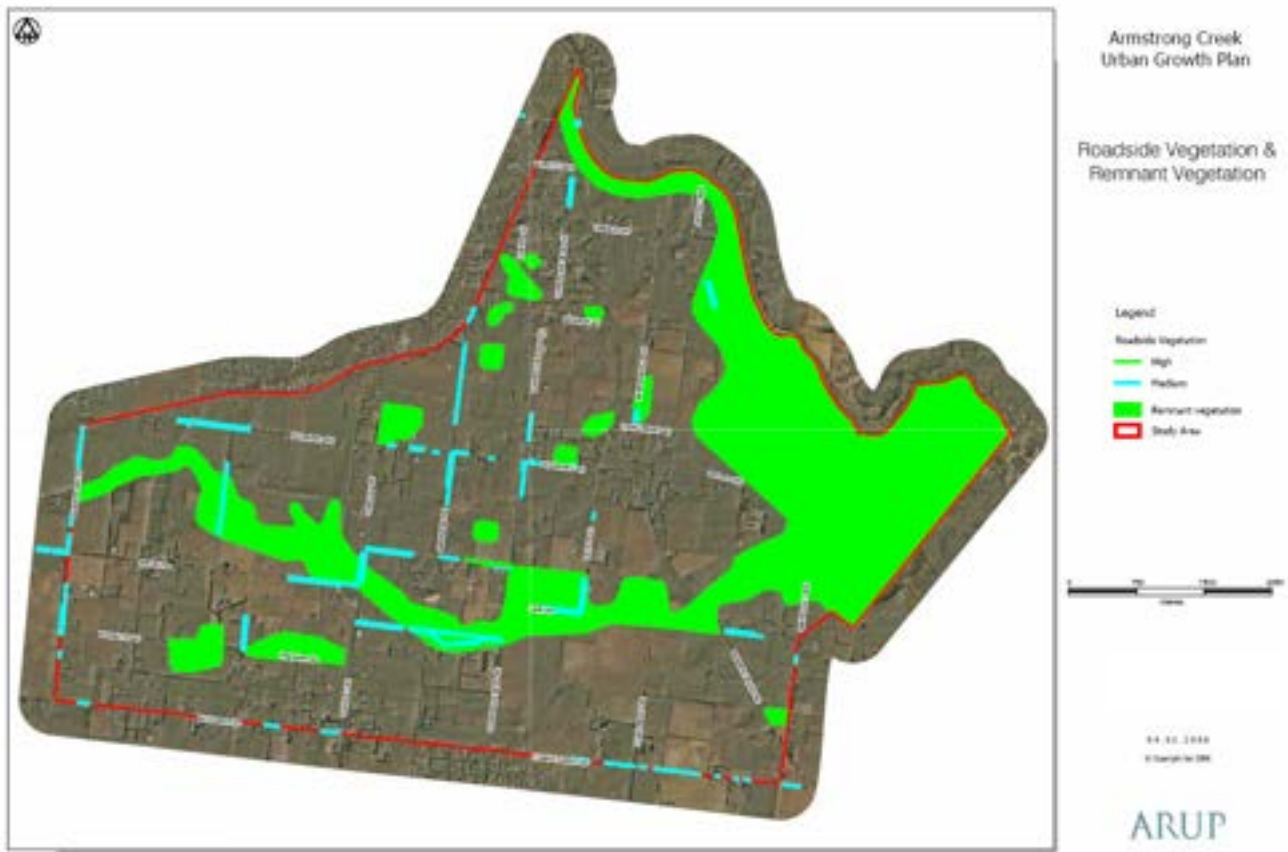


Figure 15. Armstrong Creek Urban Growth Plan - Roadside Vegetation & Remnant Vegetation (ARUP, 2006).

### 3.4 - Environmental & Landscape Values:

Criteria 4.1 Impact on the protection of biodiversity values.

The flora and fauna study commissioned for the Armstrong Creek Urban Growth Area identified two areas of remnant vegetation within the area, as well as areas of medium quality roadside vegetation (refer Figure 15).<sup>5</sup>

An Environment Significance Overlay applies to part of the western parcel of remnant vegetation.

Any change to the settlement boundary would have a generally neutral impact on the satisfaction of this criteria, as the relevant biodiversity values could be protected by planning and management measures.

Criteria 4.2 Impact on the protection of coastal areas & wetlands.

Not Applicable.

Criteria 4.3 Impact on the protection of significant landscapes.

The area is considered to contain a significant landscape, given that it is located within a Declared Area under the Distinctive Areas and Landscapes legislation (and has therefore met the criteria for inclusion under that legislation).

The area has been assessed under the draft DAL Strategy as forming an important part of the wider Mt Duneed Volcanic Plain Landscape Area. Mt Duneed is an important landscape feature in this part of the Declared Area.

Any change to the settlement boundary in this area would have a negative impact on the satisfaction of this criteria, for the reasons set out under Criteria 1 and 3.1.

<sup>5</sup> Armstrong Creek Urban Growth Plan Flora and Fauna Technical Report (Ecology Australia, 2006).

Criteria 4.4 Impact on the preservation of identified urban breaks.

The Greater Geelong Planning Scheme (at Clause 21.06-2 and at Clause 21.11) seeks to maintain the non-urban breaks between the Armstrong Creek Growth Area and the Surf Coast.

The existing settlement boundary satisfies this objective by setting land aside between the settlement boundary and the municipal boundary as non-urban land.

If the settlement boundary were to be moved to Mt Duneed Road then there would no longer be a non-urban break within the Greater Geelong municipal boundary. This would be contrary to the intent of the non-urban break policies contained within the Greater Geelong Planning Scheme.

If the settlement boundary were to be moved south onto the upper north facing slopes of Mt Duneed Road then a non-urban break would be preserved.

Any change to the settlement boundary in this area would potentially have a negative impact on the preservation of a non-urban break within the municipal boundary (and therefore on the satisfaction of this criteria), depending on its location.

### 3.5 - Environmental Risks:

Criteria 5.1 Climate change – impacts of coastal inundation & erosion.

The area is not affected by coastal inundation or erosion.

Criteria 5.2 Bushfire risks in the location.

The investigation area is within a Bushfire Prone Area but is not located within or proximate to a Bushfire Management Overlay. Bushfire risk is not likely to be determinative of the suitability of urban development in the area. A Bushfire Management Plan could be prepared to manage the potential risks posed by bushfire on urban development in the area.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

Criteria 5.3 Impacts on/of floodplains.

The area is not located on or adjacent to a floodplain.

Criteria 5.4 Impacts on/of soil degradation.

The Geological Survey of Victoria (1:63,360) Geological Map Series Geelong Sheet indicated that the area is underlain by Newer Volcanics and Moorabook Viaduct Sands.<sup>6</sup>

No soil degradation impact risks have been identified in the desktop review for this area.<sup>7</sup>

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however If development was approved in this area further analysis would be required to investigate soil conditions and the impact development might have on soil degradation.

<sup>6</sup> See map sheet 9 - <http://earthresources.efirst.com.au/categories.asp?CID=33>

<sup>7</sup> <https://www.ccmaknowledgebase.vic.gov.au/nrmpp>

#### Criteria 5.5 Impacts on/of erosion & landslip.

The area is identified as having a low-moderate risk of gully and sheet erosion.<sup>8</sup>

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however If development was approved in this area further analysis would be required to investigate soil conditions and the impact erosion and landslip might have on development.

#### Criteria 5.6 Impacts on/of salinity, acid sulfate soils.

No salinity or acid sulfate soil impact risks have been identified in the desktop review for this area.<sup>9</sup>

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however If development was approved in this area further analysis would be required to investigate soil conditions and the impact salinity and acid sulfate soil conditions might have on development.

#### Criteria 5.7 Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.

The area is located in proximity to the existing Boral/Blue Circle limestone quarry and concrete manufacturing facility. However, Boral has discontinued limestone quarrying at the site, and will soon relocate concrete activities to its new facility at the Port of Geelong. The site is now under active rehabilitation.<sup>10</sup>

The Geelong Pistol Club and Mt Duneed Pony Club are both located within the area, and consideration would need to be given to the compatibility of residential development with these uses.

<sup>8</sup> <https://www.ccmaknowledgebase.vic.gov.au/nrmpp>

<sup>9</sup> Ibid.

<sup>10</sup> Boral submission to Surf Coast DAL Standing Advisory Committee, 2021.

Land to the immediate south of the area is in a Farming Zone and currently used for grazing and other rural purposes. There are no land uses that require separation from residential or other sensitive uses within 1km of Mt Duneed Road. Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria.

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria.

#### Criteria 5.8 Impacts on/of major hazard facilities.

There are no major hazard facilities located in proximity to this area.

### 3.6 - Natural Resource Management:

#### Criteria 6.1 Impact on the protection of agricultural land.

The Greater Geelong Planning Scheme seeks to support the use of the land within the southern rural areas for productive agriculture.<sup>11</sup>

The area has been identified as having a combination of Class 3 (moderate-high) and Class 4 (Moderate) land capability, as have all of the rural areas within the Bellarine Peninsula and Surf Coast Shire.<sup>12</sup> These are defined as follows:

Class 3 - Land that is inherently capable for soil-based agriculture at moderate to high intensity. The potential/capability may vary (e.g. according to slope, inherent fertility and drainage) but is often realised with access to a constant water supply.

Class 4 - Land that is not as inherently capable for intensive soil-based agriculture. Extensive agriculture (including broadacre cropping with suitable land management practices) and non-soil utilisation activities are often most appropriate, and more intensive grazing is possible in some higher rainfall areas or where consistent water supplies are available.

<sup>11</sup> Clause 21.07-4

<sup>12</sup> Assessment of agricultural land capability in Melbourne's green wedge and peri-urban areas (Agriculture Victoria, 2018).

The land holdings vary in size in the area, and the majority are under 30ha in area. There are a number of non-agricultural land uses located across Mt Duneed (including a school, recreation reserve, cemetery, pistol club, pony club and some larger rural lifestyle dwellings).

Any change to the settlement boundary is expected to have a negative impact on the availability of land for agricultural production and therefore the satisfaction of this criteria. However, given the existing subdivision and land use patterns in the area, the impact on the achievement of wider agricultural production objectives would be modest.

Criteria 6.2 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources.

The northern part of the area drains towards Armstrong Creek and the southern part towards Thompsons Creek. Residential development within the area would impact on these waterways but these impacts could be readily mitigated through the design of any urban stormwater infrastructure within the area.

Any change to the settlement boundary is expected to have a neutral impact on the protection of nearby catchments and therefore the satisfaction of this criteria.

Criteria 6.3 Impact on the protection of extractive resources.

The area is not identified as an Extractive Industries Interest Area. Residential development in part of this area would be located close to nearby stone resources (west of Ghazeepore Road). However, the holder of the work authority for these resources (Boral) has discontinued limestone quarrying at the site, and the site is now under active rehabilitation.

Any change to the settlement boundary is expected to have a neutral impact on the protection of extractive resources and therefore the satisfaction of this criteria.

### 3.7 - Heritage:

Criteria 7.1 Impact on known Aboriginal cultural heritage values.

Aboriginal Victoria mapping shows the Armstrong Creek and Thompsons Creek waterways as areas of cultural heritage sensitivity. There are also a number of areas of cultural heritage sensitivity in the Mt Duneed recreation reserve.<sup>13</sup>

Any change to the settlement boundary is expected to have neutral impact on the protection of known areas of Aboriginal cultural heritage sensitivity. However, consultation with Traditional Owners and further assessment of other potential areas of Aboriginal cultural heritage sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

Criteria 7.2 Impact on known post contact heritage values.

A Heritage Overlay currently applies to the Mt Duneed cemetery, and the 'Hillside' residence on Williams Road.

Any change to the settlement boundary is expected to have a neutral impact on the protection of known areas of Aboriginal cultural heritage sensitivity.

<sup>13</sup> See <https://achris.vic.gov.au/#/onlinemap>

### 3.8 - Transport:

Criteria 8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access.

The majority of the area currently does not have access to local bus services (except for services which run along the Surf Coast Highway). The area is not located within walking distance of existing and planned activity centres within the Armstrong Creek Growth Area, and it would be necessary to re-route local public transport services to the area in order to connect residents to regional employment, health, education and other services.

Any change to the settlement boundary is expected to have a negative impact on the ability to cost-effectively provide public transport services to the Armstrong Creek growth area, as it would be necessary to extend and re-route existing bus services to connect to this area.

- Potential that a new pump station may be needed for recycled water

The technical feasibility and cost-effectiveness of providing additional urban services to cater for additional housing growth in this location has not been examined as part of this desktop review.

However, any change to the settlement boundary in this area is anticipated to have a negative impact on the ability to cost-effectively provide urban services to the Armstrong Creek growth area, as it would be necessary to construct at least some new community facilities and utility services to cater for the additional demand, rather than being able to rely on available capacity within existing/planned urban services.

### 3.9 - Infrastructure:

Criteria 9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage.

The area has access to an existing primary school and recreation reserve, and could be connected to the existing growth area via Williams Road and new local streets. The area is not located within walking distance of existing or planned secondary schools, activity centres or other community facilities within the Armstrong Creek Growth Area, and those facilities were not originally planned to cater for additional housing growth in this area.

Initial consultation with Barwon Water has identified the following:

- Land South of the PPRZ land drains away from the existing network and therefore would be difficult to service
- The land identified in Figure 14 could potentially drain into the existing sewerage system.

6.2

Armstrong Creek  
South Central

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

376.953 ha (gross land area).

## 1.2 Definition of investigation area:

The investigation area in Armstrong Creek South Central (i.e. east of the Surf Coast Highway) is defined by the land parcels which are (in the majority) contiguous with the Urban Growth Zone land contained within the existing settlement boundary (refer Figures 16 and 17). This land therefore satisfies Principle 2 of the Long Term Boundary Review in that it is contiguous with urban residential areas.

There are a small number of land holdings located at the Lower Duneed Road intersection of Surf Coast Highway and Barwon Heads road that are not contiguous with the urban residential area. This land has been included within the investigation area, on the basis that this will enable a more holistic consideration of the landscape characteristics that will inform the settlement boundary in this location.

## 1.3 Current Zoning and Overlays:

The land within the investigation area is zoned Farming Zone (refer Figure 18).

The following overlay controls apply to land within the investigation area:

- Vegetation Protection Overlay (roadside locations)
- Heritage Overlay (farming residence and structures, 21 Lower Duneed Road)
- Flood Overlay (western part of area)
- Land Subject to Inundation Overlay (eastern part of area)
- Public Acquisitions Overlay (Barwon Heads Road widening)

(Refer Figures 19 and 20).

A photo montage of the existing site context of the investigation area is shown at Figure 21.

Geelong Growth Investigation Areas  
Armstrong Creek South - Central



Figure 16. Armstrong Creek South Central – Aerial Cadastral Plan.

Geelong Growth Investigation Areas  
Armstrong Creek South Central Investigation Area

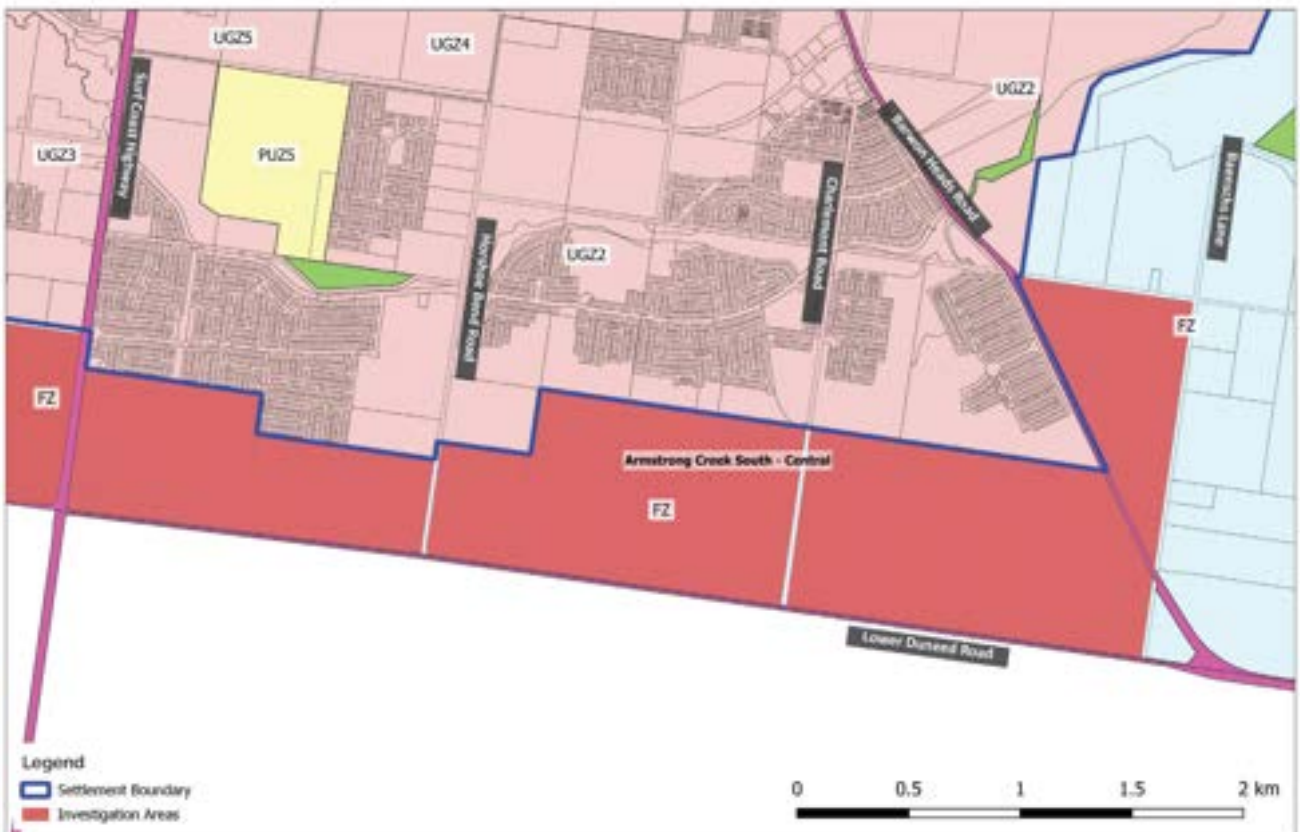


Figure 17. Armstrong Creek South Central – Investigation Area Plan.

Geelong Growth Investigation Areas  
Armstrong Creek South Central - Zoning

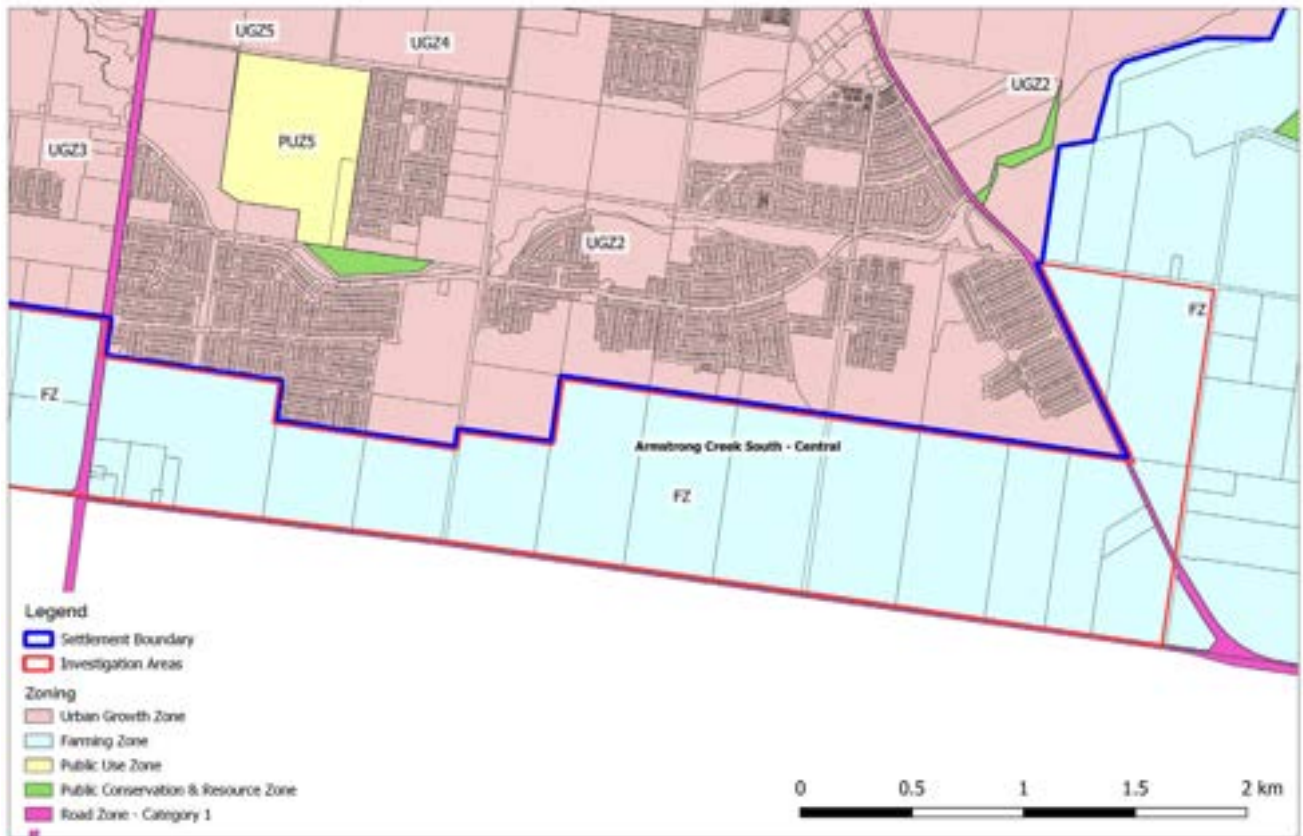


Figure 18. Armstrong Creek South Central – Zoning Plan.

Geelong Growth Investigation Areas  
Armstrong Creek South Central - Overlays

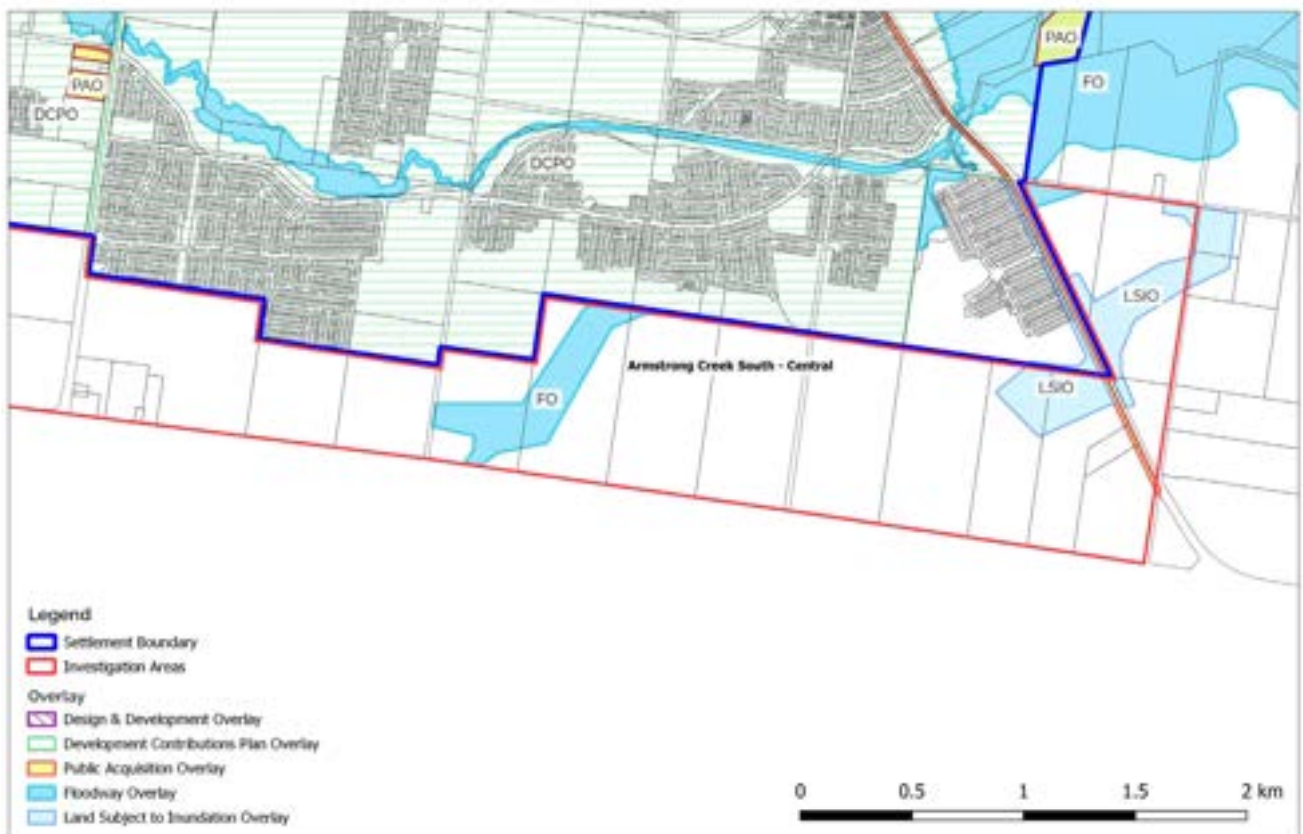


Figure 19. Armstrong Creek South Central – Overlays Plan 1.

Geelong Growth Investigation Areas  
Armstrong Creek South Central - Overlays

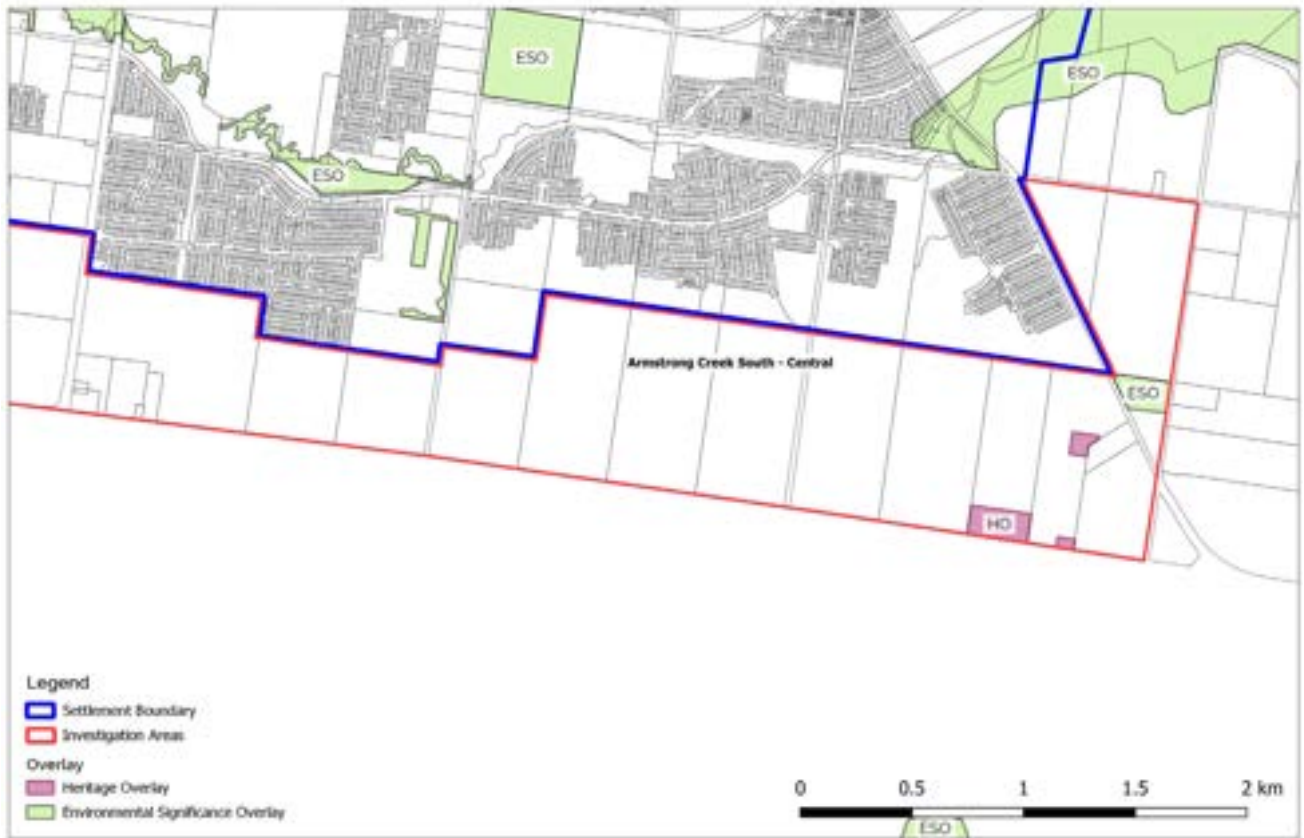


Figure 20. Armstrong Creek South Central – Overlays Plan 2.



Figure 21. Armstrong Creek South Central – Photo Montage.

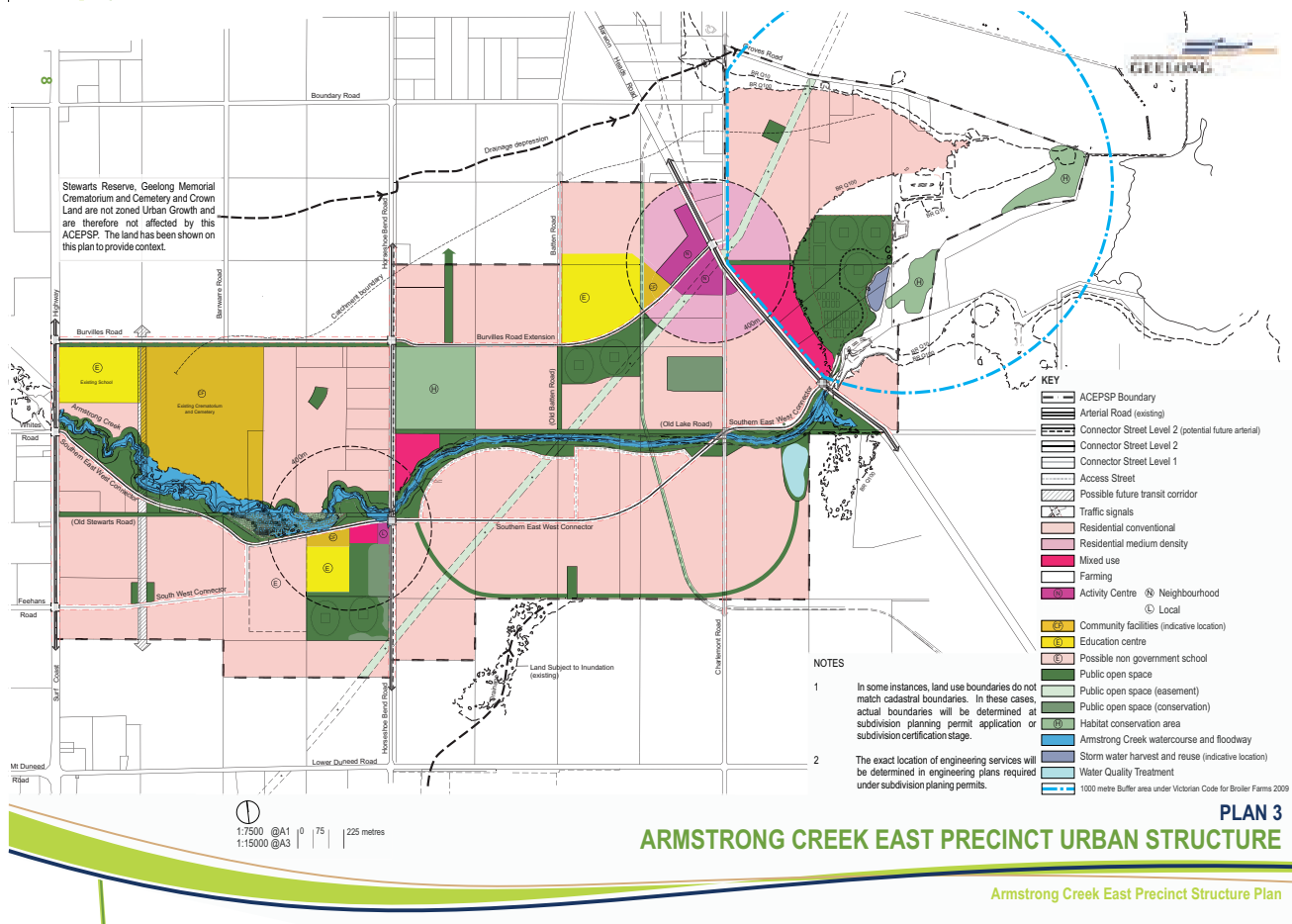


Figure 22. Armstrong Creek East Precinct - Urban Structure (Armstrong Creek East Precinct Structure Plan, City of Greater Geelong, 2010).

### 1.4 Investigation Area & Surrounds:

The investigation area is generally flat in the central and western parts, and gently rises towards Mt Duneed to the west. The land is primarily used for cropping and grazing, and there are a small number of farm houses located on land within the area.

The Armstrong Creek Growth Area and Armstrong Creek East PSP area are located to the north of the investigation area (refer Figure 22). Substantial residential development has already occurred in this part of the growth area. The urban form within this growth area is visible at a distance from Lower Duneed Road, and is set back from this road between 450-800m.

The prevailing character of the area is rural, with both sides of Lower Duneed Road being used for farming or (in the case near Horseshoe Bend Road) low density residential.

## 2 - Summary of Recent Submissions in Relation to the Settlement Boundary

### 2.1 Amendment C395 to the Greater Geelong Planning Scheme (Greater Geelong Settlement Strategy)

The following is a summary of submissions made to the City of Greater Geelong in relation to the settlement boundary identified in Amendment C395 (Geelong Settlement Strategy):

#### 372-450 Charlemont Road Armstrong Creek (DFC Services Pty Ltd and Landowner):

It is the view of DFC Services Pty Ltd and the landowner (the Sprague family), that the 372-450 Charlemont Road property is suitable for urban residential development and should be treated as a logical extension of the Warralily development located to the immediate north. The submitter supports the use of a 'logical inclusions' process in order to determine a settlement boundary and assess the suitability of contiguous land.

#### 70 Baenschs Lane (Property Corporate Holdings Pty Ltd):

This submission seeks recognition of 70 Baenschs Lane, Connewarre as a suitable candidate for inclusion within the Geelong Settlement Boundary.

The submission makes the following points:

- The site exhibits a range of features that are in-keeping with those features present on the land to the west before it was rezoned from Farming Zone to Urban Growth Zone via Amendment C301.
- Inclusion of the site within the Geelong Settlement Boundary can demonstrate consistency with the planning aspirations and objectives of the State and Local Planning Policy Frameworks of the Greater Geelong Planning Scheme, including the following:
- The existence of major road infrastructure in the form of Barwon Heads Road and the approval of Amendment C301 results in good accessibility to a range of services from the site.

- Inclusion of the subject site into the Armstrong Creek Growth Area will result in improved utilisation of the neighbourhood centre and associated recreational facilities within a 1.6km catchment of the subject site.

#### 70 Baenschs Lane (Property Corporate Holdings Pty Ltd):

This submission seeks recognition of 70 Baenschs Lane, Connewarre as a suitable candidate for inclusion within the Geelong Settlement Boundary. It also argues that:

- The subject site does not exhibit any of the attributes listed under section 46Ap of the Planning and Environment Act 1987 that must apply for a site to be declared as a distinctive area ad landscape.
- The subject site does not exhibit any of the attributes qualifying the Bellarine Peninsula as a distinctive area and landscape listed in table 1 of the draft SPP.
- The approach taken to classifying land under the SPP is highly generalised and lacks clear guidance
- The subject site is no more visually prominent or sensitive than land to the west, which is within the Armstrong Creek Growth Area.

## 2.2 Draft Surf Coast Distinctive Areas and Landscapes (DAL) Strategy

A number of landowners made submissions to the Victorian Government in relation to question of whether and how the Geelong Settlement Boundary should be addressed in the DAL Strategy. The following is a summary of submissions made to the draft DALs:

### 372-450 Charlemont Road Armstrong Creek (DF (Sprague Farm) Developments Pty Ltd):

DF (Sprague Farm) Developments Pty Ltd submitted that the location, purpose, characteristics and implementation of a final protected settlement boundary for Armstrong creek Urban Growth Areas are matters of further investigation, to be finalised following the completion of a 'logical inclusions' process facilitated by the City of Greater Geelong.

The submission stated that it is premature for the Surf Coast DAL Advisory Committee to make any recommendations in relation to the green link and settlement boundary in this location.

### 413-491 Charlemont Road, Armstrong Creek (DFC Services Pty Ltd and Landowner):

It is the view of DFC Services Pty Ltd and the landowner (the Cameron Family) that land north of Lower Duneed Road and east of Horseshoe Bend Road should not have formed part of the Surf Coast DAL and instead should be consumed within the Armstrong Creek Urban Growth Area as part of the City of Greater Geelong's future logical inclusions review process.

The submitter argued that the settlement break proposed within the draft Surf Coast DAL Statement of Planning Policy should be located south of Lower Duneed Road, focused on the Thompson Creek Valley, and that the land north of Lower Duneed Road be included within the Geelong Settlement Boundary via Council's logical inclusions process.

### 91 Lower Duneed Road (Geoff and Carolyn Blyth):

The owner of 91 Lower Duneed road submitted that an additional set of planning controls as proposed in the DAL is unwarranted. Further, it was their submission that their property and those in the immediate area within the City of Greater Geelong do not meet the requirements / criteria as set out in Section 46AP of the Planning and Environment Act 1987 to be included in the Surf Coast DAL. The submitter noted that is no concentration of unique attributes of State and/or National significance that are under threat of significant or irreversible change in this location.

## 2.3 Draft Bellarine Peninsula Distinctive Area and Landscape (DAL) Strategy

A number of landowners made submissions to the Victorian Government in relation to question of whether and how the Geelong Settlement Boundary should be addressed in the DAL Strategy. The following is a summary of submissions made to the draft DALs:

### 70 Baenches Lane, Conneware (Property Corporate Holdings Pty Ltd):

## 3 - Assessment of Investigation Area Against Suitability Criteria

The following is an assessment of the investigation area against the Long Term Boundary Review Decision Criteria.

### 3.1 - Settlement:

Criteria 1.1: Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (including consideration of natural features, location of major roads and reservations for public utilities).

The existing settlement boundary is located along cadastral boundaries circa 450-800m north of Lower Duneed Road, between the Surf Coast Highway and Barwon Heads Road.

This settlement boundary was set following the preparation of the Armstrong Creek Framework Plan and the review of the boundary by an independent planning panel in 2008 (Amendment C138 to the Greater Geelong Planning Scheme).

The settlement boundary was broadly based on the principles contained in the planning scheme at the time of maintaining non-urban breaks between settlements, and using natural boundaries as the edge of urban areas.

The finer-grained objectives for setting of the boundary along the southern edge of Armstrong Creek were articulated as follows:

- establish a permanent and natural edge to development;
- maintain the green skyline viewed from within the growth area and from land to its north;
- maintain an attractive green edge to Geelong when approached from the south, south-east and south-west; and
- protect the existing character of Mt Duneed.

We have reviewed the abovementioned objectives for setting the settlement boundary along the southern edges of Armstrong Creek and we consider that they continue to remain relevant.

We have therefore adopted these objectives for the purposes of considering the impact of any proposed changes to the settlement boundary in this location.

The original application of the abovementioned objective to this area sought to define a limit to urban development which limited the degree of intrusion into the rural landscape when viewed along Lower Duneed Road (and specially when viewed from either end of the 'dip' along this road between the Surf Coast Highway and a point approximately 600 metres east of Horseshoe Bend Road).

In each of these views, a prominent natural feature was identified part way down the north-facing slope of Mt Duneed or the ridgeline that was considered to be critical to the 'green' character experienced from the road (refer Figure 23).

The settlement boundary that was introduced by Amendment C138 was selected in a location which sought to protect the rural character along Lower Duneed road as viewed between these two locations. It was broadly based on the viewline analysis prepared by Council but adapted in some locations to follow cadastral boundaries.

An additional 52ha of land was included within the settlement boundary (and rezoned Urban Growth Zone) by Amendment C301 to the Greater Geelong Planning Scheme in 2016. The independent panel that assessed this amendment was satisfied that this boundary expansion would not remove the urban break between the Armstrong Creek Urban Growth Area and the Surf Coast Shire to the south of the amendment area.

The settlement boundary options outlined in Table 1 (overleaf) have been identified as potential alternatives to the existing settlement boundary.

Each of these options has been assessed against the abovementioned settlement boundary objectives.

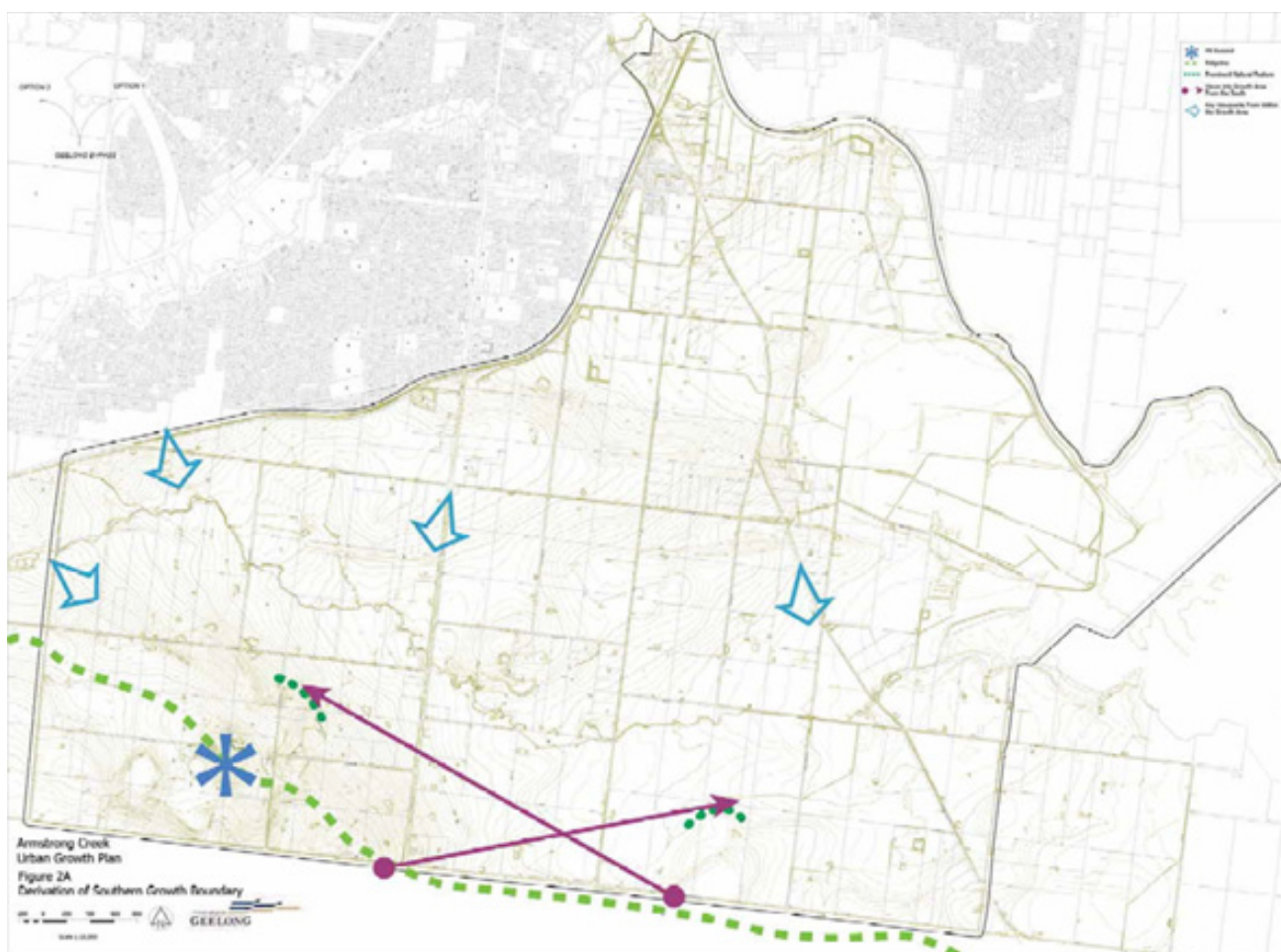


Figure 23. Diagram illustrating the derivation of the southern growth boundary (Mark Sheppard Evidence Statement, Amendment C138 Panel hearing, 2007)

Table 1. Settlement Boundary Options – Armstrong Creek South Central.

Option	Title	Description
1	Lower Duneed Road	Move the boundary to Lower Duneed Road and rezone land within it to Urban Growth Zone
2	Lower Duneed Road Hybrid	Move the boundary to Lower Duneed Road and rezone part of the land within it to Urban Growth Zone, and land closest to the road to Low Density Residential
3	Minor boundary change	Make minor boundary changes to marginally encroach into the view corridors identified in the original ACGU study
4	Rural Living	Rezone land to Rural Living Zone

### Option 1 - Lower Duneed Road:

This option is to move the boundary to Lower Duneed Road and rezone land within it to Urban Growth Zone. It would result in the inter-urban break between Geelong and Torquay being moved to the municipal boundary.

Clause 21.06-2 of the Greater Geelong Planning Scheme contains the following policy in relation to inter-urban breaks:

“Maintain the non-urban breaks between Geelong and Melbourne (Wyndham), Geelong and the Surf Coast, urban Geelong and the Bellarine Peninsula, and the townships on the Bellarine Peninsula.”

The intention of the above policy is that land within the Geelong municipal boundary would be set aside for the purposes of contributing towards the maintenance of the non-urban break.

Maintaining a non-urban break between the ACUGA and the Surf Coast Shire is also identified as a key issue to be addressed via the Armstrong Creek Urban Growth Plan (Clause 21.01-1).

The existing settlement boundary that was established via Amendment C138 sets land aside between the growth area and the municipal boundary to give effect to these non-urban break policy aspirations (and the equivalent policies which pre-dated them back in 2007).

Moving the settlement boundary to Lower Duneed Road is not consistent with the above policy expectations. Whilst certain subdivision, urban and landscape design treatments could be applied to the settlement boundary to visually soften this edge, the policy intent is to maintain an urban break on land within the municipality, rather than treat the municipal boundary itself as the edge between urban and non-urban uses.

### Option 2 - Lower Duneed Road Hybrid:

This option is to move the boundary to Lower Duneed Road, rezone part of the land within it to Urban Growth Zone, and rezone land closest to the road to the Low Density Residential Zone (LDRZ).

Under the LDRZ, each lot must be at least the area specified for the land in a schedule to this zone, and any area specified must be at least:

- 0.4 hectare for each lot where reticulated sewerage is not connected.
- 0.2 hectare for each lot with connected reticulated sewerage.

The Geelong Settlement Strategy defines the term ‘rural residential development’ as including land in the LDRZ and it notes that this form of development is discouraged, as it is not sustainable and results in high servicing costs.<sup>1</sup>

Clause 21.06 of the Geelong Planning Scheme seeks to limit rural-living developments to existing zoned land in Lara, Drysdale/Clifton Springs, Wallington, Wauron Ponds, Lovely Banks Batesford, Fyansford, Leopold, Newcomb, Moolap, Curlewis, Portarlington and Ocean Grove.

Notwithstanding the lack of policy support for using the LDRZ this location, it is nonetheless a tool that could be used to create a more sensitive interface along the settlement boundary. If applied in conjunction with siting, design and landscaping guidelines, then zoning which allowed low density residential lots of between 0.2 and 0.4ha could result in a more sensitive transition between rural and urban land uses in this location.

The LDRZ is an urban rather than a rural zone under the Victoria Planning Provisions, albeit one that is intended to facilitate low density residential outcomes.

<sup>1</sup> Geelong Settlement Strategy, pages 50 & 65.

Whilst this type of outcome would result in a better landscape interface than would be the case if an urban zone was applied to this edge, the outcome would still not be consistent with the intent of setting of a genuinely non-urban break on land within the Geelong municipal boundary.

### Option 3 – Minor boundary change:

This option is to make minor boundary changes to marginally encroach into the view corridors identified in the original ACGU study and create an alternative rural-urban edge condition along the revised boundary.

This option would still necessitate land within the western and eastern flanks of the area remaining in a non-urban zone, but would provide for an extension of the existing settlement boundary at the margins of the view-corridors identified in the original ACUGA study.

This could be achieved by ‘squaring off’ the existing boundary location or (preferably) creating a more curvilinear edge (refer Figure 24), each of which could incorporate extensive landscaping at the interface to create a stronger green edge to the boundary in this area.



Figure 24. Option 3 – Minor boundary change (based on view corridors identified within original ACGU study).

This type of boundary change would not follow any natural features or roads, and it would only be more logical and enduring than the existing boundary if the edge that was created took the form of a public open space link (such as a cycling or bridle trail).

There would be relatively limited benefit in making minor boundary changes, other than to potentially create opportunities to establish a more substantial green edge than is provided for within the existing PSP for this area.

The benefit in creating this type of open space link in this location would need to be demonstrated, given the cost associated with creating and maintaining such a link and given that the Armstrong Creek corridor is only 400-800m from the existing settlement boundary.

Further analysis would be required of both the degree of encroachment into the non-urban landscape that would be acceptable (when measured against the original objectives for setting the boundary referred to earlier in this chapter) as well as the merit and design parameters of any linear landscaped public open space treatment along this alternative edge. Additionally, consideration would need to be given to the feasibility and cost/benefit of this option.

### Option 4 – Rural Living:

This option is to zone land between the existing settlement boundary and Lower Duneed Road to a Rural Living Zone (RLZ).

Under the RLZ, each lot must be at least the area specified for the land in a schedule to this zone. If no area is specified, each lot must be at least 2 hectares.

The planning panel that considered Amendment C138 found that there was no strategic support at that time for a rural living designation for the areas south of the settlement boundary. It also found that there was no reason for it to recommend a further strategic review given that the Rural Land Use Strategy had only recently been completed just prior to the Panel hearing.<sup>2</sup>

<sup>2</sup> Amendment C138 Panel report, page 81.

The Geelong Settlement Strategy defines the term 'rural residential development' as including land in the RLZ and it notes that this form of development is discouraged, as it is not sustainable and results in high servicing costs.<sup>3</sup>

The Geelong Planning Scheme seeks to limit rural-living developments to existing zoned land in other locations across the municipality, and it also supports the use of the land within the southern rural areas for productive agriculture.<sup>4</sup>

Rezoning the area to RLZ would be contrary to these policies.

Notwithstanding the lack of policy support for using the RLZ this location, it is nonetheless a tool that could be used to create a more sensitive interface along the settlement boundary. If applied in conjunction with siting, design and landscaping guidelines, then zoning which allowed large (notionally 2ha) lots could result in a more sensitive transition between rural and urban land uses in this location. Notwithstanding the lack of policy support for using the RLZ in this location, it is nonetheless a tool that could be used to create a more sensitive interface along the settlement boundary.

At present, there are long and mid-range views from Mt Duneed Road to the edge of residential development further north across the open, relatively flat intervening rural land. Including this land in a zoning which allowed large (notionally 2ha lots) along with the use of with siting, design and landscaping guidelines could potentially result in a more sensitive transition between rural and urban land uses in this location than the current situation.

This outcome would be relatively more consistent with the intent of setting of a non-urban break on land within the Geelong municipal boundary than Options 1-3. The outcome might be expected to be similar to the development in the RLDRZ subdivision located on the south side of Lower Duneed Road (refer Figures 25–28)<sup>5</sup>. The streets within this estate have a semi-rural in character,

<sup>3</sup> Geelong Settlement Strategy, pages 50 & 65

<sup>4</sup> Clause 21.06; Clause 21.07-4.

<sup>5</sup> Noting that overlay controls would be required to ensure that the landscape, site and design controls created an appropriate non-urban break

but they have a very different character to present-day the open farmland character that makes up most of the present-day inter-urban break.

Low density rural development would also need to be able to support services in a cost effective and sustainable manner. This would include being able to support either reticulated or septic waste systems, drainage, water and power supply and road access. It would be necessary to undertake a feasibility to study to determine whether this form of subdivision would be cost effective and sustainable, having regard to State infrastructure policies relating to these matters (Clause 19).

The current settlement boundary satisfies this Criteria. Options 1 and 2 would have a negative impact on the satisfaction of this criteria. Options 3 and 4 could potentially satisfy this criteria, depending on the layout, building and landscape design strategies adopted. Further concept development and assessment of these options would be needed in order to determine whether these options could satisfactorily address this criteria.



Figure 25. Example rural living dwelling 1 (source: Google Street-View).



Figure 26. Example rural living dwelling 2 (source: Google StreetView).



Figure 27. Horseshoe Bend Road Rural Living Area Aerial.  
(source: Google Satellite)



Figure 28. Example Horseshoe Bend Road rural living streetscape.  
(source: Google StreetView)



The Settlement Boundary along Barwon Heads Road.

Barwon Heads Road (south of Lake Road) forms the eastern boundary of Geelong's settlement boundary in the investigation area.

Land to the north of this point is partially located within the settlement boundary and partially located within a Farming Zone. This land is impacted by flooding and a substantial portion of this area (both within and outside the settlement boundary) is included within a Flood Overlay.

Barwon Heads road is an important connection between urban Geelong and coastal areas to the south, and it represents a logical and enduring settlement boundary.

Baensch's lane is the next nearest physical feature west of Barwon Heads road that could be considered as an alternative settlement boundary in this location.

The triangle of land bound by Baensch's lane and Lake Road is located in a Farming Zone and is partially affected by a Flood Overlay (northern edge), Land Subject to Inundation Overlay and Environment Significance Overlay - 'Areas of flora and fauna habitat and geological and natural interest' (central area).

This area does not contain sufficient land to accommodate a self-contained neighbourhood and any residents in this area would be reliant on infrastructure and services located in on land to its north and west. However, this area is physically separated from the Armstrong Creek Growth Area by Barwon Heads Road and it is located between 1-3km from the nearest town centre to the north. As a result, future residents in this area would not enjoy walkable access to local community infrastructure.

For the above reasons, Baensch's lane is not a more logical or enduring settlement boundary than Barwon Heads Road. Additional factors against the use of Baensch's lane as an alternative settlement boundary include the following:

- Urban development within this area will result in an encroachment onto fringes of the environmentally sensitive Reedy Lake/Lake Connewarre environs. This would require sensitive management to ensure that the habitat values of these adjoining areas are not adversely affected.
- The Geelong Settlement Strategy calls for green breaks to be preserved between urban Geelong and other settlements within the Bellarine Peninsula. The existing rural/urban transition is at the Barwon Heads Road intersection with Lake Road, and including this area within the settlement boundary would relocate this transition 2km south to the Barwon Heads Road intersection with Mt Duneed Road.

The current settlement boundary satisfies this Criteria. The alternative settlement Boundary (Baensch's Road) is not a more logical or enduring boundary than Barwon Heads road, and expanding urban development across this land will not contribute to other policy outcomes relating to walkable neighbourhoods, urban breaks and protecting the environmental values of the adjoining wetlands environs.

### 3.2 - Managing Growth:

Criteria 2.1: Impact on the orderly development of the adjoining urban area.

Significant research and analysis has gone into determining the physical and social infrastructure that is needed to support urban growth within the wider Armstrong Creek Urban Growth Area. The outcomes are reflected in the PSPs and DCPs that have been put in place to guide the delivery of urban development in this growth area.

The inclusion of all or a substantial portion of the area into the settlement boundary would potentially have a significant impact on the orderly development of the adjacent urban area, as described below.

Using the social infrastructure benchmarks set out in the methodology chapter of this report, the potential for residential development to generate demand for additional infrastructure on the western and eastern portions of the PSP area has been assessed.

Land on the west side of the area will be relatively proximate to the southern community hub identified in the Armstrong Creek East PSP. This hub comprises a primary school, sporting ovals and a local activity centre. Notwithstanding, inclusion of all of the land in the western portion of the area could potentially generate the need for an additional government primary school, Level 1 community centre and active open space reserve.

Land on the east side of the area is not proximate to any of the community hubs identified in the Armstrong Creek East PSP. The closest town centre is almost 3km from the south-east edge of the area, and the majority of the social infrastructure (other than a local open space and Catholic primary school) is located on the north side of Armstrong Creek, which is circa 1.6+km from Lower Duneed Road).

The inclusion of all of the land in the eastern portion of the area is highly likely to generate the need for an additional government primary school, Level 1 community centre and active open space reserve. This area is located sufficiently far away from existing and planned infrastructure that it would be necessary to create a new community hub (including local activity centre) in order to provide residents with reasonable walkable access to social infrastructure.

The above is only a desktop analysis for the purposes exploring the broad likelihood of including this land impacting on the orderly development of adjacent areas. The likely impacts would ultimately depend on how much land was included within the settlement boundary, the extent to which the capacity of existing/planned infrastructure could be re-sized to accommodate additional growth, and how close the additional land is located to existing and planned infrastructure.

However, the desktop analysis suggests that:

- There is unlikely to be sufficient capacity for the social infrastructure in the existing/planned residential areas to the north of the south-east portion of the investigation area to cater for substantial additional population growth.

If the concept of the 20 minute neighbourhood and 800m walking catchments is maintained in the planning of this part of the Armstrong Creek growth area then it will be necessary to plan an entire new community in the south-east portion of the area.

- There may not be capacity for the social infrastructure in the existing/planned residential areas to the north of the south-west portion of the investigation area to cater for substantial additional population growth.

This is a smaller area than land in the north-east portion of the investigation area, and it is located significantly closer to planned activity centre and social infrastructure south of Armstrong Creek.

So whilst it should not be necessary to have to plan an entire new community in the south-west portion of the area, it would be necessary to provide additional social infrastructure, including increasing the capacity of schools, community and active open space facilities.

These features are relatively fixed now within the adjacent PSP, and so re-casting the plan for an expanded settlement boundary in this location will not be a straightforward task.

Any change to the settlement boundary (other than minor changes) would have a negative impact on the satisfaction of this criteria.

Criteria 2.2: Impact on management of the sequence of development and the early provision of services.

A substantial proportion of the residential land within the Armstrong Creek East PSP has already been completed or is currently under development. The inclusion of additional residential land south of Whites Road would not have any major impact on the management of sequencing of development or the early provision of infrastructure.

However, it is likely to have a significant impact on the demand for infrastructure and services, and resolving how this demand is met (either via existing/planning facilities or via the creation of new facilities) would be challenging. It would be essential that the inclusion of any additional land within the settlement boundary was accompanied by a strategy for ensuring the timely delivery (and funding) of the additional infrastructure and services required to meet the needs of a larger population in this location.

Any change to the settlement boundary would potentially have a negative impact on the satisfaction of this criteria, depending on how the provision and funding of services was addressed.

Criteria 2.3: Impacts of any proposed boundary changes on the economic provision of other development fronts.

A substantial proportion of the residential land within all of the residential PSPs has already been completed or is currently under development. The inclusion of additional residential land in this area would not have any major impact on the economic provision of existing development fronts in the growth area or elsewhere in Geelong, as the additional land is likely to be available to the market in the final phases of other PSP areas exhausting their land supply.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

### 3.3 - Planning for Places – Distinctive Areas & Landscapes:

Criteria 3.1: Impact on any identified unique features or special characteristics within a declared area.

The area is located within a Declared Area under the Distinctive Areas and Landscapes legislation. The area has been assessed under the draft DAL Strategy as forming an important part of the wider Mt Duneed Volcanic Plain Landscape Area, Mt Duneed is an important landscape feature in this part of the Declared Area.

The landscape assessment undertaken as part of the draft DAL Strategy describes the landscape significance of the wider area as follows:

“The geographical location of the northern part of the Thompson Valley green break (north of Mount Duneed Road/Lower Duneed Road), immediately abutting the southern development front of Geelong makes it vulnerable to development pressure and future change.

This area is very important visually and geographically for the role it plays as part of a broader strategic landscape area i.e. as an integral part of the Mount Duneed Volcanic Plain Landscape Area, and as an open rural green break between settlements, and between Geelong and the Great Ocean Road landscapes.

An assessment of the visual significance of the landscape has found that it is of regional significance.

When travelling along Mount Duneed Road/ Lower Duneed Road, the Thompson Valley green break to the north acts as an important 'distance barrier', mitigating the visual impact of the southern development front of Geelong.

It also relates visually and geographically to the open landscape to the south of the City of Greater Geelong municipal boundary, the two areas combining to form the whole 'landscape experience' when driving along Mount Duneed Road.

As such, the wider Thompson Valley green break has a direct relationship with the coastal landscapes of state significance further south, in that it separates them (and specifically Torquay) from the built-up urban edge of Geelong.

In order to maintain the open rural green break, particularly from the area where it is most frequently viewed and experienced, i.e. Mount Duneed Road, there should be no policy change or rezoning of agricultural land beyond the current Greater Geelong Urban Growth Boundary.

If residential development were to occur closer to Mount Duneed Road it would erode the rural views and experience of travelling to Barwon Heads/the Bellarine Peninsula via this route, and this scenario would need to be mitigated with a substantial distance buffer and indigenous screening vegetation.

If residential development were to occur immediately adjacent to Mount Duneed Road, the rural green break as experienced by most would cease to exist."<sup>1</sup>

Volume 2 of the landscape assessment work undertaken as part of the draft DAL Strategy went on to clarify the different landscape significance of different parts of the Mt Duneed Plain and Surrounds landscape, as follows:

"The majority of the Mount Duneed Plain and Surrounds landscape is considered to be of low regional significance with areas of higher (moderate regional) significance coinciding with landscape features such as the Thompson Creek corridor, Mount Duneed itself, and the interface with the adjacent landscape of state significance."<sup>2</sup>

Given that the area is located some distance away from Mt Duneed, the Thompsons Creek Corridor and any landscapes of state significance, it is understood that the area forms part of a landscape rated as being of 'low regional significance' in the abovementioned DAL landscape assessment.<sup>3</sup>

Any change to the settlement boundary in this area would have a negative impact on the landscape values identified via the draft DAL Strategy for this area (albeit that these values are rated as being of low regional significance), and therefore it would have a negative impact on the satisfaction of this criteria.

<sup>1</sup> Surf Coast DAL Landscape Assessment Review Volume 1,

page 129.

<sup>2</sup> Surf Coast DAL Landscape Assessment Review Volume 2, page 7.

<sup>3</sup> Armstrong Creek Urban Growth Plan Flora and Fauna Technical Report (Ecology Australia, 2006).

### 3.4 - Environmental & Landscape Values:

Criteria 4.1 Impact on the protection of biodiversity values.

The flora and fauna study commissioned for the Armstrong Creek Urban Growth Area identifies some areas of medium quality roadside vegetation (refer Figure 29).<sup>4</sup> An Environment Significance Overlay has been applied to these areas of roadside vegetation.

Any change to the settlement boundary would have a generally neutral impact on the satisfaction of this criteria, as the relevant biodiversity values could be protected by planning and management measures.

Criteria 4.2 Impact on the protection of coastal areas & wetlands.

Not Applicable.

Criteria 4.3 Impact on the protection of significant landscapes.

The area is considered to contain a significant landscape, given that it is located within a Declared Area under the Distinctive Areas and Landscapes legislation (and has therefore met the criteria for inclusion under that legislation).

The area has been assessed by the landscape significance assessments undertaken as part of the draft DAL Strategy as being of 'low regional significance'.

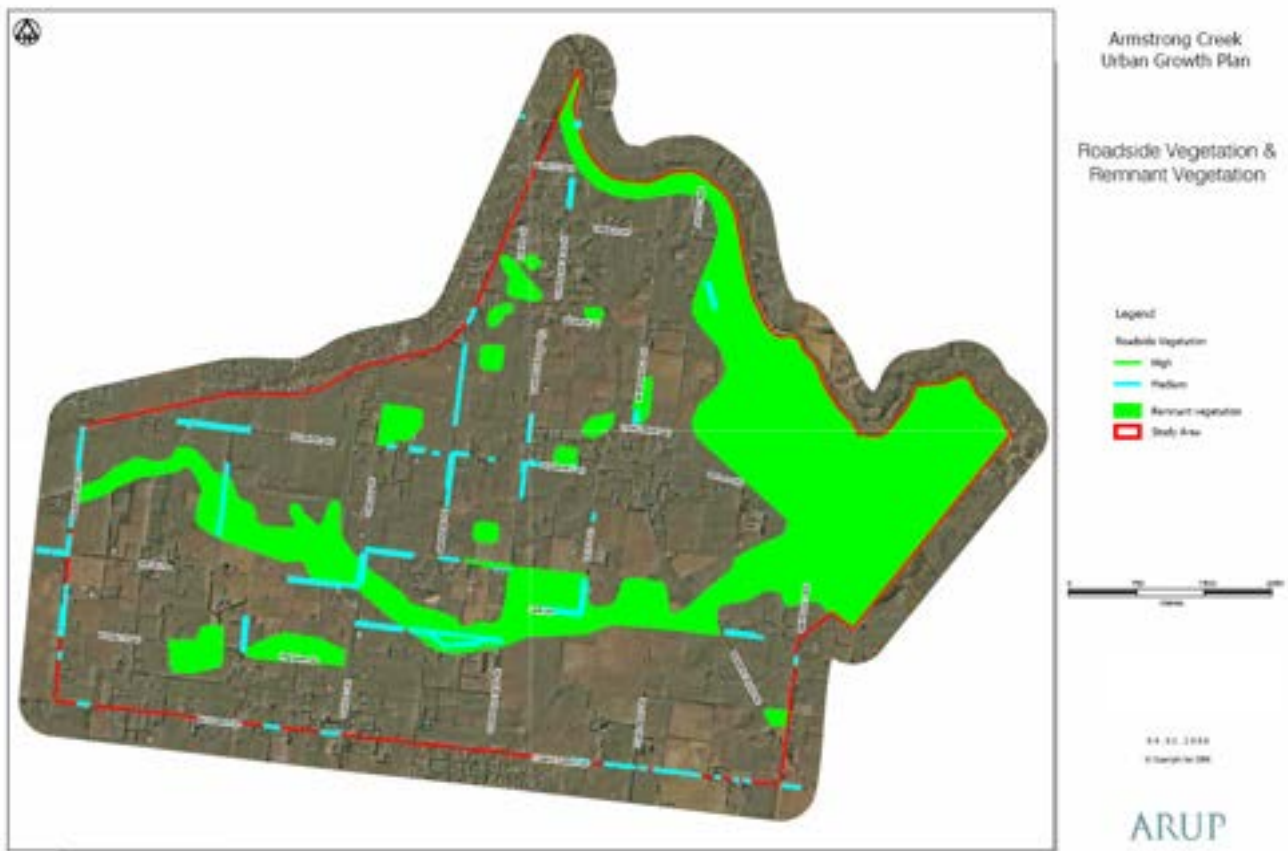


Figure 29. Armstrong Creek Urban Growth Plan - Roadside Vegetation & Remnant Vegetation (ARUP, 2006).

4 Armstrong Creek Urban Growth Plan Flora and Fauna Technical Report (Ecology Australia, 2006).

Any change to the settlement boundary in this area would have a negative impact on the satisfaction of this criteria, for the reasons set out under Criteria 1 and 3.1.

Criteria 4.4 Impact on the preservation of identified urban breaks.

The Greater Geelong Planning Scheme (at Clause 21.06-2 and at Clause 21.11) seeks to maintain the non-urban breaks between the Armstrong Creek Growth Area and the Surf Coast.

The existing settlement boundary satisfies this objective by setting land aside between the settlement boundary and the municipal boundary as non-urban land.

If the settlement boundary were to be moved to Lower Duneed Road then there would no longer be a non-urban break within the Greater Geelong municipal boundary. This would be contrary to the intent of the non-urban break policies contained within the Greater Geelong Planning Scheme.

Alternative settlement boundary options are explored in the discussion against Criteria 1.

Any change to the settlement boundary in this area would potentially have a negative impact on the preservation of a non-urban break within the municipal boundary (and therefore on the satisfaction of this criteria), depending on its form and its location (refer discussion under Criteria 1).

### 3.5 - Environmental Risks:

Criteria 5.1 Climate change – impacts of coastal inundation & erosion.

The area is not affected by coastal inundation or erosion.

Criteria 5.2 Bushfire risks in the location.

This area is within a Bushfire Prone Area but is not located within or proximate to a Bushfire Management Overlay. Bushfire risk is not likely to be determinative of the suitability of urban development in the area. A Bushfire Management Plan could be prepared to manage the potential risks posed by bushfire on urban development in the area.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria

Criteria 5.3 Impacts on/of floodplains.

Any urban development within the area would need to be designed to ensure that it did not adversely affect either existing floodplains or residential areas that are downstream of the area.

The land immediately west of Horseshoe Bend Road is located within a Flood Overlay, and the land immediately east of Barwon heads Road is located within a Land Subject to Inundation Overlay. The constraints imposed by these controls on urban development would need to be further investigated before these areas could be identified as being suitable for urban development.

Any change to the settlement boundary would have a minor and potentially neutral impact on the satisfaction of this criteria

Criteria 5.4 Impacts on/of soil degradation.

The Geological Survey of Victoria (1:63,360) Geological Map Series Geelong Sheet indicated that the area is underlain by Newer Volcanics geology.<sup>1</sup>

No soil degradation impact risks have been identified in the desktop review for this area.<sup>2</sup>

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however If development was approved in this area further analysis would be required to investigate soil conditions and the impact development might have on soil degradation.

Criteria 5.5 Impacts on/of erosion & landslip.

The area is identified as having a moderate risk of gully and sheet erosion.<sup>3</sup>

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however If development was approved in this area further analysis would be required to investigate soil conditions and the impact erosion and landslip might have on development.

Criteria 5.6 Impacts on/of salinity, acid sulfate soils.

No salinity impact risks have been identified in the desktop review for this area.<sup>4</sup> The eastern portion of the area has been identified as being potentially affected by coastal acid sulfate soils.<sup>5</sup>

Any change to the settlement boundary is expected to have a neutral or low impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact salinity and acid sulfate soil conditions might have on development.

Criteria 5.7 Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.

The area is not located in proximity to industrial, extractive industry, tourism and other established and valued land uses that require separation from residential or other sensitive uses.

Land to the immediate south of the area is in a Farming Zone and currently used for grazing and other rural purposes. There are no land uses that require separation from residential or other sensitive uses within 1km of Lower Duneed Road.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

Criteria 5.8 Impacts on/of major hazard facilities.

There are no major hazard facilities located in proximity to this area.

### 3.6 - Natural Resource Management:

Criteria 6.1 Impact on the protection of agricultural land.

The Greater Geelong Planning Scheme seeks to support the use of the land within the southern rural areas for productive agriculture.<sup>6</sup> The area south of urban Geelong has been identified as having a combination of Class 3 (moderate-high) and Class 4 (Moderate) land capability, as have all of the rural areas within the Bellarine Peninsula and Surf Coast Shire.<sup>7</sup>

1 See map sheet 9 - <http://earthresources.efirst.com.au/categories.asp?clD=33>

2 <https://www.ccmaknowledgebase.vic.gov.au/nrmp>

3 Ibid.

4 Ibid.

5 Ibid.

6 Clause 21.07-4.

7 Assessment of agricultural land capability in Melbourne's green wedge and peri-urban areas (Agriculture Victoria, 2018)

These are defined as follows:

Class 3 - Land that is inherently capable for soil-based agriculture at moderate to high intensity. The potential/capability may vary (e.g. according to slope, inherent fertility and drainage) but is often realised with access to a constant water supply.

Class 4 - Land that is not as inherently capable for intensive soil-based agriculture. Extensive agriculture (including broadacre cropping with suitable land management practices) and non-soil utilisation activities are often most appropriate, and more intensive grazing is possible in some higher rainfall areas or where consistent water supplies are available.

The land holdings vary in size in the area, ranging from circa 1ha to 100 ha, and the land is primarily used for agricultural production with associated farm dwellings.

Any change to the settlement boundary is expected to have a negative impact on the availability of land for agricultural production and therefore the satisfaction of this criteria.

Criteria 6.2 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources.

The area drains towards Armstrong Creek. Residential development within the area could potentially impact on this waterway but these impacts could be readily mitigated through the design of any urban stormwater infrastructure within the area.

Any change to the settlement boundary is expected to have a neutral impact on the protection of nearby catchments and therefore the satisfaction of this criteria.

Criteria 6.3 Impact on the protection of extractive resources.

The area is not identified as an Extractive Industries Interest Area, and there are no quarries located within 1km of the area.

### 3.7 - Heritage:

Criteria 7.1 Impact on known Aboriginal cultural heritage values.

Aboriginal Victoria mapping shows the Armstrong Creek as an area of cultural heritage sensitivity. There is also an areas of cultural heritage sensitivity located in the eastern portion of the area.<sup>8</sup>

Any change to the settlement boundary is expected to have neutral impact on the protection of known areas of Aboriginal cultural heritage sensitivity. However, consultation with Traditional Owners and further assessment of other potential areas of Aboriginal cultural heritage sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

Criteria 7.2 Impact on known post contact heritage values.

A Heritage Overlay currently applies to a farming residence and associated structures at 21 Lower Duneed Road).

Any change to the settlement boundary is expected to have a neutral impact on the protection of known areas of Aboriginal cultural heritage sensitivity.

<sup>8</sup> See <https://achris.vic.gov.au/#/onlinemap>

### 3.8 - Transport:

Criteria 8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access.

The majority of the area currently does not have walkable access to local bus services (except for services which run along the Surf Coast Highway and Barwon Heads Road). The eastern and western portions of the area are not located within walking distance of existing and planned activity centres within the Armstrong Creek Growth Area, and it would be necessary to re-route local public transport services to the area in order to connect residents to regional employment, health, education and other services.

Any change to the settlement boundary is expected to have a potentially negative impact on the ability to cost-effectively provide public transport services to the Armstrong Creek growth area, as it would be necessary to extend and re-route existing bus services to connect to this area.

### 3.9 - Infrastructure:

Criteria 9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage.

The social and recreational facilities constructed and proposed within the Armstrong Creek Growth Area were not originally planned to cater for additional housing growth in this area.

The western portion of the area will in future have access to a local activity centre, sporting oval and primary school, and could be connected to the existing growth area via Horseshoe Bend Road and new local streets. A preliminary analysis of the potential additional community services needed to support additional residential growth in this area indicates that some significant upgrades or even new facilities might be required to accommodate additional growth in this location.

The eastern portion of area is not located within walking distance of existing or planned secondary schools, activity centres or other community facilities within the Armstrong Creek Growth Area. A preliminary analysis of the potential additional community services needed to support additional residential growth in this area indicates that a number of additional facilities are likely be required to accommodate additional growth in this location.

(Refer assessment against Criteria 2 for further discussion)

Initial consultation with Barwon Water has identified the following:

- The investigation area could be serviced by water, sewerage and recycled water.
- The land drains into the existing sewer infrastructure.
- Potential capacity in the network to accommodate additional growth. However, constraints would need to be addressed
- Triangular parcel to the east would be difficult to service from a sewer perspective as the land is too flat and potentially falls in the wrong direction. A new pump station would be needed.

The preliminary assessments undertaken as part of this review suggest that some significant additional community infrastructure might be needed to support additional residential growth across the whole area. The technical feasibility and cost-effectiveness of providing additional urban services to cater for additional housing growth in this location has not been examined as part of this desktop review.

However, any change to the settlement boundary in this area is anticipated to have a negative impact on the ability to cost-effectively provide urban services to the Armstrong Creek growth area, as it would be necessary to upgrade and /or construct at least some new community facilities and utility services to cater for the additional demand, rather than being able to rely on available capacity within existing/ planned urban services.

# 6.3

## Sparrovale

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

659.512 ha (gross land area).

## 1.2 Definition of investigation area:

The Sparrovale investigation area comprises rural land generally located between the Armstrong Creek Growth Area and the Barwon River (north of Lake Road) (refer Figures 30 and 31).

The majority of the allotments in this area adjoin land within the Urban Growth Zone that is identified for urban residential purposes under the Armstrong Creek Growth Area Framework Plan.<sup>1</sup>

Whilst there are some allotments that do not, the whole of the area between the existing settlement boundary has been included in order to enable a holistic assessment of the area.

Whilst land to the north of the investigation area adjoins land within the Urban Growth Zone, this land is identified in the Armstrong Creek Growth Area Framework Plan for employment purposes. This land was not included in the investigation area for this reason.

## 1.3 Current Zoning and Overlays:

The land within the investigation area is located within the Farming Zone.

All of the land within the investigation area is included within the Flood Overlay.

A Public Acquisition overlay applies to a large area of land in the northern portion of the area.

The above zones and overlays are shown at Figures 32 to 34.

<sup>1</sup> Refer Clause 21.11 of the Greater Geelong Planning Scheme.

**Geelong Growth investigation areas**  
Sparrovale Investigation Area

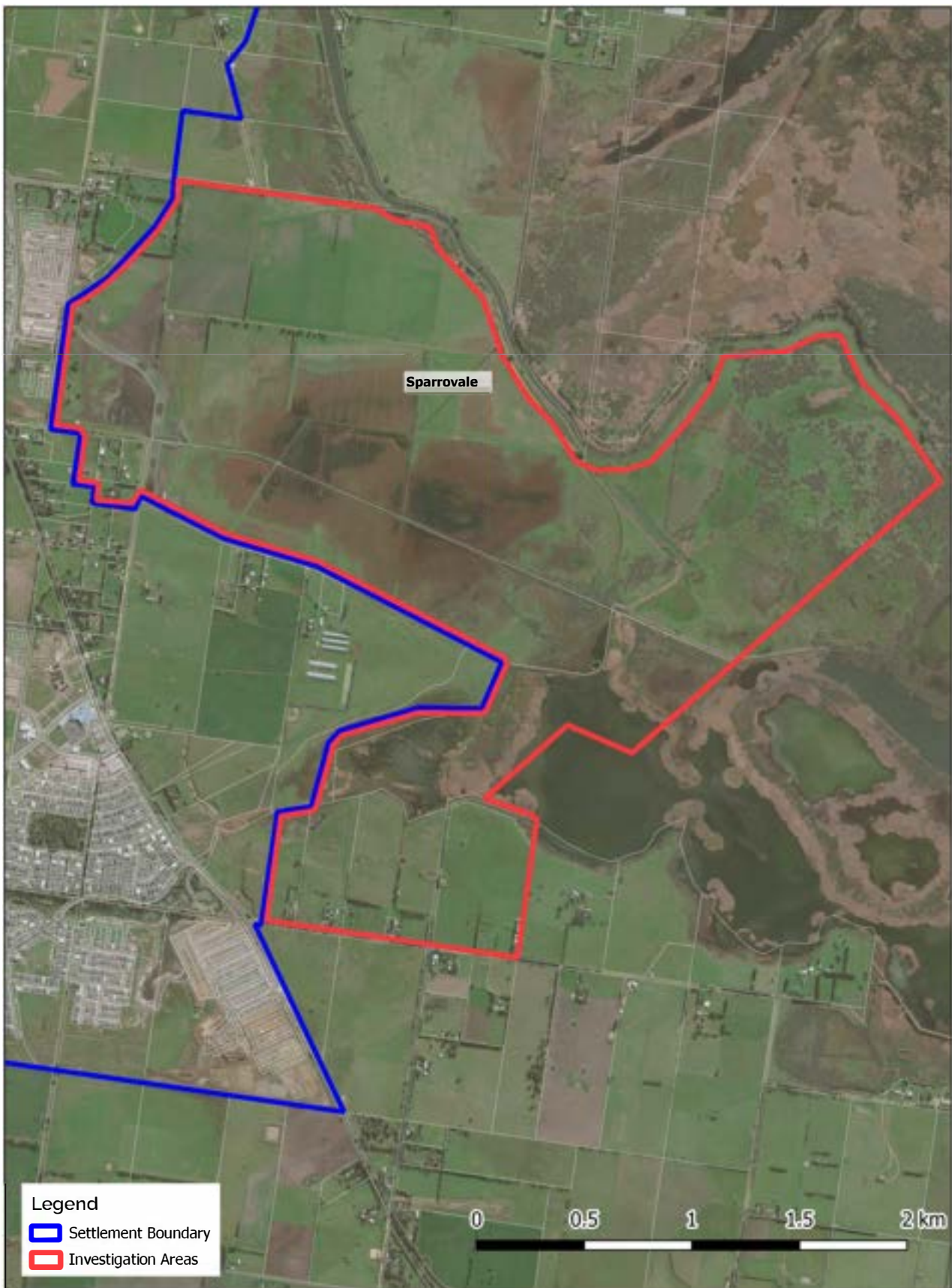


Figure 30. Sparrovale – Aerial Cadastral Plan.

Geelong Growth investigation areas  
Sparrovale Investigation Area

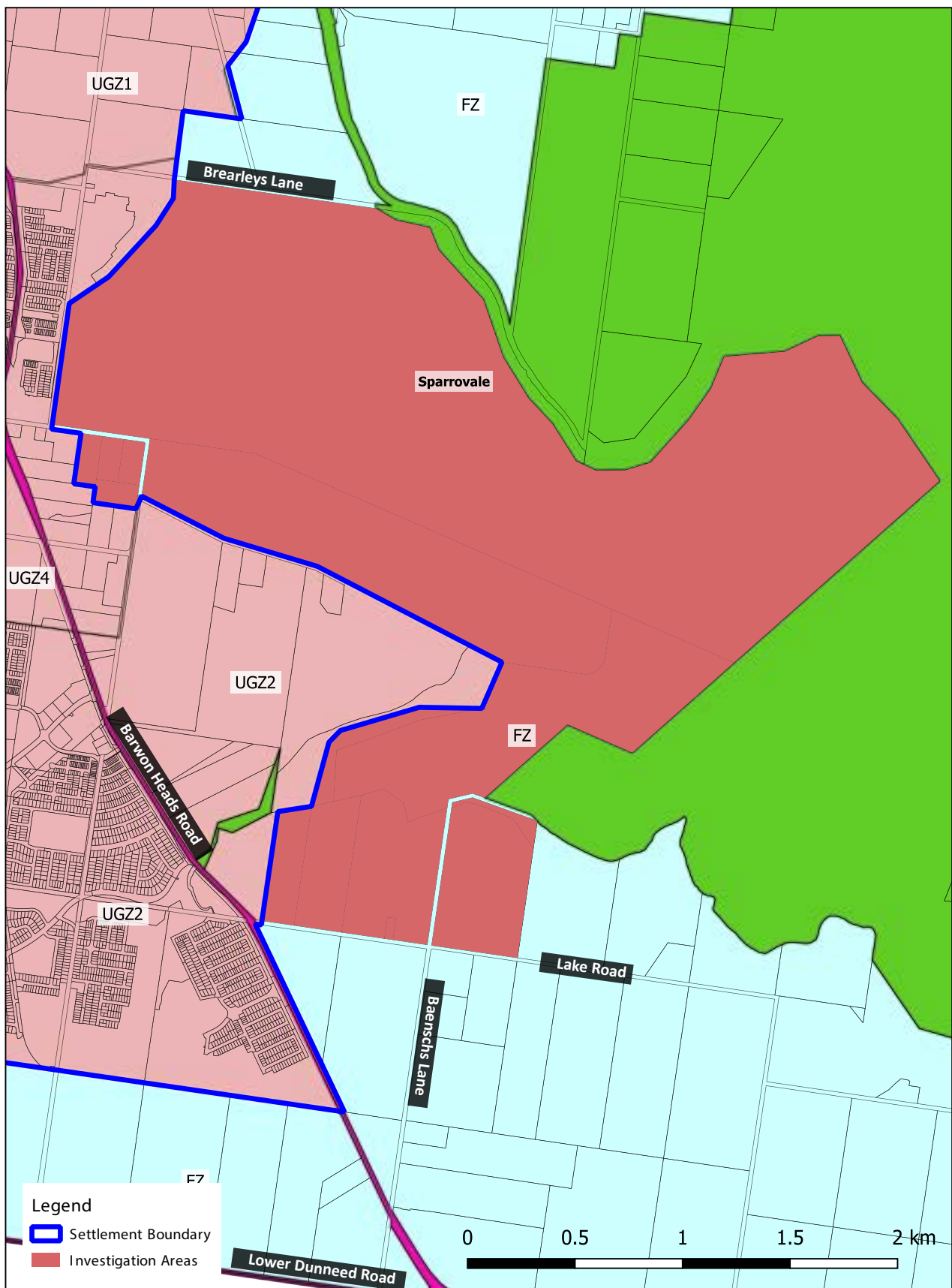


Figure 31. Sparrovale – Investigation Area Plan.

**Geelong Growth investigation areas**

Sparrovale - Zoning

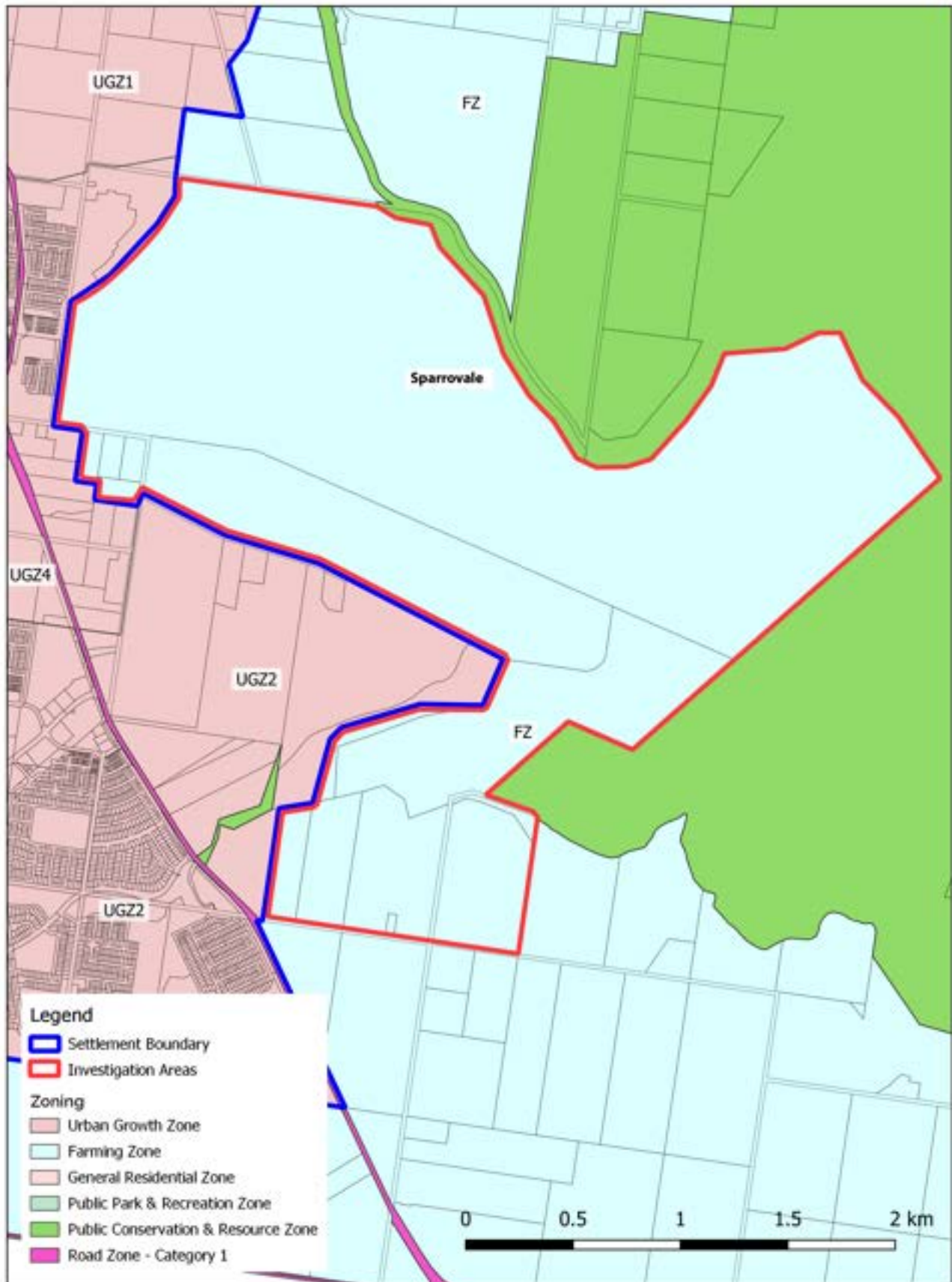


Figure 32. Sparrovale – Zoning Plan.

**Geelong Growth investigation areas**

Sparrovale - Overlays

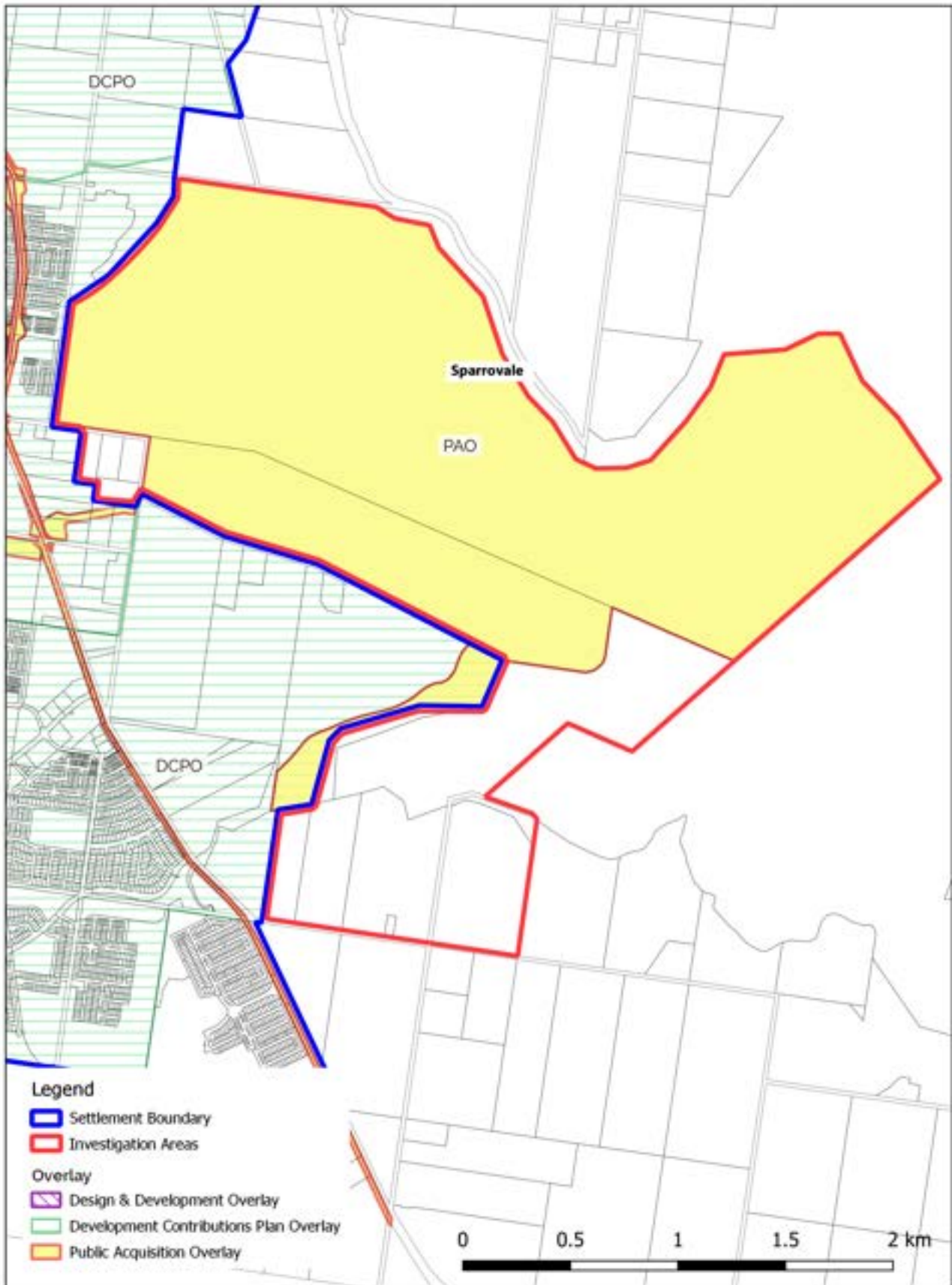


Figure 33. Sparrovale – Overlays Plan 1.

**Geelong Growth Investigation areas**  
Sparrovale - Overlays

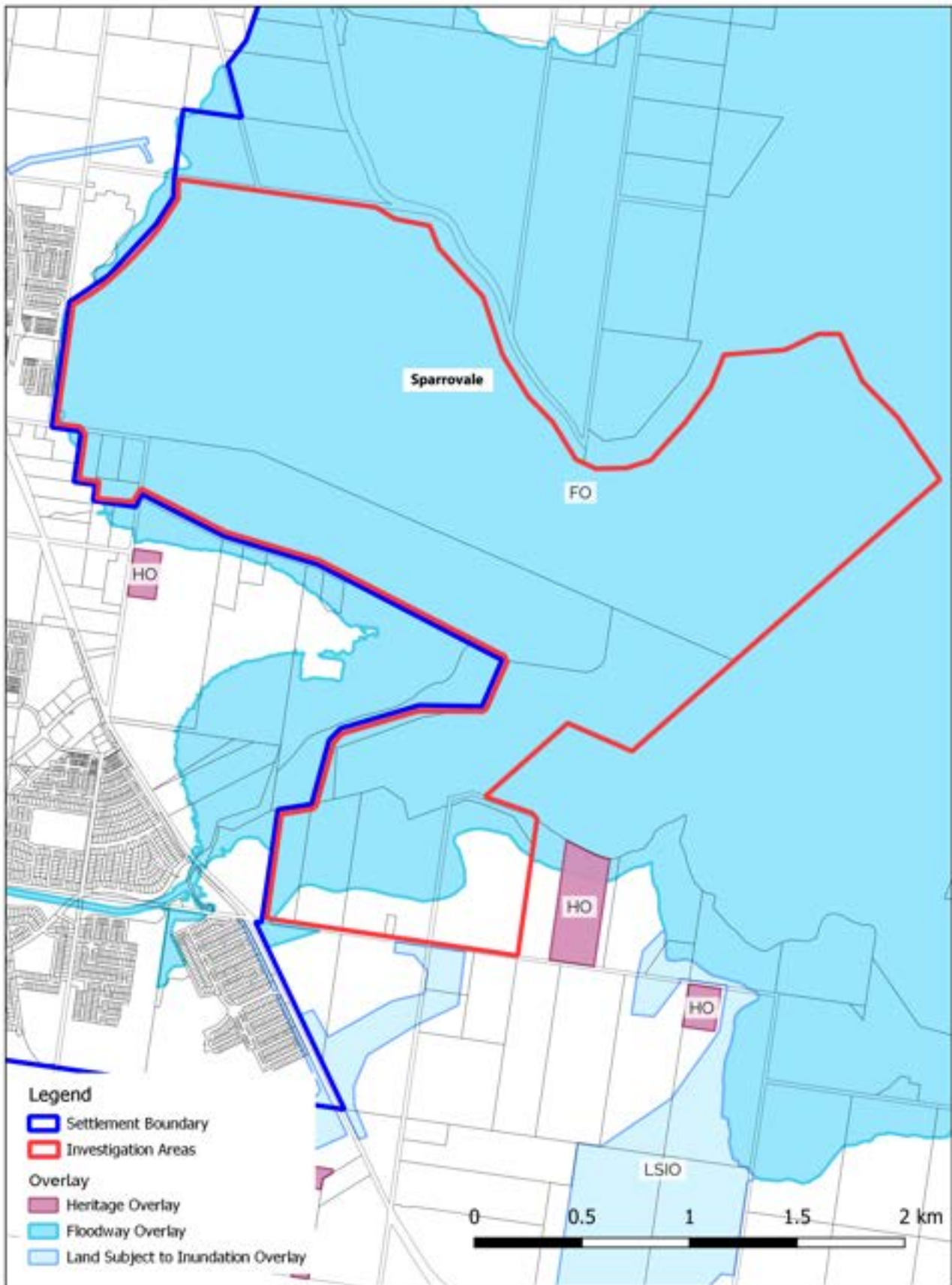


Figure 34. Sparrovale – Overlays Plan 2.

### 1.4 Investigation Area & Surrounds:

All of the land within the investigation area is affected by flooding, and the majority of the northern part of the investigation area will form part of the future Sparrowale Wetlands open space complex.

The City of Greater Geelong owns a large portion of this land (refer Figure 35) and/or is intended to be licensed by Council for parkland purposes.

Council adopted the Sparrowale-Ngubitj yoorree Wetlands Master Plan in July 2021 (refer Figure 37). The master plan provides for a 500-hectare nature reserve comprising a mix of natural and constructed wetlands which will be developed over three phases:

- Phase One (2019-2022): completion of major drainage infrastructure works, pest plant and animal control, protection of threatened flora and fauna;
- Phase Two (2022-2030): establishment of public reserve, plus continued pest plant and animal control and revegetation; and
- Phase Three (2030-2040): connection of the Barwon River Trail to Geelong, and promotion of Sparrowale Wetlands as a key tourism, environmental, cultural and recreational site for the region.

Land in the southern portion of the investigation area comprises Armstrong Creek at its interface with the adjacent Hospital Swamp. The majority of the Land to the south of Armstrong Creek is (along Lake Road) is affected by flooding.

Land to the immediate west of the investigation area forms part of the Armstrong Creek Growth area, and a Precinct Structure Plan (SP) has been approved for this area (refer Figure 36).

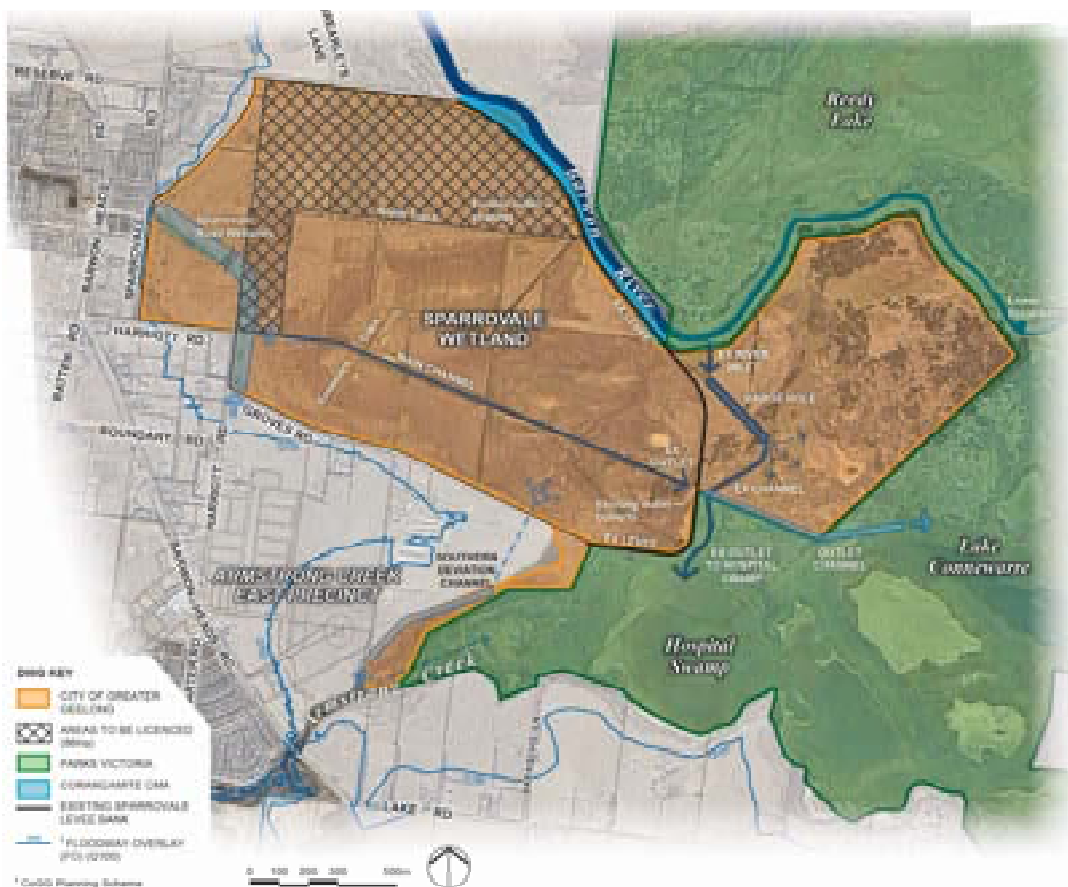


Figure 35. Sparrowale-Ngubitj yoorree Wetlands area – land ownership and management.

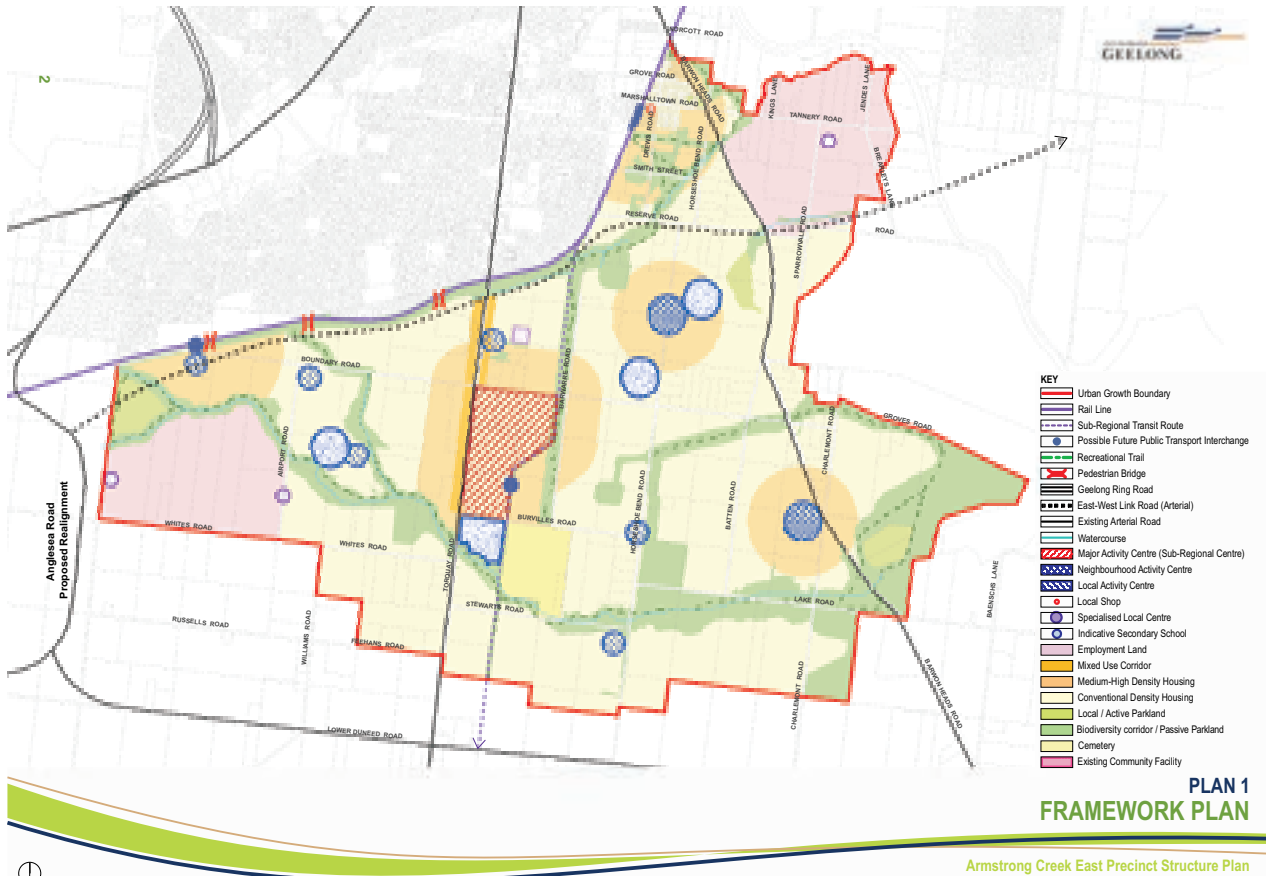


Figure 36. Armstrong Creek East Precinct Structure Plan (2010).

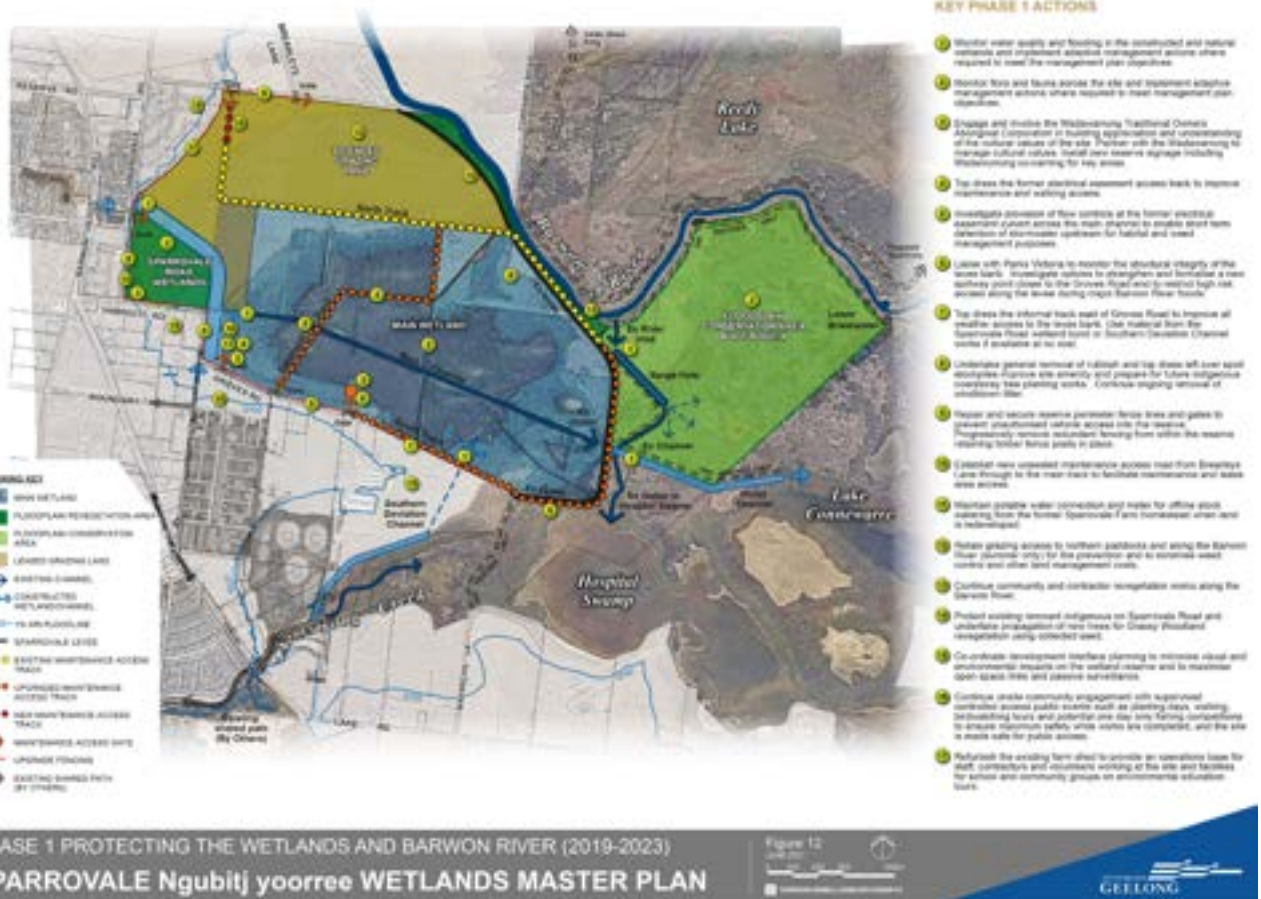


Figure 37. Sparrovale-Nubityj yoorree Wetlands Master Plan Phase 1.

## 2 - Assessment of Investigation Area Against Suitability Criteria

The following is an assessment of the investigation area against the Long Term Boundary review Decision Criteria.<sup>1</sup>

### Northern Section:

In the northern part of the investigation area, the boundaries of the Armstrong Creek PSP and the Sparrovale-Nubitj yoorree Wetlands Master Plan largely dovetail into each other, and the existing settlement boundary is both logical and enduring for these areas for this reason.

However, there are small number of privately owned land holdings located along the west and south side of Harriots Road which are located outside of the current settlement boundary but are not proposed for inclusion within the Sparrovale-Nubitj yoorree Wetlands reserve (refer Figure 36).

These lots are currently located within the Farming Zone and a Flood Overlay applies to them. The recent updated to flood modelling in this area has confirmed that these lots remain either wholly or substantially within the 1 in 100 year floodplain and Amendment C339 proposes to apply a combination of Flood Overlay and LSI0 to these properties (refer Figure 38).

The Wetlands Reserve masterplan proposes a constructed wetlands channel within the Wetlands reserve to the north and west of these land holdings. It is not clear what assumptions are included within the updated flood modelling regarding the future wetlands works (including the above-mentioned channel) within the proposed Wetlands Reserve would impact on the flood impacts on these properties. Any further analysis undertaken in relation to this would be a future action and is not able to be known as part of this project.

No further property-specific information has been identified in relation to these properties as part of the current desktop review of the Geelong Settlement Boundary.

<sup>1</sup> Given the physical context of this investigation area, and the limited range of factors that will influence the location of the settlement boundary in this location, this investigation area has not been subject to a detailed assessment against the full settlement boundary assessment criteria.

The abovementioned land holdings which are located outside of both the Wetlands Reserve and the current Settlement Boundary could potentially be included within the Settlement Boundary if it can be demonstrated that all or part of these land holdings could be developed for urban residential purposes.

If Council were of a mind to make a change to the settlement boundary, a more detailed review of the flooding and other constraints is warranted before determining to include these land holdings within the Geelong Settlement Boundary.

### Southern Section:

The existing settlement boundary in this location (defined by the Armstrong Creek Growth Area Framework Plan and the Urban Growth Zone) is considered to be logical and enduring boundary. No alternative logical or enduring boundary has been identified in this location, based on consideration of the following factors:

- Large parts of the land holdings on the southern part of the investigation area (between Armstrong Creek and Lake Road), are encumbered by flooding constraints.
- The portions of the land holdings located outside of the current Flood Overlay are relatively small and irregularly shaped, and they are not contiguous with urban residential land within the nearby Armstrong Creek Growth area. This area is physically separated from the Armstrong Creek Growth Area by Barwon Heads Road and it is located between 1-3km from the nearest town centre to the north. As a result, future residents in this area would not enjoy walkable access to local community infrastructure.
- This Review does not recommend that any of the land to the south of Lake Road be included within the Settlement Boundary, and if this position is adopted then the land to the north of Lake Road will not form part of any wider future urban residential area south-west of Barwon Heads/Lake Road.

- Urban development within this area will result in an encroachment onto fringes of the environmentally sensitive Hospital Swamp/Lake Connewarre environs. This would require sensitive management to ensure that the habitat values of these adjoining areas are not adversely affected.

In addition to the above initial consultation with Barwon Water has identified the following:

- The whole of the investigation area drains away from the existing sewer network and is located within the floodplain.
- Any new development would need dedicated sewer infrastructure.
- Sewerage infrastructure should not be located in the floodplain due to the environmental risks that this presents.

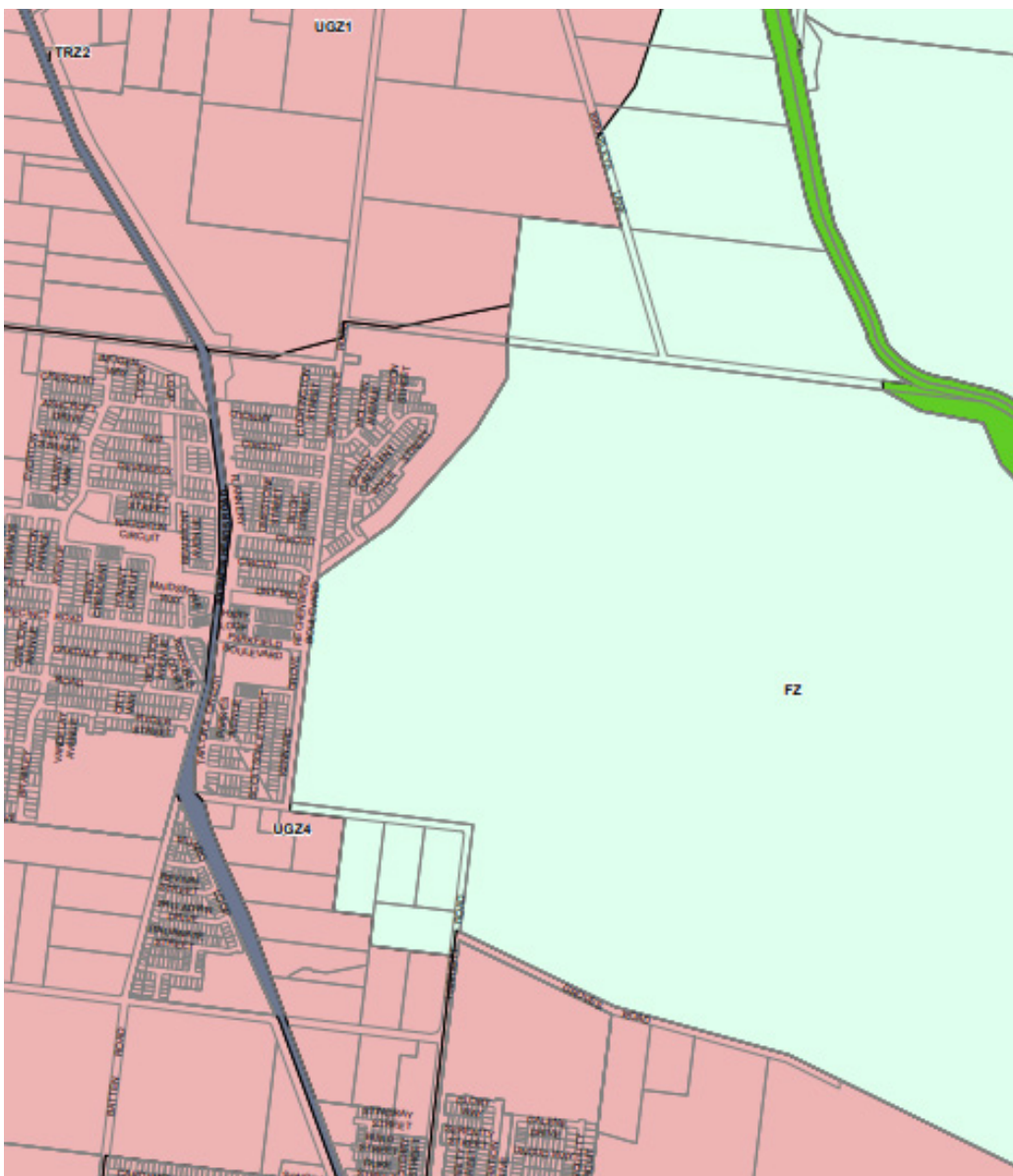


Figure 38. Existing zone boundaries.

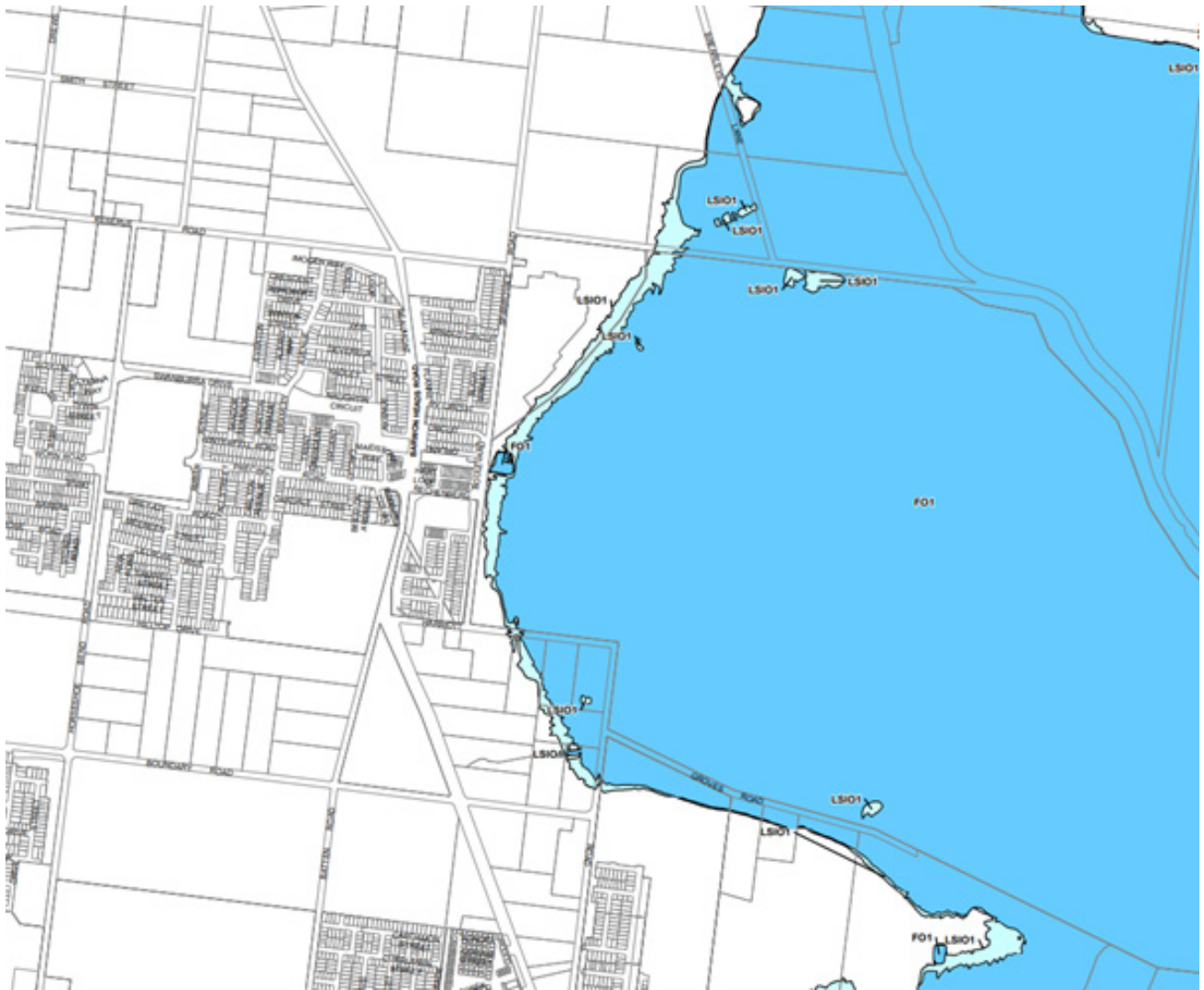


Figure 39. Draft revised Flood Overlay and LSIO Maps (Amendment C339)

# 6.4

## Moolap

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

498.422 ha (gross land area).

## 1.2 Definition of investigation area:

The northern section of the Moolap investigation area is defined by the land parcels which are contiguous with urban residential areas to the west of Helm Street, as well as additional land parcels to the immediate west of these parcels (up to Coppards Road).

Limiting the investigation area to either only those lots that are strictly contiguous with the settlement boundary or to lots facing Coulter Street would require reliance on an alternative settlement boundary defined by the rear boundaries or lots. These features are not considered to represent a sufficiently logical or enduring settlement boundary. Additional land parcels up to Coulters Road have therefore been included within the investigation area, on the basis that Coppards Road is the closest feature of any significance that could potentially be used to define an alternative settlement boundary in this local area.

The southern section of the Moolap investigation area is defined by the following features:

- Moolap Station Road to the east
- Woods Road to the south-east
- Flood-prone land to the south-west\*

[\*Aside from the mapped extent of the flood-prone land, there is currently no natural or artificial feature that would represent an alternative logical or enduring boundary to Woods Road. The lots facing Woods Road are only partially affected by flooding constraints and these have therefore been included in the investigation area to allow consideration of the suitability of those parts of these land parcels that are not affected by flooding.]

The Moolap investigation area is shown at Figures 40 and 41 overleaf.

## 1.3 Current Zoning and Overlays:

The land within the investigation area is predominately zoned Low Density Residential (LDRZ) to the north and Farming Zone (FZ) to the south. An existing recreation service within the investigation area is zoned Public Park and Recreation (PPRZ).

The following overlay controls apply to land within the investigation area:

- Floodway Overlay (south-east and south-west parts of area)
- Land Subject to Inundation Overlay (south-east part of area)
- Special Building Overlay (central and north parts of area)
- Heritage Overlay (Residence on Earles Road Moolap)

Land immediately north and south of the investigation area is included within Environmental Significance Overlay (high value wetlands and habitat protection).

The above zones and overlays are shown at Figures 42 to 44.

A photo montage of the existing site context of the investigation area is shown at Figure 45.

**Geelong Growth Investigation Areas**  
Moolap Investigation Area



Figure 40. Moolap – Aerial Cadastral Plan.

Geelong Growth Investigation Areas

Moolap Investigation Area

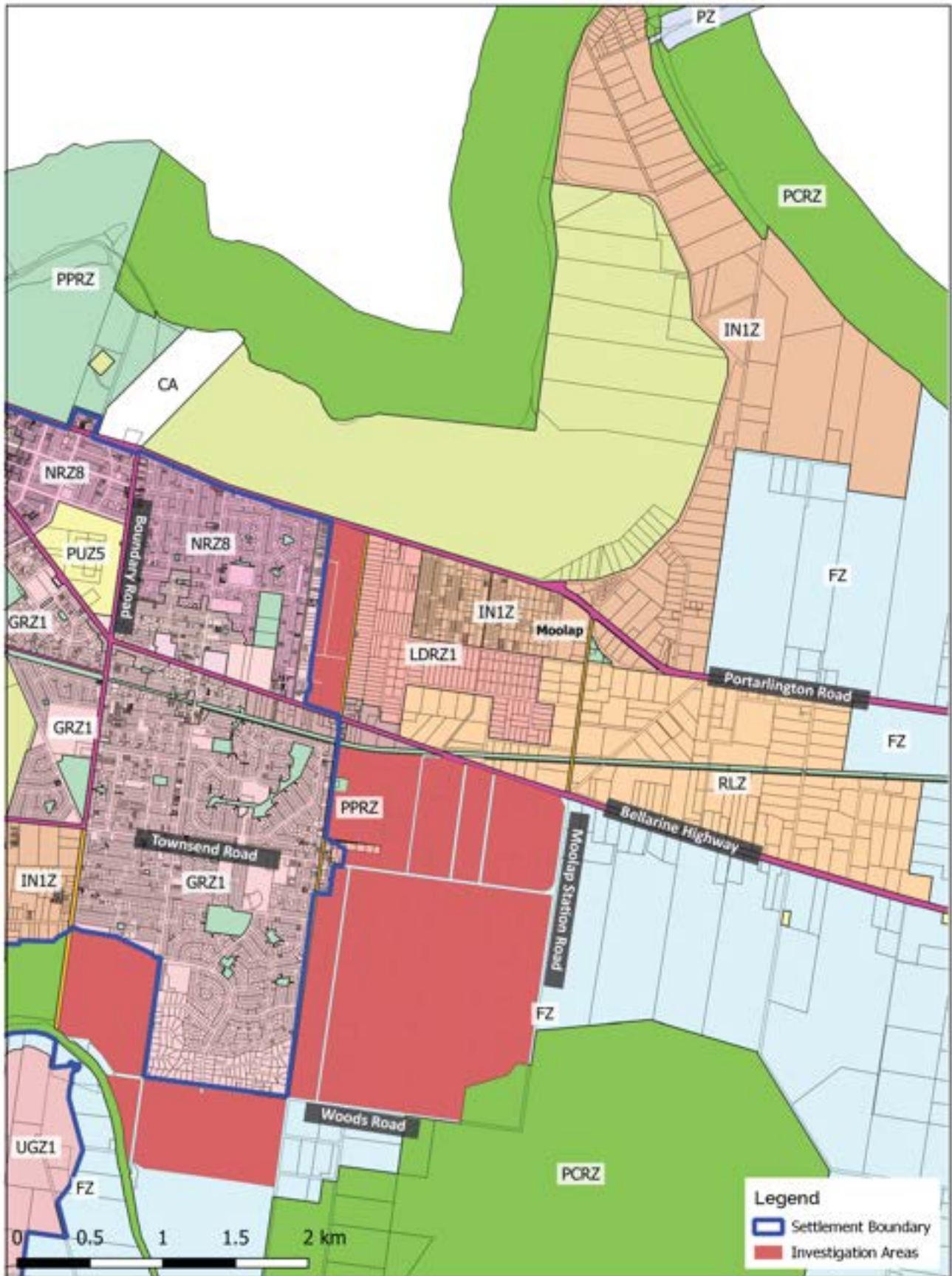


Figure 41. Moolap – Investigation Area Plan.

Geelong Growth Investigation Areas

Moolap - Zoning

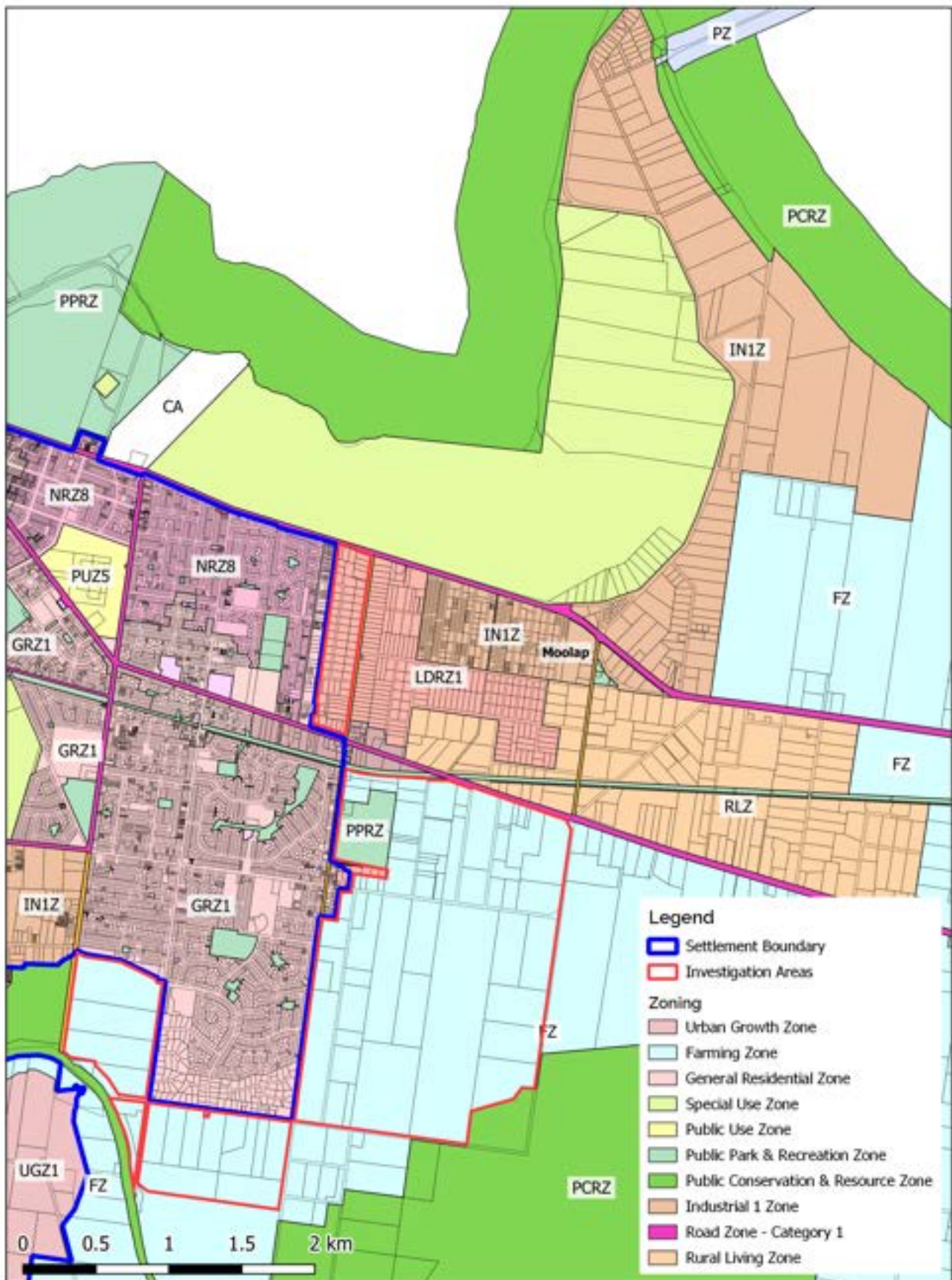


Figure 42. Moolap – Zoning Plan.

Geelong Growth Investigation Areas

Moolap - Overlays

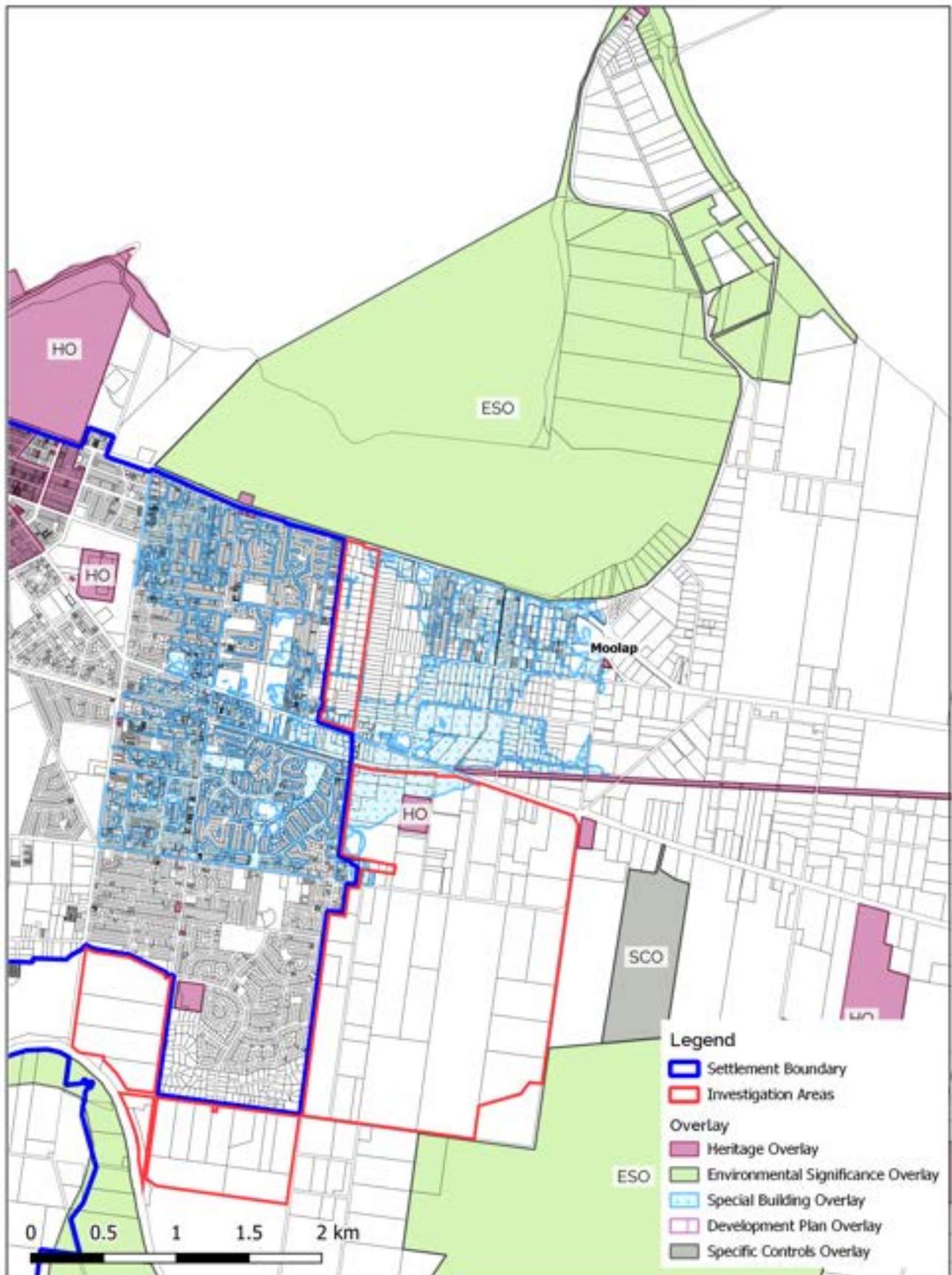


Figure 43. Moolap – Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Moolap - Overlays

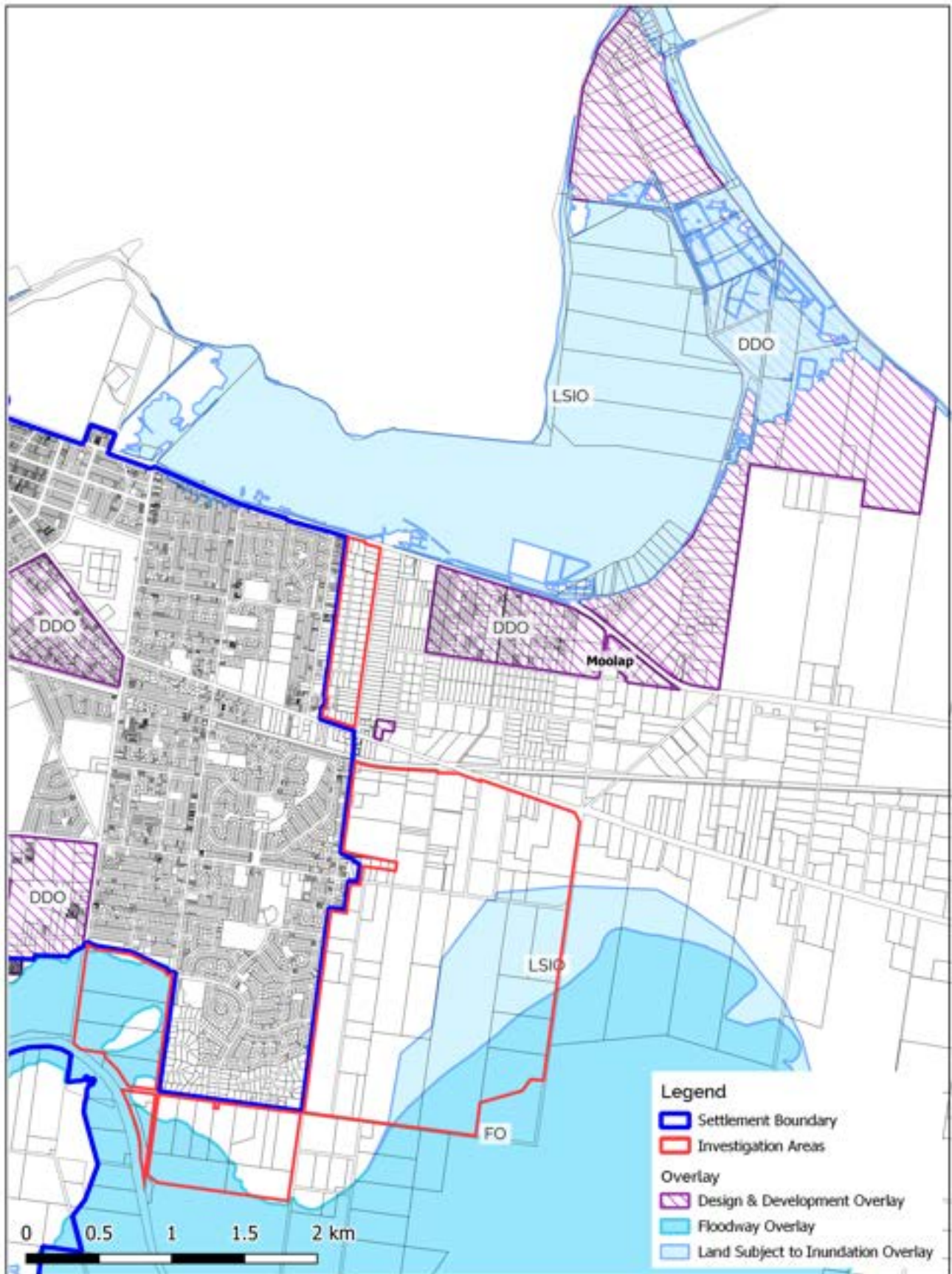


Figure 44. Moolap – Overlays Plan 2.



Figure 45. Moolap – Photo Montage.

## 1.4 Investigation Area & Surrounds:

The investigation area is generally flat and low-lying. It is bounded by significant natural areas to the north and south, being Stingaree Bay to the north of Portarlinton Road and Reedy Lake / Lake Connewarre conservation reserve and Barwon River to the south.

This area currently provides a visual break between the two urban areas and is understood to be valued by the community as part of the retention of the open landscape character that defines Geelong and the Bellarine Peninsula. Land within the northern part of the area has been developed with low density housing whilst land to the south remains rural and is used for agriculture and agistment purposes.

The Grinter Reserve comprises sporting fields, an aquatic centre, BMX track and other sporting facilities.

The following land uses are located to the north and north-west of the area:

- Wetlands and coastal foreshore reserve
- Former Cheetham Saltworks
- Former Aluminium smelter and rolling mill
- Industrial areas, including chemicals and munitions manufacturing facilities
- Low density residential activities to the immediate west

The nearest industrial zoned land is circa 400m to the west of Coppards Road.

Land to the immediate south of the area is affected by floodplains associated with the Barwon River and the Lake Connewarre reserve. Lake Connewarre and its environs are projected by various international, national, state and local policies and legislation for the protection of sites of flora and fauna significance.

### 1.4.1 Moolap Coastal Strategic Framework Plan

The Moolap Coastal Strategic Framework Plan has been prepared to guide the long term redevelopment of the coastal and industrial land north of the area (refer Figure 46). This Plan supports residential development, tourism, environmental parkland, and the continuation of industrial businesses on land within that precinct. There are a number of significant industrial uses which continue to operate from this area, which places limitations on the introduction of sensitive uses within close proximity to that precinct (refer Figure 47).

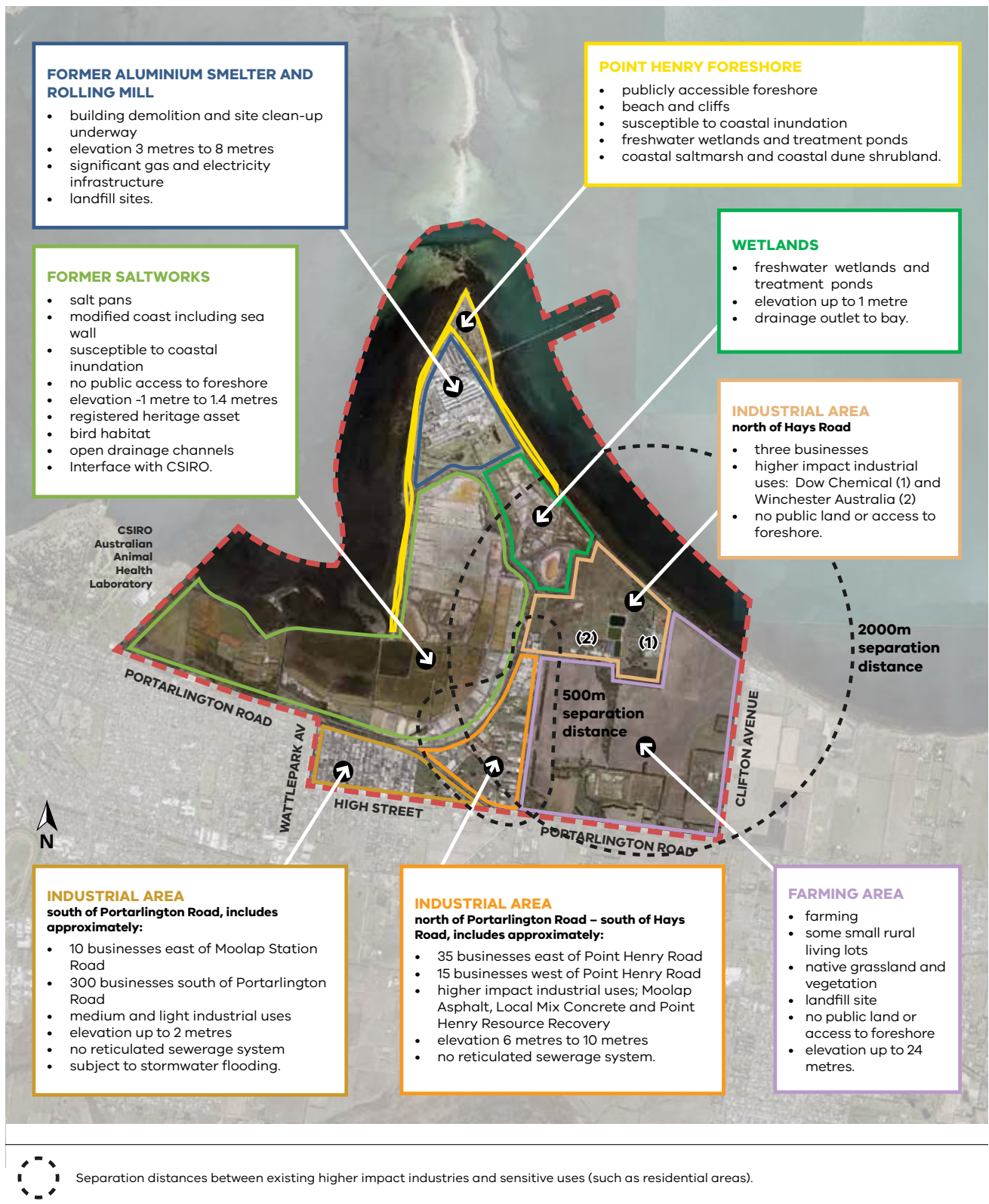
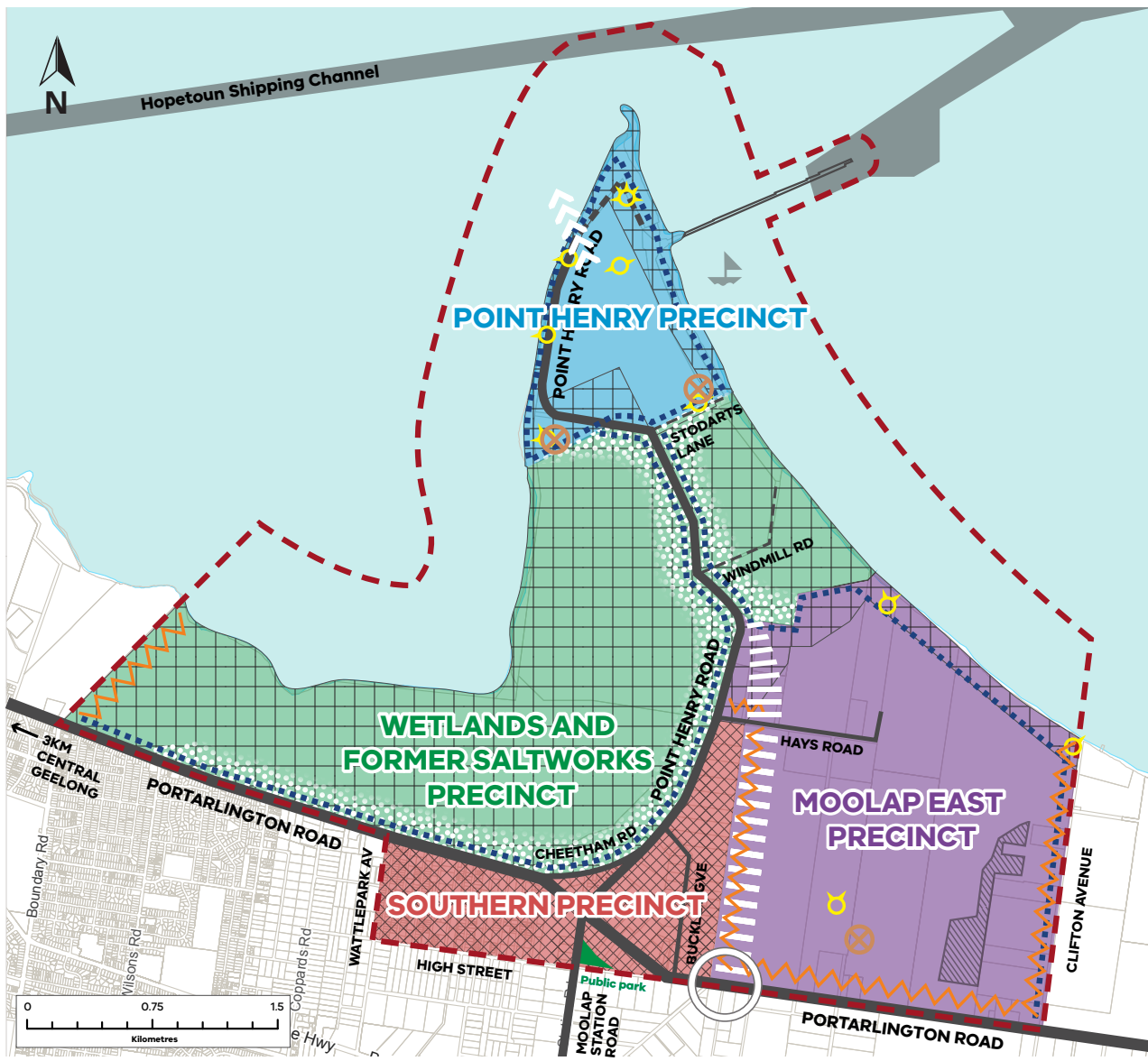


Figure 46. Extract from Moolap Strategic Framework Plan (p.15).



**LEGEND**

<p><b>Residential and Tourism</b> (subject to remediation of the land), includes medium-high density development, permanent residential and temporary accommodation, tourist facilities as well as commercial and community facilities to meet the needs of residents and visitors.</p>	<p><b>Environmental</b> including bird habitats, public open space, stormwater management, environmental, historical and cultural values and complementary infrastructure and facilities.</p>	<p><b>Industrial</b> including light and medium industry and commercial businesses to provide local services and employment while avoiding off-site impact on residential neighbours.</p>	<p><b>Residential</b> (subject to Dow Chemical deciding to relocate and remediation of the land), includes a range a residential densities, with community, retail and commercial facilities to meet the needs of the study area.</p>
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<ul style="list-style-type: none"> <li> Study area boundary</li> <li> Existing Roads</li> <li> Potential connection to Bellarine Link (indicative)</li> <li> Protect a long-term strategic road alignment (indicative)</li> <li> Potential intersection upgrade associated with the potential connection with Bellarine Link (indicative)</li> </ul>	<ul style="list-style-type: none"> <li> Provide trails and pedestrian connections (indicative)</li> <li> Marine infrastructure and facilities</li> <li> Provide an appropriate interface</li> <li> Rehabilitate previous land fill prior to a new sensitive use</li> <li> Respond to predicted sea level rise including coastal retreat and protection measures (while maintaining a public owned foreshore)</li> </ul>	<ul style="list-style-type: none"> <li> Retain and support public access to key views</li> <li> Investigate improvements to stormwater management and connection to reticulated sewer</li> <li> Potential area for infrastructure/ utilities, and where it complements environmental management and conditions, facilities and buildings for tourism, research and culture/heritage (excluding residential).</li> <li> Manage the Moolapio grasslands</li> </ul>
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Figure 47. Extract from Moolap Strategic Framework Plan (p.3).

#### 1.4.2 Bellarine Distinct Areas and Landscapes

The Bellarine Peninsula has been declared as distinctive area and landscape under Section 46A of the Planning and Environment Act 1987, and a draft Statement of Planning Policy (SPP) has been prepared in relation to the declared area.

The draft SPP notes that the unique attributes of the Bellarine Peninsula include its Wadawurrung living cultural and historic heritage, biodiversity, significant landscapes, natural resources, productive land, strategic infrastructure and built form — and that these attributes need protection against overuse, overdevelopment and climate change impacts.

The draft SPP identifies the Reedy Lake/Lake Connewarre area as an area of high conservation significance. It notes that better management of urban stormwater run-off into these adjacent wetlands and waterways is a priority within the declared area and upstream, to better protect their values.

The draft SPP also identifies land within the investigation areas as being a regionally significant landscape. It contains an Objective to protect and enhance the identified landscape character, physical features, view corridors and natural and cultural values of the declared area's significant landscapes. The following Strategies have been proposed to achieve this objective:

- Protect the coastal and hinterland settings of settlements by containing urban growth and development within settlement boundaries.
- Reserve green breaks between settlements for conservation, agriculture, nature-based tourism and natural resource purposes that prioritise the protection and enhancement of the significant landscapes and landscape characters.

The Bellarine DAL notes that protected settlement boundaries are needed for this area, to ensure the green break between urban Geelong and the Bellarine Peninsula is preserved and significant landscape and environmental values are protected.

It notes that the resolution of this protected settlement boundary will be informed by further strategic planning work led by the City of Greater Geelong in consultation with DELWP and other relevant agencies. It also notes that this work will include consideration of urban/rural transition areas that support the regionally significant landscape setting.<sup>1</sup>

#### 1.4.3 Bellarine Link Road

The Victorian Government has identified the need to develop the Geelong Ring Road Extension (Bellarine Link) in multiple stages to address immediate growth needs in the following locations:

- Surf Coast Highway to Barwon Heads Road
- Barwon Heads Road to Portarlington Road.

Funding has been allocated in the 2021-22 Budget to progress planning for a link between the Surf Coast Highway and Barwon Heads Road. This includes traffic modelling, planning studies and environmental investigations which will help us understand the environmental and social impacts, develop design options and confirm scope and costs.

Whilst a preferred alignment has not yet been identified, the indicative location of the link is shown in Figure 48. This notional alignment runs generally north of the wetlands and associated flood prone areas to their north, along the southern edge of the investigation area before running diagonally form a proposed bridge crossing of the Barwon River across Coppards Road to the Bellarine Highway.

<sup>1</sup> Page 58.

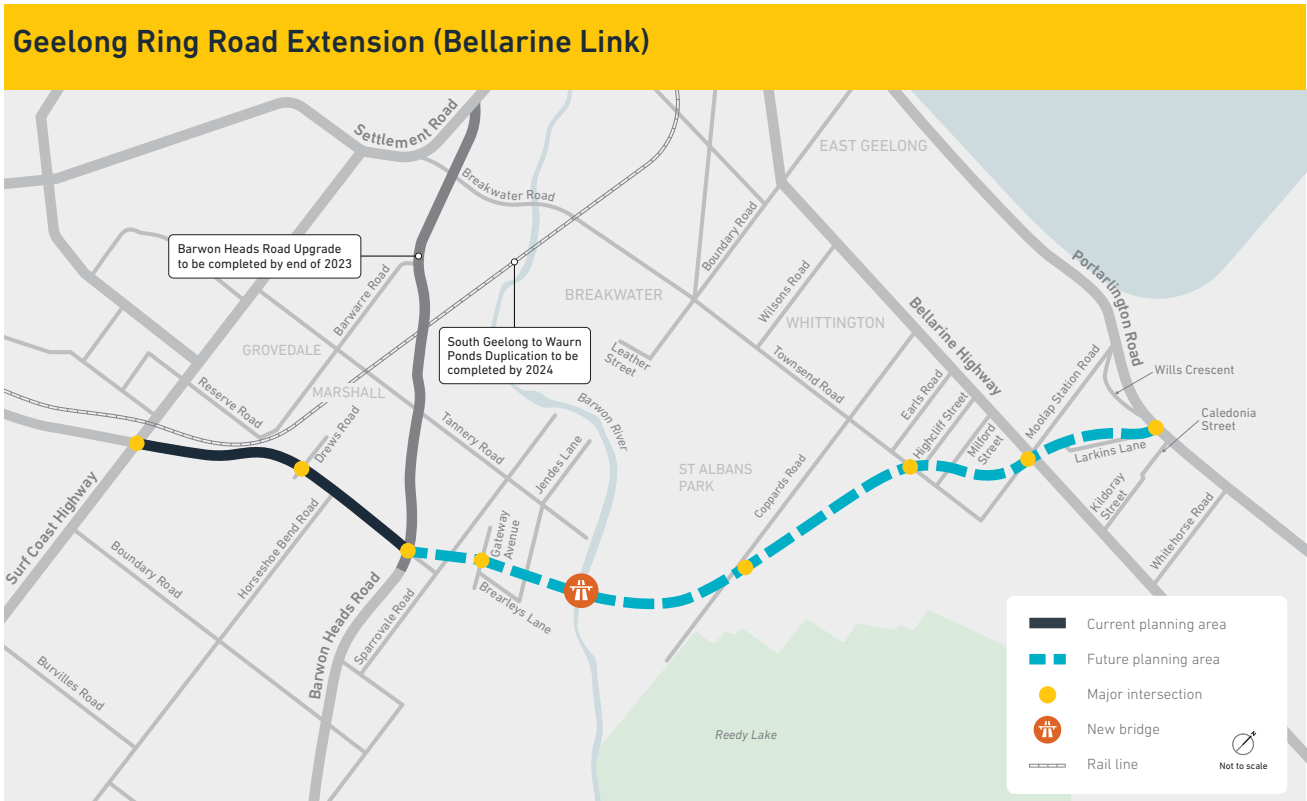


Figure 48. Indicative alignment of the Bellarine Link (source: [www.bigbuild.vic.gov.au/projects/mrpv/geelong-ring-road-extension-bellarine-link](http://www.bigbuild.vic.gov.au/projects/mrpv/geelong-ring-road-extension-bellarine-link)).

## 2 - Summary of Recent Submissions in Relation to the Settlement Boundary

We have reviewed the submissions in relation to the Geelong Settlement Strategy (Planning Scheme Amendment C395).

None of the submissions related to land within the Moolap area.

However it is understood eleven submissions were made in support of further development in Moolap as part of the informal Settlement Strategy consultation.

## 3 - Assessment of Investigation Area Against Suitability Criteria

The following is an assessment of the investigation area against the Long Term Boundary review Decision Criteria.

### 3.1 - Settlement:

Criteria 1.1: Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (including consideration of natural features, location of major roads and reservations for public utilities).

#### Northern section of the Moolap investigation area:

The existing settlement boundary in the northern part of the investigation area is located on the rear title boundary of lots within the General Residential Zone along Helms Street.

The rear boundary of lots is not an optimal location for a long-term settlement boundary. Ideally the boundary in this location would be on a road, with the practical options being either Helms Road or Coppards road.

The lots on the west of Helms Road are already in an urban zone (GRZ) and developed for urban residential purposes, and therefore they should remain within Geelong's long-term settlement boundary.

Coppards Road could serve as an alternative long term settlement boundary. However, including the lots between the GRZ and Coppards Road would serve little purpose in terms of enhancing the local neighbourhood or making efficient use of existing infrastructure.

The existing lots in this area are typically 0.4ha (or larger) in area and have been developed for low density residential purposes. It is likely that delivering urban services to this land will be expensive and complex, given the low-lying and flat nature of this area (refer further discussion under criteria 8.2).

The marginal benefit of using Coppards road as an alternative long term boundary is outweighed by the facts that including this additional land within the boundary does not create any particular long term benefits for the Moolap community or Geelong more broadly.

#### Southern section of the Moolap investigation area:

The existing settlement boundary in the southern part of the investigation area is located along Coppards & Woods Roads. These roads currently function as a clear and logical long term settlement boundary, and can readily function as an enduring boundary over time.

Land south of Woods Road forms part of the wider Reedy Lake and Barwon River floodplain. There are currently no other natural or constructed features in this location that would represent a more logical or enduring long term settlement boundary in this direction.

The following potential alternative settlement boundaries have been considered for land to the east of Coppards Road:

- Earls and Woods Road (narrow rural roads located circa 600m and 200m west of Coppards Road).
- Moolap Station Road (located circa 1.6km west of Coppards Road).

Land in these areas form part of a wider rural area which has value for agricultural, environmental and landscape purposes (refer assessment against other suitability criteria in this report). It is understood that delivering urban services to this land will also be expensive and complex, given the low-lying and flat nature of this area (refer further discussion under criteria 8.2).

The former of the above two options would create marginal benefits in terms of enhancing the local neighbourhood or making efficient use of existing infrastructure.

The latter option would result in a very substantial land area (circa 350ha) being included within the settlement boundary. Given that the recently completed Geelong Settlement Strategy has set the larger-scale long term land supply for the city, including significant additional land areas within the settlement boundary for land supply purposes is not needed and therefore not a relevant consideration for this review.

Neither of the above alternative long term settlement boundary options are considered to be more logical or enduring than the existing boundary, and each would present potential issues in terms of provision of urban services, and impact on agricultural, natural and landscape values of this area.

The Bellarine Link Road alignment might potentially create a more logical and enduring settlement boundary than the current boundary at a future point in time. However, neither the alignment of this road or the timeframe for its delivery are resolved at this point. It would still also be necessary to determine the impact of including existing rural land on the 'urban side' of this road alignment into the settlement boundary on the agricultural, environmental and landscape values of this area.

The potential implications of the future Bellarine Link Road on the location of Geelong's long term settlement boundary in this location should be reviewed once there is greater definition of the alignment and commitments to deliver the road.

The current settlement boundary satisfies this Criteria.

The potential alternative settlement boundary locations are no more logical or enduring, and present issues and challenges relating to other suitability criteria.

Any change to the settlement boundary (other than minor changes) would therefore have a negative impact on the satisfaction of this criteria.

### 3.2 - Managing Growth:

Criteria 2.1: Impact on the orderly development of the adjoining urban area.

The northern part of the investigation area has access to a government primary and secondary school, non-government primary school and sporting facilities. The inclusion of relatively small number of additional dwellings within the northern part of the investigation area is likely to have only a marginal impact on the orderly development of these adjoining areas.

The southern part of the investigation area has access to two government primary schools, a community centre and sporting facilities. Residents in this area have access to a government secondary college on the north side of the Bellarine Highway.

Application of the social infrastructure benchmarks set out in the methodology chapter of this report suggests that the existing population in this area would optimally have access to more 'community centre' and sporting facilities than currently provided.

The addition of any significant areas of residential land into the Geelong Settlement Boundary in this location will place additional demands on existing social infrastructure. It would therefore be necessary to upgrade and/or expand the existing social infrastructure in this neighbourhood to cater for additional demands.

The addition of any significant area of residential land into the Geelong Settlement Boundary in the southern part of the investigation area is likely to have a negative impact on the orderly development of the adjoining residential area. The scale of the impact would depend on the area of land included.

Any change to the settlement boundary (other than minor changes) would therefore have a negative impact on the satisfaction of this criteria.

Criteria 2.2: Impact on management of the sequence of development and the early provision of services.

The intensification of development within the northern part of the investigation area would require either substantial lot consolidation or the substantial use of 'battle-axe' type lots.

It is likely that redevelopment for urban residential purposes within the constraints of the existing subdivision pattern would occur on an incremental and piecemeal basis. This will present significant challenges to providing efficient and cost-effective drainage works and utility services to this area.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria in relation to the orderly development northern part of the investigation area.

Criteria 2.3: Impacts of any proposed boundary changes on the economic provision of other development fronts.

Any significant changes to the settlement boundary in this location would result in the City's expenditure on growth area infrastructure having to be spread more thinly across a wider area than envisaged under the Settlement Strategy. This would potentially have an adverse impact on the economic provision of other development fronts in the wider Geelong region.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

### 3.3 - Planning for Places – Distinctive Areas & Landscapes:

Criteria 3.1: Impact on any identified unique features or special characteristics within a declared area.

The area is located within a Declared Area under the Distinctive Areas and Landscapes legislation, and the draft SPP identifies land within the investigation areas as being a regionally significant landscape.

The landscape assessment undertaken as part of the draft DAL Strategy includes the investigation area in a landscape type known as 'Localised Flatlands: Lake Connewarre Lowlands'. It describes the sensitivity change in this area as follows:

"The low, flat and environmentally significant wetlands environs of this Landscape Area make it particularly sensitive to most forms of development. Built form has the potential to be visually impactful when viewed from main road corridors..."<sup>1</sup>

The landscape assessment identifies land within the investigation area as forming part of a broader area of Regional landscape significance known as 'Bellarine Northern Coast and Central Hills: Regional Significance' (refer Figure 49).

The draft SPP contains an Objective to protect and enhance the identified landscape character, physical features, view corridors and natural and cultural values of the declared area's significant landscapes.

The following strategies have been proposed in the draft DAL Strategy to achieve this objective:

- Protect the coastal and hinterland settings of settlements by containing urban growth and development within settlement boundaries.

<sup>1</sup> Bellarine Peninsula Landscape Assessment Review, Vol 1 page 40.

- Reserve green breaks between settlements for conservation, agriculture, nature-based tourism and natural resource purposes that prioritise the protection and enhancement of the significant landscapes and landscape characters.

The Bellarine DAL strategy notes that protected settlement boundaries are needed for this area, to ensure the green break between urban Geelong and the Bellarine Peninsula is preserved and significant landscape and environmental values are protected.

Land within and adjoining the investigation area is not currently included within a Significant Landscape Overlay (SLO) under the Greater Geelong Planning Scheme. The landscape assessment that accompanies the Draft SPP does not recommend that any SLO be applied to land within or immediately adjoining the investigation area.

Whilst the landscape within the investigation area could therefore be said to have Regional significance, it has not been assessed as having a level of significance that warrants protection via an SLO planning control.

However, the draft DAL SPP (and the Geelong Settlement Strategy) calls for urban growth to be contained within settlement boundaries and for green breaks to be reserved between urban Geelong and other settlements within the Bellarine Peninsula.

The purpose of such breaks is to preserve land for a combination of conservation, agriculture, nature-based tourism and landscape purposes.

An extension of the settlement boundary within the investigation area would reduce the size of the green break between urban Geelong and Leopold, and it would place greater pressure on the conservation values of the nearby Reedy Lake and Lake Connewarre. It would also reduce the land area available for agriculture and nature-based tourism activities.

In summary, the extension of the boundary in this location will have a potentially negative effect on the following DAL objectives for the Bellarine Peninsula:

- Enhancing the conservation of the environment (due to potential impact on flood prone land within the area, and potential downstream impacts on Reedy Lake/Lake Connewarre).
- Protection and conservation of regionally significant landscape values of Bellarine Northern Coastal & Central Hills Landscape.

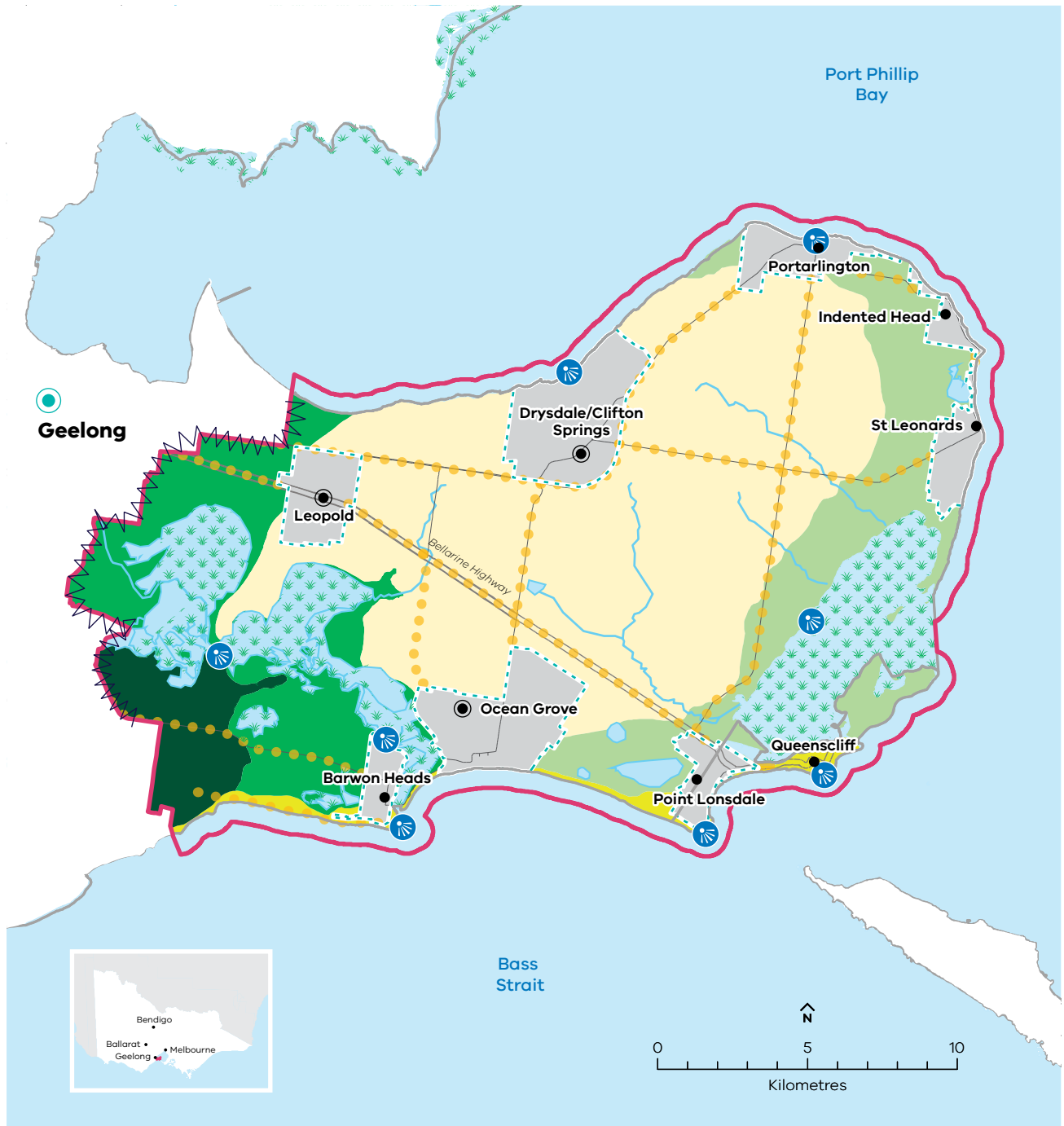
Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.



**LEGEND**

- Regional city
- District town
- Village
- Protected settlement boundary
- Declared area boundary
- Protected settlement boundary to be defined subject to strategic planning work
- Local Government Area
- Urban area
- State significant landscape:** Bellarine Peninsula Southern Coast
- Regional significant landscape:** Lake Connearre and Barwon River
- Regional significant landscape:** Swan Bay
- Regional significant landscape:** Bellarine Northern Coast and Central Hills
- Road corridor views
- Significant view
- Waterways
- Lakes
- Ramsar wetlands
- Highway
- Main road

Figure 49. Bellarine Significant Landscape Areas (draft Bellarine DAL SPP, p.34)



**LEGEND**

- |  |  |  |   |  |                     |
|--|--|--|---|--|---------------------|
|  | Regional city  |  | Western Plains Cones and Lakes, Mount Duneed Volcanic Plain |  | Road corridor views |
|  | District town  |  | Localised Flatlands, Lake Connewarre Lowlands               |  | Significant view    |
|  | Village  |  | Localised Flatlands, Lake Victoria, Swan Bay                |  | Waterways           |
|  | Protected settlement boundary  |  | Coastal Cliffs and Dunes, Bellarine Southern Coast          |  | Lakes               |
|  | Declared area boundary   |  | Bellarine Uplands, Central Bellarine Hills                  |  | Ramsar wetlands     |
|  | Protected settlement boundary to be defined subject to strategic planning work |  |   |  | Highway             |
|  | Local Government Area  |  |   |  | Main road           |
|  | Urban area   |  |   |  |                     |

Figure 50. Bellarine Landscape Character Types (draft Bellarine DAL SPP, p.35)

### 3.4 - Environmental & Landscape Values:

#### Criteria 4.1 Impact on the protection of biodiversity values.

The investigation area adjoins the Barwon River and Reedy Lake/Lake Connewarre wetlands systems. These wetlands are designated as “wetland of international significance” under the Ramsar convention and they provide significant habitat for a range of plant and animal species, including endangered migratory bird species listed under the Japan–Australia Migratory Bird Agreement (1981) and the China–Australia Migratory Bird Agreement (1988).

These wetlands are sensitive natural environments which are particularly vulnerable to the impacts of urban development and climate change. The importance of protecting of these habitats is identified across a wide range of international, federal, state and local policies and regulations.

Better management of urban stormwater run-off into these wetlands is a high priority. This includes sensitively managing stormwater flows and quality by redirecting, storing and treating it before it flows into sensitive habitats and investing in infrastructure to harvest stormwater for reuse before it enters natural systems.

Any change to the settlement boundary would have a potentially negative impact on the satisfaction of this criteria, as the relevant biodiversity values within the adjacent wetlands are highly sensitive to changes in stormwater flow and quality.

#### Criteria 4.2 Impact on the protection of coastal areas & wetlands.

Refer criteria 4.1 for discussion.

Any change to the settlement boundary in this area would have a potentially negative impact on the satisfaction of this criteria, for the reasons set out under Criteria 4.1.

#### Criteria 4.3 Impact on the protection of significant landscapes.

Land within and adjoining the investigation area is not currently included within a Significant Landscape Overlay (SLO) under the Greater Geelong Planning Scheme.

The landscape within the investigation area has been identified in the Bellarine DAL SPP as have Regional significance. Whilst this landscape has not been assessed as having a level of significance that warrants protection via an SLO planning control, both the draft Bellarine DAL SPP and the Geelong Settlement Strategy call for green breaks to be reserved between urban Geelong and other settlements within the Bellarine Peninsula (Refer Criteria 3.1 and 4.4 for further discussion).

Expanding residential development into this rural landscape would have a negative impact on the rural landscape break between Geelong and Leopold although these impacts could be mitigated via subdivision and landscape design measures to some degree.

Any change to the settlement boundary is expected to have a negative impact on the satisfaction of this criteria.

Criteria 4.4 Impact on the preservation of identified urban breaks.

The Greater Geelong Planning Scheme (at Clauses 11.01-1R, 21.06-2 and 21.14) seeks to maintain the non-urban breaks between urban Geelong and the Bellarine Peninsula.

The Geelong Settlement Strategy notes the following in relation to urban breaks in this location:

“The State Planning Policy Framework clearly states that a non-urban break should be maintained here. However, without the support of further development controls and landscape polices, the existing visual break between Newcomb/Moolap and Leopold could be progressively eroded until Leopold functions, and is perceived, as the eastern edge of urban Geelong.”<sup>2</sup>

Expanding residential development into the rural landscape between Moolap and Leopold would have a negative impact on the green break between Geelong and Leopold although these impacts could be mitigated via subdivision and landscape design measures to some degree.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

### 3.5 - Environmental Risks:

Criteria 5.1 Climate change – impacts of coastal inundation & erosion.

Parts of the investigation area are affected by coastal inundation and flooding.

The Flood Overlay, LSIO and SBO currently apply to areas of land within the investigation area, and Amendment.

Amendment C339 to the Greater Geelong Planning Scheme proposes to update flooding and inundation controls that apply to land within the investigation area (refer Figure 51). The Amendment implements the Lower Barwon and Lower Moorabool Flood Investigation (Dec 2018) and part of the Bellarine Peninsula – Corio Bay Local Coastal Hazard Assessment (Dec 2015).

The Amendment seeks to satisfy the following State policy objective relating to climate change and coastal inundation:

“To plan for the potential coastal impacts of climate change and implements the following strategies:

- Plan for sea level rise of not less than 0.8 metres by 2100 and allow for the combined effects of tides, storm surges, coastal processes and local conditions such as topography and geology when assessing risks and coastal impacts associated with climate change.
- Ensure that land subject to coastal hazards is identified and appropriately managed to ensure that future development is not at risk.
- Avoid development in identified coastal hazard areas susceptible to inundation.”

The revised boundaries of the Flood Zone and LSIO affect land in the southern portion of the investigation area.

Any change to the settlement boundary in the southern portion of the investigation area would have a negative impact on the satisfaction of this criteria.

<sup>2</sup> Geelong Settlement Strategy, page 79.

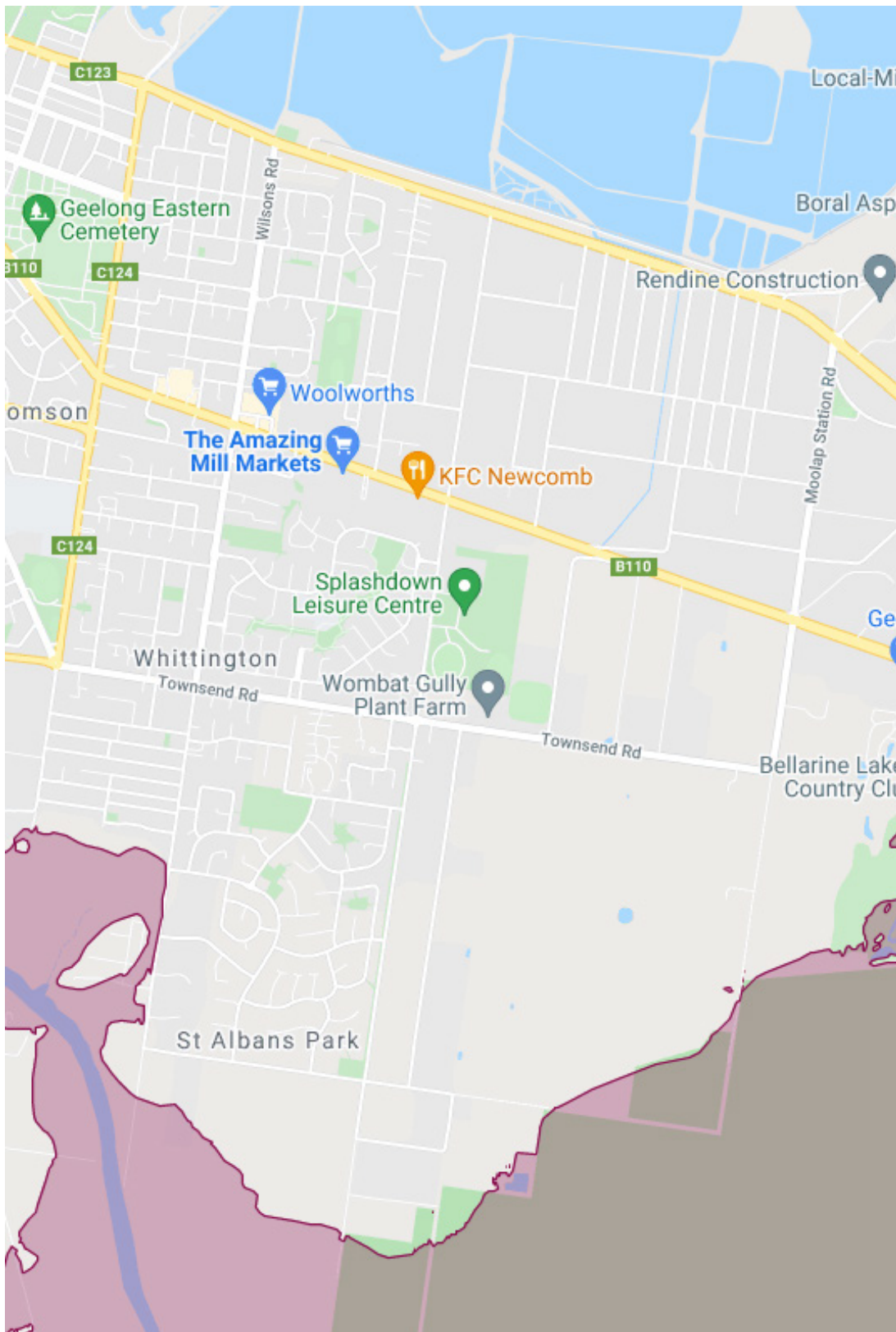


Figure 51. Proposed revised extent of the Flood Overlay (draft Amendment C339, <https://www.geelongaustralia.com.au/amendments/item/8d8c14bb1962deb.aspx>)

#### Criteria 5.2 Bushfire risks in the location.

This area is within a Bushfire Prone Area but is not located within or proximate to a Bushfire Management Overlay. Bushfire risk is not likely to be determinative of the suitability of urban development in the area. A Bushfire Management Plan could be prepared to manage the potential risks posed by bushfire on urban development in the area.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria

#### Criteria 5.3 Impacts on/of floodplains.

Parts of the investigation area are affected by coastal inundation and flooding.

The Flood Overlay, LSIO and SBO currently apply to areas of land within the investigation area, and Amendment, and Amendment C339 to the Greater Geelong Planning Scheme proposes to update flooding and inundation controls that apply to land within a close to the investigation area (refer criteria 5.1 for further discussion).

The northern portion of the investigation area is low lying and as liable to inundation by overland flows from the surrounding drainage networks. This area is included within the SBO under the Greater Geelong Planning Scheme. The constraints imposed by these controls on urban development would need to be further investigated before these areas could be identified as being suitable for urban development.

Any change to the settlement boundary in the southern portion of the investigation area would have a negative impact on the satisfaction of this criteria.

Any change to the settlement boundary in the northern portion of the investigation area would have a minor or potentially neutral impact on the satisfaction of this criteria, depending on what more detailed investigation of flooding conditions and mitigation measures were to confirm.

#### Criteria 5.4 Impacts on/of soil degradation.

The Geological Survey of Victoria (1:63,360) Geological Map Series Geelong Sheet indicated that the area is underlain by High level alluvium deposits (sand, gravel and clay).<sup>3</sup>

No soil degradation impact risks have been identified in the desktop review for this area.<sup>4</sup>

Any change to the settlement boundary might potentially have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact development might have on soil degradation.

#### Criteria 5.5 Impacts on/of erosion & landslip.

The area is identified as having a moderate risk of gully and sheet erosion.<sup>5</sup>

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact erosion and landslip might have on development, and vice-versa.

#### Criteria 5.6 Impacts on/of salinity, acid sulfate soils.

Areas adjoining the Barwon River, Reedy Lake and Stingaree Bay are impacted by salinity associated with these waterways and wetlands features. The majority of the investigation has been identified as having a high waterlogging risk and also having potential for the presence of acid sulfate soils.<sup>6</sup>

<sup>3</sup> See map sheet 9 - <http://earthresources.efirst.com.au/categories.asp?CID=33>

<sup>4</sup> <https://www.ccmaknowledgebase.vic.gov.au/nrmpp>

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

Any change to the settlement boundary is expected to have a negative impact on the satisfaction of this criteria, however further analysis would be required to investigate these soil conditions and the degree to which salinity, waterlogging acid sulfate soil conditions might impact on development, and vice versa.

Criteria 5.7 Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.

The northern part of the area is 380m from an industrial zone which accommodates predominately light industrial uses, and 1.5-2km from the heavier industries located within the Moolap Strategic Framework Plan area.

The land between these industrial activities and the existing settlement boundary is currently zoned for low density residential purposes. The encroachment of urban-density residential development towards the existing industrial zone in Moolap might potentially impact on the buffer requirements of existing industrial activities and reduce the capacity of these areas to cater for certain types of industry which require large buffer distances in the future.

The southern portion of the investigation area is adjacent to farmland and so the compatibility between urban and farming uses would be a design consideration. However, incompatibility with adjacent agricultural uses is not likely to be determinative of the suitability of urban development in the area.

Any change to the settlement boundary is expected to have a minor negative impact on the satisfaction of this criteria.

Criteria 5.8 Impacts on/of major hazard facilities.

There are no licensed major hazard facilities located in proximity to this area.<sup>7</sup> However, there are pharmaceutical and munitions manufacturing activities located circa 2.5km north-east of the investigation area.

Any change to the settlement boundary is not expected to have an impact on the satisfaction of this criteria.

### 3.6 - Natural Resource Management:

Criteria 6.1 Impact on the protection of agricultural land.

The Greater Geelong Planning Scheme seeks to support the use of the land within the southern rural areas for productive agriculture.<sup>8</sup>

The investigation area has been identified as having a predominately Class 4 (Moderate) land capability. These are defined as follows:

Class 4 – Land that is not as inherently capable for intensive soil-based agriculture. Extensive agriculture (including broadacre cropping with suitable land management practices) and non-soil utilisation activities are often most appropriate, and more intensive grazing is possible in some higher rainfall areas or where consistent water supplies are available.

The land holdings vary in size in the area, and the land is primarily used for agricultural production and agistment, with associated dwellings.

Any change to the settlement boundary is expected to have a moderately negative impact on the availability of land for agricultural production and therefore the satisfaction of this criteria.

<sup>7</sup> <https://www.worksafe.vic.gov.au/licenced-and-registered-major-hazard-facilities>

<sup>8</sup> Clause 21.07-4

Criteria 6.2 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources.

The investigation area is located between the wetlands of the Barwon River, Reedy Lake and Stingaree Bay and land within it drains towards these environmentally sensitive features.

The investigation areas is flat, low-lying and subject to waterlogging and the emergence of acid-sulfate soils.

Urban development has a high potential to impact on the ground and surface water conditions within the investigation area and on the natural values of the wider catchment and nearby waterway and marine features.

It is possible that these impacts might be mitigated through the design of any urban stormwater infrastructure within the area. However, a thorough and detailed investigation would be required to verify whether this is possible or not.

Any change to the settlement boundary is expected to have a negative impact on the protection of nearby catchments and therefore the satisfaction of this criteria. Further detailed technical analysis would be required to investigate degree to the impacts of urban development on the environmental values of the catchment, and nearby waterway and marine environments.

Criteria 6.3 Impact on the protection of extractive resources.

The area is not identified as an Extractive Industries Interest Area, and there are no quarries located within 1km of the area.

### 3.7 - Heritage:

Criteria 7.1 Impact on known Aboriginal cultural heritage values.

Aboriginal Victoria mapping shows the land around the Barwon River, Reedy Lake and Stingaree Bay are areas of cultural heritage sensitivity.<sup>9</sup>

Any change to the settlement boundary is expected to have neutral impact on the protection of known areas of Aboriginal cultural heritage sensitivity. However, consultation with Traditional Owners and further assessment of other potential areas of Aboriginal cultural heritage sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

Criteria 7.2 Impact on known post contact heritage values.

A Heritage Overlay currently applies to a farming residence on Earles Road Moolap.

Any change to the settlement boundary is expected to have a neutral impact on the protection of known areas of post-contact cultural heritage sensitivity.

<sup>9</sup> See <https://achris.vic.gov.au/#/onlinemap>

### 3.8 - Transport:

Criteria 8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access.

The area has access to existing road networks and it is located proximate to two existing local bus services. It would be necessary to re-route local public transport services to the area in order to connect residents to regional employment, health, education and other services.

However, the feasibility of providing roads and public transport to the area would not be determinative of the suitability of urban development in the area.

Any change to the settlement boundary is expected to have a neutral impact on the feasibility and cost of providing roads and public transport access to the area.



Figure 52. Existing nearby bus routes (source: <https://www.ptv.vic.gov.au/assets/default-site/more/maps/Local-area-maps/Regional/c7de90c6b9/Geelong-Bus-Network.pdf>).

### 3.9 - Infrastructure:

Criteria 9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage.

The investigation area is not currently serviced by reticulated sewer, and it does not have access to reticulated water infrastructure of sufficient capacity to support urban residential development. The nearest sewer and water networks are located in the adjacent suburbs of Newcomb and St Albans Park.

Any significant expansion of sewerage provision to the study area would require the installation of a new sewerage pump station and transfer pipeline from the area to the sewerage outfall drain near the Geelong Racecourse in East Geelong.

Careful consideration of sewerage servicing solutions will be required at this location due to the challenges of low elevation, flat topography, high saline water table, potential for environmental issues such as contaminated or acid sulfate soils.

The area's proximity to internationally significant wetlands means that a high level of assurance relating to protecting surface and ground water conditions from both urban stormwater and effluent flows would be necessary if urban further residential development were to be contemplated in this location.

It is possible that these impacts might be mitigated through the design of any urban reticulated sewerage and urban stormwater infrastructure within the area. However, a thorough and detailed investigations would be required to verify whether this is possible or not.

It is also likely that substantial augmentations and extensions to the reticulated water system would be required to supply new development in the area.

The existing social and recreational infrastructure in this location does not fully cater for the needs of the existing population in this area. Any increase in dwellings and population in this area will place additional demands on this existing social infrastructure. It would therefore be necessary to upgrade and/or expand the existing social infrastructure in this neighbourhood to cater for additional demands.

Given the above, and the constraints in the ability to develop land in the investigation area, it is likely that an expansion of the settlement boundary may not be able to cost-effectively provide for the range of the utility, drainage and community services needed to support further residential development in this location.

This would be influenced by the scale of urban residential development contemplated in the investigation area, and a more detailed assessment of the relevant environmental, physical and social impacts and mitigations.

The preliminary assessments undertaken as part of this review suggest that some significant additional drainage, utility and community infrastructure might be needed to support additional residential growth within this location.

The technical feasibility and cost-effectiveness of providing additional urban services to cater for additional housing growth in this location has not been examined as part of this desktop review. However, any change to the settlement boundary in this area is anticipated to have a negative impact on the ability to cost-effectively provide urban and social services to this area, as it would be necessary to upgrade and /or construct at least some new community facilities and utility services to cater for the additional demand, rather than being able to rely on available capacity within existing/planned urban services.

6.5

Waurm Ponds North

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

527.633 ha (gross land area).

## 1.2 Definition of investigation area:

The investigation area in Waurm Ponds North has been defined by the parcels which are contiguous with the General Residential Zone land to the east of the existing settlement boundary (Principle 2) (refer Figures 53 and 54).

Given the configuration of the land holdings in this area, an investigation area that is larger than just the contiguous land holdings has been selected. The Marcus Oldham College property forms the northern extent of the investigation area, and Cochranes Road and Waurm Ponds Drive form its western and southern extent. Cochranes Road has been selected on the western boundary of the investigation area as it is the nearest physical feature west of Pigdons Road that could be used as a settlement boundary.

## 1.3 Current Zoning and Overlays:

The land within the investigation area is located within the Farming Zone and Public Use Zone 2 (Education). The properties within the investigation area are also partially impacted by the Significant Landscape Overlay – Schedule 3 (Waurm Ponds Valley).

The above zones and overlays are shown at Figures 55 to 57.

A photo montage of the existing site context of the investigation area is shown at Figure 58.

## 1.4 Investigation Area & Surrounds:

The land within the investigation area has been developed for a number of urban-related uses as follows:

- Deakin University
- Epworth Hospital
- Christian College Geelong Senior School
- Marcus Oldham College

Other land uses within the investigation area include farmland, a winery (Waurm Ponds Estate), produce market, motel and rural living properties along Cochranes Road and Waurm Ponds Drive. The land further the north and west of this area is rural in nature and comprises of undulating farmland.

To the east of the investigation area are the suburbs of Highton and Grovedale which are established/developed suburbs of Geelong inside the settlement boundary.

Land to the south of the investigation area comprises a large area of rural living properties.

**Geelong Growth Investigation Areas**  
Waurn Ponds - Northern Area Investigation Area

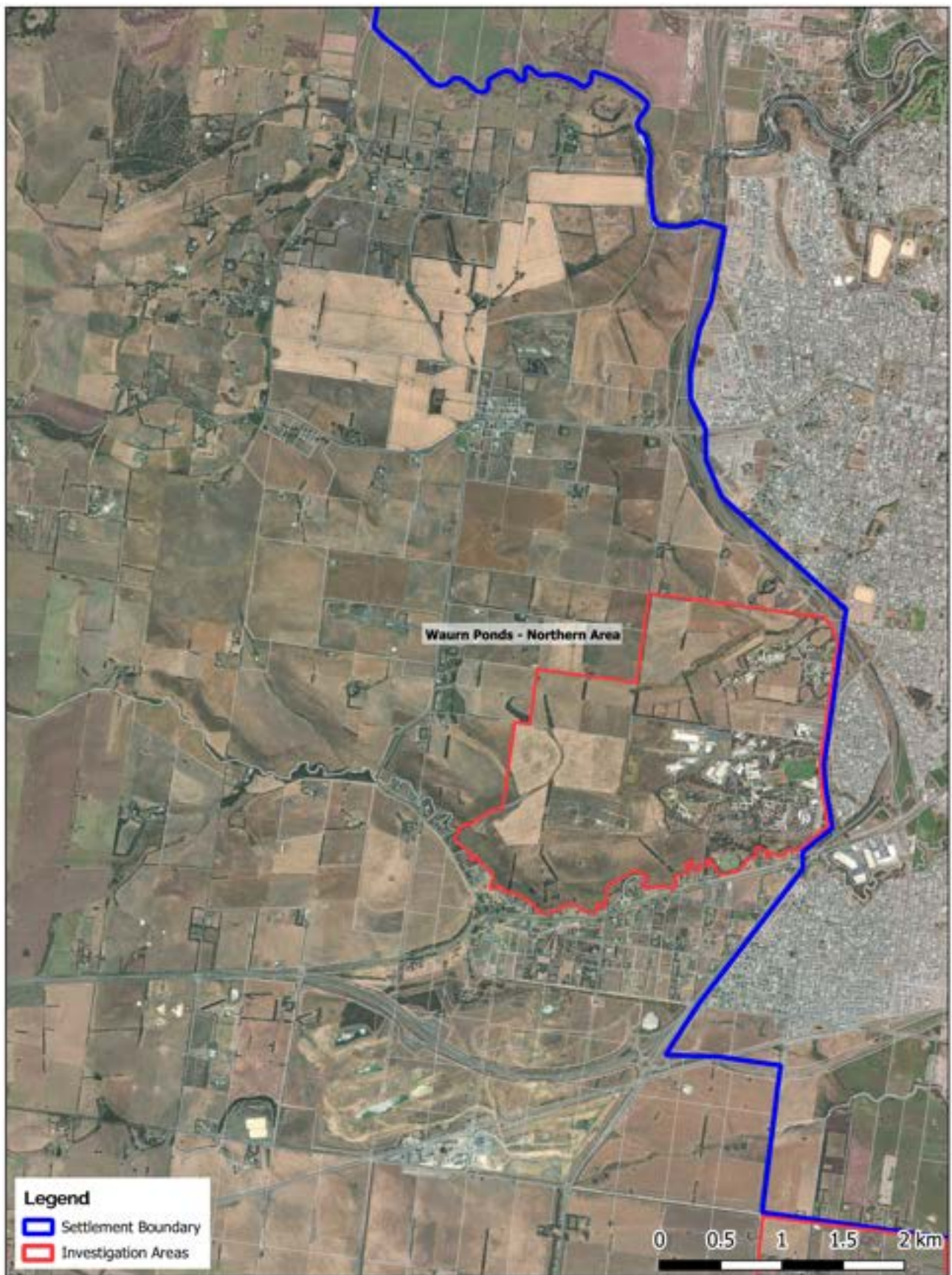


Figure 53. Waurn Ponds North – Aerial Cadastral Plan.

**Geelong Growth Investigation Areas**  
 Waurn Ponds - Northern Area Investigation Area

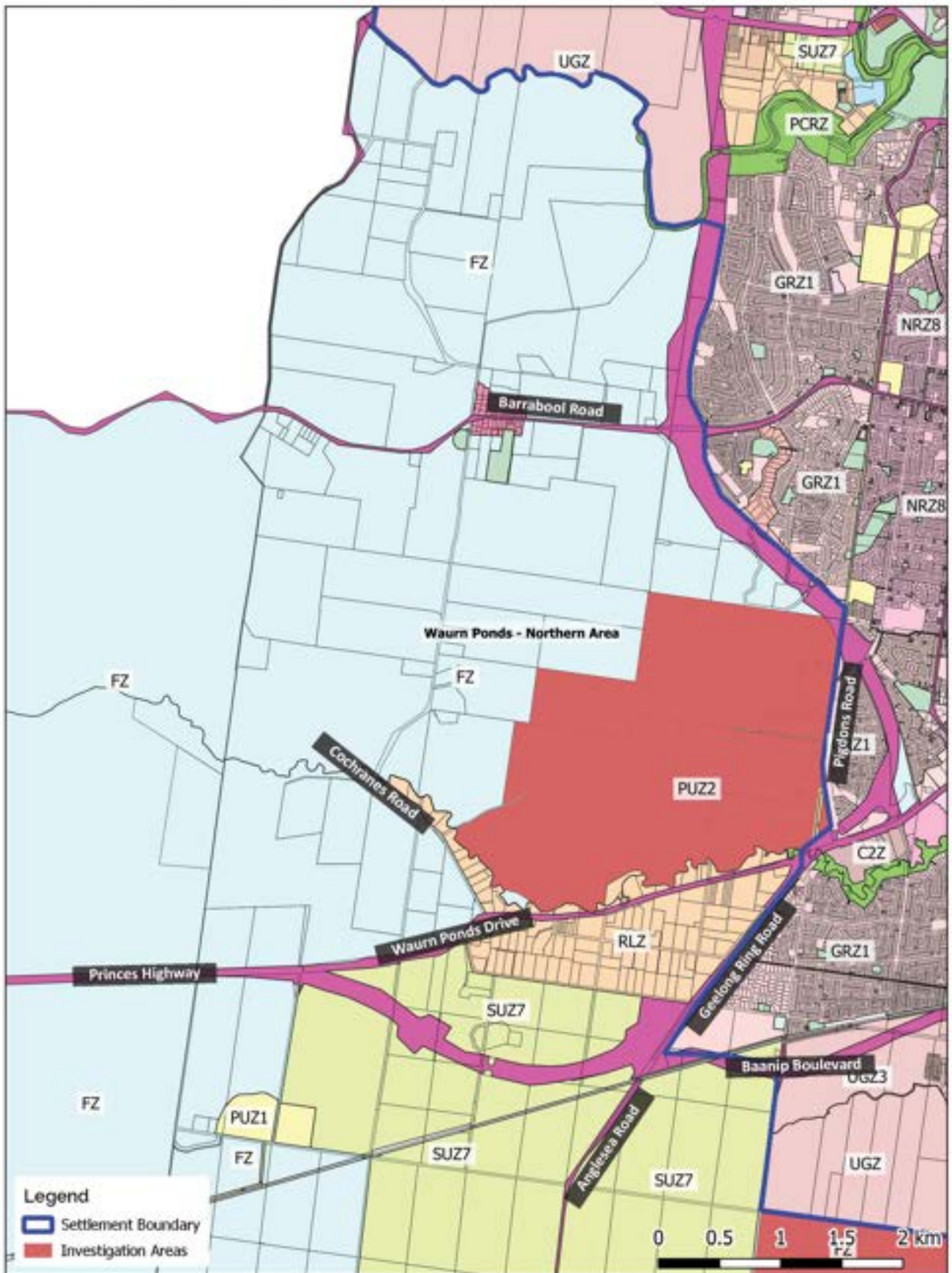


Figure 54. Waurn Ponds North – Investigation Area Plan.

**Geelong Growth Investigation Areas**  
Waurn Ponds - Northern Area - Zoning

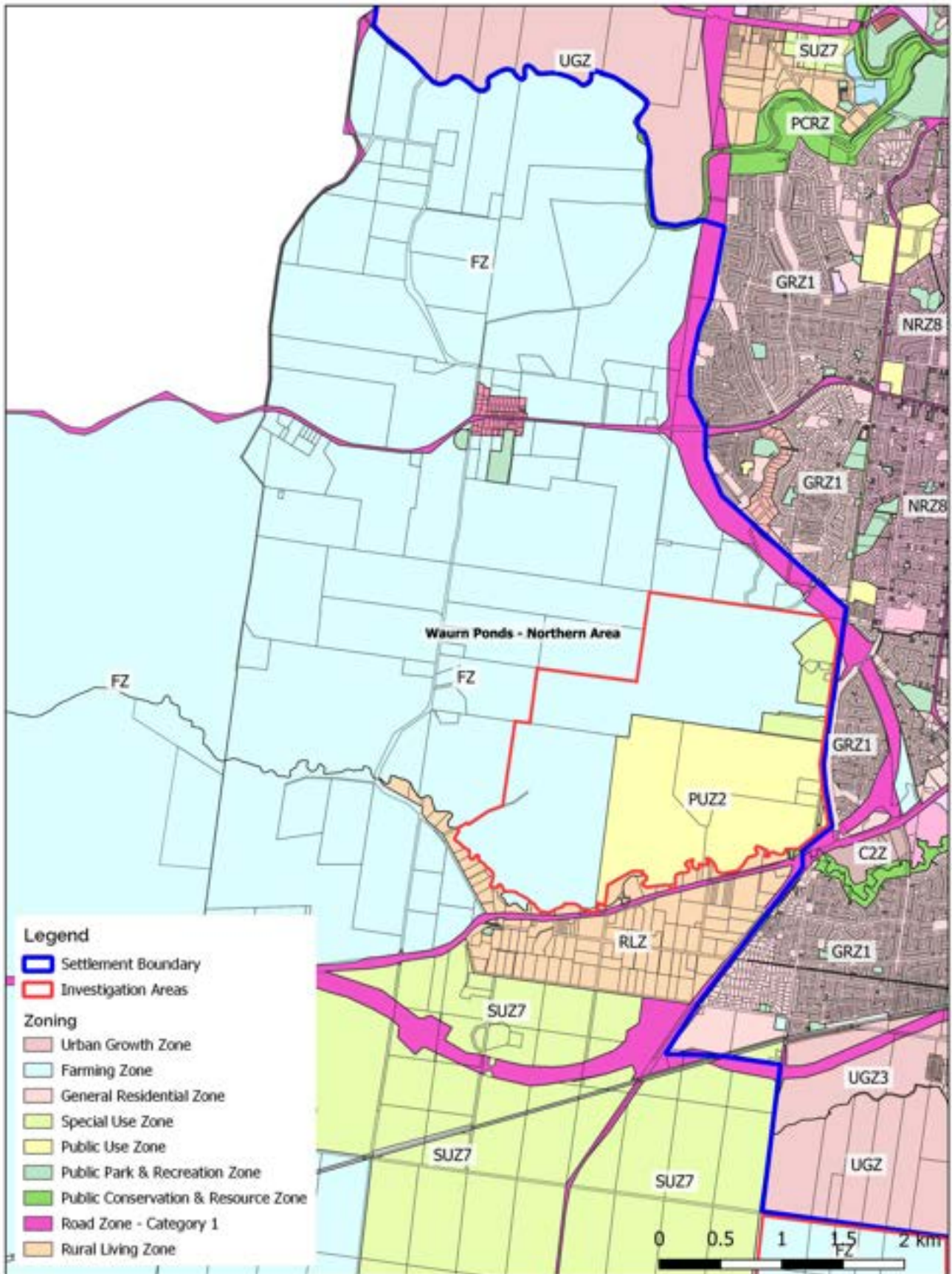


Figure 55. Waurn Ponds North – Zoning Plan.

**Geelong Growth Investigation Areas**  
Waurm Ponds - Northern Area - Overlays

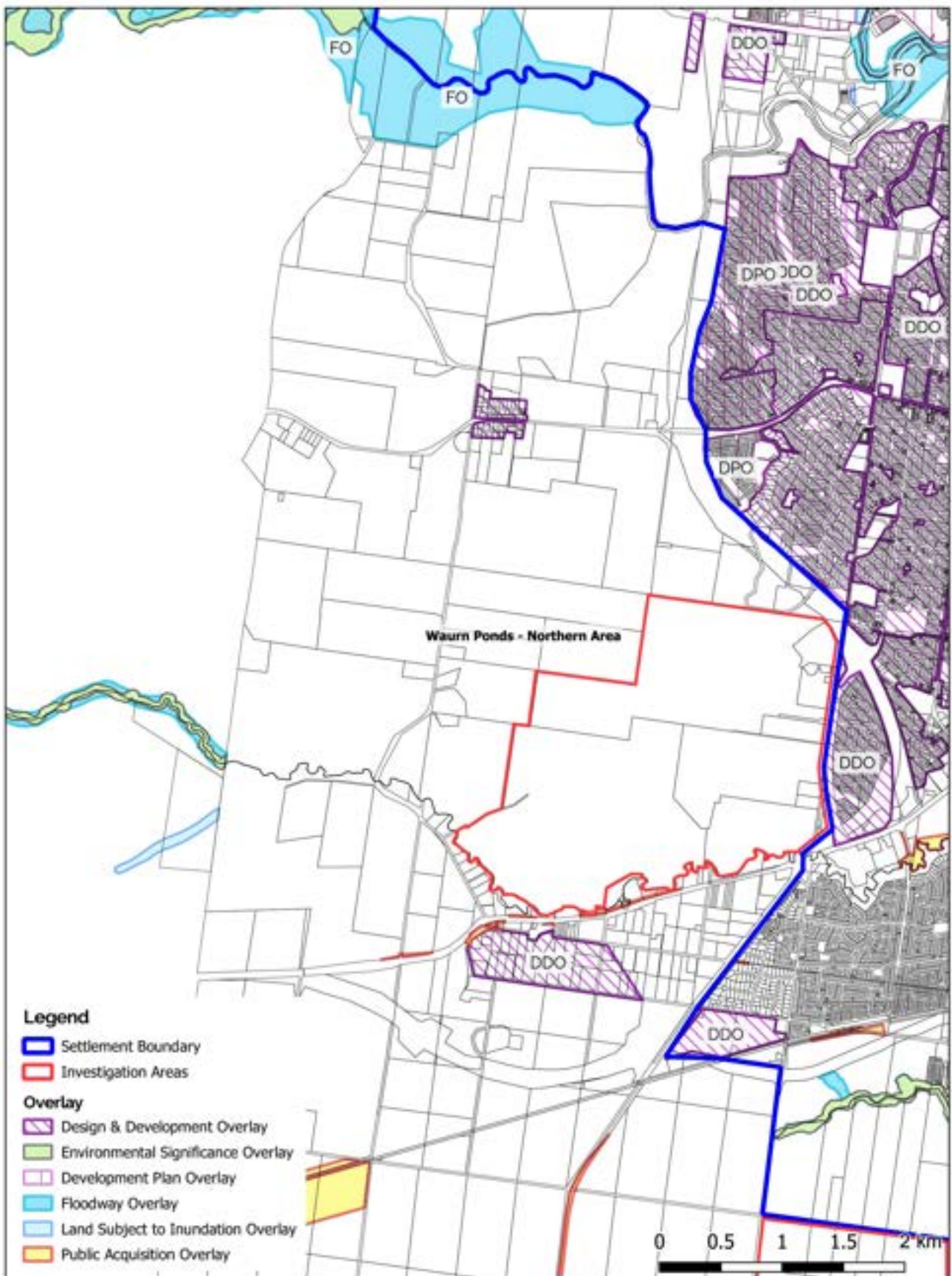


Figure 56. Waurm Ponds North – Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Waurm Ponds Northern Area - Overlays

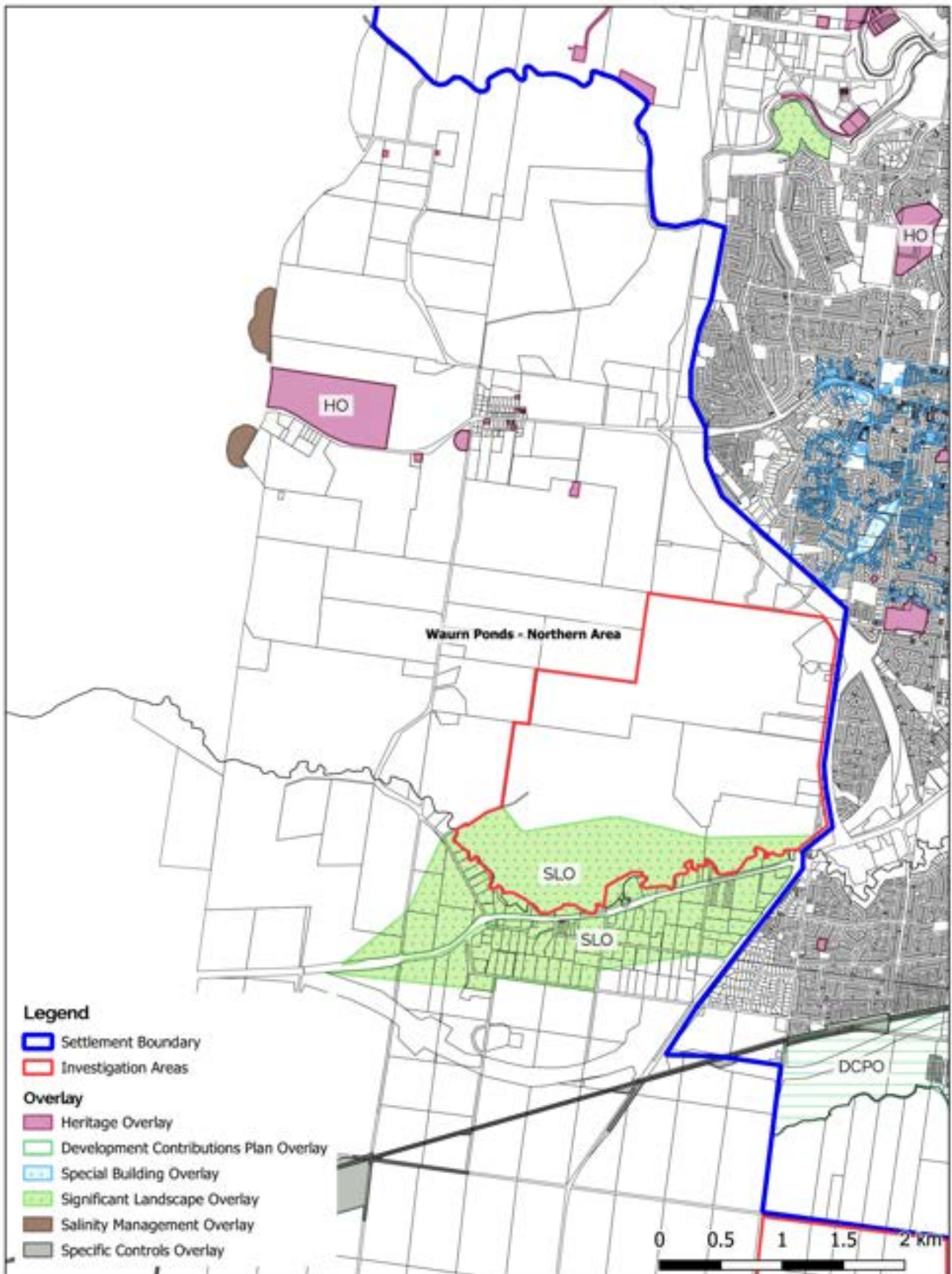


Figure 57. Waurm Ponds North – Overlays Plan 2.

## 2 - Summary of Recent Submissions in Relation to the Settlement Boundary

We have reviewed the submissions in relation to the Geelong Settlement Strategy (Planning Scheme Amendment C395).

None of the submissions related to land within the Waurm Ponds North area.



Figure 58. Waurm Ponds North – Photo Montage.

## 3 - Assessment of Investigation Area Against Suitability Criteria

The following is an assessment of the investigation area against the Long Term Boundary Review Decision Criteria.

### 3.1 - Settlement:

Criteria 1.1: Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (including consideration of natural features, location of major roads and reservations for public utilities).

Pigdons road is reasonably logical and enduring settlement boundary. There are no other natural or artificial features on land further west within the study area that represent an equal or better settlement boundary than this road.

Cochranes Road is the next nearest physical feature that could be considered as an alternative settlement boundary. However, this is some 3km west of the existing boundary, and nominating this as the alternative settlement boundary would result in the creation of a substantial new urban growth area for Geelong. This would also necessitate the provision of significant additional community infrastructure.

The Geelong Settlement Strategy does not support the inclusion of substantial new areas for residential growth within the settlement boundary in this location.

The primary purpose of the settlement boundary is to determine the long term limits to residential growth in the city of Geelong. The existing urban-related uses in the area (e.g., Deakin University, Epworth Hospital, Christian College, Marcus Oldham College) are not residential in nature and they are expected to continue to operate within this area irrespective of whether they are included within the settlement boundary.

The current settlement boundary satisfies this Criteria. Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

### 3.2 - Managing Growth:

Criteria 2.1: Impact on the orderly development of the adjoining urban area.

The area adjoining the investigation area is already largely developed (being Highton and Grovedale). Therefore, any alteration to the boundary would not affect the orderly development of the area.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

Criteria 2.2: Impact on management of the sequence of development and the early provision of services.

The area adjoining the investigation area is already largely developed (being Highton and Grovedale). Therefore, any alteration to the boundary would not affect sequence of development or the timing of infrastructure provision in the immediate area.

It is anticipated that the properties within the investigation area which are already being used for non-residential urban-related activities will continue to be developed and expanded within this area irrespective of whether they are included within the settlement boundary.

Opportunities may exist to create specialist forms of accommodation associated with one or more of these facilities (e.g. student, patient/visitor or key worker accommodation). However, any such activities would be ancillary to the primary economic function of the relevant institution as opposed to creating a new urban neighbourhoods within Geelong. Development opportunities of this nature could (if desired) be considered via site-specific controls which are linked to the relevant primary use of the land rather than through an adjustment to the settlement boundary.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

Criteria 2.3: Impacts of any proposed boundary changes on the economic provision of other development fronts.

The area adjoining the investigation area is already developed (being Highton and Grovedale) and therefore any change to the settlement boundary would not impact on the economic provision of other development fronts in the immediate vicinity of this area.

However, if any significant new residential growth area was established in this location then it would result in expenditure on growth area infrastructure having to be spread more thinly across a wider area than envisaged under the Settlement Strategy. This would potentially have an adverse impact on the economic provision of other development fronts in the wider Geelong region.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

### 3.3 - Planning for Places – Distinctive Areas & Landscapes:

Criteria 3.1: Impact on any identified unique features or special characteristics within a declared area.

Land in the investigation area is not located within a Declared Area under the Distinctive Areas and Landscapes legislation.

### 3.4 - Environmental & Landscape Values:

Criteria 4.1 Impact on the protection of biodiversity values.

The investigation area is located within the Otway Plains Bioregion. DELWP Biodiversity mapping indicates that the investigation area contains Grassy Woodlands and Swampy Riparian Woodlands.<sup>1</sup>

Further assessment of any specific ecological values on the investigation area would be required in order to determine the specific ecological values in this location, and the extent to which these might constrain the development potential of this area.

It is possible that a PSP could address biodiversity and native vegetation impacts via a Native Vegetation Precinct Plan.

The impact of any change to the settlement boundary on the satisfaction of this criteria is not known. However, it is possible that any change to the settlement boundary could potentially have a generally neutral impact on the satisfaction of this criteria, as the relevant biodiversity values could potentially be protected by planning and management measures.

Criteria 4.2 Impact on the protection of coastal areas & wetlands.

There is not a coastal area or wetland area within or in close proximity to the area. The closest wetland is Lake Conneware which is located over 9km to the east of the area.

Any change to the settlement boundary would have no impact on the satisfaction of this criteria.

<sup>1</sup> See <https://maps2.biodiversity.vic.gov.au/Html5viewer/index.html?viewer=NatureKit>

Criteria 4.3 Impact on the protection of significant landscapes.

The land on the southern portion of the investigation area is covered by the Significant Landscape Overlay (Schedule 3 – Waurm Ponds Valley). This overlay identifies that the Waurm Ponds Valley is comprised of smoothly rounded hills sloping steeply to a flat-bottomed, meandering river valley. The valley is identified as a strategic location at the westerly entrance to Geelong which contains important view lines and scenic qualities.

The Overlay seeks to ensure the scenic values of the Princes Highway through the Waurm Ponds Valley are not compromised by inappropriate development and to protect and enhance the Waurm Ponds Valley as an entrance feature to Geelong. Altering the settlement boundary in this location would likely contravene the purposes of this overlay.

Any change to the settlement boundary is expected to have a negative impact on the satisfaction of this criteria.

Criteria 4.4 Impact on the preservation of identified urban breaks.

The Geelong Planning Scheme identifies an urban break on the municipal boundary to the west of the investigation area.<sup>2</sup> The investigation area is located a considerable distance from this identified urban break and so residential development in this location would not have any adverse effect on the protection of this urban break.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

<sup>2</sup> See - [https://planning-schemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21\\_mss06\\_ggee.pdf?\\_ga=2.261586637.1378271083.1638783549-1127495322.1625462890](https://planning-schemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21_mss06_ggee.pdf?_ga=2.261586637.1378271083.1638783549-1127495322.1625462890)

### 3.5 - Environmental Risks:

Criteria 5.1 Climate change – impacts of coastal inundation & erosion.

The investigation area is not located in a coastal location.

Criteria 5.2 Bushfire risks in the location.

The investigation area is within a Bushfire Prone Area but is not located within or proximate to a Bushfire Management Overlay. Bushfire risk is not likely to be determinative of the suitability of urban development in the area. A Bushfire Management Plan could be prepared to manage the potential adverse effects of development on the bushfire risk in the area.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria

Criteria 5.3 Impacts on/of floodplains.

The investigation area is partially affected by minor flooding on the fringes of Waurm Ponds Creek – refer to Amendment C339 to the Greater Geelong Planning Scheme which seeks to update Flood and Land Subject to Inundation Overlays along this waterway.

Any change to the settlement boundary would have only minor impacts on the satisfaction of this criteria. Further analysis would be required to determine the extent of this impact, and the feasibility of any impact mitigation measures.

#### Criteria 5.4 Impacts on/of soil degradation.

The Geological Survey of Victoria (1:63,360) Geological Map Series Geelong Sheet indicated that the investigation area was covered by Moorabool Viaduct Sands, Wairn Ponds Limestone with high levels of alluvium.<sup>3</sup>

The Natural Resource Management Mapping of the Corangamite Region indicates that soils in the investigation area are friable black gradational soils with good fertility and water holding capacity.<sup>4</sup>

If development was approved in this area further analysis would be required to investigate the impact development would have on soil degradation.

Any change to the settlement boundary might potentially have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact development might have on soil degradation.

#### Criteria 5.5 Impacts on/of erosion & landslip.

Soils in the southern portion of the investigation area are identified as being subject to waterlogging, gully erosion and sodic subsoils.<sup>5</sup>

If development was approved in this area further analysis would be required to investigate the impact development would have on soil erosion.

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact erosion and landslip might have on development.

<sup>3</sup> See map sheet 9 - <http://earthresources.efirst.com.au/categories.asp?clD=33>

<sup>4</sup> See [https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp\\_map.php?section=my\\_region](https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp_map.php?section=my_region)

<sup>5</sup> See [http://vro.agriculture.vic.gov.au/dpi/vro/coranregn.nsf/pages/soil\\_landform\\_units121](http://vro.agriculture.vic.gov.au/dpi/vro/coranregn.nsf/pages/soil_landform_units121)

#### Criteria 5.6 Impacts on/of salinity, acid sulfate soils.

The Natural Resource Management Mapping of the Corangamite Region does not identify areas of salinity or acid sulfate soils in the investigation area.<sup>6</sup> The land within the investigation area is located within an area where land-uses that change the hydrology may impact on salinity.<sup>7</sup>

Any change to the settlement boundary could potentially have a negative impact on the satisfaction of this criteria. If development was approved in this area further analysis would be required to investigate soil conditions and the impact salinity and acid sulfate soil conditions might have on development.

#### Criteria 5.7 Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.

The investigation area is adjacent to farmland and so the compatibility between urban and farming uses would be a design consideration. However, incompatibility with adjacent agricultural uses is not likely to be determinative of the suitability of urban development in the area.

The area is located in proximity (700m separation) to the existing Boral/Blue Circle limestone quarry and concrete manufacturing facility. However, Boral has discontinued limestone quarrying at the site, and will soon relocate concrete activities to its new facility at the Port of Geelong. The site is now under active rehabilitation.<sup>8</sup>

There are no other land uses within or near to the site that are likely to present land-use compatibility issues.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

<sup>6</sup> See [https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp\\_map.php?section=my\\_region](https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp_map.php?section=my_region)

<sup>7</sup> City of Greater Geelong Salinity Management Overlay Salinity occurrences and mapping, dated March 2008, prepared by Dahlhaus Environmental Geology Pty Ltd.

<sup>8</sup> Boral submission to Surf Coast DAL Standing Advisory Committee, 2021.

Criteria 5.8 Impacts on/of major hazard facilities.

There are no major hazard facilities located close to the area.

Any change to the settlement boundary would have no impact on the satisfaction of this criteria.

### 3.6 - Natural Resource Management:

Criteria 6.1 Impact on the protection of agricultural land.

The agricultural land within the area is identified as being within 'Class 4' land capability, meaning that the land is not as inherently capable for intensive soil-based agriculture as other agricultural land within the region.<sup>9</sup>

Any change to the settlement boundary is expected to have a negative impact on the availability of land for agricultural production and therefore the satisfaction of this criteria. However, given the land classification of the area, the impact on the achievement of wider agricultural production objectives would be modest.

Criteria 6.2 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources.

Residential development within the area could potentially impact on catchments or waterways in the area but these impacts could be readily mitigated through the design of any urban stormwater infrastructure within the area.

Any change to the settlement boundary is expected to have a neutral impact on the protection of nearby catchments and therefore the satisfaction of this criteria.

<sup>9</sup> Assessment of Agricultural Land Capability in Melbourne's Green Wedge and Peri-urban Areas Agriculture Victoria Research Final Technical Report Updated October 2018, prepared by Agriculture Victoria.

Criteria 6.3 Impact on the protection of extractive resources.

The area is not identified as an Extractive Industries Interest Area, and there are no quarries located within 1km of the area.

### 3.7 - Heritage:

Criteria 7.1 Impact on known Aboriginal cultural heritage values.

Aboriginal Victoria mapping shows that the properties on the southern boundary of the investigation area contain areas of "cultural heritage sensitivity".<sup>10</sup>

Consultation with Traditional Owners and further assessment of potential areas of Aboriginal cultural heritage sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

A Cultural Heritage Management Plan would be required prior to the commencement of works onsite associated with development in the investigation area.

Any change to the settlement boundary is expected to have neutral impact on the protection of known areas of Aboriginal cultural heritage sensitivity. However, consultation with Traditional Owners and further assessment of other potential areas of Aboriginal Cultural Heritage Sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

Criteria 7.2 Impact on known post contact heritage values.

No known sites of post-contact heritage values exist that would be determinative of the suitability of urban development in the area.

<sup>10</sup> See <https://achris.vic.gov.au/#/onlinemap>

### 3.8 - Transport:

Criteria 8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access.

The area currently has access to Geelong and the wider region via Pidgons Lane and there are 5 existing bus routes that provide access to Deakin University and nearby facilities within the investigation area.<sup>11</sup> Given this context, the area is relatively accessible and the feasibility and cost of providing adequate public transport and road access is not likely to be significant.

Any change to the settlement boundary would satisfy this criteria.

### 3.9 - Infrastructure:

Criteria 9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage.

The land within the investigation area is in close proximity to a number of schools, community facilities and open space facilities in the adjoining urban area. There is also a shopping centre near to the investigation area. However, these facilities were not originally planned to cater for substantial additional housing growth in this area.

Initial consultation with Barwon Water has identified the following:

- This area would be difficult to service
- This land is a lot higher than where the existing water network can supply
- The area would need its own water system
- There is no capacity in the existing adjoining sewer system

The technical feasibility and cost-effectiveness of providing additional urban services to cater for additional housing growth in this location has not been examined as part of this desktop review.

However, any change to the settlement boundary in this area is anticipated to have a negative impact on the ability to cost-effectively provide urban services in this area.

<sup>11</sup> See <https://www.ptv.vic.gov.au/assets/default-site/more/maps/Local-area-maps/Regional/c7de90c6b9/Geelong-Bus-Network.pdf>

6.6

Waurm Ponds South

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

261.836 ha (gross land area).

## 1.2 Definition of investigation area:

The Waurnd Ponds South investigation area comprises the existing rural living subdivision and the Boral/Blue Circle quarry land holdings located between the Princes Highway and Waurnd Ponds Drive (refer Figure 59 and 60).

The eastern-most rural living lots are adjacent to established residential land in Waurnd Ponds (Principle 2). Given that these rural living lots form part of a wider 'rural living' precinct, an investigation area that is larger than just the contiguous land holdings has been selected. Including all of the rural living lots plus the Boral/Blue Circle quarry land holdings into the investigation area enables a more holistic consideration of the settlement boundary options in this location.

## 1.3 Current Zoning and Overlays:

The land within the investigation area is located within the Rural Living Zone and Special Use Zone Schedule 7 – Earth and Energy Resources. The properties within the investigation area are also partially impacted by the Significant Landscape Overlay – Schedule 3 (Waurnd Ponds Valley) and the Design and Development Overlay – Schedule 6 (Waurnd Ponds Quarry Environs).

The above zones and overlays are shown at Figures 61 to 63.

A photo montage of the existing site context of the investigation area is shown at Figure 64.

## 1.4 Investigation Area & Surrounds:

The land within the Waurnd Ponds South investigation area is rural in nature and lots in the northern part of the area are highly fragmented. Lots in this area comprise established dwellings in a relatively high quality semi-rural setting. There are a number of wineries located in northern section as well as the Waurnd Ponds Community Hall and Tennis Court.

The southern part of the investigation area comprises the Boral/Blue Circle quarry land holding which is undergoing rehabilitation works. Land to the north of the investigation area contains the following uses:

- Deakin University
- Epworth Hospital
- Christian College Geelong Senior School
- Marcus Oldham College

To the east of the investigation area is the suburb of Waurnd Ponds which comprises an established residential area as well as the Waurnd Ponds Shopping Centre.

**Geelong Growth Investigation Areas**  
Waurm Ponds - Southern Area Investigation Area

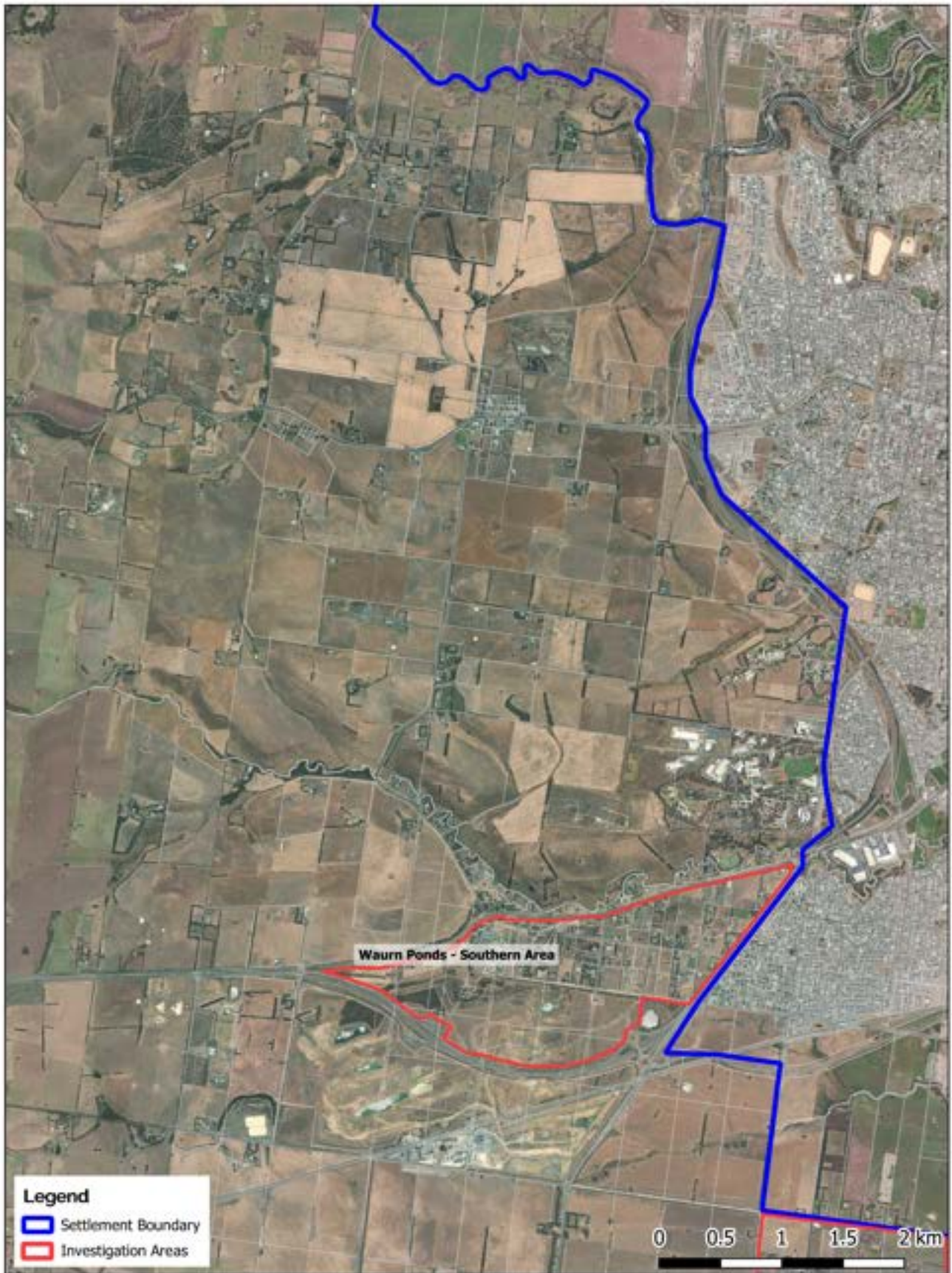


Figure 59. Waurm Ponds South – Aerial Cadastral Plan.

**Geelong Growth Investigation Areas**  
Waurm Ponds - Southern Area Investigation Area

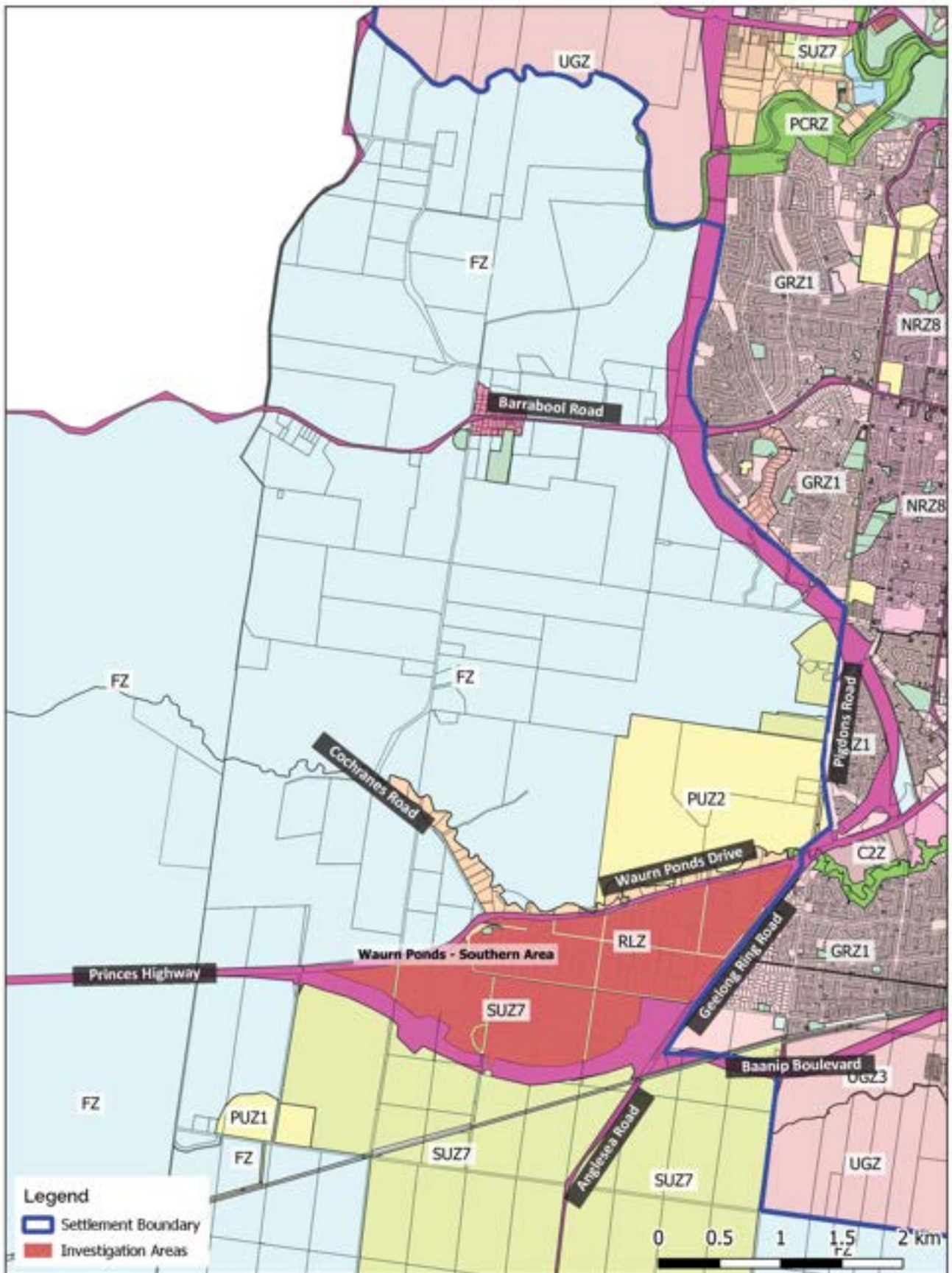


Figure 60. Waurm Ponds South – Investigation Area Plan.

**Geelong Growth Investigation Areas**  
 Waurn Ponds - Southern Area - Zoning

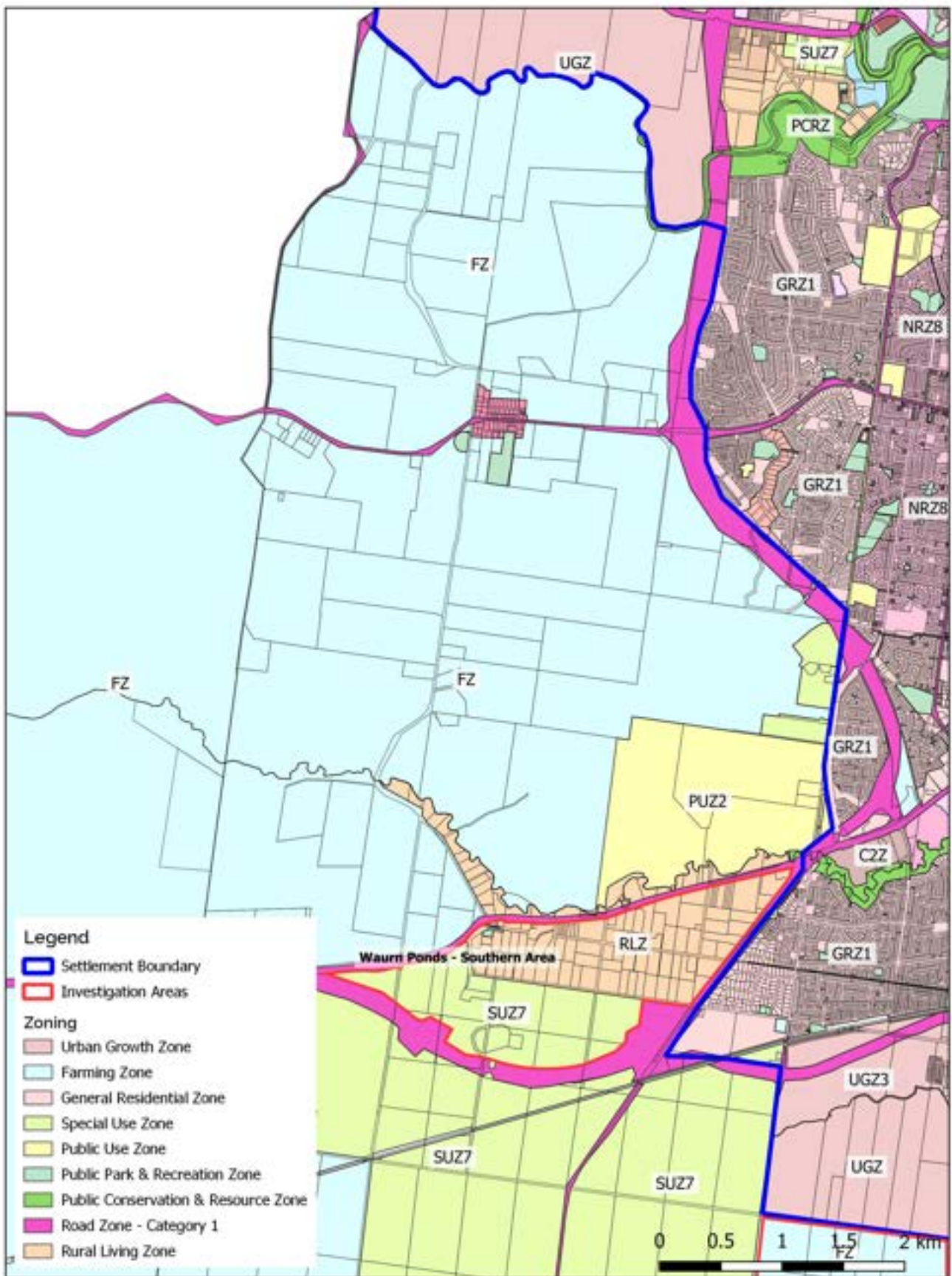


Figure 61. Waurn Ponds South – Zoning Plan.

**Geelong Growth Investigation Areas**  
Waurm Ponds - Southern Area - Overlays

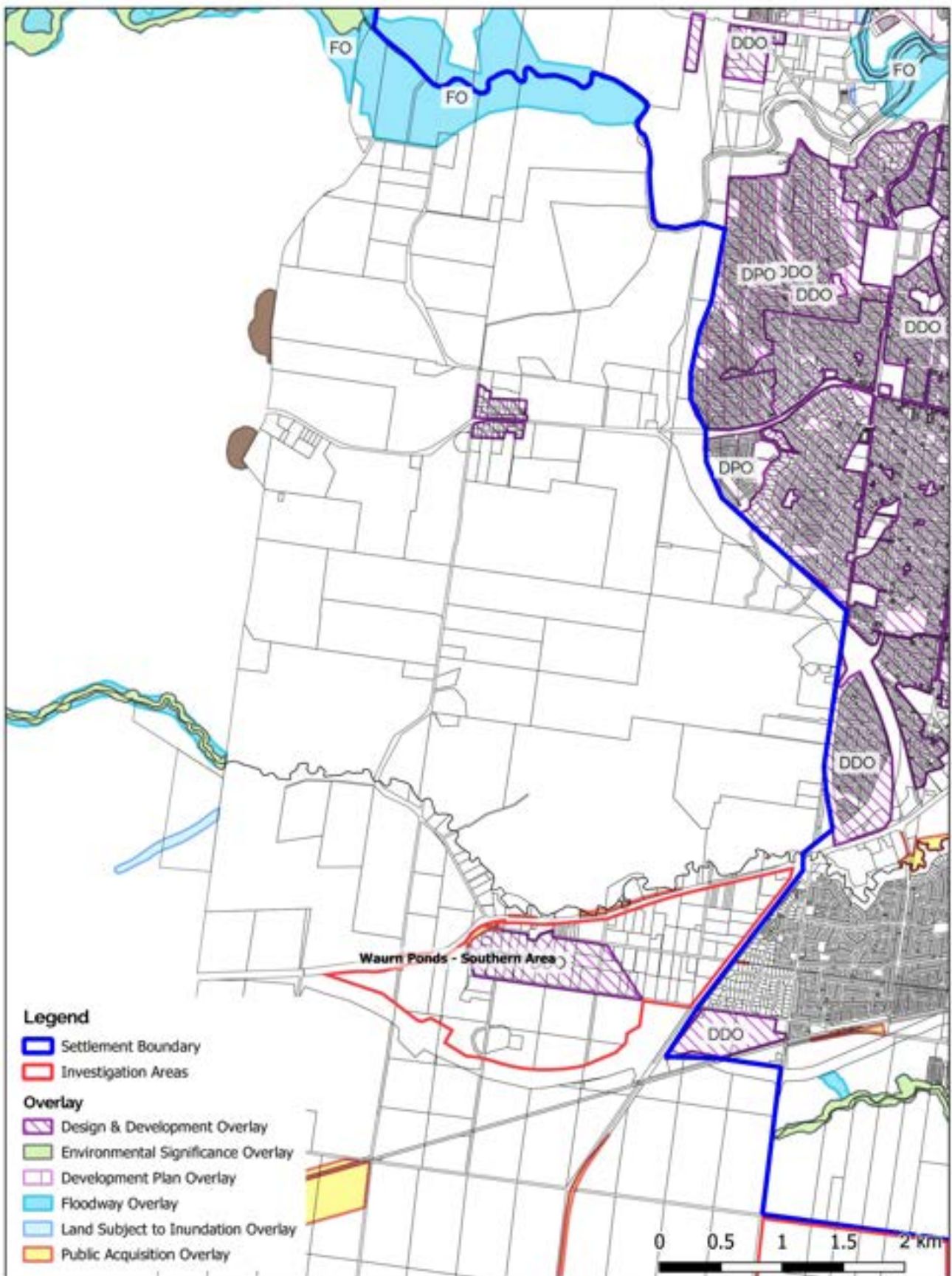


Figure 62. Waurm Ponds South – Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Waurm Ponds - Southern Area - Overlays

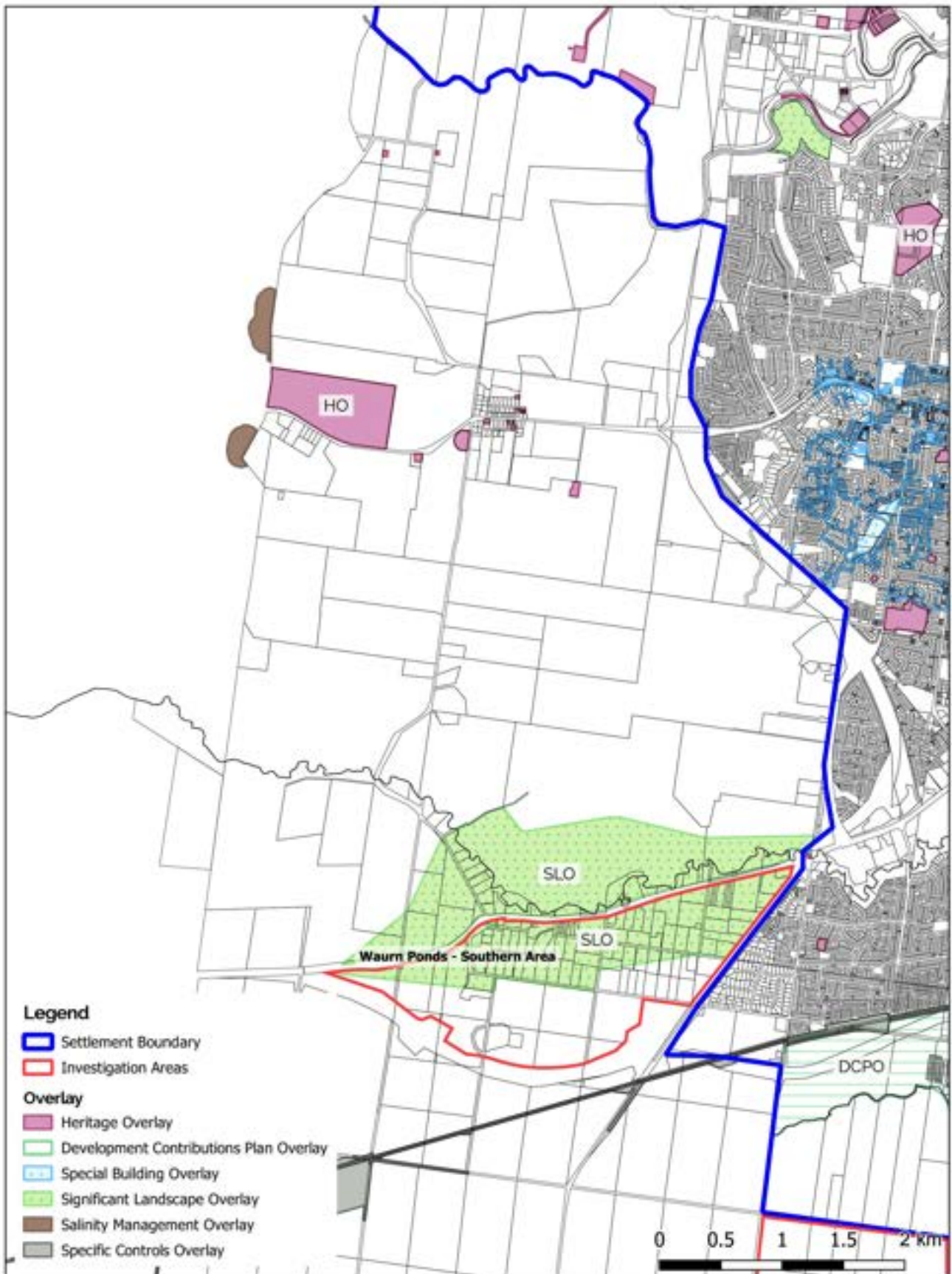


Figure 63. Waurm Ponds South – Overlays Plan 2.



Figure 64. Waurn Ponds South – Photo Montage.



## 2 - Summary of Recent Submissions in Relation to the Settlement Boundary

Boral made the following submission to the Geelong Settlement Strategy (Planning Scheme Amendment C395) relating to land within the Wurn Ponds North area:

The Boral land holdings (including land north of the Princes Freeway) should:

- (a) be rezoned to Urban Growth Zone; and
- (b) designated in local policy (either as revisions to the Settlement Strategy and Northern and Western Geelong Growth Areas Framework Plan, or separately) as -
  - i. a growth area;
  - ii. within the Urban Growth boundary.

The Independent Panel that considered submissions to Amendment C395 concluded the following in respect to this submission:

- The Boral land could be designated in the Settlement Strategy for further investigation to meet the municipality's future housing needs at the end of its extractive use and resolution of the DAL process.
- There is insufficient strategic justification for the Boral land to be identified as a growth area or rezoned to Urban Growth Zone as part of this Amendment.

[Boral also made submissions to the Surf Coast DAL Standing Advisory Committee regarding the Protected Settlement Boundary proposed in the draft Statement of Planning Policy. Whilst this submission references both the northern and southern Boral land holdings, the submission largely deals with the southern land holding within the Surf Coast DAL area, which Boral submitted should be identified as urban in the Statement of Planning Policy.]

## 3 - Assessment of Investigation Area Against Suitability Criteria

The land within the Rural Living Zone in this investigation area is designated as a 'Rural Living Area' under the Geelong Settlement Strategy.

This Strategy identifies this area as 'no expansion' (refer Figure 65) and it contains a Direction to limit rural-living developments to the existing zoned land.

The Strategy also notes the following in relation to rural living activities:

"These areas provide lifestyle and housing choice, but are considered inefficient to service and residential development is generally contrary to the objective of maintaining a farmed, rural landscape in these areas."

The Geelong Settlement Strategy does not support expansion of rural living activities beyond the existing Rural Living zone boundary in this location nor does it support the conversion of this area from rural living to urban living.

Given the above policy settings, this investigation area has not been subject to a detailed assessment against the settlement boundary assessment criteria.

However, the following is a broad assessment of this investigation area against the relevant assessment criteria:

- The Princes Highway is a logical and enduring settlement boundary in this location. There are no features within the investigation area that represent a more logical or enduring boundary than this. Inclusion of the entire investigation area into the settlement boundary would create a narrow and relatively isolated peninsula of urban development that would neither be large enough to function as a self-contained neighbourhood nor be well connected to facilities within the existing urban area (Criteria 1.1).
- The northern part of the investigation areas (land within the RLZ) forms part of a significant rural landscape, recognised under the Greater Geelong Planning Scheme (SLO3 – Wauran Ponds Valley). This overlay identifies that the Wauran Ponds Valley is comprised of smoothly rounded hills sloping steeply to a flat-bottomed, meandering river valley. The valley is identified as a strategic location at the westerly entrance to Geelong which contains important view lines and scenic qualities. The overlay seeks to ensure the scenic values of the Princes Highway through the Wauran Ponds Valley are not compromised by inappropriate development and to protect and enhance the Wauran Ponds Valley as an entrance feature to Geelong.
- The existing rural living development within this area is generally compatible with the landscape character objectives contained within SLO3. However urban residential development would create a significant intrusion into scenic values of this existing valued landscape setting (Criteria 4.3).
- The land on the southern portion of the investigation area is covered by the Significant Landscape Overlay (Schedule 3 – Wauran Ponds Valley). Altering the settlement boundary in this location would likely contravene the purposes of this overlay.
- This area is also located between the existing settlement boundary and the urban break identified in the Geelong Settlement Strategy. Urban residential development would have an adverse effect on the landscape character of this urban break (Criteria 4.4).
- Whilst this area is located relatively close to the Wauran Ponds Train station, the design of the Princes Freeway does not make provision for direct road or public transport access to the station from this location. The area is located over circa 3km by road away from this station (Criteria 8.1).

- Land within the investigation area is highly fragmented and converting this area from rural to urban residential would present many challenges from both a sequencing and servicing perspective (Criteria 8.2).
- The area is not of sufficient scale to be able to create a new residential neighbourhood and therefore the cost-effectiveness and sustainability of delivering utility and community services to this area is likely to be a significant challenge (Criteria 8.2).
- Given the area's relative isolation from the existing urban areas of Geelong, inclusion of this area within the settlement boundary would necessitate the provision of additional community infrastructure, which is inconsistent with one of the 5 main principles established to guide the Long Term Boundary review under the Geelong Settlement Strategy.

Initial consultation with Barwon Water has identified the following:

- This area would be difficult to service
- This land is a lot higher than where the existing water network can supply
- The area would need its own water system
- There is no capacity in the existing adjoining sewer system

Whilst the land to the south of the RLZ is not fragmented, it is more remote from urban services and facilities than the RLZ land. If the existing RLZ remains used for rural living purposes, then the land to its south would not be suitable for urban residential development for the following reasons:

- The area is not contiguous with established or planned future urban residential areas.
- The area is not well connected to established or planned urban residential areas – it is isolated from urban Geelong by the Princes Freeway and existing rural living area.
- On its own, the area is not of a sufficient size to support the range of social infrastructure needed to support a self-contained neighbourhood.



Figure 65. Extract from Geelong Settlement Strategy, Figure !A (Waurn Ponds South investigation area shown in red).

6.7

Lara North

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

184.294 ha (gross land area).

## 1.2 Definition of investigation area:

The investigation area in Lara North has defined by the parcels which are contiguous with the Urban Growth Zone land to the south of the existing settlement boundary (Principle 2) (refer Figures 66 and 67).

Consideration was given as to whether parcels beyond the contiguous area should be included within the investigation area as a means to establish more logical and enduring boundary. However, the size and layout of land parcels north of the contiguous lots would mean that the investigation area boundary would need to extend up to the Special Use Zone land, which is circa 1.7km north of the existing settlement boundary (circa 450ha in area).

This would represent a land area large enough to create an entirely new large neighbourhood within Lara. One of the principles guiding this review is that land must be able to rely on existing facilities and services and not create the need for additional or new community infrastructure that would be required for a new residential node. The inclusion of the land north of the lots contiguous with the current settlement boundary would not satisfy this principle due to land area considerations alone.

As such the investigation area has been confined to the lots which are contiguous with the Urban Growth Zone in this location.

## 1.3 Current Zoning and Overlays:

The land within the investigation area is located within the Farming Zone (refer Figure 68).

The properties within the investigation area are also partially impacted by the Flood Overlay (refer Figures 69 and 70 for affecting and nearby overlays).

A photo montage of the existing site context of the investigation area is shown at Figure 71.

Geelong Growth Investigation Areas  
Lara North Investigation Area

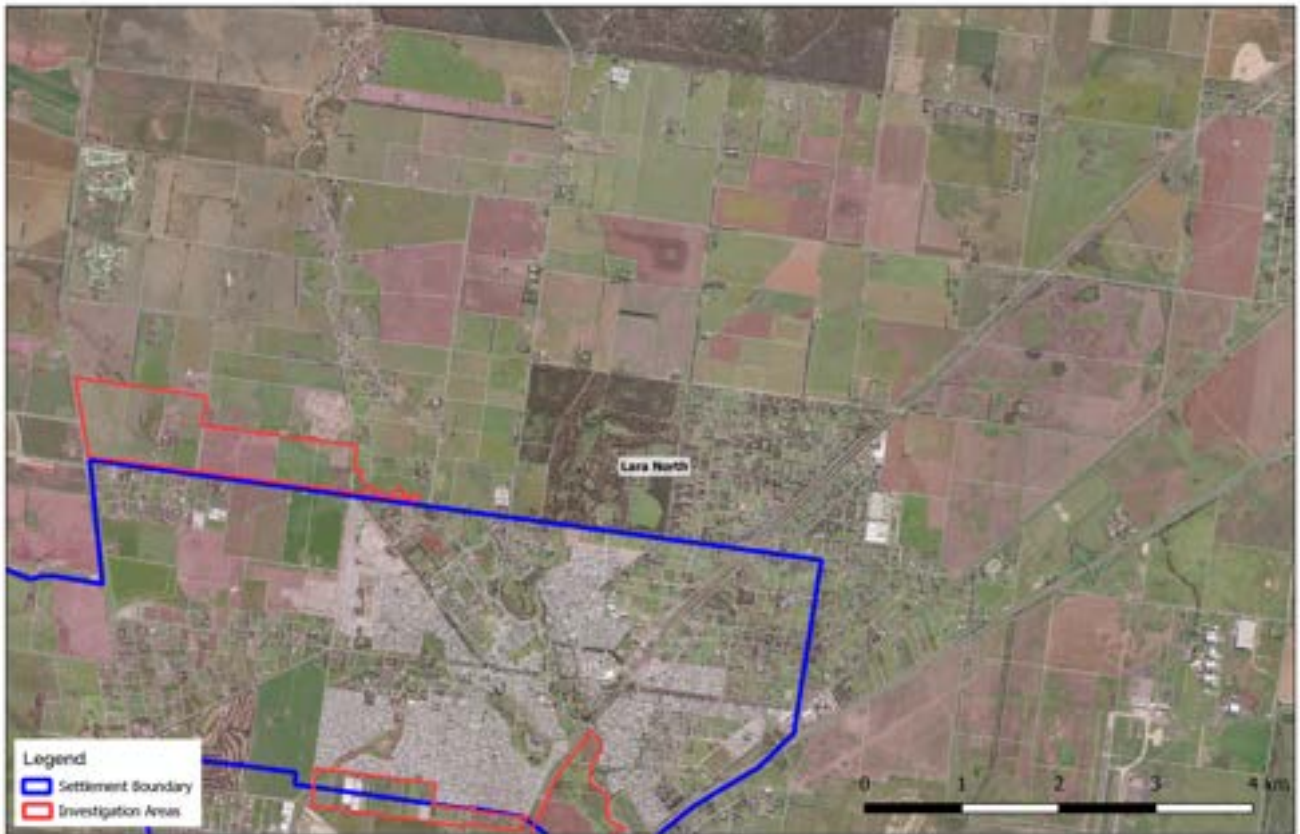


Figure 66. Lara North – Aerial Cadastral Plan.

Geelong Growth Investigation Areas  
Lara North Investigation Area

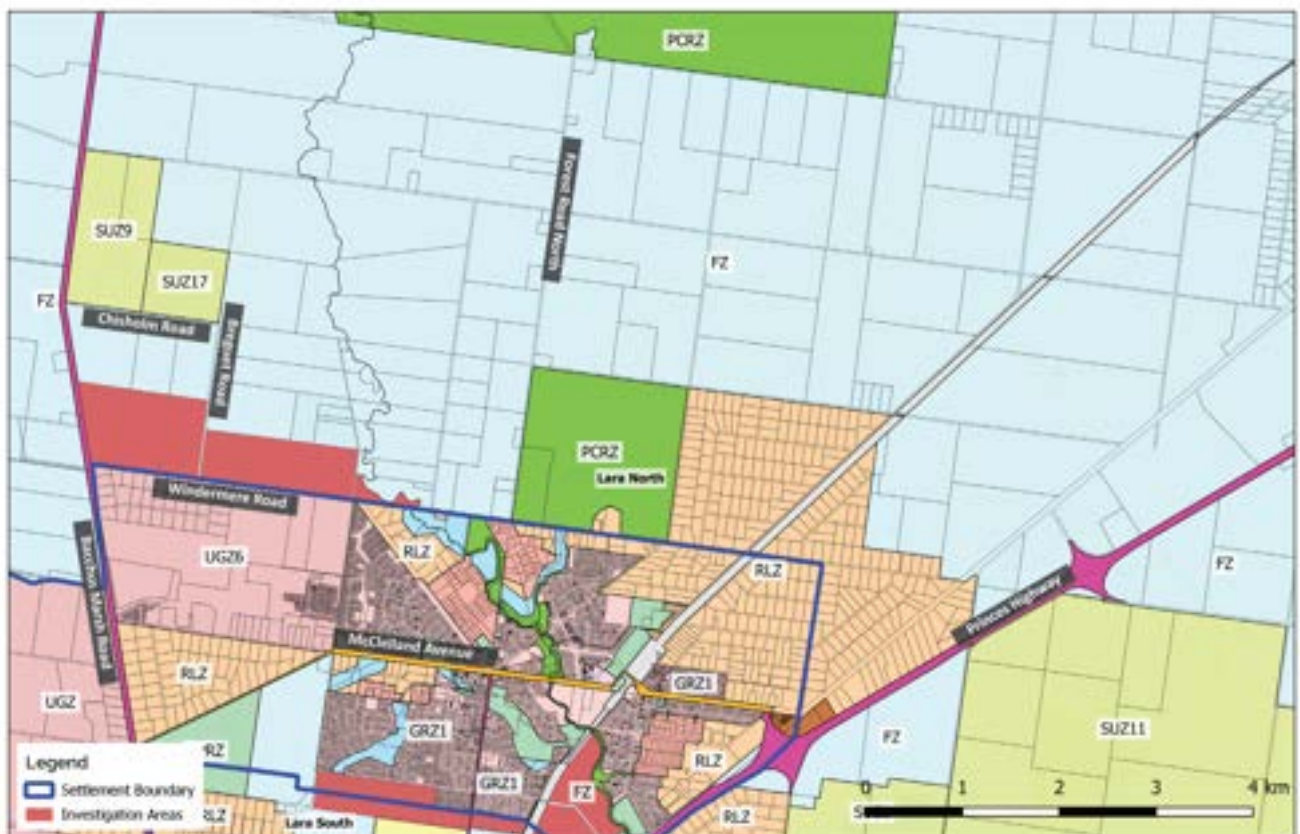


Figure 67. Lara North – Investigation Area Plan.

Geelong Growth Investigation Areas  
Lara North - Zoning

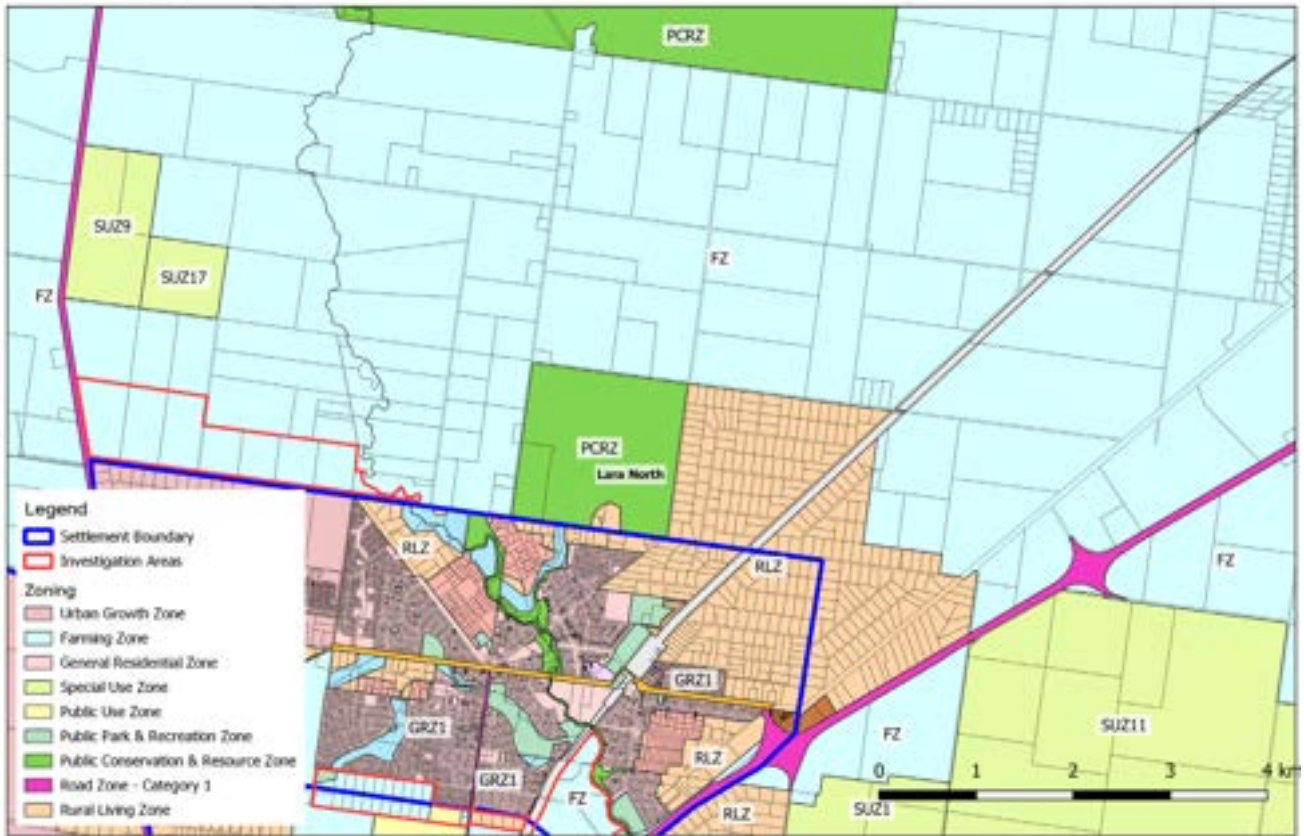


Figure 68. Lara North – Zoning Plan.

Geelong Growth Investigation Areas  
Lara North - Overlays

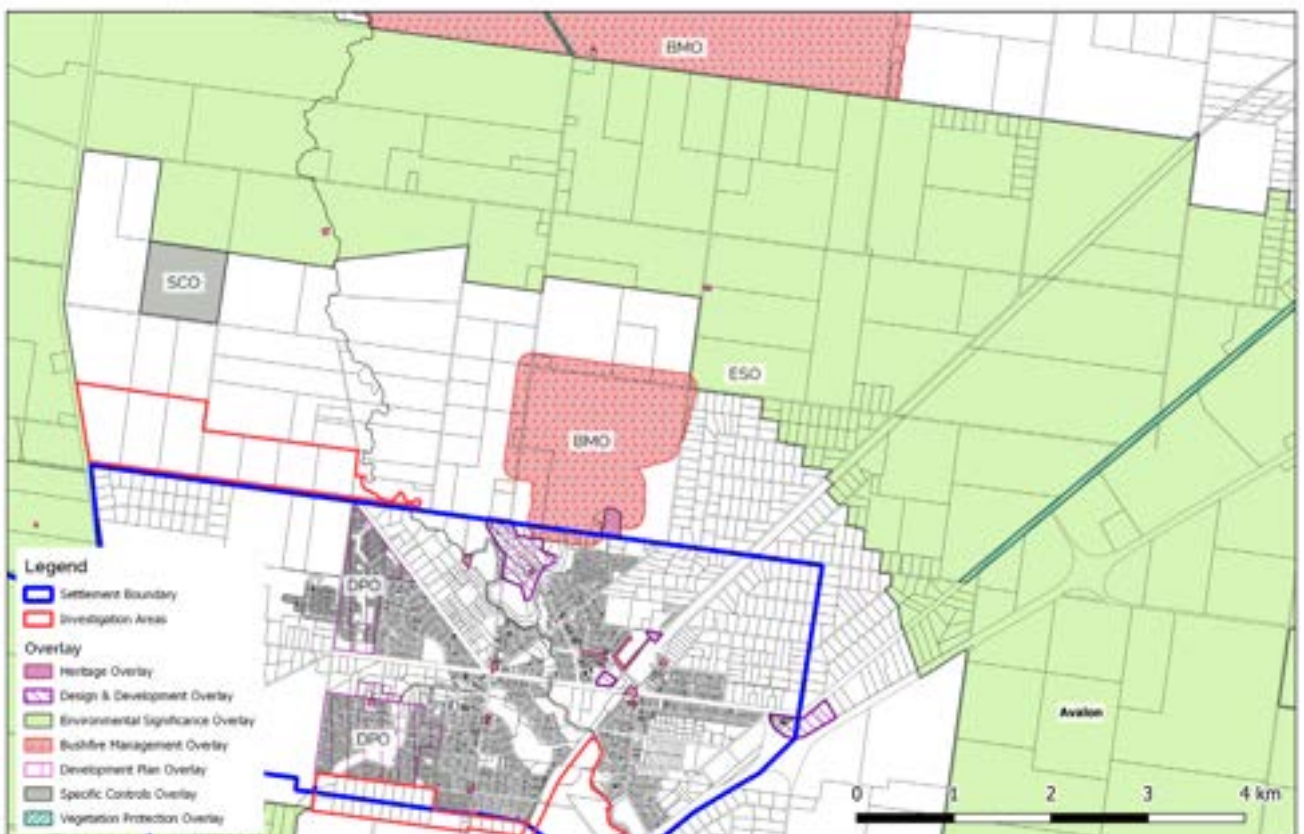


Figure 69. Lara North – Overlays Plan 1.

Geelong Growth Investigation Areas  
Lara North - Overlays

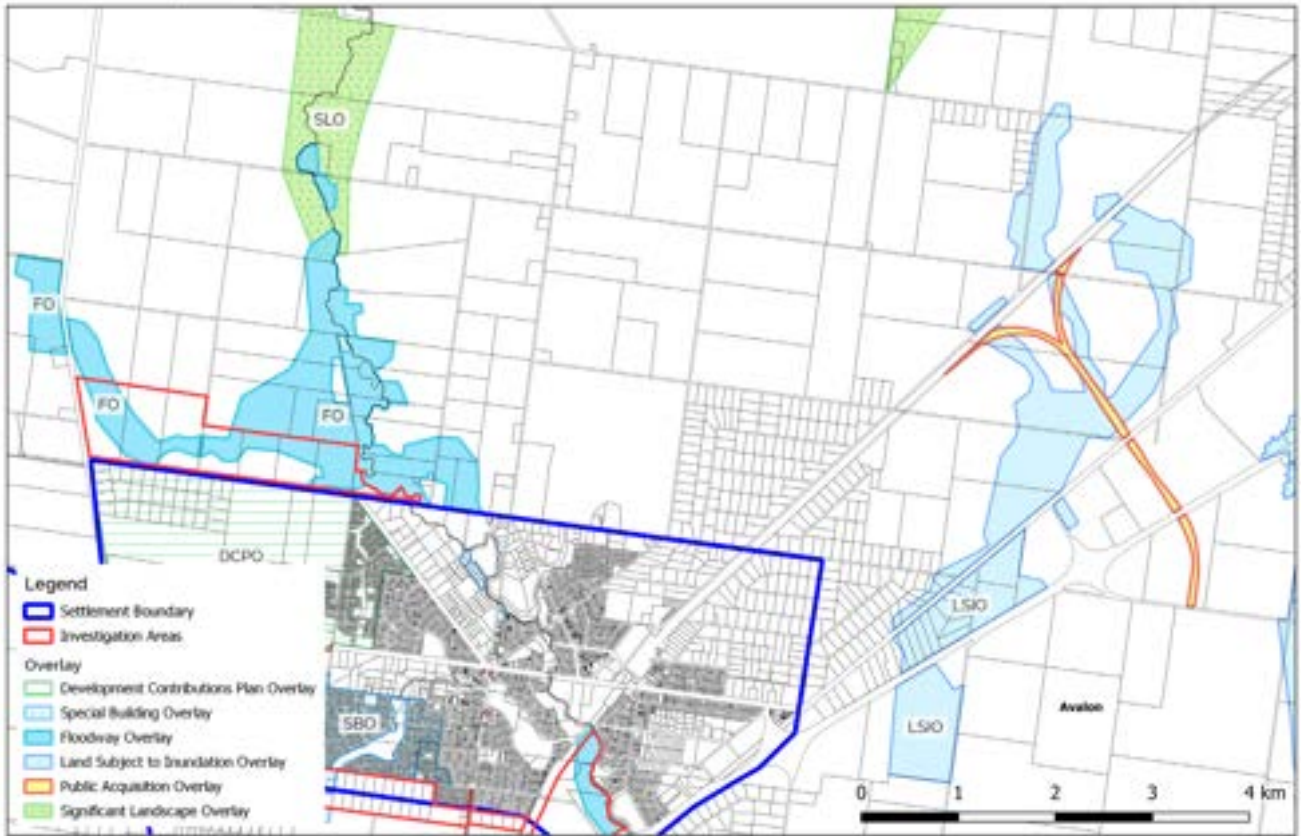


Figure 70. Lara North – Overlays Plan 2.



Figure 71. Lara North – Photo Montage.



Figure 72. Lara West Precinct Structure Plan - Plan 5: Future Urban Structure (CoGG, 2013).

### 1.4 Investigation Area & Surrounds:

The land within the Lara North investigation area is rural in nature. Three of the properties contain existing dwellings and a number of sheds. The southern property boundaries of the western side of the investigation area are delineated by a dry stone wall. This wall is not protected by a Heritage Overlay under the Geelong Planning Scheme.

High voltage transmission lines traverse the land on the eastern side of the investigation area in a north-south direction.

The You Yangs are located approximately 2km to the north of the investigation area and are visible from all of the properties.

The Serendip Sanctuary Wetlands are located approximately 1km to the east of the investigation area.

The land to the south of the investigation area is located within the Lara West Precinct Structure Plan (PSP) (refer Figure 72). The PSP identifies the following uses within the precinct:

- Conventional residential across the majority of the precinct with small pockets of medium density;
- One government secondary school;
- One government primary school;
- One private primary school;
- An employment precinct;
- A neighbourhood activity centre;
- A local activity centre;
- Two community facilities;
- A sports reserve and a number of small local parks.

## 2 - Summary of Recent Submissions in Relation to the Settlement Boundary

A submission was made by the landowner of 540 Flinders Lane, Lara in relation to the Geelong Settlement Strategy (Planning Scheme Amendment C395). The site's proximity to our study area is shown within Figure 73 below.

The landowner submission identifies that the site "poses a significant opportunity to complement the recent and future residential growth and economic development of the surrounding area". They note the site's location within the Avalon Corridor Strategy and that the site can leverage off the growth of the Avalon Airport, providing for accommodation and a unique tourism experience.

The focus of the Long Term Boundary review is to review the existing settlement boundary and make recommendations on any potential minor changes to resolve illogical or anomalous settlement boundaries.

This land holding is located circa 4km from the investigation area boundary and therefore has not been assessed as part of this review.

Geelong Growth Investigation Areas  
Lara North Investigation Area

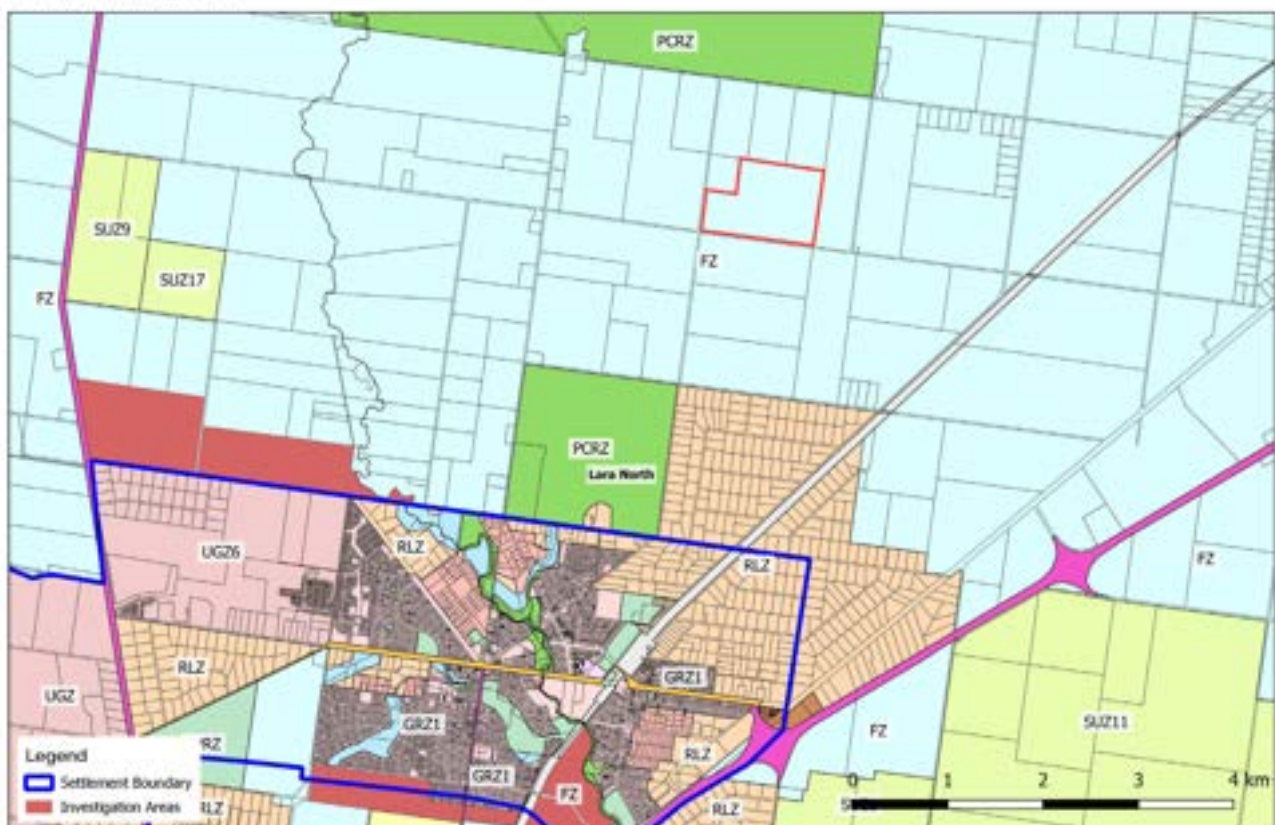


Figure 73. Lara North Investigation Area Plan, with 540 Flinders Lane, Lara shown centre-north.

## 3 - Assessment of Investigation Area Against Suitability Criteria

The following is an assessment of the investigation area against the Long Term Boundary review Decision Criteria.

### 3.1 - Settlement:

Criteria 1.1: Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (including consideration of natural features, location of major roads and reservations for public utilities).

The existing settlement boundary is located on Bacchus Marsh Road to the west and Windermere Road to the north. The alternative boundary considered in this review is located along Bacchus Marsh Road to the west and a cadastre to the north and Hovells Creek to the east. There are no natural features (other than Hovells Creek) in direct proximity to the investigation area.

The definition of a settlement boundary along a cadastre is less logical and enduring than the use of an existing road such as Windermere Road. Whilst future urban development within any revised settlement boundary could create a new local road edge along to its north, this would still be a less prominent and enduring boundary than Windermere Road, which stretches for 7 kilometres between Bacchus Marsh Road and the Melbourne-Geelong rail line.

The current settlement boundary satisfies this Criteria. Any change to the settlement boundary in this location would have a negative impact on the satisfaction of this criteria.

### 3.2 - Managing Growth:

Criteria 2.1: Impact on the orderly development of the adjoining urban area.

Inclusion of land within the investigation area into the settlement boundary could have an adverse impact on the orderly development of land within the Lara West Precinct Structure Plan in that the release of additional greenfield residential land in the investigation area could delay the residential redevelopment of smaller land holdings in Patullos Road and West Gateway areas within the Lara West PSP. This in turn would impact on the ability to fund and deliver the full range of infrastructure anticipated for this precinct under the PSP and associated DCP.

Inclusion of land within the investigation area into the settlement boundary is also expected to have an impact on the orderly provision of social infrastructure in the Lara West area.

Using the social infrastructure benchmarks set out in the methodology chapter of this report, the potential for residential development to generate demand for additional infrastructure in Lara West has been assessed.

The Lara West PSP will result in the creation of a large residential neighbourhood located 3+ kilometres from the centre of the Lara Township. The PSP area is anticipated to accommodate circa 4000 dwellings when fully developed. The PSP has been drafted based on integrated neighbourhood design principles and it makes provision for a neighbourhood activity centre, 2 community centres, a secondary and 2 primary schools and sporting reserves. This infrastructure has been determined as what is needed to support a community of circa 4000 dwellings.

The investigation area has a gross area of 184 ha and could potentially accommodate a further circa 2000 dwellings. Inclusion of the investigation area land within the settlement boundary will generate demands for additional infrastructure that have not been factored in to the infrastructure proposed within the Lara West PSP.

We have undertaken an assessment of the effect on the requirement for community infrastructure based on the additional land being added to the catchment of the Lara West PSP. The results of the assessment are outlined below in Table 2.

Inclusion of additional dwellings in the investigation area is anticipated to generate an additional demand for school, community and active open space facilities in Lara West.

The land area within the investigation area is not sufficient to accommodate (or most likely fund) the full range of social infrastructure needed to support an additional 2000 dwellings, and there is limited scope for the infrastructure needed to support this growth to be provided within the Lara West PSP.

For the above reasons, inclusion of the investigation land is considered likely to affect the orderly planning and development of the wider Lara West area.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

Table 2. Assessment of effect on the requirement for community infrastructure based on additional land being added to the catchment of the Lara West PSP.

RESULTS:	Assessed need for Lara West PSP plus residents in investigation area - based on VPA benchmarks	PSP Provision	Shortfall based on Benchmarks ?
Govt primary	2	1	Yes – Would require further assessment and liaison with DET to determine if shortfall acceptable having regard to capacity of other schools etc
Govt secondary	0.7	1	No
Level 1 community	2.1	2 unclear from information what level	Yes – additional facility likely required
Level 2 community	0.9		
Active Open Space	2.9	1	Yes  Additional AOS required

Criteria 2.2: Impact on management of the sequence of development and the early provision of services.

The Lara West PSP anticipates that development will be staged from east to west, although the work has commenced on the Austin estate in the south-west corner of this PSP area.

The Lara West PSP was prepared in 2013 and to date only limited development has commenced within this area. It is understood that resolving the design and delivery of stormwater assets within the PSP has delayed commencement of development, but that this matter is now largely resolved and the rate of development in the Lara West precinct is expected increase in coming years.

Inclusion of land within the investigation area into the settlement boundary could potentially have an adverse impact on the sequencing of development across Lara West and therefore the early provision of infrastructure in the Lara West PSP/DCP area, depending on the timing of any development occurring in the investigation area relative to the timing of land within the Lara West PSP being fully developed.

If the development of land within the Lara West PSP area was delayed as a result of additional residential land being released in the investigation area then the rate of development contributions and works in kind infrastructure delivered by development within the PSP would also be delayed.

However, this impact could be managed by delaying the rezoning and preparation of any PSP within this area until the point that enough of the land within the Lara West PSP has been developed.

Any change to the settlement boundary could potentially have a negative impact on the satisfaction of this criteria, depending on the timing of development commencing in this area.

Criteria 2.3: Impacts of any proposed boundary changes on the economic provision of other development fronts.

The economic provision of infrastructure in the Lara West PSP development front is dependent on the orderly and efficient sequencing of development of land within it. The inclusion of additional land in the investigation area could potentially have the effect of delaying the redevelopment of smaller land holdings within the PSP area and therefore affect the timely and economic provision of utility and social infrastructure within the PSP area.

However, this impact could be managed by delaying the rezoning and preparation of any PSP within this area until the point that enough of the land within the Lara West PSP has been developed.

Any change to the settlement boundary could potentially have a negative impact on the satisfaction of this criteria, depending on the timing of development commencing in this area.

### 3.3 - Planning for Places – Distinctive Areas & Landscapes:

Criteria 3.1: Impact on any identified unique features or special characteristics within a declared area.

Land in the investigation area is not located within a Declared Area under the Distinctive Areas and Landscapes legislation.

### 3.4 - Environmental & Landscape Values:

Criteria 4.1 Impact on the protection of biodiversity values.

The investigation area is located within a Victorian Volcanic Plain Bioregion. DELWP Biodiversity mapping indicates that the broader area north of the existing settlement boundary contains Plains Grasslands and Chenopod Shrublands, and Creekline Grassy Woodlands/Forest vegetation communities.<sup>1</sup>

Further assessment of any specific ecological values on the investigation area would be required in order to determine the specific ecological values in this location, and the extent to which these might constrain the development potential of this area.

It is possible that a PSP could address biodiversity and native vegetation impacts via a Native Vegetation Precinct Plan.

The impact of any change to the settlement boundary on the satisfaction of this criteria is not known.

Criteria 4.2 Impact on the protection of coastal areas & wetlands.

Land within the investigation area is not affected by a coastal area or wetland. The closest wetland is Serendip Wetland 1km to the east of the area.

Criteria 4.3 Impact on the protection of significant landscapes.

The investigation area is located in the western volcanic plains which has been assessed as having a landscape character comprising 'big skies, long views with volcanic rises that punctuate the horizon.'<sup>2</sup>

The landscape within the investigation area has not been identified as being of state or regional significance, and the Significant Landscape Overlay does not apply to the area.

<sup>1</sup> See <https://maps2.biodiversity.vic.gov.au/Html5viewer/index.html?viewer=NatureKit>

<sup>2</sup> South West Victoria Landscape Assessment Study (2013), page 24.

The area offers distant views to the Brisbane Ranges, Anakie Hills and the You Yangs,<sup>3</sup> and the views north from Windermere road are primarily across flat open farmland.

Any change to the settlement boundary would have a neutral effect on the satisfaction of this criteria.

Criteria 4.4 Impact on the preservation of identified urban breaks.

The Geelong Planning Scheme identifies an urban break between Lara and the municipal boundary to the northeast.<sup>4</sup> The investigation area is located a considerable distance from this identified urban break and so residential development in this location would not have any adverse effect on the protection of this urban break.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria

### 3.5 - Environmental Risks:

Criteria 5.1 Climate change – impacts of coastal inundation & erosion.

The investigation area is not located in a coastal location.

Criteria 5.2 Bushfire risks in the location.

The investigation area is within a Bushfire Prone Area but is not located within or proximate to a Bushfire Management Overlay. Bushfire risk is not likely to be determinative of the suitability of urban development in the area. A Bushfire Management Plan could be prepared to manage the potential risks posed by bushfire on urban development in the area.

<sup>3</sup> Ibid., page 35.

<sup>4</sup> See - [https://planning-schemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21\\_mss06\\_ggee.pdf?\\_ga=2.261586637.1378271083.1638783549-1127495322.1625462890](https://planning-schemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21_mss06_ggee.pdf?_ga=2.261586637.1378271083.1638783549-1127495322.1625462890)

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

Criteria 5.3 Impacts on/of floodplains.

The investigation area is substantially affected by an existing Flood Overlay (refer Figures 74 and 75). Amendment C339 to the Greater Geelong Planning Scheme (currently under preparation) proposes to introduce an extensive area of Land Subject to Inundation Overlay to the investigation area.

The extent of land within the investigation area that might be suitable for urban development is not known at this point. Any future urban development within the investigation area would need to be informed by a detailed assessment of how local and wider catchment related flooding conditions could be addressed.

Any change to the settlement boundary would potentially have a negative impact on the satisfaction of this criteria. Further analysis would be required to determine the extent of this impact.

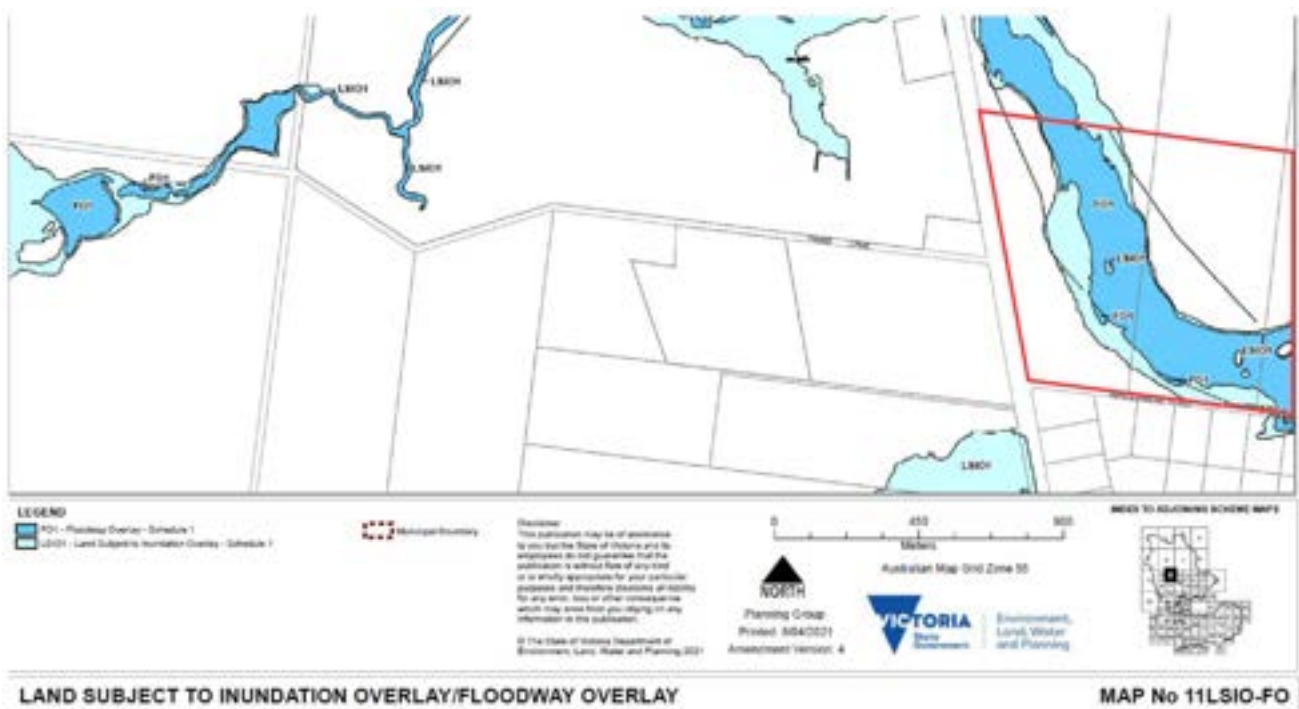


Figure 74. Draft Greater Geelong Planning Scheme - Local Provision Land Subject to Inundation Overlay/Floodway Overlay Exhibited Amendment C339ggee – Map 11

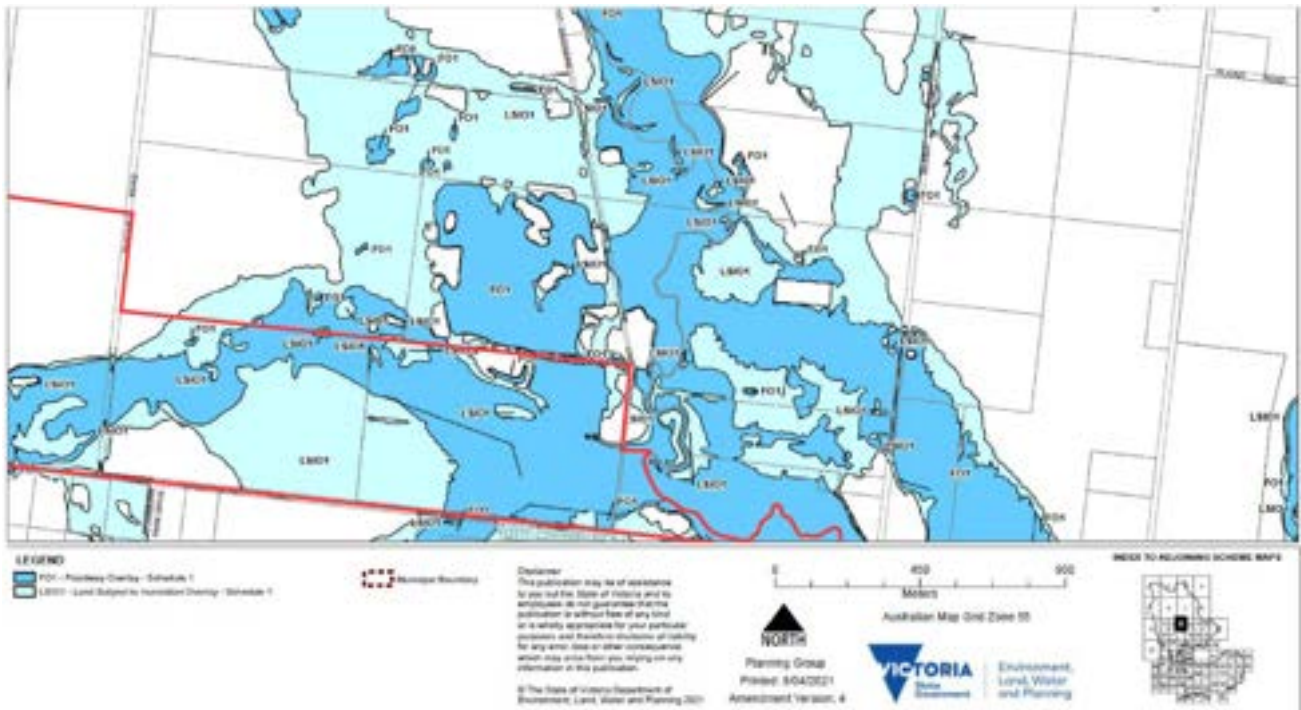


Figure 75. Draft Greater Geelong Planning Scheme - Local Provision Land Subject to Inundation Overlay/Floodway Overlay Exhibited Amendment C339ggee – Map 12.

**Criteria 5.4 Impacts on/of soil degradation.**

The Geological Survey of Victoria (1:63,360) Geological Map Series Geelong Sheet indicated that the site was underlain by Newer Volcanics including olivine basalts comprising clays as well as river alluvium (swamp deposits) comprising sand, gravel and clays.<sup>5</sup>

The Natural Resource Management Mapping of the Corangamite Region indicates that soils in the area which covers the investigation area are prone to compaction due to the sodic nature of the subsoils.<sup>6</sup>

If development was approved in this area further analysis would be required to investigate the impact development would have on soil degradation.

Any change to the settlement boundary might potentially have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact development might have on soil degradation.

**Criteria 5.5 Impacts on/of erosion & landslip.**

Soils in the area which covers the investigation area are prone to sheet and rill erosion, and gully erosion where sodic subsoils are exposed.<sup>7</sup>

If development was approved in this area further analysis would be required to investigate the impact development would have on soil erosion.

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact erosion and landslip might have on development.

5 See map sheet 9 - <http://earthresources.efirst.com.au/categories.asp?cID=33>

6 See [https://www.ccmaknowledgebase.vic.gov.au/nrmp/nrmp\\_map.php?section=my\\_region](https://www.ccmaknowledgebase.vic.gov.au/nrmp/nrmp_map.php?section=my_region)

7 See [http://vro.agriculture.vic.gov.au/dpi/vro/coranreg.nsf/pages/soil\\_landform\\_units121](http://vro.agriculture.vic.gov.au/dpi/vro/coranreg.nsf/pages/soil_landform_units121)

Criteria 5.6 Impacts on/of salinity, acid sulfate soils.

The Natural Resource Management Mapping of the Corangamite Region does not identify areas of salinity or acid sulfate soils in the investigation area.<sup>8</sup> The land within the investigation area is not located within an area where land-uses that change the hydrology may impact on salinity.<sup>9</sup>

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact salinity and acid sulfate soil conditions might have on development.

Criteria 5.7 Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.

The investigation area is adjacent to farmland and so the compatibility between urban and farming uses would be a design consideration. However, incompatibility with adjacent agricultural uses is not likely to be determinative of the suitability of urban development in the area. There are no other land uses within or near to the site that are likely to present land-use compatibility issues. As previously mentioned there is the ability to use the land in the investigation area to create a transition between the urban and rural zoned land and the Lara West PSP does not provide provision for this.

There is land 800m to the north of the investigation area which is covered by Special Use Zone 9 (Correctional Programs Centre at Lara) and Special Use Zone 17 (Chisholm Road Prison Project, Lara). Residential development in investigation area will not raise compatibility issues with these facilities given the separation distances between them.

<sup>8</sup> See [https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp\\_map.php?section=my\\_region](https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp_map.php?section=my_region)

<sup>9</sup> City of Greater Geelong Salinity Management Overlay Salinity occurrences and mapping, dated March 2008, prepared by Dahlhaus Environmental Geology Pty Ltd

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria.

Criteria 5.8 Impacts on/of major hazard facilities.

There are no major hazard facilities located close to the area.

### 3.6 - Natural Resource Management:

Criteria 6.1 Impact on the protection of agricultural land.

The agricultural land within the area is identified as being within 'Class 4' land capability, meaning that the land is not as inherently capable for intensive soil-based agriculture as other agricultural land within the region.<sup>10</sup>

Any change to the settlement boundary is expected to have a negative impact on the availability of land for agricultural production and therefore the satisfaction of this criteria. However, given the land classification of the area, the impact on the achievement of wider agricultural production objectives would be modest.

Criteria 6.2 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources.

Urban development in the area may potentially have downstream impacts on Limeburners Bay which contains a Ramsar listed wetland.<sup>11</sup> Residential development within the area could potentially impact on these waterways but these impacts could be mitigated through the design of any urban stormwater infrastructure within the area.

<sup>10</sup> Assessment of Agricultural Land Capability in Melbourne's Green Wedge and Peri-urban Areas Agriculture Victoria Research Final Technical Report Updated October 2018, prepared by Agriculture Victoria

<sup>11</sup> Corangamite Regional Catchment Strategy 2013-2019 prepared by Corangamite Catchment Management Authority

Any change to the settlement boundary is expected to have a neutral impact on the protection of nearby catchments and therefore the satisfaction of this criteria.

### 3.7 - Heritage:

Criteria 7.1 Impact on known Aboriginal cultural heritage values.

Aboriginal Victoria mapping shows that the properties on the eastern side of the investigation area are covered by areas of “cultural heritage sensitivity”.

Consultation with Traditional Owners and further assessment of potential areas of Aboriginal cultural heritage sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

A Cultural Heritage Management Plan would be required prior to the commencement of works onsite associated with development in the investigation area.

Any change to the settlement boundary is expected to have neutral impact on the protection of known areas of Aboriginal Cultural Heritage Sensitivity. However, consultation with Traditional Owners and further assessment of other potential areas of Aboriginal Cultural Heritage Sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

Criteria 7.2 Impact on known post contact heritage values.

No known sites of post-contact heritage values exist that would be determinative of the suitability of urban development in the area.

### 3.8 - Transport:

Criteria 8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access.

The area is located proximate to two existing local bus services within Lara.<sup>1</sup> These could be re-routed to service the area if necessary. Feasibility of providing public transport to the area would not be determinative of the suitability of urban development in the area.

Any change to the settlement boundary is expected to have a negative impact on the ability to cost-effectively provide public transport services to the Lara area, as it would be necessary to extend and re-route existing bus services to connect to this area

### 3.9 - Infrastructure:

Criteria 9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage.

#### Community Services:

Additional school, community facility and active open space facilities are expected to be required to cater for needs generated by additional housing in the investigation area. This potentially may not be cost effective to deliver given the relatively limited area available for urban development in the investigation area. This would require further assessment.

#### Utility Services:

There were issues with limited access to reticulated sewerage infrastructure in the Lara West area at the time that the Lara West PSP was prepared, and additional infrastructure was required to address existing shortfalls.<sup>2</sup>

<sup>1</sup> See <https://www.ptv.vic.gov.au/assets/default-site/more/maps/Local-area-maps/Regional/c7de90c6b9/Geelong-Bus-Network.pdf>

<sup>2</sup> Lara West Growth Area Infrastructure Services Report September 2012, prepared by Smec Urban Consulting Group

Initial consultation with Barwon Water has identified that the Lara system is approaching capacity - investment is needed in order to cater for the existing development. Any additional development would result in the need for further investment in upgrades

Given that the investigation area is subject to flooding and inundation, substantial drainage and flood mitigation works are likely to be needed to enable development and protect the environmental values of downstream wetlands and waterways.

This may not be cost effective to deliver given the relatively limited area available for urban development in this area. This would require further assessment.

Any change to the settlement boundary in this area is anticipated to have a negative impact on the ability to cost-effectively provide urban services to the area, as it would be necessary to construct at least some new community facilities and utility services to cater for the additional demand, rather than being able to rely on available capacity within existing/planned urban services.

6.8

Lara South

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

115.345 ha (gross land area).

## 1.2 Definition of investigation area:

The investigation area in Lara South has been largely defined by the parcels which are contiguous with the General Residential Zone land (Principle 2) (refer Figures 76 and 77).

Consideration was given as to whether parcels beyond the contiguous area should be included within the investigation area as a potential means to establish more logical and enduring boundary.

However, the proximity of these lots to the Industrial 2 zone would have a direct adverse effect on the ability of the Heales Road Industrial Area to fulfil its function as a location for manufacturing industries and storage facilities that require a substantial threshold distances.

As such the investigation area has been confined to the contiguous lots.

The existing settlement boundary has been defined based on the Lara Structure Plan.<sup>1</sup> It currently traverses a number of lots within the investigation area resulting in part of the parcel being within the settlement boundary and part being outside. Consideration will be given in this assessment as to whether this arrangement should remain, or the boundary should be moved to clearly include or exclude these parcels.

<sup>1</sup> The settlement boundary shown on the Framework Plan contained within the Geelong Planning Scheme does not exactly follow the settlement boundary shown in the Lara Structure Plan.

We understand that this is a mapping error, and we have adopted the settlement boundary shown in the Lara Structure Plan for the purposes of undertaking this review. Part of the investigation area is located within the settlement boundary shown within the Lara Structure Plan.

The purpose of including this land in the investigation area is to allow a holistic assessment of the boundary in this area.

## 1.3 Current Zoning and Overlays:

The land within the Lara South investigation area is affected by the following zones:

- Farming Zone;
- Public Park and Recreation Zone
- Public Use Zone – Schedule 6 (Local Government); and
- Rural Living Zone.

(refer Figure 78).

The following three properties on the western edge of the investigation area are affected by the Land Subject to Inundation Overlay:

- 10 Ohallorans Road;
- 20 Ohallorans Road; and
- 30 Ohallorans Road.

The following three properties on the eastern edge of the investigation area are affected by the Floodway Overlay:

- 95 Canterbury Road;
- 99 Canterbury Road; and
- 101-145 Canterbury Road.

60 Lavender Drive in the centre of the investigation area is affected by a Public Acquisition Overlay – Schedule 3 (Proposed Road – Category 1).

The above overlays are shown at Figures 79 and 80.

A photo montage of the existing site context of the investigation area is shown at Figure 81.

Geelong Growth Investigation Areas  
Lara South Investigation Area



Figure 76. Lara South – Aerial Cadastral Plan.

Geelong Growth Investigation Areas  
Lara South Investigation Area



Figure 77. Lara South – Investigation Area Plan.

Geelong Growth Investigation Areas  
Lara South - Zoning

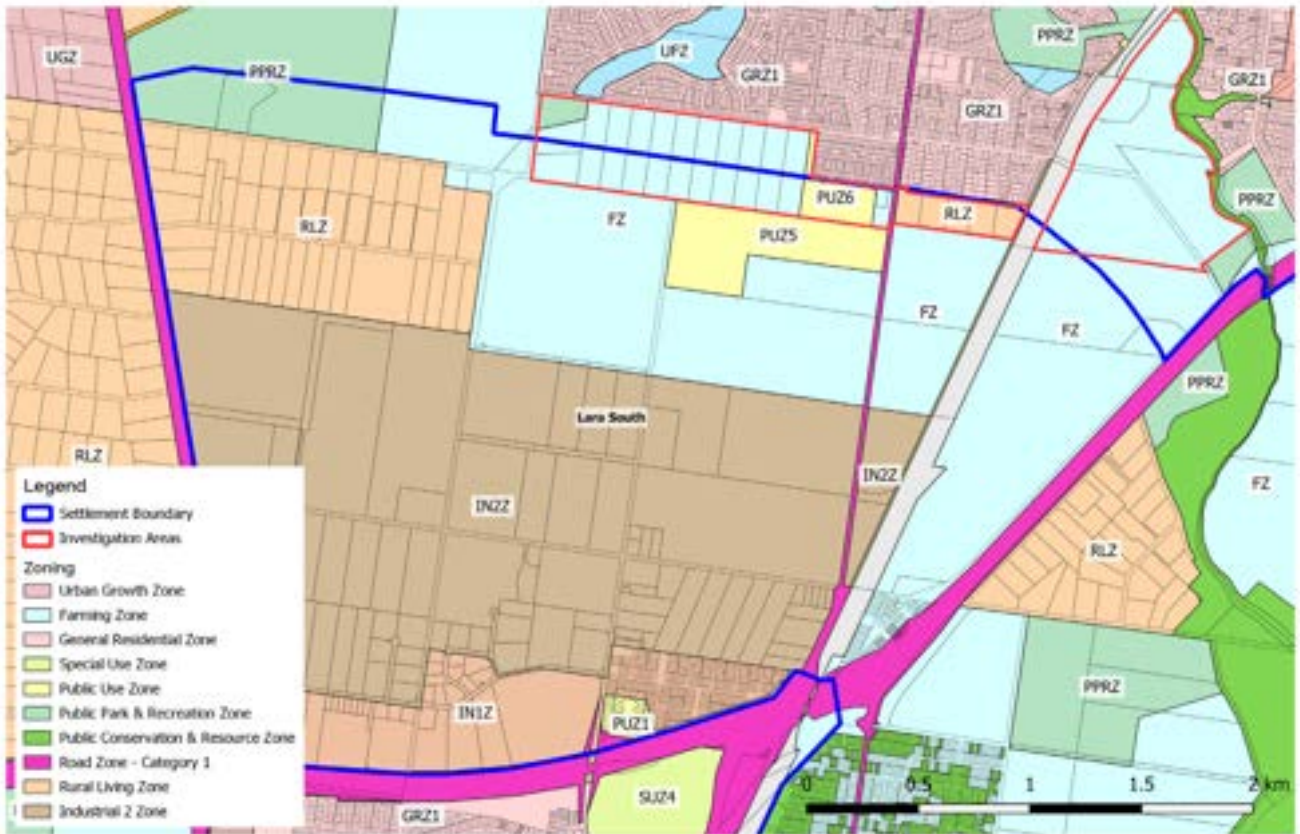


Figure 78. Lara South – Zoning Plan.

Geelong Growth Investigation Areas  
Lara South - Overlays

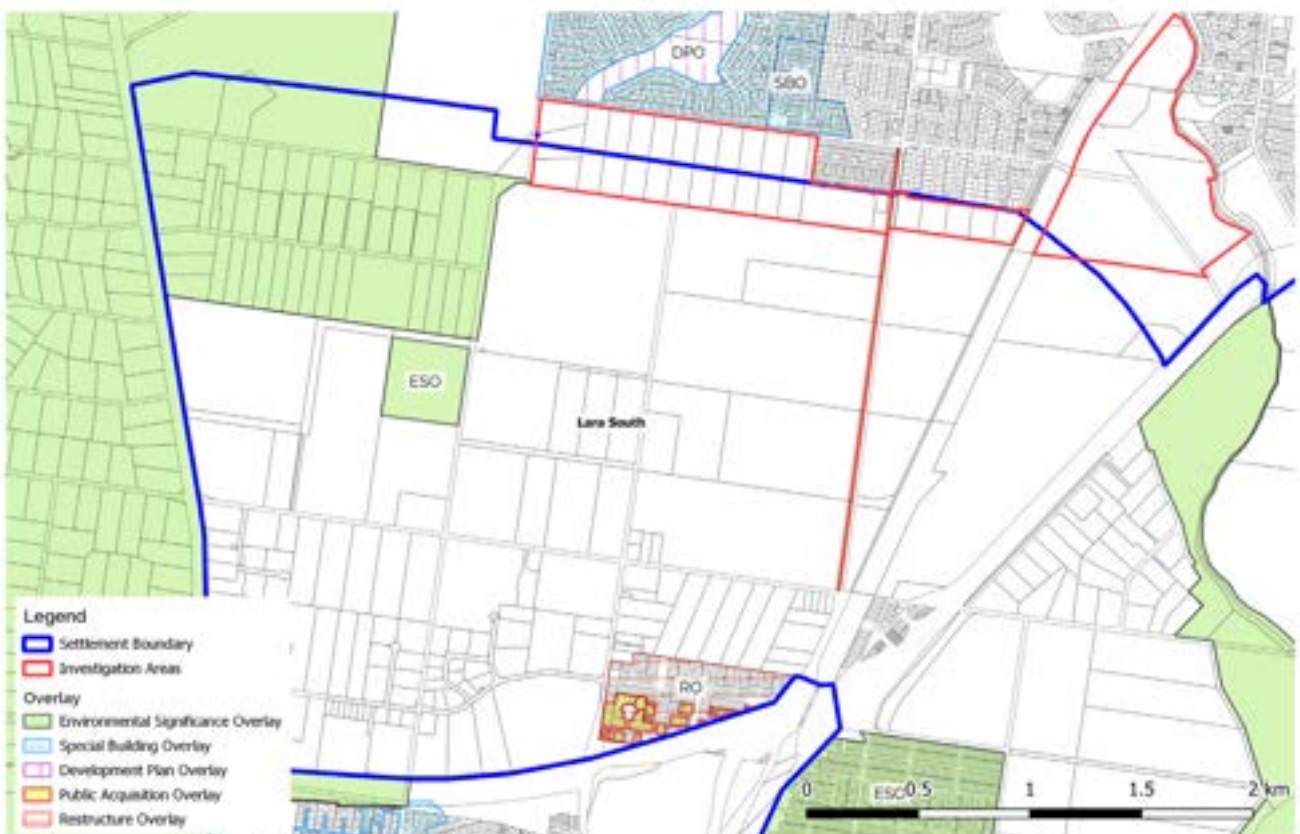


Figure 79. Lara South – Overlays Plan 1.

Geelong Growth Investigation Areas  
Lara South - Overlays

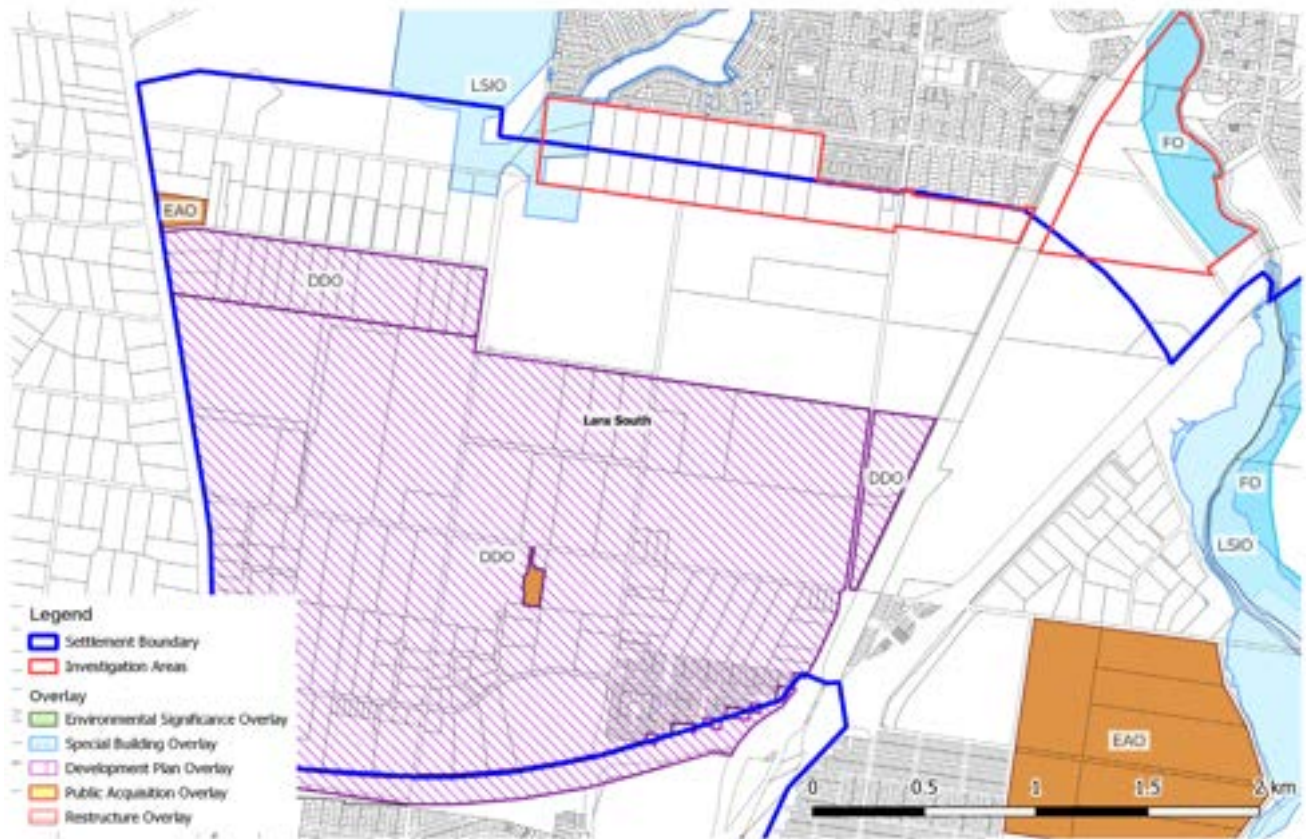


Figure 80. Lara South – Overlays Plan 2.



Figure 81. Lara South – Photo Montage.



### 1.4 Investigation Area & Surrounds:

The land within the Lara South investigation area is used for a combination of rural/agricultural, rural residential and horticultural purposes. Larger rural lots are located on the east and west side of the investigation area with small rural living lots being located between Forest Road South and the train line.

The Lara Township is located directly north of the investigation area and the Lara Structure Plan has been prepared to guide the future growth of this township.

Land within the investigation area is identified in the Structure Plan (refer Figures 82 and 83) with the following land use classifications:

- West of Forest Road (within the existing settlement boundary) - “Investigation Area for increased residential densities”
- West of Forest Road (outside of the existing boundary) is covered by the buffer to the Geelong Employment precinct and is identified as an area to “retain existing zones”.
- East of Forest Road (outside of the existing boundary) is designated as ‘retain existing rural living zone’. It is covered by the buffer to the Geelong Employment precinct and is identified as an area to “retain existing zones”.
- East of the trainline – “conventional residential” (within the existing settlement boundary) and “Buffer to Geelong Ring Road Employment Precinct” (outside the existing settlement boundary).

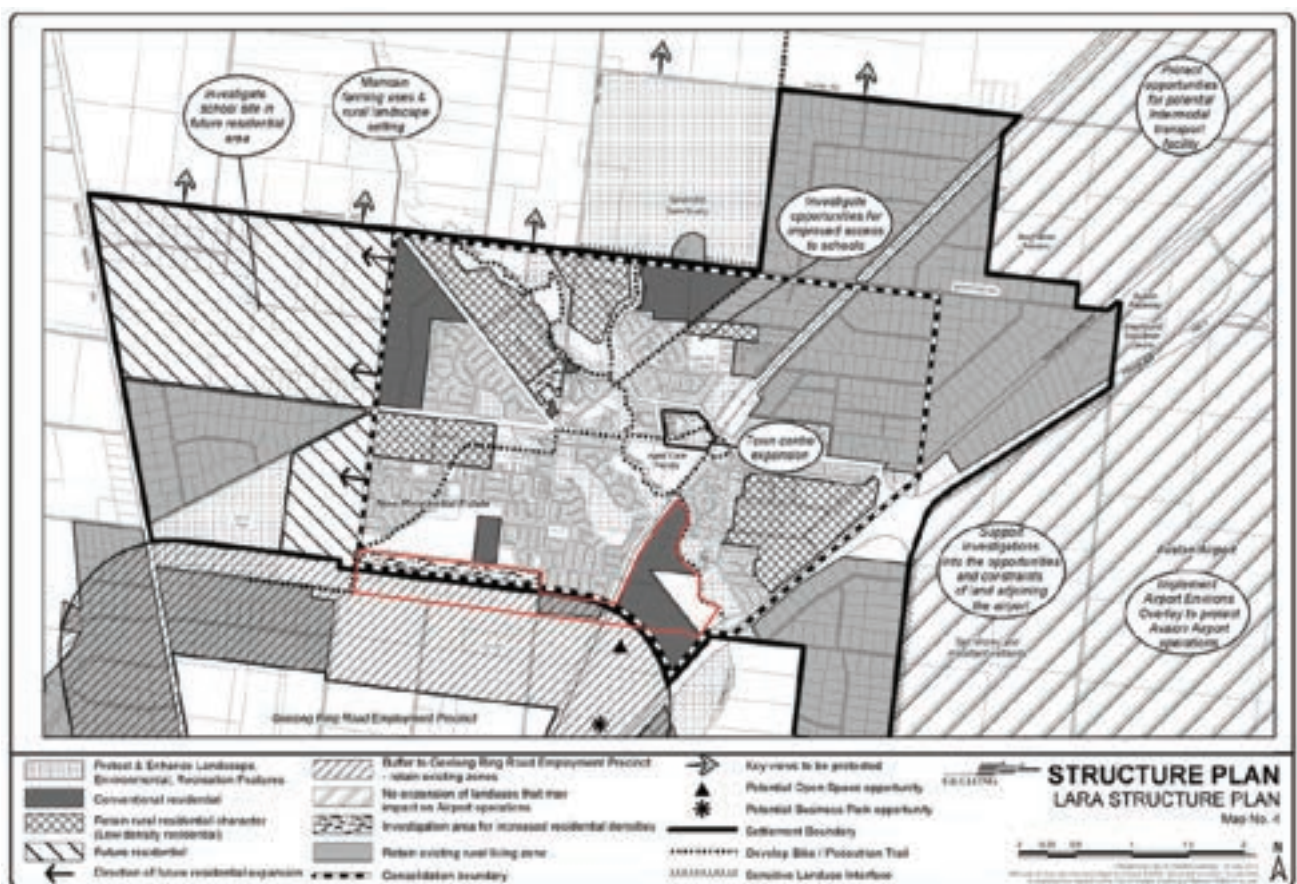


Figure 82. Lara Structure Plan (prepared by CoGG, and adopted April 2011).

Approximately 1km south of the investigation area is the Geelong Ring Road Employment Precinct Framework Plan (previously Heales Road Industrial Estate). This area has developed with a number of substantial operations including gas fuel depots, fertiliser suppliers, steep fabricators, concrete production and waste management operations.

The Geelong Planning Scheme promotes the establishment of major industrial development that requires substantial threshold distances to locate in this area. The Lara Structure Plan supports the maintenance the rural buffer between this industrial precinct and the Lara township to the north in order to protect the development and operational potential. The Framework Plan for the Employment Precinct is shown below.

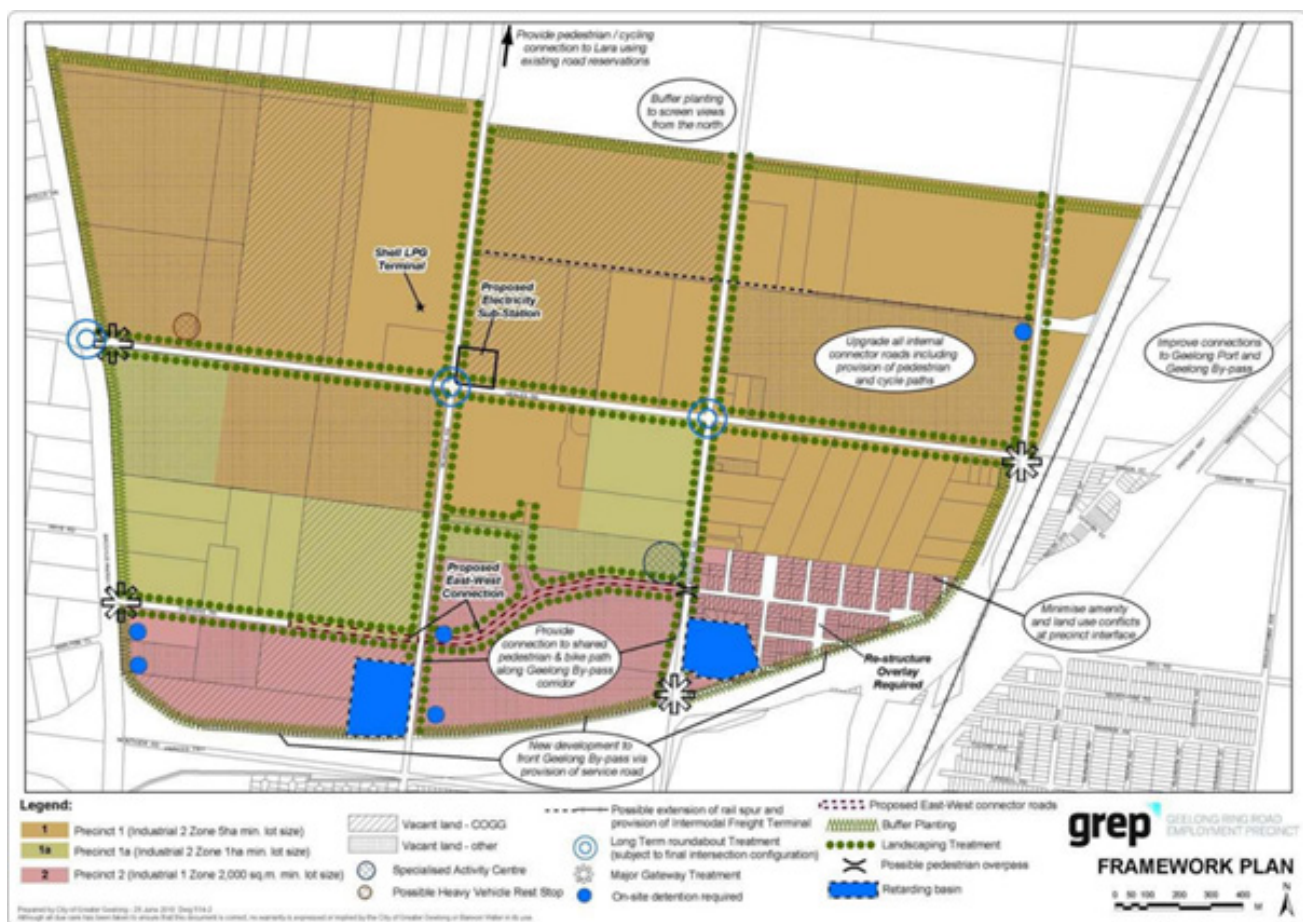


Figure 83. Lara Framework Plan.

Available via; [https://planningschemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21\\_mss07\\_ggee.pdf?\\_ga=2.202390097.1378271083.1638783549-1127495322.1625462890](https://planningschemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21_mss07_ggee.pdf?_ga=2.202390097.1378271083.1638783549-1127495322.1625462890)

## 2 - Summary of Recent Submissions in Relation to the Settlement Boundary

We have reviewed the submissions in relation to the Geelong Settlement Strategy (Planning Scheme Amendment C395).

None of the submissions related to land within the Lara South area.

## 3 - Assessment of Investigation Area Against Suitability Criteria

The following is an assessment of the investigation area against the Long Term Boundary review Decision Criteria.

### 3.1 - Settlement:

Criteria 1.1: Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (including consideration of natural features, location of major roads and reservations for public utilities).

The existing settlement boundary in Lara South is defined by the 1km buffer from the Industrial 2 precinct to the south of the investigation area.

The boundary currently dissects a number of properties on the western side of the investigation area and may not be considered conventionally as an enduring boundary as it does not align with a physical feature or a title boundary (refer Figure 84).

However, the preservation of future opportunities to facilitate industries with a large separation distance requirements is a strategic priority for the Geelong Region, and a 1km buffer between the Industrial 2 zone and sensitive uses within Lara achieves this purpose.



Figure 84. Lara South – Current Settlement Boundary Location (source: Google Satellite).

Future residential development within the existing settlement boundary is expected to be able to create a more enduring boundary once development is completed. A development arrangement similar to the existing development on the corner of Canterbury Road West and Forest Road South could occur where the subdivision pattern creates a boundary road on the edge of the settlement boundary with drainage assets associated with urban development being located just outside of the settlement boundary.

The Lara Structure Plan has previously contemplated moving the settlement boundary further north to Canterbury Road West.<sup>1</sup> This is not considered necessary as the existing boundary makes reasonable provision for separating sensitive uses from industry within the Industrial 2 zone, and in any case some urban development has already occurred south of Canterbury Road West (ie up to the 1km buffer identified within the existing structure plan).

Retaining the settlement boundary in its current location provides the opportunity for additional housing supply close to the Lara town centre, and to also establish an enduring boundary via the placement of roads and drainage works along that boundary.

In summary, the current settlement boundary is considered to be both logical and enduring. Neither an outward extension or a contraction of the settlement boundary is warranted.

The current settlement boundary satisfies this Criteria. Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

### 3.2 - Managing Growth:

Criteria 2.1: Impact on the orderly development of the adjoining urban area.

The area adjoining the investigation area is already developed (being the existing Lara Township). Therefore, any alteration to the boundary would not affect the orderly development of the area north of the investigation area.

As previously identified, the Geelong Ring Road Employment Precinct is located 1km south of the investigation area. Any change to the boundary that increases the amount of land that can be developed for urban residential purposes has potential to have an impact on the orderly development of the Employment Precinct. Whilst various existing industrial uses may be sufficiently separated from residential development in Lara, the orderly planning of this important industrial area required consideration of potential future uses which may also have very large separation distance requirements.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

Criteria 2.2: Impact on management of the sequence of development and the early provision of services.

Undeveloped land within the 'triangle' area to the east of the investigation area (ie south-west of Hovells Creek) is not well connected to the existing urban area to its north or west. It is physically separated from land to its north by Hovells Creek and wetlands, and to the west by the existing rail line, although there is an at-grade road crossing .

This land area is relatively small and its shape and relative isolation will make creating a sense of neighbourhood in this location challenging. This land is already located within the settlement boundary, and this investigation does not recommend that the land be excluded from the boundary (excluding land from the settlement boundary is not the purpose of this investigation).

<sup>1</sup> Lara Structure Plan, page 17.

However, the abuttal of this land to the 1km buffer to the Industrial area, combined with its isolated character mean that no extension of the settlement boundary in this location is justified.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

Criteria 2.3: Impacts of any proposed boundary changes on the economic provision of other development fronts.

The area adjoining the investigation area is already developed (being the existing Lara Township). Therefore, it is considered that any change to the settlement boundary would not impact on the economic provision of other development fronts.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

### 3.3 - Planning for Places – Distinctive Areas & Landscapes:

Criteria 3.1: Impact on any identified unique features or special characteristics within a declared area.

Land in the investigation area is not located within a Declared Area under the Distinctive Areas and Landscapes legislation.

### 3.4 - Environmental & Landscape Values:

Criteria 4.1 Impact on the protection of biodiversity values.

The investigation area is located within a Victorian Volcanic Plain Bioregion. DELWP Biodiversity mapping indicates that a small area within the property bounded by Canterbury Road West and O'hallorans Road contains Plains Grasslands vegetation community<sup>2</sup>. This is on land already zoned Public Park and Recreation Zone so it is likely that a PSP could address this through a Native Vegetation Precinct Plan.

<sup>2</sup> See <https://maps2.biodiversity.vic.gov.au/Html5viewer/index.html?viewer=NatureKit>

Land within the triangle parcel to the east of the investigation area is affected by Creekline Grassy Woodlands and Plains Grassland. Further assessment would be required to determine the extent that development could occur on the land without adversely impacting the native vegetation. It is possible that a PSP could address this through a Native Vegetation Precinct Plan.

The impact of any change to the settlement boundary on the satisfaction of this criteria is not known. However, it is possible that any change to the settlement boundary could potentially have a generally neutral impact on the satisfaction of this criteria, as the relevant biodiversity values could potentially be protected by planning and management measures.

Criteria 4.2 Impact on the protection of coastal areas & wetlands.

Land within the investigation area is not affected by a coastal area or wetland. However, it is in close proximity to the catchment for Limeburners Bay which contains a Ramsar listed wetland.<sup>3</sup> If further development was proposed further analysis would be required to investigate the impact of development on the downstream wetland. These impacts could potentially be mitigated through the design of any urban stormwater infrastructure within the area.

Any change to the settlement boundary is expected to have a neutral impact on the protection of nearby catchments and therefore the satisfaction of this criteria.

Criteria 4.3 Impact on the protection of significant landscapes.

The landscape within the investigation area has not been identified as being of state or regional significance, and the Significant Landscape Overlay does not apply to the area.

<sup>3</sup> Corangamite Regional Catchment Strategy 2013-2019 prepared by Corangamite Catchment Management Authority

The investigation area is located in the western volcanic plains which has been assessed as having a landscape character comprising 'big skies, long views with volcanic rises that punctuate the horizon.'<sup>4</sup>

Parts of the area offers distant views to the You Yangs, and the views north from Forest Road on the approach to the Lara township are primarily across flat open farmland (with larger format industrial uses located within the landscape further south, closer to the freeway).

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria.

Criteria 4.4 Impact on the preservation of identified urban breaks.

The Geelong Planning Scheme identifies an urban break between Lara and the municipal boundary to the northeast.<sup>5</sup> Given the assessment area is located some distance from this urban break it is considered unlikely that development in this location would have a negative impact on the scale and sense of an urban break between Geelong and Melbourne in this location.

The Lara Structure Plan also aspires to preserve a rural edge around the Lara Township. Residential development in the investigation area would have a relatively minor impact on these rural landscape vales, and these impacts could be mitigated by sensitive urban and landscape design on the township boundaries.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria.

<sup>4</sup> South West Victoria Landscape Assessment Study (2013), page 24.

<sup>5</sup> See [https://planningschemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21\\_mss06\\_ggee.pdf?\\_ga=2.261586637.1378271083.1638783549-1127495322.1625462890](https://planningschemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21_mss06_ggee.pdf?_ga=2.261586637.1378271083.1638783549-1127495322.1625462890)

### 3.5 - Environmental Risks:

Criteria 5.1 Climate change – impacts of coastal inundation & erosion.

The investigation area is not located in a coastal location.

Criteria 5.2 Bushfire risks in the location.

The investigation area is within a Bushfire Prone Area but is not located within or proximate to a Bushfire Management Overlay. Bushfire risk is not likely to be determinative of the suitability of urban development in the area. A Bushfire Management Plan could be prepared to manage the potential adverse effects of development on the bushfire risk in the area.

Any change to the settlement boundary would have a neutral impact on the satisfaction of this criteria

Criteria 5.3 Impacts on/of floodplains.

The investigation area is affected by the existing Land subject to Inundation and Floodway Overlays. Amendment C339 to the Greater Geelong Planning Scheme proposes to extend the Land subject to Inundation and a Special Building Overlay on the land to the west of the train line in the investigation area. The LSIO and SBO exhibited mapping is included at Figures 85, 86, and 87. The amended LSIO affects the parcels on the far east and west of the investigation area.

The Special Building Overlay (SBO) identifies land in urban areas liable to inundation by overland flows that exceed the capacity of the drainage system. The purpose of the SBO is to ensure that future developments allow the free passage of floodwaters, minimise flood damage, are compatible with flood hazard and local drainage conditions, and will not cause a significant rise in flood level or flow velocity.<sup>6</sup>

<sup>6</sup> Summary Report Lara Flood Study, prepared by Water Technology, dated 11 February 2020.

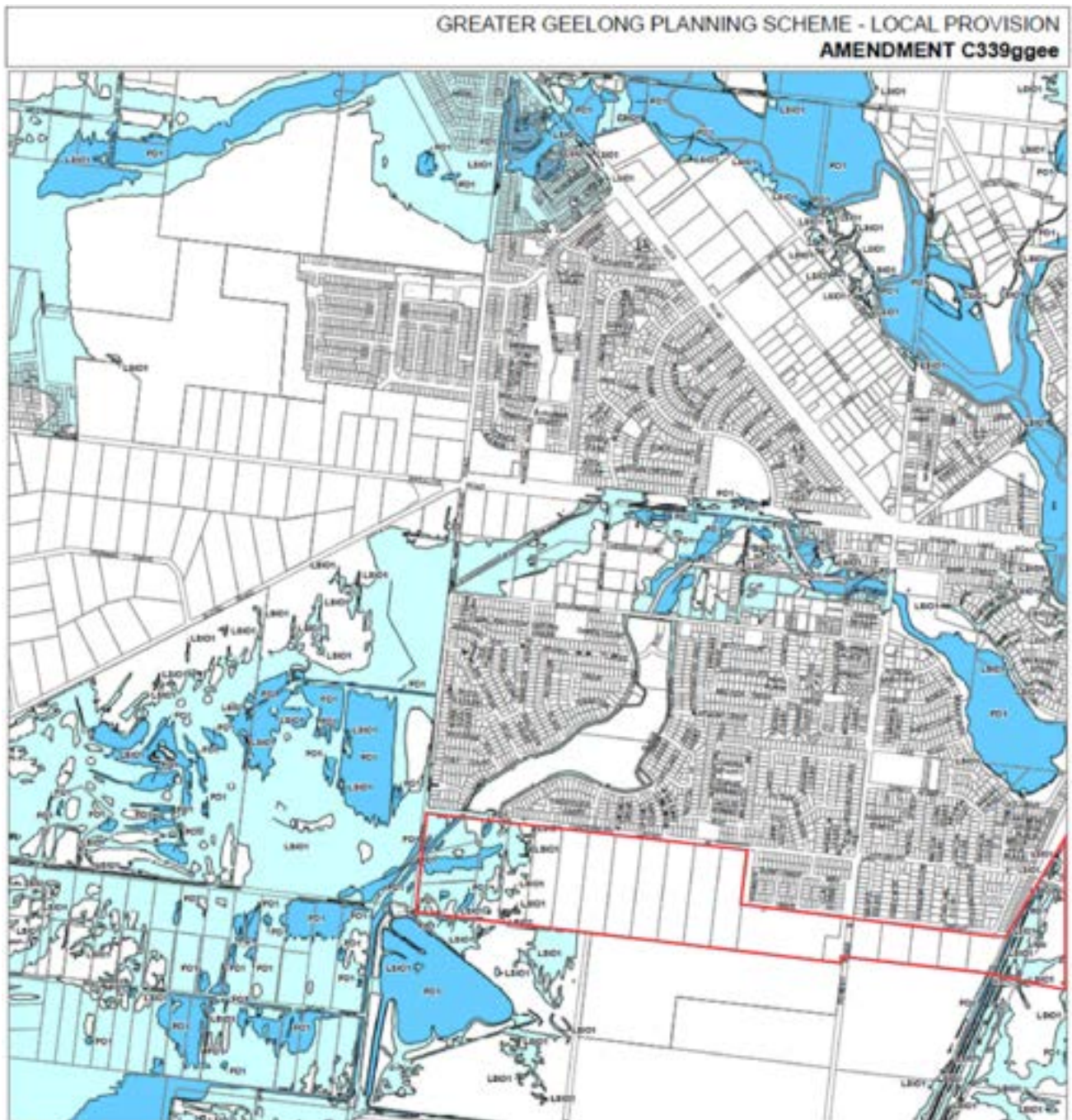


Figure 85. Draft Greater Geelong Planning Scheme - Local Provision LSIO – Land Subject to Inundation Overlay Exhibited Amendment C339ggee – Map 18.



Figure 86. Draft Greater Geelong Planning Scheme - Local Provision LSIO – Land Subject to Inundation Overlay Exhibited Amendment C339ggee – Map 19.

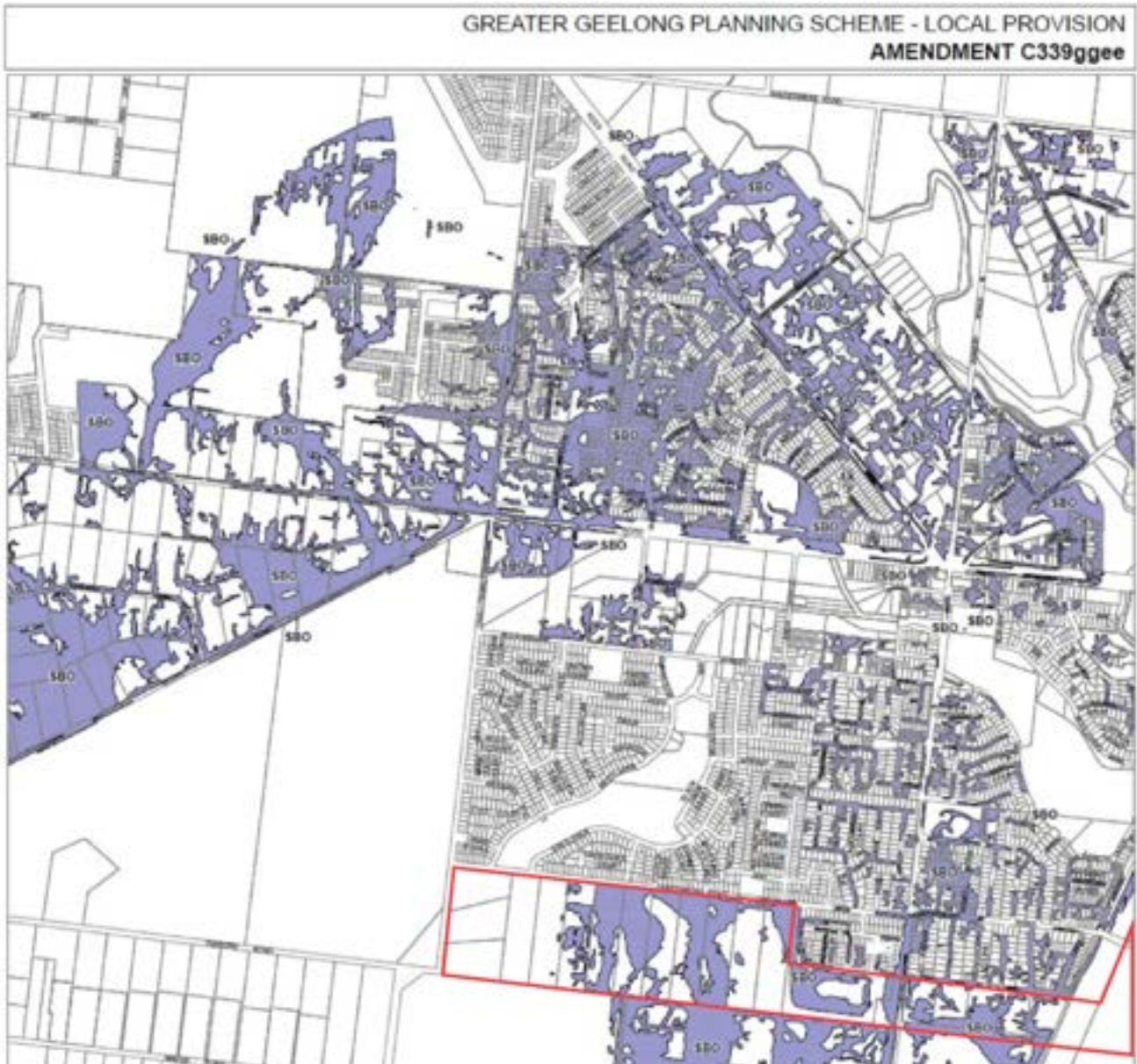


Figure 87. Draft Greater Geelong Planning Scheme - Local Provision SBO - Special Building Overlay Exhibited Amendment C339ggee – Map 18.

The SBO does not prevent residential development from occurring in the investigation area. However, further assessment of the feasibility of undertaking development within the SBO would be necessary if land in this area were to be included within the settlement boundary.

Any change to the settlement boundary would potentially have a negative impact on the satisfaction of this criteria. Further analysis would be required to determine the extent of this impact, and the feasibility of any impact mitigation measures.

#### Criteria 5.4 Impacts on/of soil degradation.

The Geological Survey of Victoria (1:63,360) Geological Map Series Geelong Sheet indicated that the site was underlain by Newer Volcanics including olivine basalts comprising clays as well as river alluvium (swamp deposits) comprising sand, gravel and clays.<sup>7</sup>

The Natural Resource Management Mapping of the Corangamite Region indicates that soils in the area which covers the investigation area are prone to compaction due to the sodic nature of the subsoils.<sup>8</sup>

If development was approved in this area further analysis would be required to investigate the impact development would have on soil degradation.

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact development might have on soil degradation.

#### Criteria 5.5 Impacts on/of erosion & landslip.

Soils in the area which covers the investigation area are prone to erosion due to the sodic nature of the soils.<sup>9</sup>

If development was approved in this area further analysis would be required to investigate the impact development would have on soil erosion.

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however If development was approved in this area further analysis would be required to investigate soil conditions and the impact erosion and landslip might have on development.

#### Criteria 5.6 Impacts on/of salinity, acid sulfate soils.

The Natural Resource Management Mapping of the Corangamite Region does not identify areas of salinity or acid sulfate soils in the western portion of the investigation area. It does identify recorded salinity within Hovells Creek on the eastern side of the investigation Area.<sup>10</sup> However, the land within the investigation area is not located within an area where land-uses that change the hydrology may impact on salinity.<sup>11</sup>

Any change to the settlement boundary is expected to have a neutral impact on the satisfaction of this criteria, however if development was approved in this area further analysis would be required to investigate soil conditions and the impact salinity and acid sulfate soil conditions might have on development.

<sup>7</sup> See map sheet 9 - <http://earthresources.efirst.com.au/categories.asp?clD=33>

<sup>8</sup> See [https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp\\_map.php?section=my\\_region](https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp_map.php?section=my_region)

<sup>9</sup> See [http://vro.agriculture.vic.gov.au/dpi/vro/coranregn.nsf/pages/soil\\_landform\\_units185](http://vro.agriculture.vic.gov.au/dpi/vro/coranregn.nsf/pages/soil_landform_units185)

<sup>10</sup> See [https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp\\_map.php?section=my\\_region](https://www.ccmaknowledgebase.vic.gov.au/nrmpp/nrmpp_map.php?section=my_region)

<sup>11</sup> City of Greater Geelong Salinity Management Overlay Salinity occurrences and mapping, dated March 2008, prepared by Dahlhaus Environmental Geology Pty Ltd.

Criteria 5.7 Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.

The area is adjacent to farmland and so the compatibility between urban and farming uses would be a design consideration. However, incompatibility with adjacent agricultural uses is not likely to be determinative of the suitability of urban development in the area.

Land south of the township is located within 1km of the northern boundary of the Industrial Zone – Schedule 2 (IN2) Precinct. Given that this precinct is a preferred location for manufacturing industries and storage facilities that require substantial separation distances, the encroachment of residential development into this buffer distance would reduce the capacity of the IN2 area to cater for future industry, and may also impact on the operation of existing industries.

The preservation of opportunities to accommodate industrial uses in the IN2 zone outweighs the relatively marginal benefit of providing a limited number of additional lots within the settlement boundary of an area which appears to already have ample residential land supply.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

Criteria 5.8 Impacts on/of major hazard facilities.

There is a major hazard facility approximately 1.2km from the south western corner of the investigation area.<sup>12</sup> Viva Energy Refining Pty Ltd operates on the property at 137-207 McManus Road, Lara.

<sup>12</sup> See <https://www.worksafe.vic.gov.au/licenced-and-registered-major-hazard-facilities>

Clause 13.07-2S of the Geelong Planning Scheme states that planning should “Protect registered or licenced major hazard facilities as defined under Regulation 5 of the Occupational Health and Safety Regulations 2017 from encroachment of sensitive land uses”.<sup>13</sup> Allowing the settlement boundary to move further south from its current location has the potential to result in a land use conflict with this facility.

Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.

### 3.6 - Natural Resource Management:

Criteria 6.1 Impact on the protection of agricultural land.

The agricultural land within the area is identified as being within ‘Class 4’ land capability, meaning that the land is not as inherently capable for intensive soil-based agriculture as other agricultural land within the region.<sup>14</sup>

Any change to the settlement boundary is expected to have a negative impact on the availability of land for agricultural production and therefore the satisfaction of this criteria. However, given the land classification of the area, the impact on the achievement of wider agricultural production objectives would be modest.

<sup>13</sup> See [https://planningschemes.api.delwp.vic.gov.au/schemes/vpp/13\\_072S.pdf?\\_ga=2.34412129.1378271083.1638783549-1127495322.1625462890](https://planningschemes.api.delwp.vic.gov.au/schemes/vpp/13_072S.pdf?_ga=2.34412129.1378271083.1638783549-1127495322.1625462890)

<sup>14</sup> Assessment of Agricultural Land Capability in Melbourne’s Green Wedge and Peri-urban Areas Agriculture Victoria Research Final Technical Report Updated October 2018, prepared by Agriculture Victoria.

Criteria 6.2 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources.

Urban development in the area may potentially have downstream impacts on Limeburners Bay which contains a Ramsar listed wetland.<sup>15</sup> Residential development within the area would impact on these waterways but these impacts could be readily mitigated through the design of any urban stormwater infrastructure within the area.

Any change to the settlement boundary is expected to have a neutral impact on the protection of nearby catchments and therefore the satisfaction of this criteria.

### 3.7 - Heritage:

Criteria 7.1 Impact on known Aboriginal cultural heritage values.

Aboriginal Victoria mapping shows that the properties on the eastern side of the investigation area are covered by areas of “cultural heritage sensitivity”.<sup>16</sup>

Consultation with Traditional Owners and further assessment of potential areas of Aboriginal Cultural Heritage Sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

A Cultural Heritage Management Plan would be required prior to the commencement of works onsite associated with development in the investigation area.

Any change to the settlement boundary is expected to have neutral impact on the protection of known areas of Aboriginal cultural heritage sensitivity. However, consultation with Traditional Owners and further assessment of other potential areas of Aboriginal Cultural Heritage Sensitivity should be undertaken if land within this area was to be further considered for inclusion within the settlement boundary.

Criteria 7.2 Impact on known post contact heritage values.

No known sites of post-contact heritage values exist that would be determinative of the suitability of urban development in the area.

### 3.8 - Transport:

Criteria 8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access.

The area is located proximate to two existing local bus services within Lara.<sup>17</sup> These could be re-routed to service the area if necessary. Feasibility of providing public transport to the area would not be determinative of the suitability of urban development in the area.

Any change to the settlement boundary is expected to have a negative impact on the ability to cost-effectively provide public transport services to the Lara area, as it would be necessary to extend and re-route existing bus services to connect to this area

<sup>15</sup> Corangamite Regional Catchment Strategy 2013-2019 prepared by Corangamite Catchment Management Authority

<sup>16</sup> See <https://achris.vic.gov.au/#/onlinemap>

<sup>17</sup> See <https://www.ptv.vic.gov.au/assets/default-site/more/maps/Local-area-maps/Regional/c7de90c6b9/Geelong-Bus-Network.pdf>

### 3.9 - Infrastructure:

Criteria 9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage.

#### Community Services:

Given that no change is proposed to the settlement boundary, no assessment of community infrastructure requirements has been undertaken for this investigation area. Any future development on land within the existing settlement boundary will require consideration in relation to given to the adequacy of infrastructure within the Lara Township to accommodate the new development. However, this issue has been addressed in general terms by the original Lara Structure Plan.

#### Utility Services:

The Lara Structure Plan identified that an increase in Lara's population beyond 12,000 people will necessitate additional sewerage capacity to be provided by Barwon Water.<sup>18</sup> As the population in Lara in 2019 was approximately 17,549 people,<sup>19</sup>

Initial consultation with Barwon Water has identified that the Lara system is approaching capacity - investment is needed in order to cater for the existing development. Any additional development would result in the need for further investment in upgrades.

Any change to the settlement boundary is expected to have a negative impact on the ability to cost-effectively provide urban services in the Lara area

<sup>18</sup> Lara Structure Plan, prepared by the City of Greater Geelong, Adopted April 2011.

<sup>19</sup> Our Community Places, Spaces and Services - A Social Infrastructure Plan for the City of Greater Geelong, prepared by City of Greater Geelong, dated June 2020.

6.9

Avalon

# 1 - Investigation Area Context

## 1.1 Total area of land within investigation area

N/A (refer 1.2)

## 1.2 Definition of investigation area:

The second Long Term Boundaries review principle under the Greater Geelong Settlement Strategy states that “Land must be contiguous with urban residential areas – GRZ, RGZ, NRZ or UGZ”. The Avalon area is separated from any adjoining urban residential areas by the Princess Freeway. Therefore, land within the Avalon area does not meet this principle (refer Figures 88 and 89).

Consideration was given to whether certain areas should be considered in the Long Term Boundary Review notwithstanding the lack of contiguous land. However, this was not considered appropriate for the reasons set out in Section 3 of this assessment.

## 1.3 Current Zoning and Overlays:

The land within Avalon is located within the following zones:

- Farming Zone;
- Rural Living Zone;
- Public Park and Recreation Zone;
- Industrial 1 & 2 Zone;
- Public Conservation and Resource Zone;
- Special Use Zone – Schedule 11 (Avalon Airport); and
- Public Use Zone – Scheduled 1 (Service and Utility).

(refer Figure 90).

The land is also affected by many overlays. They are as follows:

- Design and Development Overlay – Schedule 20 (Industrial 1, 2 & 3 Zones);
- Development Plan Overlay – Schedule 1 (Special Industrial Area, Port Wilson);
- Environmental Significance Overlay – Schedule 4 (Grasslands within Werribee Plains Hinterland);
- Flood Overlay;
- Land subject to Inundation Overlay;
- Public Acquisition Overlay – Schedule 14 (Railway);
- Special Controls Overlay – Schedule 3 (Specialist Training Facility); and
- Vegetation Protection Overlay.

These overlays are shown at Figures 91-93.

Geelong Growth Investigation Areas

Avalon Investigation Area



Figure 88. Avalon – Aerial Cadastral Plan.

Geelong Growth Investigation Areas

Avalon Investigation Area



Figure 89. Avalon – Investigation Area Plan.

Geelong Growth Investigation Areas  
Avalon - Zoning

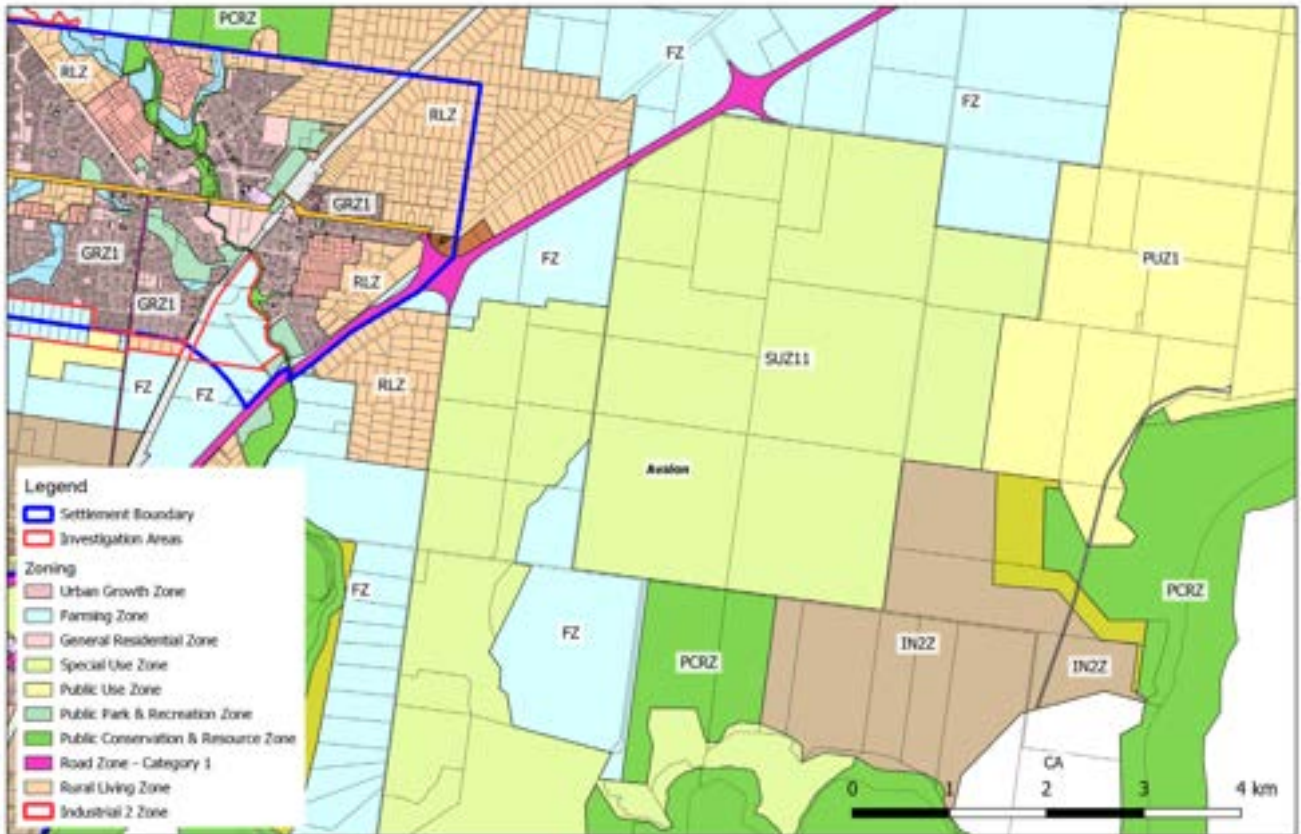


Figure 90. Avalon – Zoning Plan.

Geelong Growth Investigation Areas  
Avalon - Overlays

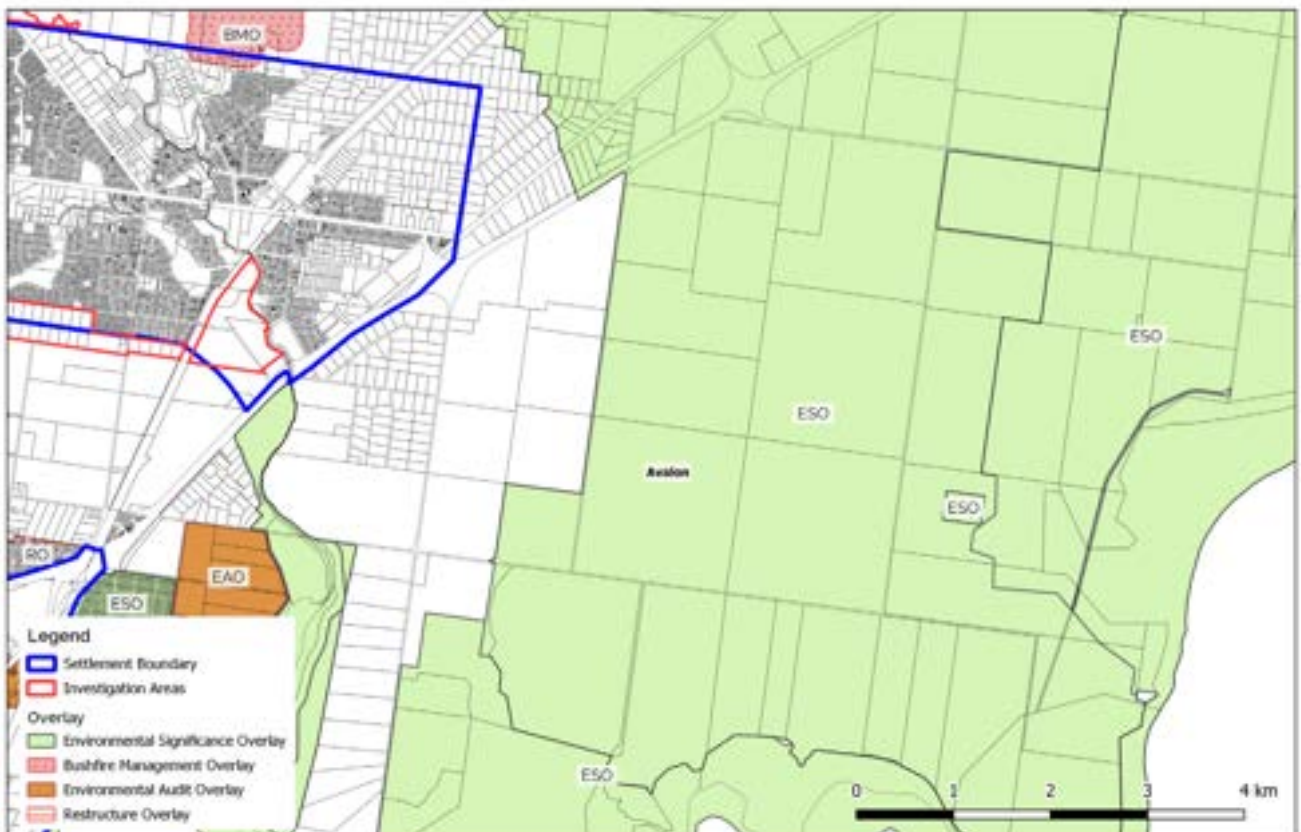


Figure 91. Avalon – Overlays Plan 1.

Geelong Growth Investigation Areas

Avalon - Overlays

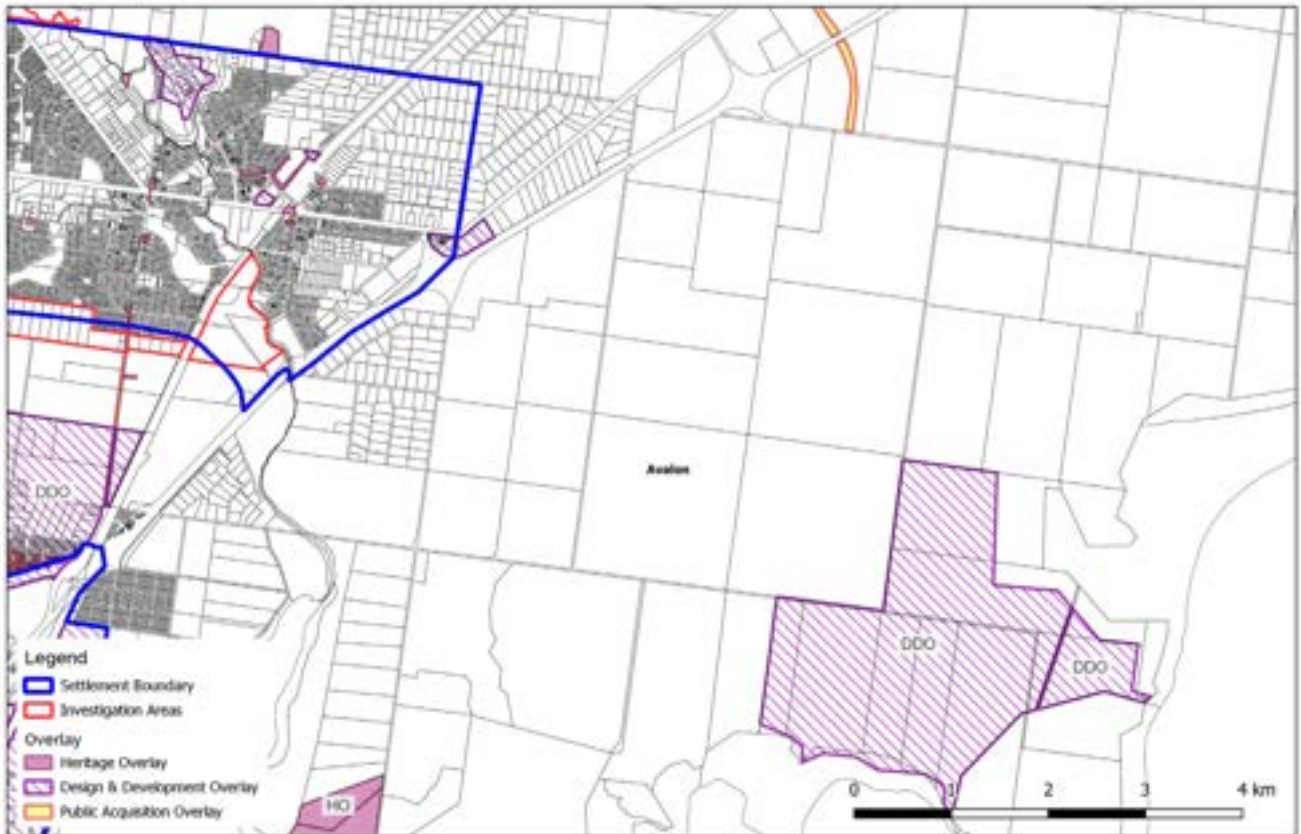


Figure 92. Avalon – Overlays Plan 2.

Geelong Growth Investigation Areas

Avalon - Overlays

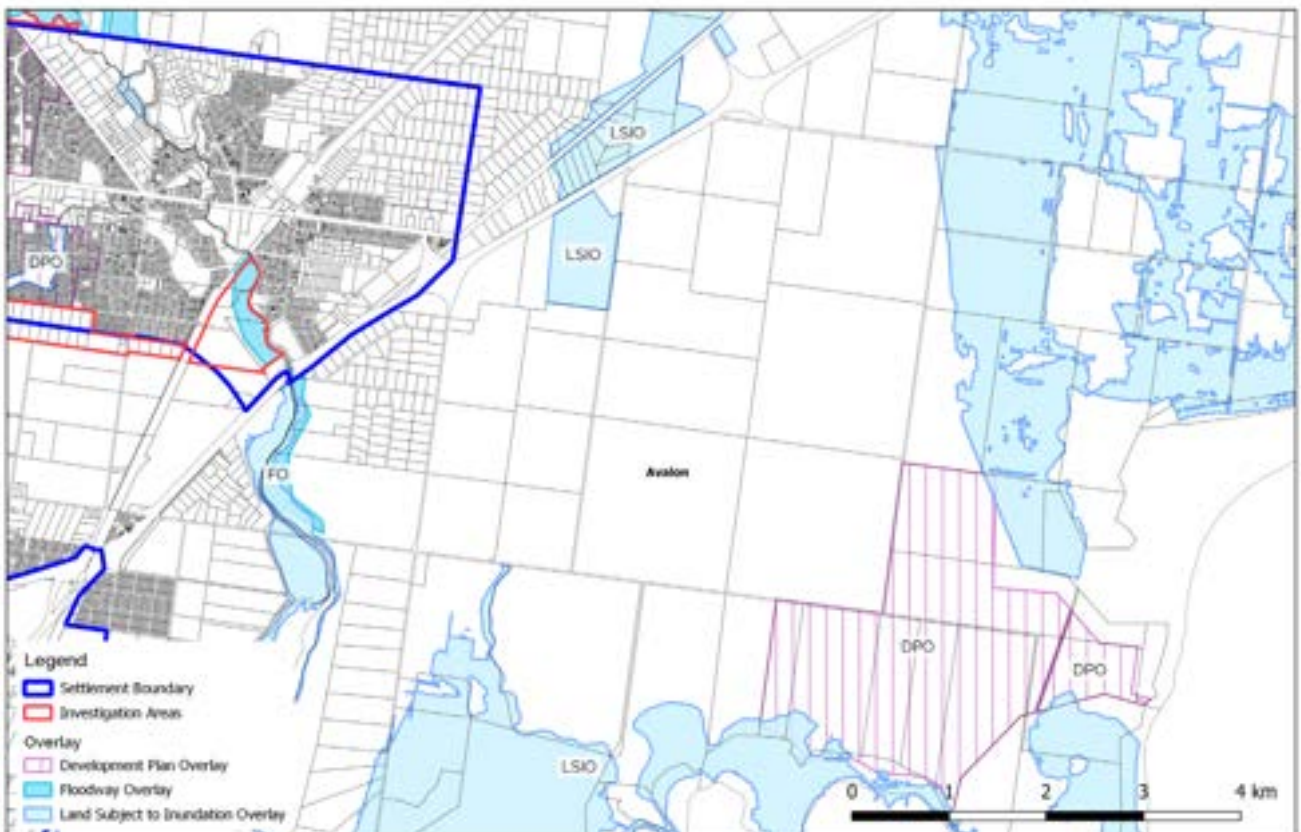


Figure 93. Avalon – Overlays Plan 3.

## 1.4 Investigation Area & Surrounds:

There are a variety of existing uses within the Avalon Area which require substantial separation distances from sensitive uses, and their presence provides a basis for ensuring that residential development does not establish in this area. These include the following:

- Avalon Airport
- Mountain View Quarry
- Western Treatment Plant
- Point Wilson Defence Base

Other land uses in this area include the Geelong Grammar School, Avalon College, the Spit Wildlife Reserve and the former Cheetham Saltworks.

### 1.4.1 Draft Avalon Corridor Strategy

The Draft Avalon Corridor Strategy has recently been completed for this area. This Strategy aims to provide clear strategic guidance regarding potential land use and development change within the Avalon Corridor.

Figure 94 shows the draft Framework Plan from this Strategy which indicates existing and potential future land uses in the Avalon region. This framework plan does not make provision for additional residential development within Avalon.

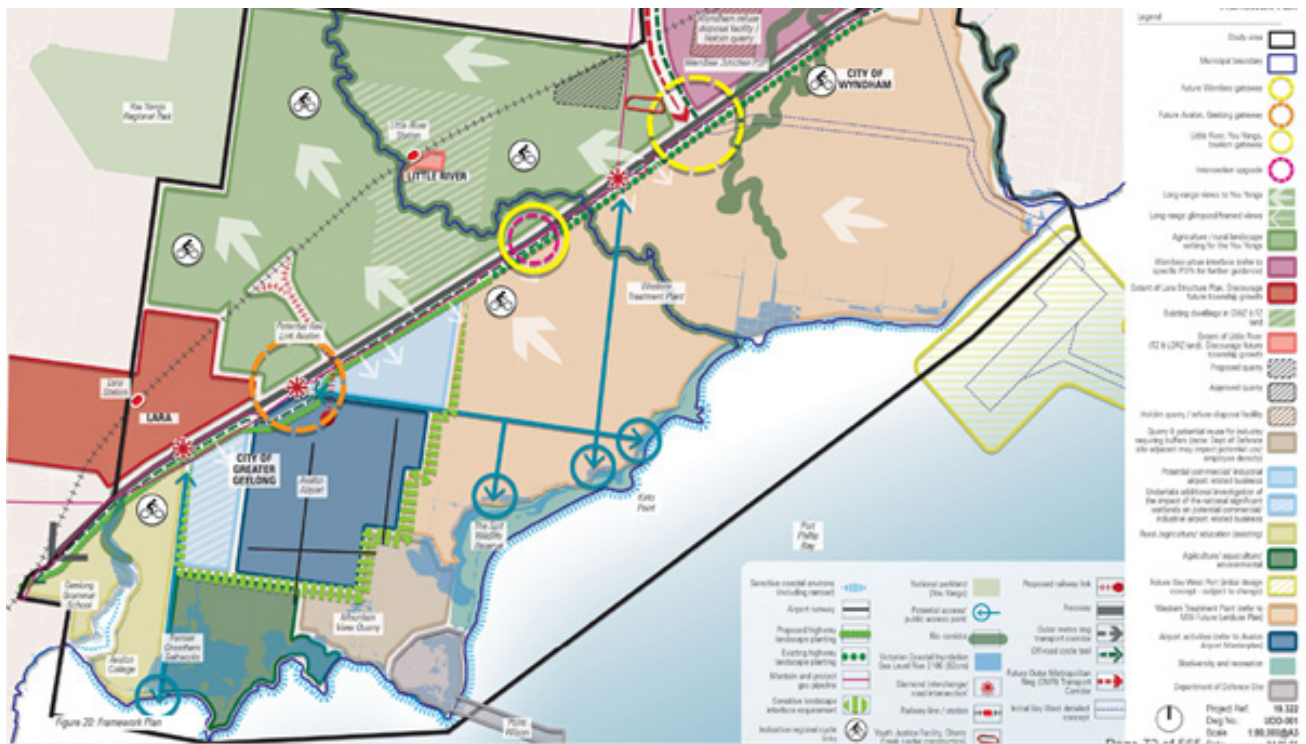


Figure 94. Avalon Corridor Strategy: Draft Report for Consultation, August 2021, prepared by Hansen Partnership.

## 2 - Assessment of Investigation Area Against Suitability Criteria

As Avalon does not contain any residentially zoned land which is within Geelong's existing settlement boundary, this location does not satisfy Principle 2 relating to the Long Term Boundary Review from the Greater Geelong Strategy.

The Long Term Boundary Review is a review of the Geelong settlement boundary in order to determine if there are locations where it is logical for the boundary to be amended to accommodate additional urban residential uses. The purpose of the review is not to determine if non-residential urban uses should be located within the settlement boundary or not.

The type of urban uses contemplated under the Avalon Strategy do not include urban residential uses, and these existing/proposed uses do not in themselves generate any requirement for the existing settlement boundary to extend into this area.

Notwithstanding, the following is a broad assessment of the Avalon area and the appropriateness of urban residential development in this location.

The land within the Avalon area is extremely segregated from adjoining urban residential development by the Princess Freeway. As a result of this there is limited links between this land and existing community services in adjoining areas and as such it is expected that substantial additional infrastructure would be required to support the creation of a new "neighbourhood" in this location.

Initial consultation with Barwon Water has identified the following:

- There is no existing sewer in Avalon to cater for additional residential development
- The area will need to be serviced eventually to facilitate the uses identified in the draft Avalon Strategy (when the scope is clarified). However, additional residential was never anticipated in this area from a servicing perspective.

Avalon serves the function of providing a physical separation and break in urban development between Melbourne and Geelong. This is supported by Geelong's Settlement Strategy and Clause 21.06-2 of the Geelong Planning Scheme which includes a strategy to "Maintain the non-urban breaks between Geelong and Melbourne (Wyndham)".<sup>1</sup> Plan Melbourne 2017-2050 further reinforces this by stating that the 'Avalon Corridor' should be preserved for state infrastructure opportunities but also to ensure a maintenance as a settlement break between Melbourne and Geelong.<sup>2</sup> Allowing for additional land to be brought into the settlement boundary in this location (for the purpose of future residential) would compromise this urban break which is currently being successfully preserved by the existing settlement boundary.

The draft Avalon Corridor Strategy anticipates a range of potential large-scale urban commercial/ industrial uses associated with the existing transport infrastructure in the area. Residential uses are largely incompatible with these activities.

Lastly, Avalon is affected by a complex array of land use zoning and overlays, which when viewed collectively do not lend themselves to supporting residential development. The combination of the existing uses and associated zoning as well as the Environmental Significance, Vegetation Protection, Flood and Land Subject to Inundation Overlays provide significant constraints that would make residential development inappropriate and in places unviable in this area.

<sup>1</sup> See Clause 21.06 Geelong Planning Scheme - [https://planning-schemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21\\_mss06\\_ggee.pdf?\\_ga=2.232223327.1378271083.1638783549-1127495322.1625462890](https://planning-schemes.api.delwp.vic.gov.au/schemes/greatergeelong/ordinance/21_mss06_ggee.pdf?_ga=2.232223327.1378271083.1638783549-1127495322.1625462890)

<sup>2</sup> Plan Melbourne 2017-2050, prepared by Department Environment, Land Water and Planning.

# Chapter Seven

# Recommendations

This chapter comprises a summary of the results of the assessments for each investigation area as well as an identification of whether any further work is recommended should Council consider pursue including an investigation area within the settlement boundary.

Armstrong Creek South West				
Criteria:	NA	Positive Impact	Neutral Impact	Negative Impact
1.0 Settlement Criteria				
1.1 Enduring Boundary				
2.0 Managing Growth Criteria				
2.1 Orderly Development				
2.2 Development Sequencing				
2.3 Economic provision of other development fronts				
3.0 Planning for Places – Distinctive Areas and Landscapes Criteria				
3.1 Unique features or special characteristics				
4.0 Environmental & Landscape Values Criteria				
4.1 Biodiversity values				
4.2 Coastal areas & wetlands	NA			
4.3 Significant landscapes				
4.4 Identified urban breaks				
5.0 Environmental Risk Criteria				
5.1 Coastal inundation & erosion	NA			
5.2 Bushfire risks				
5.3 Floodplains	NA			
5.4 Land contamination				
5.5 Erosion & landslip				
5.6 Salinity, acid sulfate soils				
5.7 Land use compatibility				
5.8 Major hazard facilities	NA			
6.0 Natural Resource Management Criteria				
6.1 Agricultural land				
6.2 Catchments, waterways, estuaries, bays, and the marine environment				
6.3 Extractive resources				
7.0 Heritage Criteria				
7.1 Aboriginal cultural heritage values				
7.2 Post contact heritage values				
8.0 Accessibility Criteria				
8.1 Public transport and roads access				
9.0 Infrastructure Criteria				
9.1 Utility, community services and drainage				
<p>Further work:</p> <p>Should Council consider it appropriate to pursue this investigation area further the following additional analysis would be required:</p> <ul style="list-style-type: none"> <li>• Further visual analysis in order to determine the potential landscape implications of including all or part of Purdies Paddock and the northern part of 10-40 Williams Road in the settlement boundary.</li> <li>• Further site constraints analysis (i.e. soils, native vegetation, flooding, heritage etc.)</li> </ul>				



Armstrong Creek South Central				
Criteria:	NA	Positive Impact	Neutral Impact	Negative Impact
1.0 Settlement Criteria				
1.1 Enduring Boundary		Option 3 & 4 potentially satisfy subject to further investigation		Option 1 & 2
2.0 Managing Growth Criteria				
2.1 Orderly Development				
2.2 Development Sequencing				
2.3 Economic provision of other development fronts				
3.0 Planning for Places – Distinctive Areas and Landscapes Criteria				
3.1 Unique features or special characteristics				
4.0 Environmental & Landscape Values Criteria				
4.1 Biodiversity values				
4.2 Coastal areas & wetlands	NA			
4.3 Significant landscapes				
4.4 Identified urban breaks				
5.0 Environmental Risk Criteria				
5.1 Coastal inundation & erosion	NA			
5.2 Bushfire risks				
5.3 Floodplains				
5.4 Land contamination				
5.5 Erosion & landslip				
5.6 Salinity, acid sulfate soils				
5.7 Land use compatibility				
5.8 Major hazard facilities	NA			
6.0 Natural Resource Management Criteria				
6.1 Agricultural land				
6.2 Catchments, waterways, estuaries, bays, and the marine environment				
6.3 Extractive resources	NA			
7.0 Heritage Criteria				
7.1 Aboriginal cultural heritage values				
7.2 Post contact heritage values				
8.0 Accessibility Criteria				
8.1 Public transport and roads access				
9.0 Infrastructure Criteria				
9.1 Utility, community services and drainage				
<p>Further work:</p> <p>Should Council consider it appropriate to pursue this investigation area further the following additional analysis would be required:</p> <ul style="list-style-type: none"> <li>• Further concept development and assessment of options 3 and 4 in order to determine whether these options could satisfactorily address this criteria.</li> <li>• Further site constraints analysis (i.e. soils, native vegetation, flooding, heritage etc.)</li> </ul>				

Sparrovale:

All of the land within the investigation area is affected by flooding, and the majority of the northern part of the investigation area will form part of the future Sparrovale Wetlands open space complex.

Given the physical context of this investigation area, and the limited range of factors that will influence the location of the settlement boundary in this location, the Sparrovale investigation area was not subject to a detailed assessment against the full settlement boundary assessment criteria.

In addition to the flooding constraints, urban development within this area will result in an encroachment onto fringes of the environmentally sensitive Hospital Swamp/Lake Connewarre environs.

There are major issues associated with servicing this area due to the fall of the land as well as the flooding constraints (given Barwon Water do not support building their infrastructure on land subject to flooding).

Overall it is concluded that it is not appropriate to alter the settlement boundary in this location and that the existing settlement boundary is considered logical and enduring.



Moolap				
Criteria:	NA	Positive Impact	Neutral Impact	Negative Impact
1.0 Settlement Criteria				
1.1 Enduring Boundary				
2.0 Managing Growth Criteria				
2.1 Orderly Development				
2.2 Development Sequencing				
2.3 Economic provision of other development fronts				
3.0 Planning for Places – Distinctive Areas and Landscapes Criteria				
3.1 Unique features or special characteristics				
4.0 Environmental & Landscape Values Criteria				
4.1 Biodiversity values				
4.2 Coastal areas & wetlands				
4.3 Significant landscapes				
4.4 Identified urban breaks				
5.0 Environmental Risk Criteria				
5.1 Coastal inundation & erosion				
5.2 Bushfire risks				
5.3 Floodplains			Northern Portion	Southern Portion
5.4 Land contamination				
5.5 Erosion & landslip				
5.6 Salinity, acid sulfate soils				
5.7 Land use compatibility				
5.8 Major hazard facilities				
6.0 Natural Resource Management Criteria				
6.1 Agricultural land				
6.2 Catchments, waterways, estuaries, bays, and the marine environment				
6.3 Extractive resources	NA			
7.0 Heritage Criteria				
7.1 Aboriginal cultural heritage values				
7.2 Post contact heritage values				
8.0 Accessibility Criteria				
8.1 Public transport and roads access				
9.0 Infrastructure Criteria				
9.1 Utility, community services and drainage				

Waurm Ponds North				
Criteria:	NA	Positive Impact	Neutral Impact	Negative Impact
1.0 Settlement Criteria				
1.1 Enduring Boundary				
2.0 Managing Growth Criteria				
2.1 Orderly Development				
2.2 Development Sequencing				
2.3 Economic provision of other development fronts				
3.0 Planning for Places – Distinctive Areas and Landscapes Criteria				
3.1 Unique features or special characteristics	NA			
4.0 Environmental & Landscape Values Criteria				
4.1 Biodiversity values				
4.2 Coastal areas & wetlands				
4.3 Significant landscapes				
4.4 Identified urban breaks				
5.0 Environmental Risk Criteria				
5.1 Coastal inundation & erosion	NA			
5.2 Bushfire risks				
5.3 Floodplains				
5.4 Land contamination				
5.5 Erosion & landslip				
5.6 Salinity, acid sulfate soils				
5.7 Land use compatibility				
5.8 Major hazard facilities	NA			
6.0 Natural Resource Management Criteria				
6.1 Agricultural land				
6.2 Catchments, waterways, estuaries, bays, and the marine environment				
6.3 Extractive resources				
7.0 Heritage Criteria				
7.1 Aboriginal cultural heritage values				
7.2 Post contact heritage values				
8.0 Accessibility Criteria				
8.1 Public transport and roads access				
9.0 Infrastructure Criteria				
9.1 Utility, community services and drainage				

Waurm Ponds South:

The Geelong Settlement Strategy does not support expansion of rural living activities beyond the existing Rural Living zone boundary in this location nor does it support the conversion of this area from rural living to urban living.

Given the above policy settings, the Waurm Ponds South investigation area was not subject to a detailed assessment against the settlement boundary assessment criteria.

The Princes Highway is a logical and enduring settlement boundary in this location.

Land within the investigation area is highly fragmented and converting this area from rural to urban residential would present many challenges from both a sequencing and servicing perspective.

The area is not of sufficient scale to be able to create a new residential neighbourhood and therefore the cost-effectiveness and sustainability of delivering utility and community services to this area is likely to be a significant challenge.

Overall it is concluded that it is not appropriate to alter the settlement boundary in this location and that the existing settlement boundary is considered logical and enduring.

Lara North				
Criteria:	NA	Positive Impact	Neutral Impact	Negative Impact
1.0 Settlement Criteria				
1.1 Enduring Boundary				
2.0 Managing Growth Criteria				
2.1 Orderly Development				
2.2 Development Sequencing				
2.3 Economic provision of other development fronts				
3.0 Planning for Places – Distinctive Areas and Landscapes Criteria				
3.1 Unique features or special characteristics	NA			
4.0 Environmental & Landscape Values Criteria				
4.1 Biodiversity values				
4.2 Coastal areas & wetlands	NA			
4.3 Significant landscapes				
4.4 Identified urban breaks				
5.0 Environmental Risk Criteria				
5.1 Coastal inundation & erosion	NA			
5.2 Bushfire risks				
5.3 Floodplains				
5.4 Land contamination				
5.5 Erosion & landslip				
5.6 Salinity, acid sulfate soils				
5.7 Land use compatibility				
5.8 Major hazard facilities	NA			
6.0 Natural Resource Management Criteria				
6.1 Agricultural land				
6.2 Catchments, waterways, estuaries, bays, and the marine environment				
6.3 Extractive resources	NA			
7.0 Heritage Criteria				
7.1 Aboriginal cultural heritage values				
7.2 Post contact heritage values				
8.0 Accessibility Criteria				
8.1 Public transport and roads access				
9.0 Infrastructure Criteria				
9.1 Utility, community services and drainage				

Lara South				
Criteria:	NA	Positive Impact	Neutral Impact	Negative Impact
1.0 Settlement Criteria				
1.1 Enduring Boundary				
2.0 Managing Growth Criteria				
2.1 Orderly Development				
2.2 Development Sequencing				
2.3 Economic provision of other development fronts				
3.0 Planning for Places – Distinctive Areas and Landscapes Criteria				
3.1 Unique features or special characteristics	NA			
4.0 Environmental & Landscape Values Criteria				
4.1 Biodiversity values				
4.2 Coastal areas & wetlands				
4.3 Significant landscapes				
4.4 Identified urban breaks				
5.0 Environmental Risk Criteria				
5.1 Coastal inundation & erosion	NA			
5.2 Bushfire risks				
5.3 Floodplains				
5.4 Land contamination				
5.5 Erosion & landslip				
5.6 Salinity, acid sulfate soils				
5.7 Land use compatibility				
5.8 Major hazard facilities				
6.0 Natural Resource Management Criteria				
6.1 Agricultural land				
6.2 Catchments, waterways, estuaries, bays, and the marine environment				
6.3 Extractive resources	NA			
7.0 Heritage Criteria				
7.1 Aboriginal cultural heritage values				
7.2 Post contact heritage values				
8.0 Accessibility Criteria				
8.1 Public transport and roads access				
9.0 Infrastructure Criteria				
9.1 Utility, community services and drainage				

Avalon:

As Avalon does not contain any residentially zoned land which is within Geelong’s existing settlement boundary, this location does not satisfy Principle 2 relating to the Logical Inclusions Review from the Greater Geelong Strategy.

The Logical Inclusions Review is a review of the Geelong settlement boundary in order to determine if there are locations where it is logical for the boundary to be amended to accommodate additional urban residential uses. The purpose of the review is not to determine if non-residential urban uses should be located within the settlement boundary or not.

The type of urban uses contemplated under the Avalon Strategy do not include urban residential uses, and these existing/proposed uses do not in themselves generate any requirement for the existing settlement boundary to extent into this area.

The land within the Avalon area is extremely segregated from adjoining urban residential development by the Princess Freeway. As a result of this there is limited links between this land and existing community services in adjoining areas and as such it is expected that substantial additional infrastructure would be required to support the creation of a new “neighbourhood” in this location.

In addition to the above, Barwon Water have never contemplated servicing additional residential development in the Avalon area and as such servicing is highly constrained.

Overall it is concluded that it is not appropriate to alter the settlement boundary in this location and that the existing settlement boundary is considered logical and enduring.



# Appendix 1

## Assessment of investigation areas against Principle 5 of the Settlement Boundary Review – Results

# Armstrong Creek South West

				School Provision Ratio and Quantities Summary	Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve	
Estimated Households (Dwellings)	Persons Per Household	Population		Govt P6 School Per <b>dwellings</b>	Govt P7-12 School per <b>dwellings</b>	Multi purpose comm Ctr per <b>population</b>	Neighbourhood House per <b>population</b>	Active Open space reserve per <b>population</b>
				3.5ha	8.4ha	0.8ha - will include 2 or 3 kindergarten rooms / MCH + community rooms. May also include business accelerator, adult education, youth space, comm arts, play group & occasional child care. (0.4ha where no kindergarten)	1.2ha and replaces level 1 centre. Includes all elements of Level 1 centre + additional classroom space and specialist facilities. (0.8ha where no kindergarten)	8 hectare open space reserve
Ratio				3,000	9,000	8,000	20,000	6,000
Source of Ratio				DET	DET	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
Totals Residential	4,050	2.80	11,340					
	Calculated Provision Rates			1.4	0.5	1.4	0.6	1.9

Investigation Area	Assume 70% developable	Assume 15dwellings/ha
432.95	303.07	4546.01

# Amstrong Creek South Central

				School Provision Ratio and Quantities Summary		Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve
	Estimated Households (Dwellings)	Persons Per Household	Population	Govt P6 School Per dwellings	Govt P7-12 School per dwellings	Multi purpose comm Ctr per population	Neighbourhood House per population	Active Open space reserve per population
Explanatory notes				3.5ha	8.4ha	0.8ha - will include 2 or 3 kindergarten rooms / MCH + community rooms. May also include business accelerator, adult education, youth space, comm arts, play group & occasional child care. (0.4ha where no kindergarten)	1.2ha and replaces level 1 centre. Includes all elements of Level 1 centre + additional classroom space and specialist facilities. (0.8ha where no kindergarten)	8 hectare open space reserve
<b>Ratio</b>				<b>3,000</b>	<b>9,000</b>	<b>8,000</b>	<b>20,000</b>	<b>6,000</b>
<b>Source of Ratio</b>				DET	DET	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
<b>Totals Residential</b>	<b>4,018</b>	<b>2.80</b>	<b>11,250</b>					
	<b>Calculated Provision Rates</b>			<b>1.3</b>	<b>0.4</b>	<b>1.4</b>	<b>0.6</b>	<b>1.9</b>

Investigation Area	Assume 70% developable	Assume 15dwellings/ha
376.95	263.87	3958.01

# Sparrovale

				School Provision Ratio and Quantities Summary		Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve
	Estimated Households (Dwellings)	Persons Per Household	Population	Govt P6 School Per dwellings	Govt P7-12 School per dwellings	Multi purpose comm Ctr per population	Neighbourhood House per population	Active Open space reserve per population
Explanatory notes				3.5ha	8.4ha	0.8ha - will include 2 or 3 kindergarten rooms / MCH + community rooms. May also include business accelerator, adult education, youth space, comm arts, play group & occasional child care. (0.4ha where no kindergarten)	1.2ha and replaces level 1 centre. Includes all elements of Level 1 centre + additional classroom space and specialist facilities. (0.8ha where no kindergarten)	8 hectare open space reserve
<b>Ratio</b>				<b>3,000</b>	<b>9,000</b>	<b>8,000</b>	<b>20,000</b>	<b>6,000</b>
<b>Source of Ratio</b>				DET	DET	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
<b>Totals Residential</b>	<b>1,473</b>	<b>2.80</b>	<b>4,124</b>					
	<b>Calculated Provision Rates</b>			<b>0.5</b>	<b>0.2</b>	<b>0.5</b>	<b>0.2</b>	<b>0.7</b>
	Investigation Area		Assume 70% developable	Assume 15dwellings/ha				
	659.51		461.66	6924.88				

**Moolap**

				School Provision Ratio and Quantities Summary		Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve
Estimated Households (Dwellings)	Persons Per Household	Population		Govt P6 School Per dwellings	Govt P7-12 School per dwellings	Multi purpose comm Ctr per population	Neighbourhood House per population	Active Open space reserve per population
				3.5ha	8.4ha	0.8ha - will include 2 or 3 kindergarten rooms / MCH + community rooms. May also include business accelerator, adult education, youth space, comm arts, play group & occasional child care. (0.4ha where no kindergarten)	1.2ha and replaces level 1 centre. Includes all elements of Level 1 centre + additional classroom space and specialist facilities. (0.8ha where no kindergarten)	8 hectare open space reserve
<b>Ratio</b>				3,000	9,000	8,000	20,000	6,000
<b>Source of Ratio</b>				DET	DET	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
<b>Totals Residential</b>	4,006	2.80	11,218					
	<b>Calculated Provision Rates</b>			1.3	0.4	1.4	0.6	1.9
						Investigation Area	Assume 70% developable	Assume 15dwellings/ha
						498.42	348.90	5233.43

## Moolap existing community

				School Provision Ratio and Quantities Summary	Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve	
	Estimated Households (Dwellings)	Persons Per Household	Population	Govt P6 School Per <b>dwellings</b>	Govt P7-12 School per <b>dwellings</b>	Multi purpose comm Ctr per <b>population</b>	Neighbourhood House per <b>population</b>	Active Open space reserve per <b>population</b>
Explanatory notes				3.5ha	8.4ha	0.8ha - will include 2 or 3 kindergarten rooms / MCH + community rooms. May also include business accelerator, adult education, youth space, comm arts, play group & occasional child care. (0.4ha where no kindergarten)	1.2ha and replaces level 1 centre. Includes all elements of Level 1 centre + additional classroom space and specialist facilities. (0.8ha where no kindergarten)	8 hectare open space reserve
<b>Ratio</b>				<b>3,000</b>	<b>9,000</b>	<b>8,000</b>	<b>20,000</b>	<b>6,000</b>
<b>Source of Ratio</b>				DET	DET	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
<b>Totals Residential</b>	<b>4,721</b>	<b>2.80</b>	<b>13,219</b>					
	<b>Calculated Provision Rates</b>			<b>1.6</b>	<b>0.5</b>	<b>1.7</b>	<b>0.7</b>	<b>2.2</b>



# Waurn Ponds South

				School Provision Ratio and Quantities Summary		Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve
PSP	Estimated Households (Dwellings)	Persons Per Household	Population	Govt P6 School Per dwellings	Govt P7-12 School per dwellings	Multi purpose comm Ctr per population	Neighbourhood House per population	Active Open space reserve per population
Explanatory notes				3.5ha	8.4ha	0.8ha - will include 2 or 3 kindergarten rooms / MCH + community rooms. May also include business accelerator, adult education, youth space, comm arts, play group & occasional child care. (0.4ha where no kindergarten)	1.2ha and replaces level 1 centre. Includes all elements of Level 1 centre + additional classroom space and specialist facilities. (0.8ha where no kindergarten)	8 hectare open space reserve
Ratio				3,000	9,000	8,000	20,000	6,000
Source of Ratio				DET	DET	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
Totals Residential	2,928	2.80	8,198					
Calculated Provision Rates				1.0	0.3	1.0	0.4	1.4
				Precinct Area		Assume 70% developable	Assume 15dwellings/ha	
				261.84		183.29	2749.28	

Lara North + Lara West PSP

				School Provision Ratio and Quantities Summary		Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve
Estimated Households (Dwellings)	Persons Per Household	Population		Govt P6 School Per dwellings	Govt P7-12 School per dwellings	Multi purpose comm Ctr per population	Neighbourhood House per population	Active Open space reserve per population
Explanatory notes				3.5ha	8.4ha	0.8ha - will include 2 or 3 kindergarten rooms / MCH + community rooms. May also include business accelerator, adult education, youth space, comm arts, play group & occasional child care. (0.4ha where no kindergarten)	1.2ha and replaces level 1 centre. Includes all elements of Level 1 centre + additional classroom space and specialist facilities. (0.8ha where no kindergarten)	8 hectare open space reserve
Ratio				3,000	9,000	8,000	20,000	6,000
Source of Ratio				DET	DET	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
Totals Residential	6,116	2.80	17,125					
	Calculated Provision Rates			2.0	0.7	2.1	0.9	2.9

Investigation Area	Assume 70% developable	Assume 15dwellings/ha
184.29	129.01	1935.09
Existing PSP dwelling estimate		4178
Total dwellings		6115.95

Lara South

				School Provision Ratio and Quantities Summary		Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve
PSP	Estimated Households (Dwellings)	Persons Per Household	Population	Govt P6 School Per <b>dwellings</b>	Govt P7-12 School per <b>dwellings</b>	Multi purpose comm Ctr per <b>population</b>	Neighbourhood House per <b>population</b>	Active Open space reserve per <b>population</b>
Explanatory notes				3.5ha	8.4ha	0.8ha - will include 2 or 3 kindergarten rooms / MCH + community rooms. May also include business accelerator, adult education, youth space, comm arts, play group & occasional child care. (0.4ha where no kindergarten)	1.2ha and replaces level 1 centre. Includes all elements of Level 1 centre + additional classroom space and specialist facilities. (0.8ha where no kindergarten)	8 hectare open space reserve
<b>Ratio</b>				<b>3,000</b>	<b>9,000</b>	<b>8,000</b>	<b>20,000</b>	<b>6,000</b>
<b>Source of Ratio</b>				DET	DET	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
<b>Totals Residential</b>	<b>1,787</b>	<b>2.80</b>	<b>5,002</b>					
	<b>Calculated Provision Rates</b>			<b>0.6</b>	<b>0.2</b>	<b>0.6</b>	<b>0.3</b>	<b>0.8</b>
					Precinct Area	Assume 70% developable	Assume 15dwellings/ha	
					115.35	80.74	1211.12	

# Appendix 2

## Settlement Boundary and the Planning Policy Framework

## Step 2 – Establish Assessment Criteria for reviewing the Settlement Boundary.

The relevant State and regional planning strategies contained in the Greater Geelong Planning Scheme are set out as follows.

[Note these are limited to the strategies of most relevance to determining the urban Geelong Settlement Boundary, and that have informed the selection of the Settlement Boundary Assessment Criteria]

### 1.0 Settlement Criteria:

Settlement Boundary Assessment Criteria:	Geelong Planning Scheme:
<p>1.1 Impacts of any proposed changes on the establishment of logical and enduring settlement boundaries (including consideration of natural features, location of major roads and reservations for public utilities)</p>	<p>Clause 11.1-1S Settlement</p> <p><u>Strategy:</u></p> <p>Create and reinforce settlement boundaries.</p> <p>Clause 11.01-1R – Settlement:</p> <p><u>Strategies:</u></p> <p>Maintain a significant settlement break between the region and Melbourne.</p> <p>Provide for settlement breaks between towns to maintain their unique identities.</p> <p>Require a settlement boundary for all towns</p> <p>Clause 21.06-2 Spatial Distribution of Growth</p> <p><u>Objectives:</u></p> <p>Contain growth within identified locations across the municipality. Minimise the economic, environmental, visual and servicing impacts of residential development on rural areas.</p> <p>Maintain the unique township, landscape, tourism, farming and environmental values of the Bellarine Peninsula.</p> <p>Maintain the unique identity of Greater Geelong and its townships.</p> <p><u>Strategies:</u></p> <p>Direct the majority of future housing needs to urban Geelong (urban infill, Armstrong Creek and the Northern and Western Geelong Growth Areas).</p> <p>Reduce the share of new housing development on the Bellarine Peninsula.</p> <p>Ensure development occurs within designated settlement boundaries.</p>

2.0 Managing Growth Criteria:

Settlement Boundary Assessment Criteria:	Geelong Planning Scheme:
<p>2.1 Impact on the orderly development of the adjoining urban area</p>	<p>Clause 19.03-2S Infrastructure design and provision</p> <p><u>Objective:</u></p> <p>To provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p><u>Strategies:</u></p> <p>Provide an integrated approach to the planning and engineering design of new subdivision and development.</p> <p>Integrate developments with infrastructure and services, whether they are in existing suburbs, growth areas or regional towns</p>
<p>2.2 Impact on management of the sequence of development and the early provision of services</p>	<p>Clause 11.2-3S Sequencing of development:</p> <p><u>Objective:</u></p> <p>To manage the sequence of development in areas of growth so that services are available from early in the life of new communities.</p> <p><u>Strategies:</u></p> <p>Define preferred development sequences in areas of growth to better coordinate infrastructure planning and funding.</p> <p>Ensure that new land is released in areas of growth in a timely fashion to facilitate coordinated and cost-efficient provision of local and regional infrastructure.</p> <p>Require new development to make a financial contribution to the provision of infrastructure such as community facilities, public transport and roads.</p> <p>Improve the coordination and timing of infrastructure and service delivery in areas of growth.</p> <p>Support opportunities to co-locate facilities.</p> <p>Ensure that planning for water supply, sewerage and drainage works receives high priority in early planning for areas of growth.</p>



Settlement Boundary Assessment Criteria:	Geelong Planning Scheme:
<p>2.3 Impacts of any proposed boundary changes on the economic provision of other development fronts</p>	<p>Clause 11.02-3S Sequencing of development</p> <p><u>Objective:</u></p> <p>To manage the sequence of development in areas of growth so that services are available from early in the life of new communities.</p> <p><u>Strategies:</u></p> <p>Define preferred development sequences in areas of growth to better coordinate infrastructure planning and funding.</p> <p>Ensure that new land is released in areas of growth in a timely fashion to facilitate coordinated and cost-efficient provision of local and regional infrastructure.</p> <p>Require new development to make a financial contribution to the provision of infrastructure such as community facilities, public transport and roads.</p> <p>Improve the coordination and timing of infrastructure and service delivery in areas of growth.</p> <p>Ensure that planning for water supply, sewerage and drainage</p>



3.0 Planning for Places – Distinctive Areas and Landscapes Criteria:

Criteria: Geelong Planning Scheme:	
<p>3.1 Impact on any identified unique features or special characteristics within a declared area</p>	<p>Clause 11.03-5S Distinctive Areas and Landscapes:</p> <p><u>Objective:</u></p> <p>To recognise the importance of distinctive areas and landscapes to the people of Victoria and protect and enhance the valued attributes of identified or declared distinctive areas and landscapes.</p> <p><u>Strategies:</u></p> <p>Recognise the unique features and special characteristics of these areas and landscapes.</p> <p>Implement the strategic directions of approved Localised Planning Statements and Statements of Planning Policy.</p> <p>Integrate policy development, implementation and decision-making for declared areas under Statements of Planning policy.</p> <p>Recognise the important role these areas play in the state as tourist destinations. Protect the identified key values and activities of these areas.</p> <p>Enhance conservation of the environment, including the unique habitats, ecosystems and biodiversity of these areas.</p> <p>Support use and development where it enhances the valued characteristics of these areas.</p> <p>Avoid use and development that could undermine the long-term natural or non-urban use of land in these areas.</p> <p>Protect areas that are important for food production</p>



4.0 Environmental & Landscape Values Criteria:

Criteria:	Geelong Planning Scheme:
<p>4.1 Impact on the protection of biodiversity values</p>	<p>Clause 12.01-15 Protection of biodiversity:</p> <p><u>Objective:</u></p> <p>To assist the protection and conservation of Victoria’s biodiversity.</p> <p><u>Strategies:</u></p> <p>Use biodiversity information to identify important areas of biodiversity, including key habitat for rare or threatened species and communities, and strategically valuable biodiversity sites.</p> <p>Strategically plan for the protection and conservation of Victoria’s important areas of biodiversity.</p> <p>Ensure that decision making takes into account the impacts of land use and development on Victoria’s biodiversity, including consideration of:</p> <ul style="list-style-type: none"> <li>•Cumulative impacts.</li> <li>•Fragmentation of habitat.</li> <li>•The spread of pest plants, animals and pathogens into natural ecosystems.</li> </ul> <p>Avoid impacts of land use and development on important areas of biodiversity.</p> <p>Consider impacts of any change in land use or development that may affect the biodiversity value of national parks and conservation reserves or nationally and internationally significant sites; including wetlands and wetland wildlife habitat designated under the Convention on Wetlands of International Importance (the Ramsar Convention) and sites utilised by species listed under the Japan-Australia Migratory Birds Agreement (JAMBA), the China-Australia Migratory Birds Agreement (CAMBA), or the Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA).</p> <p>Assist in the identification, protection and management of important areas of biodiversity.</p> <p>Assist in the establishment, protection and re- establishment of links between important areas of biodiversity, including through a network of green spaces and large-scale native vegetation corridor projects</p>

4.0 Environmental & Landscape Values Criteria:

Criteria:	Geelong Planning Scheme:
<p>4.2 Impact on the protection of coastal areas &amp; wetlands</p>	<p>Clause 12.02-15 Protection of the marine and coastal environment:</p> <p><u>Objective:</u></p> <p>To protect and enhance the marine and coastal environment.</p> <p><u>Strategies:</u></p> <p>Manage privately-owned foreshore consistently with the adjoining public land.</p> <p>Protect coastal and foreshore environments and improve public access and recreation facilities around Port Phillip Bay and Western Port by focusing development in areas already developed or in areas that can tolerate more intensive use.</p> <p>Enhance the ecological values of the ecosystems in the marine and coastal environment.</p> <p>Protect and enhance the overall extent and condition of native habitats and species diversity distributions across public and private land in the marine and coastal environment.</p> <p>Encourage revegetation of cleared land abutting coastal reserves.</p> <p>Minimise direct, cumulative and synergistic effects on ecosystems and habitats.</p> <p>Maintain the natural drainage patterns, water quality and biodiversity in and adjacent to coastal estuaries, wetlands and waterways.</p> <p>Maintain and enhance water and soil quality by minimising disturbance of sediments.</p> <p>Avoid disturbance of coastal acid sulfate soils.</p> <p>Protect and enhance natural features, landscapes, seascapes and public visual corridors.</p> <p>Plan for marine development and infrastructure to be sensitive to marine national parks and environmental assets.</p> <p>Protect the heritage values, the aesthetic quality of locations, cultural links with maritime activities, sea country and sense of place.</p>



Criteria: Geelong Planning Scheme:	
4.2 Impact on the protection of coastal areas & wetlands	<p>12.03-1S River corridors, waterways, lakes and wetlands</p> <p><u>Objective:</u></p> <p>To protect and enhance river corridors, waterways, lakes and wetlands.</p> <p><u>Strategies:</u></p> <p>Protect the environmental, cultural and landscape values of all water bodies and wetlands.</p> <p>Ensure development responds to and respects the significant environmental, conservation, cultural, aesthetic, open space, recreation and tourism assets of water bodies and wetlands.</p> <p>Ensure development is sensitively designed and sited to maintain and enhance environmental assets, significant views and landscapes along river corridors and waterways and adjacent to lakes and wetlands.</p> <p>Ensure development does not compromise bank stability, increase erosion or impact on a water body or wetland's natural capacity to manage flood flow.</p> <p>Facilitate growth in established settlements where water and wastewater can be managed.</p>
4.3 Impact on the protection of significant landscapes	<p>Clause 12.05-2S Landscapes</p> <p><u>Objective:</u></p> <p>To protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.</p> <p><u>Strategies:</u></p> <p>Ensure significant landscape areas such as forests, the bays and coastlines are protected.</p> <p>Ensure development does not detract from the natural qualities of significant landscape areas.</p> <p>Improve the landscape qualities, open space linkages and environmental performance in significant landscapes and open spaces, including green wedges, conservation areas and non-urban areas.</p> <p>Recognise the natural landscape for its aesthetic value and as a fully functioning system.</p> <p>Ensure important natural features are protected and enhanced.</p>

4.0 Environmental & Landscape Values Criteria:

Criteria:	Geelong Planning Scheme:
<p>4.4 Impact on the preservation of identified urban breaks</p>	<p>Clause 11.01-1R Settlement – G21</p> <p><u>Strategies:</u></p> <p>Maintain a significant settlement break between the region and Melbourne.</p> <p>Provide for settlement breaks between towns to maintain their unique identities.</p> <p>Require a settlement boundary for all towns.</p> <p>Protect critical agricultural land by directing growth to towns.</p> <p>Clause 21.06-2 Spatial distribution of growth:</p> <p><u>Strategies:</u></p> <p>Maintain the non-urban breaks between Geelong and Melbourne (Wyndham), Geelong and the Surf Coast, urban Geelong and the Bellarine Peninsula, and the townships on the Bellarine Peninsula.</p>



5.0 Environmental Risk Criteria:

Criteria:	Geelong Planning Scheme:
<p>5.1 Climate change – impacts of coastal inundation &amp; erosion</p>	<p>Clause 13.01-15 - Natural hazards and climate change:</p> <p><u>Objective:</u></p> <p>To minimise the impacts of natural hazards and adapt to the impacts of climate change through risk-based planning.</p> <p><u>Strategies:</u></p> <p>Consider the risks associated with climate change in planning and management decision making processes.</p> <p>Identify at risk areas using the best available data and climate change science.</p> <p>Integrate strategic land use planning with emergency management decision making.</p> <p>Direct population growth and development to low risk locations.</p> <p>Develop adaptation response strategies for existing settlements in risk areas to accommodate change over time.</p> <p>Ensure planning controls allow for risk mitigation or risk adaptation strategies to be implemented.</p> <p>Site and design development to minimise risk to life, property, the natural environment and community infrastructure from natural hazards.</p> <p>Clause 13.01-25 - Coastal inundation and erosion:</p> <p><u>Objective:</u></p> <p>To plan for and manage coastal hazard risk and climate change impacts.</p> <p><u>Strategies:</u></p> <p>Plan for sea level rise of not less than 0.8 metres by 2100 and allow for the combined effects of tides, storm surges, coastal processes and local conditions such as topography and geology when assessing risks and coastal impacts associated with climate change.</p> <p>Ensure that land subject to hazards is identified and appropriately managed to ensure that future use and development is not at risk.</p> <p>Avoid use and development in areas vulnerable to coastal inundation and erosion.</p> <p>Respond to marine and coastal processes in the context of the coastal compartment type.</p> <p>Assess the effectiveness, costs, benefits, impacts (direct, cumulative and synergistic) and path dependency of available adaptation options in the following order:</p> <ol style="list-style-type: none"> <li>1. non-intervention</li> <li>2. avoid</li> <li>3. nature-base methods</li> <li>4. retreat</li> <li>5. protect</li> </ol> <p>Ensure that development or protective works that seek to respond to coastal hazard risks avoid detrimental impacts on coastal processes.</p>

5.0 Environmental Risk Criteria:

Criteria: Geelong Planning Scheme:	
5.2 Bushfire risks in the location	<p>Clause 13.02-15 Bushfire planning:</p> <p><u>Policy application:</u></p> <p>This policy must be applied to all planning and decision making under the Planning and Environment Act 1987 relating to land that is:</p> <p>Within a designated bushfire prone area; Subject to a Bushfire Management Overlay; or Proposed to be used or developed in a way that may create a bushfire hazard.</p> <p><u>Objective:</u></p> <p>To strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.</p> <p><u>Strategies:</u></p> <p>Protection of human life: Give priority to the protection of human life by:</p> <ul style="list-style-type: none"> <li>•Prioritising the protection of human life over all other policy considerations.</li> <li>•Directing population growth and development to low risk locations and ensuring the availability of, and safe access to, areas where human life can be better protected from the effects of bushfire.</li> <li>•Reducing the vulnerability of communities to bushfire through the consideration of bushfire risk in decision making at all stages of the planning process.</li> </ul> <p><u>Bushfire hazard identification and assessment:</u></p> <p>Identify bushfire hazard and undertake appropriate risk assessment by:</p> <p>Applying the best available science to identify vegetation, topographic and climatic conditions that create a bushfire hazard.</p> <p>Considering the best available information about bushfire hazard including the map of designated bushfire prone areas prepared under the Building Act 1993 or regulations made under that Act.</p> <p>Applying the Bushfire Management Overlay to areas where the extent of vegetation can create an extreme bushfire hazard.</p> <p>Considering and assessing the bushfire hazard on the basis of:</p> <ul style="list-style-type: none"> <li>•Landscape conditions – meaning conditions in the landscape within 20 kilometres (and potentially up to 75 kilometres) of a site;</li> <li>•Local conditions – meaning conditions in the area within approximately 1 kilometre of a site;</li> <li>•Neighbourhood conditions – meaning conditions in the area within 400 metres of a site; and</li> <li>•The site for the development.</li> </ul> <p>Consulting with emergency management agencies and the relevant fire authority early in the process to receive their recommendations and implement appropriate bushfire protection measures.</p> <p>Ensuring that strategic planning documents, planning scheme amendments, planning permit applications and development plan approvals properly assess bushfire risk and include appropriate bushfire protection measures.</p>



Criteria: Geelong Planning Scheme:	
5.2 Bushfire risks in the location	<p>Not approving development where a landowner or proponent has not satisfactorily demonstrated that the relevant policies have been addressed, performance measures satisfied or bushfire protection measures can be adequately implemented.</p> <p><u>Settlement planning:</u></p> <p>Plan to strengthen the resilience of settlements and communities and prioritise protection of human life by:</p> <p>Directing population growth and development to low risk locations, being those locations assessed as having a radiant heat flux of less than 12.5 kilowatts/square metre under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009).</p> <p>Ensuring the availability of, and safe access to, areas assessed as a BAL-LOW rating under AS 3959-2009 Construction of Buildings in Bushfire prone Areas (Standards Australia, 2009) where human life can be better protected from the effects of bushfire.</p> <p>Ensuring the bushfire risk to existing and future residents, property and community infrastructure will not increase as a result of future land use and development.</p> <p>Achieving no net increase in risk to existing and future residents, property and community infrastructure, through the implementation of bushfire protection measures and where possible reducing bushfire risk overall.</p> <p>Assessing and addressing the bushfire hazard posed to the settlement and the likely bushfire behaviour it will produce at a landscape, settlement, local, neighbourhood and site scale, including the potential for neighbourhood-scale destruction.</p> <p>Assessing alternative low risk locations for settlement growth on a regional, municipal, settlement, local and neighbourhood basis.</p> <p>Not approving any strategic planning document, local planning policy, or planning scheme amendment that will result in the introduction or intensification of development in an area that has, or will on completion have, more than a BAL-12.5 rating under AS 3959-2009 Construction of Buildings in Bushfire-prone Areas (Standards Australia, 2009).</p> <p>[refer to clause 13.02-1 for complete citation of this policy]</p>

5.0 Environmental Risk Criteria:

Criteria:	Geelong Planning Scheme:
<p>5.3 Impacts on/of floodplains;</p>	<p>Clause 13.03-1s Floodplain management</p> <p><u>Objective:</u></p> <p>To assist the protection of:</p> <ul style="list-style-type: none"> <li>•Life, property and community infrastructure from Flood hazard, including coastal inundation, riverine and overland flows.</li> <li>•The natural flood carrying capacity of rivers, streams and floodways.</li> <li>•The flood storage function of floodplains and waterways.</li> <li>•Floodplain areas of environmental significance or of importance to river, wetland or coastal health.</li> </ul> <p><u>Strategies:</u></p> <p>Identify land affected by flooding, including land inundated by the 1 in 100 year flood event (1 per cent Annual Exceedance Probability) or as determined by the floodplain management authority in planning schemes.</p> <p>Avoid intensifying the impact of flooding through inappropriately located use and development.</p> <p>Plan for the cumulative impacts of use and development on flood behaviour.</p> <p>Locate emergency and community facilities (including hospitals, ambulance stations, police stations, fire stations, residential aged care facilities, communication facilities, transport facilities, community shelters and schools) outside the 1 in 100 year (1 per cent Annual Exceedance Probability) floodplain and, where possible, at levels above the height of the probable maximum flood.</p> <p>Locate use and development that involve the storage or disposal of environmentally hazardous industrial and agricultural chemicals or wastes and other dangerous goods (including intensive animal industries and sewage treatment plants) outside floodplains unless site design and management is such that potential contact between such substances and floodwaters is prevented, without affecting the flood carrying and flood storage functions of the floodplain.</p> <p>Ensure land use on floodplains minimises the risk of waterway contamination occurring during floods and floodplains are able to function as temporary storage to moderate peak flows and minimise downstream impacts</p>



Criteria:	Geelong Planning Scheme:
5.4 Impacts on/of contamination land;	<p>Clause 13.04-1S Contaminated and potentially contaminated land</p> <p><u>Objective:</u></p> <p>To ensure that contaminated and potentially contaminated land is used and developed safely.</p> <p><u>Strategies:</u></p> <p>Ensure contaminated or potentially contaminated land is or will be suitable for the proposed use, prior to the commencement of any use or development.</p> <p>Protect sensitive uses including a residential use or use as childcare centre, kindergarten, pre- school centre, secondary school or children’s playground from the effects of contamination.</p> <p>Facilitate the remediation of contaminated land to make the land suitable for future intended use or development.</p>
5.5 Impacts on/of erosion & landslip;	<p>Clause 13.03-2S Erosion and landslip</p> <p><u>Objective:</u></p> <p>To protect areas prone to erosion, landslip or other land degradation processes.</p> <p><u>Strategies:</u></p> <p>Identify areas subject to erosion or instability in planning schemes and when considering the use and development of land.</p> <p>Prevent inappropriate development in unstable areas or areas prone to erosion.</p> <p>Promote vegetation retention, planting and rehabilitation in areas prone to erosion and land instability</p>
5.6 Impacts on/of salinity, acid sulfate soils;	<p>Clause 13.03-3S Salinity</p> <p><u>Objective:</u></p> <p>To minimise the impact of salinity and rising water tables on land uses, buildings and infrastructure in rural and urban areas and areas of environmental significance and reduce salt load in rivers.</p> <p><u>Strategies:</u></p> <p>Identify areas subject to salinity in the preparation of planning schemes and land use planning decisions.</p> <p>Promote vegetation retention and replanting in aquifer recharge areas contributing to groundwater salinity problems.</p> <p>Prevent inappropriate development in areas affected by groundwater salinity.</p>

5.0 Environmental Risk Criteria:

Criteria: Geelong Planning Scheme:	
<p>5.7 Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.</p>	<p>Clause 13.07-1S - Land use compatibility</p> <p><u>Objective:</u></p> <p>To protect community amenity, human health and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with potential adverse off-site impacts.</p> <p><u>Strategies:</u></p> <p>Ensure that use or development of land is compatible with adjoining and nearby land uses.</p> <p>Avoid locating incompatible uses in areas that may be impacted by adverse off-site impacts from commercial, industrial and other uses.</p> <p>Avoid or otherwise minimise adverse off-site impacts from commercial, industrial and other uses through land use separation, siting, building design and operational measures.</p> <p>Protect existing commercial, industrial and other uses from encroachment by use or development that would compromise the ability of those uses to function safely and effectively</p>
<p>5.8 Impacts on/ of major hazard facilities;</p>	<p>Clause 13.07-2S Major hazard facilities</p> <p><u>Objective:</u></p> <p>To minimise the potential for human and property exposure to risk from incidents that may occur at a major hazard facility and to ensure the ongoing viability of major hazard facilities.</p> <p><u>Strategies:</u></p> <p>Ensure major hazard facilities are sited, designed and operated to minimise risk to surrounding communities and the environment.</p> <p>Consider the risks associated with increasing the intensity of use and development within the threshold distance of an existing major hazard facility.</p> <p>Apply appropriate threshold distances from sensitive land uses for new major hazard facilities and between major hazard facilities.</p> <p>Protect registered or licenced major hazard facilities as defined under Regulation 5 of the Occupational Health and Safety Regulations 2017 from encroachment of sensitive land uses</p>



6.0 Natural Resource Management Criteria:

Criteria:	Geelong Planning Scheme:
6.1 Impact on the protection of agricultural land	<p>Clause 14.01-15 Protection of agricultural land:</p> <p><u>Objective:</u></p> <p>To protect the state’s agricultural base by preserving productive farmland.</p> <p><u>Strategies:</u></p> <p>Identify areas of productive agricultural land, including land for primary production and intensive agriculture.</p> <p>Consider state, regional and local, issues and characteristics when assessing agricultural quality and productivity.</p> <p>Avoid permanent removal of productive agricultural land from the state’s agricultural base without consideration of the economic importance of the land for the agricultural production and processing sectors.</p> <p>Protect productive farmland that is of strategic significance in the local or regional context.</p> <p>Protect productive agricultural land from unplanned loss due to permanent changes in land use.</p> <p>Prevent inappropriately dispersed urban activities in rural areas.</p> <p>Protect strategically important agricultural and primary production land from incompatible uses.</p> <p>Limit new housing development in rural areas by:</p> <ul style="list-style-type: none"> <li>•Directing housing growth into existing settlements.</li> <li>•Discouraging development of isolated small lots in the rural zones from use for dwellings or other incompatible uses.</li> <li>•Encouraging consolidation of existing isolated small lots in rural zones.</li> </ul> <p>Identify areas of productive agricultural land by consulting with the Department of Economic Development, Jobs, Transport and Resources and using available information.</p> <p>In considering a proposal to use, subdivide or develop agricultural land, consider the:</p> <ul style="list-style-type: none"> <li>•Desirability and impacts of removing the land from primary production, given its agricultural productivity.</li> <li>•Impacts on the continuation of primary production on adjacent land, with particular regard to land values and the viability of infrastructure for such production.</li> <li>•Compatibility between the proposed or likely development and the existing use of the surrounding land.</li> <li>•The potential impacts of land use and development on the spread of plant and animal pests from areas of known infestation into agricultural areas.</li> <li>•Land capability.</li> </ul> <p>Avoid the subdivision of productive agricultural land from diminishing the long-term productive capacity of the land.</p> <p>Give priority to the re-structure of inappropriate subdivisions where they exist on productive agricultural land.</p> <p>Balance the potential off-site effects of a use or development proposal (such as degradation of soil or water quality and land salinisation) against the benefits of the proposal.</p>

6.0 Natural Resource Management Criteria:

Criteria:	Geelong Planning Scheme:
<p>6.2 Impact on the protection of agricultural land</p>	<p>Clause 1.01-11R Settlement G21:</p> <p><u>Strategy:</u></p> <p>Protect critical agricultural land by directing growth to towns.</p> <p>Clause 14.01-2R Agricultural productivity - Geelong G21</p> <p><u>Strategy:</u></p> <p>Support new opportunities in farming and fisheries.</p>
<p>6.3 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources</p>	<p>Clause 14.02-15 Catchment planning and management:</p> <p><u>Objective:</u></p> <p>To assist the protection and restoration of catchments, waterways, estuaries, bays, water bodies, groundwater, and the marine environment.</p> <p><u>Strategies:</u></p> <p>Ensure the continued availability of clean, high- quality drinking water by protecting water catchments and water supply facilities.</p> <p>Consider the impacts of catchment management on downstream water quality and freshwater, coastal and marine environments.</p> <p>Retain natural drainage corridors with vegetated buffer zones at least 30 metres wide along each side of a waterway to:</p> <ul style="list-style-type: none"> <li>•Maintain the natural drainage function, stream habitat and wildlife corridors and landscape values,</li> <li>•Minimise erosion of stream banks and verges, and</li> <li>•Reduce polluted surface runoff from adjacent land uses.</li> </ul> <p>Undertake measures to minimise the quantity and retard the flow of stormwater from developed areas.</p> <p>Require appropriate measures to filter sediment and wastes from stormwater prior to its discharge into waterways, including the preservation of floodplain or other land for wetlands and retention basins.</p> <p>Ensure that development at or near waterways provide for the protection and enhancement of the environmental qualities of waterways and their instream uses.</p> <p>Ensure land use and development minimises nutrient contributions to water bodies and the potential for the development of algal blooms.</p> <p>Require appropriate measures to restrict sediment discharges from construction sites.</p> <p>Ensure planning is coordinated with the activities of catchment management authorities.</p> <p>Ensure that water quality infrastructure is designed to minimise risk of harm to surface waters and Groundwater.</p>



Criteria:	Geelong Planning Scheme:
<p>6.4 Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources</p>	<p>Clause 14.02-25 Water quality:</p> <p><u>Objective:</u></p> <p>To protect water quality.</p> <p><u>Strategies:</u></p> <p>Protect reservoirs, water mains and local storage facilities from potential contamination.</p> <p>Ensure that land use activities potentially discharging contaminated runoff or wastes to waterways are sited and managed to minimise such discharges and to protect the quality of surface water and groundwater resources, rivers, streams, wetlands, estuaries and marine environments.</p> <p>Discourage incompatible land use activities in areas subject to flooding, severe soil degradation, groundwater salinity or geotechnical hazards where the land cannot be sustainably managed to ensure minimum impact on downstream water quality or flow volumes.</p> <p>Prevent the establishment of incompatible land uses in aquifer recharge or saline discharge areas and in potable water catchments.</p> <p>Encourage the siting, design, operation and rehabilitation of landfills to reduce impact on groundwater and surface water.</p> <p>Use the mapped information available from the Department of Environment, Land, Water and Planning to identify the beneficial uses of groundwater resources and have regard to potential impacts on these resources from proposed land use or development.</p>



7.0 Heritage Criteria:

Criteria:	Geelong Planning Scheme:
<p>7.1 Impact on known Aboriginal cultural heritage values</p>	<p>Clause 15.03-25 Aboriginal cultural heritage:</p> <p><u>Objective:</u></p> <p>To ensure the protection and conservation of places of Aboriginal cultural heritage significance.</p> <p><u>Strategies:</u></p> <p>Identify, assess and document places of Aboriginal cultural heritage significance, in consultation with relevant Registered Aboriginal Parties, as a basis for their inclusion in the planning scheme.</p> <p>Provide for the protection and conservation of pre-contact and post-contact Aboriginal cultural heritage places.</p> <p>Ensure that permit approvals align with the recommendations of any relevant Cultural Heritage Management Plan approved under the Aboriginal Heritage Act 2006.</p>
<p>7.2 Impact on known post contact heritage values</p>	<p>Clause 15.03-15 Heritage conservation:</p> <p><u>Objective:</u></p> <p>To ensure the conservation of places of heritage significance.</p> <p><u>Strategies:</u></p> <p>Identify, assess and document places of natural and cultural heritage significance as a basis for their inclusion in the planning scheme.</p> <p>Provide for the protection of natural heritage sites and man-made resources.</p> <p>Provide for the conservation and enhancement of those places that are of aesthetic, archaeological, architectural, cultural, scientific or social significance.</p> <p>Encourage appropriate development that respects places with identified heritage values.</p> <p>Retain those elements that contribute to the importance of the heritage place.</p> <p>Encourage the conservation and restoration of contributory elements of a heritage place.</p> <p>Ensure an appropriate setting and context for heritage places is maintained or enhanced.</p> <p>Support adaptive reuse of heritage buildings where their use has become redundant.</p> <p>Consider whether it is appropriate to require the restoration or reconstruction of a heritage building in a Heritage Overlay that has been unlawfully or unintentionally demolished in order to retain or interpret the cultural heritage significance of the building, streetscape or area.</p>



8.0 Accessibility Criteria:

Criteria:	Geelong Planning Scheme:
<p>8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access</p>	<p>Clause 18.01-1S Land use and transport integration:</p> <p><u>Objective:</u></p> <p>To facilitate access to social, cultural and economic opportunities by effectively integrating land use and transport.</p> <p><u>Strategies:</u></p> <p>Plan and develop a transport system that facilitates:</p> <ul style="list-style-type: none"> <li>•Social and economic inclusion for all people and builds community wellbeing.</li> <li>•The best use of existing social and economic infrastructure.</li> <li>• A reduction in the distances people have to travel to access jobs and services.</li> <li>•Better access to, and greater mobility within, local communities.</li> <li>•Network-wide efficiency and coordinated operation.</li> </ul> <p>Plan land use and development to:</p> <ul style="list-style-type: none"> <li>•Protect existing transport infrastructure from encroachment or detriment that would impact on the current or future function of the asset.</li> <li>•Protect transport infrastructure that is in delivery from encroachment or detriment that would impact on the construction or future function of the asset.</li> <li>•Protect planned transport infrastructure from encroachment or detriment that would impact deliverability or future operation.</li> <li>•Protect identified potential transport infrastructure from being precluded by land use and development.</li> </ul> <p>Plan land use and development to allow for the ongoing improvement and development of the State Transport System in the short and long term.</p> <p>Plan movement networks and adjoining land uses to minimise disruption to residential communities and their amenity.</p> <p>Plan the timely delivery of transport infrastructure and services to support changing land use and associated transport demands.</p> <p>Plan improvements to public transport, walking and cycling networks to coordinate with the ongoing development and redevelopment of urban areas.</p> <p>Plan the use of land adjacent to the transport system having regard to the current and future development and operation of the transport system.</p> <p>Reserve land for strategic transport infrastructure to ensure the transport system can be developed efficiently to meet changing transport demands.</p> <p>Support urban development that makes jobs and services more accessible:</p> <ul style="list-style-type: none"> <li>•In accordance with forecast demand.</li> <li>•By taking advantage of all available modes of transport.</li> <li>•Protect existing and facilitate new walking and cycling access to public transport.</li> <li>•Locate major government and private sector investments in regional cities and centres on major transport corridors to maximise the access and mobility of communities.</li> </ul> <p>Design neighbourhoods to:</p> <ul style="list-style-type: none"> <li>•Better support active living.</li> <li>•Increase the share of trips made using sustainable transport modes.</li> <li>•Respond to the safety needs of all users.</li> <li>•Design the transport system and adjacent areas to achieve visual outcomes that are responsible to local context with particular reference to:             <ul style="list-style-type: none"> <li>» Landscaping.</li> <li>» The placement of signs.</li> <li>» Providing buffer zones and resting places.</li> </ul> </li> </ul>

8.0 Accessibility Criteria:

Criteria: Geelong Planning Scheme:	
<p>8.1 Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access</p>	<p>Clause 18.01-25 Transport system:</p> <p><u>Objective:</u></p> <p>To facilitate the efficient, coordinated and reliable movement of people and goods by developing an integrated and efficient transport system.</p> <p><u>Strategies:</u></p> <p>Plan and develop a transport system integrated across all movement networks that:</p> <ul style="list-style-type: none"> <li>•Facilitates the efficient, coordinated and reliable movement of people and goods at all times.</li> <li>•Optimises transport system capacity.</li> <li>•Improves connectivity and facilitates the growth and development of regional Victoria.</li> <li>•Improves connectivity between Victoria’s regional cities and metropolitan Melbourne.</li> <li>•Ensures sufficient capacity for the movement of passengers into and out of Victoria at Principal Transport Gateways.</li> <li>•Improves how goods are moved to local, interstate and overseas markets.</li> <li>•Maximises access to residential areas, employment, markets, services and recreation.</li> <li>•Improves local transport options to support 20-minute neighbourhoods in Melbourne’s suburbs and Victoria’s regional cities and towns.</li> <li>•Is legible and enables easy access and movement between modes.</li> </ul> <p>Plan movement networks that share the same space to do so in a way that balances the needs of the different users of the transport system.</p> <p>Plan and develop the State Transport System comprising the:</p> <ul style="list-style-type: none"> <li>•Principal Bicycle Network: Existing and future high quality cycling routes that provide access to major destinations and facilitate cycling for transport, sport, recreation and fitness.</li> <li>•Principal Public Transport Network: Existing and future high quality public transport routes in the Melbourne metropolitan area.</li> <li>•Regional Rail Network: Existing and future passenger rail routes in regional Victoria.</li> <li>•Principal Road Network: Declared arterial roads and freeways under the Road Management Act 2004.</li> <li>•Principal Freight Network: Existing and future corridors and precincts where the movement of high volumes of freight are concentrated or of strategic value.</li> <li>•Principal Transport Gateways: Existing and future ports, airports and interstate terminals that serve as key locations for moving passengers and freight into, out of and around Victoria.</li> </ul> <p>Facilitate delivery of:</p> <ul style="list-style-type: none"> <li>•Declared major transport projects and their ancillary projects that are of economic, social or environmental significance to the State of Victoria.</li> <li>•Transport projects that improve the State Transport System.</li> </ul>



9.0 Infrastructure Criteria:

Criteria:	Geelong Planning Scheme:
<p>9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage</p>	<p>Clause 19.03-2S Infrastructure design and provision:</p> <p><u>Objective:</u></p> <p>To provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p><u>Strategies:</u></p> <p>Provide an integrated approach to the planning and engineering design of new subdivision and development.</p> <p>Integrate developments with infrastructure and services, whether they are in existing suburbs, growth areas or regional towns.</p> <p>19.02-4S Social and cultural infrastructure</p> <p><u>Objective:</u></p> <p>To provide fairer distribution of and access to, social and cultural infrastructure.</p> <p><u>Strategies:</u></p> <p>Identify and address gaps and deficiencies in social and cultural infrastructure, including additional regionally significant cultural and sporting facilities.</p> <p>Encourage the location of social and cultural infrastructure in activity centres.</p> <p>Ensure social infrastructure is designed to be accessible.</p> <p>Ensure social infrastructure in growth areas, is delivered early in the development process and in the right locations.</p> <p>Plan and design community places and buildings so they can adapt as the population changes and different patterns of work and social life emerge.</p>

9.0 Infrastructure Criteria:

Criteria:	Geelong Planning Scheme:
<p>9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage</p>	<p>Clause 19.02-6S Open space:</p> <p>Objective: To establish, manage and improve a diverse and integrated network of public open space that meets the needs of the community.</p> <p>Strategies: Plan for regional and local open space networks for both recreation and conservation of natural and cultural environments.</p> <p>Ensure that open space networks: Are linked, including through the provision of walking and cycling trails.</p> <p>Are integrated with open space from abutting subdivisions.</p> <p>Incorporate, where possible, links between major parks and activity areas, along waterways and natural drainage corridors, connecting places of natural and cultural interest.</p> <p>Maintain public accessibility on public land immediately adjoining waterways and coasts.</p> <p>Create opportunities to enhance open space networks within and between settlements.</p> <p>Ensure that land is set aside and developed in residential areas for local recreational use and to create pedestrian and bicycle links to commercial and community facilities.</p> <p>Ensure that land use and development adjoining regional open space networks, national parks and conservation reserves complements the open space in terms of visual and noise impacts, preservation of vegetation and treatment of waste water to reduce turbidity and pollution.</p> <p>Improve the quality and distribution of open space and ensure long-term protection.</p> <p>Protect large regional parks and significant conservation areas.</p> <p>Ensure land identified as critical to the completion of open space links is transferred for open space purposes.</p> <p>Ensure that where there is a reduction of open space due to a change in land use or occupation, additional or replacement parkland of equal or greater size and quality is provided.</p> <p>Ensure that urban open space provides for nature conservation, recreation and play, formal and informal sport, social interaction, opportunities to connect with nature and peace and solitude.</p> <p>Accommodate community sports facilities in a way that is not detrimental to other park activities.</p> <p>Ensure open space provision is fair and equitable with the aim of providing access that meets the needs of all members of the community, regardless of age, gender, ability or a person's location.</p>



Criteria:	Geelong Planning Scheme:
<p>9.1 Ability to cost-effectively provide urban services including both utility, community services and drainage</p>	<p>Develop open space to maintain wildlife corridors and greenhouse sinks.</p> <p>Provide new parkland in growth areas and in areas that have an undersupply of parkland.</p> <p>Encourage the preparation of management plans or explicit statements of management objectives for urban parks.</p> <p>Ensure exclusive occupation of parkland by community organisations is restricted to activities consistent with management objectives of the park to maximise broad community access to open space.</p> <p>Ensure the provision of buildings and infrastructure is consistent with the management objectives of the park.</p> <p>Ensure public access is not prevented by developments along stream banks and foreshores.</p> <p>Ensure public land immediately adjoining waterways and coastlines remains in public ownership.</p> <p>Plan open space areas for multiple uses, such as community gardens, sports and recreation, active transport routes, wildlife corridors and flood storage basins.</p>



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