

# AGENDA

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## COUNCIL MEETING

**Tuesday 23 July 2024**  
**6:30 pm**

Off-Site Meeting  
Poa Banyul Community Hub, 110 Unity Drive, Mount Duneed

TO BE LIVE STREAMED ON THE CITY'S WEBSITE:  
[www.geelongaustralia.com.au/meetings](http://www.geelongaustralia.com.au/meetings)

### COUNCIL:

Cr T Sullivan (Bellarine Ward) - Mayor  
Cr A Aitken (Windermere Ward) - Deputy Mayor  
Cr J Mason (Bellarine Ward)  
Cr E Wilkinson (Bellarine Ward)  
Cr M Cadwell (Brownbill Ward)  
Cr E Kontelj (Brownbill Ward)  
Cr P Murrhly (Brownbill Ward)  
Cr B Harwood (Kardinia Ward)  
Cr B Moloney (Kardinia Ward)  
Cr R Nelson (Kardinia Ward)  
Cr S Hathway (Windermere Ward)

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## 2.4. Urban Geelong Long Term Settlement Boundary Review

**Source:** Placemaking  
**Executive Director:** Tennille Bradley

### Purpose

1. To present the Urban Geelong Long Term Settlement Boundary Review and recommendations for Council adoption.
2. To seek Councillor support for the commencement of a planning scheme amendment to introduce into local policy a long-term settlement boundary for urban Geelong and a new rural living node at Mount Duneed - Armstrong Creek.
3. To seek Councillor support to investigate the rezoning of two parcels of land being placed inside the Armstrong Creek growth area boundary as part of the amendment preparation.

### Background

4. The Greater Geelong Settlement Strategy was adopted by Council on 25 August 2020 and included a direction to: *'Pursue options to implement long term settlement boundaries for Greater Geelong.'*
5. The 'Greater Geelong Long Term Boundary Review for Urban Geelong, Background Report, July 2023' (the Review) can be found in Attachment 1. This includes an addendum dated May 2024 to reflect further work that has been completed post the final report.
6. The 'Engagement Summary and Final Recommendations' (the Recommendations) including further strategic justification and draft planning scheme changes can be found in Attachment 2.
7. Long term boundaries have already been implemented for the townships on the Bellarine Peninsula via the Statement of Planning Policy under the Distinctive Areas and Landscapes program and are not part of this review.

### Key Matters

8. Public consultation was undertaken in 2022 with 92 submissions received. A response to submissions can be found in the Review (Attachment 1) and Recommendations (Attachment 2).
9. As a result of the Review and Recommendations three minor amendments (see map 1, Attachment 2) are proposed to Geelong's existing settlement boundary:
  - 9.1. The area zoned Low Density Residential from the existing boundary extending east to Coppards Road, Newcomb between the Bellarine Hwy and Portarlington Rd (no zone changes).
  - 9.2. 145 Harriott Road, Charlemont (supporting future residential development); and

- 9.3. 55 & 75 Williams Road, Mount Duneed (supporting future residential development).
10. A new rural living node is also proposed at Mount Duneed – Armstrong Creek between the Armstrong Creek Urban Growth Boundary and Mount Duneed and Lower Duneed Roads between Ghazeeopore Road and Barwon Heads Road (see map 1, Attachment 2).
11. A planning scheme amendment is required to introduce the long-term boundary into the planning scheme and to support the proposed Rural Living node south of the Armstrong Creek Growth area.
12. Officers will investigate the option to rezone land at Harriott and Williams Roads to support future residential development alongside the boundary review amendment with stakeholders as part of the amendment preparation.

## Recommendation

### That Council:

1. **Adopt the ‘Urban Geelong Long-Term Settlement Boundary Review’ July 2023 (including the Report Addendum, May 2024) in Attachment 1;**
2. **Adopt the ‘Engagement Summary and Final Recommendations’ June 2024 in Attachment 2 of this report;**
3. **Seek authorisation from the Minister for Planning to commence a planning scheme amendment to the Greater Geelong Planning Scheme:**
  - 3.1. **To introduce the urban Geelong long-term settlement boundary and proposed Mount Duneed – Armstrong Creek Rural Living Node into local policy; and**
  - 3.2. **Subject to further investigation rezone two sites to be included in the boundary at Williams Road, Mt Duneed and Harriot Road, Armstrong Creek to an appropriate residential zone with planning overlays and Section 173 Agreements as required.**

### ***Financial Sustainability***

13. There are no significant financial implications to Council beyond that usually associated with the planning scheme amendment process. Developer Contributions will be sought as part of any rezonings.
14. There is a separate process for Council to consider the timing, process and resource implications to deliver the rural living node outcomes identified in this report.

### ***Community Engagement***

15. The following consultation activities were undertaken:
  - 15.1. Direct mailout to all landowners in the investigation areas.
  - 15.2. Notice to Geelong based planning consultants.
  - 15.3. Notice to agencies, Traditional Owners and state Government.
  - 15.4. Notices in papers - City News throughout April 2022.
  - 15.5. Have Your Say page (submissions received from 30th March - 27th May 2022).
  - 15.6. Optional submitter 30-minute meetings conducted 29 August - 7 September 2022; and
  - 15.7. (28 meetings conducted).
16. Ninety-two submissions were received.
17. The key themes to emerge in submissions include:
  - 17.1. General support for approach to investigation areas, methodology, criteria and assessments noting the limitations of such a large study area.
  - 17.2. A number of submitters noted a more nuanced assessment of 'stand-alone' sites or smaller 'precincts' within investigation areas could yield different assessment results providing an overall 'positive' outcome.
  - 17.3. A few submissions noted lot supply should form part of the assessment criteria A few submissions requested the investigation areas be extended.
  - 17.4. The majority of submissions requested inclusion within the long-term settlement boundary due to being able to make a positive contribution to housing supply and an enduring boundary without impacting on existing communities, infrastructure or the environment.
  - 17.5. Several submissions requested the boundary remain where it is to promote infill development, prevent urban sprawl and protect environmental and landscape values.
  - 17.6. A few submissions noted the need for an 'Urban Growth Boundary' as opposed to a 'Housing and Settlement Boundary' to include all urban land including employment land.
  - 17.7. A response to submissions can be found in the Review (Attachment 1) and Recommendations (Attachment 2). There will be another round of public notice

and an invitation to make a submission as part of the formal planning scheme amendment process.

***Social Equity and Sustainability***

18. Consultation has aimed to allow those potentially affected to have their say. There will be another round of public notice and invitation to make a submission as part of the formal planning scheme amendment process.

***Relevant Law/Policy/Legal Implications***

19. The need to undertake a boundary review is identified in the Greater Geelong Planning Scheme further strategic work at clause 74.02.
20. A list of planning scheme changes to implement the recommendations is provided in Attachment 2.
21. The former Boral Quarry site (north of Reservoir Road) was excluded from investigation as part of this project. This site along with the Western Industrial Precinct (Armstrong Creek) have been addressed in the South-West Geelong Employment Land Review (adopted by Council in December 2023) and will form part of the South-West Geelong Investigation Area.
22. The South-West Geelong Investigation Area will not be included within the settlement boundary at this time. When the detailed planning for the investigation area (or precincts) has been completed it may be appropriate to include some or all land within the settlement boundary at this time.
23. Where the settlement boundary interacts with the Surf Coast and Bellarine Peninsula declared areas it will inform the implementation of a Protected Settlement Boundary (PSB) between urban Geelong and the Bellarine Peninsula and Greater Geelong and the Surf Coast Shire within the Bellarine Peninsula and Surf Coast Statements of Planning Policy. The introduction of a PSB will be managed by the Department of Transport and Planning.
24. The introduction of a long-term settlement boundary is part of the City's ongoing program of managing growth.

***Alignment to Community Plan and Vision***

25. This report aligns with Our Community Plan 2021-2025 strategic priority: Sustainable growth and environment.
26. This report aligns with the Community led 30-year Vision, "Greater Geelong: A Clever and Creative Future" community aspiration: Sustainable development that supports population growth and protects the natural environment.

***Conflict of Interest***

27. No officer involved in the preparation of this report declared a general or material conflict of interest.

### ***Risk Assessment***

28. There are no significant risks associated with implementing the recommendations of this report. The recommendations will see the commencement of the formal planning scheme amendment process.
29. The risk of Council not endorsing and implementing the Review is ongoing pressure for expansion and alterations to the settlement boundary and failure to implement Protected Settlement Boundaries (PSBs) along the south and east of the Armstrong Creek Growth Area. These boundaries adjoin the Bellarine Peninsula and Surf Coast declared areas under the Distinctive Areas and Landscapes (DAL) legislation and the two Statements of Planning Policy require Council to implement PSBs.

### ***Environmental Sustainability***

30. The boundary review seeks to introduce a long-term settlement boundary. This boundary will contain residential development protecting farming land and significant landscapes and environmental features. It will also help encourage infill housing and maximise opportunities in greenfield areas. The boundary will support the Council target to increase the share of infill to housing supply from around 30 percent to 50 percent by 2047.

### **Attachments**

1. Attachment 1 - Boundary Review Final Report [2.4.1 - 282 pages]
2. Attachment 1.a - Boundary Review - appendices [2.4.2 - 53 pages]
3. Attachment 2 - Engagement Summary and Final Recommendations Boundary Review [2.4.3 - 55 pages]

An aerial photograph of a city and a large reservoir. The city is in the foreground, with a river winding through it. The reservoir is in the middle ground, and the city extends into the background. The image is overlaid with a dark blue gradient at the bottom.

# Greater Geelong Settlement Boundary

## Long Term Boundary Review for Urban Geelong

**Final Background Report**  
(including response to issues raised in submissions)  
**July 2023**





<b>PROJECT NUMBER</b>	2606
<b>PREPARED BY:</b>	MW, DA
<b>REVIEWED BY:</b>	MW
<b>VERSION</b>	240605

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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.

Following public exhibition of a draft of this report in early 2022, the report authors reviewed submissions received. This final version of this report now includes a response to the issues raised in submissions.

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 (including a response to issues raised in submissions):
  - » Armstrong Creek South West
  - » Armstrong Creek South Central
  - » Sparrovale
  - » Moolap
  - » Waurin Ponds North
  - » Waurin Ponds South
  - » Lara North
  - » Lara South
  - » Avalon
- A consolidated set of findings in relation to the Settlement Boundary.

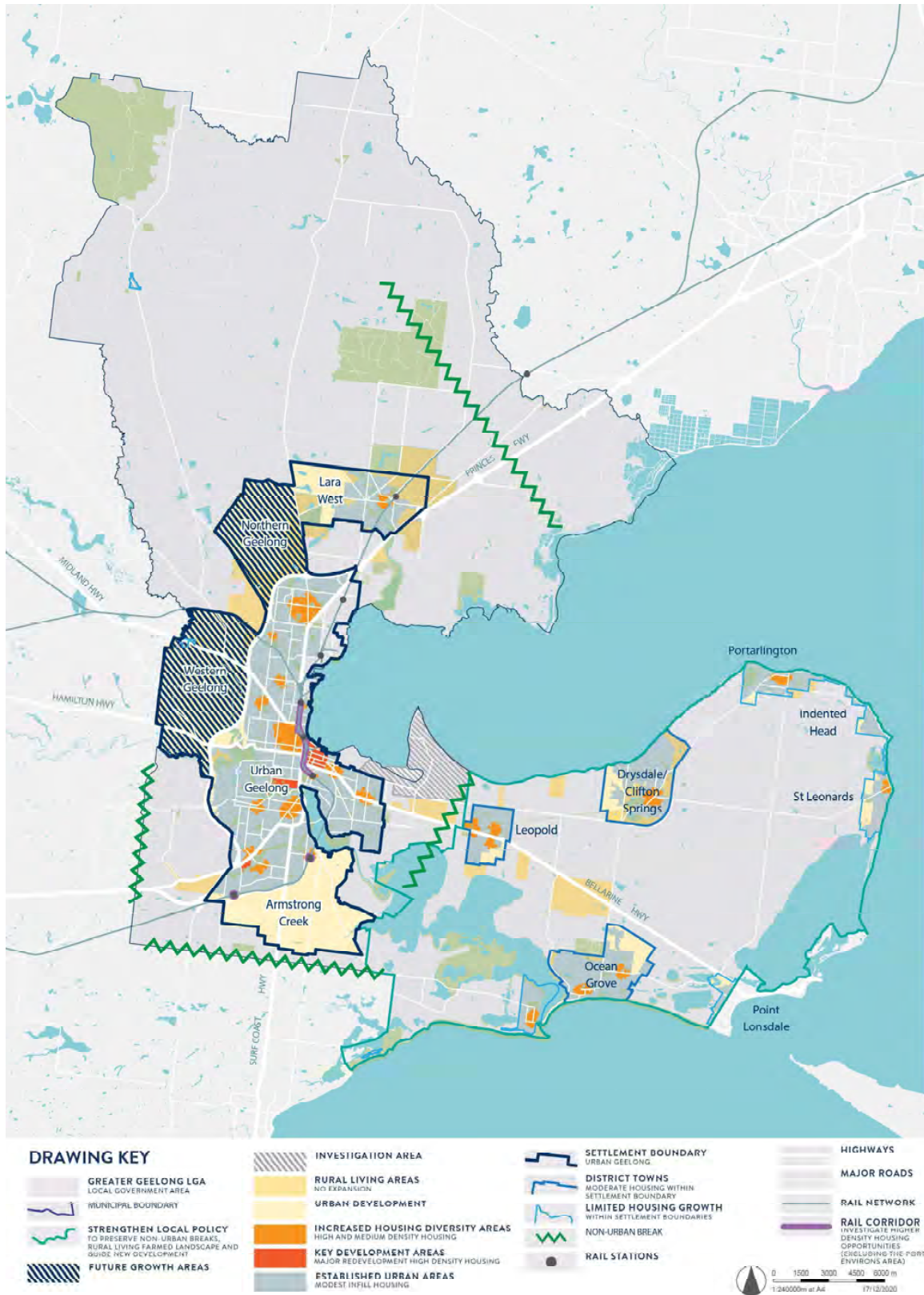


Figure 1. Housing and Settlement Framework Plan, Clause 21.06 of Greater Geelong Planning Scheme.

# 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 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. The Surf Coast SPP September 2022 was approved by the Governor in Council on 25 October 2022 and has now come into effect.

*"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."*

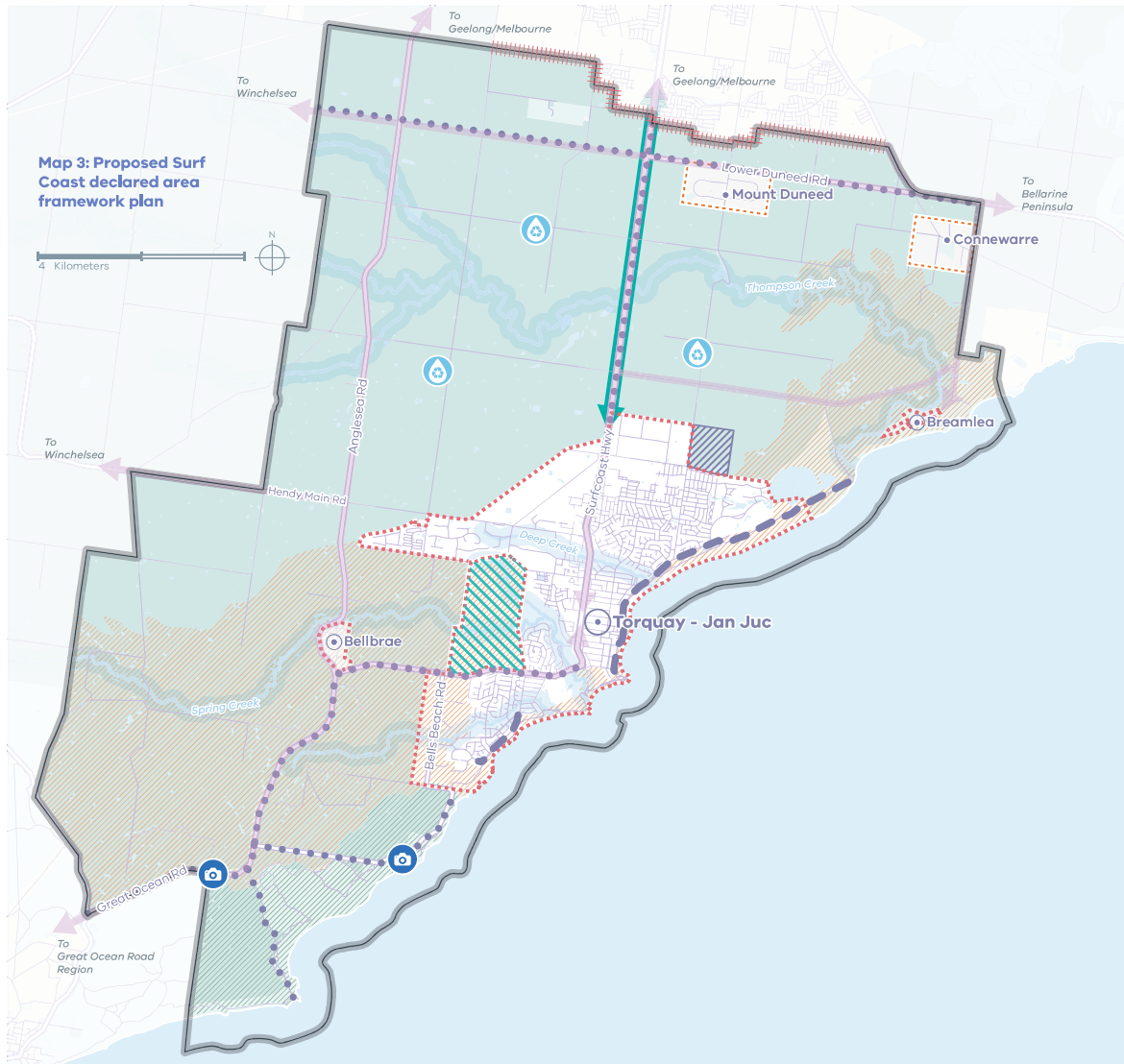
The eastern edge of urban Geelong is affected by the **Bellarine Peninsula DAL**. The draft Bellarine Peninsula SPP proposes that the eastern boundary of Geelong become a protected settlement boundary once the City of Greater Geelong undertakes a review process (i.e. this Long Term Boundary review).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

The draft Bellarine SPP October 2022 has been finalised but is not yet approved by the Governor in Council at the time of writing this report.

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



**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
- 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.

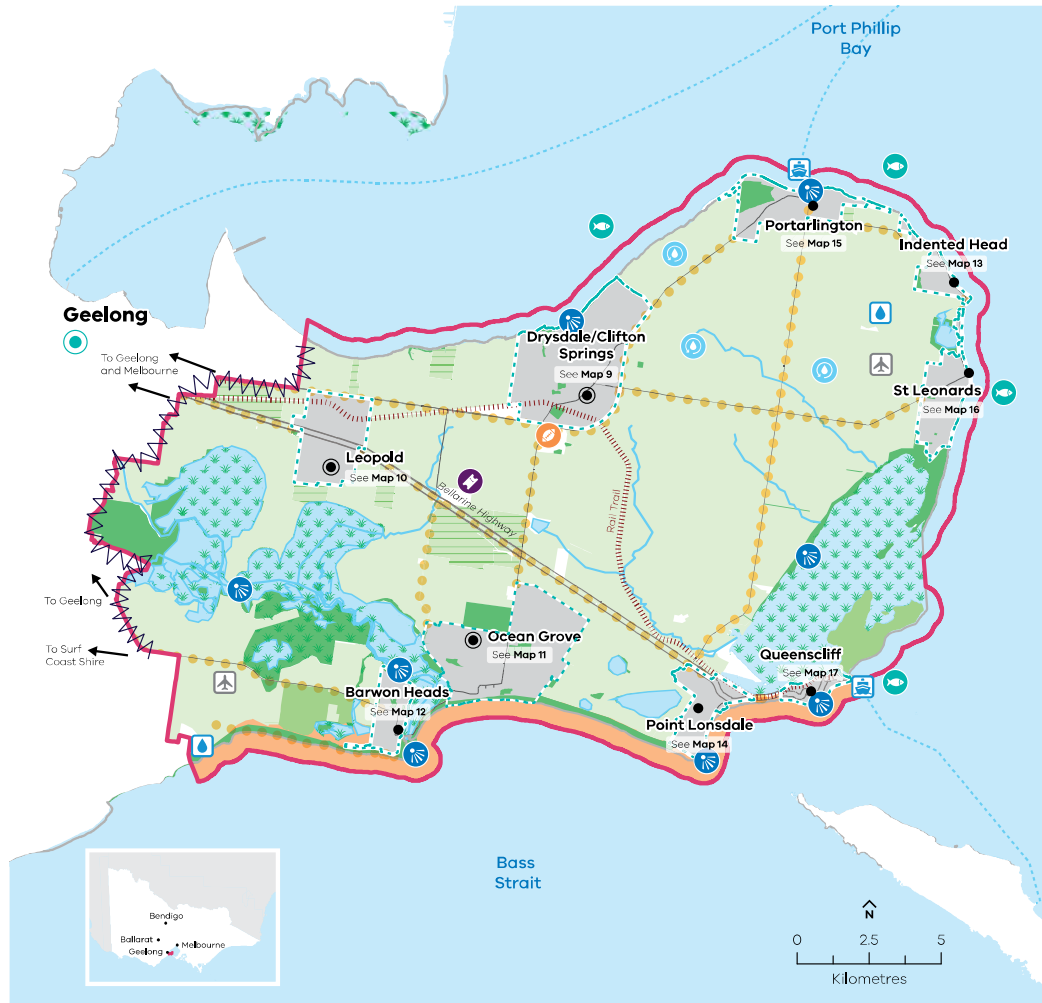
**Aboriginal cultural heritage and historic heritage**

- 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 Connewarre 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>*

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

## 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>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 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 Waurin 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 Waurin 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 Waurin 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 Surf Coast SPP and draft SPP for the 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 SPP for both the Surf Coast and Bellarine Peninsula (draft) 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 final/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:
<p><b>1.1</b> 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>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><b>Clause 11.01-1R Settlement – G21:</b></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><b>Clause 21.06-2 Spatial Distribution of Growth:</b></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><b>Clause 19.03-2S Infrastructure design and provision:</b></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><b>Clause 11.2-3S Sequencing of development:</b></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	The suitability for urban development should consider... Impacts of any proposed boundary changes on the economic provision of other development fronts	<p><b>Clause 11.02-3S Sequencing of development</b></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><b>Clause 11.03-5S Distinctive Areas and Landscapes:</b></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:
<p><b>4.1</b> Impact on the protection of biodiversity values</p>	<p>The suitability of urban development should consider.... environmental issues</p>	<p><b>Clause 12.01-1S Protection of biodiversity:</b> Assist the protection and conservation of Victoria's biodiversity.</p>
<p><b>4.2</b> Impact on the protection of coastal areas &amp; wetlands</p>	<p>The suitability of urban development should consider.... environmental issues including acid sulphate soils</p>	<p><b>Clause 12.02-1S Protection of the marine and coastal environment:</b> Protect and enhance the marine and coastal environment.  <b>Clause 12.03-1S River corridors, waterways, lakes and wetlands:</b> Protect and enhance river corridors, waterways, lakes and wetlands.</p>
<p><b>4.3</b> Impact on the protection of significant landscapes</p>	<p>[refer discussion on boundaries on pp. 78-79]</p>	<p><b>Clause 12.05-2S Landscapes</b> Protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.</p>
<p><b>4.4</b> Impact on the preservation of identified urban breaks</p>	<p>[refer discussion on non-urban breaks on pp. 78-79]</p>	<p><b>Clause 11.01-1R Settlement - G21</b> 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.  <b>Clause 21.06-2 Spatial distribution of growth:</b> 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 Settlement Strategy:	Geelong Planning Scheme:
<p><b>5.1</b> Climate change – impacts of coastal inundation &amp; erosion</p>	<p>The suitability of urban development should consider.... flooding risks, climate change, environmental issues including acid sulphate soils.</p>	<p><b>Clause 13.01-1S - Natural hazards and climate change:</b></p> <p>Minimise the impacts of natural hazards and adapt to the impacts of climate change through risk-based planning.</p> <p><b>Clause 13.01-2S - Coastal inundation and erosion:</b></p> <p>Plan for and manage coastal hazard risk and climate change impacts.</p>
<p><b>5.2</b> Bushfire risks in the location</p>	<p>The suitability of urban development should consider.... environmental issues</p>	<p><b>Clause 13.02-1S Bushfire planning:</b></p> <p>Strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.</p>
<p><b>5.3</b> Impacts on/of floodplains</p>	<p>The suitability of urban development should consider.... flooding risks, climate change, environmental issues including acid sulphate soils.</p>	<p><b>Clause 13.03-1S Floodplain management:</b></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>
<p><b>5.4</b> Impacts on/of contamination land</p>	<p>The suitability of urban development should consider.... environmental issues</p>	<p><b>Clause 13.04-1S Contaminated and potentially contaminated land:</b></p> <p>Ensure that contaminated and potentially contaminated land is used and developed safely.</p>

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
<p><b>5.5</b> Impacts on/of erosion &amp; landslip</p>	<p>The suitability of urban development should consider.... environmental issues</p>	<p><b>Clause 13.03-2S Erosion and landslip</b></p> <p><i>Objective:</i> To protect areas prone to erosion, landslip or other land degradation processes.</p> <p><i>Strategies:</i> 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>
<p><b>5.6</b> Impacts on/of salinity, acid sulfate soils</p>	<p>The suitability of urban development should consider.... environmental issues</p>	<p><b>Clause 13.03-3S Salinity:</b></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>
<p><b>5.7</b> Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses</p>	<p>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>	<p><b>Clause 13.07-1S - Land use compatibility:</b></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>
<p><b>5.8</b> Impacts on/of major hazard facilities</p>	<p>The suitability of urban development should consider.... potential impacts on sensitive land use buffers, tourism and other established and valued land uses.</p>	<p><b>Clause 13.07-2S Major hazard facilities:</b></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:
<p><b>6.1</b> Impact on the protection of agricultural land</p>	<p>The suitability of urban development should consider.... potential impacts on agricultural activities.</p>	<p><b>Clause 14.01-1S Protection of agricultural land:</b></p> <p>Protect the state’s agricultural base by preserving productive farmland.</p> <p><b>Clause 14.01-11R Settlement G21:</b></p> <p>Protect critical agricultural land by directing growth to towns.</p>
<p><b>6.2</b> Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources</p>	<p>The suitability of urban development should consider... flooding risks, climate change, environmental issues including acid sulphate soils</p>	<p><b>Clause 14.02-1S Catchment planning and management:</b></p> <p>Assist the protection and restoration of catchments, waterways, estuaries, bays, water bodies, groundwater, and the marine environment.</p> <p><b>Clause 14.02-2S Water quality:</b></p> <p>Protect water quality.</p>
<p><b>6.3</b> Impact on protection of extractive resources</p>	<p>**</p>	<p>**</p>

**7.0 Heritage Criteria:**

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

**8.0 Accessibility Criteria:**

Criteria:	Geelong Settlement Strategy:	Geelong Planning Scheme:
<p><b>8.1</b> Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access</p>	<p>The suitability of urban development should consider.... accessibility, including the feasibility and cost of providing adequate public transport and roads access</p>	<p><b>Clause 18.01-1S Land use and transport integration:</b></p> <p>Facilitate access to social, cultural and economic opportunities by effectively integrating land use and transport.</p> <p><b>Clause 18.01-2S Transport system:</b></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:
<p><b>9.1</b> Ability to cost-effectively provide urban services including both utility, community services and drainage</p>	<p>The suitability of urban development should consider.... urban services including both utility and community services.</p>	<p><b>Clause 19.03-2S Infrastructure design and provision:</b></p> <p>Provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p><b>Clause 19.02-4S Social and cultural infrastructure:</b></p> <p>Provide fairer distribution of and access to, social and cultural infrastructure.</p> <p><b>Clause 19.02-6S Open space:</b></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.

### Step 4 – Public Consultation

A draft version of this report was released for public consultation between 30th March and 27th May 2022. Following exhibition, Council officers commenced their review of submissions and met with submitters upon request.

Submissions were invited via direct mail/email correspondence as well as via the City of Greater Geelong ‘Have Your Say’ webpage.

A total of 92 submissions were received. The distribution of submissions across locations/topics was as follows:

Location/Topic:	No. of submissions:
Armstrong Creek (West & Central)	27
Avalon	2
Lara	9
Moolap	25
Sparrovale	5
Waurm Ponds	3
Overall Strategy	21

A full list of submitters is contained at **Appendix 5** of this report.

### Step 5 Report Finalisation

The report authors were also asked to review the submissions, and to update the draft report to include thematic response to the issues raised in submissions before preparing and submitting a final report to Council for its consideration.

In the course of reviewing submissions in relation to land in Armstrong Creek South (West and Central area), the consultant engaged Urban Fold (urban/landscaped designers) to undertake a preliminary design study of different ways that land subdivision might address the interface between urban development in the Armstrong Creek growth area and the rural landscape outside of the Geelong Settlement Boundary.

The purpose of this design study was to explore some alternative ways that the subdivision of land north of Mt Duneed/Lower Duneed Road might address the landscape considerations identified for this area in state and local planning policy. The study options and accompanying preliminary analysis was then reviewed and the report Authors in the course of reviewing submissions and finalising this report.

A copy of this design study is contained in **Appendix 3** of this report.

# 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

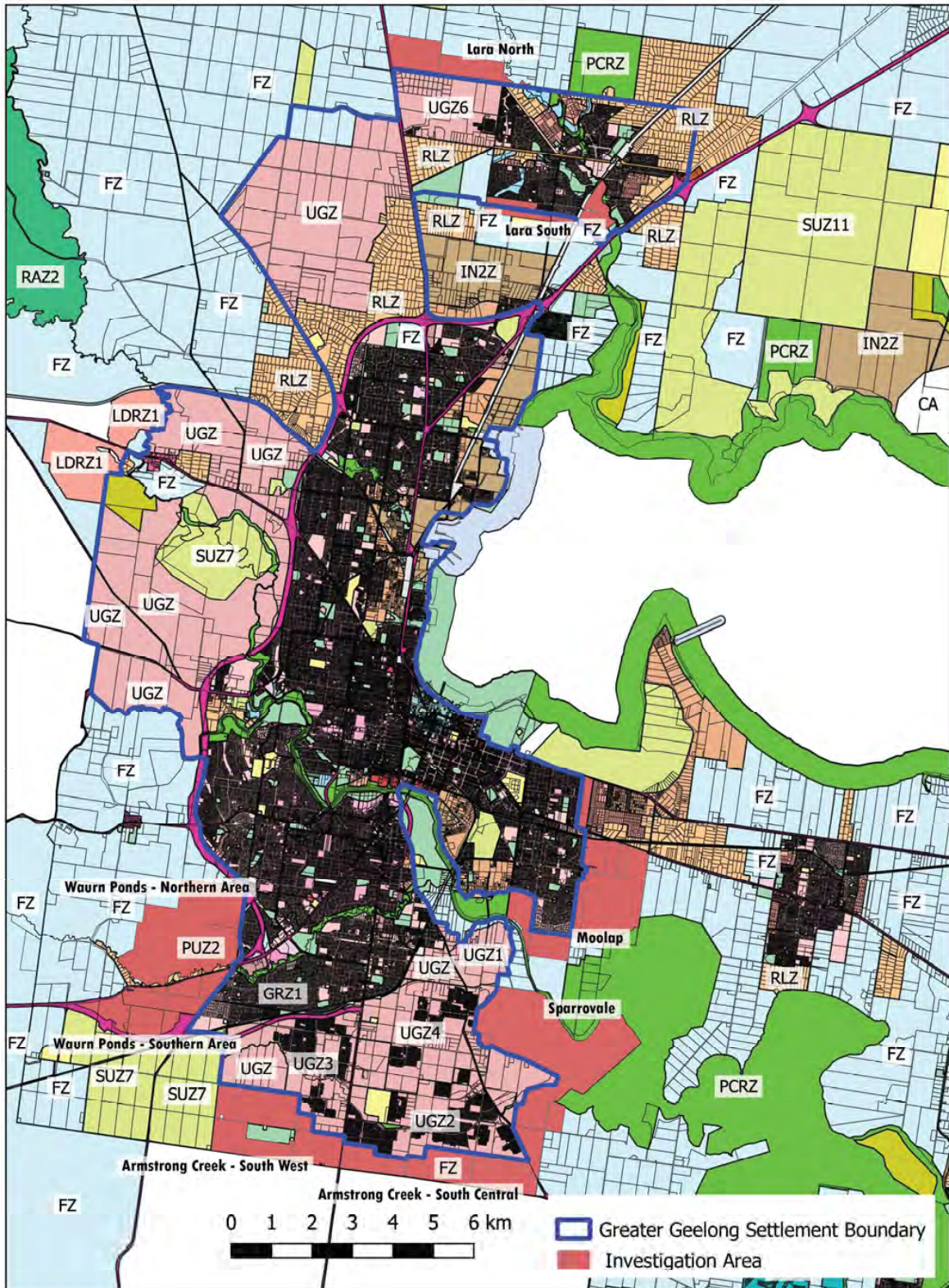


Figure 5. Overall Geelong Settlement Boundary Investigation Areas

# 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

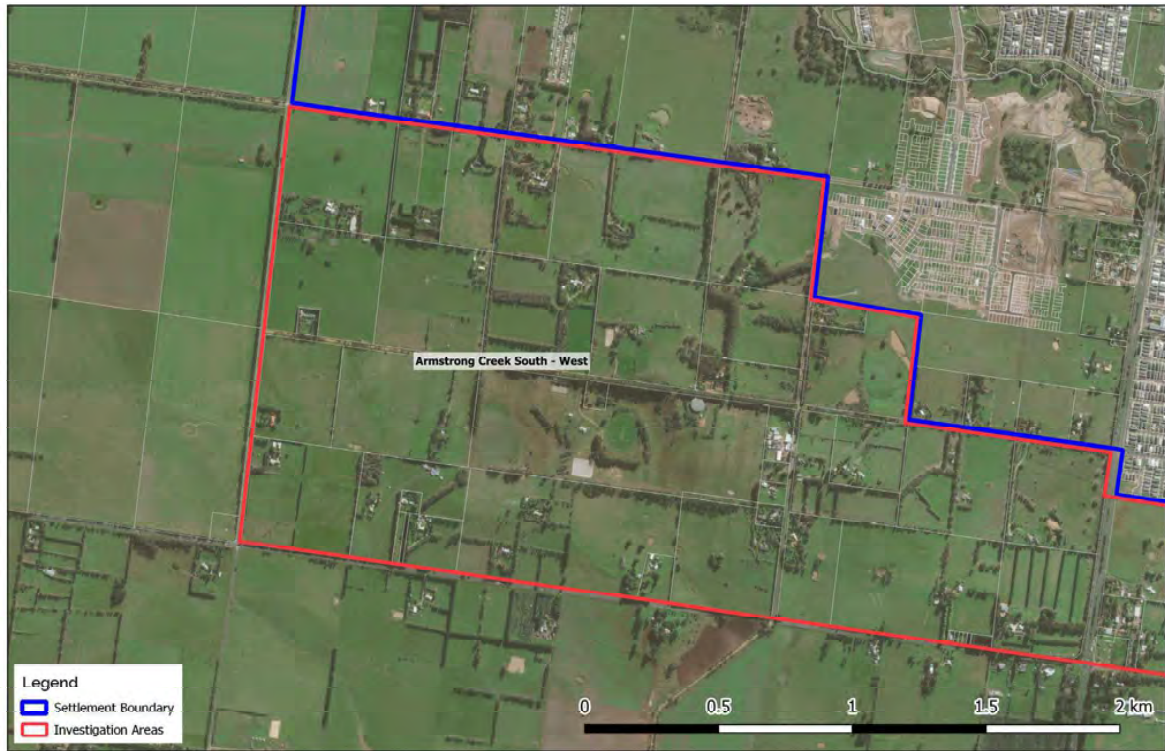


Figure 6. Armstrong Creek South West – Aerial Cadastral Plan.

**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

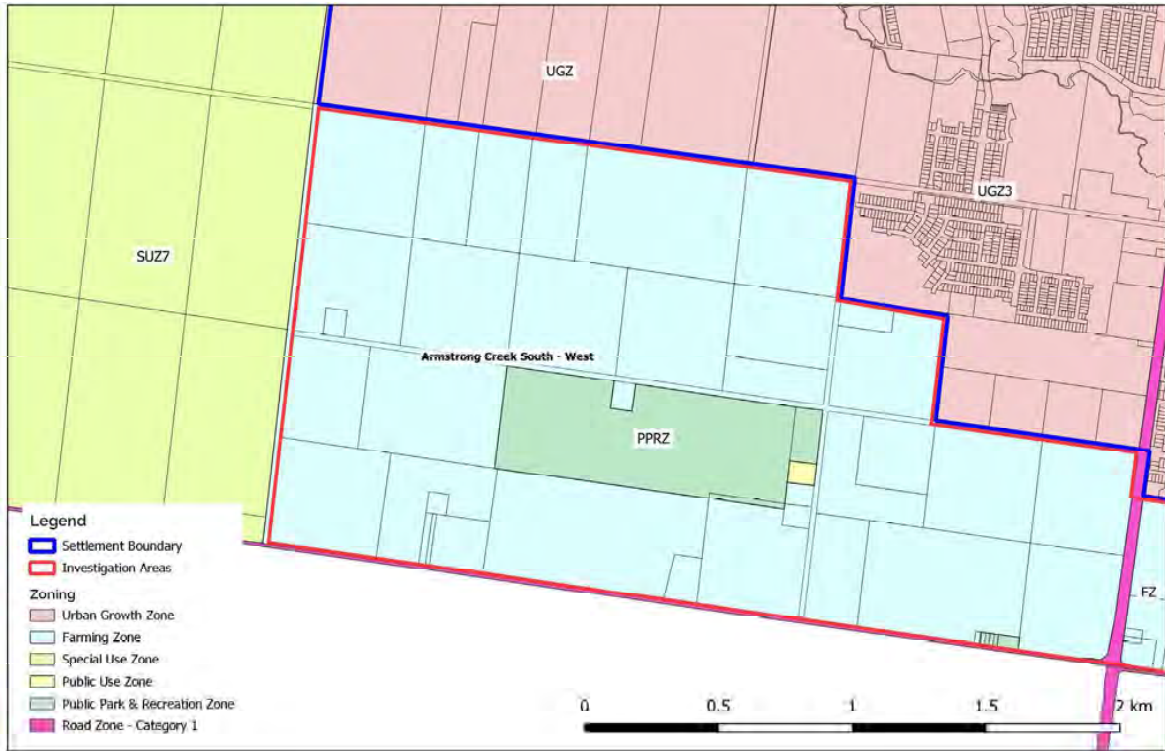


Figure 8. Armstrong Creek South West – Zoning Plan.

**Geelong Growth Investigation Areas**  
Armstrong Creek South West - Overlays

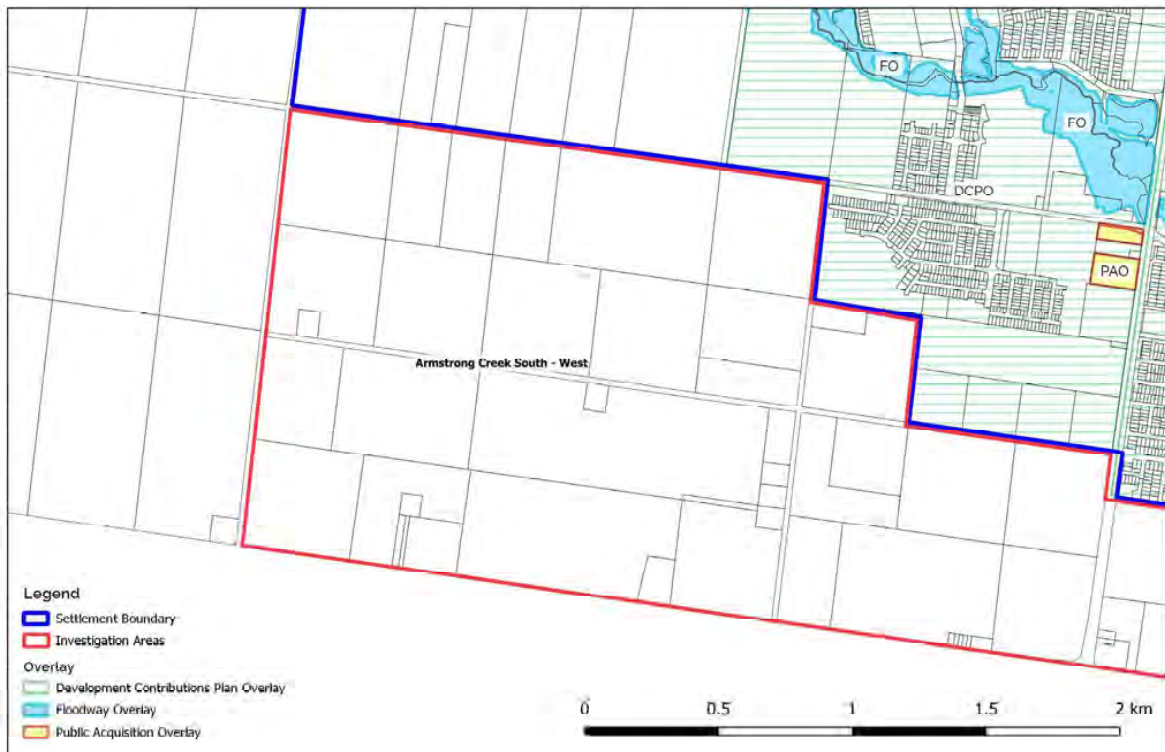


Figure 9. Armstrong Creek South West – Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Armstrong Creek South West - Overlays

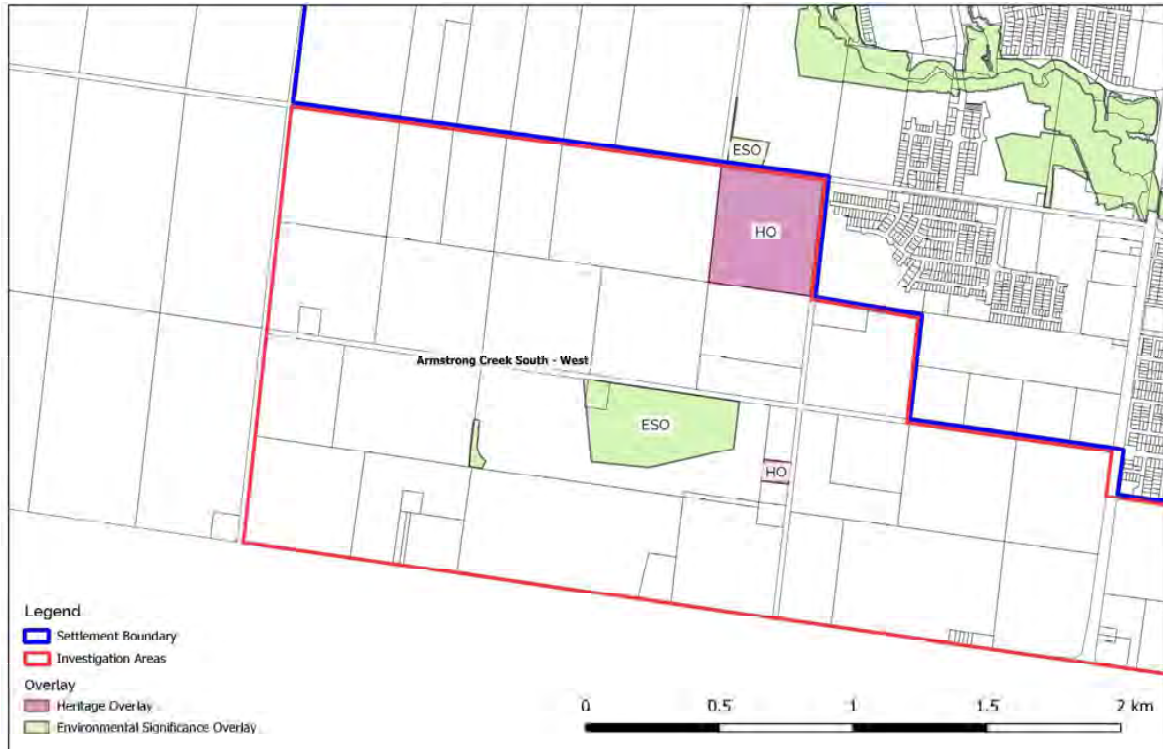


Figure 10. Armstrong Creek South West – Overlays Plan 2.



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.

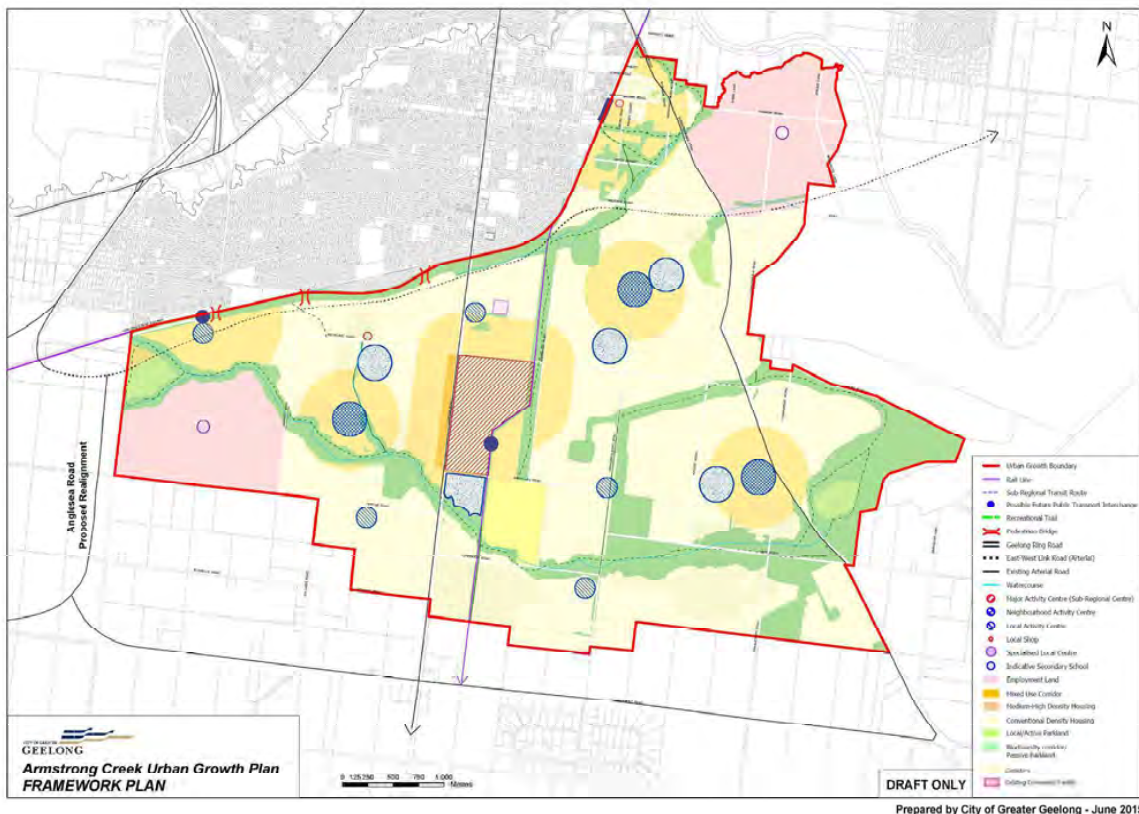


Figure 12. Armstrong Creek Urban Growth Plan (City of Greater Geelong [CoGG], 2015).

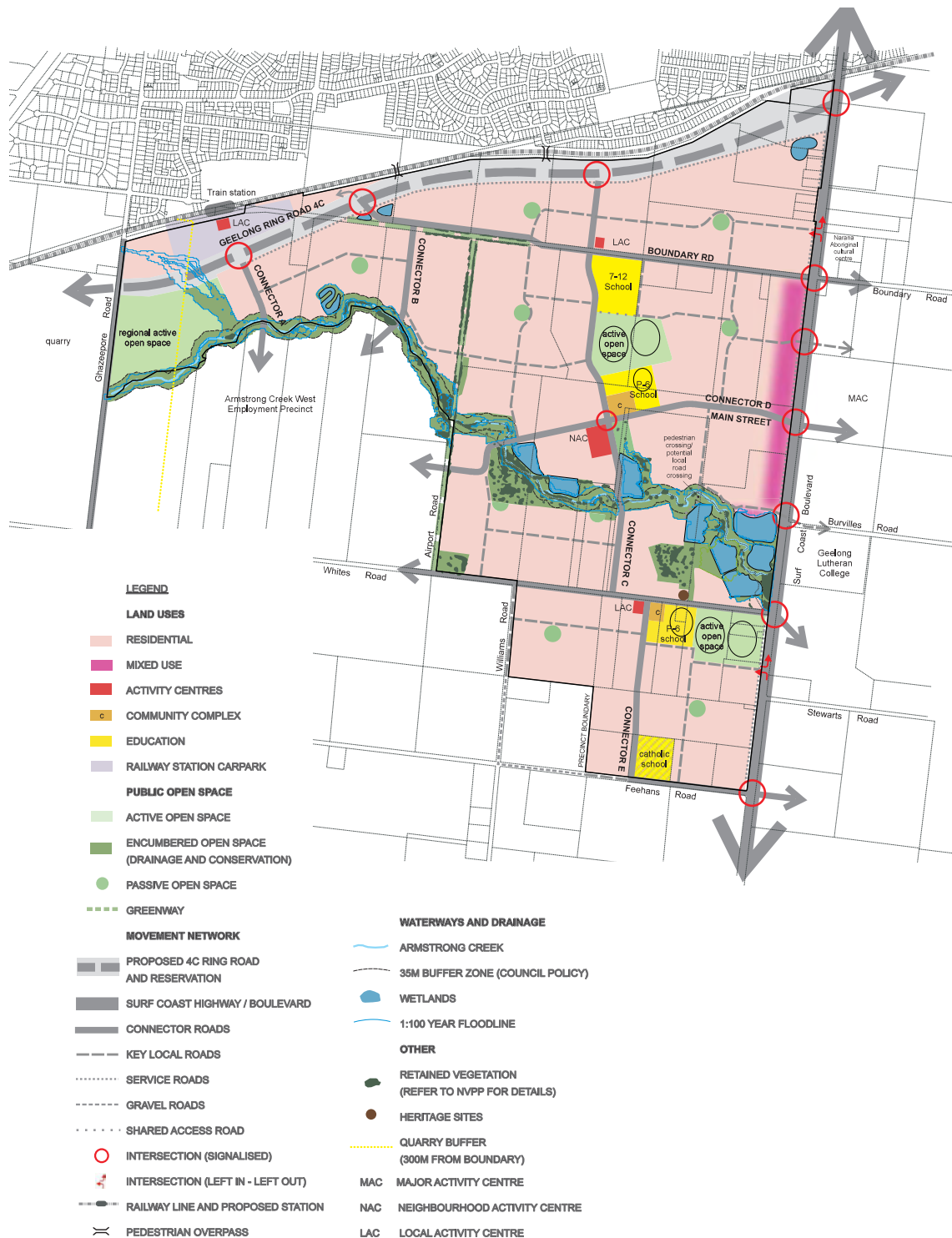


Figure 13. Armstrong Creek West Precinct Structure Plan - Urban Structure Plan (CoGG, 2012).

## 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.

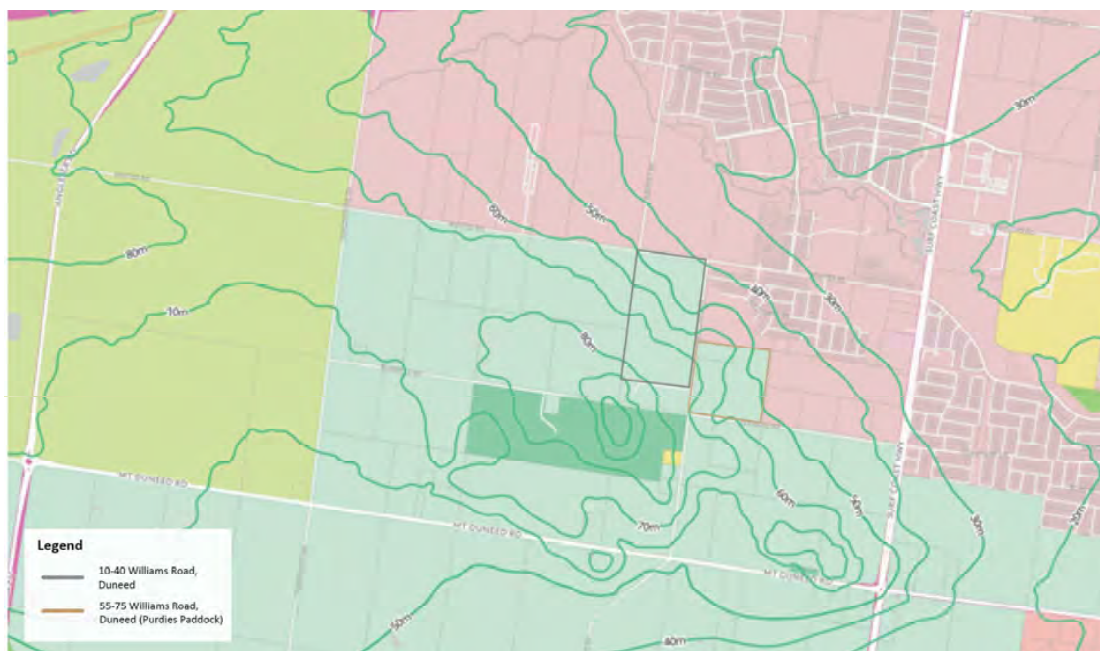


Figure 14. Contour Plan (base map source: Landchecker - see <https://app.landchecker.com.au/properties/@?lng=144.31307285259504&lat=-38.24151602634505>)

### 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.

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

**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.**

**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 no 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 presently disclosed Wadawurrung living cultural heritage and values.**

The Aboriginal Cultural Heritage Registration Information System (ACHRIS) mapping identifies 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 cause material detriment to Wadawurrung tangible and or intangible living cultural heritage, part of which are identified in Areas of Cultural Heritage Sensitivity. Having regard to clause 148 (fd) of the Aboriginal Heritage Act 2006, Council will consult with the Wadawurrung Traditional Owners Aboriginal Corporation 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 post contact heritage values.

<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.

## 4 - Response to submissions on the Draft boundary review.

A total of 11 submissions were received in relation to the Armstrong Creek South West investigation area. The following summarises issues raised in submissions relating to this area, together with a response to them (submissions 1.01, 1.02, 1.03, 1.04, 1.07, 1.11, 1.12, 1.14, 1.15, 1.17, 1.18).

The submissions have been geographically grouped as follows:

- Mt Duneed Road (west of Williams Road)
- Mt Duneed Road (east of Williams Road)
- Land west of Ghazeepore Road (Boral)
- Whites Road
- Central (in vicinity of Whites & Williams Road)

### 4.1 Mt Duneed Road (west of Williams Road)

#### Submissions:

A number of landowners in this area have submitted that their land holdings are no longer viable for farming purposes and have requested that:

- Their properties be included within the City of Greater Geelong's settlement boundary, and
- The entire ACSW investigation area be rezoned to 'low density rural residential' (ie the Rural Living zone) with variable lot sizes ranging from 1-3ha.

#### Response:

The purpose of the Settlement Boundary identified under Clause of the Greater Geelong Planning Scheme is to define the long term extent of urban (residential) growth of the City of Geelong.<sup>1</sup>

It would only be appropriate to include the area within the settlement boundary if it was intended

<sup>1</sup> Noting that a 'protected settlement boundary' under the Distinctive Areas and Landscapes legislation refers to a long term boundary for any form of outward urban growth (ie not just residential) which if identified in an approved Statement of Planning Policy can only be changed if ratified by both houses of the Victorian parliament.

to be developed for urban residential purposes. It remains the view of this report's authors that this area is not suitable for urban residential development and that it should therefore remain outside the settlement boundary, for the reasons set out in section 3.1 of this chapter of the report.

As noted in submissions, the land within this area comprise a wide range of lot sizes, and are currently occupied for a mixture of semi-rural and 'lifestyle' purposes.

The Victorian Government guidelines on the application of rural zoning notes that the Rural Living Zone is designed to be applied to areas where (inter-alia):

- the rural land has a mainly residential function
- farming may take place on the land but this is subordinate to the residential use
- residents require certainty about the residential amenity of the area and are protected from potentially incompatible land uses
- farming is of a nature or scale that will not conflict with housing
- residents will have access to most of the normal services and infrastructure provided in urban areas.<sup>2</sup>

These guidelines describe rural residential development as follows:

*"land in a rural setting, used and developed for dwellings that are not primarily associated with agriculture. Some agriculture may take place on the land however it will be ancillary to the use for a dwelling. It is likely to be carried on for 'lifestyle' reasons and is unlikely to provide a significant source of household income. Rural residential land is typically also used for non-agricultural home occupations or for large gardens. These lots are larger than typical residential lots, but are usually too small for agricultural use.*

*Because of its primarily residential function, rural residential development requires access to most of the normal services and infrastructure provided in urban settlements.*

<sup>2</sup> Planning Practice Note 42 – Applying the Rural Zones (2022)

*Typically it also generates urban residential amenity expectations.<sup>3</sup>*

The above descriptions could be said to apply to some but not necessarily all of the land within the area.

The guidelines also note the following in relation to the relationship between rural residential development and urban development:

*“Rural residential development is inappropriate on land that is suitable and required for present or future residential use at usual urban densities. For example, if a town has limited supplies of development land at urban densities, but has unused town water and waste water treatment capacity, land that can easily be served by this infrastructure should normally be considered first as a candidate for development at urban densities.”<sup>4</sup>*

Both state and local policy anticipate that this area will play a long term strategic role as a green edge to the City of Geelong, and that the southern slopes of Mt Duneed are not appropriate for urban development today or even in the long-term.

Given this policy context, the proximity of the area to the Armstrong Creek growth area, and the mix of lot sizes and activities within the area, there is merit in considering rezoning this land within this area to the Rural Living Zone.

Planning Practice Note 42 (Applying the Rural Zones) provides further guidance on how any such rezoning and development would need to address matters such as housing need, protecting natural resources, environmental values, landscape value, land use compatibility, servicing, provision of social infrastructure, lot size and design, etc.

The impact of any rural residential development on the Mt Duneed landscape feature and the ‘green edge’ of Geelong and the DAL region would be a primary consideration in any such assessment.

<sup>3</sup> Planning Practice Note 37 – Rural Residential Development (2015)

<sup>4</sup> Planning Practice Note 37 – Rural Residential Development (2015)

Any proposed rezoning would need to address these matters.

Some further analysis of interface design options has been undertaken to inform the response to submissions (refer Appendix 3) and a broad concept plan for this area has been prepared. The options consider potential lot numbers as follows:

- North of Russells Road - 47-94 RLZ lots
- South of Russells Road - 32-63 RLZ lots

The future subdivision layout, siting, infrastructure and landscape design of the area will require coordination via a Development Plan Overlay or similar tool.

#### **Recommendation:**

This area should not be included within the Geelong Settlement Boundary.

However, it is **recommended** that further consideration be given to rezoning land within this area to the Rural Living Zone.

The future development of land within this area will need to respond to the policy aspirations of retaining Mt Duneed as a prominent landscape feature and the maintenance of a ‘green edge’ along the boundary between urban Geelong and the declared Surf Coast DAL area. It will also need to address matters such as environmental values, land use compatibility, infrastructure, lot size and design, etc. Development options for this investigation area have been considered in Appendix 3. The recommendations for this investigation area are a combination of options 3 & 5.

It is **recommended** that any rezoning of this land be accompanied by a requirement to prepare a development plan, infrastructure plan and infrastructure funding agreements. A Development Plan Overlay or similar tool should be applied to the land to address such matters.

#### **4.2 Mt Duneed Road (east of Williams Road)**

This area encompasses the land bound by Feehans Road, Surf Coast Highway, Mt Duneed

Rd and Williams Road.

Submitters in this area have variously requested that the land be:

- included within the settlement boundary and developed for urban residential purposes
- zoned to allow a transition from urban residential, low density residential and rural living purposes
- zoned for rural living purposes

#### Response:

It remains the view of this report's authors that this area is not suitable for urban residential development and that it should therefore remain outside the settlement boundary, for the reasons set out in section 3.1 of this chapter of the report.

Whilst parts of the land within this area (facing Surf Coast Highway) are located below the 60m contour line, the land faces towards the north and east and it is therefore visible from a distance across the Armstrong Creek growth area and along Lower Duneed Road.

Conventional residential development on these slopes would negatively impact on the maintenance of an attractive green edge to Geelong that is sought by the objectives described in section 3.1 of this chapter of the report.

Both state and local policy anticipate that this area will play a long term strategic role as a green edge to the City of Geelong, and that the southern slopes of Mt Duneed are not appropriate for urban development.

Given the policy aspirations for this area to play a long term strategic role as a green edge to the City of Geelong, the proximity of the area to the Armstrong Creek growth area, and the mix of lot sizes and activities within the area, there is merit in further exploring whether land within this area could be rezoned to the Rural Living Zone.

As is the case with the area further along Mt Duneed Road (west of Williams Road) it would be necessary for any such reasoning to address

the matters set out in Planning Practice Note 42 to confirm how the area could be developed for rural residential purposes.

The impact of any rural residential development on the Mt Duneed landscape feature and the 'green edge' of Geelong and the DAL region would be a primary consideration in any such assessment.

#### Recommendation:

This area should not be included within the Geelong Settlement Boundary.

However, it is **recommended** that further consideration be given to rezoning land within this area to the Rural Living Zone.

The future development of land within this area will need to respond to the policy aspirations of retaining Mt Duneed as a prominent landscape feature and the maintenance of a 'green edge' along the boundary between urban Geelong and the declared Surf Coast DAL area. It will also need to address matters such as environmental values, land use compatibility, infrastructure, lot size and design, etc.

It is **recommended** that any rezoning of this land be accompanied by a requirement to prepare a development plan, infrastructure plan and infrastructure funding agreements. A Development Plan Overlay is similar tool should be applied to the land to address such matters.

### 4.3 Land West of Ghazepore Road (Boral)

Boral are the owners of a 1,030 hectare property located west of Ghazepore road, opposite the proposed western industrial precinct (WIP) within the Armstrong Creek growth area.

Boral submits that there merit in considering at least including a portion of Boral's land that is abutting the WIP for inclusion within Geelong's long term urban settlement boundary now, even if there are parameters around timing for any consideration of future urban residential use on that land.

Boral also submits that its northern and central land parcels should also be considered for inclusion in a long term settlement boundary to allow for the development of a modern business park including a mix of commercial, community and residential uses.

The submission notes that Council is currently undertaking an employment land study which is considering the future role of the Western Industrial Precinct (WIP) and Boral's Waurin Ponds holdings as part of a regional employment land assessment.

Boral acknowledges that the ultimate use of this land will be subject to the outcomes of Council's separate review of employment land requirements in Geelong's southeast (which is currently underway). However, it is Borals view that its northern and central land holdings within this investigation areas should be included within the settlement boundary as part of the current boundary review, and not be deferred pending the outcomes of the abovementioned regional employment land assessment.

#### **Response:**

The purpose of the current settlement boundary review is to determine if there are any locations along the existing settlement boundary where the boundary to existing or planned residential communities is anomalous or lacks logic from an urban planning or development perspective.

The Geelong Settlement Strategy states that for land to be included within the settlement boundary review then the land must be 'contiguous with urban residential areas'. The Boral land holding adjoins an area currently designated for employment purposes (the WIP), and the outcomes of the current regional employment land assessment that is examining both these locations are not yet finalised.

The Geelong Settlement Strategy also notes the next phases of growth for the city would be further considered if Council's regular demand and supply analysis make it clear that further land needs to be identified due to higher take-up or issues with delivering identified areas. This would occur via a review of the Geelong

Settlement Strategy, and the Boral land holdings are identified in the Geelong Settlement Strategy as an investigation area for the above purpose.<sup>5</sup>

This is consistent with the findings of the C395 Panel which identified the Boral landholding as a 'strategic landholding' for the city as distinct to a 'logical inclusion' land holding.

The preferred use of the WIP and Boral land will also need to be informed by the outcomes of the abovementioned regional employment land assessment.

Given all of these circumstances, it is our view that it is premature to include any of the Boral land holdings within the settlement boundary as part of the current review process.

#### **Recommendation:**

That the land west of Ghazeepore Road remain outside of the settlement boundary.

### **4.4 Whites Road**

This area encompasses the existing lots located on the south side of Whites Road, between Ghazeepore Road and 10-40 Williams Road.

Submitters in this area have variously requested that the land be:

- included within the settlement boundary and developed for urban residential purposes
- zoned to allow for an 'urban to rural transition'

The submissions state that (inter-alia) the potential contributions that this land can make towards creating a green skyline setting for the Armstrong Creek growth area have been overstated, and that its adjacency to a planned employment area to the north is not an impediment to the land being included in the settlement boundary for housing purposes.

#### **Response:**

The Geelong Settlement Strategy states that

<sup>5</sup> Geelong Settlement Strategy, page 94

for land to be included within the settlement boundary review then the land must be 'contiguous with urban residential areas' (defined as including the GRZ, RGZ, NRZ or UGZ.).

The land south-west of the Whites/Airport Road intersection adjoins land that is located within the UGZ but which is identified as employment land in the Armstrong Creek Urban Growth Plan. This land was therefore assessed as not satisfying Principle 2 on the basis that the land was not 'contiguous with urban residential areas'.

Notwithstanding the above, this land was included within the ACSGA investigation area, on the basis that its inclusion will enable a more holistic assessment of the area, and in particular a holistic consideration of the landscape characteristics associated with Mt Duneed that must inform the boundary review.

The settlement boundary along Whites Road was ultimately supported by the C138 Panel and adopted by the Planning Authority on the basis that it would enable the green skyline viewed from within the growth area and from land to its north to be maintained.

Whilst that Panel did observe that the prominence, importance and visual contribution made by Mt Duneed was somewhat overstated in the analysis put to it by Council and its consultants at that time, the Panel nonetheless supported the use of visual analysis to define the Urban Growth Boundary in the Mt Duneed area, and it also supported the use of Whites road as the settlement boundary.<sup>6</sup>

Having considered the landscape assessment which accompanies submissions in this area, it remains our view that 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 would largely be lost.

We acknowledge that the author of the landscape assessment that accompanies these submissions considers that large parts of the Mt Duneed landscape feature are not particularly distinctive and that their opinion is that using Whites road as

the boundary to protect views to these landforms is a conservative approach to take. We do not share these views and we are also not certain that development could in fact continue up to the 80m contour without views from the south being affected as suggested in this assessment.

The South West Geelong Employment Land Review is examining the future of the WIP land along with the former Boral quarry land to determine the quantum and preferred location of employment land in this region. It is understood that alternative land uses may be considered on any land identified as being surplus for employment purposes in this location. Parties with an interest in the WIP land have made previous submission for this area to be developed for residential purposes, on the basis that the Boral land could accommodate all the employment land needs in this part of Geelong.

Therefore whilst the current planning framework identifies this land as industrial, there is some possibility that the outcomes of the above mentioned review may result in a different land use being identified for some or all of this area.

Regardless of the future land use to the north, it is not recommended urban development extend further south in this location. Most of the land outside the current settlement boundary is located above the 65m contour which provides the green backdrop to Armstrong Creek. Maintaining a non-urban setting for Mount Duneed for both views and to provide an appropriate 'green' setting for the landform itself remains an important landscape objective to retain for the area.

Whilst this is in part because it would be necessary to manage interface between residential and employment uses along Whites Road to avoid land use conflict, it is also because it is unlikely that sufficient land would be established south of Whites Road to create a walkable neighbourhood (including local activity centre, school, etc.). The western portion of this area is over 2km from the nearest (planned) local activity centre, and in our opinion creating an elongated residential development so far removed from key neighbourhood amenities would not represent an orderly planning outcome

<sup>6</sup> C138 Panel report, page 76

for this area.

However, land within this location could be included within the Rural Living Zone, for the same reasons (and subject to the same conditions) as the land on the southern slopes of Mt Duneed.

**Recommendation:**

This area should not be included within the Geelong Settlement Boundary.

However, it is **recommended** that further consideration be given to rezoning land within this area to the Rural Living Zone.

The future development of land within this area will need to respond to the policy aspirations of retaining Mt Duneed as a prominent landscape feature and the maintenance of a 'green edge' along the boundary between urban Geelong and the declared Surf Coast DAL area. It will also need to address matters such as environmental values, land use compatibility, infrastructure, lot size and design, etc.

It is **recommended** that any rezoning of this land be accompanied by a requirement to prepare a development plan, infrastructure plan and infrastructure funding agreements. A Development Plan Overlay is similar tool should be applied to the land to address such matters.

### 6.4.5 Central (in vicinity of Whites & Williams Road)

There are two land holdings located centrally within the ACSW investigation area that were identified as warranting further consideration for inclusions within the settlement boundary. The response to the submissions relating to these sites is set out below.

Site 1 - Purdies Paddock (55 & 75 Williams Road, Mt Duneed):

The submission in relation to this site expresses the view that the application of the Assessment Criteria solely to Purdies Paddock would result in a different assessment outcome to the whole of

precinct assessment.

It argues that the application of the Assessment Criteria to Purdies Paddock would yield a significantly more positive outcome than is the case across the wider precinct, and that the inclusion of that site within the Settlement Boundary could also deliver a number of significant community benefits.

The submission is accompanied by a detailed landscape/visual analysis, infrastructure assessment and surface water management strategy, and a letter of support from the Mt Duneed Primary School.

**Response:**

A whole of precinct assessment is required for the purposes of determining whether there is sufficient strategic planning grounds to make any changes across the length of the existing settlement boundary between the Surf Coast Highway and Ghazeeopore Road.

However, the assessment approach set out in this specific report provides sufficient flexibility to identify any locations where inclusion of land within the Settlement Boundary could be further considered.

The original assessment identified the opportunity to further investigate whether including all or part of Purdies Paddock within the Settlement Boundary would have any adverse impact on retention of the landscape characteristics in this location.

The Landscape and Visual Assessment Report ('landscape report') that accompanies the landowner submission concludes that development on Purdies Paddock would not be detrimental to the overall visual quality or landscape character as viewed from either the rural landscape areas to the south or from within the Armstrong Creek growth area, save for a minor reduction in the green backdrop to the growth area.

The analysis and conclusions of this landscape report appear to be generally sound from a strategic planning perspective, but they should be

subject to peer review before being accepted.

One caveat to the above observation is that the viewshed analysis contained within this landscape report (pp 18-20) identifies that visual exposure of the site encroaches along lower Duneed Road into the Kallara Cres. Rural living area, but this has not been assessed in the accompanying photomontage analysis contained within the landscape assessment (the report includes a photomontage viewpoint immediately east of the site (on the Surf Coast highway) but not from the south-east along Lower Duneed Road).

It will be necessary to verify the extent of visual impact of urban development on Purdies Paddock when viewed from the east, along lower Duneed Road. Further view analysis work is required to confirm this.

The majority of this land holding is below the 65 AHD contour, and keeping as much of the land above this contour free from housing development as possible will mean that the land above this contour line can serve its intended function as a green backdrop to the growth area.

Further consideration should be given to ensuring that part of the lot that is located above the 65AHD contour be set aside as part of a wider linear open space corridor which can define the settlement boundary location. The physical form and character of this linear open space reserve should be resolved as part of the precinct and infrastructure planning that forms the basis of the any future rezoning of this land.

The inclusion of Purdies Paddock within the settlement boundary would essentially allow for the construction of modest number of additional homes (circa 200 dwellings) within the Armstrong Creek Growth Area which in our opinion would not have any significant impacts on the orderly sequencing of development or the delivery of infrastructure and services within this location. Residential development on the site could also be designed to integrate with the adjoining urban areas.

A structure plan will need to be prepared for the area at time of rezoning to ensure that it is properly integrated into its adjoining

neighbourhood.

It is expected that this area will be able to connect into the utility infrastructure within this area (albeit that some augmentation may be required) and that this area will also generate some additional requirements for drainage, open space and social infrastructure.

Inclusion of this area into the settlement boundary should be contingent upon new or augmented physical and social infrastructure being funded by the development of the land without the need for reliance on substantial external funding sources. An infrastructure plan and funding agreement will need to be prepared for this area at the time of rezoning to ensure that these requirements are fully addressed.

Any infrastructure funding agreement should also include provision for the creation, embellishment and transfer of a linear open space reserve along the settlement boundary. The exact location, physical form and character of this linear open space reserve should be resolved as part of preparing the structure plan and funding agreement for the area.

#### **Recommendation:**

It is **recommended** that:

- Purdies Paddock be included within the Geelong Settlement Boundary, subject to confirmation that developing this land for housing will have an acceptable visual impact on views to Mt Duneed when viewed from the east, along Lower Duneed Road.
- A structure plan, infrastructure plan and infrastructure funding agreement be prepared for the future residential development of the land.
- Following the preparation of the abovementioned plans and agreement, a planning scheme amendment should be initiated to rezone of the land to give statutory effect to the structure plans infrastructure funding agreements.

Site 2 - 10-40 Williams Road, Mt Duneed:

This submission expresses the view that the

application of the Assessment Criteria to the entirety of the ACSW investigation area unfairly prejudices consideration of the merits of including 10-40 Williams Road (the site) within the settlement boundary. It also argues that the principles of that preserving views to the green skyline of Mt Duneed and of avoiding residential development abutting employment land do not stand in the way of the site being included within the settlement boundary.

The submission proposes a refined settlement boundary defined by a combination of the 65-75m contour can achieve the following outcomes:

- Preservation of natural landscape values
- Ensuring contiguous residential land use
- Establishing a natural and enduring boundary
- Avoiding the need for new urban infrastructure

The submission is accompanied by a visual analysis and a stormwater management technical memorandum.

#### **Response:**

As noted in the response to the Purdies Paddock submission, whilst a whole of precinct assessment is required in order to consider the wider strategic planning logic of the existing versus alternative boundary locations, it retains flexibility to identify any specific locations where their inclusion could be further considered.

The original assessment identified the opportunity to further investigate whether including all or part of the site within the Settlement Boundary would have any adverse impact on retention of the landscape characteristics in this location.

The original assessment did not rule out inclusion of the site based on its proximity to the employment land north of Whites Road, or on the basis that the inclusion of this land alone would have adverse effects on orderly development sequencing, accessibility or infrastructure criteria.

The main factors that ought to determine whether or not to include the site within the

Settlement Boundary are as follows:

- Whether its inclusion would result in the creation of a logical and enduring settlement boundary, and;
- What potential impact its inclusion might have on the achievement of the landscape-related settlement boundary objectives set out in section 3.1 of this chapter of the report.

Whites Road and Williams Road currently function as a logical and enduring settlement boundary in this location. The title boundaries associated with 10-40 Williams Road do not represent a more logical or enduring boundary than the existing road reserve.

Therefore if any part of this site was to be included then it would be necessary to create a new physical feature which meaningfully delineates the long term settlement boundary in this location. This would need to take the form of public open space feature (such as a landscaped open space corridor) rather than simply a local street, as the latter would not read in the landscape as a strong urban boundary.

If this type of public open space feature could not be delivered on the subject site, then it would be better for Whites and Williams Road to remain as the long-term settlement boundary in this location.

In relation to the landscape-related objectives associated with the settlement boundary, the submission argues that these objectives can be satisfied by a refined settlement boundary which is based on a combination of the 65m and 75m contours (with some rationalisation of the boundary at the eastern and western ends of the site). A viewshed analysis has been prepared in support of this submission.

In our assessment, some of the site could potentially be developed without adversely impacting on the abovementioned landscape-related settlement boundary objectives. However, the viewshed analysis provided with the submission does not definitively demonstrate that the proposed alternative settlement boundary is the correct location for the

achievement of these outcomes.

The near-view viewshed analysis contained within the submission has not addressed the degree to which residential development on this site would impact on more distant views of Mt Duneed from locations further north within the Armstrong Creek growth area, including within the Armstrong Creek waterway corridor and along the Surf Coast Highway.

Having considered the abovementioned viewshed analysis, we consider that the inclusion of the northern title of this land holding within the revised Geelong settlement boundary would most likely still provide for the upper slopes of Mt Duneed to remain visible as a 'green backdrop' when viewed for locations further north within the Armstrong Creek growth area.

A large proportion of this lot boundary follows the 65 AHD contour, and generally keeping land above this contour free from housing development may well mean that the 35+m elevation above this contour line can satisfactorily provide a green backdrop to the growth area. However, it will be necessary to verify the extent of visual impact of urban development of this site when viewed from a distance, from (for example) Armstrong Creek Waterway, town centre and Wearn Ponds Station.

As noted above, in our opinion, that part of the lot that is located above the 65AHD contour should be set aside as part of a wider linear open space corridor which can define the settlement boundary location. The physical form and character of this linear open space reserve should be resolved as part of the precinct and infrastructure planning that forms the basis of the any future rezoning of this land.

For simplicity, the whole of the northern lot could be included within the settlement boundary, and the future planning of that land could potentially resolve which parts of the land in the vicinity of the 65AHD contour should form part of the abovementioned linear open space reserve. Given that the western edge of this land holding would function as part of the settlement boundary, this abovementioned open space link should connect along this western boundary to

Williams Road.<sup>7</sup>

It is expected that part of the southern lot would also form part of the abovementioned linear open space reserve, and that the balance of this land (south of the ultimate open space reserve) could be rezoned to the Rural Living Zone, consistent with the recommended rezoning of other land south of this location.

The inclusion of the northern site within the settlement boundary would essentially allow for the construction of a relatively modest number of additional homes (up to circa 200 dwellings) within the Armstrong Creek Growth Area.

In our opinion, the aggregate impact of including the site and Purdies Paddock within the Settlement Boundary is also unlikely to have any significant impacts on the orderly sequencing of development or the delivery of infrastructure and services within this location (refer Appendix 4 for details).

A structure plan will need to be prepared for the area at time of rezoning to ensure that it is properly integrated into its adjoining neighbourhood.

It is expected that this area will be able to connect into the utility infrastructure within this area (albeit that some augmentation may be required) and that this area will also generate some additional requirements for drainage, open space and social infrastructure.

Inclusion of this area into the settlement boundary should also be contingent upon new or augmented physical and social infrastructure being funded by the development of the land without the need for reliance on substantial external funding sources. An infrastructure plan and funding agreement will need to be prepared

<sup>7</sup> Part of the adjoining land west of 10-40 Williams Road is also located below the 65AHD contour. This is a relatively small diagonal land area that represents a small proportion of that 26ha site. We do not think inclusion of the adjoining site into the settlement boundary is practical or warranted given what we say are the requirements to deliver a substantial linear open space feature as an alternative boundary to the existing road. For this reason, it is our view that the title boundary between 10-40 Williams Road and this site (with the associated open space link running along it) can suffice as a settlement boundary.

for this area at the time of rezoning to ensure that these requirements are fully addressed.

Any infrastructure funding agreement should also include provision for the creation, embellishment and transfer of a linear open space reserve along the settlement boundary. The exact location, physical form and character of this linear open space reserve should be resolved as part of preparing the structure plan and funding agreement for the area.

**Recommendation:**

It is **recommended** that:

- The northern lot of 10-40 Williams Road be considered for inclusion within the Geelong Settlement Boundary, and the southern part of this site be considered for rezoning to the Rural Living Zone, subject to confirming that development on this land for housing will have an acceptable visual impact on views to Mt Duneed when viewed from the north and north east (i.e. locations such as the Armstrong Creek Waterway, town centre and Waurn Ponds Station).
- A structure plan, infrastructure plan and infrastructure funding agreement be prepared for future residential development on the northern part of the land. This plan (together with any development plan for the southern part of the site that is identified for rural living purposes) should make provision for the creation of a wide linear open space corridor in the vicinity of the 65AHD contour. This link should connect along the western site boundary to Whites Road, to delineate the long-term edge of urban Geelong in this location.
- Following the preparation of the abovementioned plans and agreement, a planning scheme amendment should be initiated to rezone the land to give statutory effect to the structure plan's infrastructure funding agreements.
- If there is any doubt about being able to successfully realise the above outcomes then Whites and Williams Road should remain as the long-term settlement boundary in this location.

# 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

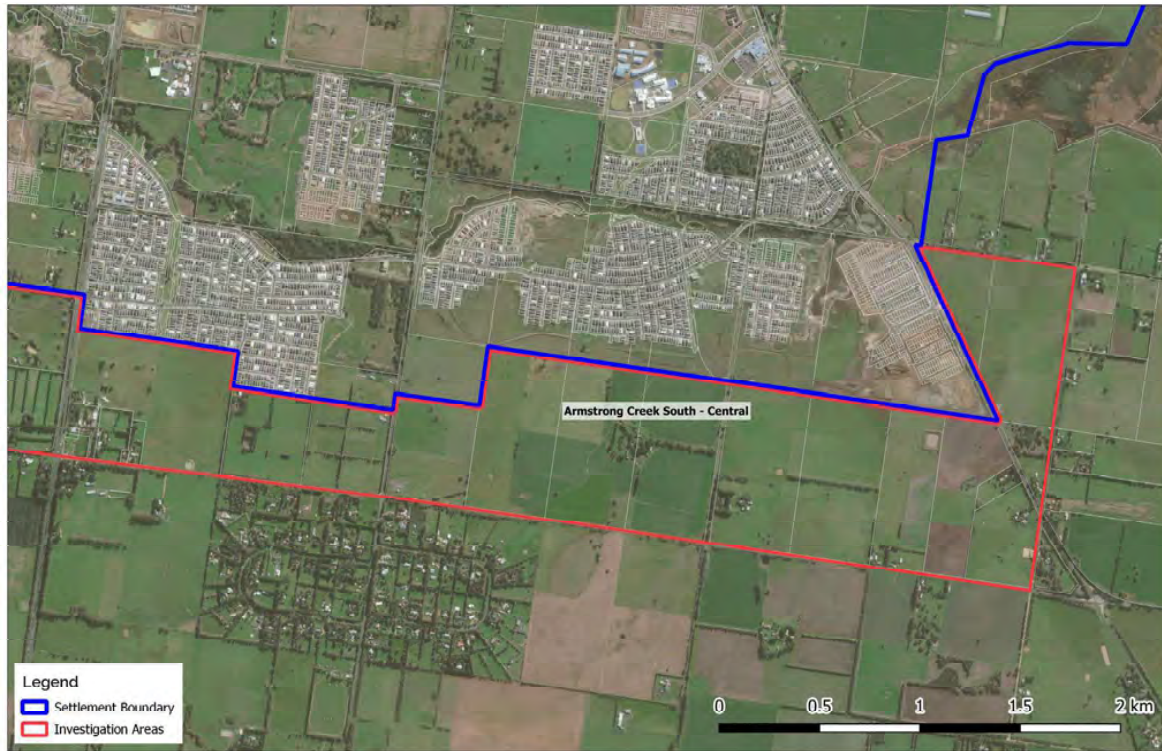


Figure 16. Armstrong Creek South Central – Aerial Cadastral Plan.

**Geelong Growth Investigation Areas**  
Armstrong Creek South Central Investigation Area

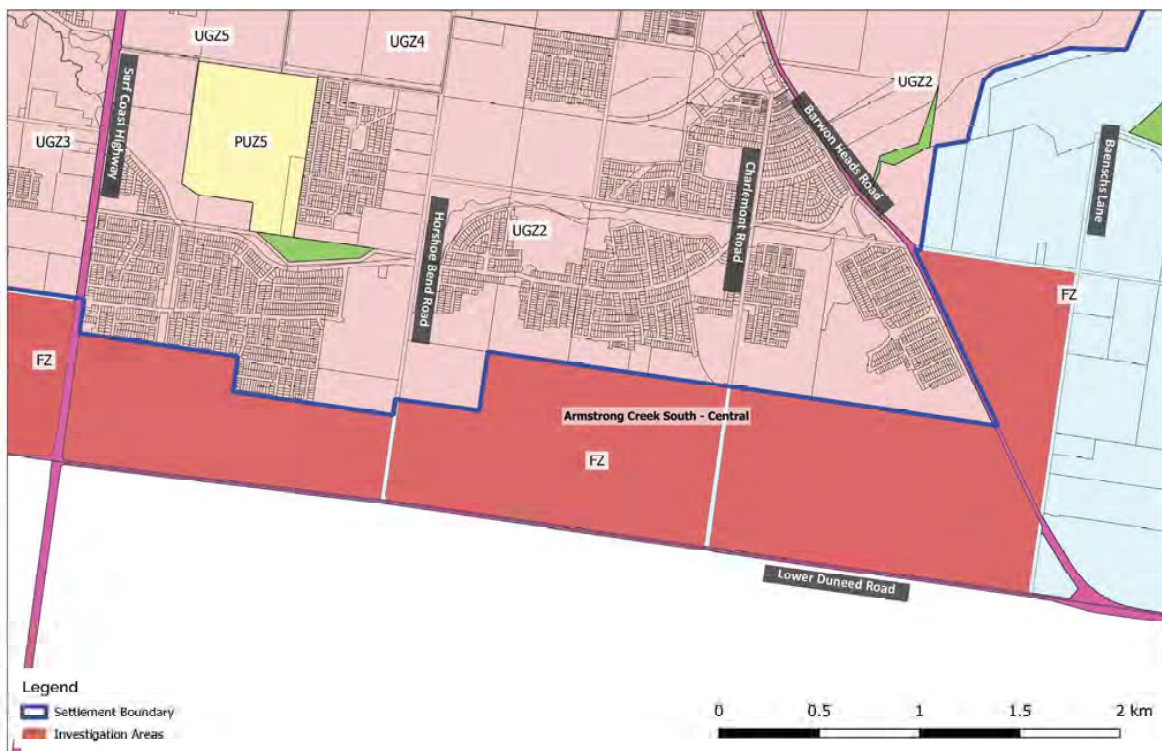


Figure 17. Armstrong Creek South Central – Investigation Area Plan.

**Geelong Growth Investigation Areas**  
 Armstrong Creek South Central - Zoning

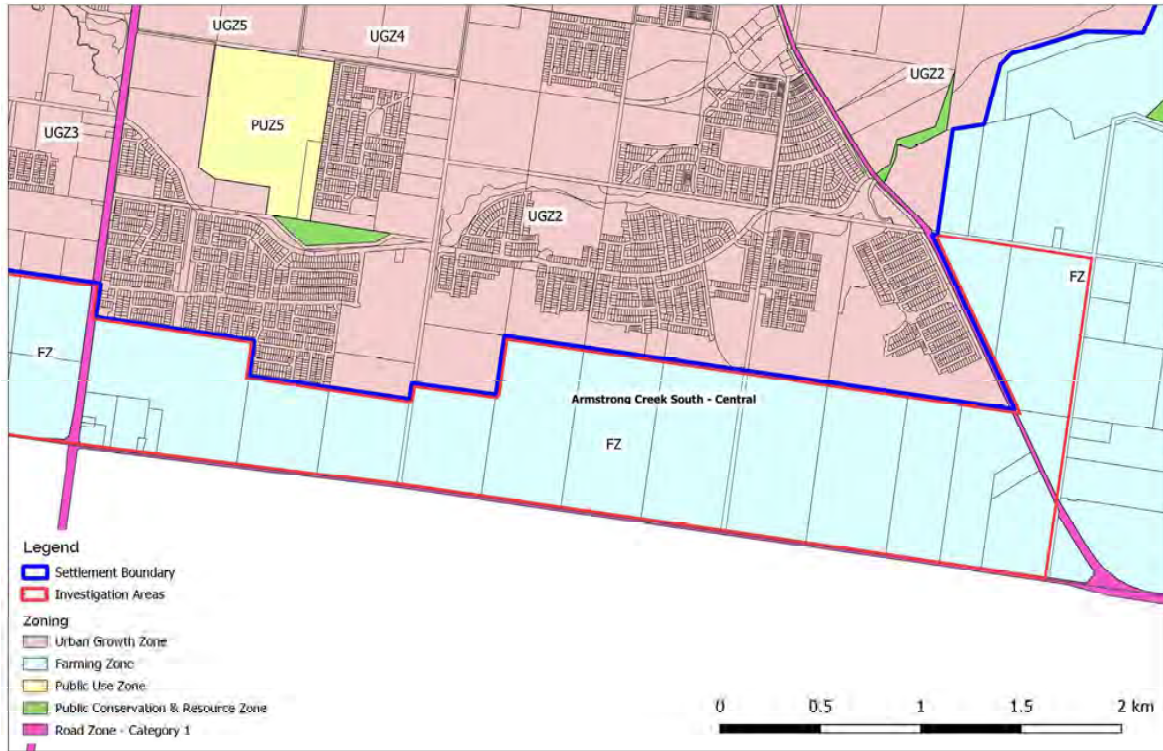


Figure 18. Armstrong Creek South Central – Zoning Plan.

**Geelong Growth Investigation Areas**  
 Armstrong Creek South Central - Overlays

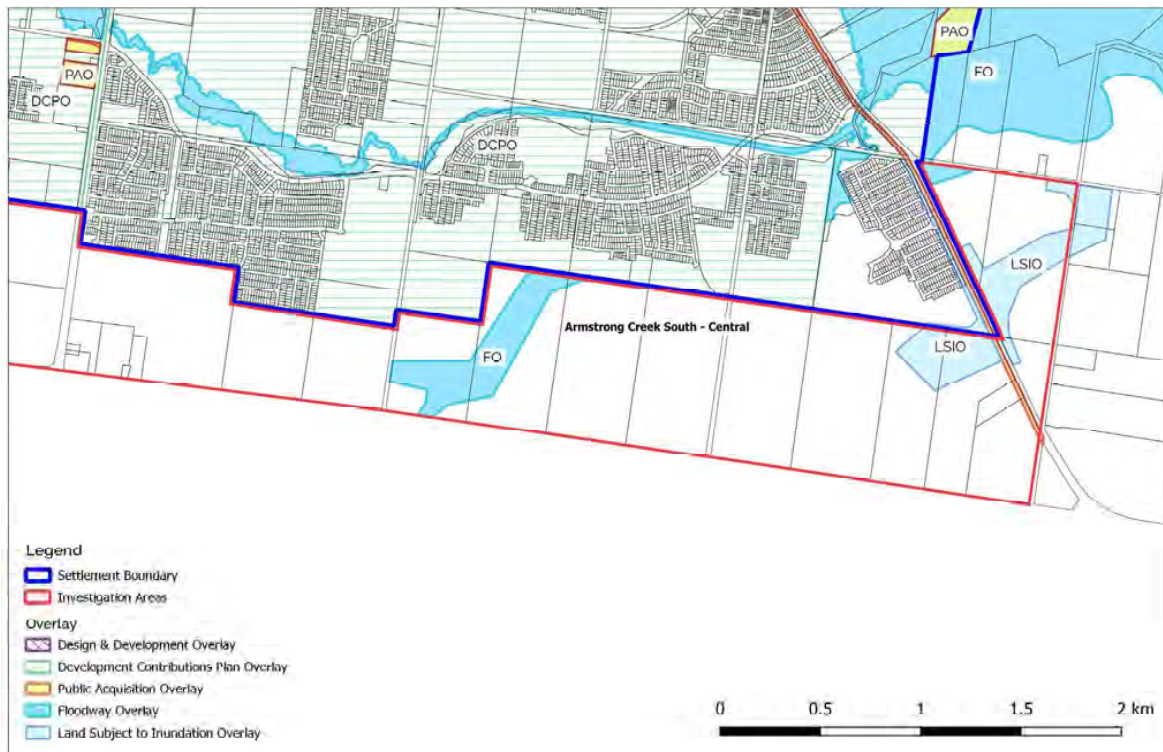


Figure 19. Armstrong Creek South Central – Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Armstrong Creek South Central - Overlays

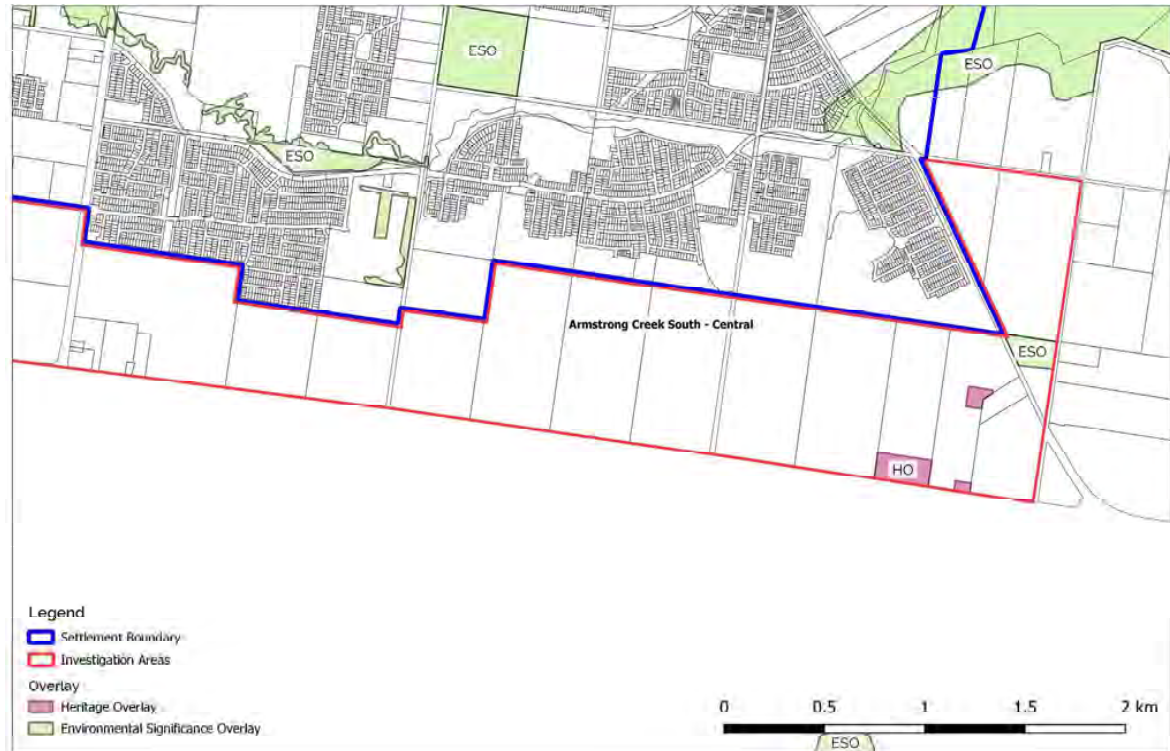


Figure 20. Armstrong Creek South Central - Overlays Plan 2.



Figure 21. Armstrong Creek South Central – Photo Montage.

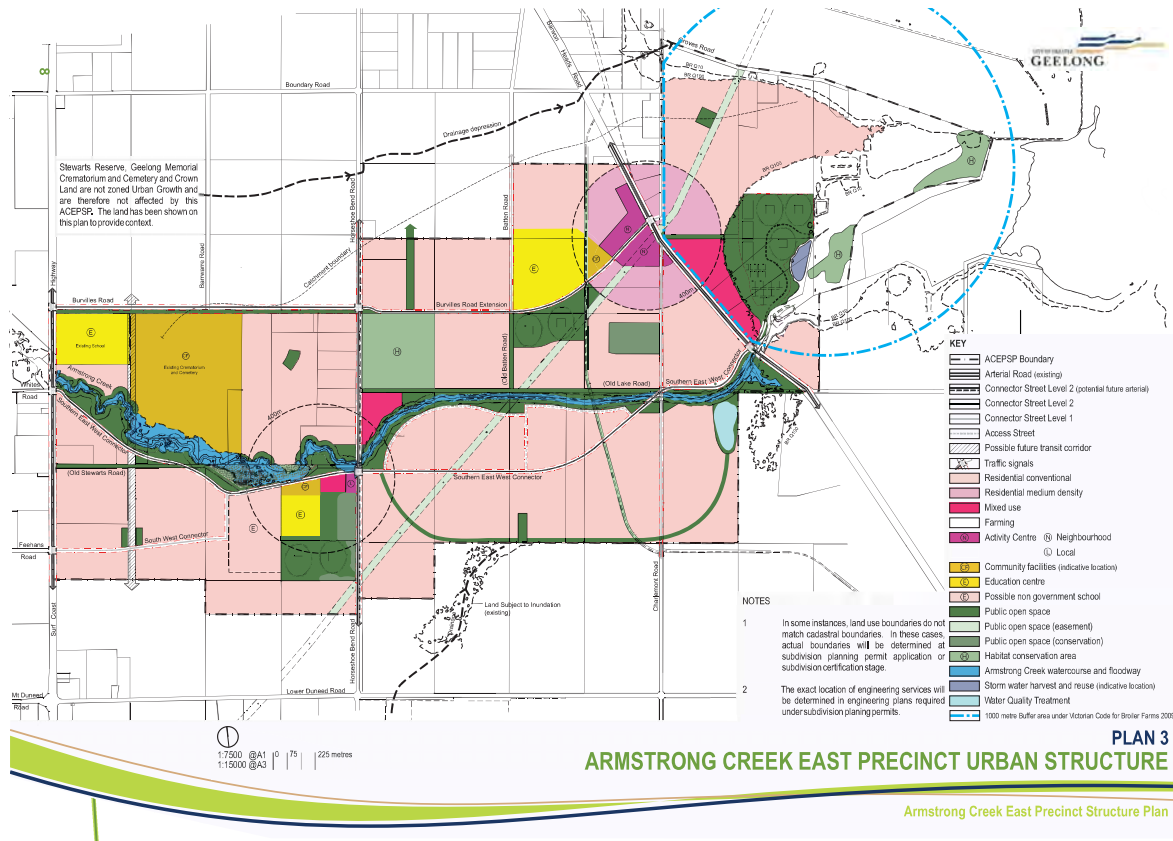


Figure 22. Armstrong Creek East Precinct - Urban Structure (Armstrong Creek East Precinct Structure Plan, City of Greater Geelong, 2010).

**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

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

The owners of 70 Baenches Lane made a submission to the Victorian Government in relation to question of whether and how the Geelong Settlement Boundary should be addressed in the DAL Strategy. Key points raised in this submission are as follows:

- The submitter seeks to ensure that the land can be considered for inclusion within the Armstrong Creek settlement boundary as part of the further strategic planning work of the City of Greater Geelong will lead before the draft SPP is finalised.
- The land landholding exhibits any of the attributes listed in Section 46AP of the Planning and Environment Act that must apply for a site to be declared a distinctive area and landscape.
- The approach taken in the SPP to classifying areas is highly generalised and lacks any clear guidance on why land is located within a declared area.
- Agricultural activity on the land will be limited in the future due to a range of factors, and the land does not have particular values in terms of Aboriginal Cultural Heritage, landscape, tourism or biodiversity.

## 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, Waurin 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.

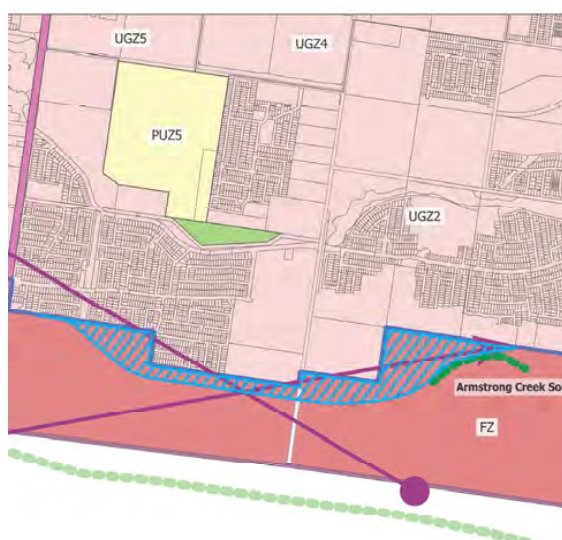


Figure 24. Option 3 – Minor boundary change (based on view corridors identified within original ACGU study).

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 StreetView).



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>

1 See map sheet 9 - <http://earthresources.efirst.com.au/categories.asp?cID=33>  
 2 <https://www.ccmaknowledgebase.vic.gov.au/nrmpp>  
 3 Ibid.  
 4 Ibid.  
 5 Ibid.

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>

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 presently disclosed Wadawurrung living cultural heritage and values.**

The Aboriginal Cultural Heritage Registration Information System (ACHRIS) mapping identifies the Armstrong Creek and Thompsons Creek waterways as Areas of Cultural Heritage Sensitivity. There is also 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 cause material detriment to Wadawurrung tangible and or intangible living cultural heritage, part of which are identified in Areas of Cultural Heritage Sensitivity. Having regard to clause 148 (fd) of the Aboriginal Heritage Act 2006, Council will consult with the Wadawurrung Traditional Owners Aboriginal Corporation 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 post contacts heritage values

<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.

## 4 - Response to submissions on the Draft boundary review.

A total of 8 submissions were received in relation to land within this investigation area (submissions 1.05, 1.06, 1.08, 1.09, 1.10, 1.13, 1.16, 1.19). Seven submissions related to the land north of Lower Duneed Road (between the Surf Coast Highway and Barwon Heads Road) and one submission related to land west of Barwon Heads Road.

A number of different views were put in submission relating to the settlement boundary location on the land north of Lower Duneed Road varied, as follows:

- The settlement boundary should not move and the land should remain in the Farming Zone (1.08)
- The land south of the existing settlement boundary should be rezoned for rural residential purposes (1.09)
- The settlement boundary should be moved to Lower Duneed Road and the land within it either rezoned to UGZ or a combination of UGZ and LDRZ (1.05, 1.06, 1.10, 1.13, 1.19)

The submission in relation to land east of Barwon Heads Road requested that land be included within the settlement boundary in this location.

The following summarises the key issues raised in submissions relating to the land north of Lower Duneed Road and west of Barwon Heads Road, together with a response to them.

### 4.1 Land north of Lower Duneed Road

The primary policy considerations in determining the location of the settlement boundary in this investigation area are as follows:

- The boundary should be logical and enduring (criteria 1.1)
- The boundary should enable orderly development and support the provisions of services (criteria 2.1, 2.2, 8.1 & 9.1)
- The boundary should not adversely impact on valued landscape characteristics or the preservation of an urban break along the southern edge of the Geelong LGA (criteria 3.1, 4.3 & 4.4)

The issues raised in submissions in relation to each of the above considerations is discussed further below.

#### 4.1.1 The boundary should be logical and enduring.

Some submitters contended that the existing boundary is neither logical nor enduring, and that making only a minor change to this boundary location (Option 3 in this report) would be a manufactured outcome rather than one based on obvious or prominent physical features in the landscape.

A number of submitters considered that Lower Duneed Road would be a more logical and enduring boundary than either the existing boundary or Option 3, and most submitters acknowledged that some form of lower density or landscaped interface treatment would be desirable along this boundary under either Options 1 or 2 in this report.

#### Response:

The current location and form of the Armstrong Creek Central settlement boundary is not particularly logical or enduring. Rezoning the land south of the existing boundary to Rural Living (Option 4) would go some way towards strengthening the sense of the existing location as an enduring boundary but it is also possible than this land would come under further pressure for rezoning in future years.

It is accepted that Mt Duneed Road (in the form of either Option 1 or 2) could function as a more logical and enduring boundary than the current boundary, if that were the only consideration. However, there are other policy outcomes that also need to be taken into consideration when setting a boundary, including the need for the boundary to preserve valued landscape characteristics and an urban break along the southern edge of the Geelong LGA. This is discussed further in section 4.1.3 of this report.

In relation to Option 3, the intention would be to create new, prominent and enduring physical features (comprising an open space corridor with trails and housing development on larger

lots facing it from across a road reserve). It is acknowledged that this will need to be created as it does not currently exist. However, this does not mean that these types of features could not serve the purpose of being a logical and enduring boundary just as well as the existing Mt Duneed Road reserve might.

#### 4.1.2 The boundary should enable orderly development and support the provision of services

Some submitters contend that extending the boundary to Mt Duneed Road and developing all or most of the land within it for housing at urban densities can be managed in a way which is orderly, will not have any adverse impact on existing neighbourhoods to the north, and can be provided with urban infrastructure and services.

Submission 1.10 (on behalf of DF (Sprague Farm) Developments Pty Ltd) describes this outcome is a logical extension of an existing development front, as opposed to being an entirely new development front. This submission is supported by various reports which set out how traffic, servicing and surface water management issues could be addressed in relation to the future development of the Sprague Farm land holdings.

##### Response:

The abovementioned technical reports do not address how the wider investigation area might be serviced (ie beyond the land buildings that the reports relate to), and they do not contain any detailed assessment of how community infrastructure could be delivered to any future urban development across the wider investigation area.

The Geelong Settlement Strategy contains the following urban growth Principles to guide the setting of any revised long term settlement boundary:

- 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 original assessment contained in this report concluded that extending the boundary to Mt Duneed Road and developing all or most of the land within it for housing at urban densities (ie Options 1 and 2) would not satisfy the above principles. The submissions do not contain compelling arguments to suggest otherwise.

The key issue with Options 1 and 2 relates to social infrastructure rather than the provision of utility services. The initial investigations undertaken at the time of preparing the Settlement boundary review confirmed that Barwon Water considered that the investigation area could be serviced by water, sewerage and recycled water.

However, the desktop analysis of the potential social infrastructure requirements associated within residential development across the wider investigation area concluded that there was unlikely to be sufficient capacity for the social infrastructure within the existing Armstrong Creek growth area to cater for the population levels that might be accommodated within a settlement boundary that extended to Lower Duneed Road.

This desktop analysis found that it was likely that the infrastructure in the western portions of the existing growth areas would need to be augmented to cater for new population in the west of the investigation areas, and that it would be necessary to plan an entirely new community in the eastern portions of the investigation area.

Whilst growth plans could potentially be prepared for land within the investigation area to address the requirements for provision of social and other forms of infrastructure, this would not be a small task, as the investigation area could potentially accommodate circa 11,000 residents across its almost 5km length.

Consideration would also need to be given to the integration of each new housing area along this

length into the various neighbourhoods that have been planned and are being developed to the north of the investigation area.

It is for these reasons that the Option 1 (and to a lesser extent Option 2) are considered to not satisfy the abovementioned urban growth Principles, and that they would have a potentially negative impact on the achievement of Criteria 2.1, 2.2, 8.1 & 9.1.

Having said that, it is necessary to take account of the DAL legislation and Surf Coast DAL SPP which intends for any revised settlement boundary within Armstrong Creek to be a 'protected settlement boundary' which endures over the long term (circa 50 years). Once a protected settlement boundary is established there is an expectation that it will not be revisited in the short or even medium term.

We consider that the assessment of land within Armstrong Creek against the abovementioned urban growth principles must therefore be cognisant of this 'protected settlement boundary' context, whereas this context does not apply to most other locations across the Geelong settlement boundary.

Given this context, it is reasonable to decide today whether the future planning and development of any land to be included within the Armstrong Creek settlement boundary could be done in an orderly manner and support the provisions of services to the area, even if its inclusion does not benefit adjoining areas or rely upon services within those areas. We say this because the DAL context does not allow for this question to be revisited as part of future periodic reviews of the Geelong Settlement Strategy in this location.

It is our view that some of the land within the investigation area could be included within the settlement boundary without presenting any great risk of 'orderly development' and infrastructure outcomes being able to be achieved via more detailed planning processes for this area.

In this context, is our view that some (but not all) of the land within this investigation area could be

included within the settlement boundary without presenting any great risk of disrupting the orderly development or provision of infrastructure and services to this growth area.

The extent of land that might be included within the settlement boundary should be informed by how the landscape characteristics of the non-urban land on the edge of the settlement boundary are addressed (refer section 4.1.3 for discussion).

Furthermore detailed analysis of the specific demand for infrastructure and services associated with the development of any land included within the settlement boundary would need to be done as part of future development planning for this area (this is addressed further in section 4.1.4).

#### **4.1.3 The boundary should not adversely impact on valued characteristics or the preservation of an urban break along the southern edge of the Geelong LGA.**

A number of submitters considered that the landscape characteristics and preservation of an urban break along the southern edge of the Geelong LGA could be achieved by the placement of low density residential or rural living allotments along Lower Duneed Road.

Submission 1.01 (on behalf of DF (Sprague Farm) Developments Pty Ltd) is supported by a detailed landscape appraisal and accompanying technical reports. The main points raised in this appraisal are set out below (along with our response to them in italics):

- A more forensic and technical examination of the landscape and viewshed is required to inform the definition of any permanent or long-term settlement boundary in this investigation area. The 4 options described in the review report have not been sufficiently articulated in terms of form, density and configuration, or measured for visual impacts from key vantage points.

**Response - Agree in principle:**

*The definition of any revised boundary and the evaluation of potential options should be informed by a more detailed visual landscape analysis. However, we consider that it is possible to eliminate some options based on the current knowledge of the existing landscape setting, including eliminating the option of development of conventional or low density (0.2-0.4ha) residential along the edge of Lower Duneed Road. In our view neither of these development typologies would present a sufficiently respectful 'urban break' or landscape interface along Lower Duneed Road.*

*Some further analysis of interface design options has been undertaken to inform the response to submissions (refer Appendix 3) and a broad concept plan for this area has been prepared (refer to section 4.1.4 for details).*

*The fine tuning of this ultimate layout and design of the low density edge along the southern edge of the prepared revised settlement boundary can be undertaken at the time of rezoning the preparation of development plans for this land.*

- The investigation area is in a wider regional landscape setting that has been rated as being of low regional significance in the DAL process, and the land north of Lower Duneed Road is largely dissociated with the regional landscape setting on land to the south of this road.

**Response – Disagree:**

*Whilst the changes in landform across Lower Duneed Road create some degree of dissociation with the wider landscape to the south, the land to the north still remains visually connected to the wider regional landscape setting described in the DAL landscape assessment.*

- The combined effect of rising topography south of Lower Duneed Road, roadside vegetation and substantive canopy cover within the Mount Duneed Estate results in a prevailing green silhouette to the south that

will not be threatened by proximate urban development.

**Response - This requires further testing:**

*The landscape setting of the ascribed 'green silhouette' could be significantly altered by urban development to the immediate north of Lower Duneed road, depending on what form it takes. In any event, a semi-rural interface along the northern boundary of this road would have a far more positive impact on this landscape context than an urban interface would.*

- Land along Lower Duneed Road has both filtered and open aspects to the north towards suburban housing within Armstrong Creek and both rural and low-density residential to the south.

**Response - Agree**

- Option 3 (Rural Living) would represent minimal visual impacts in this landscape.

**Response – Agree:**

*This would be the most straightforward means of achieving the policy aspiration to create an 'urban break' or landscape interface along both sides of Lower Duneed Road.*

- A hybrid configuration of conventional and low-density residential development could also be designed to have minimal landscape impacts (an indicative development representation is included within this submission).

**Response - Agree in Part:**

*Whilst this is something that requires further design development and testing as part of the more detailed planning of subdivision and development in this locations, it is the authors view that the development of low density (0.2-0.4ha) residential development at the edge of Lower Duneed Road would not present a sufficiently respectful 'urban break' or landscape interface along this edge.*

*In our view a mix of conventional, low-density*

*and rural living residential development could be designed to have minimal landscape impacts, subject to there being sensitive transition from rural living to conventional densities across the landform (ie from south to north, and from the central to the east/west part of the area).*

*Any such transition should take account of the policy aspiration to create an 'urban break' or landscape interface along both sides of Lower Duneed Road, and also the need to design a layout which presents a semi-rural landscape interface from the more distant views in and out of the investigation area (refer to Section 4.1.4 for further conclusion).*

#### 4.1.4 Conclusions and recommendations

The current location and form of the Armstrong Creek Central settlement boundary is not particularly logical or enduring, and it requires modification.

An alternative long term settlement boundary can be established for Armstrong Creek Central that is logical and enduring, preserves the desired landscape and 'urban edge' character along Lower Duneed Road, whilst allowing for the orderly urban development of some additional land within the boundary.

The alternative settlement boundary would differ from all 4 of the original settlement boundary options identified in this report, in that it would include a more substantial land area within it than Option 3, but it would also retain substantial areas of land along Lower Duneed Road within a non-urban (rural living) zone.

This alternative settlement boundary option is conceptually illustrated in Figure 30.

The key features of this alternative settlement boundary concept include the following:

- The settlement boundary would be established along a new linear open space corridor running along the southern edge of the Armstrong Creek Growth Area.
- Rural living development would be permitted on the land area between the

new settlement boundary and Lower Duneed Road. Lot sizes would transition from larger to smaller rural living allotments, and requirements relating to landscape character, access, servicing, etc., would be guided by development plans and infrastructure funding agreements.

- Urban development to the north of the settlement boundary would be guided by precinct plans, supporting technical analysis and infrastructure funding agreements.

The following recommendations are made in relation to abovementioned elements of the alternative settlement boundary concept:

##### A. Location of the revised settlement boundary:

It is **recommended** that the revised settlement boundary should be set in a location which accommodates the following configuration of land uses:

- Larger (1.5-3ha) rural living lots on the land north of Lower Duneed Road and on the corners of the Surf Coast Highway and Barwon Heads Road.
- Smaller (0.2-0.4ha) rural living lots between the abovementioned larger lots and the linear open space corridor along the alignment of the settlement boundary, to provide a transition in density towards the settlement boundary.
- Internal roads to provide access from the rural living lots via Horseshoe Bend and Charlemont Roads.

The alternative settlement boundary location conceptually illustrated in Figure 30 can accommodate all of the above features.

##### B. Physical form of the boundary:

The interface between urban development within the settlement boundary and rural living allotments outside of it should be clearly delineated in both functional and landscaping terms. This delineation should comprise a combination of walking/cycling trails, open space, drainage reserves, etc. with urban residential

housing facing these features across a road reserve located within the settlement boundary.

It is **recommended** that any future rezoning of land within the revised settlement boundary make provision for the creation, embellishment and transfer of a linear open space reserve along the alignment of the boundary. The physical form and character of this linear open space reserve should be resolved as part of the development and infrastructure planning that forms the basis of the land rezoning (see below for details).

C. Rural living allotments and landscape character:

The preservation of an urban break and respectful landscape interface at the southern edge of the Armstrong Creek Growth Area will be best achieved by establishing rural living allotments along Lower Duneed road.

Siting, design and landscape requirements should be applied to the larger (1.5-3.0ha) lots along Lower Duneed Road and so as to ensure that the landscape character along this road interface presents a high quality rural living character.

These lots would not have direct access to this road, and so it will be necessary to ensure that these design requirements ensure that fencing, the siting/design of structures and landscaping on these lots is respectful of the desired 'urban break' landscape character for this location.

Siting, design and landscape requirements should also be applied to the smaller (0.2-0.4ha) rural living lots to ensure that this area presents a high quality, landscaped rural living character.

The design and landscaping of existing and new roads in the area between Lower Duneed Road and the Settlement Boundary should reflect the role of this location as a permanent rural

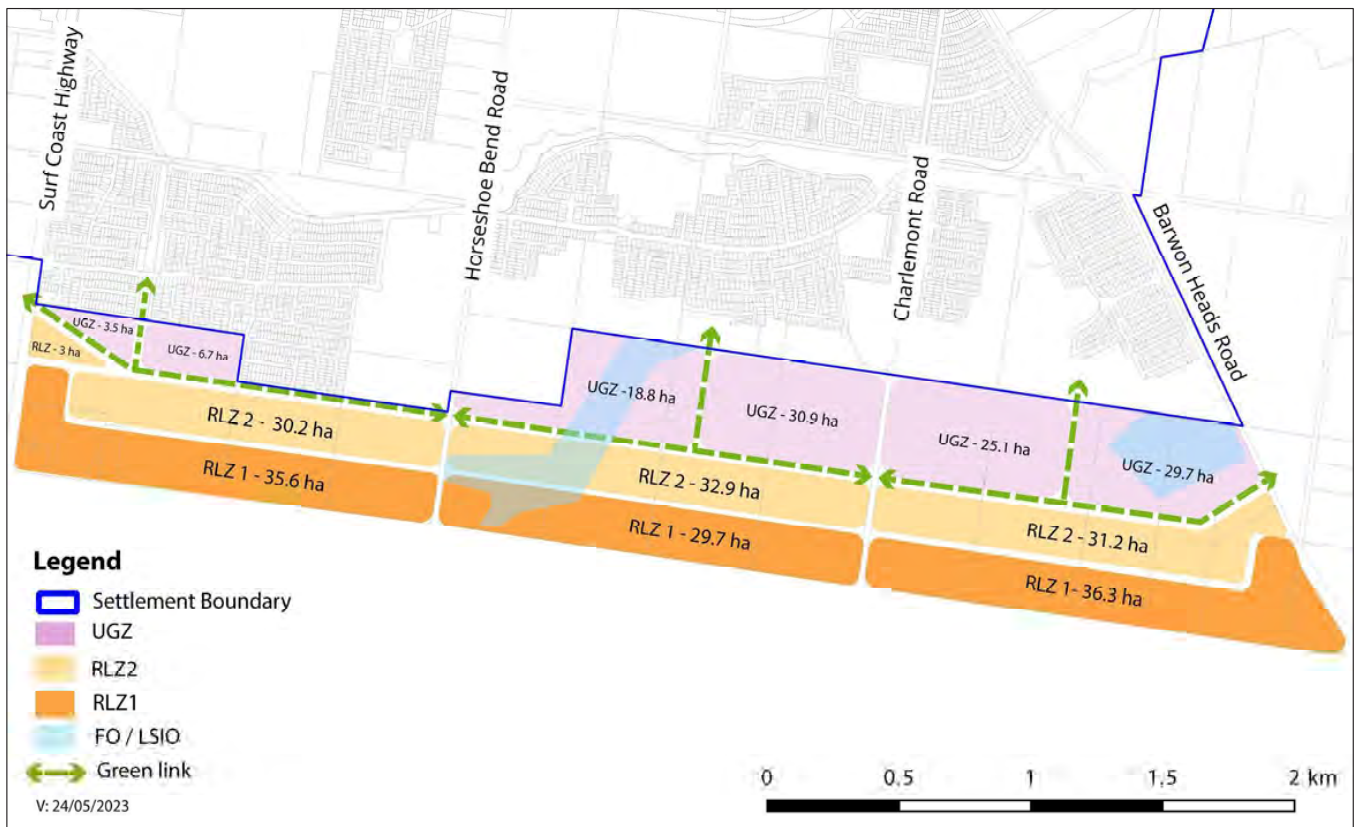


Figure 30. Armstrong Creek South Central Investigation Area - Settlement Boundary Alternative

edge to urban Geelong. It should also consider opportunities to preserve distant views to Mt Duneed where possible.

Given the proximity of this land to Armstrong Creek, options to connect these lots to urban services should be explored.

It is **recommended** that:

- The land between Lower Duneed Road and the revised settlement boundary be rezoned to the Rural Living Zone
- Minimum lot sizes be applied via schedules to the UGZ for land along Lower Duneed Road (min 1.5ha) and the balance of the land (min 0.2ha)
- A Development Plan Overlay be applied to the land between Lower Duneed Road and the revised settlement boundary at the time of rezoning in to establish subdivision design, infrastructure, building siting and landscape design requirements for this area.

#### D. Orderly development and infrastructure delivery:

The alternative settlement boundary concept provides for circa 114 ha (gross) of land to be made available for residential development purposes. This includes (circa):

- 10.2 ha of land near to the Surf Coast Highway
- 49.7 ha of land near to Barwon Heads Road
- 54.8 ha of land located centrally between Horseshoe Bend and Charlemont Roads.

The broad-brushed 'community infrastructure needs' assessment methodology described in Chapter 5 of this report has been applied the above-mentioned potential additional 114ha in order to determine the potential scale of social infrastructure needs that might arise from including this land within the Geelong settlement boundary (noting that this is based on 70% net developable area, 15 lots per hectare average and 2.8 people per household).

The adoption of the above assumptions would mean that circa 1,200 new dwellings might be created in the revised settlement boundary,

accommodating an additional population of circa 3,350 people. The potential aggregate social infrastructure associated with this additional population is set out in Appendix 4 to this report. This is based on a simplified application of infrastructure benchmarks to the population size.

Structure Plans will need to be prepared for each area at the time of rezoning to ensure that they are properly integrated into existing/planned neighbourhoods that they adjoin.

It is expected that they will each be able to connect into the utility infrastructure within these areas (albeit that some augmentation may be required) and that they will also generate additional requirements for drainage, open space and social infrastructure.

The potential future population would be distributed across multiple neighbourhoods along the southern edge of Armstrong Creek, and each of these will be 'add-ons' to the existing/planned neighbourhoods that they adjoin. The capacity of existing facilities to accommodate (or be upgraded to accommodate) the needs of the additional population has not been assessed as part of this review. However such an assessment will be needed in order to determine how to deliver (and fund) the necessary additional social infrastructure.

Inclusion of these areas into the settlement boundary should be contingent upon new or augmented physical and social infrastructure being funded by the development of the land without the need for reliance on substantial external funding sources. An infrastructure plan and funding agreement will need to be prepared for each area at the time of rezoning to ensure that these requirements are fully addressed.

Any infrastructure funding agreement should also include provision for the creation, embellishment and transfer of a linear open space reserve along the settlement boundary. The physical form and character of this linear open space reserve should be resolved as part of preparing the structure plan for the relevant residential area.

It is **recommended** that:

- Structure plans, infrastructure plans and infrastructure funding agreements be prepared for the future residential development of land between the revised settlement boundary and existing UGZ.
- Following the preparation of the abovementioned plans and agreements, a planning scheme amendment should be initiated to rezone the land between the revised settlement boundary and existing UGZ and to give statutory effect to the structure plans infrastructure funding agreements.

#### 4.2 Land east of Barwon Heads Road.

The owner of a large land holdings (70 Baenchs Lane) has made a detailed submission which argues for the inclusion of that land within the settlement boundary. The submission raises a range of issues that were not explored in sufficient detail in the Background Review report and therefore a detailed response to these issues is set out as follows:

##### 4.2.1 Consideration of relevant technical reports.

The landowner submits that the Background Report investigation falls short of the detailed analysis that the Planning Scheme requires to be completed to inform 'logical inclusions' decisions pertaining to the Armstrong Creek settlement boundary.

##### Response:

The original Background Report was informed by the written submissions made on behalf of the land owner to Amendment C395 (Geelong Settlement Strategy) and the Bellarine DAL Advisory Committee hearing. However, it was not informed by the technical reports referred to in the current submission, aside from the ecological report appended to submission to the Bellarine DAL Advisory Committee.

These reports have now been considered in the formulation of this response to the landowner submission (noting that the report authors are not qualified to comment on the technical

substance of these reports).

It should also be noted that this review is a strategic, corridor-wide review of geographically large sections of the existing Geelong Settlement Boundary. Whilst all relevant site-specific considerations have been taken into account in the review (to the extent known to the authors at the time of the review), the city and corridor-wide nature of the review means that there are limits to the level of site-based analysis that has been possible within the review scope.

This review has broadly followed the approach that taken by the State Government in the 'Logical Inclusions' review of Melbourne's Urban Growth Boundary in 2012, although this review has sought to include a substantially more detailed level of assessment for each investigation area than was the case in the Logical Inclusions review.<sup>1</sup>

##### 4.2.2 Approach to the assessment of land west of Barwon Heads Road.

The landowner submits that the Background Report has failed to give proper consideration to the specific circumstances of the land west of Barwon Heads Road, and the opportunities that they present to support for including this land within the settlement boundary.

##### Response:

The original Background Report assessed the land west of Barwon Heads Road separately to the land north of Lower Duneed road on the basis that:

- a. The former area has a different physical relationship to the Armstrong Creek Growth Area, in that it is physically separated by an arterial road whereas the latter area does not.
- b. The environmental context of the former area differs from the latter area in that it is located between the Armstrong Creek Growth Area and environmentally sensitive Reedy

<sup>1</sup> See for example: <https://vpa.vic.gov.au/wp-content/Assets/Files/GROWTH%20AREAS%20LOGICAL%20INCLUSIONS%20REVIEW%20PROCESS%20West%20Region%20Report%202011%20Final.pdf>

Lake/Lake Connewarre environs, whereas the latter is not.

The assessment did not consider the same 4 boundary options to the land west of Barwon Heads Road because it concluded that there were strong prima facie grounds to retain the settlement boundary in its current location. It did not include a 'sub-precinct' assessment of the land west of Barwon Heads Road against the remaining criteria for the same reason.

However, the submission raises a number of propositions about the suitability of this land for inclusion that warrant further consideration. The following assessment seeks to respond to the issues raised in the submission in relation to this area.

#### 4.2.3 Determining a logical and enduring boundary (Criteria 1.1).

The landowner submission notes that urban development already straddles Barwon Heads Road further north within the Armstrong Creek growth area, and that this road is not a logical and enduring boundary. It requests that 70 Baenchs Lane be included within the settlement boundary in order to 'round out' and facilitate the double sided activation of Barwon Heads Road.

##### Response:

The fact that urban development straddles Barwon Heads Road further north of Lake Road is acknowledged, as is the fact that the inclusion of additional land into the Armstrong Creek East PSP means that there will be urban development opposite 70 Baenchs Lane.

There are numerous factors that influence whether a boundary is determined to be logical or enduring, and the following comments are made in relation to the relative merit of each location:

- Both locations are on a physical feature (a road reserve) although Barwon Heads Road is a substantially more prominent physical feature than Baenchs Lane.
- The submission argues that Barwon Heads Road is a connection route which would

enable housing on both sides of it to gain access to urban services and amenities by various modes, and that the distance between this land and those amenities is comparable to the distance in other locations north of Lower Duneed Road.

- This spatial context can also be characterised differently, depending on the persons view about how land, infrastructure and services ought to be composed in order to create sustainable, walkable and liveable neighbourhoods.<sup>2</sup>

It remains the views of this report authors that creating a relatively small pocket of housing that cannot support the provision of services within its boundaries, is physically separated from other neighbourhoods by a busy arterial road and that is not within walking distance of the amenities further north and west of the site does not represent an orderly or logical planning outcome.

#### 4.2.4 Impact on the orderly development of the adjoining urban area (Criteria 2.1).

The landowner submits that including their land within the settlement boundary would not adversely impact on the orderly development of the area.

##### Response:

This criteria addresses both state policy on the provision of infrastructure to meet community need, as well as the principles set out in the Geelong Settlement Strategy that any land to be included within the settlement boundary must deliver a benefit to existing development (Principle 4) and also be able to rely on existing facilities and services within established areas (Principle 5).

Principle 4 relates to the provision of physical infrastructure (for example, where including land might enable drainage, access or other physical services to be delivered in a timely or cost effective manner), whereas Principle 5 relates to the provision of social infrastructure (for example, where dwellings on land to be

<sup>2</sup> Pursuant to state policies for the planning of new communities (clause 11.02-25)

included can demonstrate that it will not generate demands that cannot be met by existing or planned social infrastructure).

It is not evident how moving the settlement boundary to Baenchs Lane would enable any drainage, access or other physical services needed by the existing growth area to be delivered in a timely or cost effective manner (Principle 4).

It is also not evident that the additional social infrastructure demands generated by including this land within the settlement boundary could be met by the existing/planned infrastructure within the existing growth area (Principle 5). Whilst these demands might potentially be incremental in the scheme of things, the submission for inclusion of this land does not demonstrate this, other than making general assertions in relation to this point.

#### 4.2.5 Impact on environmental values and risks (Criteria 4 and 5).

The landowner submits that allowing urban development on the site would not adversely impact on environmental values and risks for the site its environs.

##### Response:

The Background Report assessment noted that urban development within this area will result in an encroachment onto fringes of the environmentally sensitive Reedy Lake/ Lake Connewarre environs, and that this would require sensitive management to ensure that the habitat values of these adjoining areas are not adversely affected.

The technical information contained within the submission relating to surface water management, flora and fauna is noted, as are the observations of the authors of those reports in relation to the potential to manage the relevant environmental values and risks.

Whilst it is acknowledged that there is insufficient information in material considered by the Background Report to say that including the land within the settlement boundary would have

a negative impact, further verification of the potential impacts are needed before it could be said that such impacts were neutral or positive.

#### 4.2.6 Impact on landscape values (Criteria 3.1, 4.3, 4.4).

The landowner submission includes a landscape and visual sensitivity analysis which concludes that there is no strong rationale for protection of the land on landscape-related principles, and that appropriate development of the land for residential use can occur without impinging upon the established value or significance of the broader Bellarine Peninsula rural landscape as defined in the Bellarine Peninsula DAL.

##### Response:

The conclusions of the landscape and visual sensitivity analysis that the site has moderate landscape value, and generally moderate sensitivity relative to views from Barwon Heads Road and Lower Duneed Road are noted.

Whilst there is no assertion made in the analysis that this landscape is unique or significant, the Geelong Planning Scheme and Settlement Strategy both call for green breaks to be preserved between urban Geelong and other settlements within the Bellarine Peninsula.

The original assessment contained within the Background Report noted that the existing rural/urban transition is located at the Barwon Heads Road intersection with Lake Road (ie this is the point at which land to the east of Barwon Heads Road is designated as rural under the Geelong Settlement Framework).

Inclusion of the site within the settlement boundary would result in the conversion of the land east of Barwon Heads Road (from Lake Road to Lower Duneed Road) from rural to urban.

Notwithstanding the moderate significance and sensitivity of this landscape, moving the settlement boundary as proposed would have a generally negative impact on the policy aspiration to preserve a green break at this south-eastern edge of Geelong, in that it shifts the rural edge (as

viewed east across Barwon Heads Road) circa 2 km further south from its current location.

#### 4.2.7 Ability to cost effectively provide urban services to the site (Criteria 9).

The landowner submission includes a servicing report that concludes that road, sewer, water and other urban services can be provided to the site.

##### Response:

The servicing report that accompanies the landowner submission identifies the two closest existing sewer infrastructure locations which may have capacity to service the land. However, this advice does not definitively demonstrate that sewer can be provided to the site, and it also pre-dates the advice of Barwon Water that this the land would be difficult to service from a sewer perspective.

It is acknowledged that there is insufficient information at this point to say that including the land within the settlement boundary would have a negative impact on the achievement of Criteria 9.1, further verification of the potential impacts is needed before it could be said that such impacts were neutral or positive.

#### 4.2.8 Conclusions and recommendations.

Barwon Heads Road (south of Lake Road) is considered to be a logical and enduring south-eastern settlement boundary for the Armstrong Creek Growth Area.

Whilst there is insufficient information at this point to conclude that extension of the boundary to Baensch Lane would have a negative impact on the achievement of environmental values and risk criteria (Criteria 3 and 4), or the cost effective provision of urban services (Criteria 9.1), further more detailed assessments would be required before it could be said that such impacts were neutral or positive.

However, Baensch Lane is not considered to be a logical or enduring alternative settlement boundary (Criteria 1) for the reasons set out

above.

Moving the settlement boundary to this location would also not support or enhance the orderly development of the Armstrong Creek Growth Area (Criteria 2, Principles 4 & 5). Further, it would have a negative impact on the policy aspiration to preserve a green break at this south-eastern edge of Geelong.

For the above reasons, it is **recommended** that there be no change to the settlement boundary in this location.

# 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

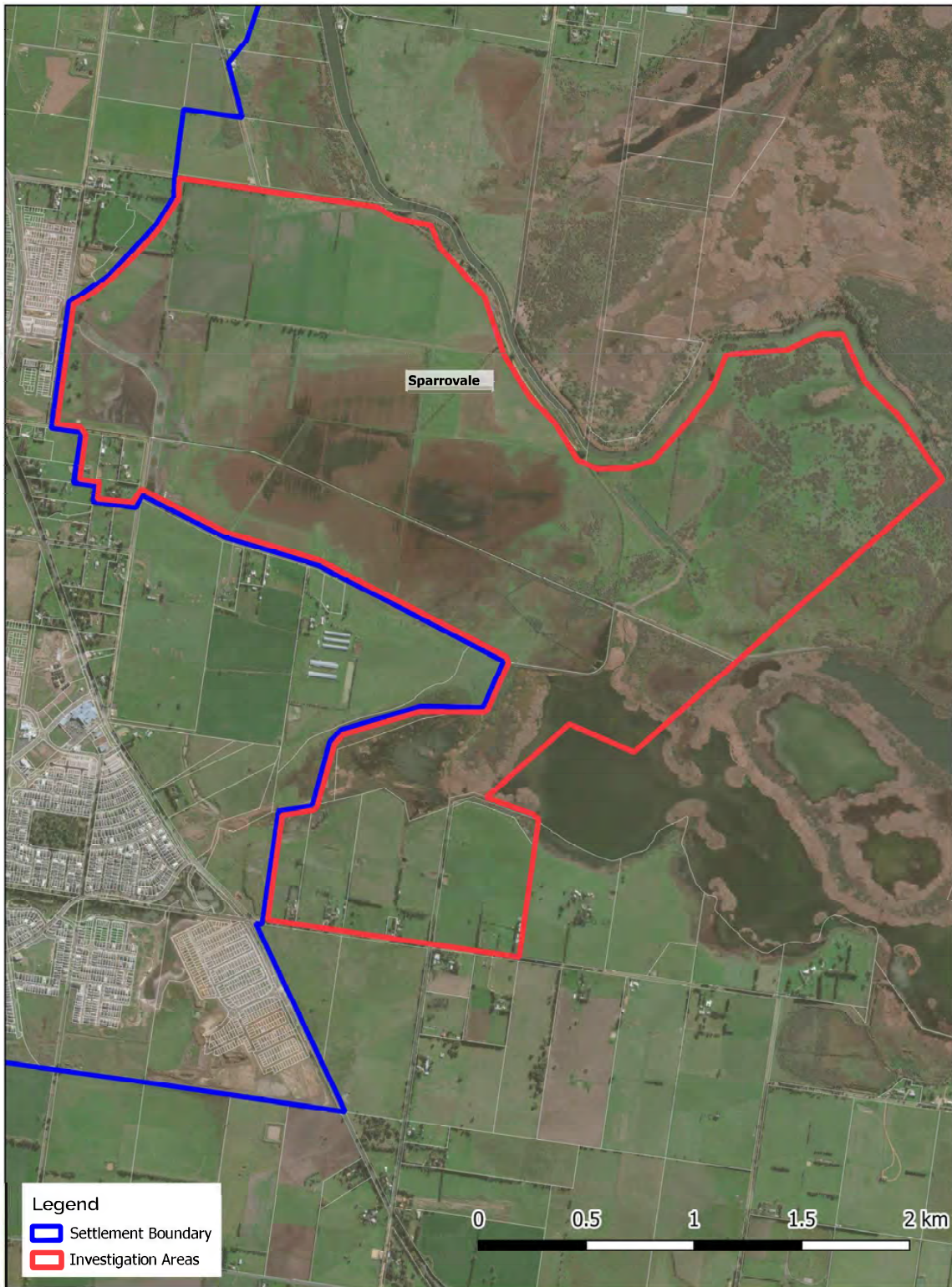


Figure 31. Sparrovale – Aerial Cadastral Plan.

Geelong Growth investigation areas  
Sparrovale Investigation Area

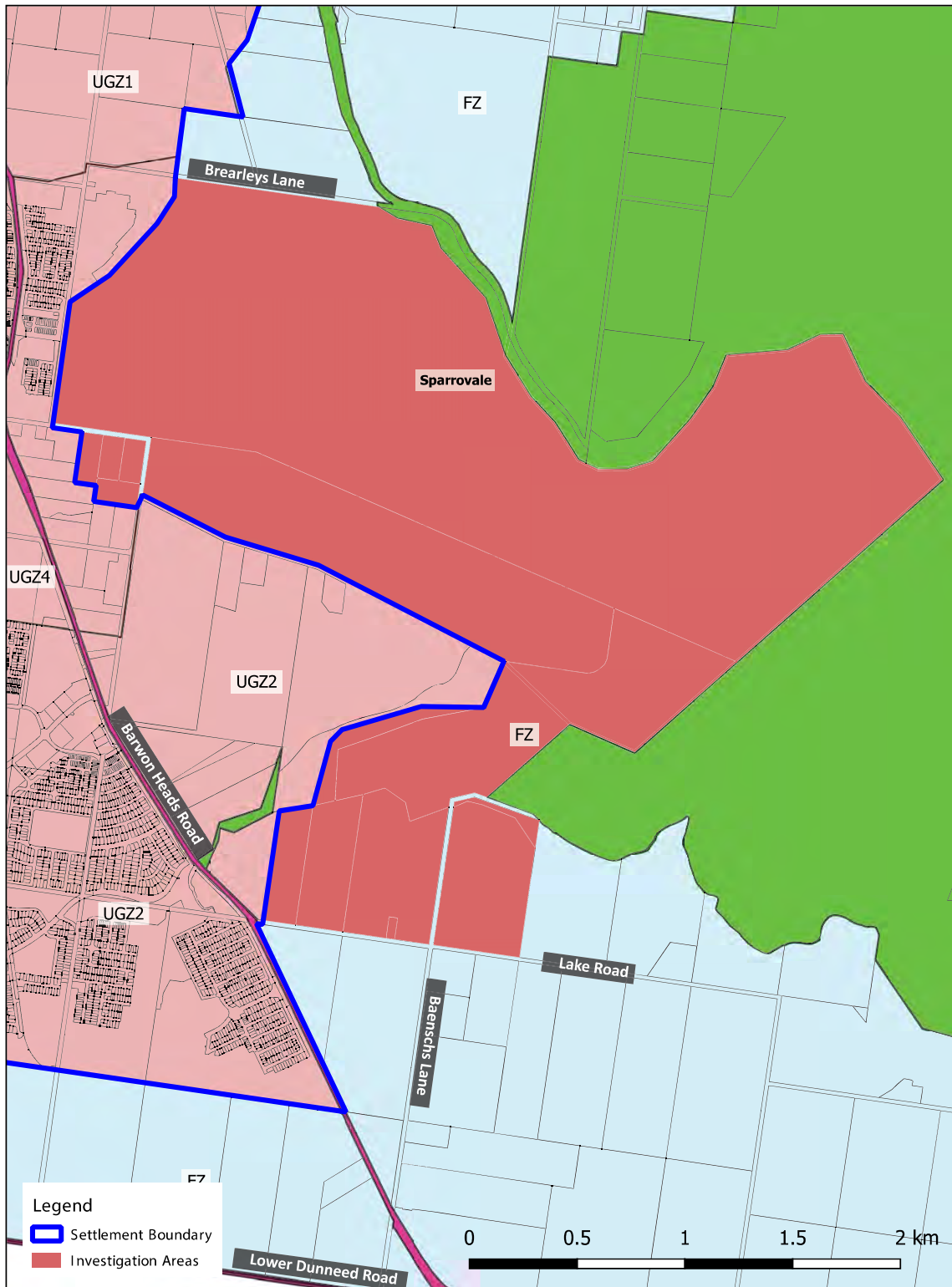


Figure 32. Sparrovale – Investigation Area Plan.

**Geelong Growth investigation areas**  
Sparrovale - Zoning

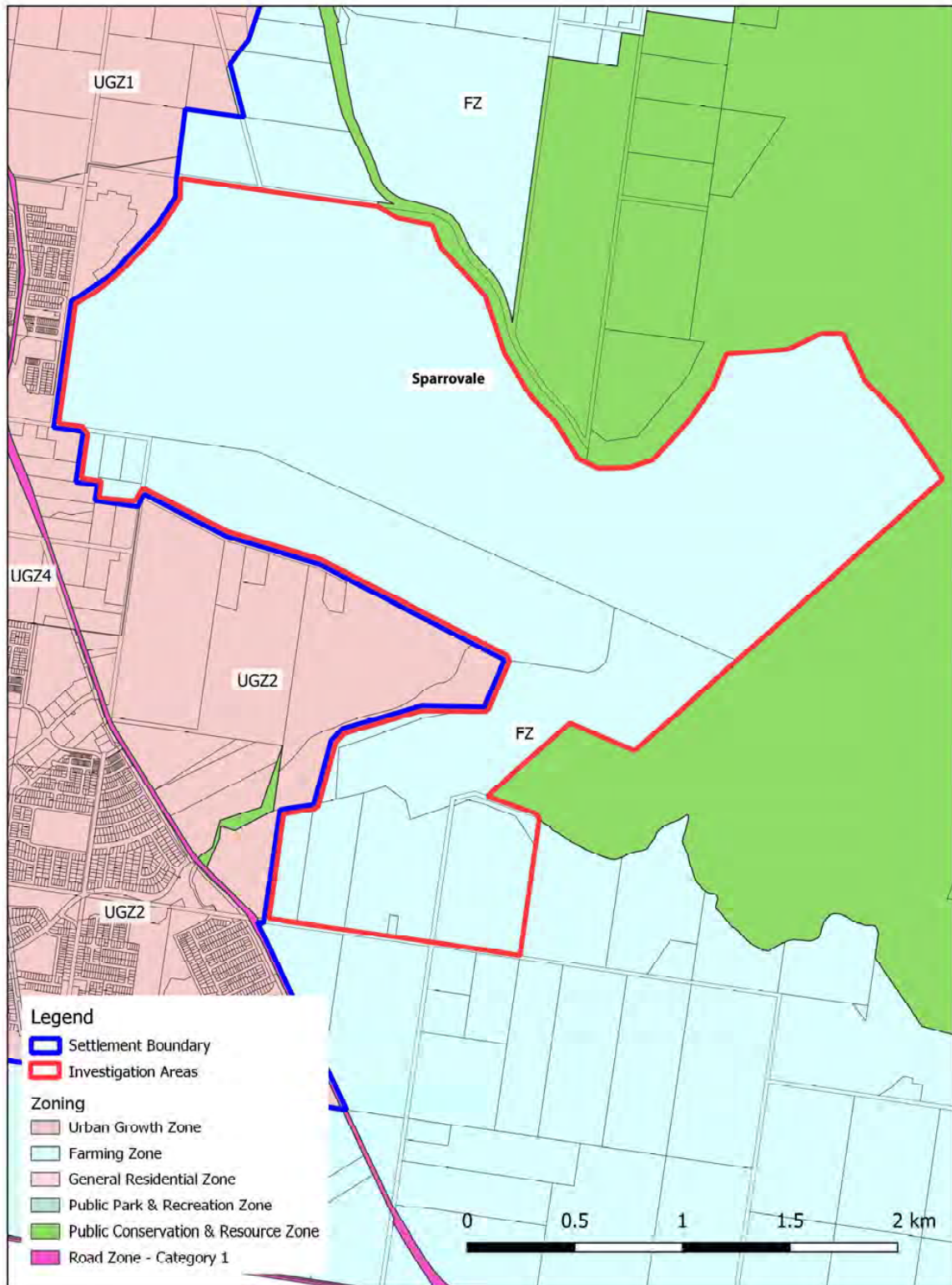


Figure 33. Sparrovale – Zoning Plan.

### Geelong Growth investigation areas Sparrovale - Overlays

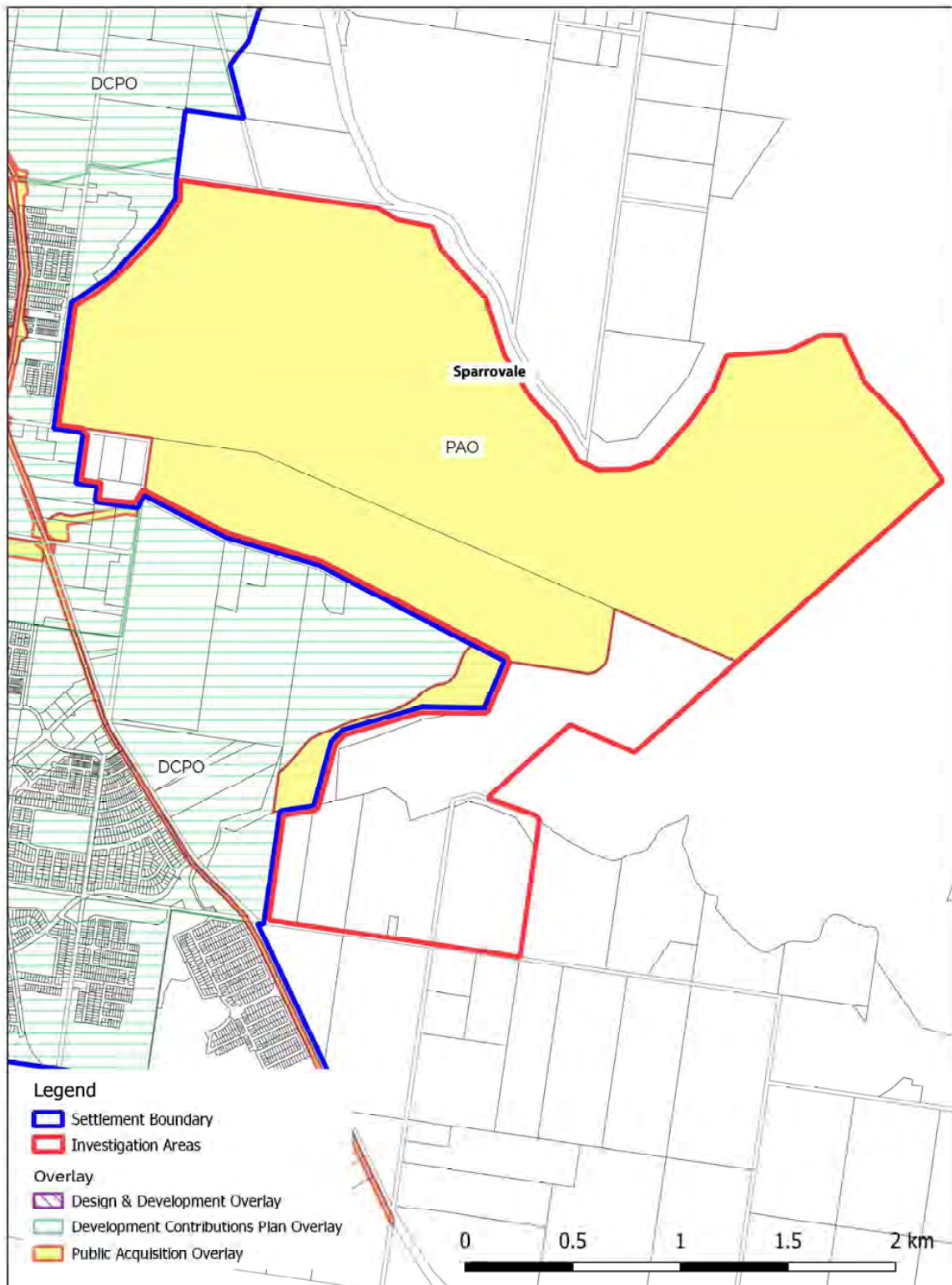


Figure 34. Sparrovale - Overlays Plan 1.

### Geelong Growth investigation areas Sparrowvale - Overlays

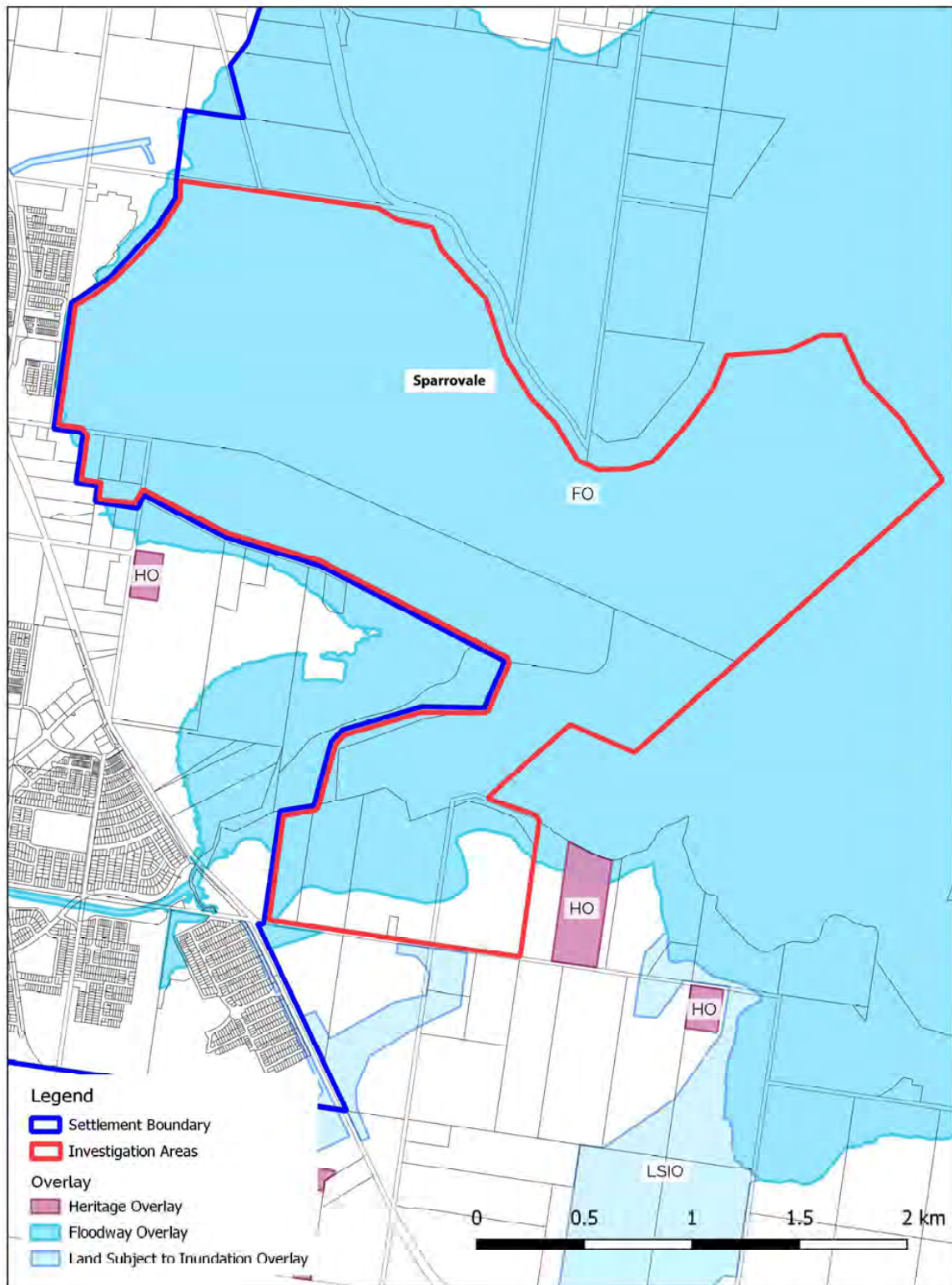


Figure 35. Sparrowvale - Overlays Plan 2.

### 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 Sparrovale Wetlands open space complex.

The City of Greater Geelong owns a large portion of this land (refer Figure 36) and/or is intended to be licensed by Council for parkland purposes.

Council adopted the Sparrovale-Ngubitj yoorree Wetlands Master Plan in July 2021 (refer Figure 36). 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 Sparrovale 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).

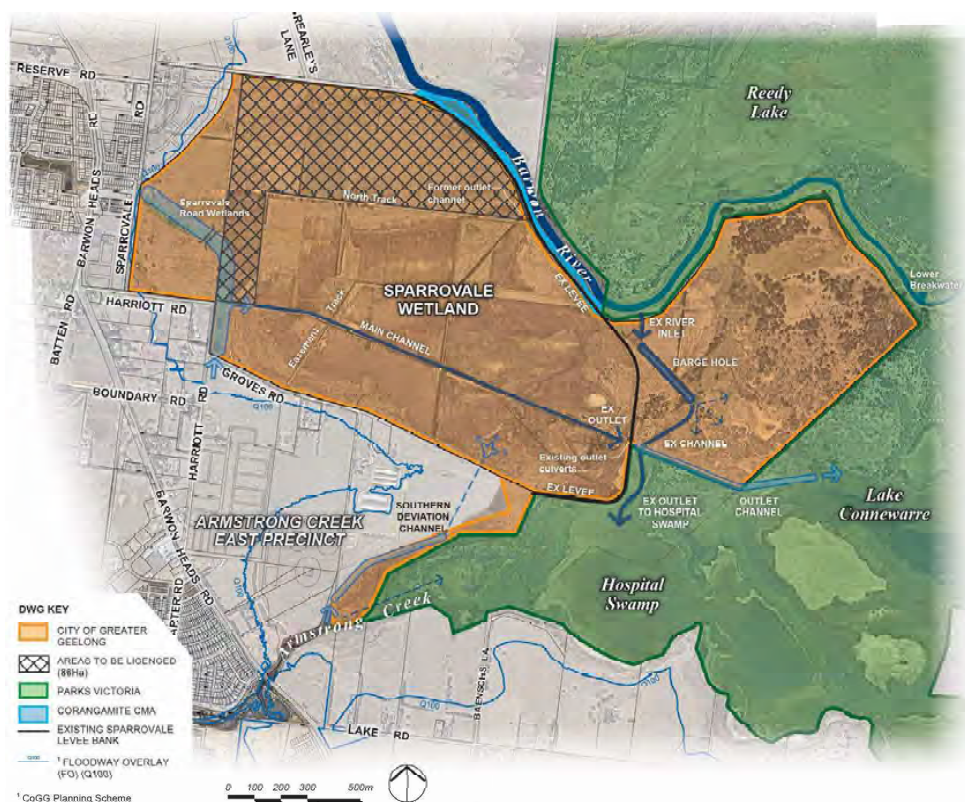


Figure 36. Sparrovale-Ngubitj yoorree Wetlands area – land ownership and management.

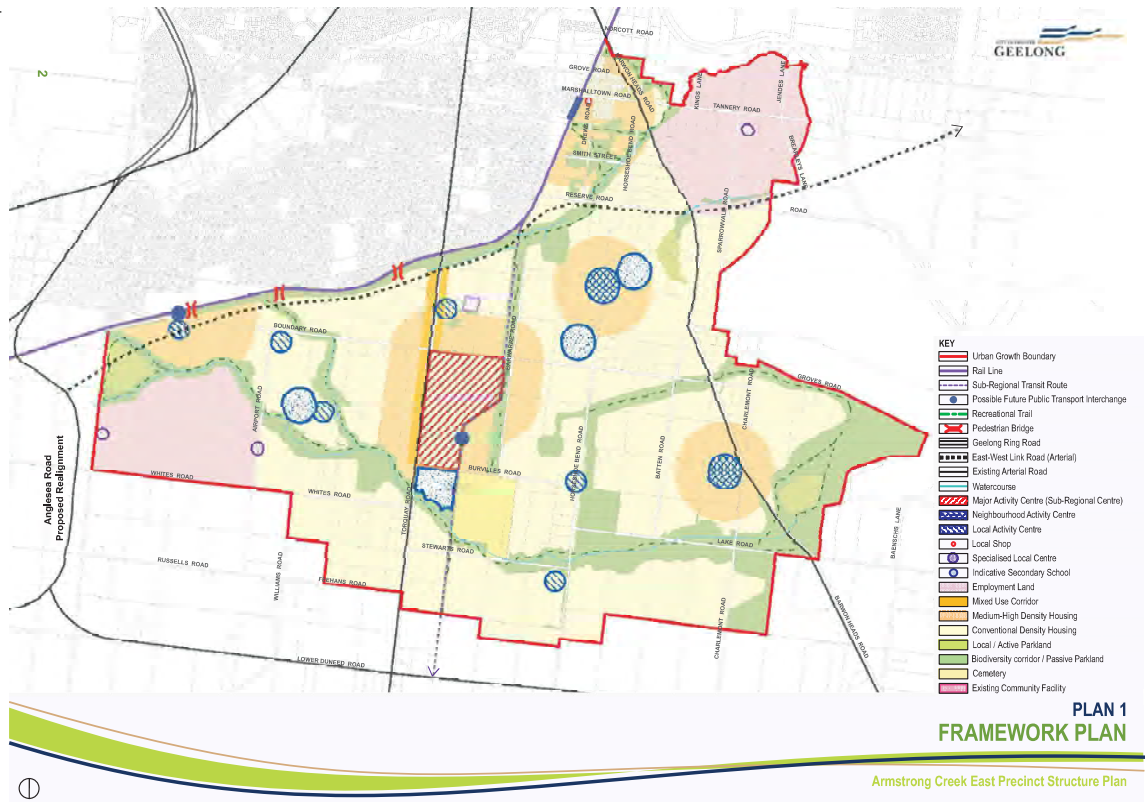


Figure 37. Armstrong Creek East Precinct Structure Plan (2010).

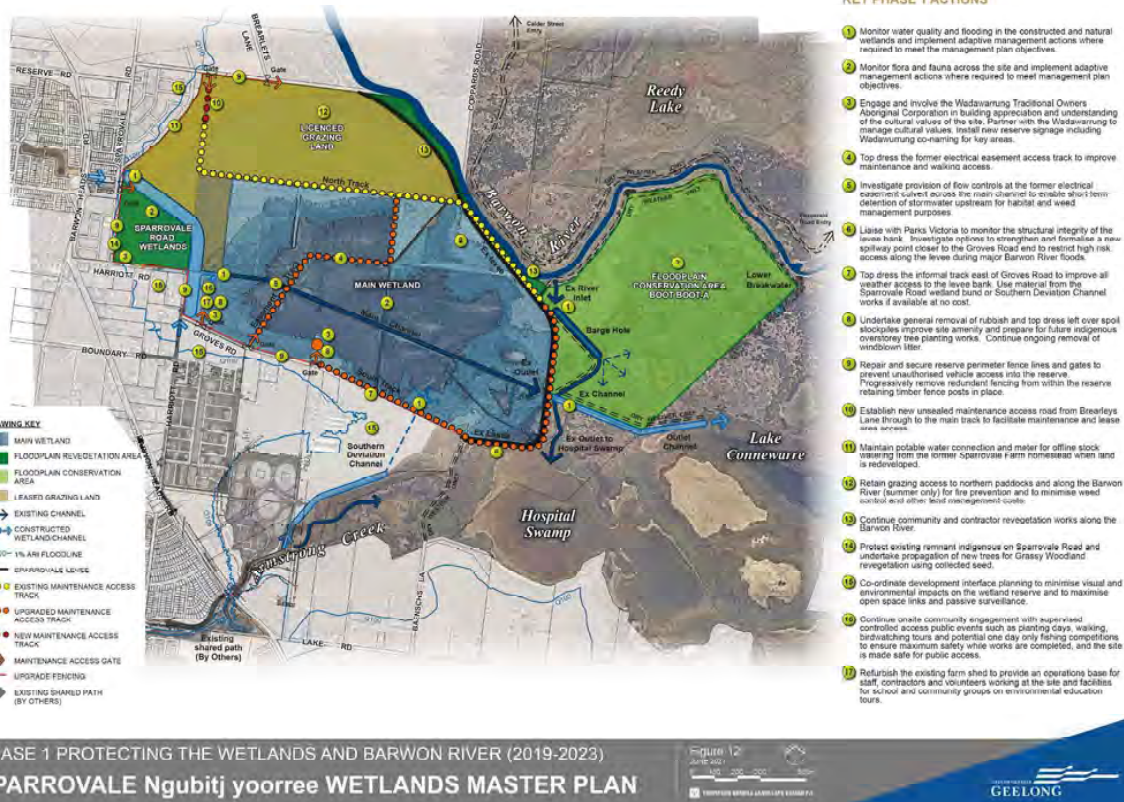


Figure 38. Sparrovale-Nubitiŋ yoorree Wetlands Master Plan Phase 1.

## 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 LSIO 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 been 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.

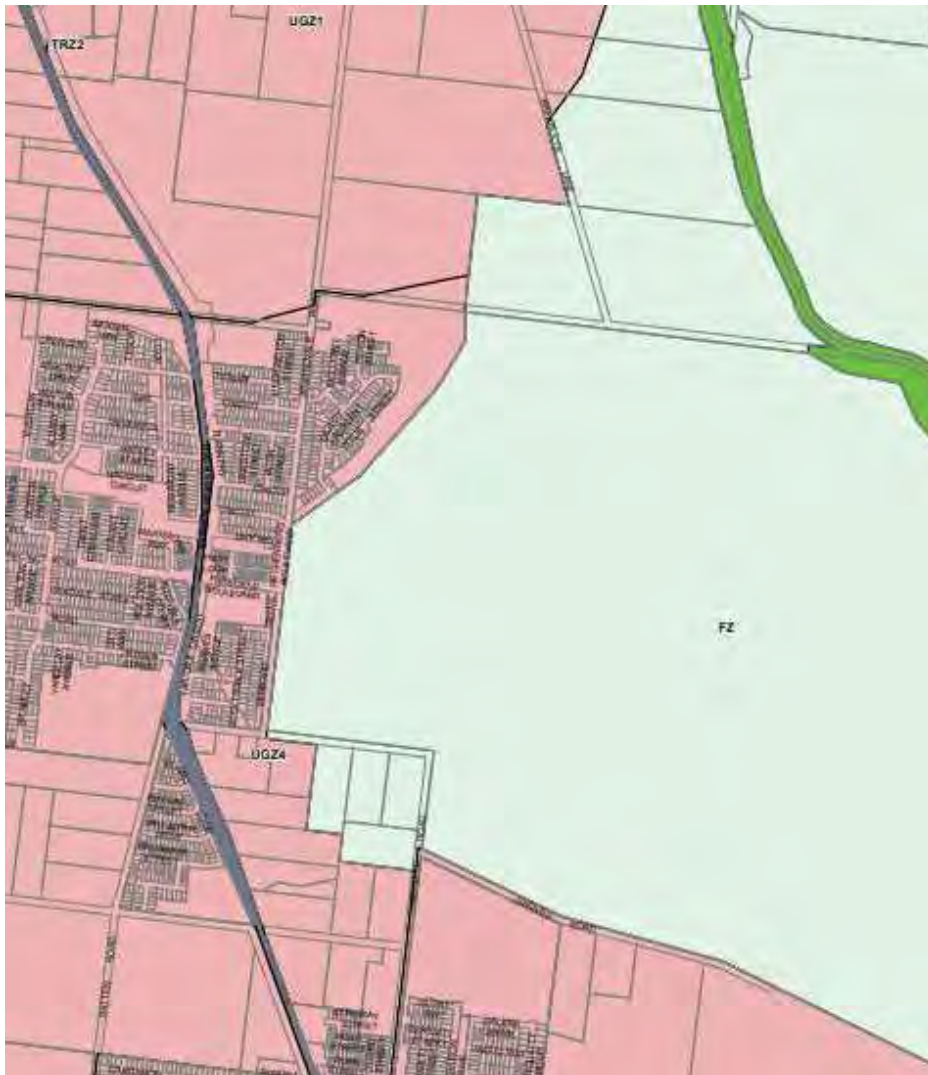


Figure 39. Existing zone boundaries.

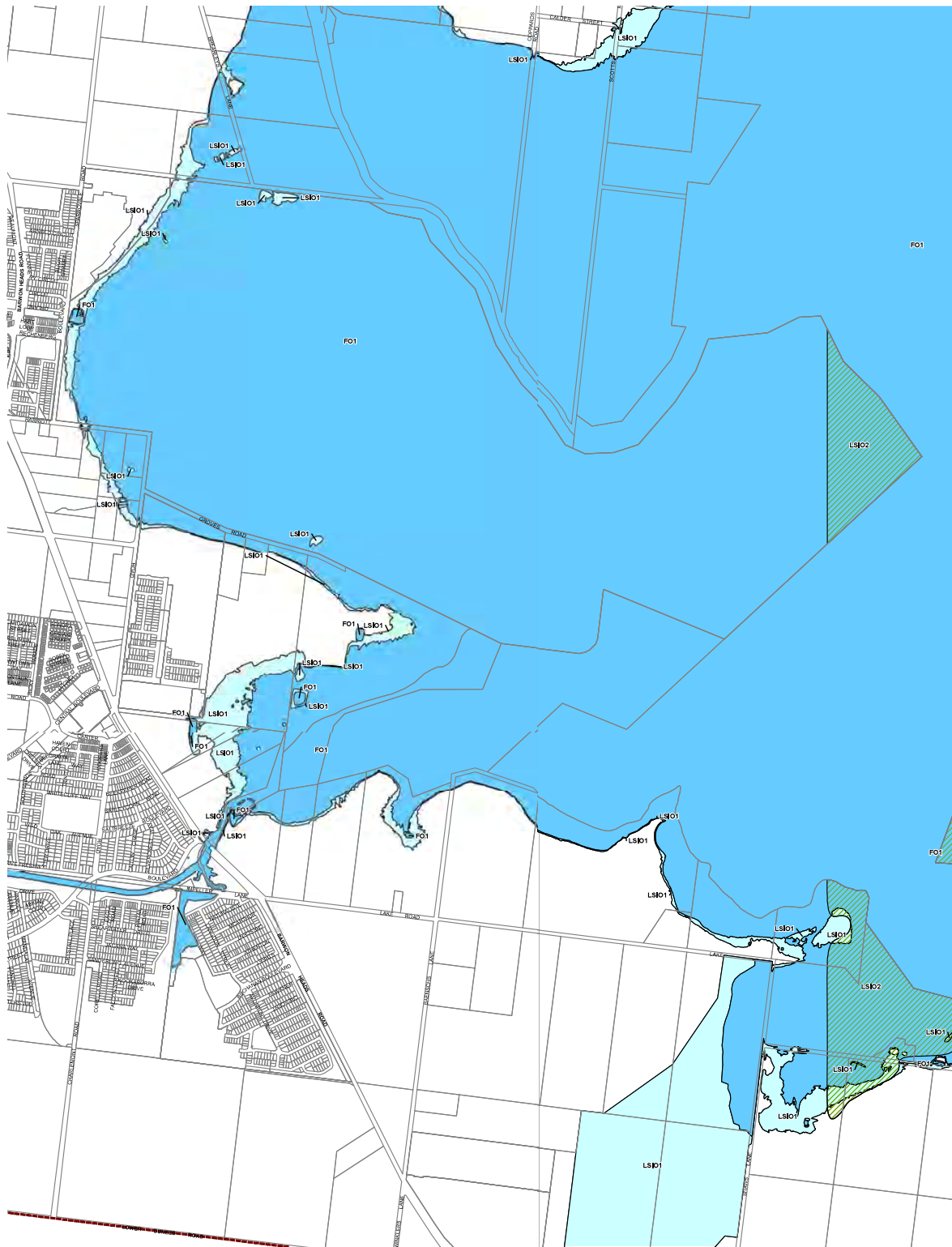


Figure 40. Exhibited LSIO and FO Overlay Map - Amendment C339ggee Part 2 Flood Overlays (Lower Barwon and Moorabool rivers and Bellarine Peninsula Coastal Hazard), "C339ggeePart 2 Lower Barwon and Bellarine LSIO and FO Overlay Maps Exhibited version" <https://www.geelongaustralia.com.au/common/public/documents/amendments/8db3142ff08855b-C339ggeePart2LowerBarwonandBellarineLSIOandFOOverlayMapsExhibitedversion.pdf>

## 3 - Response to submissions on the Draft boundary review

A total of 5 submissions were received in relation to land within this investigation area. Two submissions (2.01, 2.03) were opposed to any change to the settlement boundary due to concerns over its impact on the local environment and landscape, and one submission (2.02) was equivocal in that they could see merit in the settlement boundary being changed but they also would like to stay in a non-urban zone.

A further two submissions requested a change to the settlement boundary in the northern and southern portions of this investigation area. The following is a summary of the issues raised by these submissions together with a response to them.

### 4.1 Northern Section:

A submitter (2.04) contends that the changes to flood mapping associated with Amendment C339 to the Greater Geelong Planning Scheme mean that the land at 145 Harriots Road could be included within the settlement boundary and become an addition to Sub-precinct C of the Horseshoe Bend PSP.

The submitter notes that when Amendment C133 is gazetted that approximately half of their site would become unencumbered by overlays, and that with some filling the site can be serviced and drained appropriately.

#### Response:

The original report acknowledged that the small land holdings located between the proposed Wetlands Reserve and the current Settlement Boundary could potentially be included within the Settlement Boundary if it could be demonstrated that all of part of these land holdings could be developed for urban residential purposes.

The updated flood mapping proposed by Amendment C339 would result in a significant portion of the submitter's land being excluded from the Flood Overlay, but the remaining 3 land parcels to the east and south-east of this land would remain within the Flood Overlay.

Advice received by Council from Barwon Water confirms that 145 Harriots Road can likely be

serviced by the existing or soon to be constructed utility services, and that on this basis Barwon Water would have no objections to the inclusion of this land within the settlement boundary (correspondence dated 6 July 2022).

The submission identifies that inclusion of the abovementioned site within the settlement boundary would result in the creation of an additional 25 residential lots. This would have no impact on the orderly sequencing of development or the delivery of infrastructure or services in this location.

It is the authors opinion that the adjoining Wetlands reserve and a few small lots within the Flood Overlay would represent a logical or enduring settlement boundary in this location.

For the above reasons, it is **recommended** that 145 Harriots Road be included within the settlement boundary (subject to confirmation of the Flood Overlay and LSIO via Amendment C339).

### 4.2 Southern Section:

A submitter (2.03) considers that their land has been discounted from detailed investigation primarily on the basis of flooding conditions, without proper consideration of the updated flood mapping associated with Amendment C339 to the Greater Geelong Planning Scheme. This submitter contends that the southern section of the investigation area has the potential to accommodate a modest residential community, supported by the orderly efficient extension of existing utilities, and that such development could positively engage with the nearby wetlands environs.

#### Response:

The original report recommendations were made with due consideration of the fact that Amendment C339 would result in a reduction in the extent of land affected by the FO and LSIO in the southern section of this investigation area (the C339 map contained within this report has been updated to show the full extent of these controls the investigation area).

Whilst it is acknowledged that the Flood Overlay is proposed to be removed on the submitter's land (and reduced on other properties along Lake Road) by Amendment C339, the observation that large parts of the southern section of the investigation area will remain encumbered by flooding constraints remains valid.

The report authors consider that the observations made in relation to those parts of the southern section of the investigation area that will remain outside of the revised Flood Overlay also remain valid, namely that:

- The area of land north of Lake Road outside of the proposed revised Flood Overlay boundary are relatively small, and 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 is not recommending 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 of urban development and services to ensure that the habitat values of these adjoining areas are not adversely affected.

It is acknowledged that design solutions might potentially exist to address the abovementioned environmental interface matters. However, the inclusion of the submitters land (and land adjoining it) within the Settlement Boundary would create a relatively small and irregularly shaped 'wedge' of urban land defined by the revised Flood Overlay and Lake Road. In our view, this form of urban development would not

represent an orderly development outcome for this location and would have a negative impact on the policy aspiration to preserve a green break at this south-eastern edge of Geelong.

Importantly, this outcome would also not represent a more logical or enduring boundary than the current boundary location.

For the above reasons, it is **recommended** that there be no change to the settlement boundary in this location.

# 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 Coulter 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

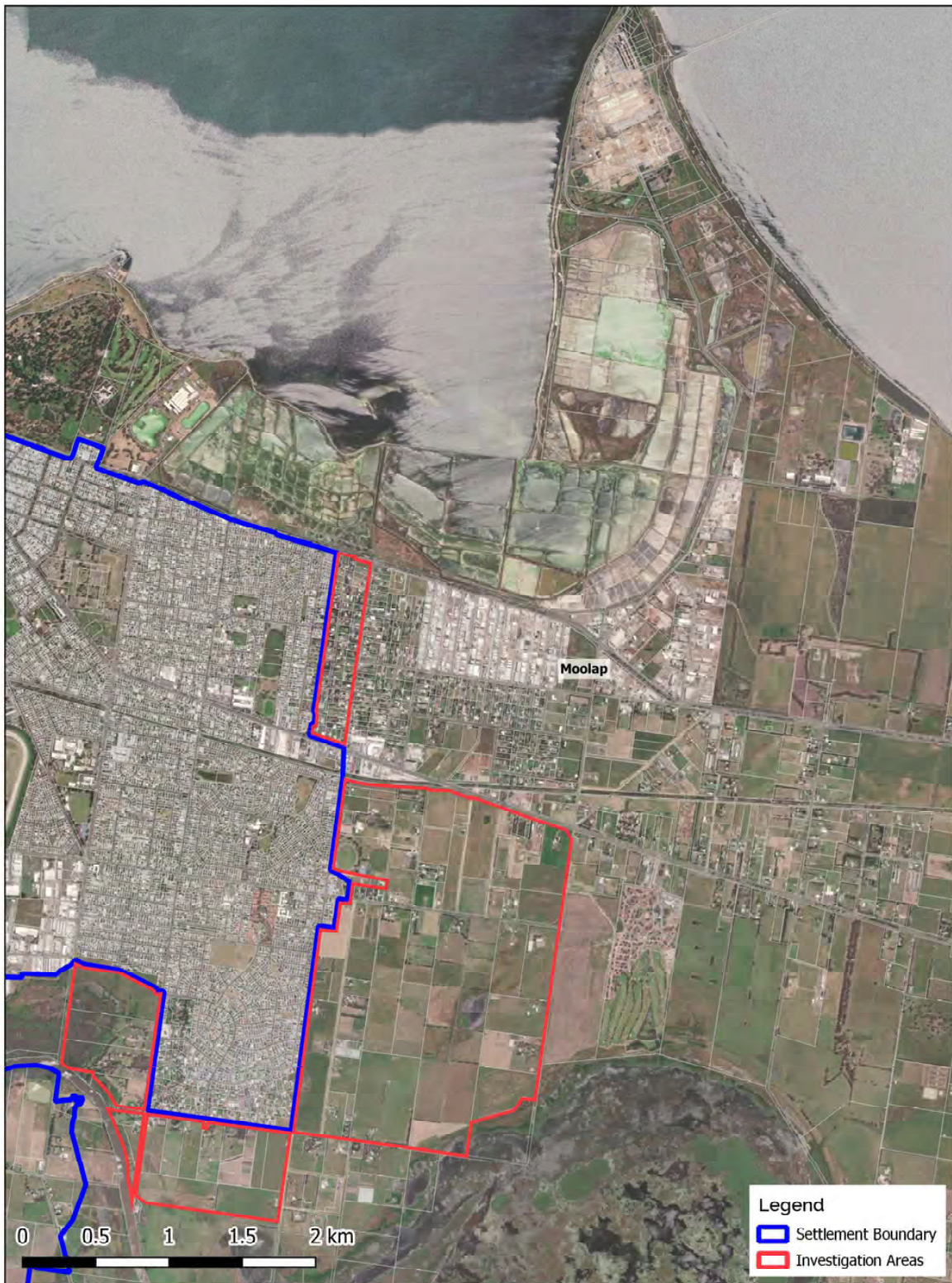


Figure 41. Moolap – Aerial Cadastral Plan.

**Geelong Growth Investigation Areas**  
Moolap Investigation Area

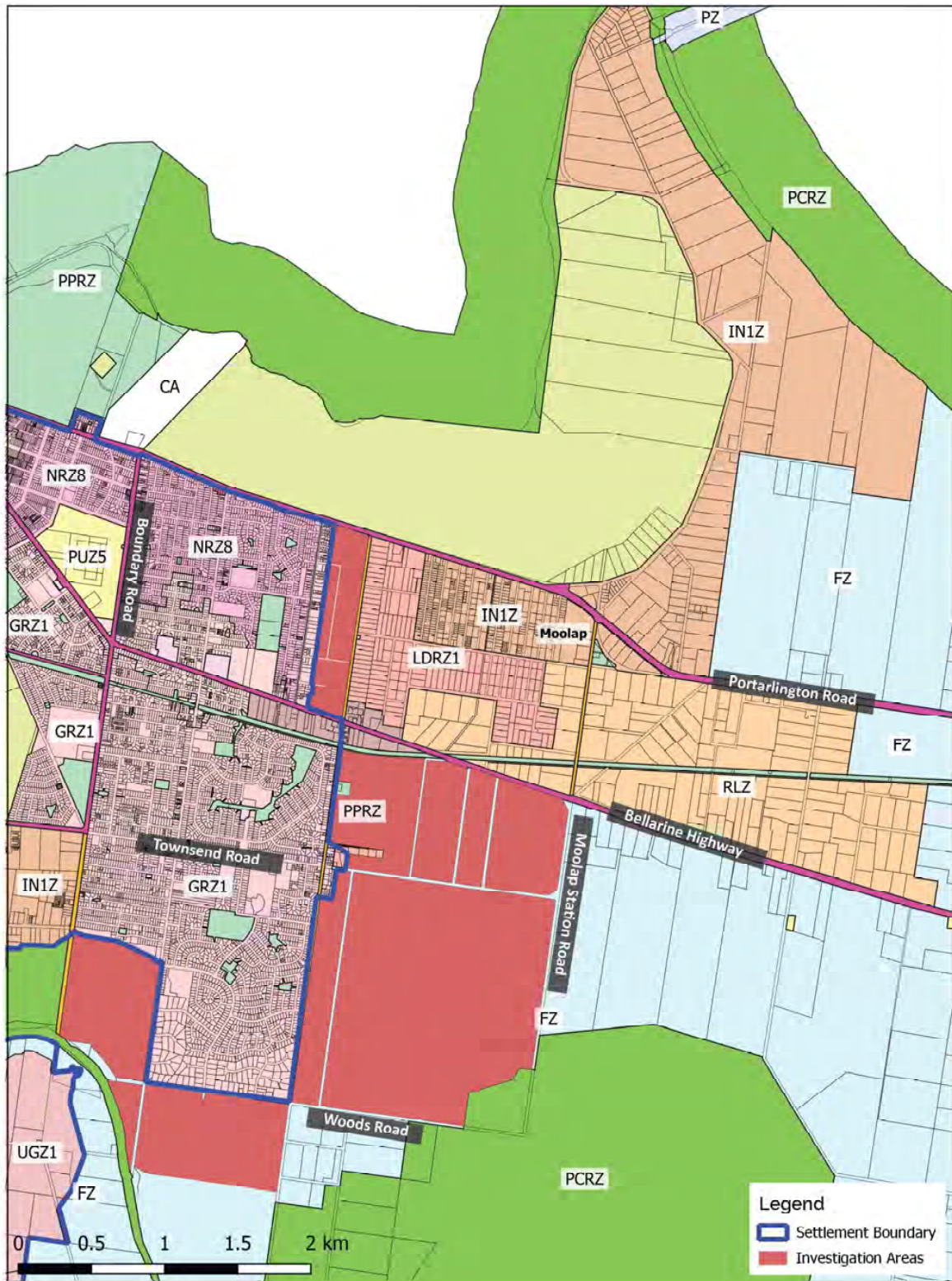


Figure 42. Moolap – Investigation Area Plan.

**Geelong Growth Investigation Areas**  
Moolap - Zoning

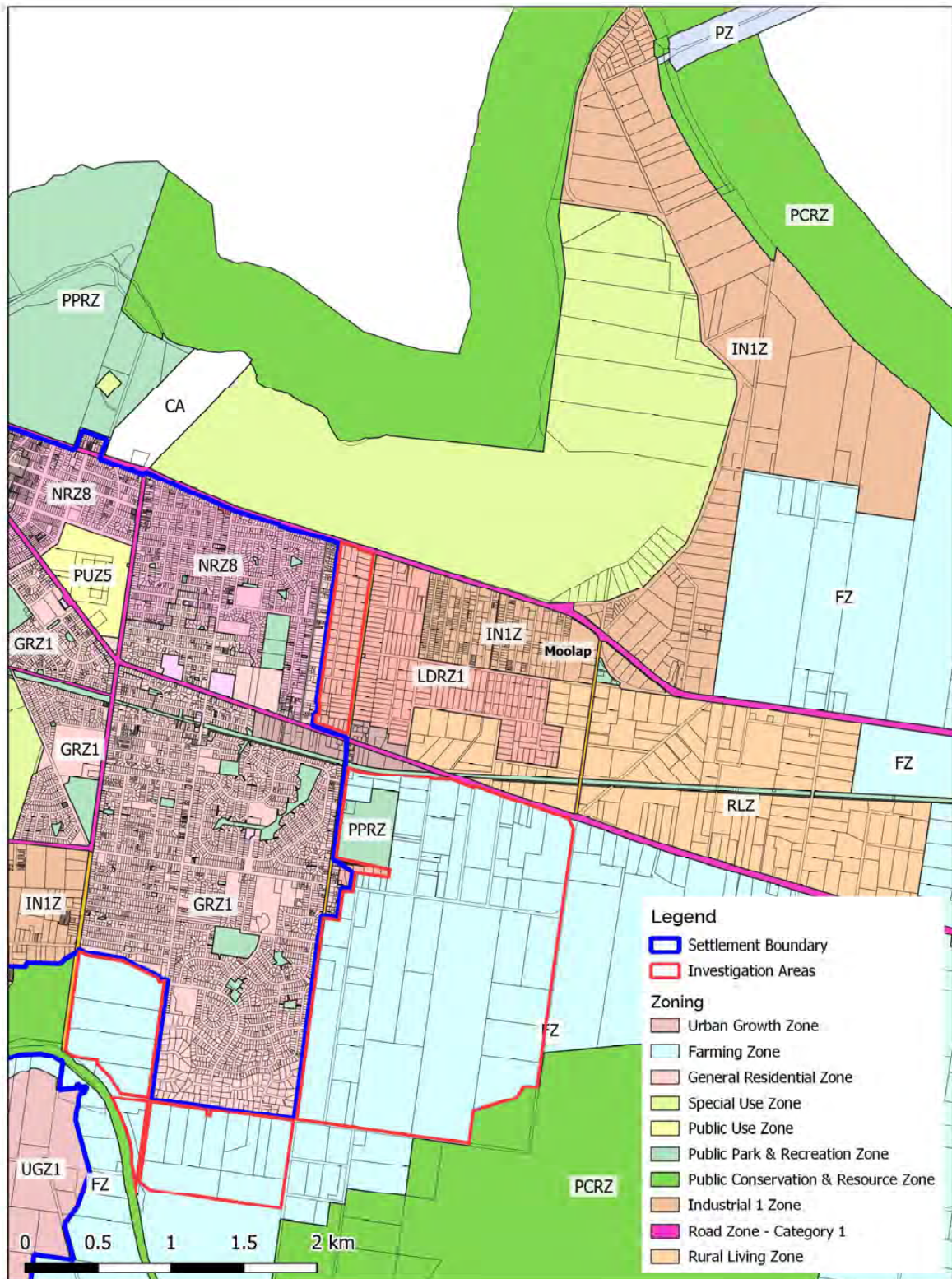


Figure 43. Moolap – Zoning Plan.

**Geelong Growth Investigation Areas**  
Moolap - Overlays

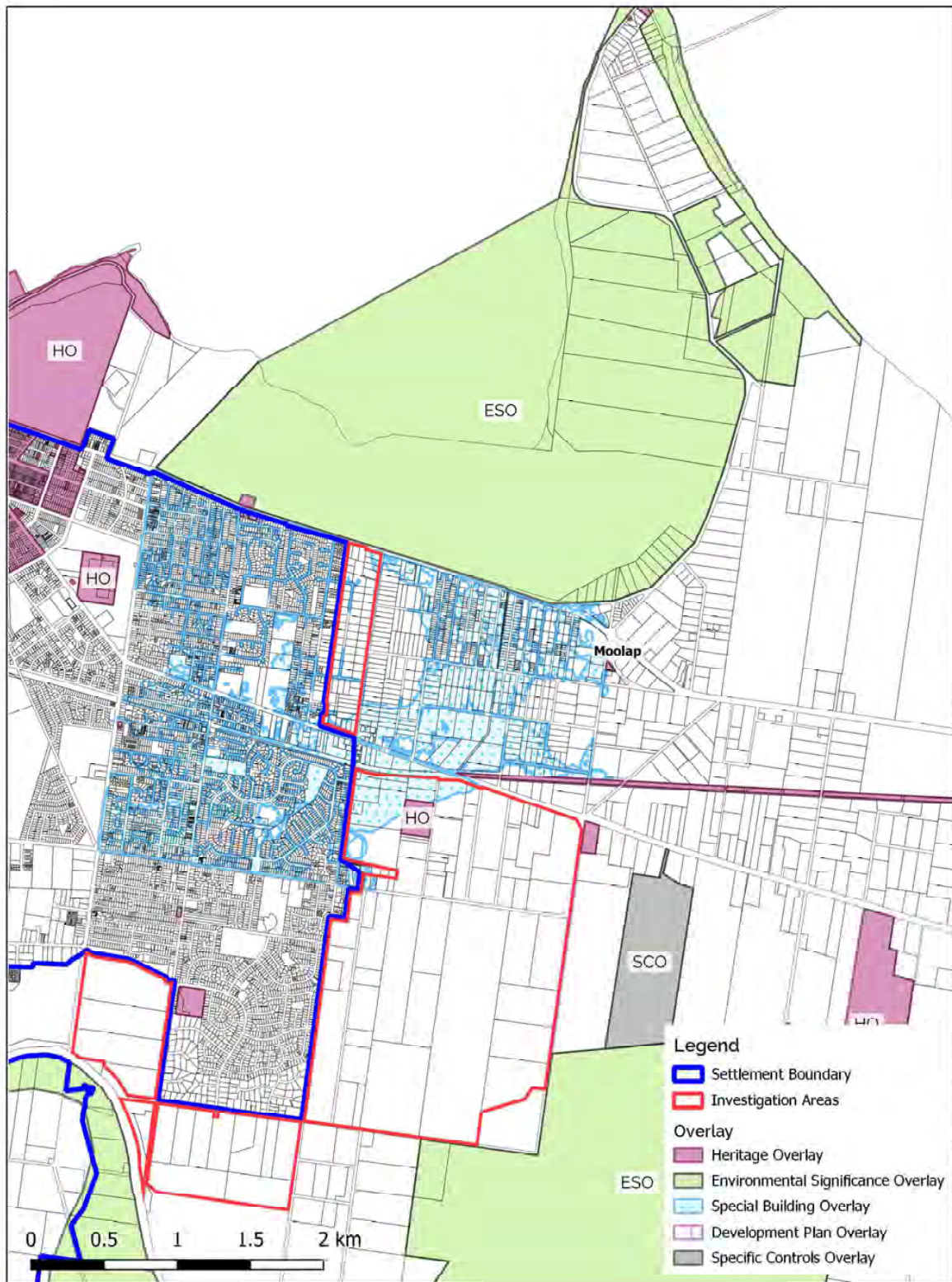


Figure 44. Moolap – Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Moolap - Overlays

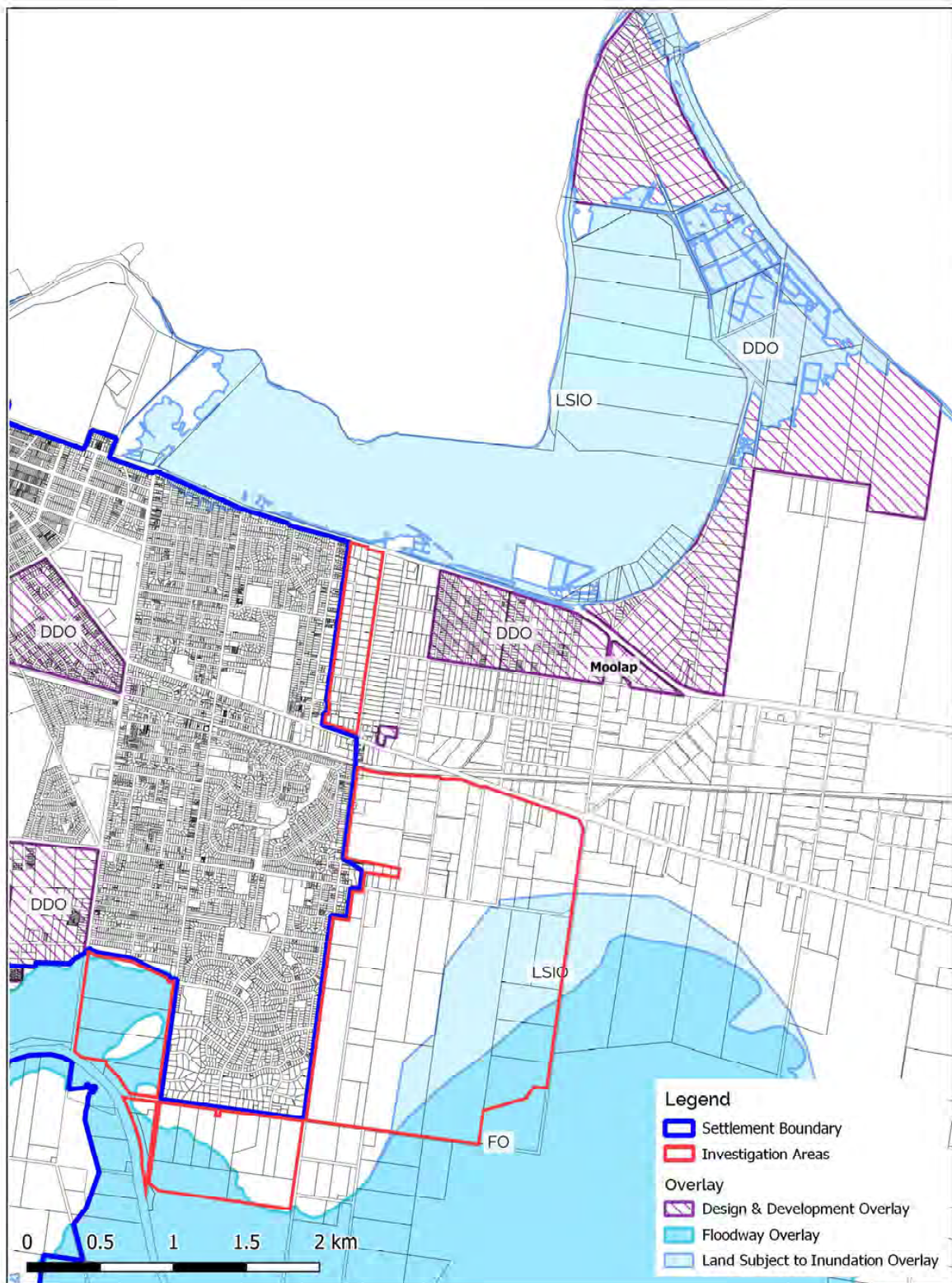


Figure 45. Moolap – Overlays Plan 2.



Figure 46. 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.

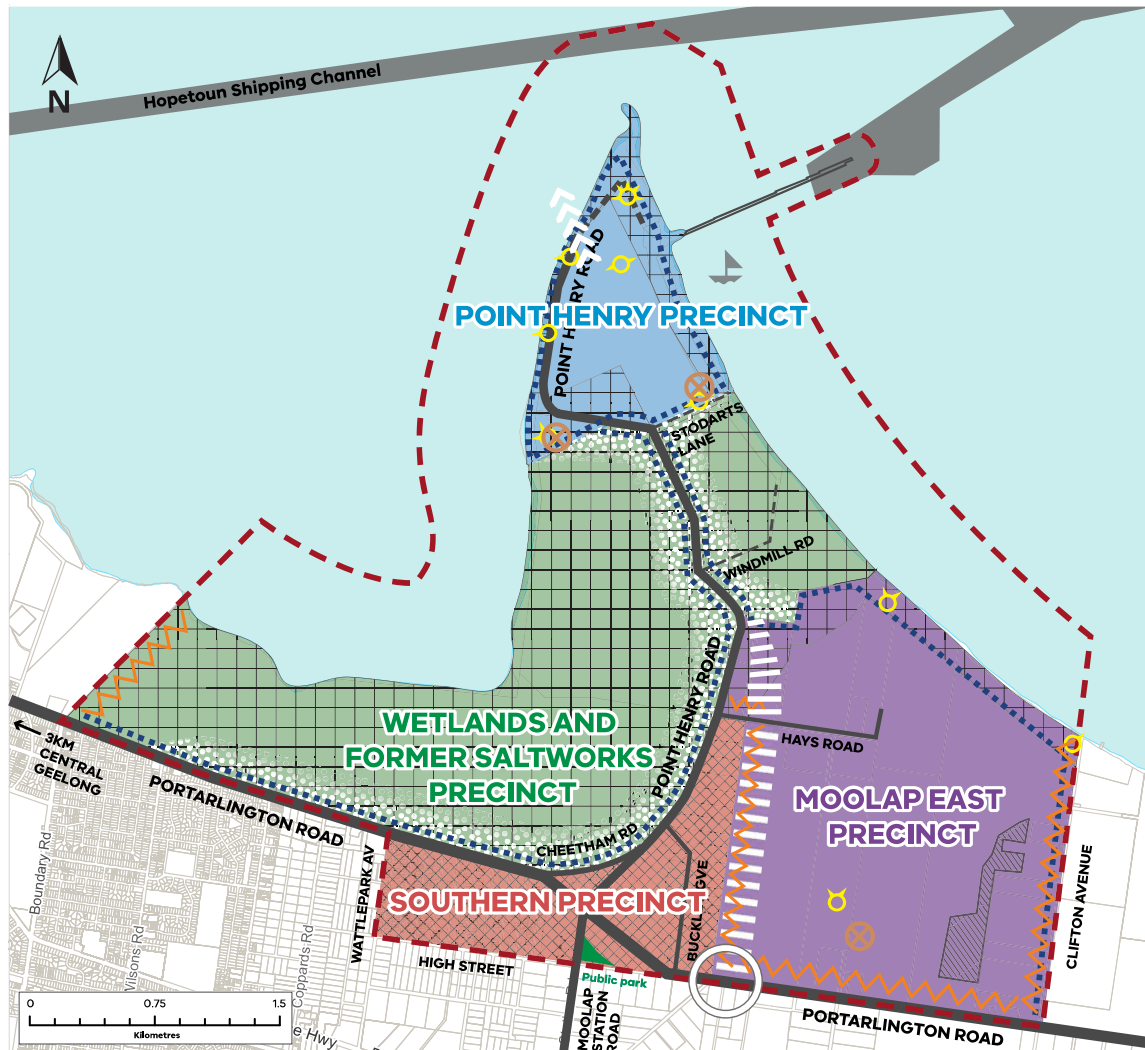
### 1.4.1 Moolap Coastal Strategic Framework Plan

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).



Separation distances between existing higher impact industries and sensitive uses (such as residential areas).

Figure 47. Extract from Moolap Strategic Framework Plan (p.15).



LEGEND			
	<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.		<b>Environmental</b> including bird habitats, public open space, stormwater management, environmental, historical and cultural values and complementary infrastructure and facilities.
	<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.		<b>Residential</b> (subject to Dow Chemical deciding to relocate and remediation of the land), includes a range of residential densities, with community, retail and commercial facilities to meet the needs of the study area.
	Study area boundary		Provide trails and pedestrian connections (indicative)
	Existing Roads		Marine infrastructure and facilities
	Potential connection to Bellarine Link (indicative)		Provide an appropriate interface
	Protect a long-term strategic road alignment (indicative)		Rehabilitate previous land fill prior to a new sensitive use
	Potential intersection upgrade associated with the potential connection with Bellarine Link (indicative)		Respond to predicted sea level rise including coastal retreat and protection measures (while maintaining a public owned foreshore)
	Retain and support public access to key views		Investigate improvements to stormwater management and connection to reticulated sewer
	Potential area for infrastructure/ utilities, and where it complements environmental management and conditions, facilities and buildings for tourism, research and culture/heritage (excluding residential).		Manage the Moolapio grasslands

Figure 48. 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.

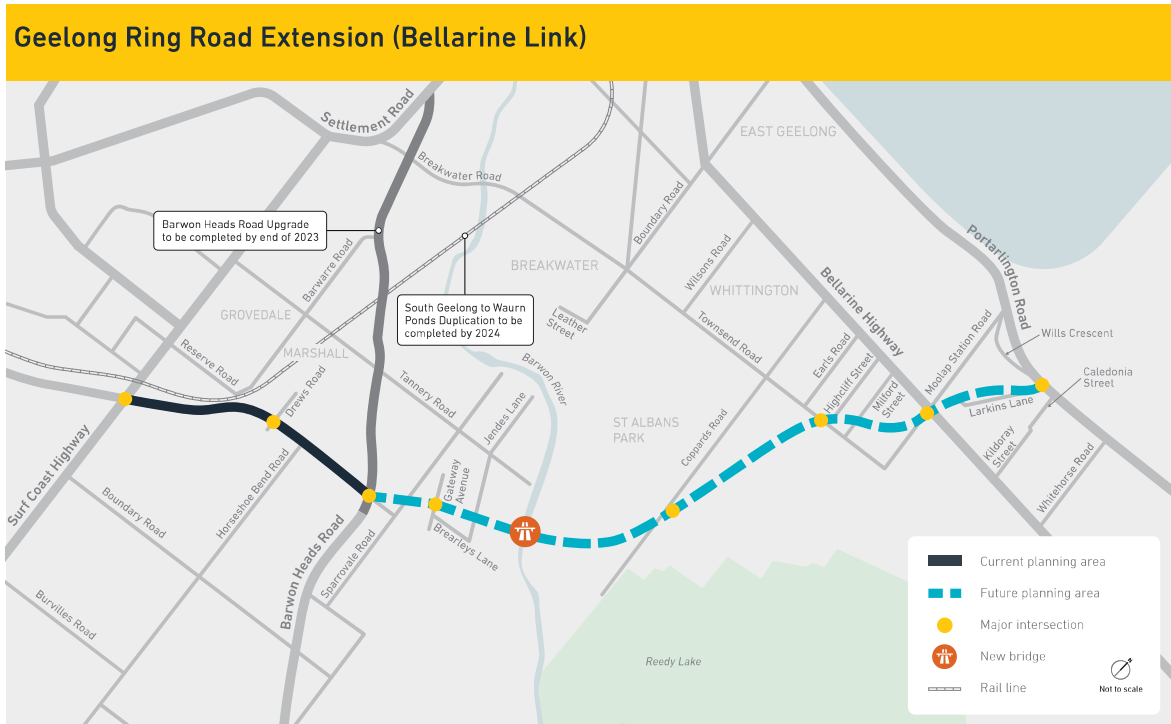


Figure 49. Indicative alignment of the Bellarine Link (source: [www.bigbuild.vic.gov.au/projects/mrpv/geelong-ring-road-extension-bellarine-link](http://www.bigbuild.vic.gov.au/projects/mrpv/geelong-ring-road-extension-bellarine-link)).

## 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.

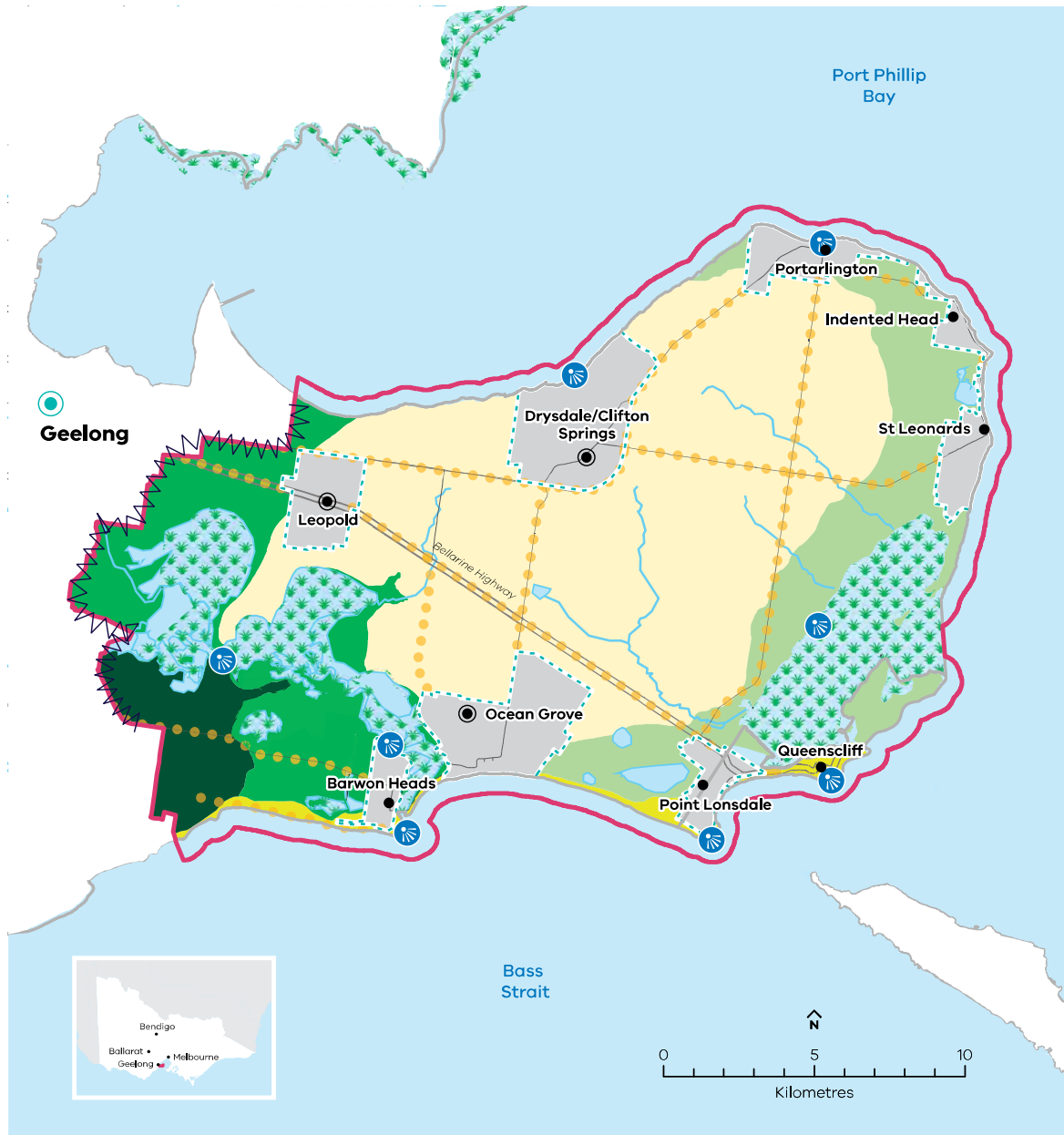
Any change to the settlement boundary would have a negative impact on the satisfaction of this criteria.



**LEGEND**

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

Figure 50. 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 51. 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.

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

**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.

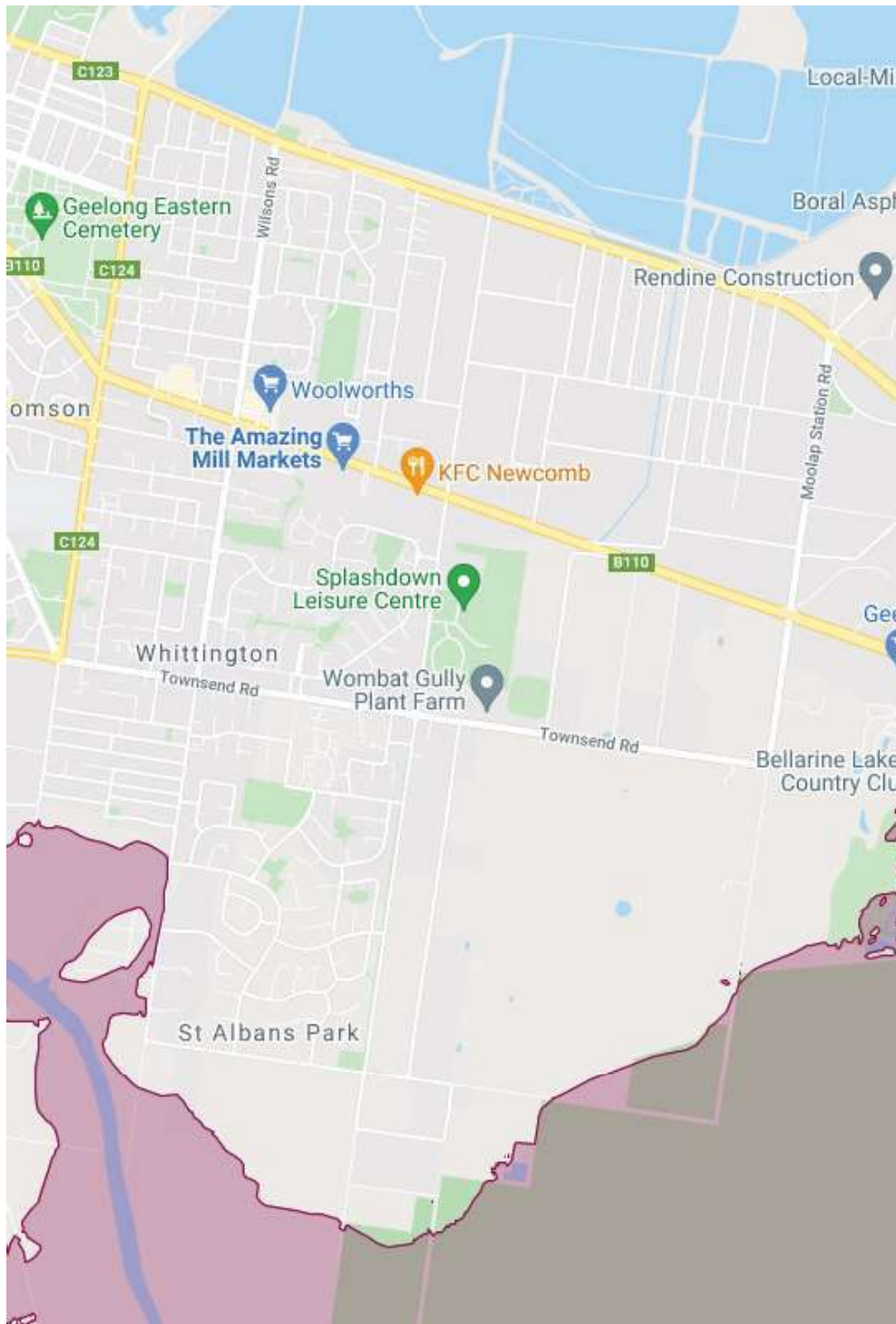


Figure 52. Proposed revised extent of the Flood Overlay (draft Amendment C339, <https://www.geelongaustralia.com.au/amendments/item/8d8c14bb1962deb.aspx>)

**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 presently disclosed Wadawurrung living cultural heritage and values.**

The Aboriginal Cultural Heritage Registration Information System (ACHRIS) mapping identifies 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 cause material detriment to Wadawurrung tangible and or intangible living cultural heritage, part of which are identified in Areas of Cultural Heritage Sensitivity. Having regard to clause 148 (fd) of the Aboriginal Heritage Act 2006, Council will consult with the Wadawurrung Traditional Owners Aboriginal Corporation 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 53. 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.

## 4 - Response to submissions on the Draft boundary review

The following summarises issues raised in submissions relating to the Moolap investigation area, together with a response to them. Similar to our assessment of the investigation area, we have grouped the submissions by the northern and southern sections of the investigation area.

### 4.1 Northern Area

A total of 11 submissions supported the expansion of the settlement boundary to include land to Coppards Road (3.03-3.12, 3-16-3.19). Submission 3.03 was made on behalf of 29 landowners within the Moolap North investigation area.

Submitters generally suggested that lot sizes and proximity of the land to urban services made this an appropriate location for infill housing development. The area is said by submitters to have all of the necessary services of a typical general residential development, including access to water, gas, electricity, sewerage, drainage, etc.

A further 3 submissions opposed the expansion noting that the large blocks in Moolap North contain trees and wildlife habitat and development will put this at risk (submissions 3.05, 3.08, 3.12).

The following is a summary of the issues raised by these submissions together with a response to them.

#### Settlement

Submissions support Coppards Road as a more logical and enduring boundary than the existing boundary location.

#### Response:

It is agreed that Coppards Road is a more logical and enduring boundary than the existing boundary location.

#### Managing Growth / Infrastructure / Environmental Values & Risks

Submissions note that including Moolap North into the settlement boundary will contribute to orderly planning as it positions housing close to

existing communities and services, and creates opportunities for infill development.

The main landowner submission (3.03) notes that Planning Practice Note 37 (Rural residential zones) calls for consideration of the primarily residential function of the Rural Residential Zone, and that it describes development in these zones as follows:

*“Because of its primarily residential function, rural residential development requires access to most of the normal services and infrastructure provided in urban settlements. Typically it also generates urban residential amenity expectations.”*

#### Response:

It is acknowledged that the existing development within this location is more an urban than rural residential typology (albeit on large low density lots) and that it enjoys access to urban utilities and nearby social infrastructure within Geelong.

The proximity of this land to central Geelong and various existing services is acknowledged and the assessment contained earlier in this report notes that adding additional dwellings in this location is likely to only generate marginal additional demands on existing nearby social infrastructure.

From the singular perspective of the land already being developed as low density residential and having access to the above-mentioned services, there is a case for the inclusion of this land within the Settlement Boundary and to explore opportunities to facilitate redevelopment of the existing lots for ‘infill’ housing.

However, it is also important to consider the practicalities of whether (and how) the future subdivision and redevelopment of these existing lots can be coordinated in an orderly and cost-effective manner.

The earlier assessment contained in this report noted that the intensification of development within this area would require either substantial lot consolidation or the substantial use of ‘battle-axe’ type lots and that redevelopment within the constraints of existing subdivision patterns is

likely to occur on an incremental and piecemeal basis. It noted that this will present significant challenges to providing efficient and cost-effective drainage works and utility services to this area.

It is acknowledged from the material contained in the submissions that existing lots within this area have access to a range of reticulated utility services including water, gas, electricity and sewerage.

However, it is not clear what the capacity of these utility services is to cope with increased loads, what upgrades to infrastructure might be required to support growth, or how this could be coordinated and funded across multiple landowners seeking to develop in different locations at different times.

State planning policy requires that planning facilitates the timely, efficient and cost-effective development of infrastructure that meets the needs of the community. This policy has been adopted as a criteria for this review (criteria 9.1).

The low-lying nature of the land within this area and the sensitive nature of nearby receiving environments will also require sophisticated coordination and design of drainage infrastructure across multiple land titles as well.

State planning policy and criteria 4.1 (biodiversity) and 4.2 (coastal wetlands) also call for consideration of the impact of urban stormwater on nearby wetlands and receiving waters. Additionally, State planning policy and Criteria 5.1 (Climate Change) call for consideration of the impact of sea level rise and coastal inundation on urban development.

The Submissions made in support of including this area within the Geelong Settlement boundary have not addressed how coordination of infill development and infrastructure upgrades could occur in a way which addresses the above policies and criteria.

#### Recommendation:

It is agreed that Coppards Road is a more logical and enduring boundary than the existing boundary location, and that existing development

within this location is more an urban than rural residential typology which enjoys access to urban utilities and nearby social infrastructure within Geelong.

Land west of Coppards Road could be included within the Geelong Settlement Boundary but any future rezoning of the land should be conditional upon it demonstrating how the necessary infrastructure and development issues can be delivered in a cost-effective and orderly manner. If this cannot be demonstrated with a high degree of confidence, then the land should remain within the existing zoning.

It is **recommended** that the settlement boundary in the northern section of the investigation area be moved to Coppards Road but that the land within it should remain within the existing Low Density Residential Zone unless any proposal to rezone the land can demonstrate with a high degree of confidence that the necessary infrastructure and development issues can be delivered in a cost-effective and orderly manner.

The land zoned LDRZ east of Coppards Rd is not recommended for inclusion in the boundary due to serving challenges and the fact that the LDRZ serves as a transition to the industrial and RLZ precincts to the further east and Coppards makes a logical and enduring eastern edge to urban Geelong.

## 4.2 Southern Area

A total of 8 submissions were received in relation to land in this part of the investigation area. Submitters variously suggested that the settlement boundary should be moved to align with the future alignment of the Bellarine Link Road or other features closer to the existing boundary (such as Wellington Street or the edges of the Barwon River floodplain)(3.01, 3.02 3.13, 3.14, 3.15, 3.20, 3.21, 3.22).

Submitters supported extending the settlement boundary to include either some or all of the Moolap South Investigation area based on its proximity to the Geelong CBD, the availability of existing infrastructure and the perceived low environmental value of the land within the investigation area.

One submission (3.13) sought support for urban development on land that is located outside of the investigation area.

The following is a summary of the issues raised by these submissions together with a response to them.

### Settlement

Two submissions suggest that the settlement boundary be marginally moved to the east (Wellington Street) and south (south of Woods Road).

Three submissions suggest that the logical extension of the settlement boundary is to the new Bellarine Link Road, as it will provide a clear physical boundary between Bellarine Coast and Geelong (submissions 3.14, 3.15, 3.20).

#### Response:

Moving the settlement boundary marginally to the east (Wellington St) and south (south of Woods Road) is not considered to establish a long term settlement boundary which is more logical or enduring than the current boundary location. It would also create marginal benefits to the nearby urban area in terms of enhancing the local neighbourhood or making efficient use of existing infrastructure (see further discussion below).

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.

For these reasons, it is not possible to use the Bellarine Link Road initiative to set a revised settlement boundary at this point.

However, once the Link Road alignment is defined and commitments to deliver it are made, the potential to use this location as an alternative location for the long term settlement boundary should be further considered.

### Managing growth / infrastructure

It was suggested in 3 submissions that developing in an area like Moolap South is more logical than developing further out in greenfield sites as it is close to already existing and established communities and infrastructure (submissions 3.01, 3.02, 3.22). Additionally, it is argued that in South Moolap, farming on large sites in the investigation area is declining and land is scarcely used for agricultural purposes (submission 3.15).

Growth in Moolap South is well supported by nearby infrastructure such as sewerage, stormwater pits, power, water, paved roads, retail, schools and bus routes (submissions 3.01, 3.02, 3.15).

#### Response:

The redevelopment of relatively small areas of land adjacent to the existing settlement boundary is likely to create its own challenges in terms of providing efficient and cost-effective drainage works and utility services to these sites.

It is not evident from the preliminary assessments undertaken in this report that including land within the settlement boundary in this location would satisfy either of the following

guiding principles for the Settlement Boundary review:

- Land must deliver a benefit to existing urban areas 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.

As outlined earlier in this report, Barwon Water has identified that the investigation area is not currently serviced by reticulated sewer and does not have access to reticulated water infrastructure of sufficient capacity to support urban residential development. Any significant expansion of sewage 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.

Recommendation:

For the above reasons, it is **recommended** that there be no change to the settlement boundary in this location.

# 6.5

## Waurn 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**  
Waurm Ponds - Northern Area Investigation Area



Figure 54. Waurm Ponds North – Aerial Cadastral Plan.

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

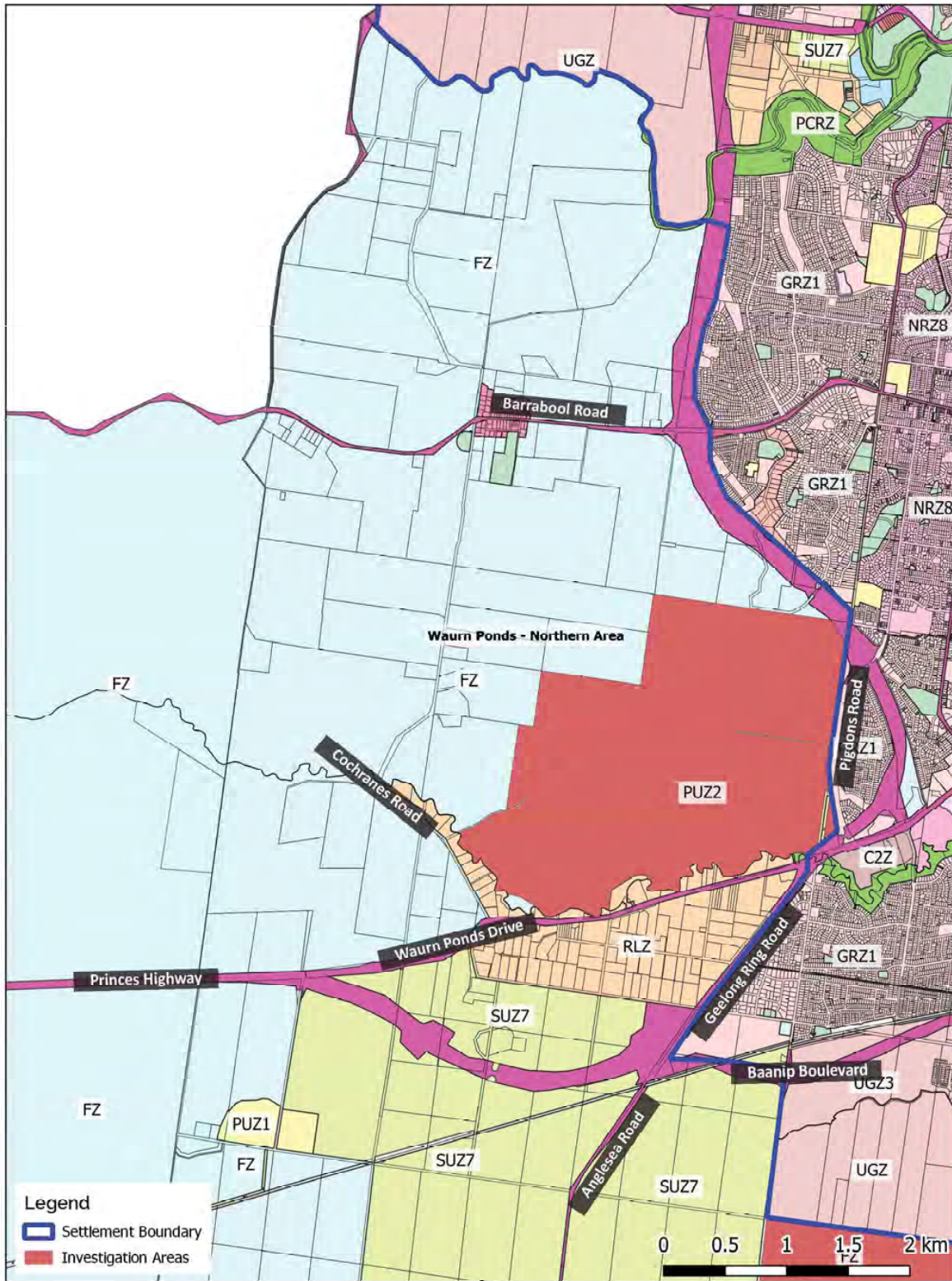


Figure 55. Waurm Ponds North - Investigation Area Plan.

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

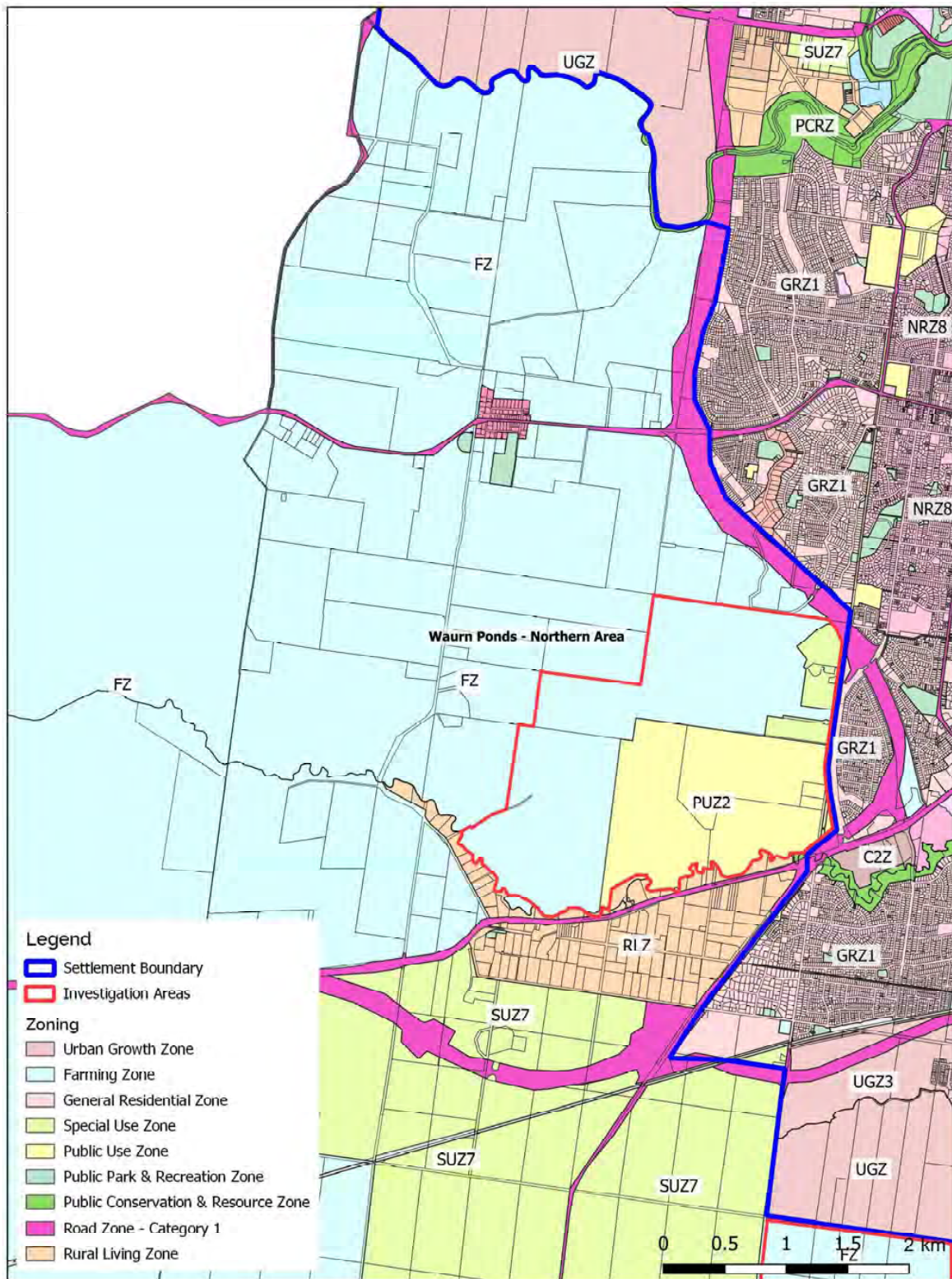


Figure 56. Waurn Ponds North - Zoning Plan.

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

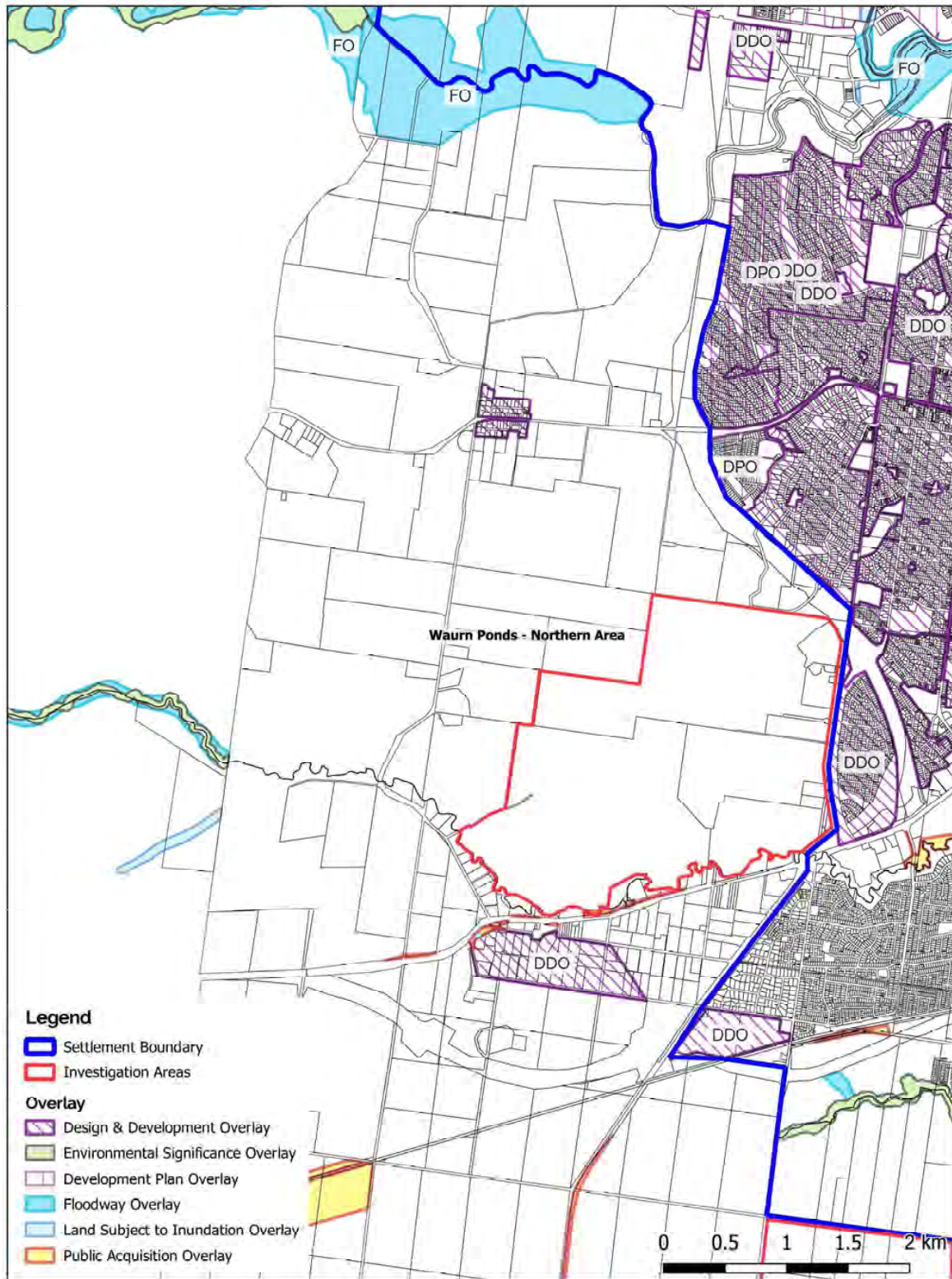


Figure 57. Waurn Ponds North - Overlays Plan 1.

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

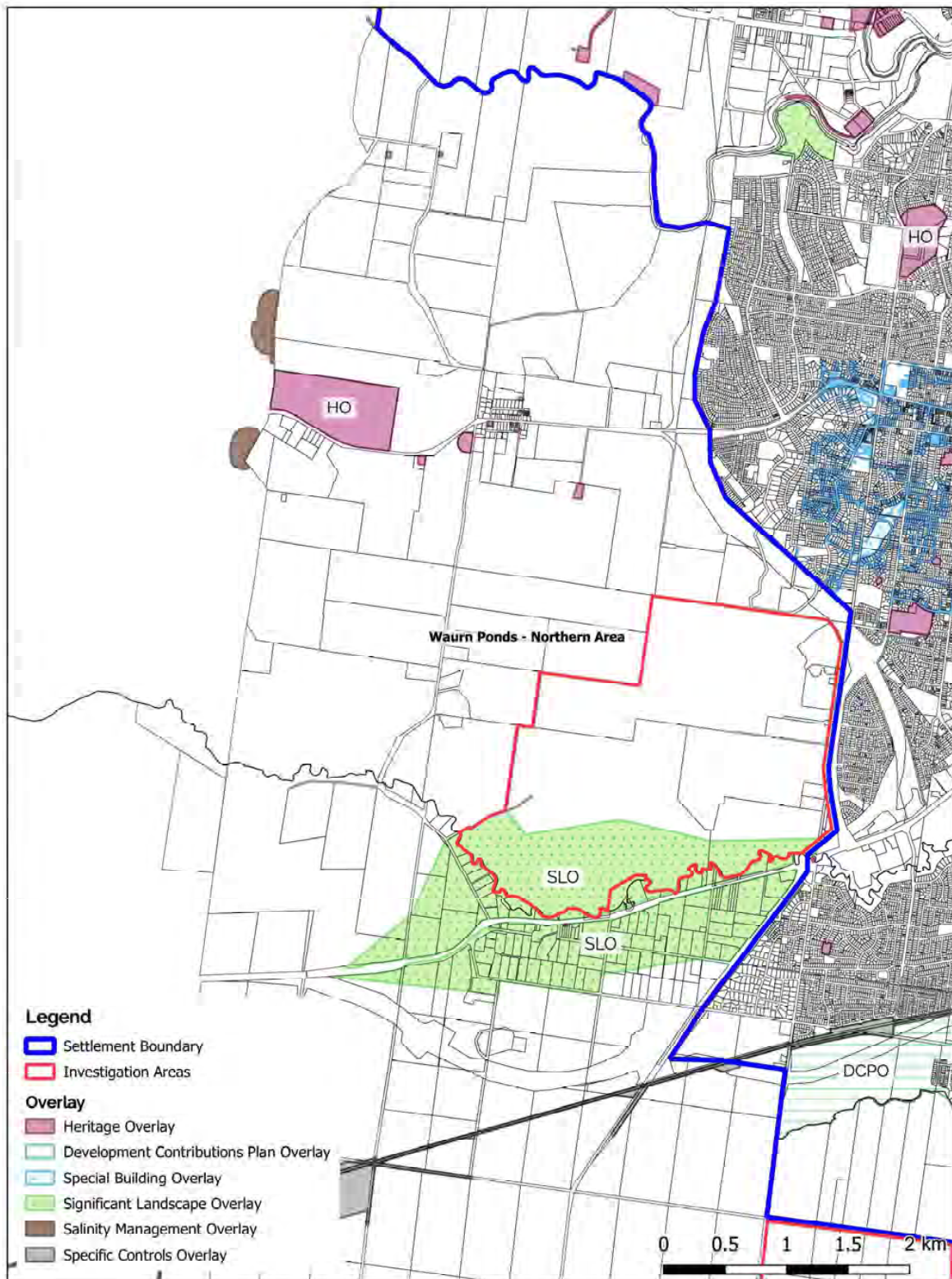


Figure 58. Waurm Ponds North - Overlays Plan 2.

## 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 59. 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 Sans, Waurn 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 presently disclosed Wadawurrung living cultural heritage and values.

The Aboriginal Cultural Heritage Registration Information System (ACHRIS) mapping identifies that there are properties on the southern boundary of the investigation area that contain Areas of Cultural Heritage Sensitivity.<sup>10</sup>

Any change to the settlement boundary is expected to cause material detriment to Wadawurrung tangible and or intangible living cultural heritage, part of which are identified in Areas of Cultural Heritage Sensitivity. Having regard to clause 148 (fd) of the Aboriginal Heritage Act 2006, Council will consult with the Wadawurrung Traditional Owners Aboriginal Corporation 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>

## 4 - Response to submissions on the Draft boundary review

One submission was received in relation to land within this investigation area (submission 4.01).

The submitter states that investigation is needed on the potential to extend the boundary to Cochranes Road as Geelong's growth has exceeded expectations to the point that it has been the fastest-growing area in Australia.

The submission considers that including all of the land to Cochranes Road will allow for the planning of future communities around the existing health and education assets within this area. It states that there are precedents for undertaking urban development in landforms similar to this area, and that it is premature to discount the location for urban growth based on limited information about environmental risks and utility servicing studies.

### Response:

The focus of this review is to determine whether there are locations along the existing Geelong Settlement boundary where an alternative, more logical and enduring boundary might exist. The review is not intended to revisit the long-term pattern of growth for the City, and the principles for the review (set out in the Geelong Settlement Strategy) state that land supply is not a consideration for this review.

Setting a revised settlement boundary at Cochranes road would result in circa 750+ha of land being added to urban Geelong. A boundary change of this scale would need to be considered in the context of a review of the overall Geelong Settlement Strategy, rather than this current review process.

It is also the author's view that extending the settlement boundary to allow urban development to extend to Cochranes Road would have an adverse impact on identified significant landscapes and agricultural land uses in this location. A number of environmental risks and significant servicing challenges would also need to be addressed.

For the above reasons, it is **recommended** that there be no change to the settlement boundary in this location.

# 6.6

## Waurn 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

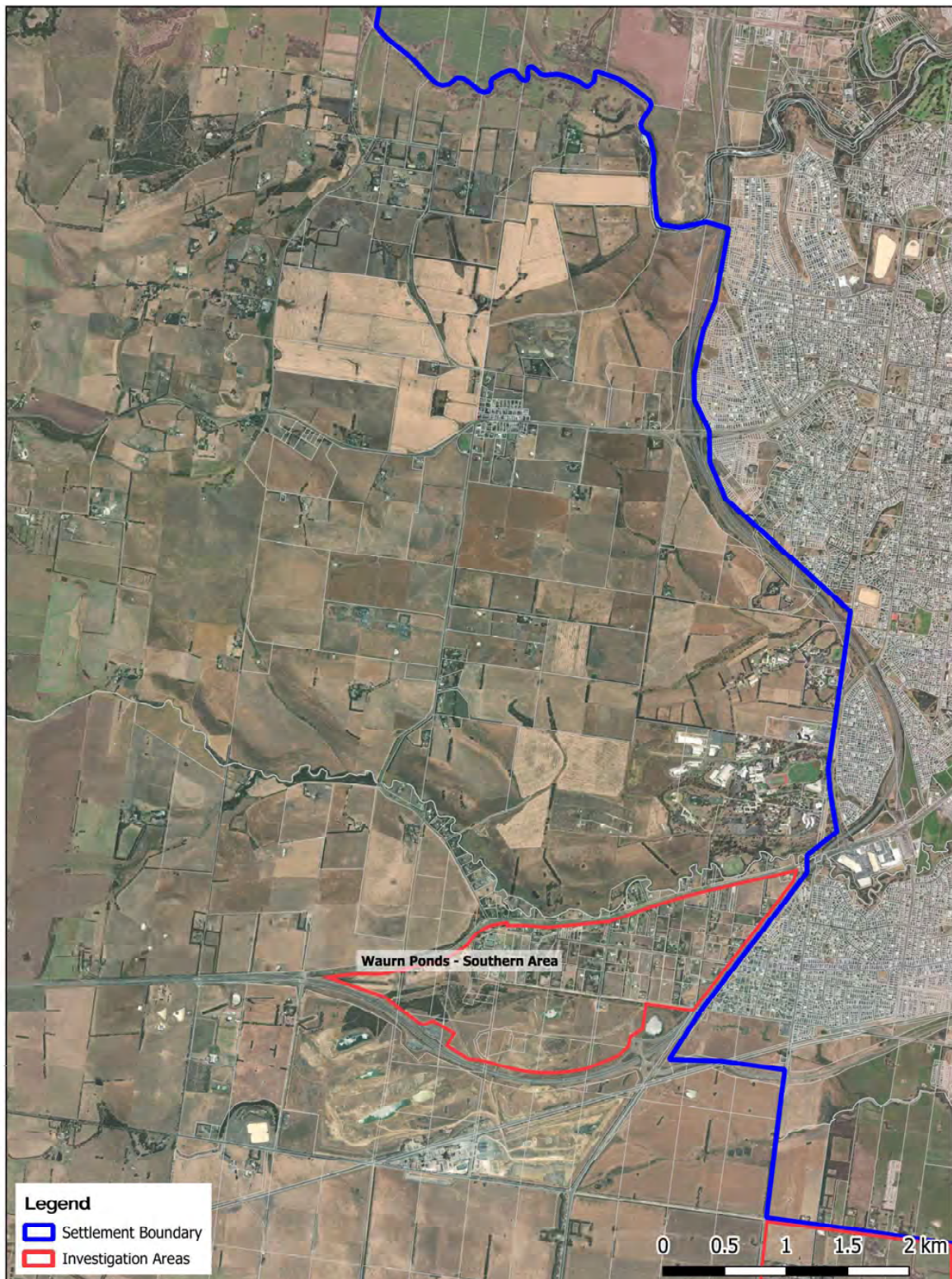


Figure 60. Waurm Ponds South – Aerial Cadastral Plan.

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

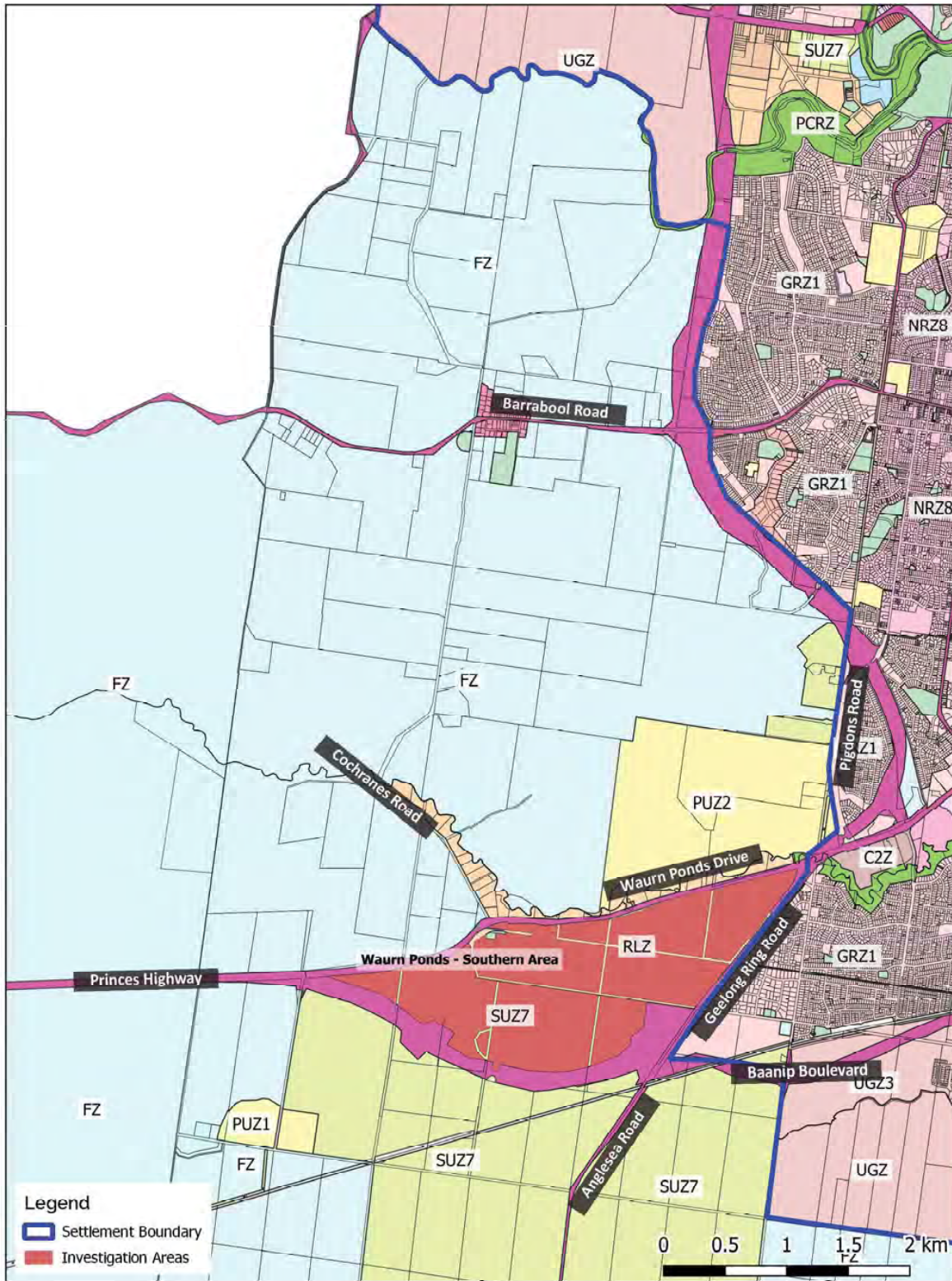


Figure 61. Waurn Ponds South – Investigation Area Plan.

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

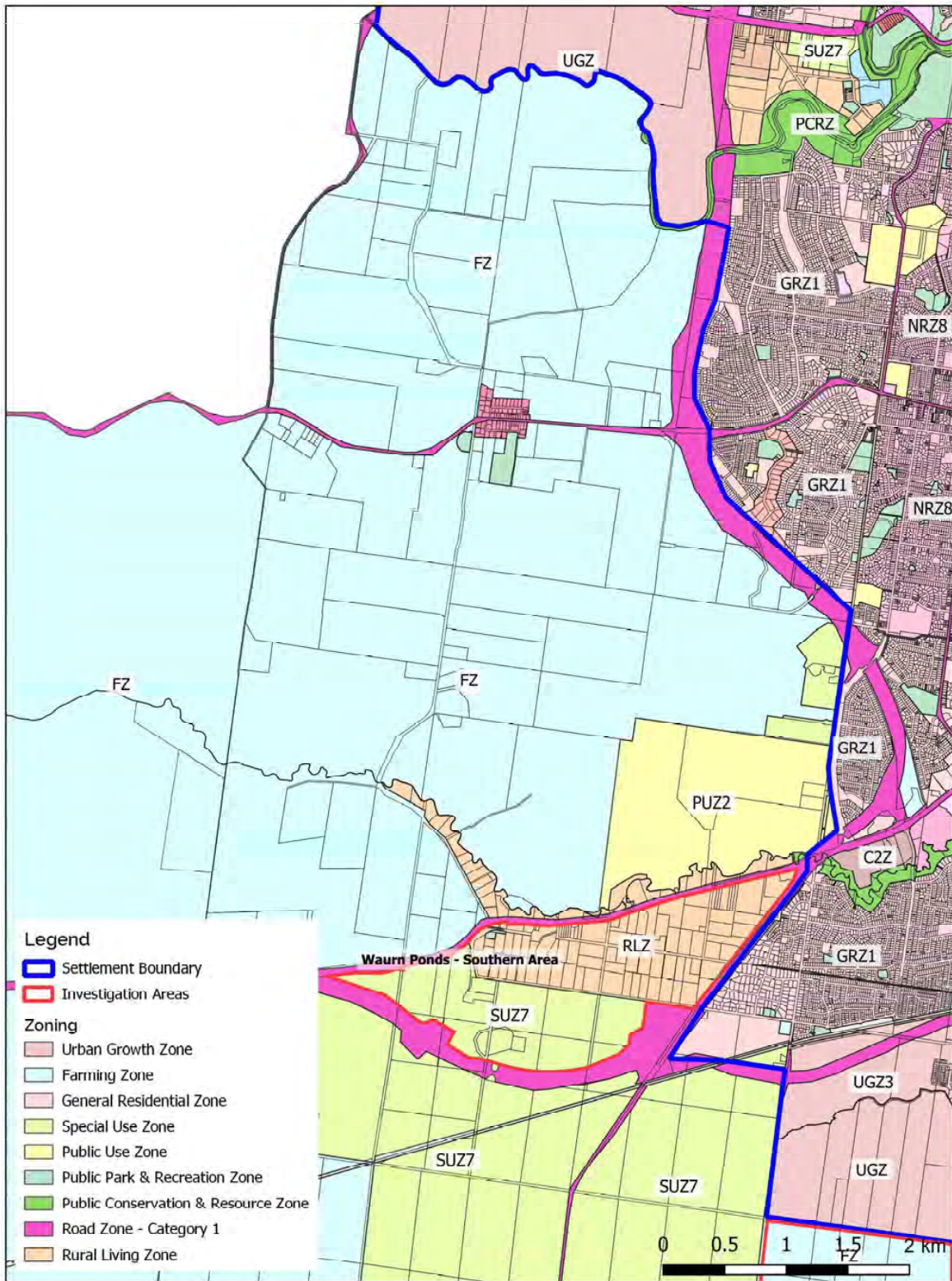


Figure 62. Waurn Ponds South – Zoning Plan.

**Geelong Growth Investigation Areas**  
 Waurn Ponds - Southern Area - Overlays

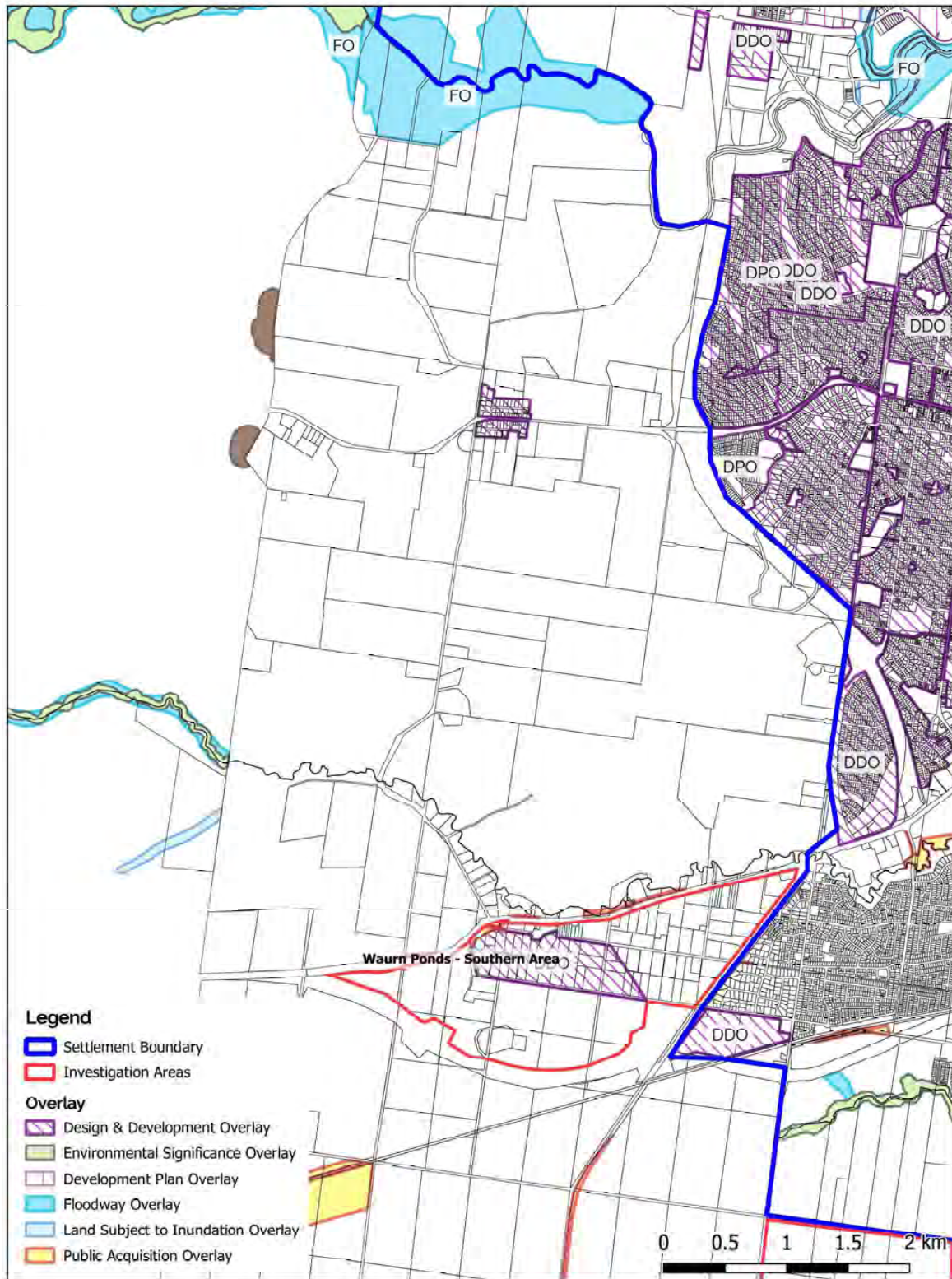


Figure 63. Waurn Ponds South – Overlays Plan 1.

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

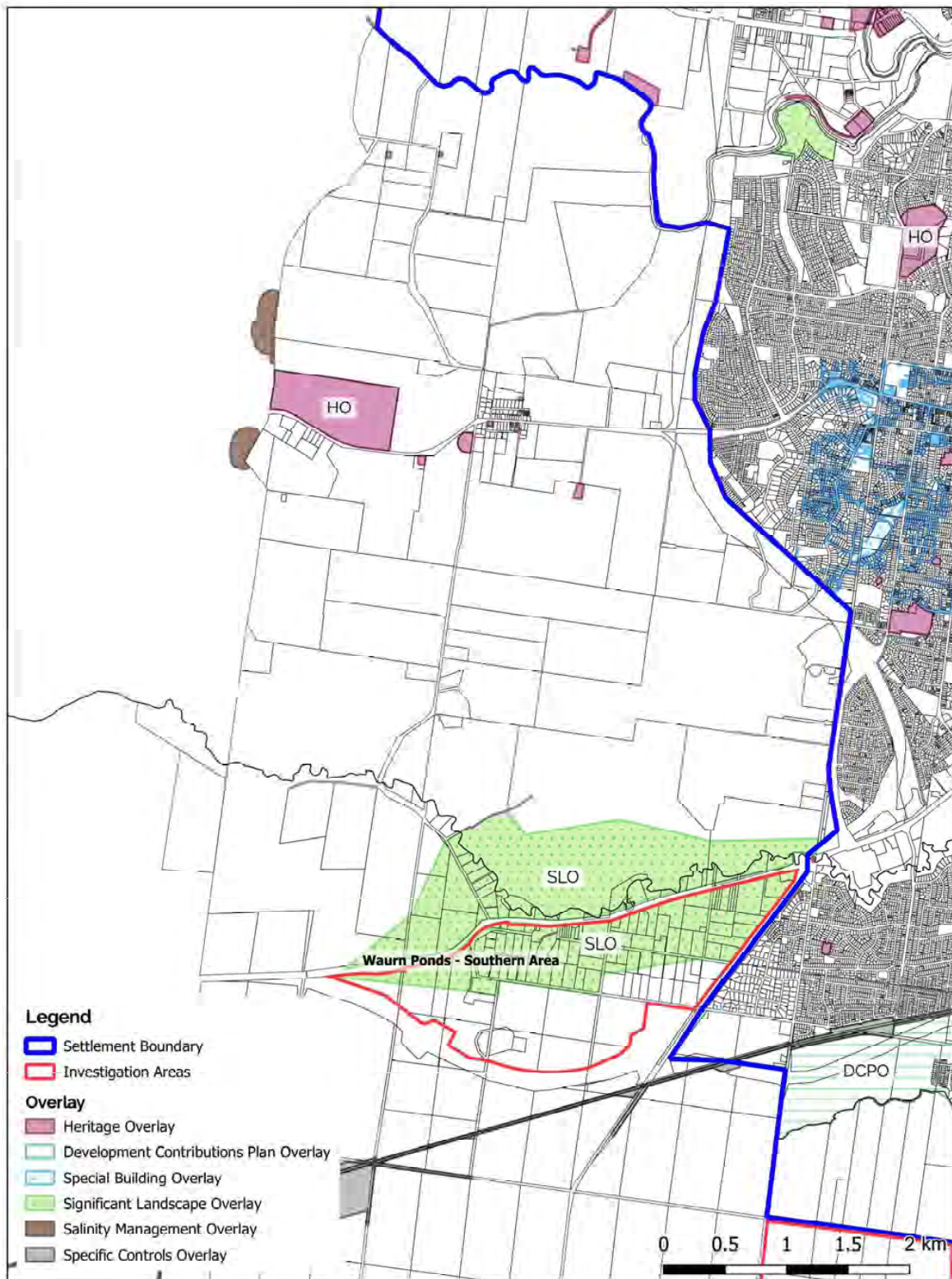


Figure 64. Waurm Ponds South – Overlays Plan 2.



Figure 65. 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 Waurin 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 – 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.
- 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 – Waurm 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 Waurm 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.

- 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.

Initial consultation with Barwon Water has identified the following:



Figure 66. Extract from Geelong Settlement Strategy, Figure 1A (Waurn Ponds South investigation area shown in red).

## 4 - Response to submissions on the Draft boundary review

Two submissions were received in relation to land within this investigation area (submissions 4.02 & 4.03).

Submission 4.02 states that Boral's northern land parcel should be considered for inclusion in a long term settlement boundary to allow for the development of a modern business park including a mix of commercial, community and residential uses. It notes that (contrary to the assessment contained in this report) this land is well connected to urban services including road, rail and recreation facilities.

### Response:

It is acknowledged that Boral's northern land parcel adjoins the Geelong Ring Road and rail line, and that it is relatively close to urban services within Waurn Ponds and Armstrong Creek. However the road and rail lines are currently a barrier to connecting this land to the urban areas immediately east and south-east of the site, and the land to the north of the site is developed for rural living purposes that is (in the author's view) not suitable for further redevelopment given the landscape setting of these allotments.

The original report observed that if the existing RLZ remains used for rural living purposes, then the land to its south (the Boral land) 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 the 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.

Submission 4.02 does not contain new facts or arguments that would lead us to reach any different conclusion to the above.

Submission 4.03 requests that all of the current RLZ land be rezoned to LDRZ or alternatively that

the RLZ schedule be revised to allow modest increases in land subdivision in this location.

The focus of this review is on determining whether there is a need to consider any alternative locations for Geelong's long term settlement boundary (and, if so, in what form that should take). Considering a change in zoning from RLZ to LDRZ (or to lot sizes within the existing zoning) is outside the scope of this review.

For the above reasons, it is **recommended** that there be no change to the settlement boundary in this location.

# 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

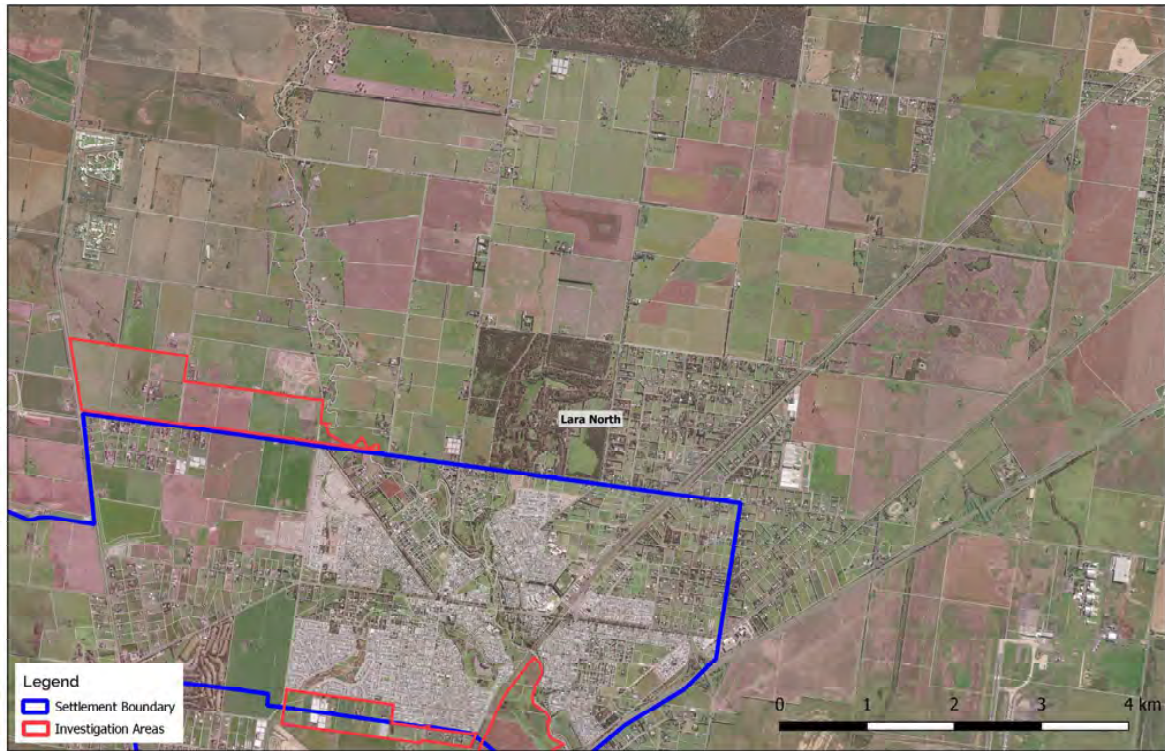


Figure 67. Lara North – Aerial Cadastral Plan.

**Geelong Growth Investigation Areas**  
Lara North Investigation Area

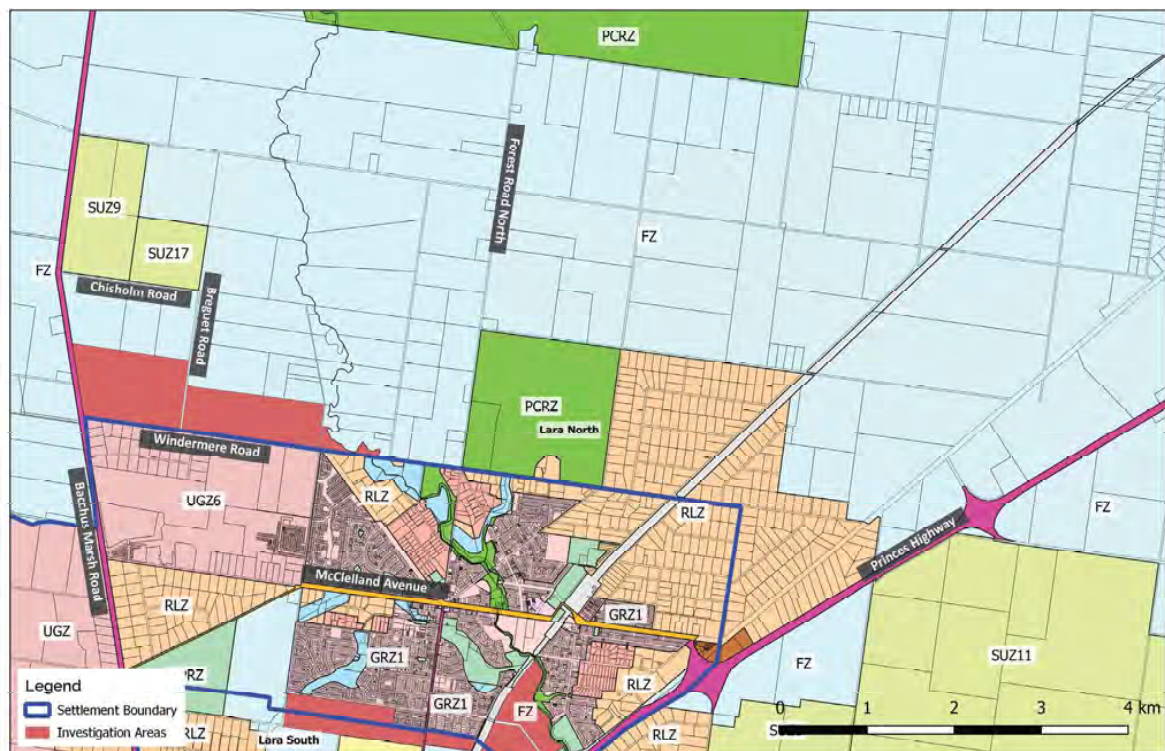


Figure 68. Lara North – Investigation Area Plan.

**Geelong Growth Investigation Areas**  
Lara North - Zoning

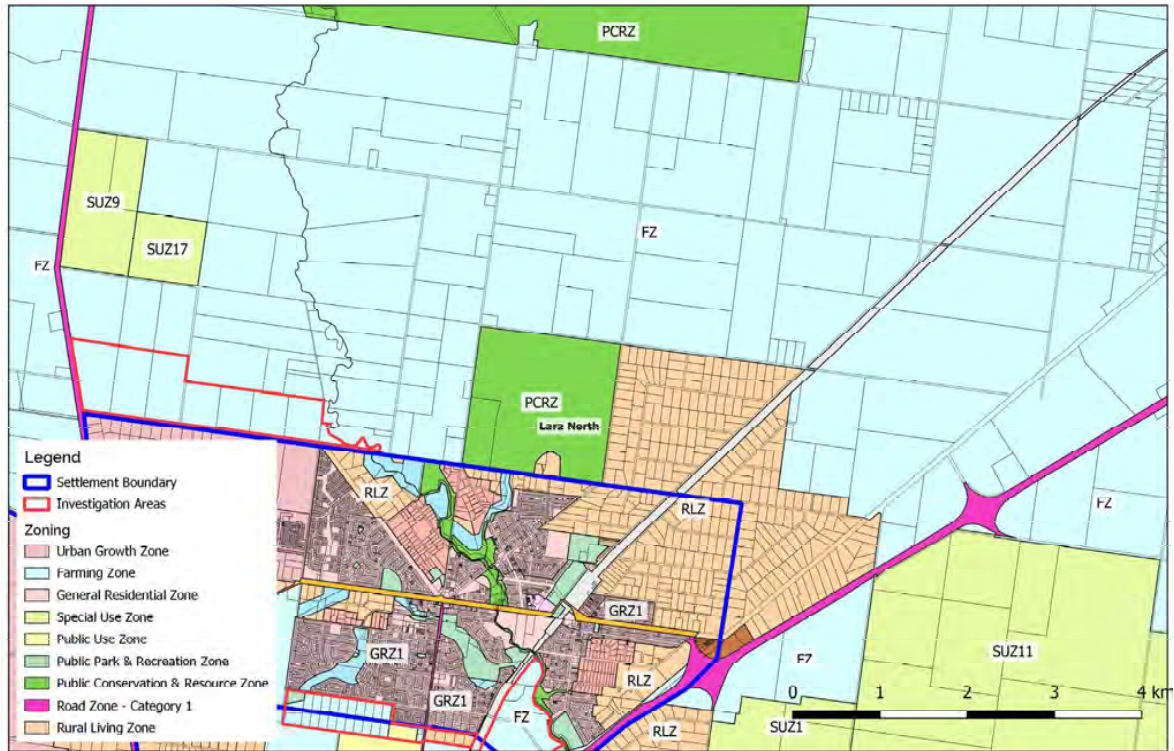


Figure 69. Lara North – Zoning Plan.

**Geelong Growth Investigation Areas**  
Lara North - Overlays

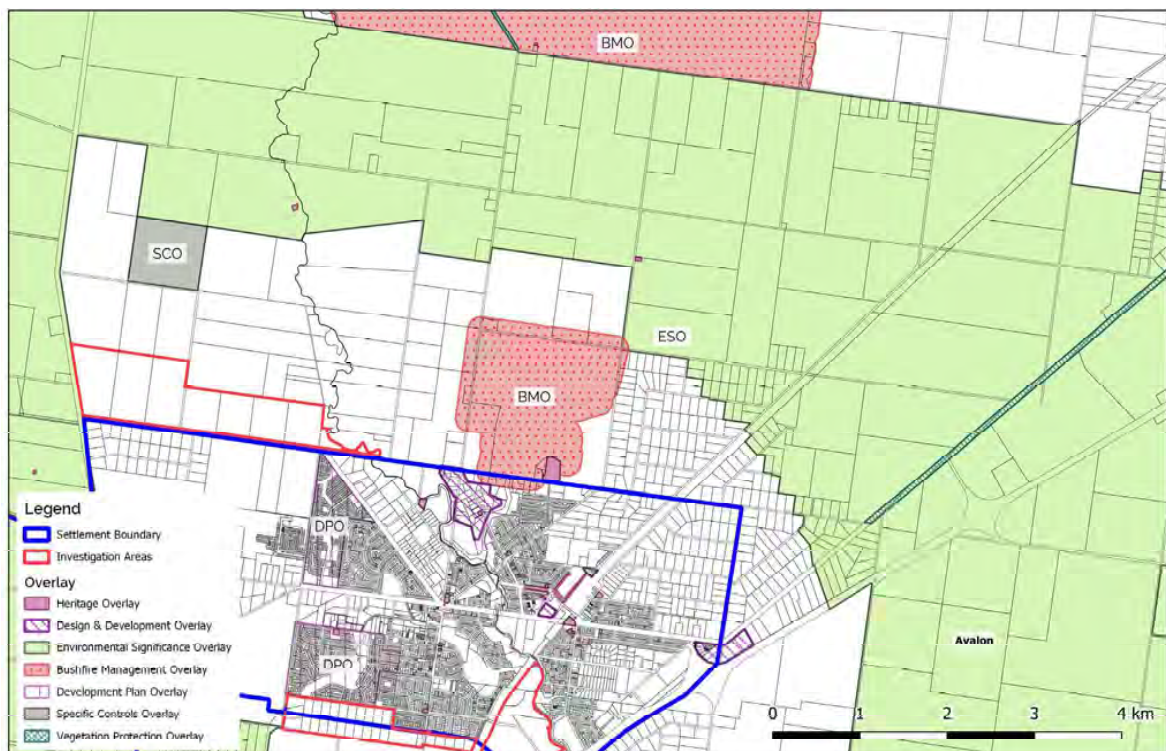


Figure 70. Lara North – Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Lara North - Overlays

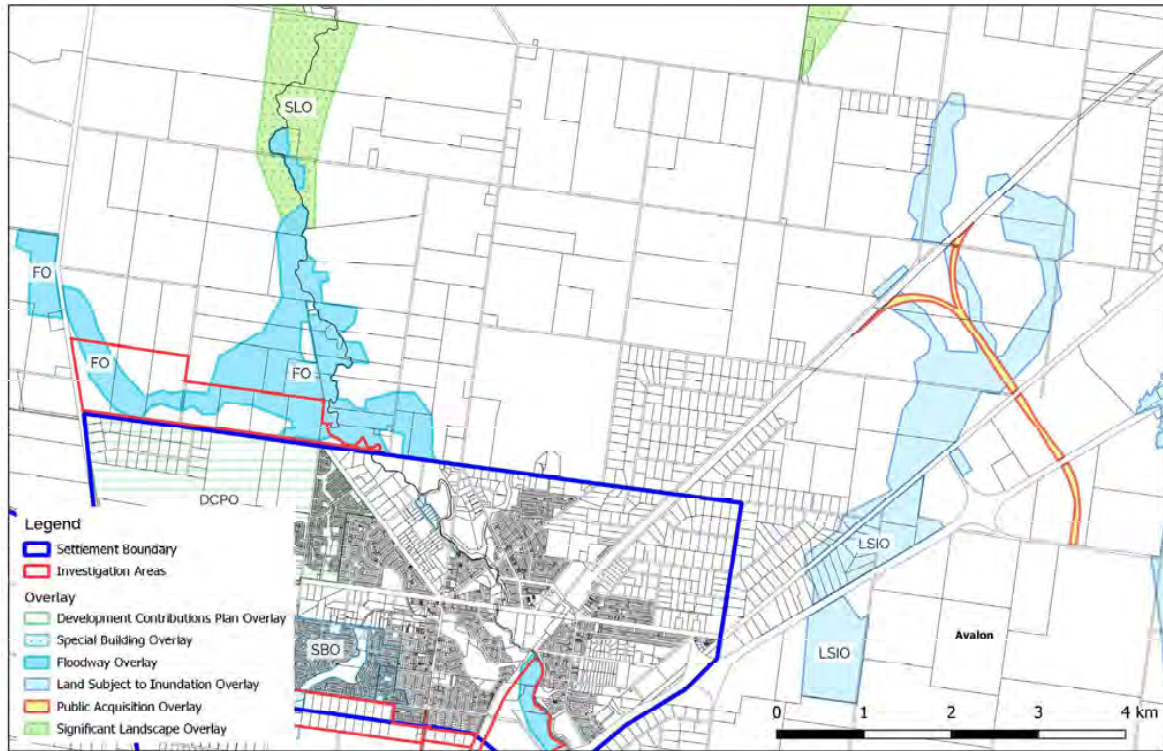


Figure 71. Lara North – Overlays Plan 2.



Figure 72. Lara North – Photo Montage.



Figure 73. 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 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.

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.

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

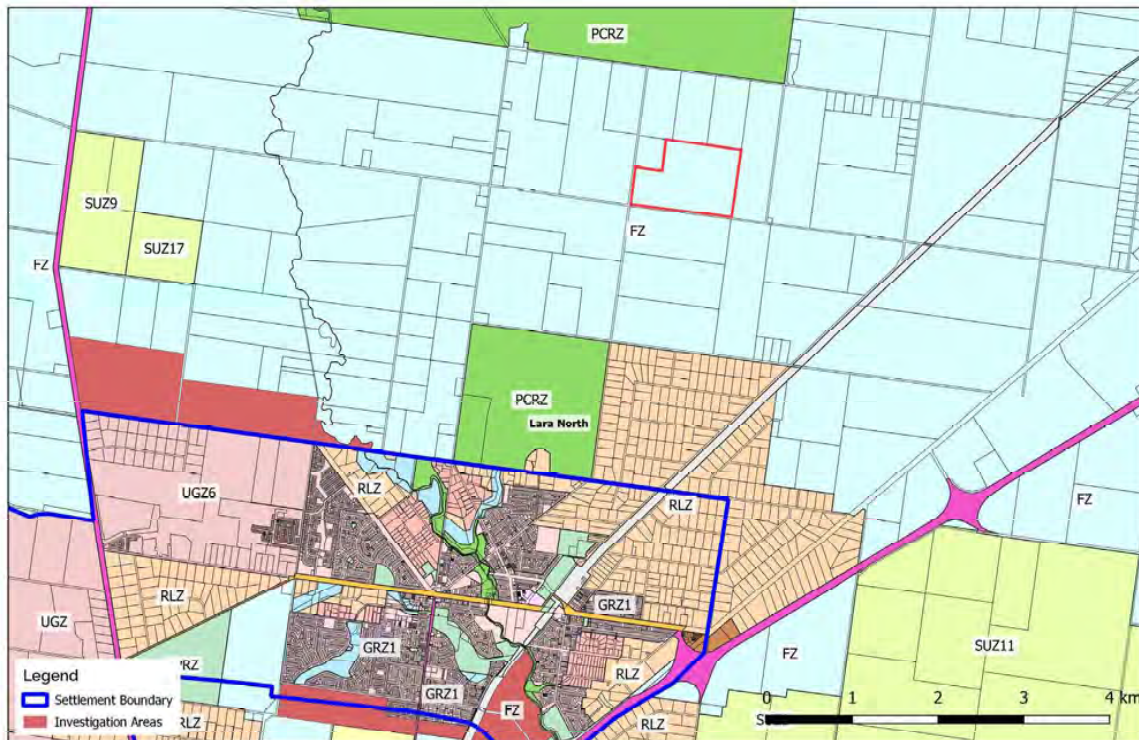


Figure 74. Lara North Investigation Area Plan, with 540 Flinders Lane, Lara shown centre-north.

## 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.

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.

**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.

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.

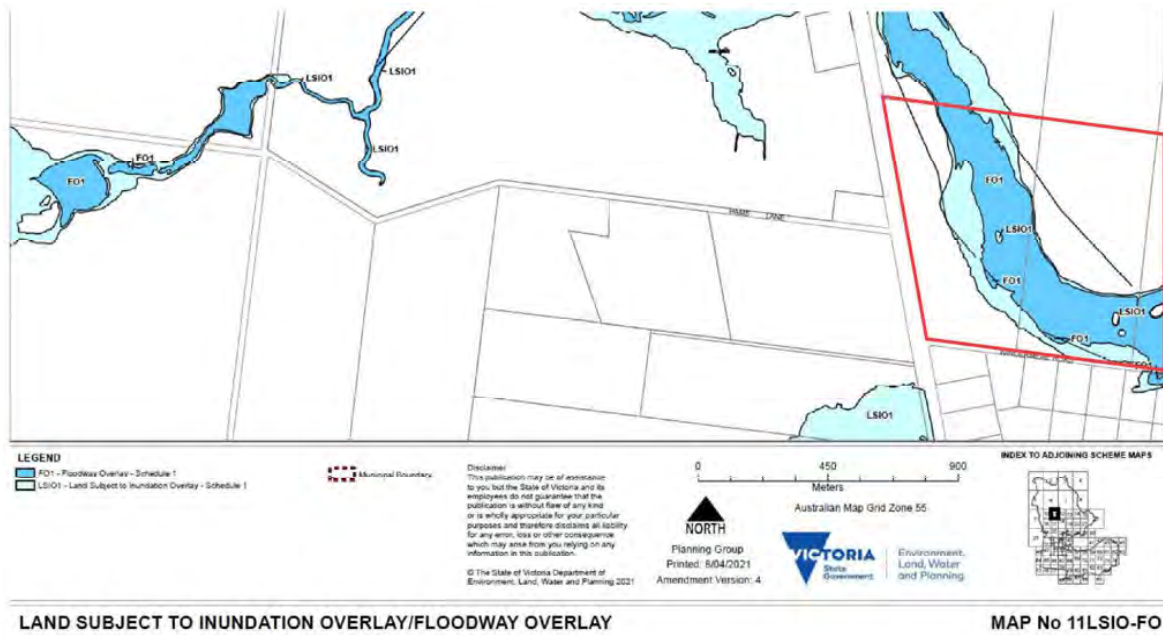


Figure 75. Draft Greater Geelong Planning Scheme - Local Provision Land Subject to Inundation Overlay/Floodway Overlay Exhibited Amendment C339gee – Map 11

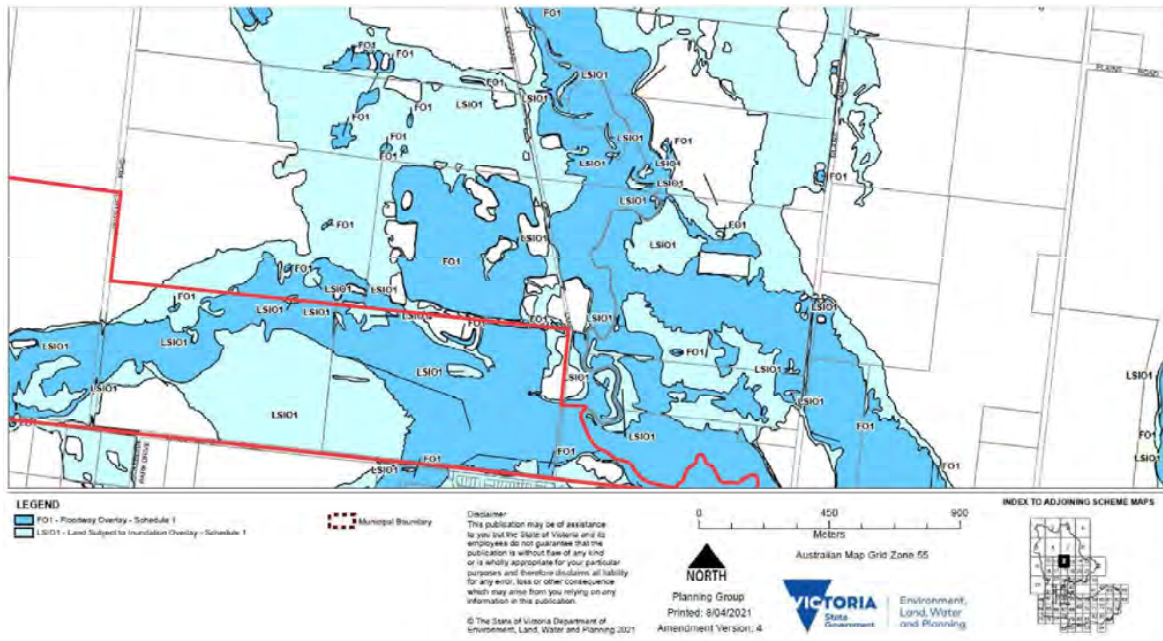


Figure 76. Draft Greater Geelong Planning Scheme - Local Provision Land Subject to Inundation Overlay/Floodway Overlay Exhibited Amendment C339ggee - Map 12.

**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.

<sup>5</sup> See map sheet 9 - <http://earthresources.efirst.com.au/categories.asp?CID=33>

<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> 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>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 presently disclosed Wadawurrung living cultural heritage and values.

The Aboriginal Cultural Heritage Registration Information System (ACHRIS) mapping identifies that there are properties on the southern boundary of the investigation area that contain Areas of Cultural Heritage Sensitivity..

Any change to the settlement boundary is expected to cause material detriment to Wadawurrung tangible and or intangible living cultural heritage, part of which are identified in Areas of Cultural Heritage Sensitivity. Having regard to clause 148 (fd) of the Aboriginal Heritage Act 2006, Council will consult with the Wadawurrung Traditional Owners Aboriginal Corporation 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.

## 4 - Response to submissions on the Draft boundary review.

The following summarises issues raised in submissions relating to the Lara North investigation area, together with a response to them.

### 4.1 Properties outside the investigation area

#### Submissions:

2 submissions were received relating to properties outside of the Lara North Investigation area (Submissions 5.01 & 5.05).

The first area is a property approximately 1km north of the current investigation area (Submission 5.01). This submission is not seeking to be included in the settlement boundary but requests to be considered for “future rural-residential development.”

The second area for consideration is to the west of the Lara West PSP and north of Staceys Road and the Northern Geelong Framework Plan area (Submission 5.05). The submission suggests inclusion of this area would provide an additional 1300 dwellings and would be a logical extension of both the Northern Geelong Framework Plan and the Lara West PSP.

#### Response:

In relation to the first area, the purpose of this investigation is to create a logical and enduring settlement boundary, not review the zoning of land outside of the settlement boundary. Additionally, the site is a significant distance from land which is contiguous to an urban residential zone which is one of the five key principles developed to consider the appropriateness of adding land into the settlement boundary.

Although outside of the Lara North Investigation Area we have considered the merit of the submissions relating to the area north of Staceys Road to determine whether the Investigation Area should be reviewed and expanded.

A guiding principle of settlement strategy is that the boundaries of the Northern and Western Growth Areas would not be considered as part of this report given that these areas have

only recently been the subject of a substantial strategic planning and public review process (via Amendment C395). Inclusion of the Staceys Road land into the settlement boundary would effectively represent a change to the boundary of the north Geelong growth area. The submission does not provide a sufficient argument to justify that this principle, of not reviewing this growth area, should be overruled.

Additionally, the submission suggests that the additional land would be in the catchment for the services in the adjoining Lara West PSP. However, based on the evaluation method undertaken for the Lara North investigation area, the addition of 1300 dwellings from this area to the catchment of the Lara West PSP would also create a shortfall in community infrastructure.

### 4.2 Submissions that support the report recommendations

#### Submissions:

3 submissions support this reports recommendation to make no changes to the settlement boundary in both Lara North and Lara South (Submissions 5.02, 5.03 & 5.04). These submissions largely relate to concerns around existing strains on roads, servicing and community infrastructure. Additionally, in relation to Lara North, submitters note the importance of the retention of agricultural land, views to the You Yangs, and the conservation values of the land especially around Serendip Sanctuary. It is argued that any change in this location would have a detrimental impact on all of these matters.

#### Response:

The investigations undertaken as part of this report support the concerns raised by submitters and ultimately informed the recommendation to make no change to the settlement boundary in this investigation area.

#### Recommendation:

It is recommended that there be no change to the settlement boundary in this location.

# 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

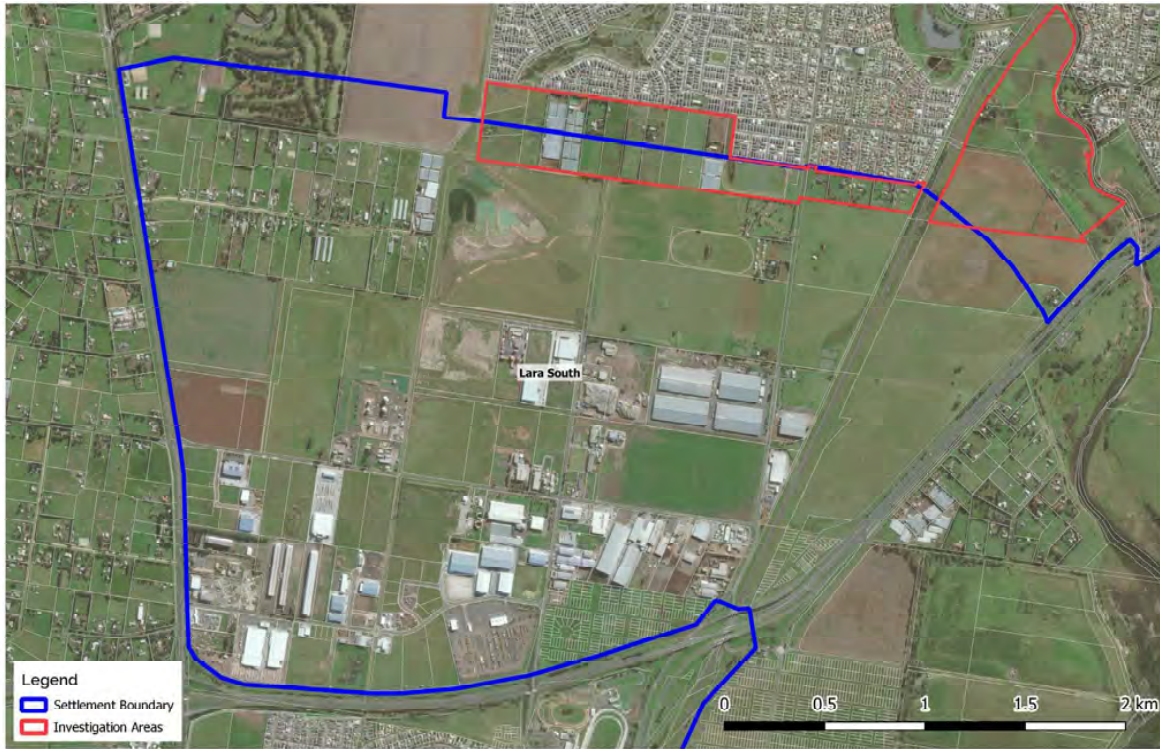


Figure 77. Lara South – Aerial Cadastral Plan.

**Geelong Growth Investigation Areas**  
Lara South Investigation Area

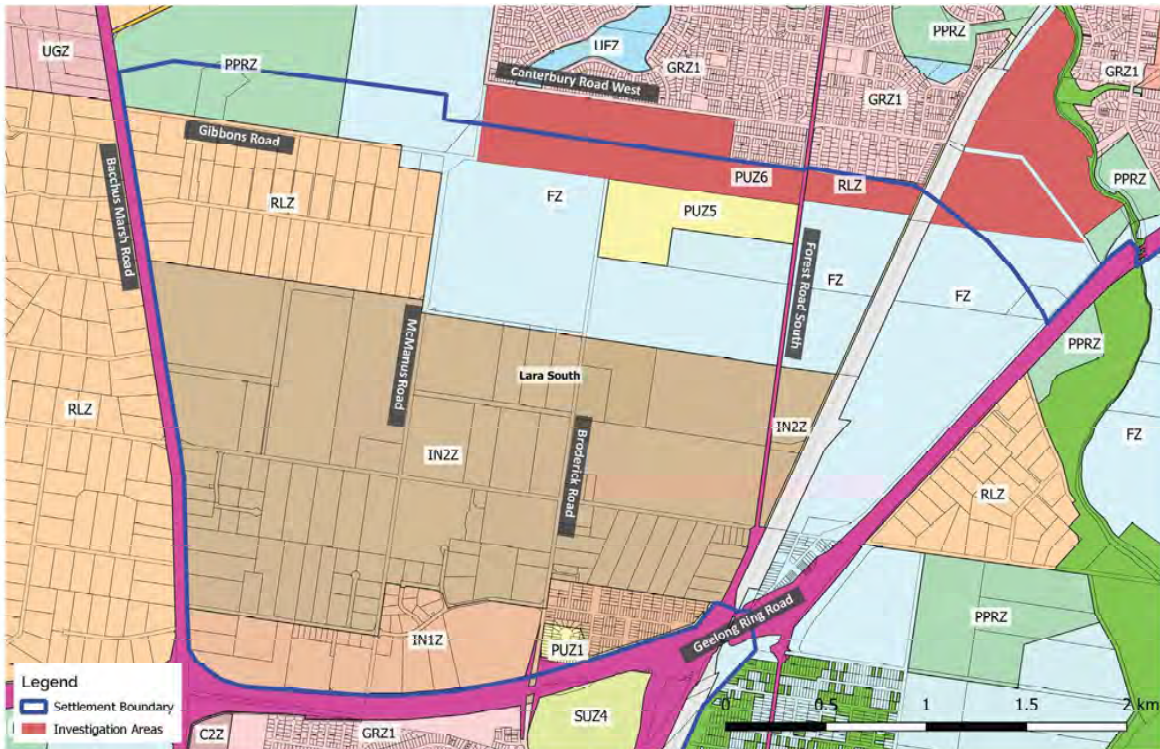


Figure 78. Lara South – Investigation Area Plan.

**Geelong Growth Investigation Areas**  
Lara South - Zoning

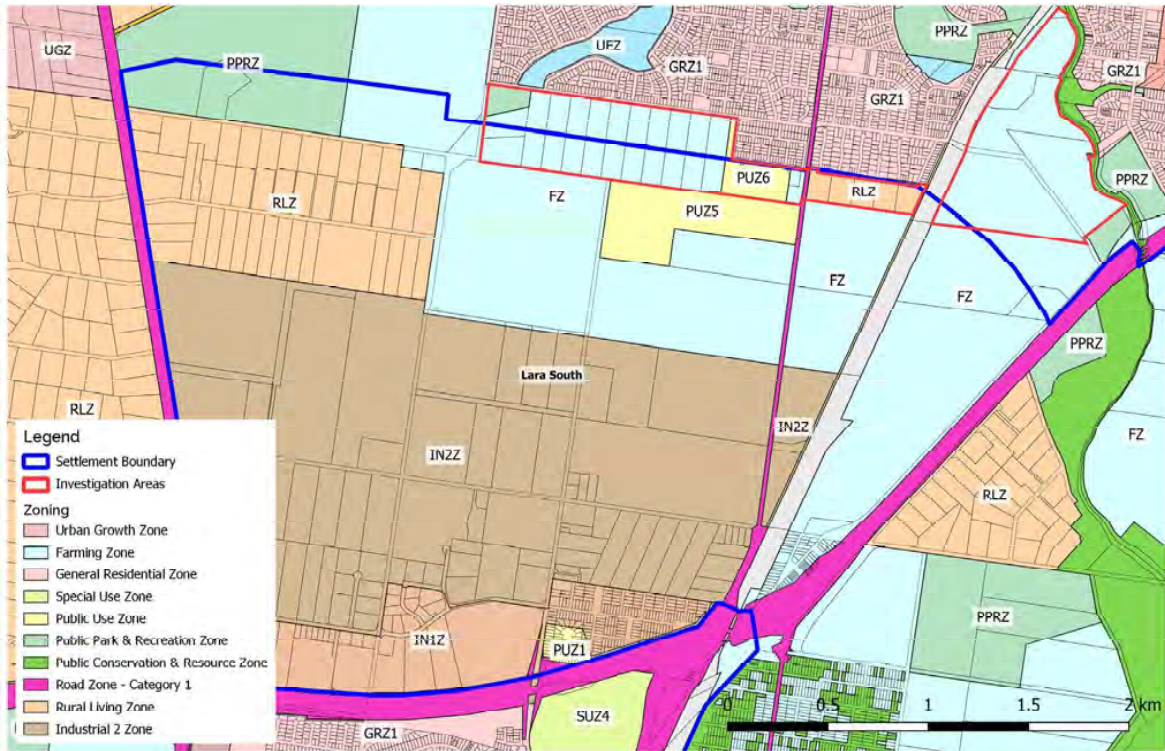


Figure 79. Lara South – Zoning Plan.

**Geelong Growth Investigation Areas**  
Lara South - Overlays

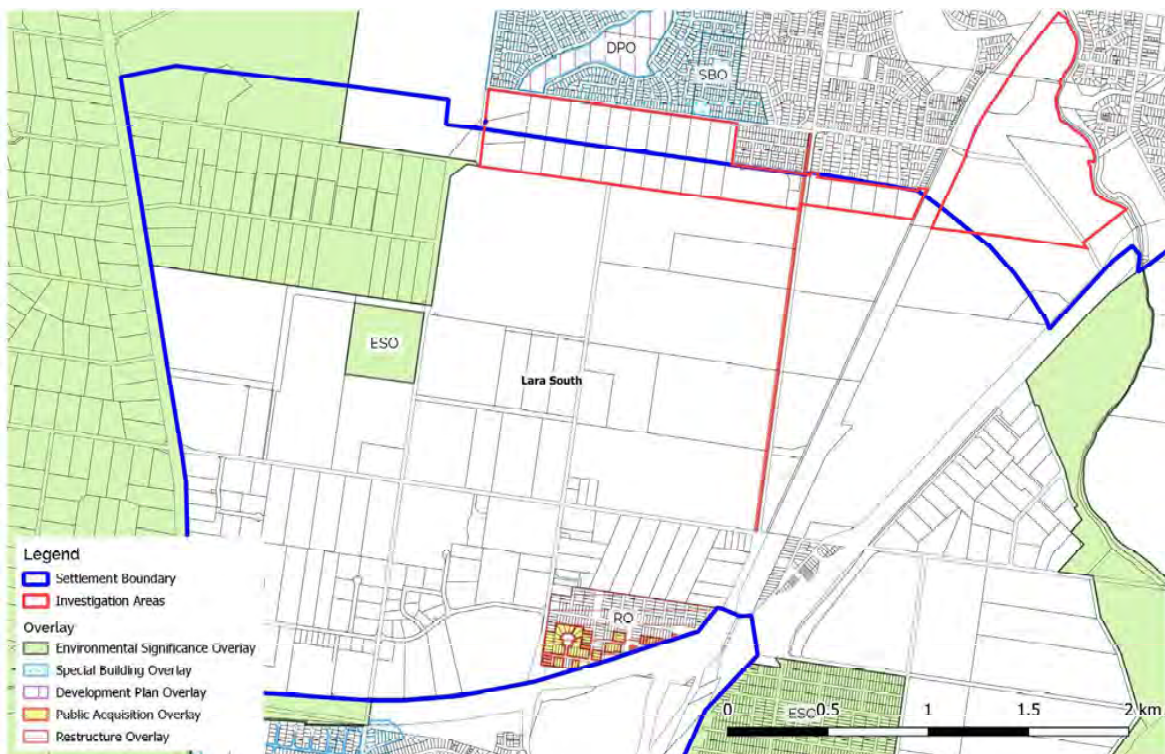


Figure 80. Lara South – Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Lara South - Overlays

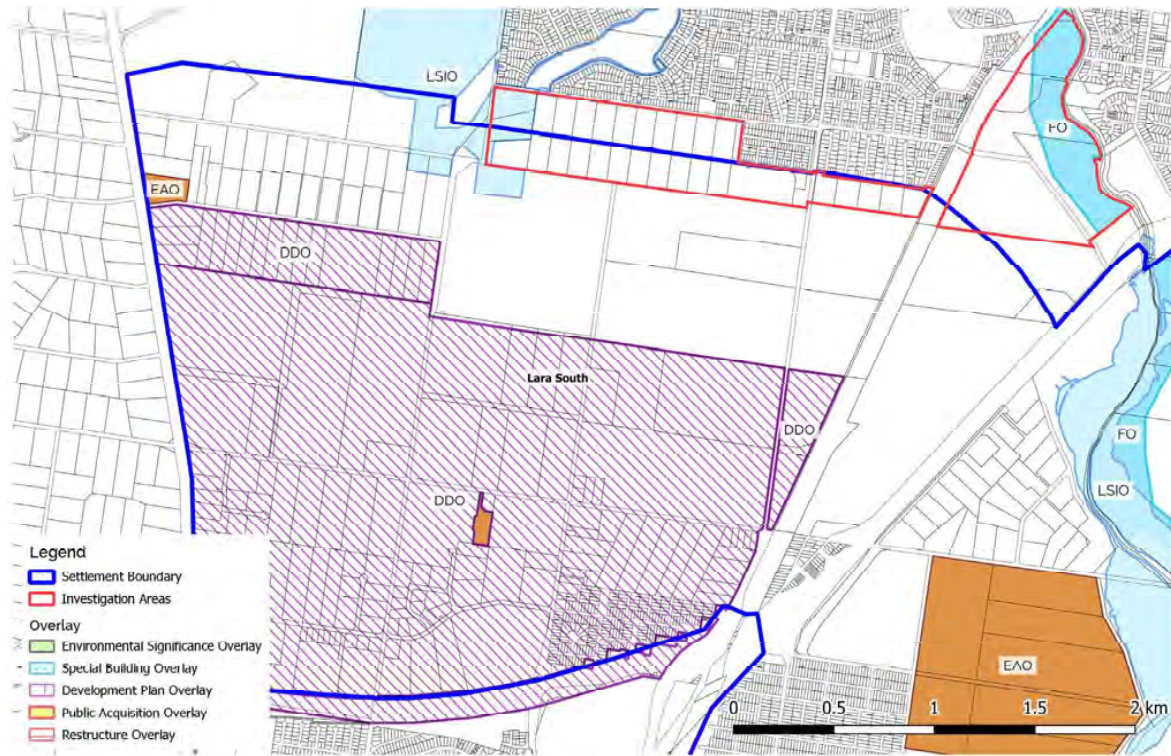


Figure 81. Lara South – Overlays Plan 2.



Figure 82. 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).

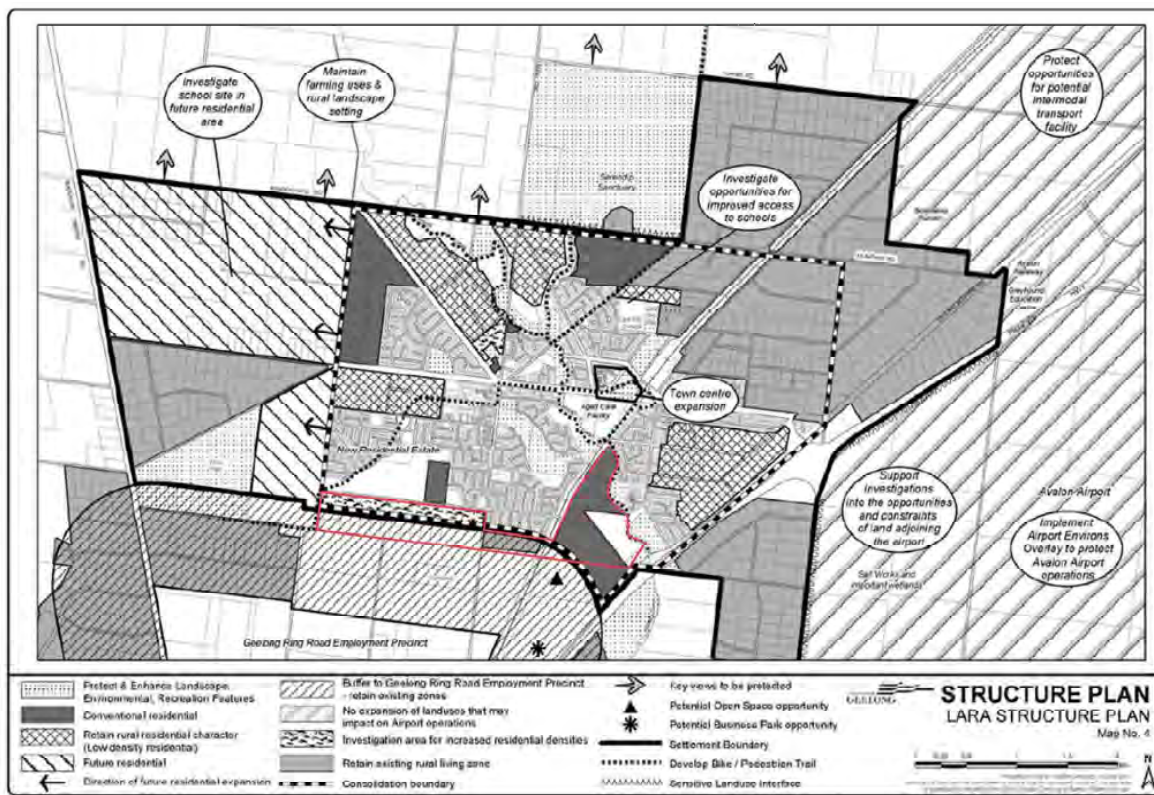


Figure 83. Lara Structure Plan (prepared by CoGG, and adopted April 2011).

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.

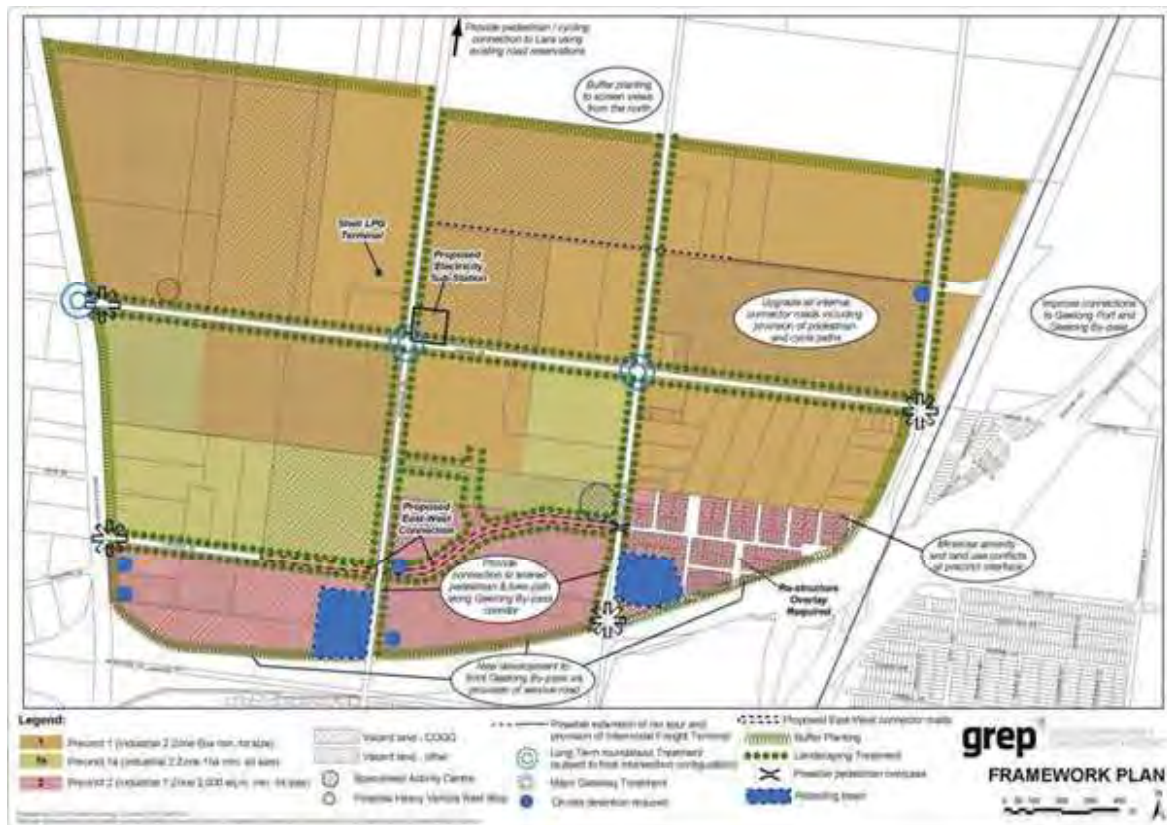


Figure 84. Lara Framework Plan.

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 85. 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.

<sup>1</sup> Lara Structure Plan, page 17.

### 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).

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.

### **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>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)

<sup>6</sup> Summary Report Lara Flood Study, prepared by Water Technology, dated 11 February 2020.

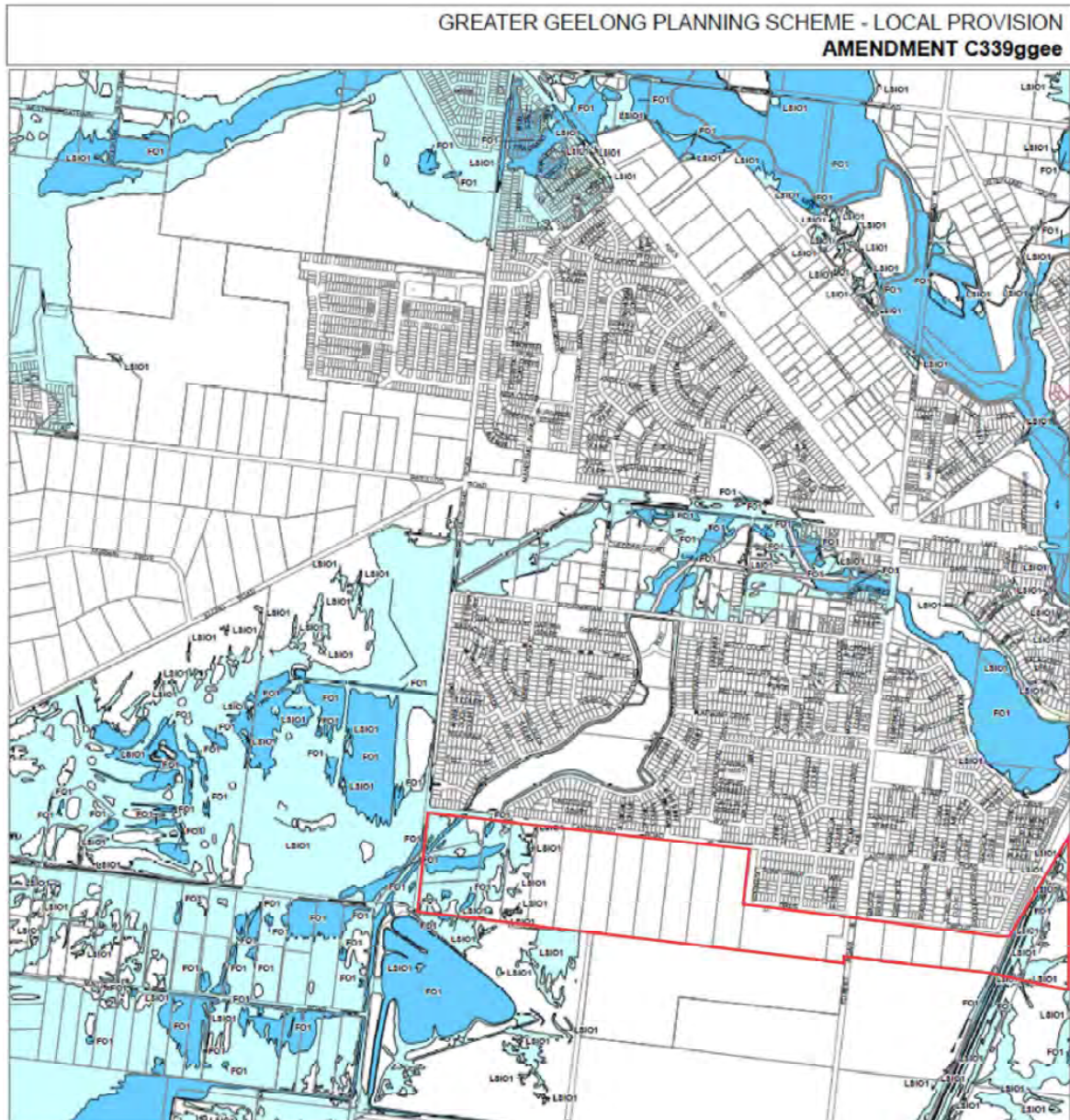


Figure 86. Draft Greater Geelong Planning Scheme - Local Provision LSIO – Land Subject to Inundation Overlay Exhibited Amendment C339ggee – Map 18.



Figure 87. Draft Greater Geelong Planning Scheme - Local Provision LSIO – Land Subject to Inundation Overlay Exhibited Amendment C339ggee – Map 19.

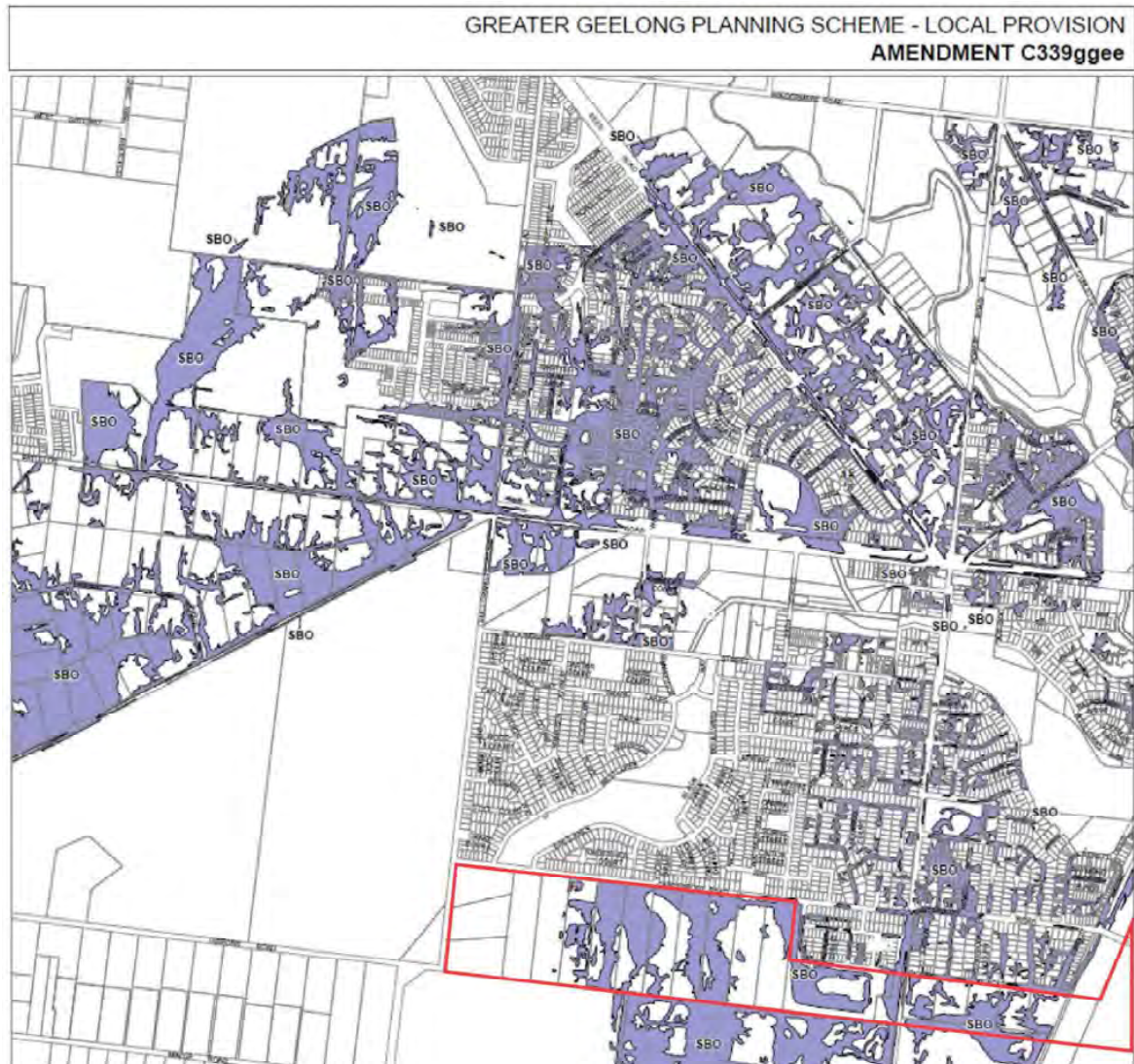


Figure 88. Draft Greater Geelong Planning Scheme - Local Provision SBO - Special Building Overlay Exhibited Amendment C339ggee - Map 18.

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?cID=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/coranreg.nsf/pages/soil\\_landform\\_units185](http://vro.agriculture.vic.gov.au/dpi/vro/coranreg.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\\_0725.pdf?\\_ga=2.34412129.1378271083.1638783549-1127495322.1625462890](https://planningschemes.api.delwp.vic.gov.au/schemes/vpp/13_0725.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.

## 4 - Response to submissions on the Draft boundary review.

The following summarises issues raised in submissions relating to the Lara South investigation area, together with a response to them.

### 4.1 Properties outside the investigation area.

#### Submissions:

2 submissions were received relating to the Farming Zone land located just outside of the southeast corner of the Lara South Investigation area (Submissions 5.08 & 5.09). These submissions acknowledge that due to the proximity of the land to the Geelong Ring Road Employment Precinct, the properties are not appropriate for residential development. However, they suggest the settlement boundary should not only focus on residential land. They submit that an urban growth boundary should replace the settlement boundary and that it should include "urban uses" including the Geelong Ring Road Employment Precinct and all of the area affected by the 1000m buffer.

#### Response:

Although outside of the Lara South Investigation Area we have considered the merit of the submissions to determine whether the Investigation Area should be reviewed and expanded.

The Greater Geelong Planning Scheme describes the role of the settlement boundary as being the long term extent of urban (residential) growth of the City of Geelong (Clause 21.06) and is based on the findings of the Greater Geelong Settlement Strategy. 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.

The long term boundary review scope is defined within the Greater Geelong Settlement Strategy, which focuses on setting a long term boundary for residential growth.

It is not within the scope of this review to alter the purpose or definition of the long term settlement boundary under the Greater Geelong Planning Scheme and Settlement Strategy.

### 4.2 Properties inside the existing settlement boundary.

#### Submissions:

2 submissions were received relating to properties inside the existing settlement boundary (Submissions 5.06 & 5.07). These submissions request that the properties remain in the settlement boundary but be identified as "Investigation Areas for consideration as a future urban area".

#### Response:

The purpose of this investigation is to establish a logical and enduring settlement boundary, not review the zoning of land within the existing settlement boundary.

### 4.3 Submissions that support the report recommendations.

#### Submissions:

3 submissions support this reports recommendation to make no changes to the settlement boundary in both Lara North and Lara South (Submissions 5.02, 5.03 & 5.04). These submissions largely relate to concerns around existing strains on roads, servicing and community infrastructure.

#### Response:

The investigations undertaken as part of this report support the concerns raised by submitters and ultimately informed the recommendation to make no change to the settlement boundary in this investigation area.

#### Recommendation:

It is recommended that there be no change to the settlement boundary in this location.

# 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 Boundary 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 89. Avalon – Aerial Cadastral Plan.

**Geelong Growth Investigation Areas**  
Avalon Investigation Area

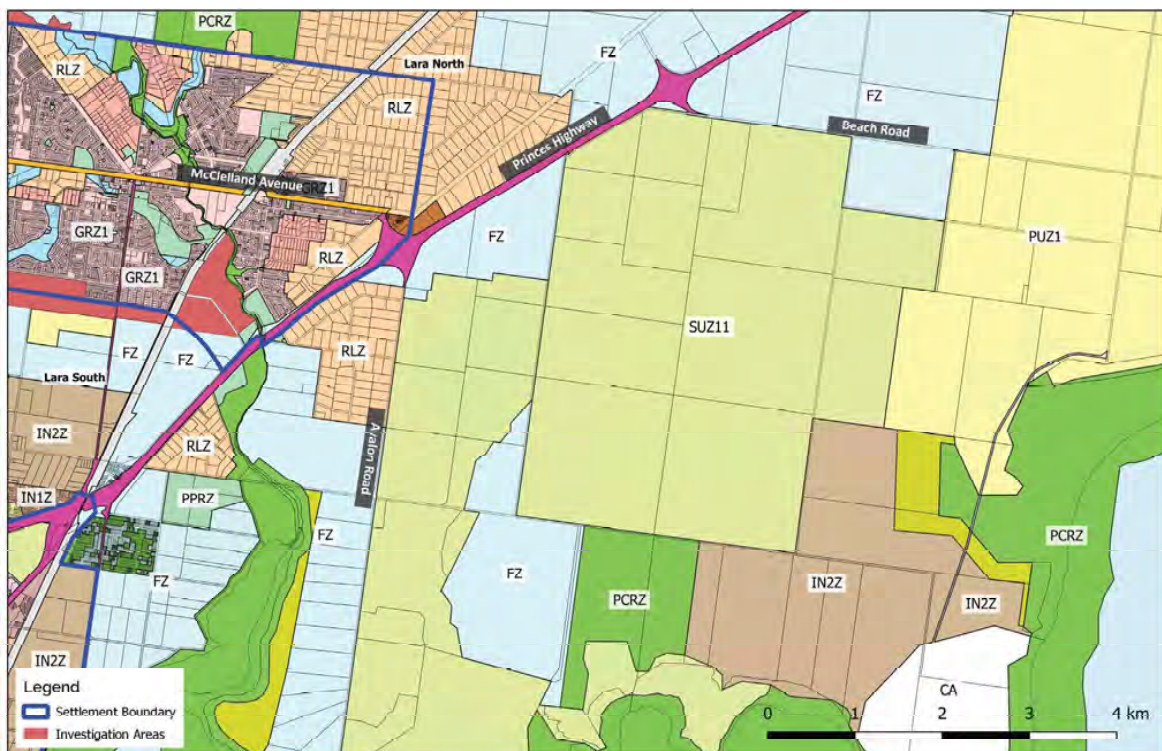


Figure 90. Avalon – Investigation Area Plan.

**Geelong Growth Investigation Areas**  
Avalon - Zoning

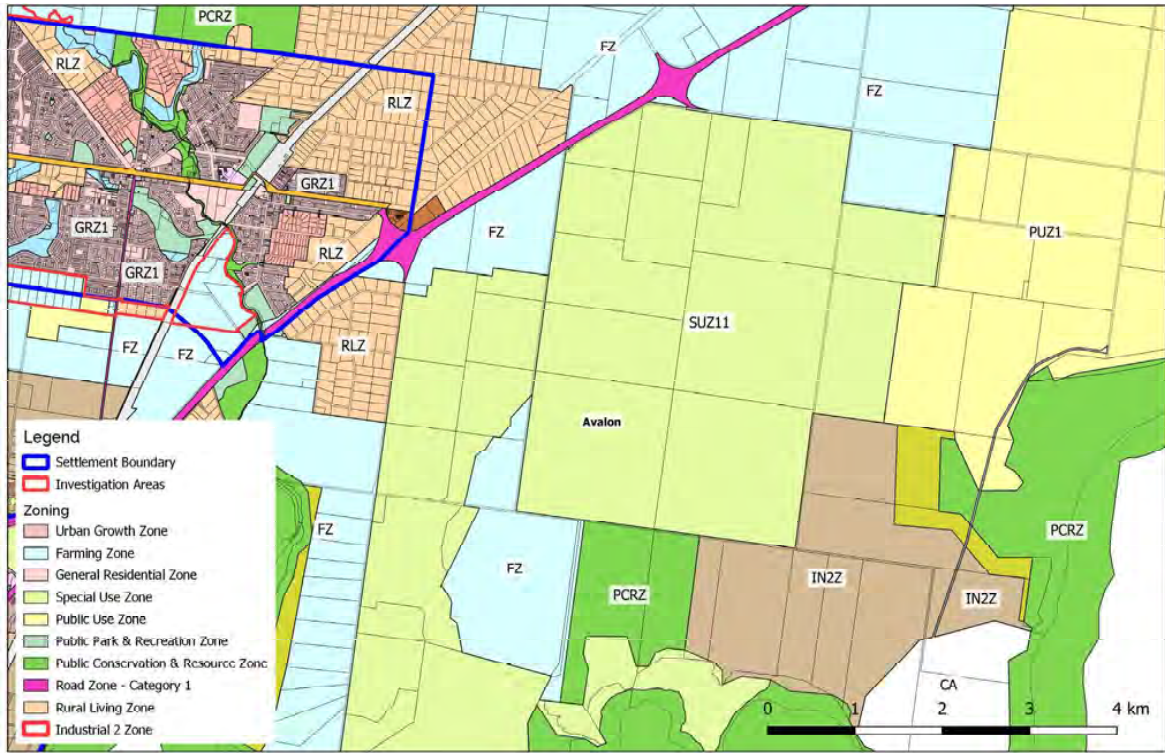


Figure 91. Avalon - Zoning Plan.

**Geelong Growth Investigation Areas**  
Avalon - Overlays

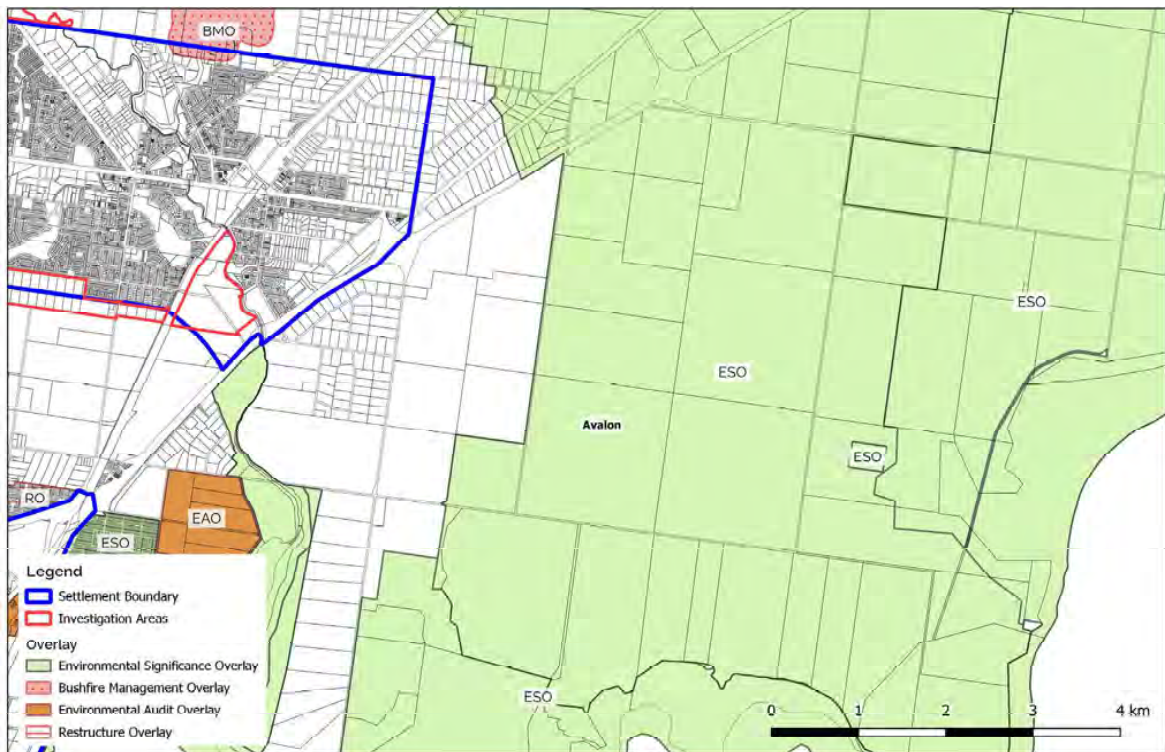


Figure 92. Avalon - Overlays Plan 1.

**Geelong Growth Investigation Areas**  
Avalon - Overlays

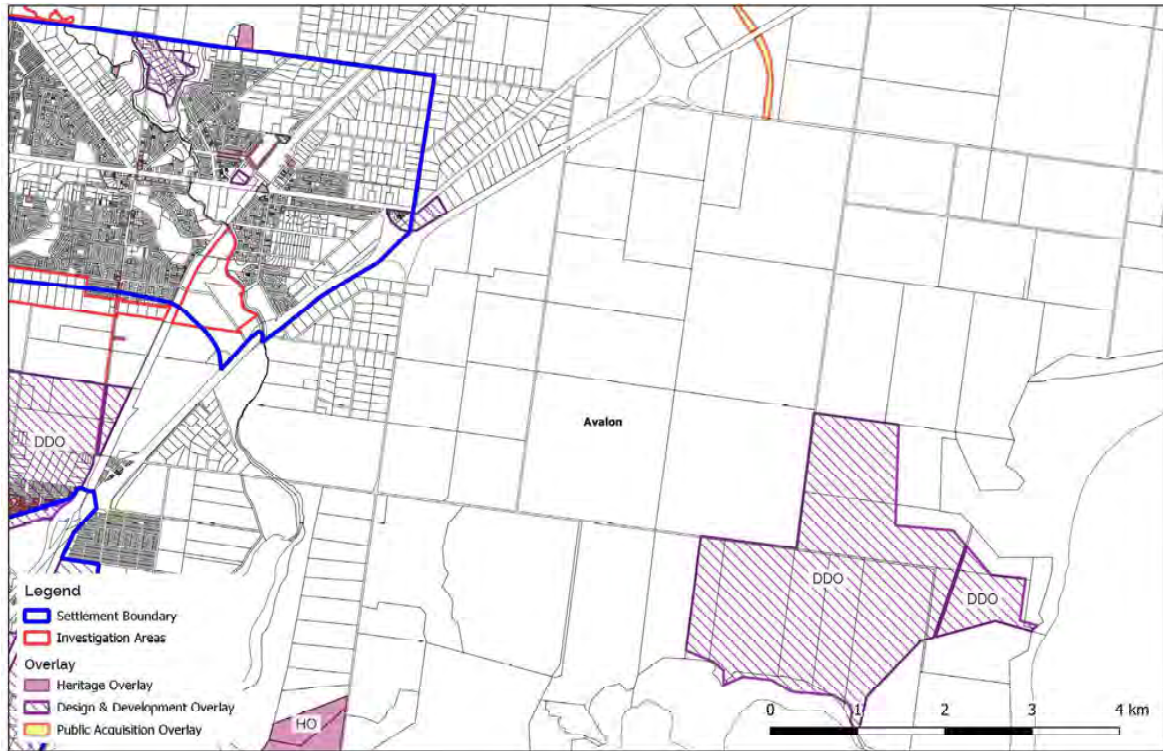


Figure 93. Avalon - Overlays Plan 2.

**Geelong Growth Investigation Areas**  
Avalon - Overlays

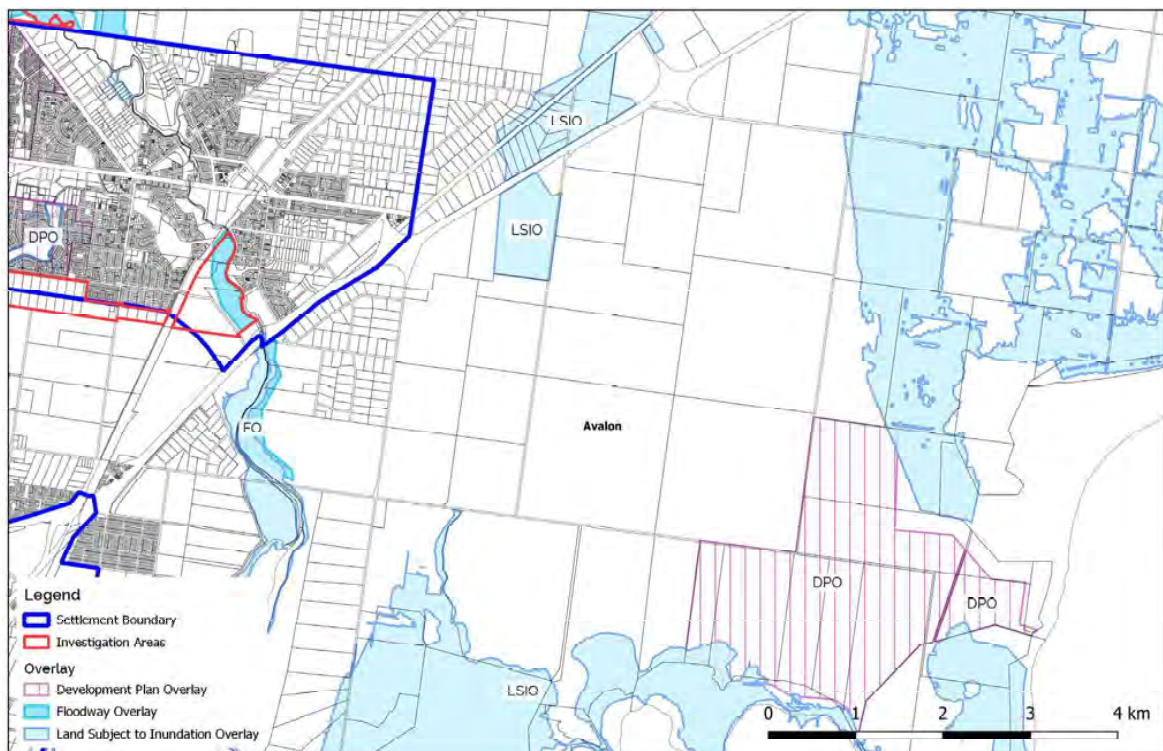


Figure 94. Avalon - Overlays Plan 3.

### 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 95. 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.

## 3 - Response to submissions on the Draft boundary review.

The following summarises issues raised in submissions relating to the Avalon investigation area.

### 3.1 Summary of key issues for this area.

#### Submissions:

There was one submission relating to the Avalon investigation area (submission 6.01). The submission sets out the views of the landowners of the following properties:

- 65 Beach Road, Avalon (Egleton)
- 130 Pousties Road, Avalon (Egleton)
- Pousties Road, Avalon (Avalon Lodge)

This submission advocates for the inclusion of the land earmarked as the Greater Avalon Employment Precinct into the Geelong settlement boundary as an additional logical Growth Investigation area on the basis of including all types of urban growth land in the boundary.

### 3.2 Settlement

The submission suggests that in conformity with Plan Melbourne's Urban Growth Boundary principles, all "urban" zoned land including "employment" areas should be included within Long Term or Protected settlement boundaries.

The submission states that the landowners are not seeking residential redevelopment opportunities. However, they suggest that the land will be a significant addition to the Geelong urban fabric and should therefore be included in the boundary.

#### Response:

The Greater Geelong Planning Scheme describes the role of the settlement boundary as being is to define the long term extent of urban (residential) growth of the City of Geelong. Under the Planning Scheme, 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.

The long term boundary review scope is defined within the Greater Geelong Settlement Strategy, which focuses on setting a long term boundary for residential growth. It is not within the scope of this review to alter the purpose or definition of the long term settlement boundary contained under the Greater Geelong Planning Scheme.

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 and there is no strategic planning for extending the settlement boundary into Avalon.

Additionally, land within Avalon serves the function of providing a physical separation and break in urban development. Therefore, allowing for additional land to be brought into the settlement boundary in this location is inconsistent with the noted of there being an urban break which is currently being successfully preserved by the existing settlement boundary.

Overall, it remains the view of this report's authors that as the purpose of this investigation is to create a logical and enduring settlement boundary, not an Urban Growth Boundary, the properties identified in this submission should therefore remain outside the settlement boundary.

#### Recommendation:

This investigation area should not be included within the Geelong settlement boundary.

# Chapter Seven

# Recommendations

This chapter comprises a summary of the recommendations in relation to each settlement boundary investigation area. These recommendations have been based on the analysis contained within this report, as well as considerations of submissions made by landowners, agencies and other stakeholders.

## 1.0 - Armstrong Creek South West

### 1.1 Mt Duneed Road (west of Williams Road)

This area should not be included within the Geelong Settlement Boundary. However, further consideration should be given to rezoning land within this area to the Rural Living Zone.

The future development of land within this area will need to respond to the policy aspirations of retaining Mt Duneed as a prominent landscape feature and the maintenance of a 'green edge' along the boundary between urban Geelong and the declared Surf Coast DAL area. It will also need to consider matters such as environmental values, land use compatibility, infrastructure, lot size and design, etc.

It is recommended that any rezoning of this land be accompanied by a requirement to prepare a development plan, infrastructure plan and infrastructure funding agreements. A Development Plan Overlay or similar tool should be applied to the land to address such matters.

### 1.2 Mt Duneed Road (east of Williams Road)

This area should not be included within the Geelong Settlement Boundary. However, further consideration should be given to rezoning land within this area to the Rural Living Zone.

The future development of land within this area will need to respond to the policy aspirations of retaining Mt Duneed as a prominent landscape feature and the maintenance of a 'green edge' along the boundary between urban Geelong and the declared Surf Coast DAL area. It will also need to consider matters such as environmental

values, land use compatibility, infrastructure, lot size and design, etc.

It is recommended that any rezoning of this land be accompanied by a requirement to prepare a development plan, infrastructure plan and infrastructure funding agreements. A Development Plan Overlay or similar tool should be applied to the land to address such matters.

### 1.3 Whites Road

It is **recommended** that the land south of Whites Road (between Ghazeepore Road and 10-40 Williams Road) remain outside of the settlement boundary.

### 1.4 Central (in vicinity of Whites and Williams Road)

#### Site 1 - Purdies Paddock (55 & 75 Williams Road, Mt Duneed):

It is **recommended** that:

- Purdies Paddock be included within the Geelong Settlement Boundary, subject to confirmation that developing this land for housing will have an acceptable visual impact on views to Mt Duneed when viewed from the east, along Lower Duneed Road.
- A structure plan, infrastructure plan and infrastructure funding agreement be prepared for the future residential development of the land.
- Following the preparation of the abovementioned plans and agreement, a planning scheme amendment should be initiated to rezone the land to give statutory effect to the structure plan's infrastructure funding agreements.

#### Site 2 - 10-40 Williams Road, Mt Duneed:

It is **recommended** that:

- The northern lot of 10-40 Williams Road be included within the Geelong Settlement boundary, and the southern part of this site be considered for rezoning to the Rural

Living Zone, subject to confirmation that developing this land for housing will have an acceptable visual impact on views to Mt Duneed when viewed from the north and north east.

- A structure plan, infrastructure plan and infrastructure funding agreement be prepared for future residential development on the northern part of the land.
- The structure plan and infrastructure funding agreement (together with any development plan for the southern part of the site that is identified for rural living purposes) should make provision for the creation of a wide linear open space corridor in the vicinity of the 65AHD contour. This link should connect along the western site boundary to Whites Road, to delineate the long term edge of urban Geelong in this location.
- Following the preparation of the abovementioned plans and agreement, a planning scheme amendment should be initiated to rezone the land to give statutory effect to the structure plan's infrastructure funding agreements.
- If there is any doubt about being able to successfully realise the above outcomes then Whites and Williams Road should remain as the long-term settlement boundary in this location.

## 2.0 - Armstrong Creek South Central

### 2.1 Land north of Lower Duneed Road

The current location and form of the Armstrong Creek Central settlement boundary is not particularly logical or enduring, and it requires modification.

An alternative long term settlement boundary can be established for Armstrong Creek Central that is logical and enduring, preserves the desired landscape and 'urban edge' character along Lower Duneed Road, whilst allowing for the orderly urban development of some additional land within the boundary.

The key features of this alternative settlement boundary concept include the following:

- The settlement boundary would be established along a new linear open space corridor running along the southern edge of the Armstrong Creek Growth Area.
- Rural living development would be permitted on the land area between the new settlement boundary and Lower Duneed Road. Lot sizes would transition from larger to smaller rural living allotments and requirements relating to landscape character, access, servicing, etc., would be guided by development plans and infrastructure funding agreements.
- Urban development to the north of the settlement boundary would be guided by development, infrastructure and services.

The alternative settlement boundary location conceptually illustrated in Figure 30 of this report accommodates all of the above features.

The following recommendations are made in relation to the abovementioned elements of the alternative settlement boundary concept:

#### A. Location of the revised settlement boundary:

It is recommended that the revised settlement boundary should be set in a location which accommodates the following configuration of land uses:

- Larger (1.5-3ha) rural living lots on the land north of Lower Duneed Road and on the corners of the Surf Coast Highway and Barwon Heads Road.
- Smaller (0.2-0.4ha) rural living lots between the abovementioned larger lots and the linear open space corridor along the alignment of the settlement boundary, to provide a transition in density towards the settlement boundary.
- Internal roads to provide access from the rural living lots via Horseshoe Bend and Charlemont Roads.

#### B. Physical form of the boundary:

The interface between urban development within the settlement boundary and rural living allotments outside of it should be clearly delineated in both functional and landscaping

terms. This delineation could comprise a combination of walking/cycling trails, open space, drainage reserves, etc., with urban residential housing facing these features across a road reserve located within the settlement boundary.

It is recommended that any future rezoning of land within the revised settlement boundary include provision for the creation, embellishment and transfer of a linear open space reserve along the alignment of the boundary. The physical form and character of this linear open space reserve should be resolved as part of the development and infrastructure planning that forms the basis of the land rezoning.

#### C. Rural living allotments and landscape character:

The preservation of an urban break and respectful landscape interface at the southern edge of the Armstrong Creek Growth Area will be best achieved by establishing rural living allotments along Lower Duneed Road.

It is recommended that:

- The land between Lower Duneed Road and the revised settlement boundary be rezoned to the Rural Living Zone.
- Minimum lot sizes be applied via schedules to the UGZ for land along Lower Duneed Road (min 1.5ha) and the balance of the land (min 0.2ha).
- A Development Plan Overlay be applied to the land between Lower Duneed Road and the revised settlement boundary at the time of rezoning to establish subdivision design, infrastructure, building siting and landscape.

#### D. Orderly development and infrastructure delivery:

It is recommended that:

- Structure plans, infrastructure plans and infrastructure funding agreements be prepared for the future residential development of land between the revised settlement boundary and existing UGZ.
- Following the preparation of the

abovementioned plans and agreements, a planning scheme amendment should be initiated to rezone the land between the revised settlement boundary and existing UGZ and to give statutory effect to the structure plans infrastructure funding agreements.

## **2.2 Land east of Barwon Heads Road**

It is recommended that there be no change to the settlement boundary in this location.

## **3.0 - Sparrovale**

### **3.1 Northern area**

It is recommended that 145 Harriots Road be included within the settlement boundary (subject to confirmation of the Flood Overlay and LSIO via Amendment C133).

### **3.2 Southern area**

It is recommended that there be no change to the settlement boundary in this location.

## **4.0 - Moolap**

### **4.1 Northern area**

It is recommended that the settlement boundary be moved to Coppards Road but that the land within it should remain within the existing Low Density Residential Zone unless any proposal to rezone the land can demonstrate with a high degree of confidence that the necessary infrastructure and development issues can be delivered in a cost-effective and orderly manner.

### **4.2 Southern area**

It is recommended that there be no change to the settlement boundary in this location.

## **5.0 - Warn Ponds North**

It is recommended that there be no change to the settlement boundary in this location.

### **6.0 - Waurnd Pond South**

It is recommended that there be no change to the settlement boundary in this location.

### **7.0 - Lara North**

It is recommended that there be no change to the settlement boundary in this location,

### **8.0 - Lara South**

It is recommended that there be no change to the settlement boundary in this location.

### **9.0 - Avalon**

It is recommended that this investigation area should not be included within the Geelong Settlement Boundary.

# Appendix 1

## Assessment of investigation areas against Principle 5 of the Settlement Boundary Review – Results

# 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><b>1.1</b> 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><b>Clause 11.1-1S Settlement</b></p> <p><i>Strategy:</i></p> <p>Create and reinforce settlement boundaries.</p> <p><b>Clause 11.01-1R – Settlement:</b></p> <p><i>Strategies:</i></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><b>Clause 21.06-2 Spatial Distribution of Growth</b></p> <p><i>Objectives:</i></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><i>Strategies:</i></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><b>2.1</b> Impact on the orderly development of the adjoining urban area</p>	<p><b>Clause 19.03-2S Infrastructure design and provision</b></p> <p><i>Objective:</i></p> <p>To provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p><i>Strategies:</i></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><b>2.2</b> Impact on management of the sequence of development and the early provision of services</p>	<p><b>Clause 11.2-3S Sequencing of development:</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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><b>2.3</b> Impacts of any proposed boundary changes on the economic provision of other development fronts</p>	<p><b>Clause 11.02-3S Sequencing of development</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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><b>3.1</b> Impact on any identified unique features or special characteristics within a declared area</p>	<p><b>Clause 11.03-5S Distinctive Areas and Landscapes:</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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><b>4.1</b> Impact on the protection of biodiversity values</p>	<p><b>Clause 12.01-1S Protection of biodiversity:</b></p> <p><i>Objective:</i></p> <p>To assist the protection and conservation of Victoria's biodiversity.</p> <p><i>Strategies:</i></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><b>4.2</b> Impact on the protection of coastal areas &amp; wetlands</p>	<p><b>Clause 12.02-1S Protection of the marine and coastal environment:</b></p> <p><i>Objective:</i></p> <p>To protect and enhance the marine and coastal environment.</p> <p><i>Strategies:</i></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:
<p><b>4.2</b> Impact on the protection of coastal areas &amp; wetlands</p>	<p><b>12.03-1S River corridors, waterways, lakes and wetlands</b></p> <p><i>Objective:</i></p> <p>To protect and enhance river corridors, waterways, lakes and wetlands.</p> <p><i>Strategies:</i></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>
<p><b>4.3</b> Impact on the protection of significant landscapes</p>	<p><b>Clause 12.05-2S Landscapes</b></p> <p><i>Objective:</i></p> <p>To protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.</p> <p><i>Strategies:</i></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><b>4.4</b> Impact on the preservation of identified urban breaks</p>	<p><b>Clause 11.01-1R Settlement – G21</b></p> <p><i>Strategies:</i></p> <ul style="list-style-type: none"> <li>Maintain a significant settlement break between the region and Melbourne.</li> <li>Provide for settlement breaks between towns to maintain their unique identities.</li> <li>Require a settlement boundary for all towns.</li> <li>Protect critical agricultural land by directing growth to towns.</li> </ul> <p><b>Clause 21.06-2 Spatial distribution of growth:</b></p> <p><i>Strategies:</i></p> <ul style="list-style-type: none"> <li>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.</li> </ul>

**5.0 Environmental Risk Criteria:**

Criteria: Geelong Planning Scheme:	
<p><b>5.1</b> Climate change – impacts of coastal inundation &amp; erosion</p>	<p><b>Clause 13.01-1S - Natural hazards and climate change:</b></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><b>Clause 13.01-2S - Coastal inundation and erosion:</b></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:	
<p><b>5.2</b> Bushfire risks in the location</p>	<p><b>Clause 13.02-1S Bushfire planning:</b></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:	
<p><b>5.2</b> Bushfire risks in the location</p>	<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><b>5.3 Impacts on/of floodplains;</b></p>	<p><b>Clause 13.03-1s Floodplain management</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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:	
<p><b>5.4</b> Impacts on/of contamination land;</p>	<p><b>Clause 13.04-1S Contaminated and potentially contaminated land</b></p> <p><i>Objective:</i></p> <p>To ensure that contaminated and potentially contaminated land is used and developed safely.</p> <p><i>Strategies:</i></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>
<p><b>5.5</b> Impacts on/of erosion &amp; landslip;</p>	<p><b>Clause 13.03-2S Erosion and landslip</b></p> <p><i>Objective:</i></p> <p>To protect areas prone to erosion, landslip or other land degradation processes.</p> <p><i>Strategies:</i></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>
<p><b>5.6</b> Impacts on/of salinity, acid sulfate soils;</p>	<p><b>Clause 13.03-3S Salinity</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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><b>5.7</b> Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.</p>	<p><b>Clause 13.07-1S - Land use compatibility</b></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><b>5.8</b> Impacts on/ of major hazard facilities;</p>	<p><b>Clause 13.07-2S Major hazard facilities</b></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:
<p><b>6.1</b> Impact on the protection of agricultural land</p>	<p><b>Clause 14.01-1S Protection of agricultural land:</b></p> <p><i>Objective:</i></p> <p>To protect the state’s agricultural base by preserving productive farmland.</p> <p><i>Strategies:</i></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><b>6.2</b> Impact on the protection of agricultural land</p>	<p><b>Clause 1.01-11R Settlement G21:</b></p> <p><i>Strategy:</i></p> <p>Protect critical agricultural land by directing growth to towns.</p> <p><b>Clause 14.01-2R Agricultural productivity - Geelong G21</b></p> <p><i>Strategy:</i></p> <p>Support new opportunities in farming and fisheries.</p>
<p><b>6.3</b> Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources</p>	<p><b>Clause 14.02-1S Catchment planning and management:</b></p> <p><i>Objective:</i></p> <p>To assist the protection and restoration of catchments, waterways, estuaries, bays, water bodies, groundwater, and the marine environment.</p> <p><i>Strategies:</i></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><b>6.4</b> Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources</p>	<p><b>Clause 14.02-2S Water quality:</b></p> <p><i>Objective:</i> To protect water quality.</p> <p><i>Strategies:</i></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:**

<b>Criteria:</b>	<b>Geelong Planning Scheme:</b>
<p><b>7.1</b> Impact on known Aboriginal cultural heritage values</p>	<p><b>Clause 15.03-2S Aboriginal cultural heritage:</b></p> <p><i>Objective:</i></p> <p>To ensure the protection and conservation of places of Aboriginal cultural heritage significance.</p> <p><i>Strategies:</i></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><b>7.2</b> Impact on known post contact heritage values</p>	<p><b>Clause 15.03-1S Heritage conservation:</b></p> <p><i>Objective:</i></p> <p>To ensure the conservation of places of heritage significance.</p> <p><i>Strategies:</i></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><b>8.1</b> Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access</p>	<p><b>Clause 18.01-1S Land use and transport integration:</b></p> <p><u>Objective:</u> 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><b>8.1</b> Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access</p>	<p><b>Clause 18.01-2S Transport system:</b></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><b>9.1</b> Ability to cost-effectively provide urban services including both utility, community services and drainage</p>	<p><b>Clause 19.03-2S Infrastructure design and provision:</b></p> <p><i>Objective:</i></p> <p>To provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p><i>Strategies:</i></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><b>19.02-4S Social and cultural infrastructure</b></p> <p><i>Objective:</i></p> <p>To provide fairer distribution of and access to, social and cultural infrastructure.</p> <p><i>Strategies:</i></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><b>9.1</b> Ability to cost-effectively provide urban services including both utility, community services and drainage</p>	<p><b>Clause 19.02-6S Open space:</b></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><b>9.1</b> 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>

# Appendix 3

# Mt Duneed Road Urban Design Analysis

# **Appendix 4**

## **Assessment of investigation areas against Principle 5 of the Settlement Boundary Review – Armstrong Creek Update**

# Appendix 5

# List of Submitters



t 03 9862 3470  
e info@echelonplanning.com.au  
w echelonplanning.com.au

a 3 Prentice Street  
Brunswick VIC 3056  
ABN 48 156 350 668

## Report Addendum – Long Term Settlement Boundary Review

**To:** Jani Chalmers – Strategic Planner, City of Greater Geelong

**From:** Mark Woodland – Director, Echelon Planning

**Date:** 5<sup>th</sup> June 2024

Dear Jani,

**Re: Report Addendum – Long Term Settlement Boundary Review (Armstrong Creek South-West Area).**

Echelon Planning was engaged to undertake the Long Term Settlement Boundary Review for Urban Geelong on behalf of City of Greater Geelong in 2021. The purpose of the review was to review the existing settlement boundary against policy-based criteria and to recommend a long term settlement boundary via future amendment(s) to the Greater Geelong Planning Scheme.

The review report (Consultation Draft, March 2022) made the following observations about the potential location of the long-term settlement boundary in proximity of the Mt Duneed Hilltop and ridgeline:

*“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 abovementioned report identified that the existing settlement boundary in Armstrong Creek South West generally remained a logical and enduring location for a long term settlement boundary, but that further technical investigation of the potential landscape implications of including all or part of Purdies Paddock and the northern part of 10-40 Williams Road should be undertaken.

Echelon Planning was subsequently engaged to undertake an assessment of submission made to the Consultation Draft report. This assessment was contained in the





Settlement Boundary Final Background Report dated June 2023. This report made the following recommendations in relation to each of the abovementioned sites:

**“Purdies Paddock:**

*It is recommended that:*

- *Purdies Paddock be included within the Geelong Settlement Boundary, subject to confirmation that developing this land for housing will have an acceptable visual impact on views to Mt Duneed when viewed from the east, along Lower Duneed Road.*
- *A structure plan, infrastructure plan and infrastructure funding agreement be prepared for the future residential development of the land.*
- *Following the preparation of the abovementioned plans and agreement, a planning scheme amendment should be initiated to rezone of the land to give statutory effect to the structure plans infrastructure funding agreements.”*

**“10-40 Williams Road:**

*It is recommended that:*

- *The northern lot of 10-40 Williams Road be considered for inclusion within the Geelong Settlement Boundary, subject to confirming that development of this land for housing will have an acceptable visual impact on views to Mt Duneed when viewed from the north and east (ie locations such as the Armstrong Creek Waterway, Town Centre and the northern edges of the growth area at Waurn Ponds train station).*
- *The southern part of 10-40 Williams Road be considered for rezoning to the Rural Living Zone.*
- *A structure plan, infrastructure plan and infrastructure funding agreement be prepared for future residential development on the northern lot. This plan (together with any development plan for the southern part of the site that is identified for rural living purposes) should make provision for the creation of a wide linear open space corridor in the vicinity of the 65AHD contour. This link should connect along the western site boundary to Whites Road, to delineate the long-term edge of urban Geelong in this location.*
- *Following the preparation of the abovementioned plans and agreement, a planning scheme amendment should be initiated to rezone the land to give statutory effect to the structure plan's infrastructure funding agreements.*
- *If there is any doubt about being able to successfully realise the above outcomes then Whites and Williams Road should remain as the long-term settlement boundary in this location.”*

In response to the above recommendation, the City of Greater Geelong (Council) engaged Pointilism Pty Ltd to prepare a visual analysis of the abovementioned sites from key view points towards the two sites (refer Attachment 1). The purpose of this analysis was to assess the potential visual impact that urban development on these two sites would have on the view lines to Mt Duneed from various points within and adjacent to the Armstrong Creek Growth Area.



Echelon Planning oversaw that preparation of this visual analysis on behalf of Council, and we have considered the visual analysis results in determining whether or not it would be appropriate to include all or part of either of the abovementioned properties within Geelong's long-term settlement boundary.

This memo outlines the method used to undertake the visual analysis, and it provides a commentary on the degree of impact that urban development on either of the abovementioned properties would have on the original policy objective for Armstrong Creek growth are to maintain the green skyline viewed from within the growth area and from land to its north.

### **1.0 Methodology:**

Step 1 - Echelon and Council identified five (5) viewpoints that from which the potential visual impact of development on either of the two sites was assessed (refer figure 1). The rationale for selecting each site was as follows:

**View 1** – Lower Duneed Road looking west towards Mt Duneed (a long-range view of the landscape feature from the western approach to Surf Coast Highway).

**View 2** – Whites Road east of school/recreation reserve site (a shorter-range view of the landscape feature from the closest east-west road within the emerging residential area).

**View 3** – Cnr Lagoon St & Bancoora Way (a longer-range view of the landscape feature from public space within the Armstrong Creek town centre).

**View 4** – Sovereign Drive, at crossing of Armstrong Creek (a shorter--range view of the landscape feature from public space along Armstrong Creek).

**View 5** – Pedestrian pathway at Waurm Ponds Station (a longer-range view of the landscape feature across the Armstrong Creek valley from public space at the northern edge of the Armstrong Creek growth area)



Figure 1: Agreed visual analysis view points

Step 2 - Echelon provided the relevant subdivision plans and Precinct Structure Plan information for land around the subject sites to pointillism to use as a 2-dimensional base-plan for undeveloped areas within the Armstrong Creek Growth Areas (refer figures 2 & 3).

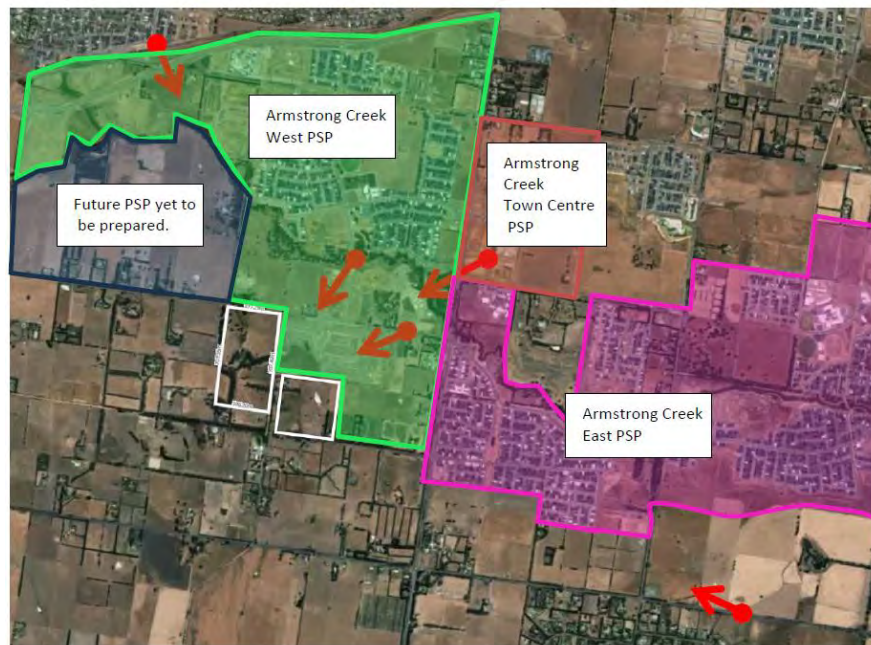


Figure 2: Surrounding development context – Precinct Structure Plans





**Figure 3:** Surrounding development context – Approved permit areas relevant to view lines.

Step 3 - Echelon Planning reviewed the relevant Precinct Structure Plans and permit plans Echelon and provided Pointilism with advice on the development assumptions to be applied by Pointilism in its modelling of to the development sites for the visual analysis. This memo included assumptions around layout, building heights, setbacks, street landscaping etc. (refer Attachment 2 for details).

Step 4 - A photographer and a surveyor from Beveridge Williams went out on site to take the high definition photos and collect relevant survey data from the various viewpoints.

Step 5 - A land surveyor (Beveridge Williams) inspected the site to mark the proposed viewing location on ground, and to collect relevant survey data for each viewpoint (so that the visual analysis could be accurately georeferenced).

Step 6 - A photographer took high definition photos from each of the nominated viewpoints.

Step 7 -With all of the above information Pointilism prepared the visual photomontages for each of the 5 viewpoints. Pointilism have prepared three images per view location as follows:

- **Image 1** – Existing conditions





- **Image 2** – Existing conditions including montage to show urban development on those areas with approved permits that are yet to be built (ie adopting the building assumptions from PSP and permits described above).<sup>1</sup>
- **Image 3** - Photomontage showing the information from Photo 2 plus development on each of the subject sites (development relating to permits on land within the existing settlement boundary are shown in red to distinguish them from the parts of the montage showing development on the subject sites).

Step 8 - Echelon reviewed each of the visual photomontages and prepared a commentary on the degree of impact that urban development on either of the abovementioned properties would have on the original policy objective for Armstrong Creek growth are to maintain the green skyline viewed from within the growth area and from land to its north (see below).

**2.0 Impact of further urban development on landscape character of Mt Duneed.**

Echelon Planning has reviewed the photo montages provided by Pointilism and provide the following commentary on the degree of impact that urban development on either of the abovementioned properties would have on the original policy objective for Armstrong Creek growth are to maintain the green skyline viewed from within the growth area and from *land to its north*.

*(note green shading represents neutral impact, orange shading represents minor negative impact & red shading represents clear negative impact)*

10-40 Williams Road Assessment	Purdies Paddock Assessment
<b>View 1 – Lower Duneed Road.</b>	
Visual analysis demonstrates that existing development already approved on the adjoining land will obscure any view of future urban development on this site from this location.  Therefore development of this site would not have additional adverse impact on the views to Mt Duneed from this location.	Visual analysis demonstrates that: <ul style="list-style-type: none"> <li>• The existing development already approved on the adjoining land has an adverse impact on the views to Mt Duneed from this location.</li> <li>• It is likely that development of this site would have a further (but modest) adverse impact on the views to Mt Duneed from this location.</li> </ul>
<b>View 2 - Whites Road east of school/recreation reserve site.</b>	

<sup>1</sup> Note that location 3 contains a montage which shows the school and recreation sites in their undeveloped state and a separate montage which shows school buildings based on a typical school site layout (based on nearby comparable examples)





<p>Visual analysis demonstrates that:</p> <ul style="list-style-type: none"> <li>• The existing development already approved on the adjoining land has an adverse impact on the views to Mt Duneed from this location.</li> <li>• It is likely that development of this site would have a further (but modest) adverse impact on the views to Mt Duneed from this location.</li> <li>• However, it is likely that the construction of school buildings on the designated school site would obscure views to Mt Duneed from this location and therefore development of this site would not have additional adverse impact on the views to Mt Duneed from this location.</li> </ul>	<p>Visual analysis demonstrates that:</p> <ul style="list-style-type: none"> <li>• The existing development already approved on the adjoining land has an adverse impact on the views to Mt Duneed from this location.</li> <li>• It is likely that development of this site would have a further (but modest) adverse impact on the views to Mt Duneed from this location.</li> <li>• However, it is likely that the construction of school buildings on the designated school site would obscure views to Mt Duneed from this location and therefore development of this site would not have additional adverse impact on the views to Mt Duneed from this location.</li> </ul>
<p><b>View 3 – Cnr Lagoon St &amp; Bancoora Way.</b></p>	
<p>Visual analysis demonstrates that:</p> <ul style="list-style-type: none"> <li>• The existing development already approved on the adjoining land has an adverse (but modest) impact on the views to Mt Duneed from this location.</li> <li>• It is likely that development of this site would have a further (but very modest) adverse impact on the views to Mt Duneed from this location.</li> </ul>	<p>Visual analysis demonstrates that:</p> <ul style="list-style-type: none"> <li>• The existing development already approved on the adjoining land has an adverse (but modest) impact on the views to Mt Duneed from this location.</li> <li>• It is likely that development of this site would have a further (but very modest) adverse impact on the views to Mt Duneed from this location.</li> </ul>
<p><b>View 4 – Sovereign Drive, at crossing of Armstrong Creek.</b></p>	
<p>Visual analysis demonstrates that:</p>	<p>Visual analysis demonstrates that:</p>





<ul style="list-style-type: none"> <li>• The existing development and approved on the adjoining land has an adverse (but modest) impact on the views to Mt Duneed from this location.</li> <li>• It is likely that development of this site would have an imperceptible impact on the views to Mt Duneed from this location.</li> </ul>	<ul style="list-style-type: none"> <li>• The existing development and approved on the adjoining land has an adverse (but modest) impact on the views to Mt Duneed from this location.</li> <li>• It is likely that development of this site would have an imperceptible impact on the views to Mt Duneed from this location.</li> </ul>
<p><b>View 5 – Pedestrian pathway at Waurm Ponds Station.</b></p>	
<p>The view to Mt Duneed is already compromised by the existing and approved development on adjoining land. However, the visual analysis demonstrates that development on 10-40 Williams Road would have a substantial impact on the views to Mt Duneed from this location.</p>	<p>Visual analysis demonstrates that given the existing development already approved on the adjoining land, it is likely that development of this site would have an imperceptible impact on the views to Mt Duneed from this location.</p>

**3.0 Conclusions and Recommendations:**

**3.1 Purdies Paddock:**

1. The visual analysis confirms that urban development on Purdies Paddock would have a modest additional impact on the views towards Mt Duneed from along Lower Duneed Road, and limited (if any) impact on views towards Mt Duneed from the other assessed locations.
2. However, any future development on Purdies Paddock would benefit from the setting siting and design guidelines to ensure that streets and residential lots provide for the establishment of mature trees so as to soften the impact of development when viewed from the east.
3. Subject to the above, it is recommended that Purdies Paddock be included within Geelong Settlement Boundary.
4. This recommendation is also subject to the completion of the additional detailed planning tasks (particularly in relation to the provision of community infrastructure) outlined in our original assessment.





**3.2 10-40 Williams Road:**

5. The visual analysis confirms that urban development on 10-40 Williams Road would have:
  - A limited (if any) impact on views towards Mt Duneed from viewing locations such as Whites Road, the Armstrong Creek Town Centre and the Armstrong Creek waterway.
  - A significant impact on view towards Mt Duneed from viewing locations further north of the Armstrong Creek Growth Area (as evidenced by the visual analysis from the footpath adjacent to Waurin Ponds Station).
6. For this reason, it is recommended that 10-40 Williams Road not be included from the Geelong Settlement Boundary.

I trust that the above is of assistance, and please do not hesitate to contact me if you have any queries in relation to it.

Kind regards,

A handwritten signature in blue ink, appearing to read "M. Woodland", is written over a light blue circular stamp.

**Mark Woodland**  
Director



# POINTILISM.

## STATEMENT OF EVIDENCE

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Geelong Settlement Boundary Review  
Visual Analysis

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### PREPARED BY

Kim Stapleton B.ARCH B.DESIGN ST  
Director  
Pointilism Pty Ltd  
1/11 French Street  
Adelaide SA 5000

### Client

City of Greater Geelong  
PO BOX 104  
Geelong VIC 3220

### Urban Planning

Echelon Planning Pty Ltd  
3 Prentice Street  
Brunswick VIC 3056

### Land Surveyor

Beveridge Williams  
Level 1, 122 Yarra Street  
Geelong VIC 3220

### Photographer

Chris Ott Photography Pty Ltd  
67 Victoria Avenue  
Albert Park VIC 3206

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## INTRODUCTION

Written instruction to prepare the photomontages and associated documentation for the proposed development was received from Echelon Planning Pty Ltd. The photomontages were prepared on the basis of the 'Memo – Development Assumptions' document dated 12<sup>th</sup> February 2024.

The photomontages were composed by Kim Stapleton & Ben Watson of Pointilism, upon a base photograph provided by Chris Ott, Director of Chris Ott Photography. Instructions as to the preferred image locations were provided by Echelon Planning Pty Ltd.

Kim Stapleton has worked in the Architectural and 3D Visualisation industry for over 15 years, and has completed numerous photomontages for use with Town Planning and VCAT submissions.

I have no private or business relationship with the client, apart from being engaged to prepare this statement.

## 2.0 PROCESS

### 2.1 Methodology

- 2.1.1 The geometry for the 3D terrain was constructed by Pointilism Pty Ltd utilising up to date CAD and survey information. Indicative Housing Types and future development layouts were constructed by Pointilism Pty Ltd to reflect the direction provided in the 'Memo – Development Assumptions' document dated 12<sup>th</sup> February 2024.
- 2.1.2 Site survey data, utilised in both the CAD drawing package and the 3D model, was supplied by Beveridge Williams. All levels are located relevant to AHD. Site survey information was received on the 29<sup>th</sup> March 2024. Heights and positions of neighbouring context and other visible markers within the photography were also captured by Beveridge Williams to provide additional points to cross-reference between the 3D model and photography. Utilising specific surveyed key static photo points, and comprehensive discussions between the photographer, Pointilism, and Beveridge Williams ensured the cameras positions and heights were accurately captured. All survey data is received within a CAD file which is plotted three dimensionally within the 3d software (3D Studio Max 2018) using a real world set-up as outlined in 2.1.4 below.
- 2.1.3 The photography was produced using a digital Horseman Phase One Medium Format camera (P45 Back), utilising a 24mm wide-angle lens. Due to the camera specifications, this lens is approximately equivalent to an 18mm lens on a standard 35mm camera setup. This lens setup creates minimal barrel distortion on extreme close up subjects, however for the distances shown, there is no apparent barrel distortion. The lens setup was chosen in order to allow ample existing context to be viewable in each photograph. In each instance, the subject is located in the centre of the frame, as to avoid any potential lens distortion. The shots have not been altered or physically corrected in any way other than minimal exposure & colour correction for optimal viewing, utilising Capture One software. All shots were taken at a level of 1600mm to simulate standard eye-height. A tripod was used for all shots. In each case, certain constraints within the existing built environment may have determined these locations, including vegetation, car parking and roadways. See section 2.3 below for further camera and photography information.

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2.1.4 The compliant geometry was then prepared for the photomontages inside 3D Studio Max Version 2018, utilising the VRAY rendering engine. The VRAY engine utilises a physical camera which accurately replicates the parameters of real-world cameras. The positions of these cameras were accurately located inside the 3D scene using the CAD and survey documentation. Several virtual markers were created employing the key points located in the survey information, which relates to visible markers within the photography. These targets were then aligned upon the under-laid photograph to match precisely. The settings from the camera lens were then replicated accurately within the parameters of the 3D Studio Max camera to obtain a precise 3D representation of the real world photography positioning. Solar conditions were matched according to the timing and location details embedded in the digital photo file, providing an accurate representation of the 3D form.

## 2.2 Software

The following software products were used to produce the photomontage images.

- 2.2.1 3D Studio Max Version 2018  
Used to render the base scene with materials and finishes as outlined within the 'Memo – Development Assumptions' document, using the VRAY Renderer.
- 2.2.2 Capture One Pro 21  
Used to apply minimal exposure and colour correction to the base photography for optimal viewing.
- 2.2.3 Adobe Photoshop CC 2024  
Used to compose the final montage by placing the rendered scene accurately into the base photograph.

## 2.3 Camera

The Camera used to take the base photograph for the montage was a digital Horseman Phase One Medium Format camera (P45 Back). All the relevant information regarding the camera settings, image settings and time of day are located below;

	Photomontage V1	Photomontage V2	Photomontage V3
<i>Survey Location</i>	<b>S1</b>	<b>S2</b>	<b>S3</b>
<i>Date taken</i>	24 <sup>th</sup> January 2024	24 <sup>th</sup> January 2024	24 <sup>th</sup> January 2024
<i>Time taken</i>	10:47 am AEDT	11:26 am AEDT	11:44 am AEDT
<i>Camera orientation</i>	Horizontal	Horizontal	Horizontal
<i>Height above ground</i>	1600mm	1600mm	1600mm
<i>ISO speed</i>	ISO-50	ISO-50	ISO-50
<i>Flash mode</i>	No flash	No flash	No flash
<i>Exposure program</i>	Manual	Manual	Manual
<i>Day type</i>	Clear	Clear	Clear
<i>Image width</i>	7087 Pixels	7087 Pixels	7087 Pixels
<i>Image height</i>	5315 Pixels	5315 Pixels	5315 Pixels
<i>Image resolution</i>	300 DPI	300 DPI	300 DPI
<i>Colour representation</i>	Un-calibrated	Un-calibrated	Un-calibrated
<i>Bit Depth</i>	24 bit	24 bit	24 bit

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	Photomontage V4	Photomontage V5
<i>Survey Location</i>	<b>S4</b>	<b>S5</b>
<i>Date taken</i>	24 <sup>th</sup> January 2024	24 <sup>th</sup> January 2024
<i>Time taken</i>	12:00 pm AEDT	12:28 pm AEDT
<i>Camera orientation</i>	Horizontal	Horizontal
<i>Height above ground</i>	1600mm	1600mm
<i>ISO speed</i>	ISO-50	ISO-50
<i>Flash mode</i>	No flash	No flash
<i>Exposure program</i>	Manual	Manual
<i>Day type</i>	Clear	Clear
<i>Image width</i>	7087 Pixels	7087 Pixels
<i>Image height</i>	5315 Pixels	5315 Pixels
<i>Image resolution</i>	300 DPI	300 DPI
<i>Colour representation</i>	Un-calibrated	Un-calibrated
<i>Bit Depth</i>	24 bit	24 bit

## 2.4 Reconstructions and neighbouring sites

2.4.1 Certain elements in the photomontages at times require reconstructions to fill gaps in the image left by the exclusion of existing conditions.

- 3.9 – Removal of existing crossover & inclusion of indicative Primary School & open reserve

## 2.5 Assumptions

It is assumed that all supplied drawings, and survey documents are correct and accurate. The relevant drawings used as verification by Pointilism Pty Ltd are tabled below.

- ‘Memo – Development Assumptions.pdf’ prepared Echelon Planning dated 12<sup>th</sup> February 2024 March 2024
- ‘2400155 Photo Survey.dwg’ Survey Plan prepared by Beveridge Williams received 29.03.2024

## 3.0 RELATED DRAWINGS AND IMAGES

Below is a listing of the images and files relating to this document.

### 3.1 Photography Report

Report detailing equipment used and relevant photograph information.

### 3.2 Survey Photography Locations

A PDF CAD plan outlining the location and extents of the viewing angle as utilised in the photomontages.

### 3.3 Existing Conditions V1

The existing base photograph for Photomontage V1 from position S1.

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- 3.4 *Existing Conditions V1 with Planning Permits*  
The existing base photograph for Photomontage **V1** from position **S1** with unbuilt Planning Permit areas included.
- 3.5 *Photomontage V1*  
A photomontage from position **S1** based on the identical lens type as the Existing Conditions **V1**, displaying all Planning Permit Areas & proposed zones to 10-40, 55 & 75 Williams Road. Unbuilt Planning Permit areas shown in red.
- 3.6 *Existing Conditions V2*  
The existing base photograph for Photomontage **V2** from position **S2**.
- 3.7 *Existing Conditions V2 with Planning Permits*  
The existing base photograph for Photomontage **V2** from position **S2** with unbuilt Planning Permit areas included.
- 3.8 *Photomontage V2*  
A photomontage from position **S2** based on the identical lens type as the Existing Conditions **V2**, displaying all Planning Permit Areas & proposed zones to 10-40, 55 & 75 Williams Road. Unbuilt Planning Permit areas shown in red.
- 3.9 *Photomontage V2 with inclusion of open reserve, Primary School & Community Facility*  
A photomontage from position **S2** based on the identical lens type as the Existing Conditions **V2**, displaying all Planning Permit Areas & proposed zones to 10-40, 55 & 75 Williams Road. Includes open reserve, Primary School & Community Facility to reflect direction from 'Memo – Development Assumptions'.
- 3.10 *Existing Conditions V3*  
The existing base photograph for Photomontage **V3** from position **S3**.
- 3.11 *Existing Conditions V3 with Planning Permits*  
The existing base photograph for Photomontage **V3** from position **S3** with unbuilt Planning Permit areas included.
- 3.12 *Photomontage V3*  
A photomontage from position **S3** based on the identical lens type as the Existing Conditions **V3**, displaying all Planning Permit Areas & proposed zones to 10-40, 55 & 75 Williams Road. Unbuilt Planning Permit areas shown in red.
- 3.13 *Existing Conditions V4*  
The existing base photograph for Photomontage **V4** from position **S4**.
- 3.14 *Existing Conditions V4 with Planning Permits*  
The existing base photograph for Photomontage **V4** from position **S4** with unbuilt Planning Permit areas included.
- 3.15 *Photomontage V4*  
A photomontage from position **S4** based on the identical lens type as the Existing Conditions **V4** displaying all Planning Permit Areas & proposed zones to 10-40, 55 & 75 Williams Road. Unbuilt Planning Permit areas shown in red.

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- 3.16 *Existing Conditions V5*  
The existing base photograph for Photomontage **V5** from position **S5**.
- 3.17 *Existing Conditions V5 with Planning Permits*  
The existing base photograph for Photomontage **V5** from position **S5** with unbuilt Planning Permit areas included.
- 3.18 *Photomontage V5*  
A photomontage from position **S5** based on the identical lens type as the Existing Conditions **V5** displaying all Planning Permit Areas & proposed zones to 10-40, 55 & 75 Williams Road. Unbuilt Planning Permit areas shown in red.

## 4.0 PROJECT TEAM

**Kim Stapleton**  
 DOB 9<sup>th</sup> February 1979  
 Director of Pointilism Pty Ltd  
 16 years active with Pointilism Pty Ltd

### QUALIFICATIONS

2007-Present  
*Director – Pointilism Pty Ltd*  
 2002-2007  
*Jackson Clements Burrows Pty Ltd*  
 2001  
*BAU - Brearley Architecture & Urbanists*  
 2000-2001  
*Bachelor of Architecture (New) at the University of Adelaide, South Australia*  
 1997-1999  
*Bachelor of Design Studies at the University of Adelaide, South Australia*

This document was prepared on the 30<sup>th</sup> May 2024 by Kim Stapleton, Director of Pointilism Pty Ltd.

I have made all enquiries that I believe are desirable and appropriate and that no matters of significance, which I regard as relevant, have to my knowledge, been withheld.



Kim Stapleton



## 3.1 Photography Report

Att - Kim Stapleton

pointilism

1/11 French Street, Adelaide SA 5000

30th May 2024

### Description

---

To photograph 55 Williams Rd, Mount Duneed ( as per brief ) for VCAT renders. All images shot on Horseman medium format digital camera with a phase one p45 digital back using a 24mm lens.

Photography Locations



### Chris Ott / Photography

19 Boyd Street, Albert Park, VIC 3206  
Tel +61 412 324 311 / info@chrisott.com.au  
chrisott.com.au



## 3.1 Photography Report

Att - Kim Stapleton

pointilism

1/11 French Street, Adelaide SA 5000

30th May 2024

### Description

---

To photograph 55 Williams Rd, Mount Duneed site ( as per brief ) for VCAT renders. All images shot on Horseman medium format digital camera with a phase one p45 digital back using a 24mm lens.

Camera height @ 1600mm from ground level, camera leveled and no rise.



S1 - 10.47 am  
24th January 2024



S2 - 11.26 am  
24th January 2024



S3 - 11.44 am  
24th January 2024



S4 - 12.00 pm  
24th January 2024



S5 - 12.28 pm  
24th January 2024

### Chris Ott / Photography

19 Boyd Street, Albert Park, VIC 3206

Tel +61 412 324 311 / [info@chrisott.com.au](mailto:info@chrisott.com.au)

[chrisott.com.au](http://chrisott.com.au)

3.2 Survey Photography Locations





3-3 Existing Conditions V1  
10:47am 24th January 2024 - 18mm focal length  
View from Lower Duneed Road looking West

POINTLISH.



3.4 Existing Conditions V1 with Planning Permits  
10:47am 24th January 2024 - 18mm focal length  
View from Lower Duneed Road looking West

POINTLISH



3.5 Photomontage V1

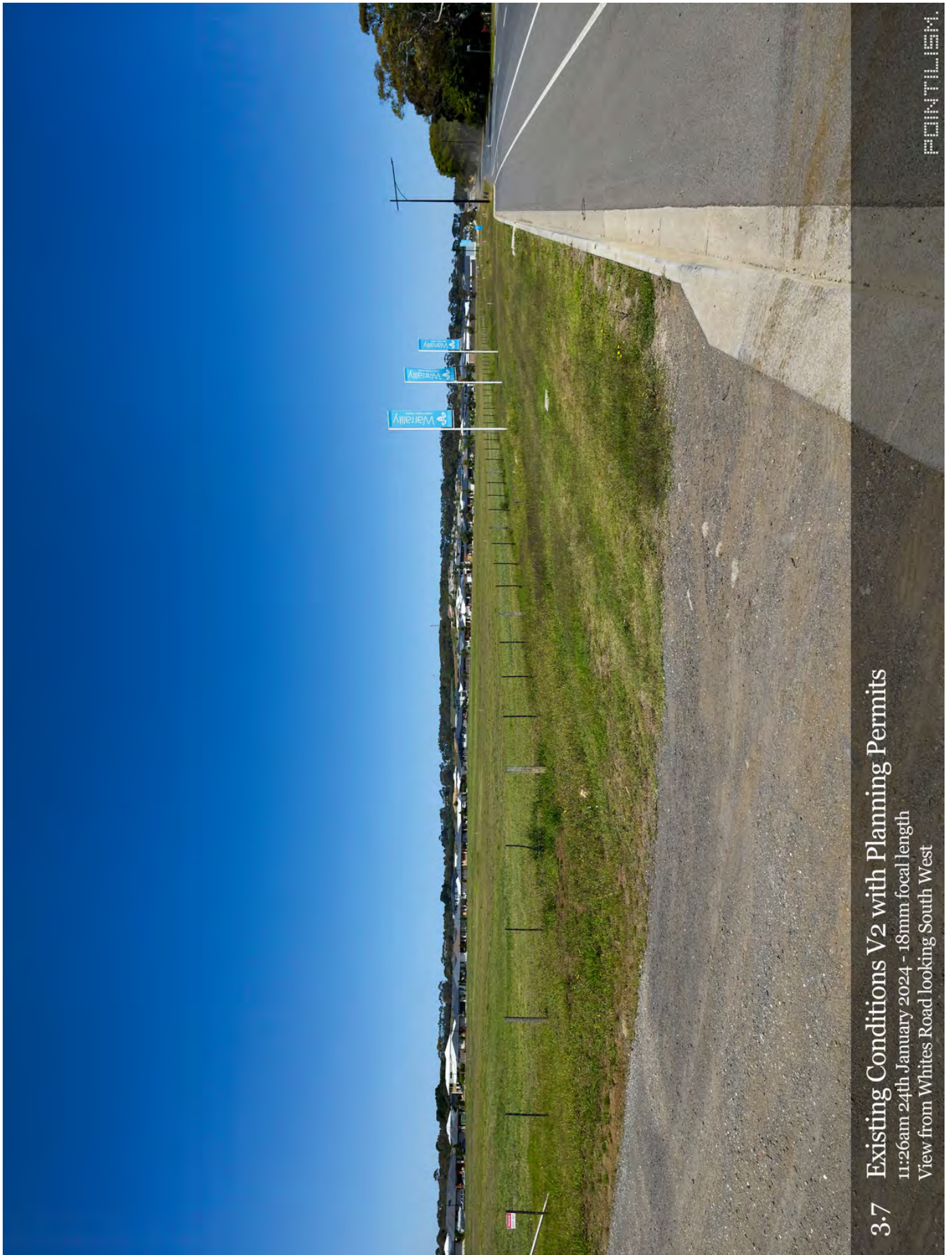
10:47am 24th January 2024 - 18mm focal length  
View from Lower Duneed Road looking West

POINTLISH.



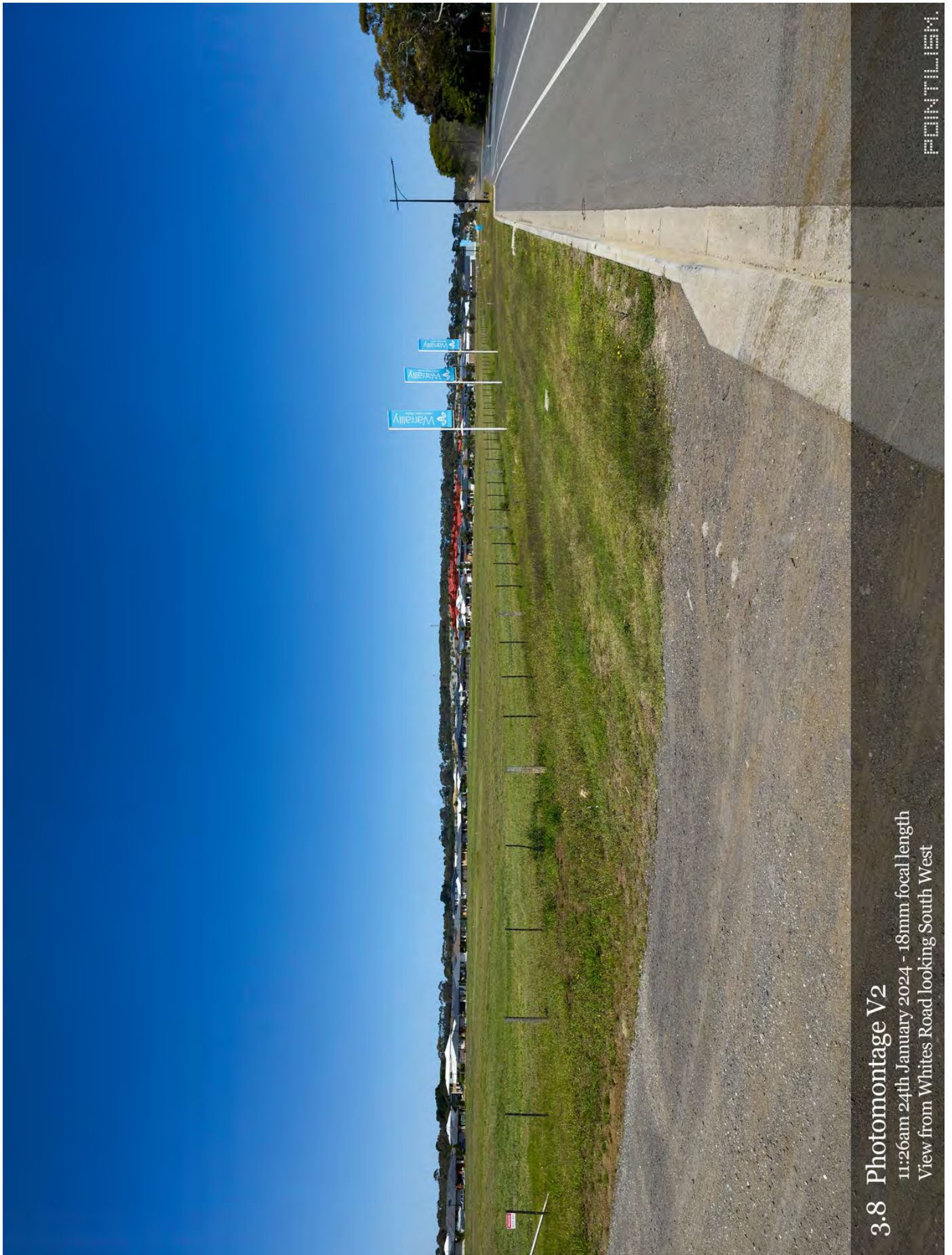
3.6 Existing Conditions V2  
11:26am 24th January 2024 - 18mm focal length  
View from Whites Road looking South West

FOUNTAIN



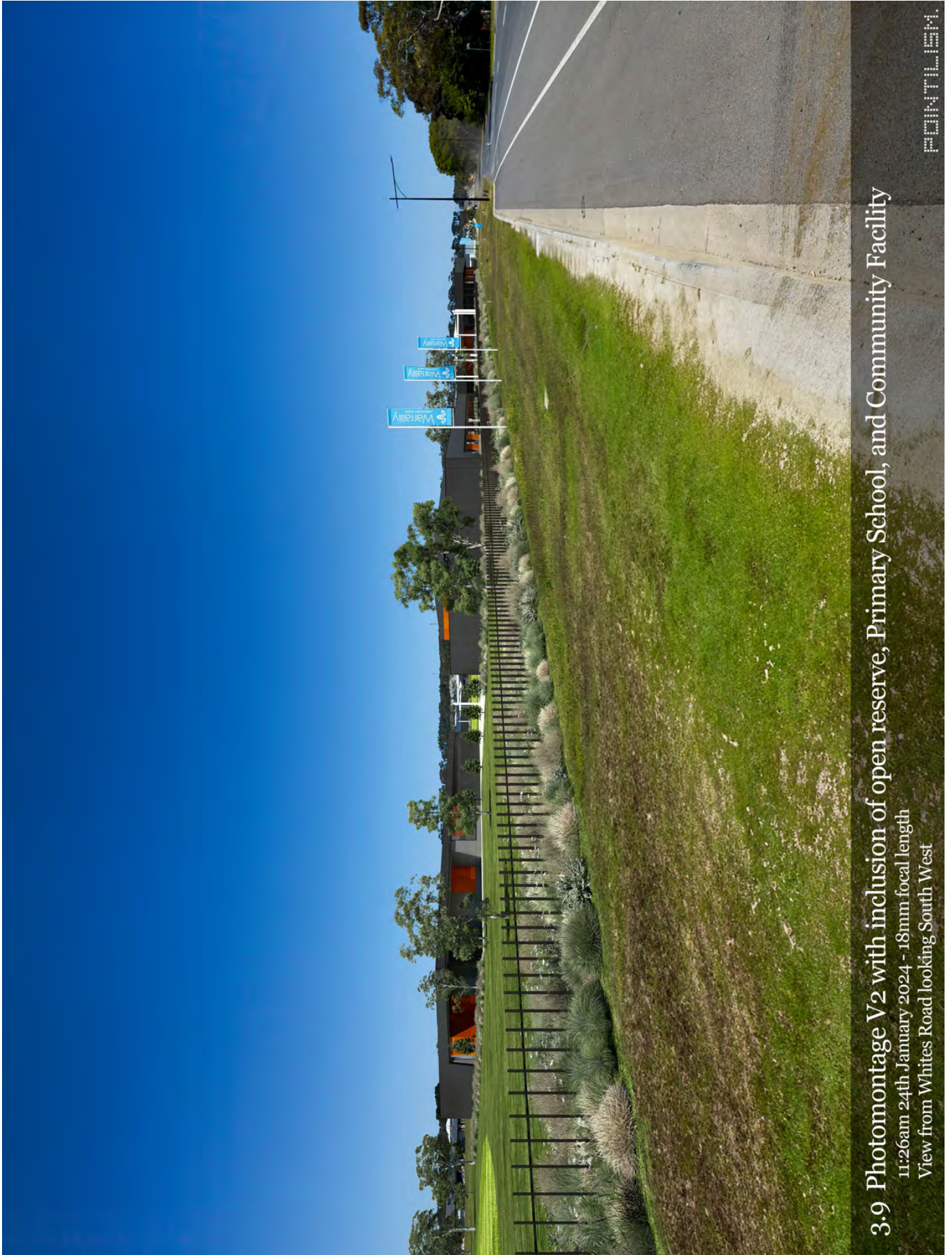
3.7 Existing Conditions V2 with Planning Permits  
11:26am 24th January 2024 - 18mm focal length  
View from Whites Road looking South West

FOUNTAIN



3.8 Photomontage V2  
11:26am 24th January 2024 - 18mm focal length  
View from Whites Road looking South West

PHOTOMONTAGE



3.9 Photomontage V2 with inclusion of open reserve, Primary School, and Community Facility

11:26am 24th January 2024 - 18mm focal length

View from Whites Road looking South West

FORNULLEN





3.11 Existing Conditions V3 with Planning Permits

11:44am 24th January 2024 - 18mm focal length

View from corner of Lagoon Street and Bancora Way looking South West

P01N1115M



3.12 Photomontage V3

11:44am 24th January 2024 - 18mm focal length

View from corner of Lagoon Street and Bancora Way looking South West

FOUNTAIN



3.13 Existing Conditions V4  
11:59 am 24th January 2024 - 18mm focal length  
View from Sovereign Drive looking South

FOUNDA



3.14 Existing Conditions V4 with Planning Permits

11:59 am 24th January 2024 - 18mm focal length

View from Sovereign Drive looking South

POINTLIGN



3.15 Photomontage V4  
11:59 am 24th January 2024 - 18mm focal length  
View from Sovereign Drive looking South

POINTLIGN

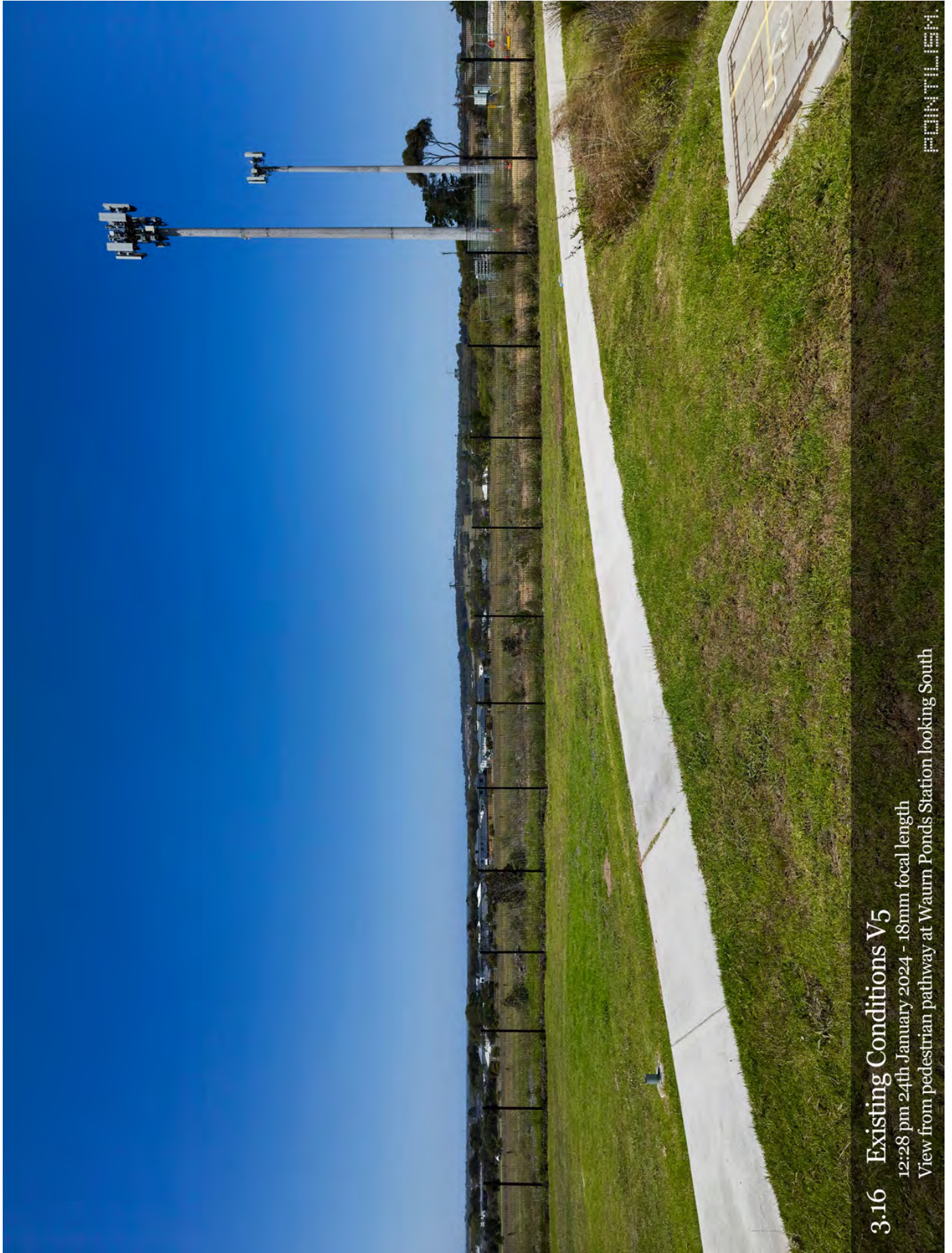


**3.16 Existing Conditions V5**

12:28 pm 24th January 2024 - 18mm focal length

View from pedestrian pathway at Waurn Ponds Station looking South

FOUNTAIN

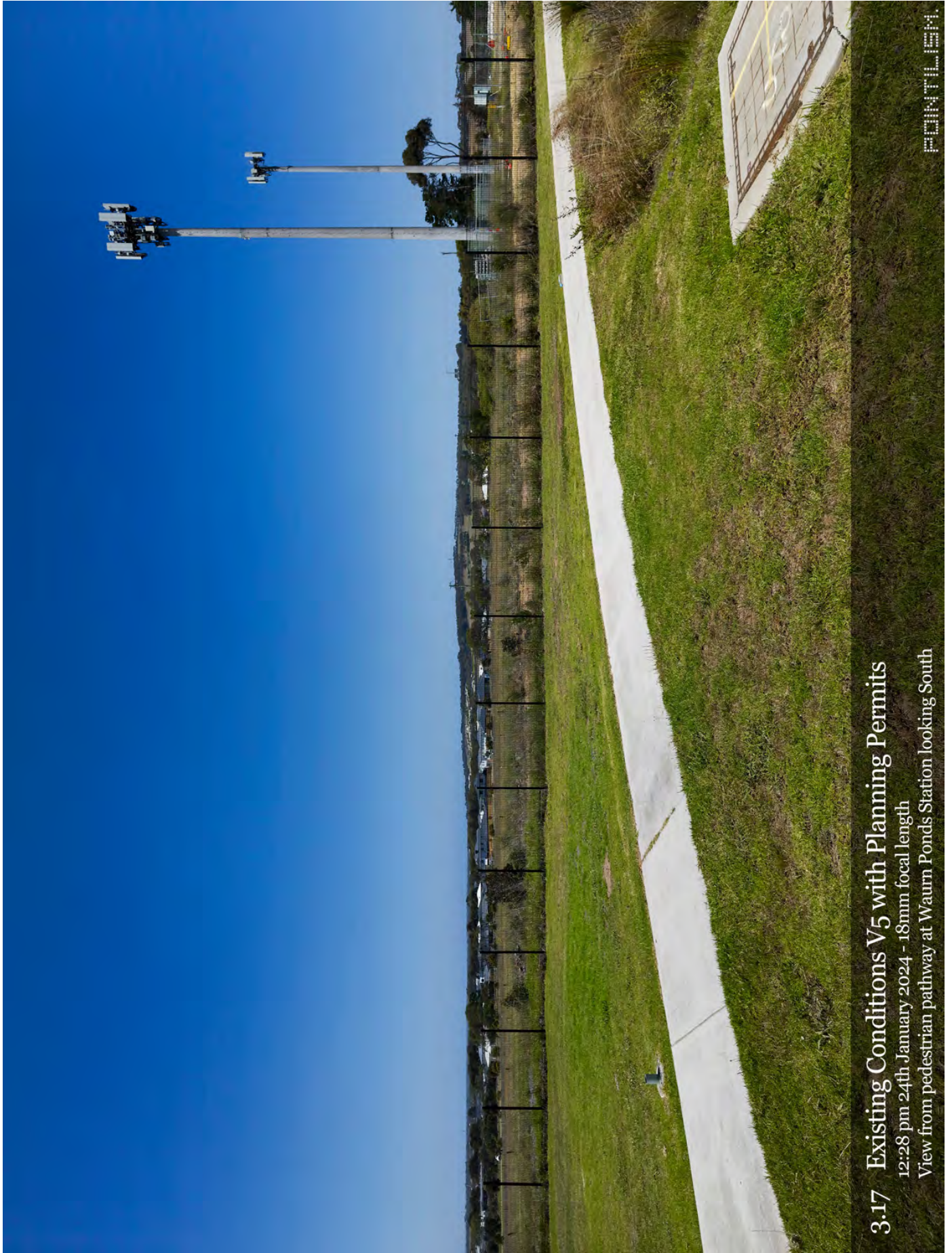


**3.16 Existing Conditions V5**

12:28 pm 24th January 2024 - 18mm focal length

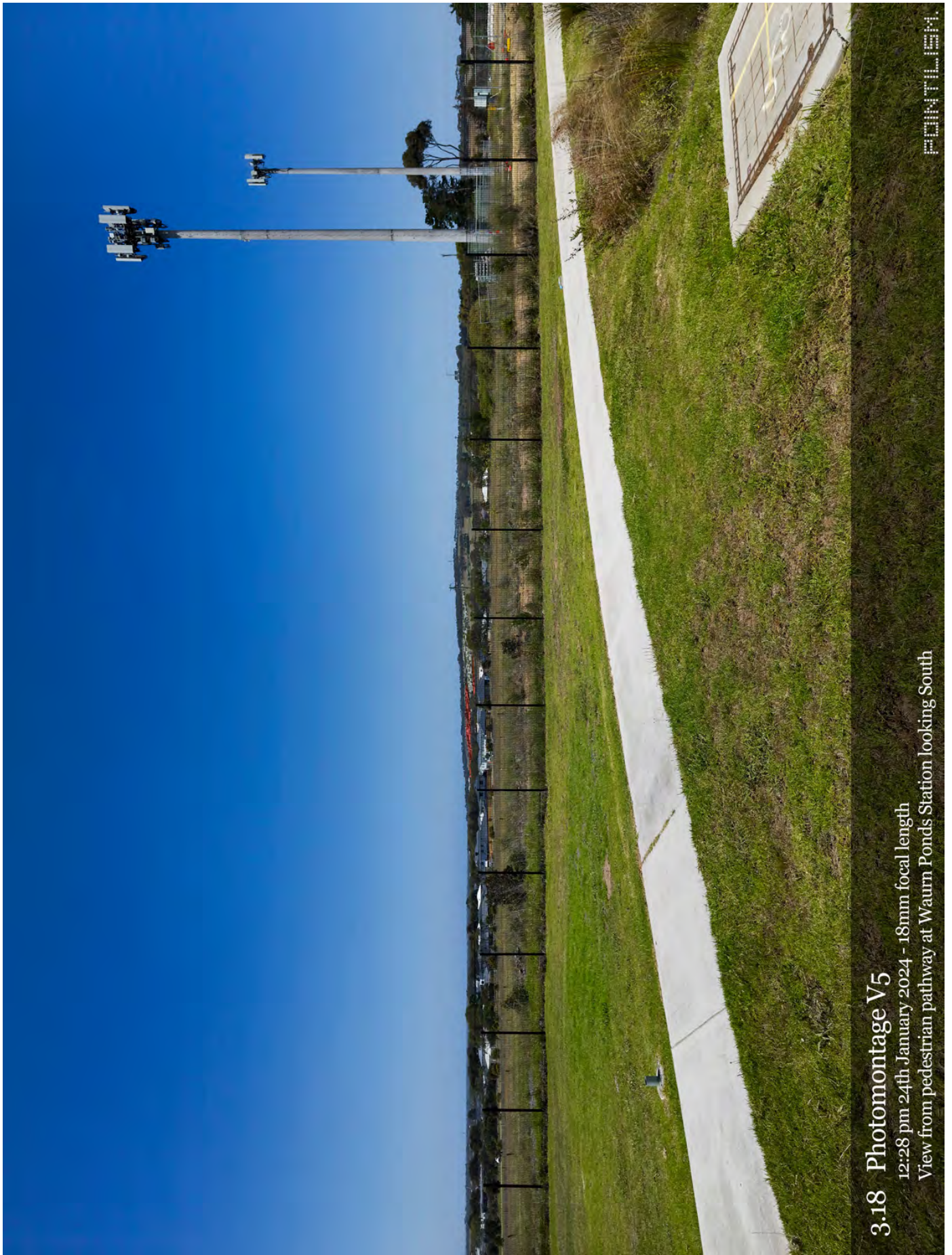
View from pedestrian pathway at Waurn Ponds Station looking South

FOUNTAIN



3.17 Existing Conditions V5 with Planning Permits  
12:28 pm 24th January 2024 - 18mm focal length  
View from pedestrian pathway at Waurn Ponds Station looking South

FOUNTAIN



**3.18 Photomontage V5**

12:28 pm 24th January 2024 - 18mm focal length

View from pedestrian pathway at Waurn Ponds Station looking South

FOUNTAIN

# 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
Govt P6 School Per dwellings	Govt P7-12 School per dwellings	Multi purpose comm Ctr per population	Neighbourhood House per population	Level 1 Active Open Space Reserve
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)	Active Open space reserve per population
3,000 DET	9,000 DET	8,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	20,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	6,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
1.4	0.5	1.4	0.6	1.9
Investigation Area		Assume 70% developable	Assume 15dwellings/ha	
432.95		303.07	4546.01	

Estimated Households (Dwellings)	Persons Per Household	Population
<b>Ratio</b>		
<b>Source of Ratio</b>		
<b>Totals Residential</b>	<b>4,050</b>	<b>11,340</b>
<b>Calculated Provision Rates</b>		

**Amstrong Creek South Central**

Estimated Households (Dwellings)		Persons Per Household	Population	School Provision Ratio and Quantities Summary		Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve
				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 DET	9,000 DET	8,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	20,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	6,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
Source of Ratio								
Totals Residential	4,018	2.80	11,250					
Calculated Provision Rates				1.3	0.4	1.4	0.6	1.9
				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	Multi purpose comm Ctr per population	Neighbourhood House per population	Active Open space reserve per population
			3.5ha	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 DET	8,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	20,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	6,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham
Source of Ratio			0.5	0.5	0.2	0.7
<b>Totals Residential</b>	<b>1,473</b>	<b>2.80</b>	<b>Calculated Provision Rates</b>			
			0.2	0.5	0.2	
			Investigation Area	Assume 70% developable	Assume 15dwellings/ha	
			659.51	461.66	6924.88	

Moolap

Estimated Households (Dwellings)		Persons Per Household	Population	School Provision Ratio and Quantities Summary		Level 1 Comm Facilities	Level 2 Comm Facilities	Level 1 Active Open Space Reserve
Explanatory notes	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	8 hectare open space reserve		
	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)				
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	4,006	2.80	11,218	Calculated Provision Rates	1.3	1.4	0.6	1.9
Investigation Area		498.42	Assume 70% developable	348.90	Assume 15dwellings/ha	5233.43		

Moolap existing community

Explanatory notes	School Provision Ratio and Quantities Summary		Level 1 Comm Facilities		Level 2 Comm Facilities		Level 1 Active Open Space Reserve	
	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	Ratio	Source of Ratio	Totals Residential
	3,000	8,400	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	3,000	ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	4,721
	3.5ha	8.4ha				DET	8,000	2,800
	3,000	9,000				DET	20,000	13,219
	1.6	0.5	1.7	0.7	2.2	Calculated Provision Rates		





Lara North + Lara West PSP

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		
			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 DET	9,000 DET	8,000 ASR 2008 Growth Area Comm Inf Rept - 2012 ASR Wyndham	20,000 ASR 2008 Growth Area Comm Inf Rept - 2012 ASR Wyndham	6,000 ASR 2008 Growth Area Comm Inf Rept - 2012 ASR Wyndham		
<b>Source of Ratio</b>									
<b>Totals Residential</b>	6,116	2.80	Calculated Provision Rates		2.0	0.7	2.1	0.9	2.9

Investigation Area	184.29	Assume 70% developable	129.01	Assume 15dwellings/ha	1935.09
		Existing PSP dwelling estimate			4178
		<b>Total dwellings</b>			<b>6115.95</b>

Lara South

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		
			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 DET	9,000 DET	8,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	20,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham	6,000 ASR 2008 Growth Area Comm Inf Rept + 2012 ASR Wyndham		
Source of Ratio									
Totals Residential	1,787	2.80	Calculated Provision Rates		0.6	0.2	0.6	0.3	0.8
			Precinct Area	115.35	Assume 70% developable	80.74	Assume 15dwellings/ha	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><b>1.1</b> 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><b>Clause 11.1-1S Settlement</b></p> <p><i>Strategy:</i></p> <p>Create and reinforce settlement boundaries.</p> <p><b>Clause 11.01-1R – Settlement:</b></p> <p><i>Strategies:</i></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><b>Clause 21.06-2 Spatial Distribution of Growth</b></p> <p><i>Objectives:</i></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><i>Strategies:</i></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><b>2.1</b> Impact on the orderly development of the adjoining urban area</p>	<p><b>Clause 19.03-2S Infrastructure design and provision</b></p> <p><i>Objective:</i></p> <p>To provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p><i>Strategies:</i></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><b>2.2</b> Impact on management of the sequence of development and the early provision of services</p>	<p><b>Clause 11.2-3S Sequencing of development:</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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><b>2.3</b> Impacts of any proposed boundary changes on the economic provision of other development fronts</p>	<p><b>Clause 11.02-3S Sequencing of development</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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><b>3.1</b> Impact on any identified unique features or special characteristics within a declared area</p>	<p><b>Clause 11.03-5S Distinctive Areas and Landscapes:</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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><b>4.1</b> Impact on the protection of biodiversity values</p>	<p><b>Clause 12.01-1S Protection of biodiversity:</b></p> <p><i>Objective:</i></p> <p>To assist the protection and conservation of Victoria's biodiversity.</p> <p><i>Strategies:</i></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><b>Clause 12.02-1S Protection of the marine and coastal environment:</b></p> <p><i>Objective:</i></p> <p>To protect and enhance the marine and coastal environment.</p> <p><i>Strategies:</i></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:
<p><b>4.2</b> Impact on the protection of coastal areas &amp; wetlands</p>	<p><b>12.03-1S River corridors, waterways, lakes and wetlands</b></p> <p><i>Objective:</i></p> <p>To protect and enhance river corridors, waterways, lakes and wetlands.</p> <p><i>Strategies:</i></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>
<p><b>4.3</b> Impact on the protection of significant landscapes</p>	<p><b>Clause 12.05-2S Landscapes</b></p> <p><i>Objective:</i></p> <p>To protect and enhance significant landscapes and open spaces that contribute to character, identity and sustainable environments.</p> <p><i>Strategies:</i></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><b>4.4</b> Impact on the preservation of identified urban breaks</p>	<p><b>Clause 11.01-1R Settlement – G21</b></p> <p><i>Strategies:</i></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><b>Clause 21.06-2 Spatial distribution of growth:</b></p> <p><i>Strategies:</i></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><b>5.1</b> Climate change – impacts of coastal inundation &amp; erosion</p>	<p><b>Clause 13.01-1S - Natural hazards and climate change:</b></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><b>Clause 13.01-2S - Coastal inundation and erosion:</b></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:	
<p><b>5.2</b> Bushfire risks in the location</p>	<p><b>Clause 13.02-1S Bushfire planning:</b></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:	
<p><b>5.2</b> Bushfire risks in the location</p>	<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><b>5.3 Impacts on/of floodplains;</b></p>	<p><b>Clause 13.03-1s Floodplain management</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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:	
<p><b>5.4</b> Impacts on/of contamination land;</p>	<p><b>Clause 13.04-1S Contaminated and potentially contaminated land</b></p> <p><i>Objective:</i></p> <p>To ensure that contaminated and potentially contaminated land is used and developed safely.</p> <p><i>Strategies:</i></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>
<p><b>5.5</b> Impacts on/of erosion &amp; landslip;</p>	<p><b>Clause 13.03-2S Erosion and landslip</b></p> <p><i>Objective:</i></p> <p>To protect areas prone to erosion, landslip or other land degradation processes.</p> <p><i>Strategies:</i></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>
<p><b>5.6</b> Impacts on/of salinity, acid sulfate soils;</p>	<p><b>Clause 13.03-3S Salinity</b></p> <p><i>Objective:</i></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><i>Strategies:</i></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><b>5.7</b> Land use compatibility – compatibility with nearby agricultural, industrial, extractive industry, tourism and other established and valued land uses.</p>	<p><b>Clause 13.07-1S - Land use compatibility</b></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><b>5.8</b> Impacts on/ of major hazard facilities;</p>	<p><b>Clause 13.07-2S Major hazard facilities</b></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:
<p><b>6.1</b> Impact on the protection of agricultural land</p>	<p><b>Clause 14.01-1S Protection of agricultural land:</b></p> <p><i>Objective:</i></p> <p>To protect the state’s agricultural base by preserving productive farmland.</p> <p><i>Strategies:</i></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><b>6.2</b> Impact on the protection of agricultural land</p>	<p><b>Clause 1.01-11R Settlement G21:</b></p> <p><i>Strategy:</i></p> <p>Protect critical agricultural land by directing growth to towns.</p> <p><b>Clause 14.01-2R Agricultural productivity - Geelong G21</b></p> <p><i>Strategy:</i></p> <p>Support new opportunities in farming and fisheries.</p>
<p><b>6.3</b> Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources</p>	<p><b>Clause 14.02-1S Catchment planning and management:</b></p> <p><i>Objective:</i></p> <p>To assist the protection and restoration of catchments, waterways, estuaries, bays, water bodies, groundwater, and the marine environment.</p> <p><i>Strategies:</i></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><b>6.4</b> Impact on the protection of catchments, waterways, estuaries, bays, and the marine environment, protection of extractive resources</p>	<p><b>Clause 14.02-2S Water quality:</b></p> <p><i>Objective:</i> To protect water quality.</p> <p><i>Strategies:</i></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:**

<b>Criteria:</b>	<b>Geelong Planning Scheme:</b>
<p><b>7.1</b> Impact on known Aboriginal cultural heritage values</p>	<p><b>Clause 15.03-2S Aboriginal cultural heritage:</b></p> <p><i>Objective:</i></p> <p>To ensure the protection and conservation of places of Aboriginal cultural heritage significance.</p> <p><i>Strategies:</i></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><b>7.2</b> Impact on known post contact heritage values</p>	<p><b>Clause 15.03-1S Heritage conservation:</b></p> <p><i>Objective:</i></p> <p>To ensure the conservation of places of heritage significance.</p> <p><i>Strategies:</i></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><b>8.1</b> Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access</p>	<p><b>Clause 18.01-1S Land use and transport integration:</b></p> <p><u>Objective:</u> 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><b>8.1</b> Accessibility of the location, including the feasibility and cost of providing adequate public transport and roads access</p>	<p><b>Clause 18.01-2S Transport system:</b></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><b>9.1</b> Ability to cost-effectively provide urban services including both utility, community services and drainage</p>	<p><b>Clause 19.03-2S Infrastructure design and provision:</b></p> <p><i>Objective:</i></p> <p>To provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.</p> <p><i>Strategies:</i></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><b>19.02-4S Social and cultural infrastructure</b></p> <p><i>Objective:</i></p> <p>To provide fairer distribution of and access to, social and cultural infrastructure.</p> <p><i>Strategies:</i></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><b>9.1</b> Ability to cost-effectively provide urban services including both utility, community services and drainage</p>	<p><b>Clause 19.02-6S Open space:</b></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><b>9.1</b> 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>

# Appendix 3

# Mt Duneed Road Urban Design Analysis



# Geelong Settlement Boundary Project

## Mt Duneed Road

URBAN DESIGN OPTIONS PACKAGE -CONFIDENTIAL

JUNE 2023

## Background to the Investigations

This urban design investigation package is a series of brief design studies to inform the analysis of the **'Greater Geelong Settlement Boundary - Long Term Boundary Review for Urban Geelong'**, undertaken by Echelon Planning for the City of Greater Geelong. It should be read in conjunction with the analysis and planning propositions of that report.

Key planning elements informing this package:

- The Surf Coast and Bellarine Peninsula have each been declared as Distinctive Areas and Landscapes, including a long-term vision and strategies to guide the future development and use of land in the declared areas,
- These areas identify long-term settlement boundaries to ensure that development does not inappropriately encroach into valued natural and rural landscapes,
- The southern edge of urban Geelong around the Armstrong Creek growth area is affected by the Surf Coast DAL.
- Mt Duneed is the primary landscape feature within the investigation area, and forms part of the wider landscape that delineates urban Geelong from the rural landscapes of the Surf Coast shire.
- The objectives for setting 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.

Distinctive Areas and Landscapes (referenced from the Echelon Draft Review)

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."

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.

There are a number of options illustrated below for the Settlement Boundary:

1. Low Density Residential Zone/Rural Living Zone transition
2. Rural Living Zone north of Lower Duneed Road
3. Rural Living Zone north of Lower Duneed Road (East of Surf Coast Highway only)
4. Minor adjustments to UGZ boundary with the balance as Farming Zone,
5. Minor adjustments to UGZ boundary with the balance as Rural Living Zone,

It is important to note that these options investigations do not represent development solutions for the investigation area, nor represent detailed planning strategy for the Settlement Boundary. There are intended as illustrations only of some of implications of the proposed planning approach and the challenges, issues and opportunities that it presents. These options need to be analysed in further detail in relation to precinct issues such as drainage and water management, traffic and access parameters, vegetation and ecology parameters, ownership boundaries and interface and frontage conditions.

## Zone Summary

Rural residential development is defined as:

“land in a rural setting, used and developed for dwellings that are not primarily associated with agriculture. Some agriculture may take place on the land however it will be ancillary to the use for a dwelling. It is likely to be carried on for ‘lifestyle’ reasons and is unlikely to provide a significant source of household income. Rural residential land is typically also used for non-agricultural home occupations or for large gardens. These lots are larger than typical residential lots, but are usually too small for agricultural use. Because of its primarily residential function, rural residential development requires access to most of the normal services and infrastructure provided in urban settlements. Typically it also generates urban residential amenity expectations.”

*Dept Transport and Planning, Practice Note: PPN37:  
Rural residential development*

### Rural Living Zone (RLZ)

The Rural Living Zone (RLZ) is a ‘rural’ zone. It specifies a lot size of at least 2 hectares and provides opportunities for some rural uses to occur. A different lot size can be specified in a schedule to the zone.

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.

### Low Density Residential Zone (LDRZ)

The Low Density Residential Zone (LDRZ) is a ‘residential’ zone. It specifies a lot size of at least 0.4 hectares in areas where reticulated sewerage is not connected or 0.2 hectares for each lot connected to reticulated sewerage. A different lot size can be specified in a schedule to the zone.

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.

Notwithstanding the lack of policy support for using the LDRZ this, 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.

### Farming Zone (FZ)

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.

For the purposes of these design investigations, the FZ is assumed to be the status quo in terms of existing conditions within the study area.

## Rural Living Character

### Rural Living Character

The elements that define local character for Rural Living areas are generally relationships between the surrounding landscape and streetscape, and the built form of local housing.

In rural areas such as the Mt Duneed Road corridor, these relationships include:

- Local roads and streets with a wide rural character, often unmade edges with no kerbs, framing long distance views,
- Lot subdivision patterns featuring informal lot sizes and the often sporadic siting of buildings,
- Streetscapes of predominately larger, landscaped building setbacks and significant gaps between buildings, often with landscape windbreaks and boundary screening,
- Front setbacks with gardens, and no fencing that blend into wide nature strips and green verges of a rural streetscape,
- Established mature but sporadic vegetation and canopy trees that contribute to a rural character.

Where the uses and lot character of the UGZ boundary to Mt Duneed is being contemplated, some of the landscape characteristics for consideration include;

- Existing and surrounding farmland across the rolling local topography (low lying and elevated land),
- Existing large canopy gum trees and co-located pockets of remnant bushland,
- Roadside vegetation and verges consisting of under storey vegetation,
- Vegetated local drainage lines and waterway corridors.



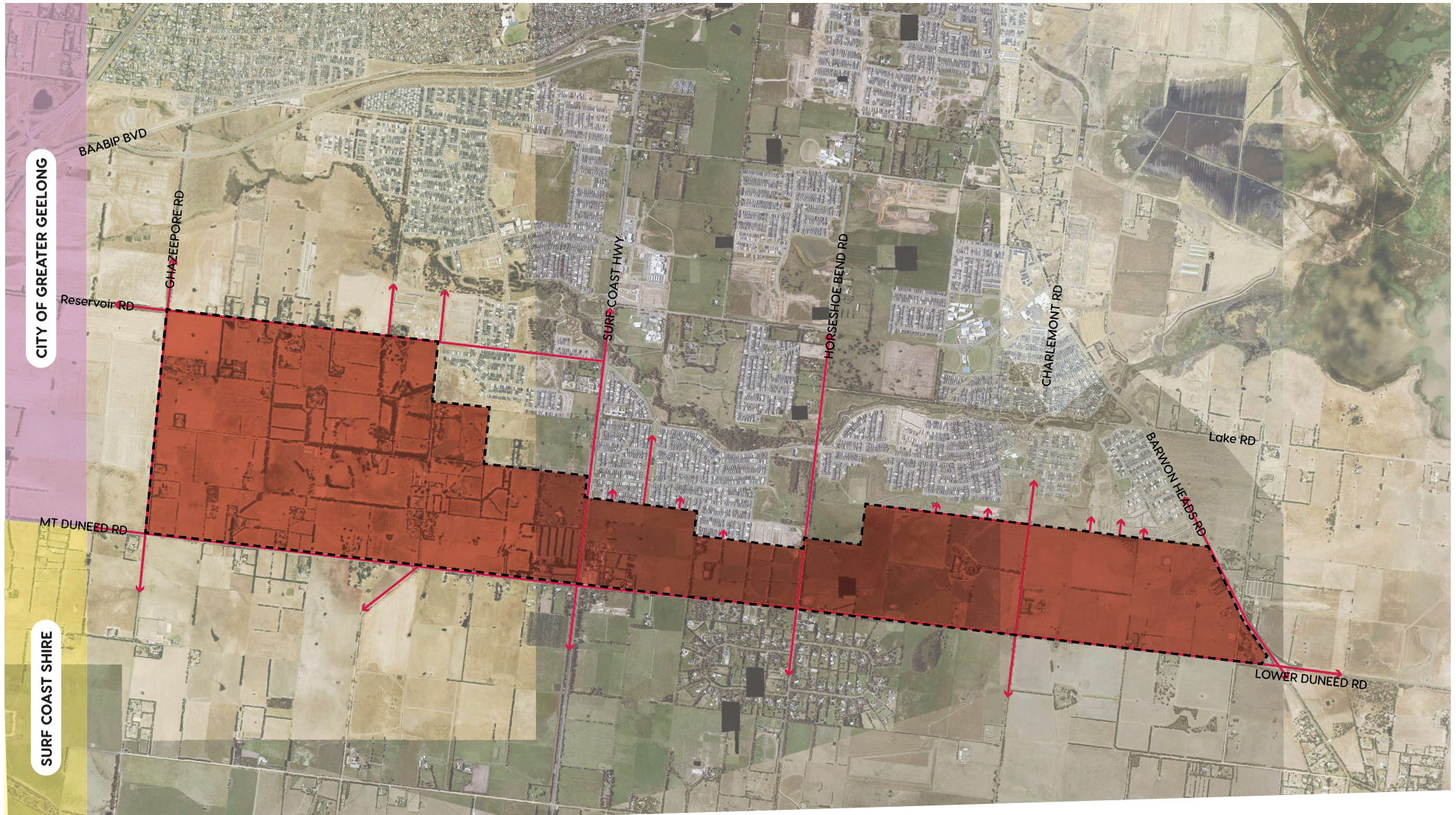
### Conventional Housing Character

The elements that define local character for conventional density residential neighbourhoods in the area include:

- New patterns of development in the UGZ areas that are more regular in size and shape,
- New housing lots with increased site coverage and roof area, where lots are smaller and dwellings are larger,
- Generally overall building site cover of between 30% to 45%, with limited impermeable surfaces on lots,
- Limited opportunities for canopy tree planning within each lot, and in front, side and rear building setbacks,
- A visual dominance of the built form, and particularly the rooflines of dwellings within the streetscape and when viewed from further afar,
- A repetition and ‘same-ness’ to dwelling and roof colours and materials, creating relatively homogeneous streetscapes,
- Dark roof colours which become the predominant element of more distant views.



### UGZ Interface Investigation Area

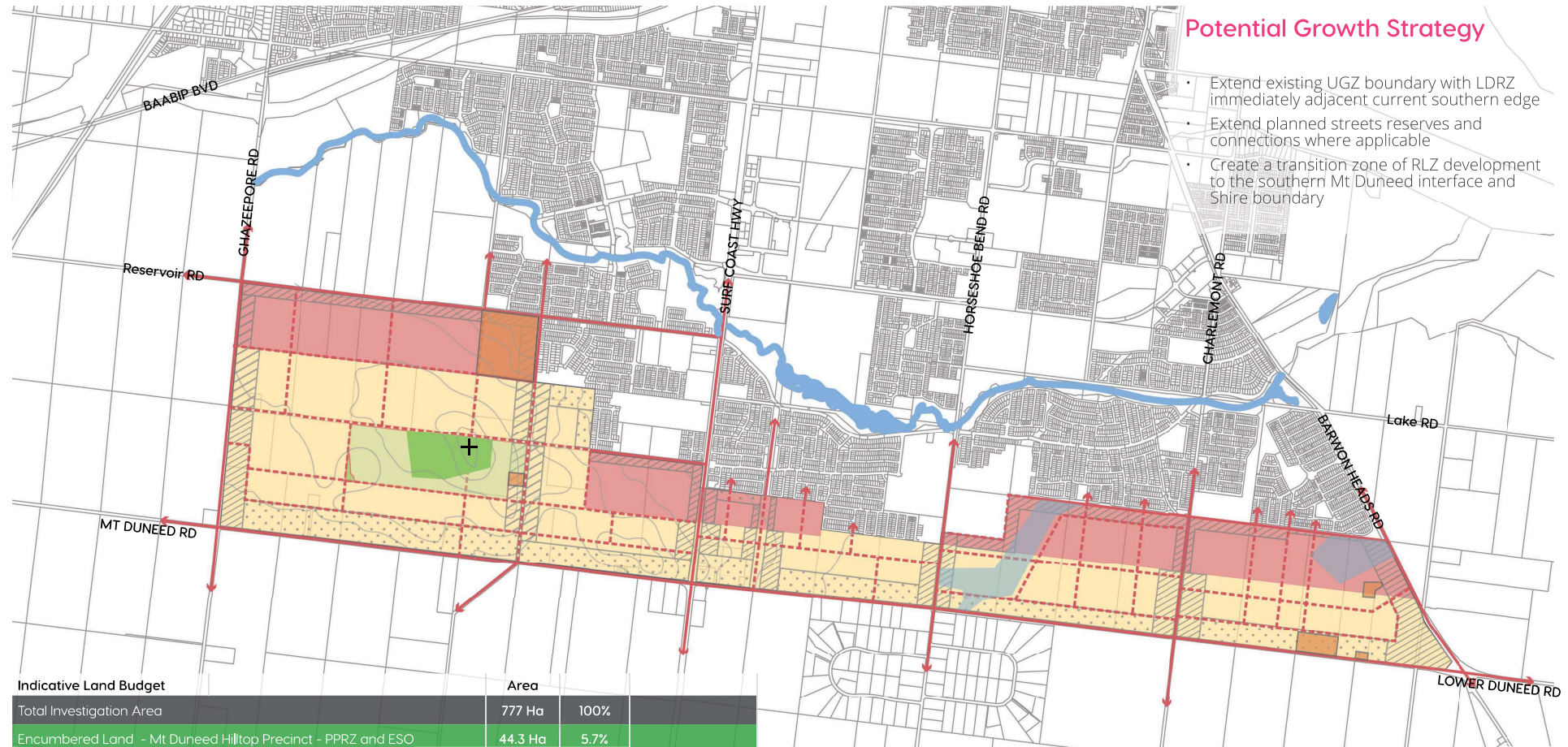


Total Investigation Area

777 ha

100%

UGZ Interface 1 - LDRZ & RLZ Transition



Potential Growth Strategy

- Extend existing UGZ boundary with LDRZ immediately adjacent current southern edge
- Extend planned streets reserves and connections where applicable
- Create a transition zone of RLZ development to the southern Mt Duneed interface and Shire boundary

Indicative Land Budget		Area	
Total Investigation Area		777 Ha	100%
Encumbered Land - Mt Duneed Hilltop Precinct - PPRZ and ESO		44.3 Ha	5.7%
Encumbered Land - Drainage and Flooding		30.9 Ha	4 %
<b>Rural Living Zone</b>		461.4 Ha	59.3%
Assume 15% for typical street/ road allowance		69.2 Ha	
Developable area for Rural Living Lots (Typical Lots range from 1-2.5 Ha)		392.2 Ha	Approx. 156 - 392 lots
<b>Low Density Residential Zone</b>		240.4 Ha	31 %
Assume 20% for typical street/ road allowance		48.1 Ha	
Assume 5% for open space and 5% local drainage allowance		24 Ha	
Developable area for Low Density Residential Lots (Typical Lots range from 0.2 - 0.4 Ha)		168.3 Ha	Approx. 420-840 lots

**Land Budget Assumptions:**

**LDRZ**

- Assume 20% typical street/ road allowance
- Assume 5% open space allowance
- Assume 5% local drainage allowance

**RLZ**

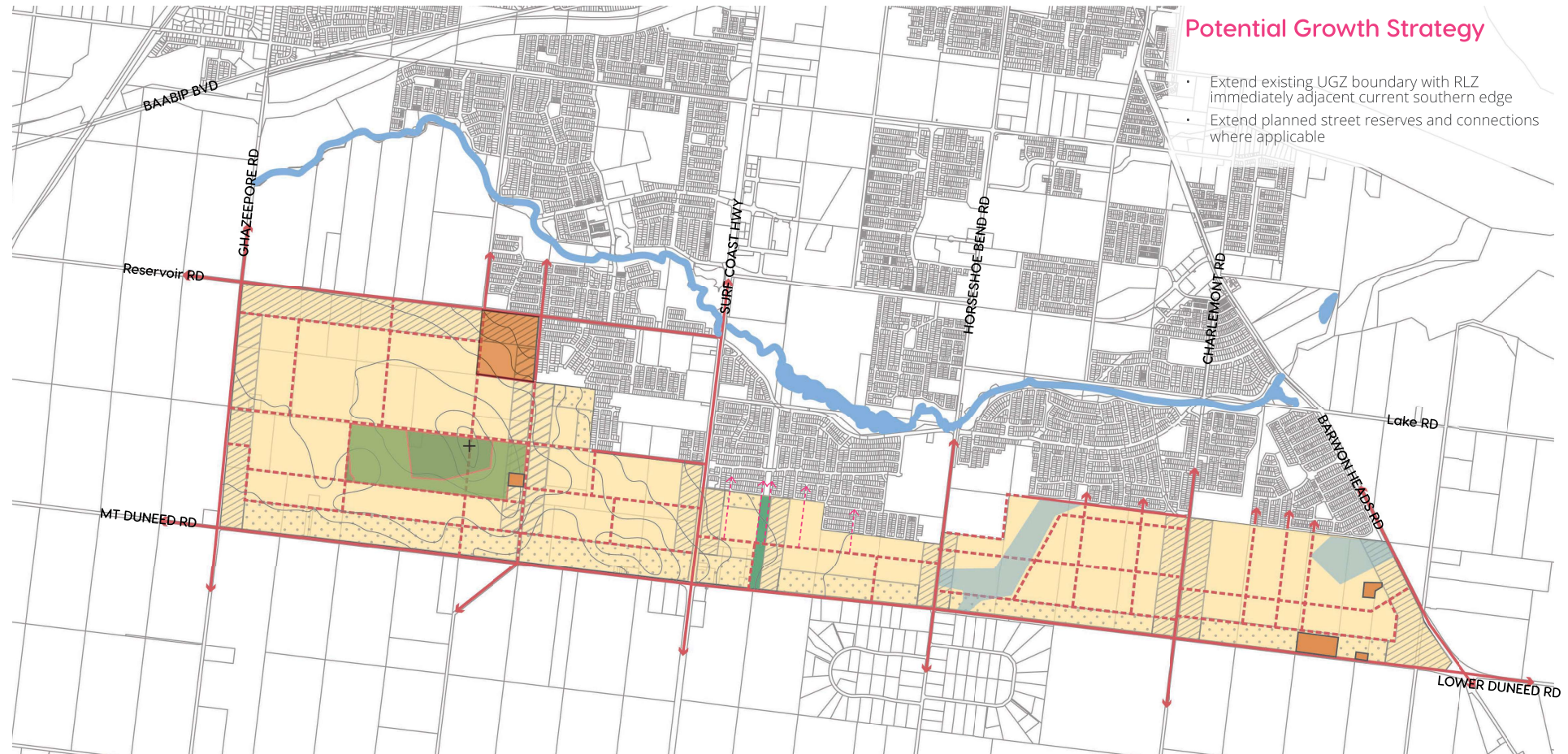
- Assume 15% typical street/ road allowance
- Assume no public open space allowance
- Assume no local drainage allowance

**Legend:**

- Environmental Significance Overlay
- Public Park & Recreation Zone
- Heritage Overlay
- Flooding Overlay
- Existing Waterways
- Service Road Frontage
- No Access (Lots back onto road reserve)
- 10m Contours
- Highpoint



UGZ Interface 2 - RLZ



Potential Growth Strategy

- Extend existing UGZ boundary with RLZ immediately adjacent current southern edge
- Extend planned street reserves and connections where applicable

Indicative Land Budget	Area	
Total Investigation Area	777 Ha	100%
Encumbered Land - Mt Duneed Hilltop Precinct - PPRZ and ESO	44.3 Ha	5.7%
Encumbered Land - Drainage and Flooding	30.9 Ha	4%
<b>Rural Living Zone</b>	701.8 Ha	90%
Assume 15% for typical street/ road allowance	105.3 Ha	
Developable area for Rural Living Lots (Typical Lots range from 1-2.5 Ha)	596.5 Ha	Approx. 238 - 596 lots

**Land Budget Assumptions:**

**LDRZ**

- Assume 20% typical street/ road allowance
- Assume 5% open space allowance
- Assume 5% local drainage allowance

**RLZ**

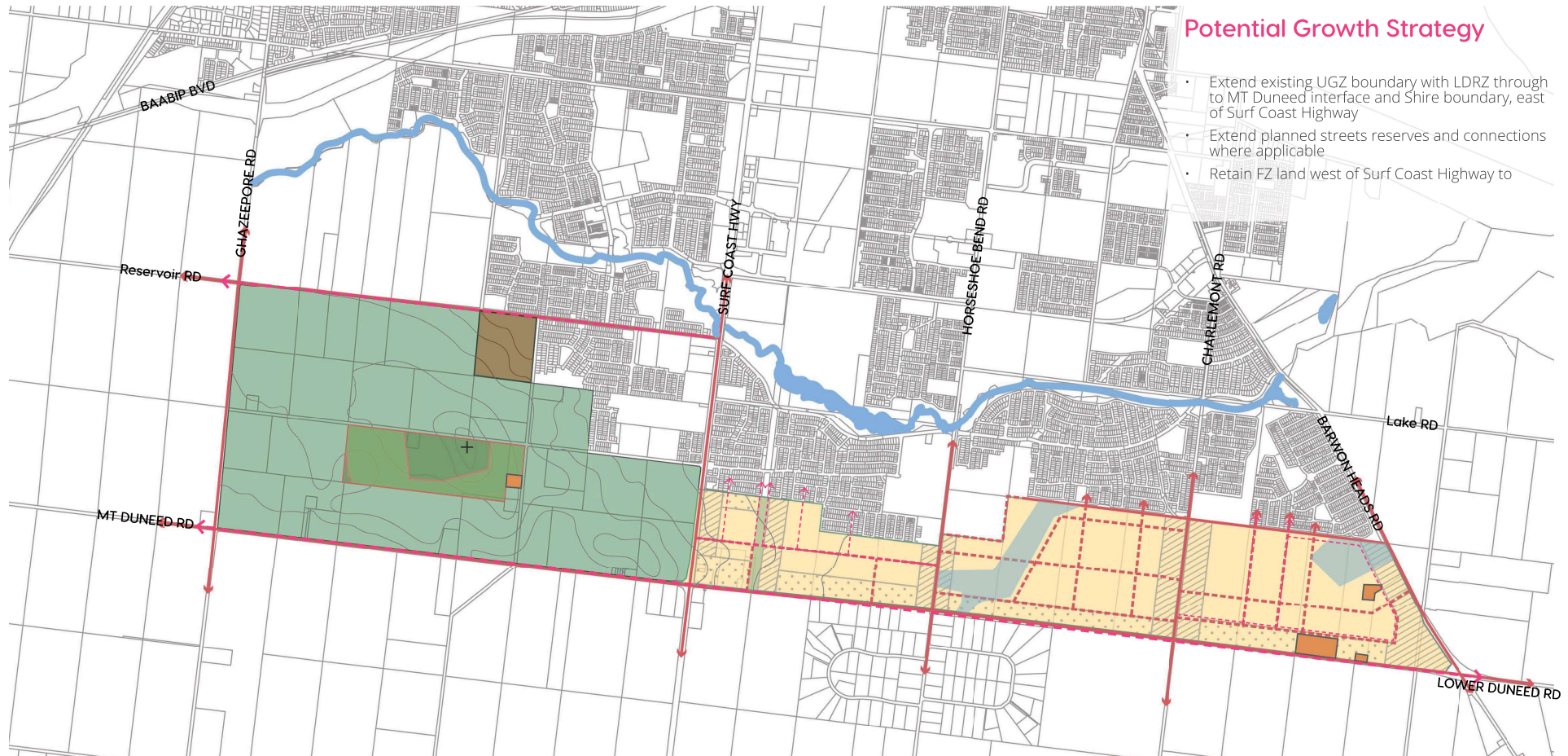
- Assume 15% typical street/ road allowance
- Assume no public open space allowance
- Assume no local drainage allowance

**Legend:**

- Environmental Significance Overlay
- Public Park & Recreation Zone
- Heritage Overlay
- Flooding Overlay
- Existing Waterways
- Service Road Frontage
- No Access (Lots back onto road reserve)
- 10m Contours
- Highpoint



UGZ Interface 3 - FZ around Mt Duneed, RLZ East of Surf Coast Highway



Potential Growth Strategy

- Extend existing UGZ boundary with LDRZ through to MT Duneed interface and Shire boundary, east of Surf Coast Highway
- Extend planned streets reserves and connections where applicable
- Retain FZ land west of Surf Coast Highway to

Indicative Land Budget			
Total Investigation Area	777 Ha	100%	
Encumbered Land - Mt Duneed Hilltop Precinct - PPRZ and ESO	44.3 Ha	5.7%	
Encumbered Land - Drainage and Flooding	30.9 Ha	4 %	
Farming Zone	378.4 Ha	48.7 %	
Rural Living Zone	323.9 Ha	41.6 %	
Assume 15% for typical street/ road allowance	48.5 Ha		
Developable area for Rural Living Lots (Typical Lots range from 1-2.5 Ha)	275.4 Ha		Approx. 110 - 275 lots

**Land Budget Assumptions:**

**LDRZ**

- Assume 20% typical street/ road allowance
- Assume 5% open space allowance
- Assume 5% local drainage allowance

**RLZ**

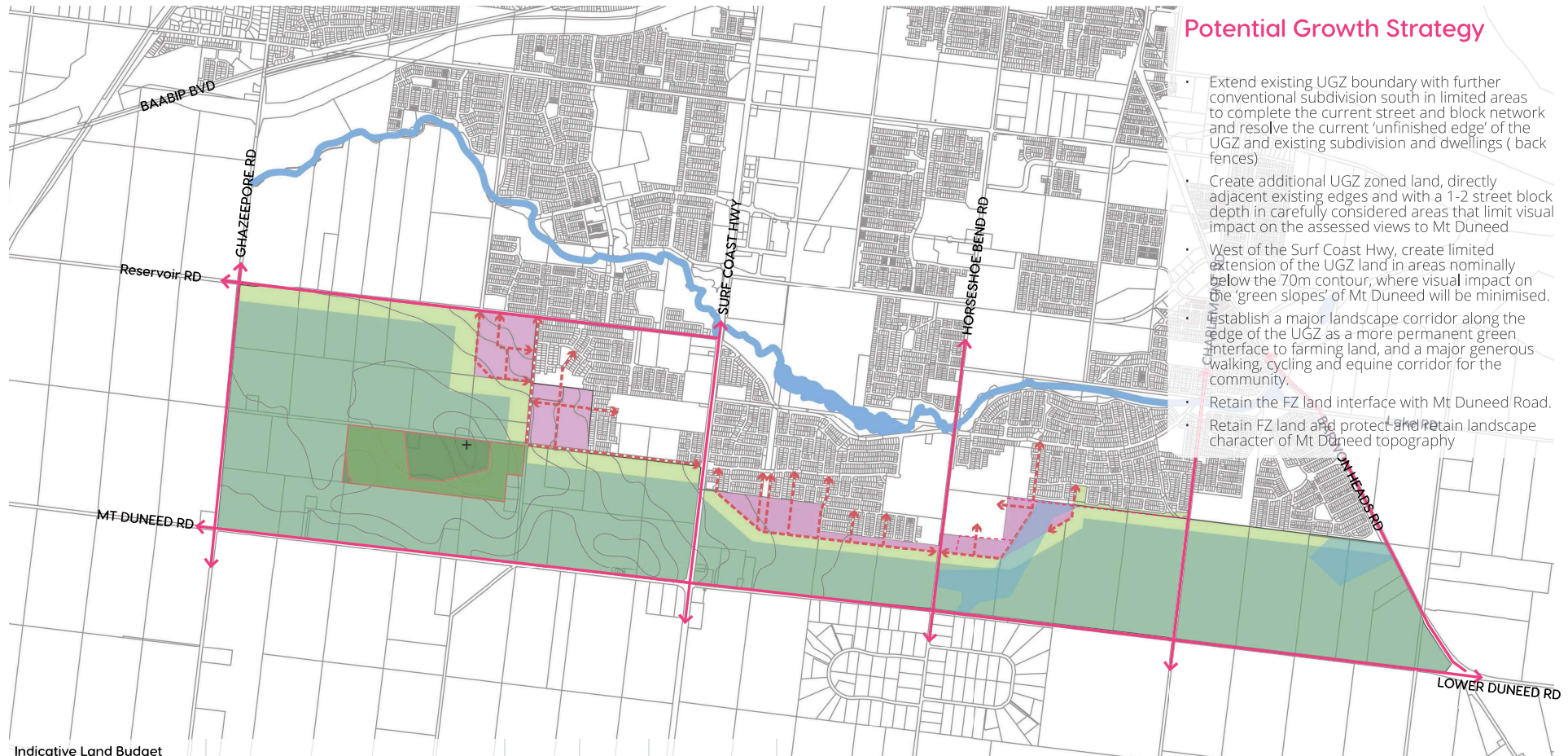
- Assume 15% typical street/ road allowance
- Assume no public open space allowance
- Assume no local drainage allowance

**Legend:**

- Environmental Significance Overlay
- Public Park & Recreation Zone
- Heritage Overlay
- Flooding Overlay
- Existing Waterways
- Service Road Frontage
- No Access (Lots back onto road reserve)
- 10m Contours
- Highpoint



UGZ Interface 4 - Standard Residential with Landscape Buffer



Potential Growth Strategy

- Extend existing UGZ boundary with further conventional subdivision south in limited areas to complete the current street and block network and resolve the current 'unfinished edge' of the UGZ and existing subdivision and dwellings (back fences)
- Create additional UGZ zoned land, directly adjacent existing edges and with a 1-2 street block depth in carefully considered areas that limit visual impact on the assessed views to Mt Duneed
- West of the Surf Coast Hwy, create limited extension of the UGZ land in areas nominally below the 70m contour, where visual impact on the 'green slopes' of Mt Duneed will be minimised.
- Establish a major landscape corridor along the edge of the UGZ as a more permanent green interface to farming land, and a major generous walking, cycling and equine corridor for the community.
- Retain the FZ land interface with Mt Duneed Road.
- Retain FZ land and protect and retain landscape character of Mt Duneed topography

Indicative Land Budget

Total Investigation Area	777 Ha	100%	
Encumbered Land - Mt Duneed Hilltop Precinct - PPRZ and ESO	44.3 Ha	5.7%	
Encumbered Land - Drainage and Flooding	30.9 Ha	4%	
Farming Zone	584.8 Ha	48.7%	
UGZ Edge - 70-m Planted Buffer and Walking/ Cycling/ Equine Corridor	58 Ha	7.4%	
Urban Growth Zone Extension	59 Ha	7.6%	
Assume 30% for typical street/ road allowance (incl significant single sided roads)	17.7 Ha		
Developable area for Standard Residential Lots (Typical Lots range from 400 - 500 sqm)	41.3 Ha		Approx. 826 - 1,032 lots

Land Budget Assumptions:

**UGZ**

- Assume 30% typical street/ road allowance given so much of the area will incorp single sided road
- Assume no open space allowance given limited areas and connection to existing open space network

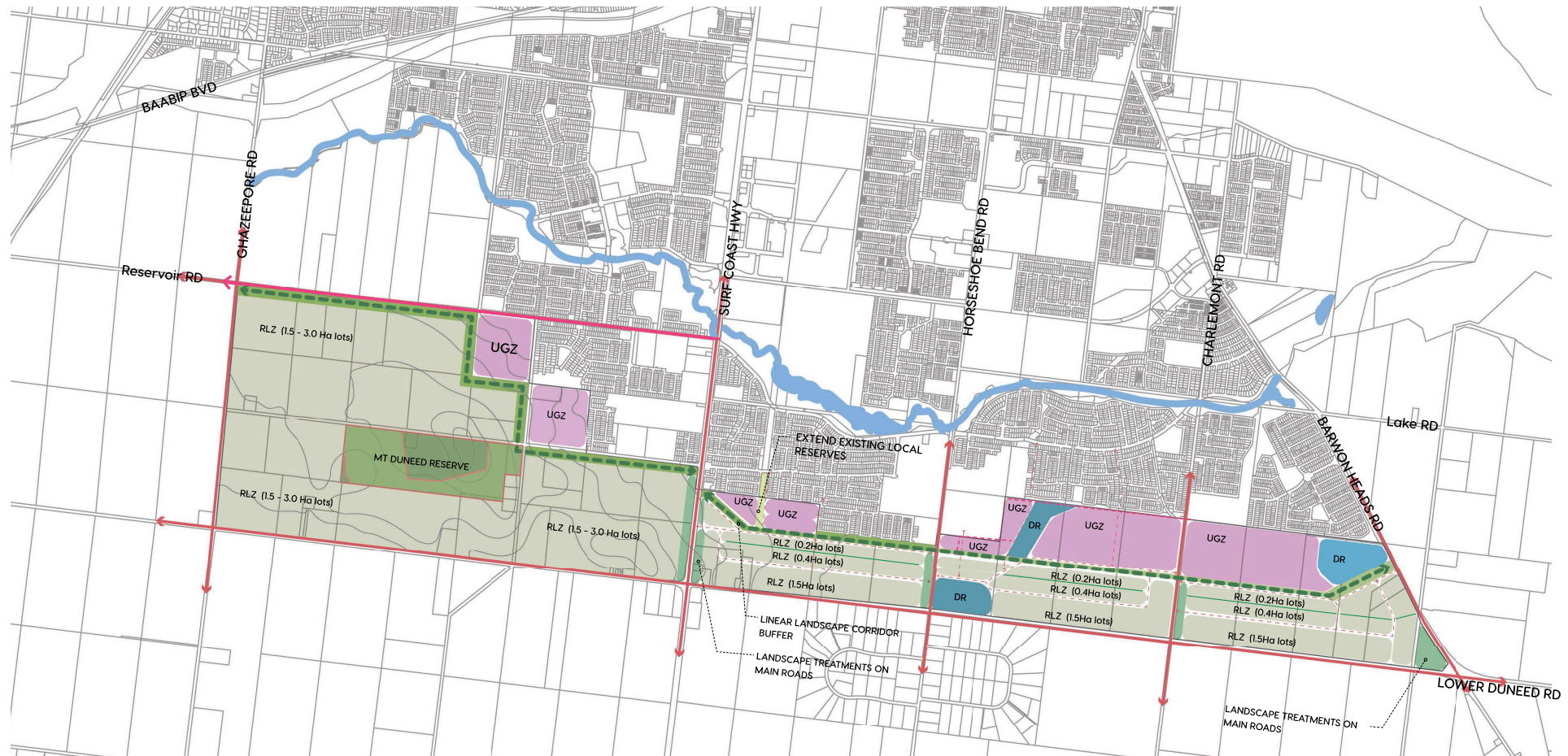
**UGZ Edge Buffer**

- Assume 70m+ planted corridor as the visual and physical edge to the growth area.
- Assume significant mature canopy and landscape over time, walking and cycling paths and equine 'bridle trail'.

	Environmental Significance Overlay
	Public Park & Recreation Zone
	Heritage Overlay
	Flooding Overlay
	Existing Waterways
	Service Road Frontage
	No Access (Lots back onto road reserve)
	10m Contours
	Highpoint



UGZ Interface 5 - Possible Proposed Layout

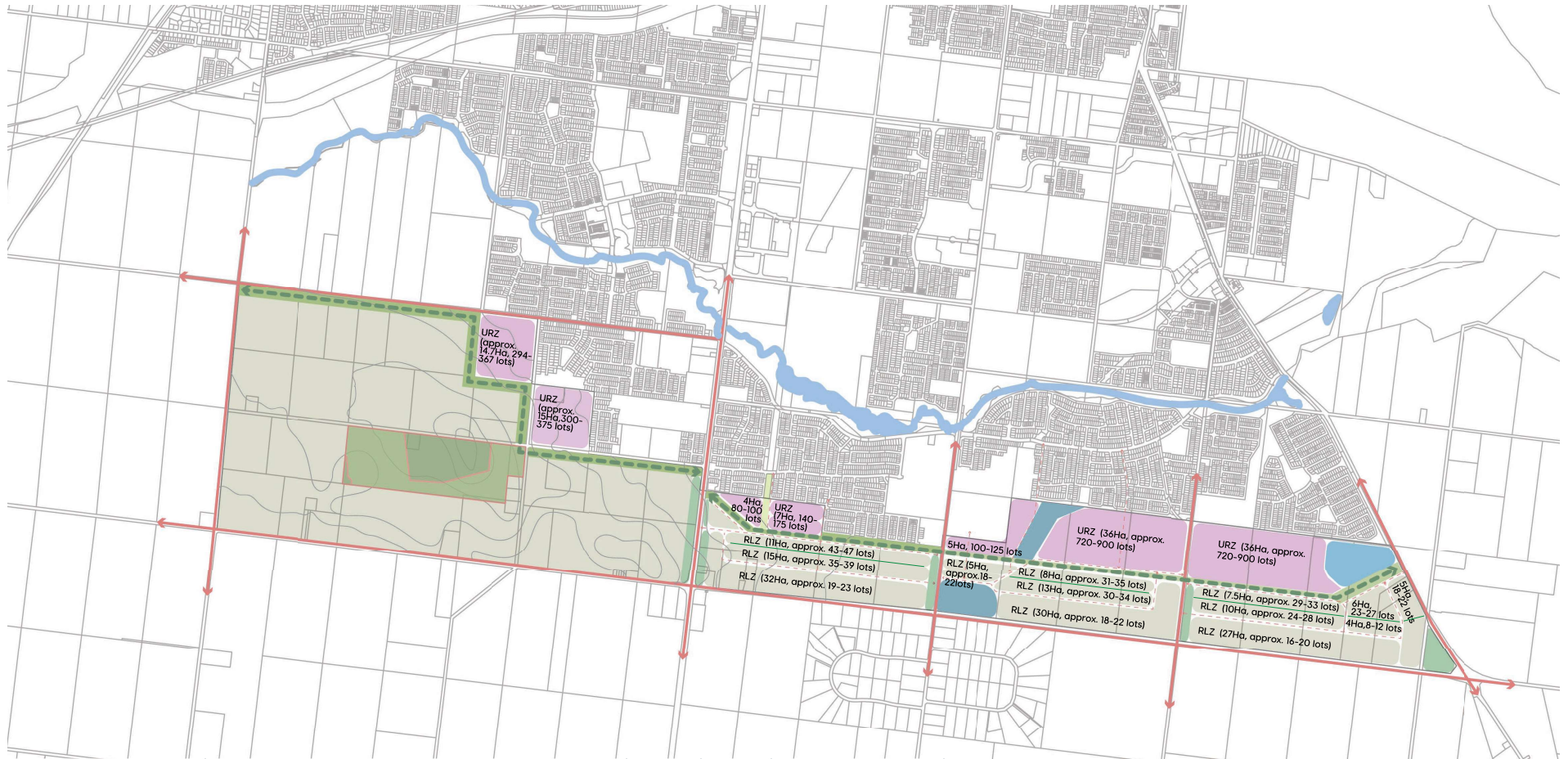


Indicative Land Budget

Total Investigation Area	777 Ha	100%
Encumbered Land - Mt Duneed Hilltop Precinct - PPRZ and ESO	44.3 Ha	5.7%
Encumbered Land - Drainage and Flooding	30.9 Ha	4%
UGZ Edge - 20m Linear Corridor	20 Ha	2.5%
Urban Growth Zone Extension	135.8 Ha	17.7%
Rural Living Zone	546 Ha	70.1%



UGZ Interface 5 - Possible Proposed Layout ( Areas and Lots Numbers )



Indicative Land Budget		
Urban Growth Zone Extension	135.8 Ha	17.7 %
Assume 15% for typical street/ road allowance ( incl significant single sided roads )	18.1 Ha	
Developable area for Standard Residential Lots (Typical Lots range from 400 - 500 sqm)	117.7 Ha	Approx. 2,354 - 2,942 lots
<b>Rural Living Zone</b>	<b>546 Ha</b>	<b>70.1 %</b>
Assume 15% for typical street/ road allowance	81.9 Ha	
Developable area for Rural Living Lots (Typical Lots range from 15-3.0 Ha)	291.6 Ha	Approx. 97-194 lots
Developable area for Rural Living Lots (Typical Lots range from 0.2-1.5 Ha)	172.5 Ha	Approx. 115-862 lots



## Summary

The Interface options outlined above incorporate considered ways to resolve the existing UGZ interface and the nature of the development boundary between City of Greater Geelong and the Surf Coast Shire. The options also consider the relative impacts on the local and more distant views towards Mt Duneed as the local topographical highpoint, and in particular these views from Mt Duneed Road.

Interface Options 2 and 3 incorporate variations on a transition from existing UGZ boundary to Low Density Residential Zone and Rural Living Zone, which would provide a visual transition to a rural landscape, and help protect the sense of Mt Duneed as an important local landscape feature. The consideration of interface treatments along arterial roads and Mt Duneed Road that limit access and crossovers to dwellings, would help visually reinforce these areas as rural in nature and character.

Interface Option 4 incorporates a Rural Living transition to the Mt Duneed Road edge, east of the Surf Coast Highway. To the west of the Surf Coast Highway it retains the existing Farming Zone to protect the slopes and topography of Mt Duneed and the important identified views and vistas to the high point.

Interface 5 outlines an approach to respect the views from along Mt Duneed Road, and make minor extensions to the UGZ areas with standard density in selected areas. This would improve the existing side/ back fences and temporary edge nature of the constructed dwellings as they currently exist. The UGZ edge would be properly formed with front facing dwellings onto a local street, which then transitions into the major landscape corridor located between UGZ and Farming Zone. This landscaped corridor could incorporate pedestrian, cycling and equine 'bridle trail' type connections. As a long term planned edge to the UGZ, this would represent a significant improvement on the existing temporary edge condition. It would also importantly respond to the identified important viewlines and vistas along Mt Duneed Road to the Mt Duneed topographic high point. In terms of the views towards Mt Duneed from the north, inside existing UGZ and development – the options take a position that standard residential development could potentially occur in selective areas ( indicated) that lie below the 65m contour, where the visual impact of new dwellings and rooflines would be minimised.



## Appendix 1: Relevant Example - Woodend

Woodend has a number of larger lot precincts being developed at the edges of the town - comprising both rural living and low density rural living.

Notable Features:

- The mix of lots sizes within the northern edges of Wooded generally range from 3,500sqm to 6,000 sqm in size,
- The area includes some significant mature vegetation and canopy trees, which help screen dwellings from view,
- The dwellings are generally set reasonably close to and addressing the street frontage.
- The mix of lots sizes within the northern edges of Wooded generally range from 1.5 - 2.5 Ha in size,
- The dwellings are significantly less visible from the road reserves, and the character of the area feels significantly more rural as a result.
- Both these edges of Woodend are reasonably flat with only very gentle changes in topography.



A relatively open rural streetscape in the northern edge of Woodend - avg 5,000sqm lots and limited screening in the road reserve.



Woodend Context



The northern edge of Woodend - avg 3,500sqm - 6,000 sqm lots.



The western edge of Woodend - avg 1.5-2.5 Ha lots.

## Appendix 2: Relevant Example - Torquay

Torquay has a north-western growth area to the settlement that transitions from conventional size lots, to larger rural living lot. It is sited along Coombes Rd as the growth boundary and interface to farming land (FZ).

Notable Features:

- Avg 3,500sqm - 1 Ha sqm lots
- The Ghazeeopore Rd interfaces are rear boundaries of lots ( no access and backing on) and larger lots up to 1Ha in size,
- The Coombes Rd interfaces are fronting on with driveway access and are generally 3,500 - 6,000 sqm in size,
- The area incorporates some significant mature vegetation and planting, particularly as screening vegetation between lots,
- Rosedale Dr and Enfield Dr incorporate a major landscape buffer of avg 30m which expands out into a larger reserve which contributes to a rural feel,
- The dwellings are significantly less visible from the road reserves, and the character of the area feels significantly more rural as a result.
- These areas are reasonably flat with only very gentle changes in topography.



A open rural streetscape in the western edge of Torquay -some streetscape vegetation screening the visual impact of dwellings



Torquay Context



The western edge of Torquay - avg 3,500sqm - 1 Ha lots.



A open rural streetscape in the western edge of Torquay -one side with extensive landscape planting

# **Appendix 4**

## **Assessment of investigation areas against Principle 5 of the Settlement Boundary Review – Armstrong Creek Update**





# Appendix 5

# List of Submitters

éche|on  
planning

**e** [info@echelonplanning.com.au](mailto:info@echelonplanning.com.au)  
**a** 3 Prentice Street, Brunswick  
**t** 03 9862 3470

THE CITY OF  
GREATER GEELONG

# URBAN GEELONG LONG TERM SETTLEMENT BOUNDARY REVIEW

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ENGAGEMENT SUMMARY &  
FINAL RECOMMENDATIONS

JUNE 2024



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The City of Greater Geelong acknowledges Wadawurrung people as the Traditional Owners of this land. It also acknowledges all other Aboriginal and Torres Strait Islander People who are part of the Greater Geelong community today.

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## Executive Summary

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This attachment provides additional information in support of the final recommendations to be adopted in relation to the Urban Geelong Long-Term Boundary Review.

It should be read in conjunction with the council report and the Urban Geelong Long-Term Boundary Review Background Report, July 2023 and associated Addendum, May 2024.

A summary of the Report recommendations and an officer response are found in Appendix A.

This attachment provides additional information in relation to the consultation, referral responses, further work and strategic assessments associated with the final recommendations.

There are 4 final recommendations to come out of the review, the existing settlement boundary will be nominated as the long-term boundary except for three minor changes:

1. Inclusion of 145 Harriots Road, Charlemont in the Sparrovale investigation area (see figure 1).
2. Inclusion of land in the Low Density Residential Zone (east of Coppards Road, Newcomb) in the Moolap Investigation area (see figure 10). No rezoning proposed.
3. Inclusion of 55 & 75 Williams Road, Mount Duneed in the Armstrong Creek South Central investigation area (see figure 13).

And a land use change recommendation that does not require any changes to the settlement boundary:

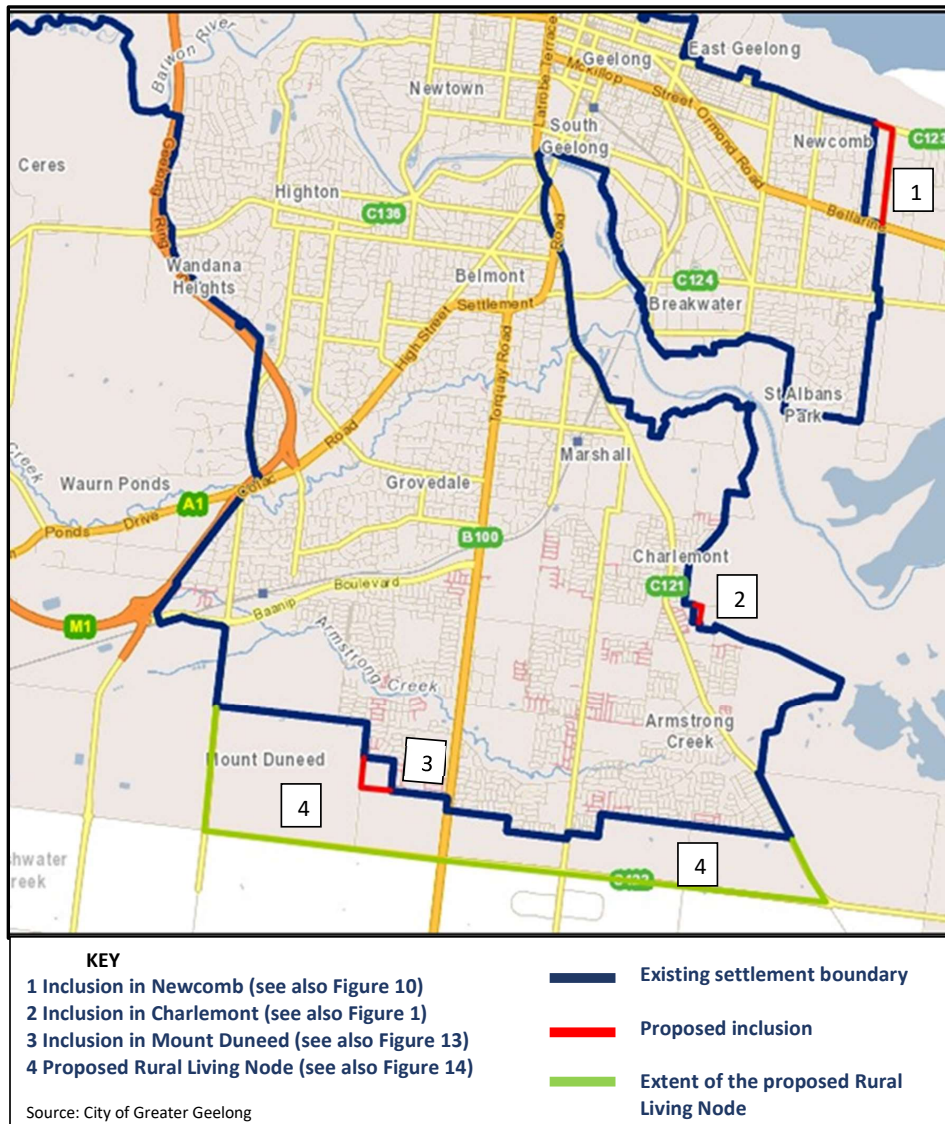
4. Proposed change to the zone from Farming to Rural Living (subject to further work) in the Armstrong Creek investigation areas between the Armstrong Creek Urban Growth Area (ACUGA) and the Surf Coast Shire (Mt Duneed and Lower Duneed roads) from Ghazeeopore Road in the west to Barwon Heads Road in the east (see figure 14).

These changes are shown on the 'Settlement Boundary Inclusions and Proposed Rural Living Node Plan' on map 1 over the page.

There is an option to pursue rezoning the land in items 1 and 3 as part of the boundary review amendment. This will be further investigated with stakeholders as part of preparing the amendment documentation. The matters to be considered as part of any rezoning are noted in section 5 of this report.

The amendment will be subject to the process and notice provisions set out in the Planning and Environment Act 1987.

**Map 1 - Settlement Boundary Inclusions and Proposed Rural Living Node**



# 1.0 Consultation

The consultation on the draft report involved inviting feedback via submissions. Feedback was invited via an online form or email direct. A total of 92 submissions were received. This section reports on the broader consultation. Submissions are addressed in the Background Report.

## 1.1 Objectives

The consultation objectives on the draft Background Report included seeking feedback on the:

- methodology
- investigation areas
- criteria
- and assessments.

*Note:* No settlement boundary was nominated in the draft report.

## 1.2 Activities

The following consultation activities were undertaken:

- Direct mailout to all landowners in the investigation areas.
- Notice to Geelong based planning consultants
- Notice to agencies, Traditional Owners and state Government
- Notices in papers - City News early 2022 (2/04, 9/04, 16/04, 23/04, 30/04)
- Have Your Say page (submissions received from 30th March - 27th May 2022)
- Optional submitter 30-minute meetings conducted 29 August - 7 September 2022 (28 meetings conducted)

### Have Your Say Page Statistics

<b>4,038</b> Views	<b>2,631</b> Visits	<b>2,188</b> Visitors	<b>73</b> Contributions	<b>69</b> Contributors	<b>59</b> Followers
<small>Views - The number of times a Visitor views any page on a Site.                  Visits - The number of end-user sessions associated with a single Visitor.                  Visitors - The number of unique public or end-users to a Site. A Visitor is only counted once, even if they visit a Site several times in one day.                  Contributions - The total number of responses or feedback collected through the participation tools.                  Contributors - The unique number of Visitors who have left feedback or Contributions on a Site through the participation tools.                  Followers - The number of Visitors who have 'subscribed' to a project using the 'Follow' button.</small>					

### 1.3 Submissions

A total of 92 submissions were received. The distribution of submissions across locations/topics was as follows:

Area	No.
<b>Armstrong Creek (West &amp; Central)</b>	27
<b>Avalon</b>	2
<b>Lara</b>	9
<b>Moolap</b>	25
<b>Sparrovale</b>	5
<b>Waurm Ponds</b>	3
<b>Overall Strategy</b>	21
<b>TOTAL</b>	<b>92</b>

### 1.4 Engagement Findings – Key Themes

The overall key themes to come out of submissions included:

- General support for approach to investigation areas, methodology, criteria and assessments noting the limitations of such a large study area.
- A number of submitters noted a more nuanced assessment of ‘stand-alone’ sites or smaller ‘precincts’ within investigation areas could yield different assessment results providing an overall ‘positive’ outcome.
- A few submissions noted lot supply should form part of the assessment criteria.
- A few submissions requested the investigation areas be extended.
- The majority of submissions requested inclusion within the long-term settlement boundary due to being able to make a positive contribution to housing supply and an enduring boundary without impacting on existing communities, infrastructure or the environment.
- Several submissions requested the boundary remain where it is to promote infill development, prevent urban sprawl and protect environmental and landscape values.
- A few submissions noted the need for an ‘Urban Growth Boundary’ as opposed to a ‘Housing and Settlement Boundary’ to include all urban land including employment land.

### 1.5 Response to Submissions

Post the consideration of submissions the Background Report was updated to summarise the submissions and respond to them. Responses are found within the relevant ‘investigation area’ chapter.

### 1.6 External Referrals

#### **Barwon Water**

Overall, Barwon Water was generally supportive of the principles and directions set out in the Settlement Boundary Review. They noted significant investments have been made to boost the region’s water resources and provide infrastructure to support and cater for growth.

They noted as a service authority they respond to planning direction from councils such as the City of Greater Geelong. They do not have a formal position on permanent settlement boundaries as they relate to servicing of areas but are supportive of the logical inclusion process and the consideration of areas based on a range of criteria. Overall, the work accurately reflects their current servicing issues for each of the investigation areas.

*Response*

Noted.

**Wadawurrung**

The Wadawurrung Aboriginal Corporation (RAP) submission provided recommended edits to wording to provide greater clarity or to use culturally appropriate statements.

There was general support for the substance and intent of the Review notwithstanding some feedback on all 'neutral' assessments to be amended to 'negative' given the impacts of potential development on Wadawurrung living cultural heritage values and greater reference to *Paleert Tjaara Dja* (2020).

It was also requested no changes be entertained to the existing protected settlement boundaries as designated/delineated in the draft Review.

*Response*

Recommended text edits have been made. Further commentary on cultural heritage impacts is discussed for each recommendation below.

**VPA**

The VPA notes the State Government's release of Victoria's Housing Statement which identifies the benefits of achieving more new development in established areas with high design standards and good access to public transport. They note a desire to prioritise and direct growth to established locations with infrastructure capacity in Geelong.

In relation to the Boral site they support the South-West Geelong Employment Land Review being progressed to address the future use of the Boral site.

*Response*

Noted.

**Department of Transport & Planning (DTP)**

DTP raised a number of concerns in relation to any expansion of the boundary in either the Bellarine or Surf Coast declared areas due to landscape and green break objectives; the use of the RLZ and consistency with local policy; the need for further view analysis if land is to be included for urban development near Mount Duneed and the inclusion of some but not all LDRZ in Newcomb/Moolap.

*Response*

Further work was undertaken to further analyse the landscape impacts of urban expansion in the Armstrong Creek Corridor, the outcomes are discussed below.

The rationale for the final long term boundary location, including an assessment against policy, can be found in section 4.0.

**CCMA**

The CCMA provided advice on the Sparrovale investigation area in relation to a potential site being included within the boundary.

*Response*

See discussion in section 4.1.

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## 2.0 Post Consultation – Armstrong Creek Investigation Areas

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### 2.1 Further Work Development Scenarios

Post the consideration of submissions it was decided further work was required to test some of the proposals put forward by submitters in the Armstrong Creek investigation areas.

Further work was carried out to consider five interface treatments between the Armstrong Creek Urban Growth Boundary and the municipal boundary (Appendix 3 in the Background Report '*Mount Duneed Road Urban Design Options*'). This work tested some of the options put forward by submitters (various combinations of rezoning the land for more intensive development) to assist decision making on the final long-term boundary.

The options are intended as illustrations only and do not represent final development scenarios. They aim to show some of the implications of different planning approaches and the associated challenges, issues and opportunities. The options included:

1. Low Density Residential Zone/Rural Living Zone transition
2. Rural Living Zone north of Lower Duneed Road
3. Rural Living Zone north of Lower Duneed Road (East of Surf Coast Highway only)
4. Minor adjustments to UGZ boundary with the balance as Farming Zone
5. Minor adjustments to UGZ boundary with the balance as Rural Living Zone.

Two case studies were also provided to look at the characteristics of rural living style developments in Torquay and Woodend.

### 2.2 Referral of the updated Background Report

Given further work had been completed and the Background Report had been updated, it was re-sent internally to all relevant departments and externally to Queenscliffe, Wyndham, Surf Coast, Golden Plains local councils, DTP (Transport, DALs project team and regional planning office), Barwon Water, G21, RAP - Wadawurrung and VPA in June 2023. A submission was also referred to the CCMA for specific comment.

The referral responses have helped inform the final recommendations, see section 4.0 below.

Officers met with DTP Geelong South-West regional office in May 2024 to discuss the progression of the work and the next steps.

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## 3.0 Post Referral – Further Work

### Armstrong Creek Investigation Areas

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#### 3.1 Further Work Visual Analysis

In its referral response to the updated background report, DTP raised a number of matters for further consideration. This included the need for a visual impact assessment to confirm any new development in the 'Mount Duneed and Surrounds' regionally significant landscape did not detrimentally impact the landscape and green break values identified in the Surf Coast Statement of Planning Policy (SPP).

Post receipt of this advice officers re-engaged Echelon in late 2023 to assist with the landscape assessment work. Consultants Pointalism, assisted by Beverage Williams, commenced in early 2024 with a report completed in May 2024. Echelon have analysed the work completed by Pointalism and prepared an addendum to the Background Report which sets out findings and recommendations.

#### 3.2 Visual Analysis Findings

The Pointalism visual analysis work is an appendix in the Echelon addendum to the background report.

The two key findings out of the visual analysis are:

- 55 & 75 Williams Road (Purdies Paddock) is included in the settlement boundary.
- 10-40 Williams Road is not included in the settlement boundary.

These findings were reviewed by officers prior to a decision being made on the location of the long-term settlement boundary.

## 4.0 Final Recommendations

There are 4 recommendations to come out of the review that result in changes to existing conditions. Three relate to changes to the boundary (Sparrovale, Moolap and Armstrong Creek South- West investigation areas) and one relates to a land use change outside the boundary (Armstrong Creek South West and South Central investigation areas).

### 4.1 Sparrovale Investigation Area

#### Recommendation 1

Extend the settlement boundary to include 145-153 Harriott Road shown in figure 1 below (existing boundary shown in blue, proposed boundary shown in red):

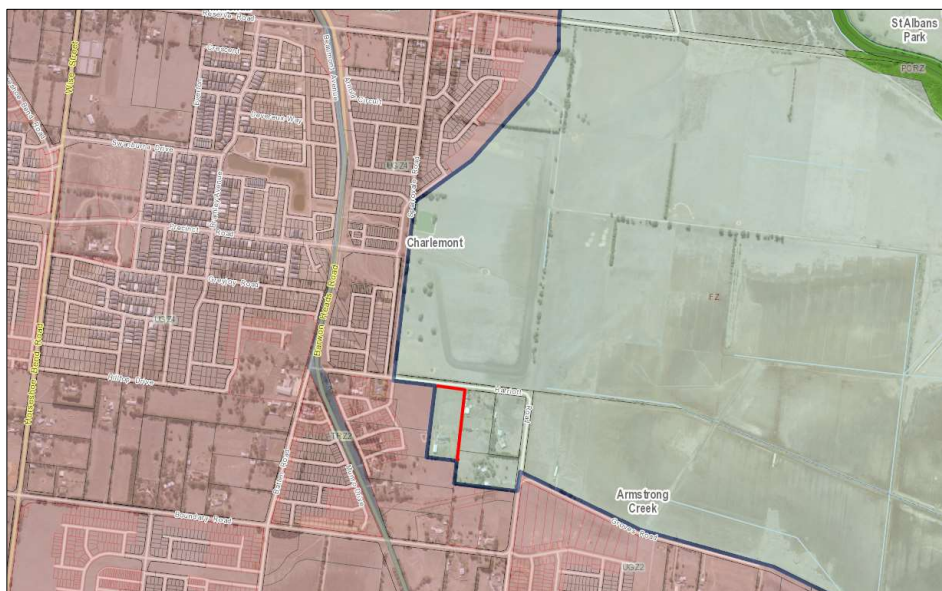


Figure 1 - Existing (blue) and proposed (red) settlement boundary. Source: CoGG

#### Summary of support for the recommendation:

- This minor adjustment to the boundary (one additional lot of ~2.3ha) is contiguous with existing urban land (assessment guiding principle 2).
- The land can rely on existing services without creating additional need (assessment guiding principle 5).
- Barwon Water have indicated infrastructure delivery benefits if the land is developed that could support development in the existing urban growth zone (assessment guiding principle 4).
- Subdivision of this site into larger residential allotments would provide an improved transition between the urban growth and farming zoned land which currently proposes a solid boundary fence.

- While Harriots Road itself would make a more logical boundary the flood levels on the other 3 lots means they are not developable. The CCMA have been consulted on the proposal to include this site and did not object subject to conditions.

Of the remaining 3 landowners one noted they were happy to be rezoned or left as farming zone and two landholders did not make a submission.

Given the minor nature of this proposal, this land could be rezoned as part of the boundary review amendment rather than require a separate amendment. A residential zone with design guidance would ensure adequate controls are in place for subdivision.

The submission included a proposed layout and a high-level assessment of servicing and other considerations:

- *Eighteen lots varying in size, offering a transitional density between Haymont estate and the land to the east (see figure 2 below).*
- *A 16m road reserve from Harriott Road and terminating at a court bowl.*
- *All lots provided with adequate area to construct a dwelling and associated outbuildings above the land subject to inundation.*
- *The land subject to inundation and flooding utilised as secluded private open space of adjacent lots.*
- *Minimal fill on the boundary with 135 Harriott and limited to the rear of the property, achieving an urban design outcome that respects neighbouring properties.*
- *Provides a better transition between urban and farming land uses.*

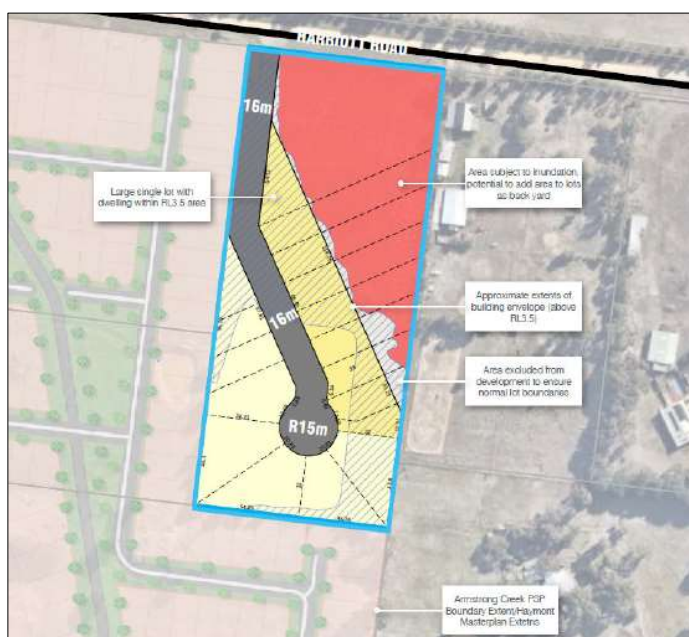


Figure 2 – Potential subdivision layout submitted by the landowner with consideration given to flood levels. Source: landholder submission

Barwon Water have indicated they do not object to this lots' inclusion. They also note there could be benefit to a through road (on proposed site) for infrastructure installation connecting to the court bowl in the urban growth zone (shown in figure 2 above). This can be investigated as the proposal moves forward.

The lot was previously subject to the Flood Overlay (figure 3 below) and thus was excluded from the urban area under the original Armstrong Creek Framework Plan. Under amendment C339 part 2 - Flood overlays (Lower Barwon and Moorabool rivers and Bellarine Peninsula Coastal Hazard) the flood overlay extent has been revised down on the subject land (figure 4).



Figure 3 – Subject site (blue outline) showing former extent of existing Flood Overlay prior to January 2024. Source: CoGG



Figure 4 – Current extent of the LSIO (light blue) and FO (dark blue) on the Farming Zoned lots on Harriott Rd. Source: GG planning scheme.

The submission was referred to the Corangamite Catchment Management Authority (CCMA) who used the proposed subdivision layout and overlaid the 1% flood level (see Figure 5 below). The CCMA did not object to this property being included within the settlement boundary and recommended conditions for the conceptual layout.

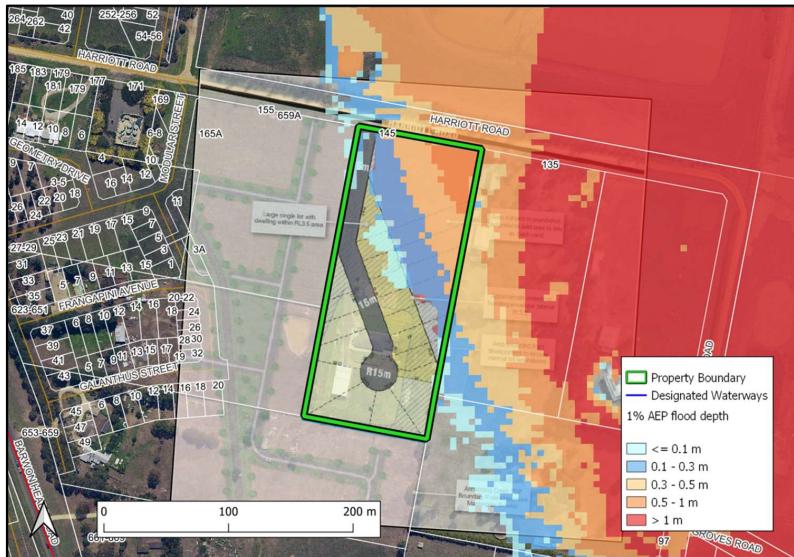


Figure 5 - Subject property (green outline) showing the applicable 1% AEP flood extent and proposed lot layout. Source: CCMA

The image below was taken during the high rainfall event in November 2022. The flooding did not extend beyond the Sparrovale wetlands (blue arrow) to Harriots Road (marked with the orange arrow) during this flood event. The subject site is shown with the red star on figure 7.



Figure 6 – Flood event in 2022 showing waters remaining in Sparrovale wetland. Source: CoGG



Figure 7 – Aerial image showing location of subject site (red star) in relation to Harriott Roads (orange arrow) and flood waters (blue arrow) in Figure 6 above. Source: CoGG

The DTP response indicated there is a lack of strategic justification to include this land within the Settlement Boundary. There is reference to the Bellarine SPP which has the boundary in this area nominated as a green break of regional significance (as is all Farm Zone land in the declared area). The boundary is nominated in the SPP as ‘indicative subject to further work’, the further work being this boundary review.

#### **Assessment against the Bellarine SPP**

An assessment against the Bellarine SPP has been carried out below:

##### ***Aboriginal cultural heritage – Wadawurrung Country***

*Objective 1: To conserve, strengthen and promote the declared area’s Aboriginal cultural heritage values and partner with the Wadawurrung to care for Country.*

##### Response

In their response to the draft Background Report the Wadawurrung indicated they want no change to the existing boundary. No response was provided to the updated Background Report. This proposed minor inclusion does not include any known areas of cultural heritage sensitivity including registered Aboriginal cultural heritage places or landforms and land categories that are generally regarded as more likely to contain Aboriginal cultural heritage. The planning scheme amendment/subdivision application will be referred to the Registered Aboriginal Party for comment including any Cultural Heritage Management Plan requirements. The site currently contains a dwelling and farming activities.

##### ***Environment and biodiversity***

*Objective 2: To conserve and enhance the significant biodiversity, ecological and environmental values of the declared area.*

##### Response

The property to be included is currently zoned and used for farming and does not contain any significant biodiversity. Any future subdivision would be subject to vegetation provisions in the

planning scheme. Stormwater can be managed on-site due to the size of the proposed lots and planned infrastructure and CCMA were supportive subject to conditions.

**Landscapes**

*Objective 3: To protect and enhance the identified landscape character, physical features, view corridors and natural and cultural values of the declared area’s significant landscapes.*

Response

Under the Bellarine SPP the land is located within the regionally significant landscape area:

*Central Bellarine Hills landscape area*

*Covering the whole central and northern area of the Bellarine Peninsula, the Central Bellarine Hills landscape area is characterised by terrain that is gently undulating to hilly. Its high points include Mount Bellarine (also known as Murradoc Hill and which is the most dominant topographic rise in the north), Scotchmans Hill and Marcus Hill. The landscape area forms a backdrop to many settlements and offers expansive views of the coast and beyond. The hilly landscape interfaces with the coast with prominent slopes to Lake Connearre and a steep escarpment overlooking the Bass Strait coast at Ocean Grove. There is a discernible, steeper edge to the landscape area in the north near Portarlington and Clifton Springs as it meets the coast. Before colonisation, the area would have supported a complex woodland community; now, only pockets of remnant native vegetation remain in small clusters, including those adjacent to waterways and along roadside reserves. The balance of the land is a cleared, agricultural patchwork of paddocks and planted windbreaks, with some exotic trees around homesteads and vineyard plantings.*

Figure 8 below shows the extent of the Central Bellarine Hills area in yellow.

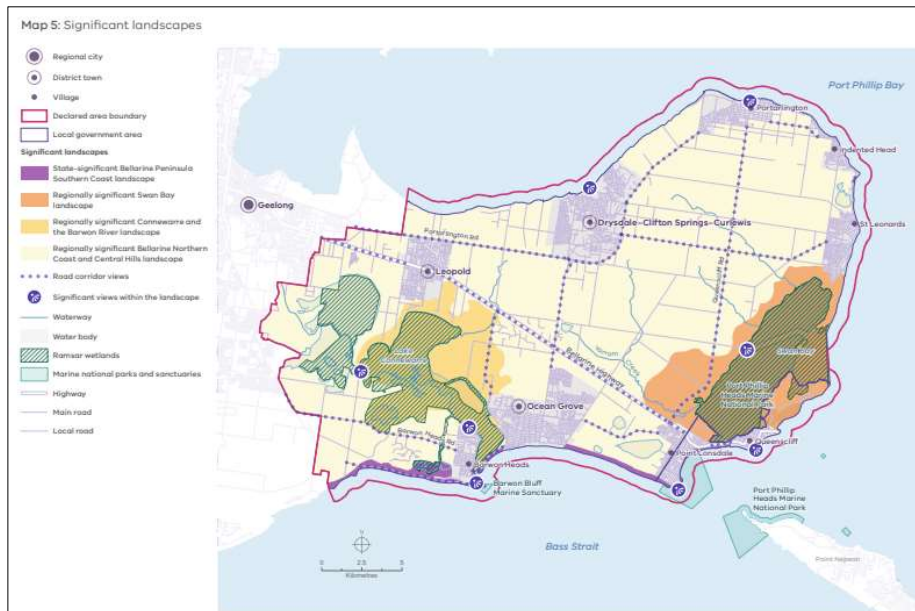


Figure 8 – Significant landscapes map, Bellarine SPP. Source: Bellarine SPP

This description does not relate to the land west of Lake Connemare. This is further demonstrated by the Landscape Character Area Map (figure 9) which nominates this area as part of the Mount Duneed Volcanic Plain rather than the Central Bellarine Hills area.



Figure 9 Landscape character area map, Bellarine SPP. Source: Bellarine SPP

The Surf Coast SPP contains the Mount Duneed Plains and Surrounds regional landscape of significance which also has the landscape area ‘Mount Duneed Volcanic Plain’, arguably this is the landscape that should apply to land west of Lake Connemare in the Bellarine SPP.

The Surf Coast SPP describes this landscape as:

*The Mount Duneed Plain and Surrounds is a flat-to gently-undulating landscape formed by volcanic flows of basalt. It includes the low, volcanic rise of Mount Duneed itself, with its unique geology and communities of grasslands. It also includes Thompson Creek, which winds its way from the coast at Breamlea, its upper and middle reaches cutting a pathway through the patchwork of paddocks that characterise this agricultural landscape. Remnant eucalypts are a further feature of this landscape, found in riparian reserves, adjacent to road corridors and scattered throughout paddocks. They contrast with the mostly exotic, lineal shelterbelt planting. This is an open, expansive landscape of long, straight roads under big skies. It is a very important green break between the built-up areas of Geelong and Torquay and the settlements of the Bellarine Peninsula.*

The proposed inclusion does not detract from the landscape or green break values identified in the Bellarine or Surf Coast SPP. No identified views or view corridors are impacted. The green break in this area is preserved in perpetuity due to the presence of flood overlays and public parks and reserves on land adjacent to the existing urban growth zone precinct. This lot is the only lot capable of development before flood levels rule further urban expansion out. The inclusion of lower density lots offers a better transition than the current planned urban-farming transition. It is also consistent with the Surf Coast SPP objective to consider the design and density of development in urban-rural

transition areas within the protected settlement boundary that support the regionally significant landscape setting.

***Environmental risks and resilience***

*Objective 4: To achieve a zero-carbon future and support the resilience of the declared area's distinctive attributes by taking sustained measures to reduce greenhouse gas emissions, mitigate climate change and natural hazards risks and adapt to their impacts.*

Response

The proposal is responsive to the latest flood mapping and is supported by the CCMA.

***Historic heritage***

*Objective 5: To protect, strengthen and promote the declared area's post-colonial historic heritage values.*

Response

Not applicable.

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

*Objective 6: To enable a diverse, sustainable and strong regional economy (including responsible tourism, agriculture and natural resource industries) that protects and promotes the declared area's landscape significance, environment and biodiversity, agriculture and Wadawurrung living cultural heritage and historic heritage values.*

Response

The proposal has no impact on tourism or agriculture. This property is one of four ~2ha lots which are more akin to lifestyle rather than farming properties. Map 7 in the SPP shows the site is covered by the Extractive Industry Interest Area however the proximity of urban development, flood risk and the location of RAMSAR wetlands means it is unlikely to ever be used for extractive activities.

***Strategic infrastructure***

*Objective 7: To ensure the integrated provision and protection of transport, strategic water assets, essential services and community infrastructure that meets the community's needs while increasing resilience to climate change.*

Response

There are no impacts on strategic infrastructure. The inclusion of one 2ha property (potential ~18 lots when subdivided) means the development can rely on existing infrastructure without putting pressure on existing and planned infrastructure, services or facilities.

***Settlements***

*Objective 8: To plan and manage the sustainable development of settlements in the declared area consistent with the protection of the area's landscape significance, environment and biodiversity values, Wadawurrung living cultural heritage and historic heritage values and consistent with the unique character and hierarchy designation of each settlement.*

Response

The proposal provides a superior transition within the settlement boundary from the urban area to the Farming Zone and Public Conservation and Resource zone.

**Conclusion**

- The addition of this lot into the settlement boundary provides a superior urban-rural transition and potential infrastructure delivery benefits.
- The addition of this lot into the settlement boundary will not detrimentally impact the greenbreak.
- The addition of this lot will not create pressure for further consolidation or boundary expansion due to the environmental constraints of the area.

**4.2 Moolap Investigation Area**

**Recommendation 2**

Extend the settlement boundary to include the area between the existing settlement boundary and Coppards Road in Newcomb (existing boundary shown in blue, proposed boundary shown in red in figure 10).

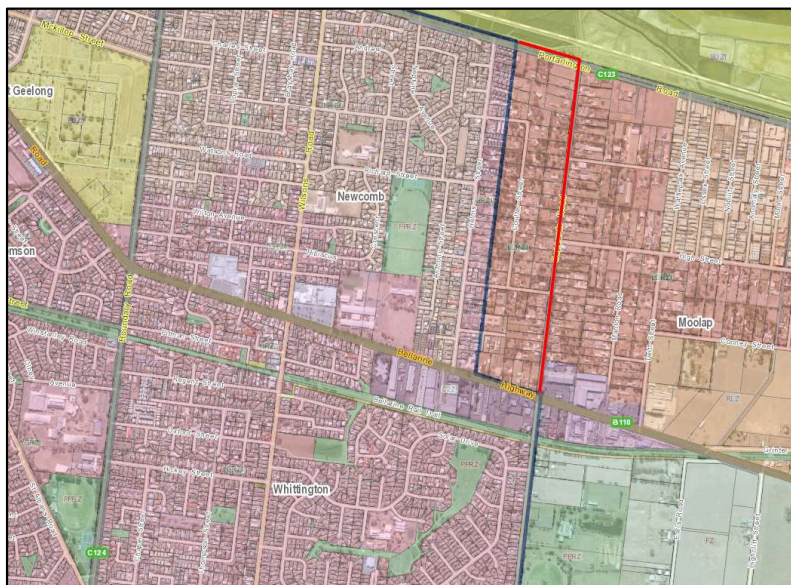


Figure 10 – Existing boundary (blue) and proposed boundary (red) in Newcomb. Source: CoGG

**Summary of support for the recommendation:**

- The land is zoned Low Density Residential Zone (LDRZ) which is an urban zone and the area is contiguous with the Newcomb urban area (principle 2).
- The area is already established and will not impact existing services (principle 5).

- The proposed boundary aligns with the Coppards Road boundary on the south side of Bellarine Highway.
- The use of a major road offers a more logical and enduring boundary than the rear of properties that mark the change between the GRZ1 and LDRZ.
- The boundary aligns with the suburb boundary between Newcomb and Moolap.
- The precinct of LDRZ on the west side of Coppards Road is connected to services, the east side has limited sewer and serves as a buffer/transition to the Moolap industrial estate.

### **Submissions**

There were several individual and a group submission that requested further investigation for urban consolidation opportunities and inclusion in the settlement boundary in the area west of Coppards Road. There are approximately 71 landholders in the area and around 35 landholders requested urban consolidation consideration (multiple landholders were included in one submission). The area is generally bounded by Coppards Rd, the rear of lots fronting Helms St (including Coulter Street) and Portarlinton and Bellarine Highways. The request for urban consolidation means rezoning from LDRZ to NRZ and/or GRZ.

One submitter was keen to see the area remain as a buffer between urban and rural/industrial areas and to protect the environmental and garden values of the area and to provide a different housing choice (larger lots) to what is currently available.

### **Discussion**

In its referral response, DTP questioned the inclusion the LDRZ area east and not west of Coppards Road and that potentially the Industrial zoned land should be included in the boundary as well.

The boundary review relates to updating the settlement and housing framework plan (02.04-3) and is not intended to be an urban growth boundary, for this reason the inclusion of employment or industrial land is not being considered. This is consistent with the approach taken across the municipality with this project including areas such as the Avalon Employment Precinct, Deakin Waurrn Ponds Campus, Geelong Ring Road Employment Precinct, Geelong Port Zone and the Moolap-Point Henry industrial area remaining outside the boundary.

Coppards Road is considered a more logical and enduring boundary than the current boundary which runs between the rear boundaries of the GRZ1 properties fronting Helms Street and the rear of properties zoned LDRZ fronting Coulter Street. Coppards Road is already used as the boundary on the south side of the Bellarine Hwy between Moolap and Whittington/St Albans Park. The proposed boundary would align with the suburb boundary of Newcomb and Moolap.

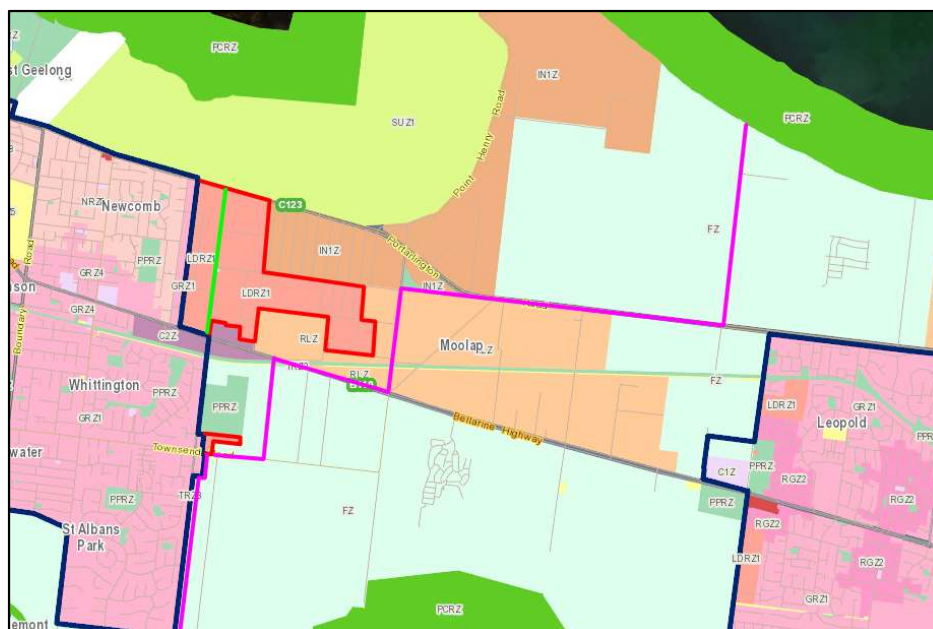
The area east of Coppards Road (north of the Bellarine Hwy) does not have access to sewer. The LDRZ precinct to the east is also irregular in shape and would not produce a more logical or enduring boundary than Coppards Road. It also offers a transition to the RLZ and provides a lower intensity interface with the Moolap industrial precinct.

The inclusion of land into the settlement boundary often precedes requests to intensify land uses such as low density residential to conventional residential densities. In this case, the City is not looking at any intensification of this LDRZ precinct, but is recommending land on the east side of Coppards Road be included into the boundary to provide a robust, logical and long-term boundary to the eastern edge of urban Geelong. This will assist with the policy aspiration to provide a green break between urban Geelong and the Bellarine Peninsula. The inclusion of the whole LDRZ will not

produce a more logical boundary than the use of Coppards Rd given it would use a combination of lot boundaries and 7 local roads (See red line boundary on figure 11 below).

If DTP do not support this position the options include amending the proposed boundary to include whole LDRZ precinct (red line, figure 11) or maintaining the existing boundary (blue line, figure 11).

This area has implications for the Bellarine SPP as the framework plan nominates an indicative settlement boundary at the eastern edge of urban Geelong, see figures 11 & 12 below. The indicative boundary in the SPP extends all the way to Clifton Avenue, Leopold, goes west along the Portarlington Highway then south for a small section along Moolap Station Road, Earls Road then Coppards Road. The indicative boundary directly follows the declared area boundary rather than the existing settlement boundary. This is a different approach to the indicative boundary in the Surf Coast SPP which follows the existing settlement boundary rather than the declared area boundary. In this case the declared boundary is not considered an appropriate settlement boundary as it would include rural living and farm zoned land.



- Existing settlement boundary
- Proposed settlement boundary
- Potential boundary if all LDRZ land is included
- SPP indicative boundary (based on the declared area boundary)

Figure 11 – Boundary options in the Newcomb - Moolap area. Source: CoGG

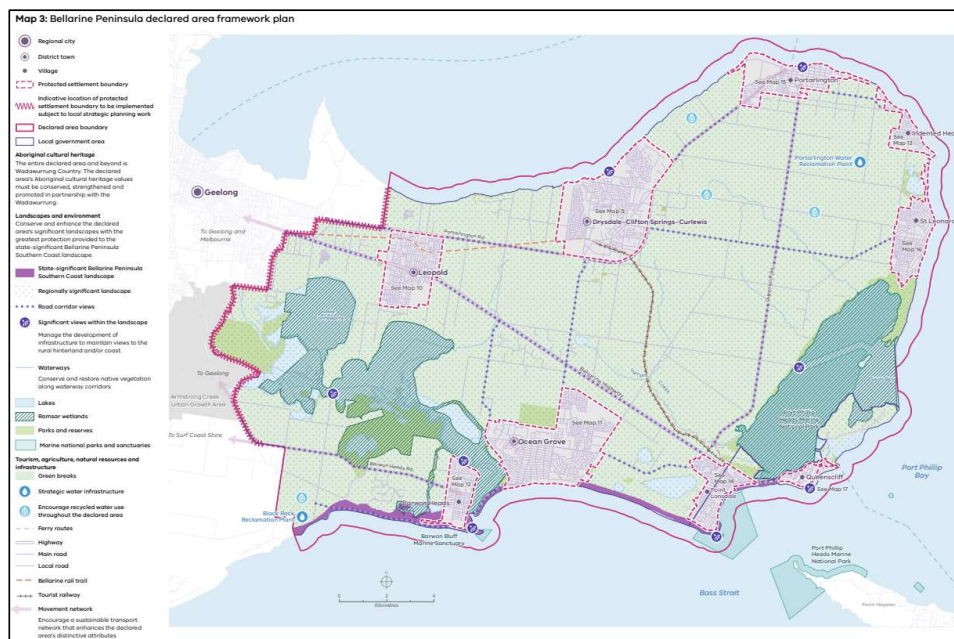


Figure 12 – Framework Plan map showing indicative boundary (red zigzag line). Source: Bellarine SPP

The outcome of this review will inform the final position of the Protected Settlement Boundary in the Bellarine SPP which will be implemented by DTP.

The urban consolidation option put forward by submitters has been investigated further with Barwon Water and the City’s Engineers.

Barwon Water noted the area has access to sewerage and water and further development of this area is likely feasible without significant augmentation of existing assets.

Engineering Services advised there are significant stormwater servicing and flooding constraints in this low-lying area. The upgrades required to the network to deliver further development in this area are not likely feasible (costs and land area required for assets etc.). This area forms part of a wider catchment and any localised development could have broader flooding implications upstream. Flood prone areas in this part of Newcomb and Moolap are covered by the Special Building Overlay. For this reason, they have recommended against this area be nominated for ‘further investigation’ for future consolidation at this time.

**Conclusion**

- The use of Coppards Road as the settlement boundary will provide a logical and defensible long term boundary between the eastern edge of urban Geelong and the Bellarine.
- Coppards Road is already used as the the boundary south of the Bellarine Highway. It is also the boundary between the suburbs of Newcomb and Moolap.
- The extension of the settlement boundary to Coppards Road will not result in a recommendation to change the zone at this time.

### 4.3 Armstrong Creek South West Investigation Area

#### Recommendation 3

Extend the settlement boundary to include 55 & 75 Williams Road, Mount Duneed. Figure 13 below shows the existing boundary in blue and proposed boundary in red.

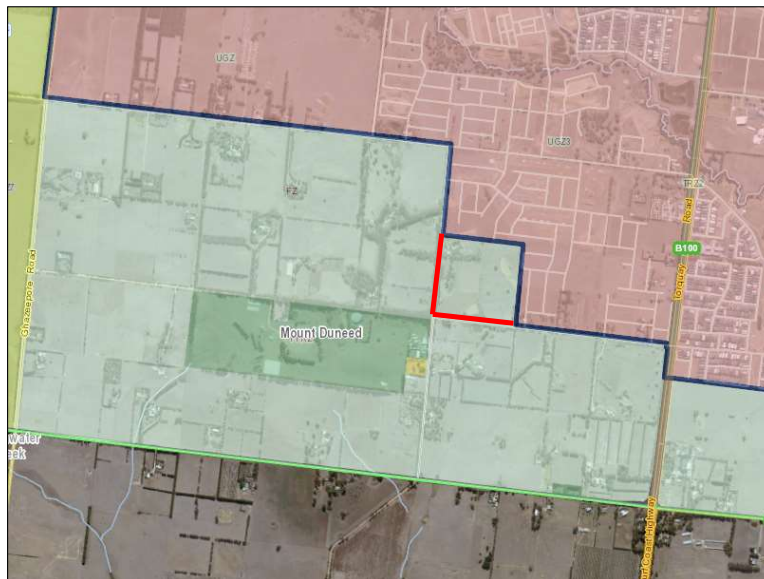


Figure 13 – Existing boundary (blue) and proposed boundary (red). Source: CoGG

#### Summary of support for the recommendation:

- This minor adjustment to the boundary (inclusion of ~16.2ha) is contiguous with existing urban land (assessment guiding principle 2).
- The land can rely on existing services without creating additional need (assessment guiding principle 5).
- The inclusion of this land will see the boundary in this location move from lot boundaries to Williams and Feehans Roads which is more robust and logical.
- The visual analysis indicates urban development in this location will have a neutral impact on views of Mount Duneed (see addendum to Background Report).
- Development of this site could support the completion of Feehans Road to the Williams Road intersection and connection to the proposed school. (assessment guiding principle 4).
- Development of this site can support the upgrade of Williams Road to improve access to the Mount Duneed Primary School. (assessment guiding principle 4).
- The development of this site provides opportunities to address local traffic management issues in this area, particularly at pick-up and drop-off times with the approved Catholic Primary school to be constructed and the existing Mount Duneed Primary school is close proximity (assessment guiding principle 4).

**Submission**

The submission made in support the inclusion of this site was supported by a planning report, infrastructure assessment, storm water assessment, landscape impact assessment and letter of support from Mount Duneed Primary School.

**Discussion**

The Background Report and Addendum provide detailed commentary on this site.

The inclusion of this land in the boundary will result in new urban development. The Neighbourhood Residential Zone is recommended to ensure development respects the identified landscape characteristics of the area by restricting development to two storeys to limit the impact on views of Mount Duneed. The application of a Development Plan Overlay/Design and Development Overlay will ensure the orderly planning of the area. Details of the proposed planning scheme changes can be found in section 5.0.

There is an option to pursue the rezoning of this land as part of the boundary review amendment. This will be further investigated with stakeholders as part of preparing the amendment documentation.

**Conclusion**

- The inclusion of these lots produces a logical boundary using roads rather than lot boundaries.
- There are road upgrade opportunities to support traffic management around existing and proposed schools.
- The impact on the green break is neutral with the Mount Duneed ridgeline still the prominent landscape feature .
- Existing canopy trees along Williams Road are to be retained to soften views.

**4.4 Armstrong Creek South West and South Central Investigation Areas****Recommendation 4**

Nominate land south of the existing Armstrong Creek Urban Growth Boundary to the municipal boundary (Mount Duneed and Lower Duneed Roads) as a rural living node.

Subject to further investigation and planning this would see the area change from the Farm Zone to the Rural Living Zone, see figure 13 below. No changes to the existing settlement boundary are recommended (except for the site noted above in section 4.3).

The Rural Living Zone would create approximately 238 to 596 lots based on lot sizes of 1– 2.5 hectares.

Given there are multiple land owners and fragmentation it is recommended the proposed rural living node be divided into an east and west precinct from Torquay Road / Surf Coast Highway. A coordinated approach is required to deliver overall planning for the precincts and ensure the

efficient delivery infrastructure and road, drainage and open space networks. Developer contributions will also need to be calculated.

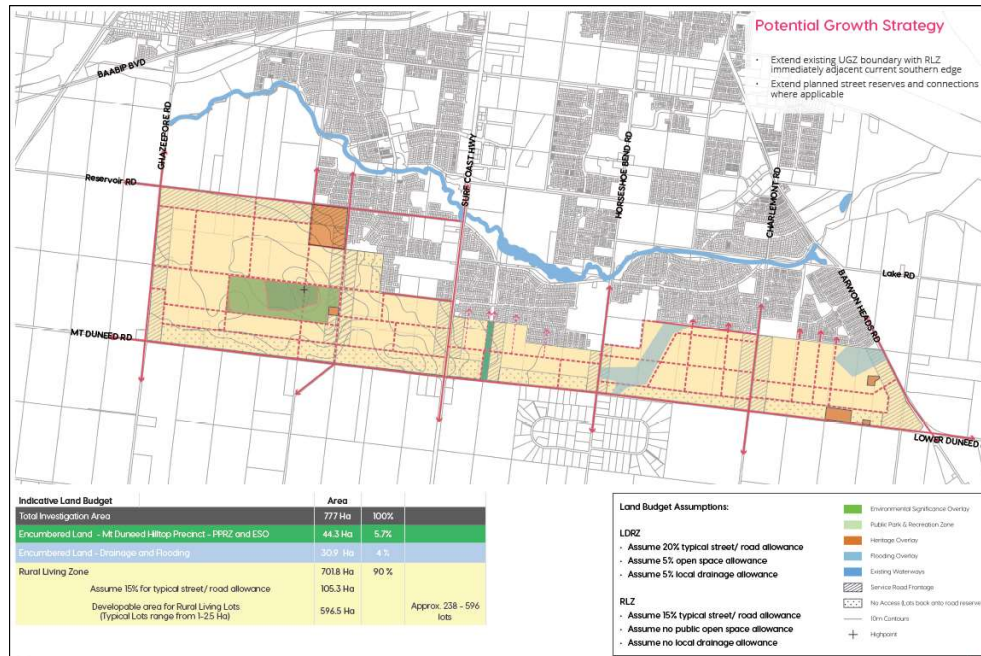


Figure 14 – Proposed rural living zone shown in orange hatching. Source: Background Report Appendix 3 pg 6.

**Summary of support for the recommendation:**

- The land is contiguous with existing urban zoned land (guiding principle 2)
- Development of the area for Rural Living will not impact existing services (principle 5).
- Some submitters noted farming in the area is becoming increasing problematic with urban encroachment.
- The RLZ is part of the rural suite of zones and the proposed lot sizes will ensure this change will not ‘urbanise’ the area.
- Housing and landscape policy objectives can be delivered via the Rural Living Zone and built form or landscape overlays.
- The application of the Rural Living zone in this area will strengthen the existing settlement boundary by ruling out future urban expansion or consolidation.

**Submissions**

There were 27 submissions from Armstrong Creek South-West (11) and Armstrong Creek South Central (16) requesting inclusion in the boundary to facilitate some form of more intensive development (GRZ, LDRZ, RLZ or a combination). There are around 59 titles / 56 owners in the corridor. Three submissions in this area requested no change to the existing boundary to support the existing landscape and farming activities in the area. The submissions are summarised and responded to in chapters 6.1 and 6.2 in the Background Report.

A further submission from landowners in the ACSW area was provided in 2024 which included a survey of landholders in the area and their preferred land use outcome. The survey showed there

was good support for the Rural Living Zone or a mix of zones from urban, Low Density and Rural Living to transition the intensity of development from the existing urban area to the farmland in Surf Coast Shire (16/30). There were several unknown responses due to no response or landowners assuming because the land was in an investigation area it would be included in the boundary with the option to sell to a developer, these responses did not offer a preferred land use outcome (11/30). The remaining options included keep as farming (2/30) and make urban (1/30). The majority of landholders are supportive of a change to more intensive development of some kind.

Several submitters raised the issue of farm viability with the existing and proposed urban encroachment. They argued the current transition is inadequate to preserve the ability for landowners to carry out farming activities without issues relating to slashing, spraying, baiting, hay bailing, moving machinery, stray dogs, people trespassing (often to walk dogs), rubbish dumping and biosecurity concerns. Financial and land value issues were also raised.

### Referral Response

DTP provided a response to the updated draft with boundary options and land use scenarios based on the further work (Appendix 3 in the Background Report '*Mount Duneed Road Urban Design Options*') in November 2023. They identified five key issues for further consideration by Council:

- **Strategic justification** – further strategic justification be provided in the context of the Bellarine Peninsula and Surf Coast Statements of Planning Policy (SPPs).
- **Scope** – The potential scale and intensity of any new urban (in interface scenarios 1, 4 & 5, Background Report) development could impact the character of the Mount Duneed landscape and rural green break of the Surf Coast declared area.
- **Visual impact assessment** – Confirm any new development in the Mount Duneed landscape does not protrude above the ridgeline and that visual impacts on the green break are minimised through detailed visual landscape assessments. (See discussion in section 3.2)
- **Urban-rural transition areas** – Consideration should be given to the design and density of development in urban-rural transition areas of Armstrong Creek within the protected settlement boundary, consistent with section 5.9.7 of the Surf Coast Statement of Planning Policy.
- **Preferred option** – The *UGZ Interface Option 4* (excluding the land parcel at 10-40 Williams Road) creates a logical boundary and meets the scope of the review subject to undertaking further landscape assessment work to inform an urban-rural interface treatment.

The key issues are addressed in the discussion below.

## Discussion

### Strategic Justification / Policy

There is relevant state, regional and local policies that inform decision making on the long term/protected settlement boundary in relation to green break principles:

#### State Policy

##### 11.03-5S Distinctive areas and landscapes

#### Strategies

- *Recognise the unique features and special characteristics of these areas and landscapes.*
- *Implement the strategic directions of approved Localised Planning Statements and Statements of Planning Policy.*

The Surf Coast SPP contains the following binding objective under section 5.3 Landscapes:

- *To conserve and enhance the declared area's significant landscapes.*

#### Regional Policy

##### 11.01-1R -Settlement - Geelong G21

#### Strategies

- *Provide for settlement breaks between towns to maintain their unique identities.*
- *Require a settlement boundary for all towns.*
- *Protect critical agricultural land by directing growth to towns.*

See figure 15 for the Regional Growth Plan.

#### Local Policy

Municipal Planning Statement (clause 02.03-1) objective:

- *Maintain the rural break between the ACUGA and Surf Coast Shire.*

##### 11.01-1L-01 Settlement - Greater Geelong

#### Strategies

- *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.*

See figure 16 for the Greater Geelong Settlement and Housing Framework Plan.

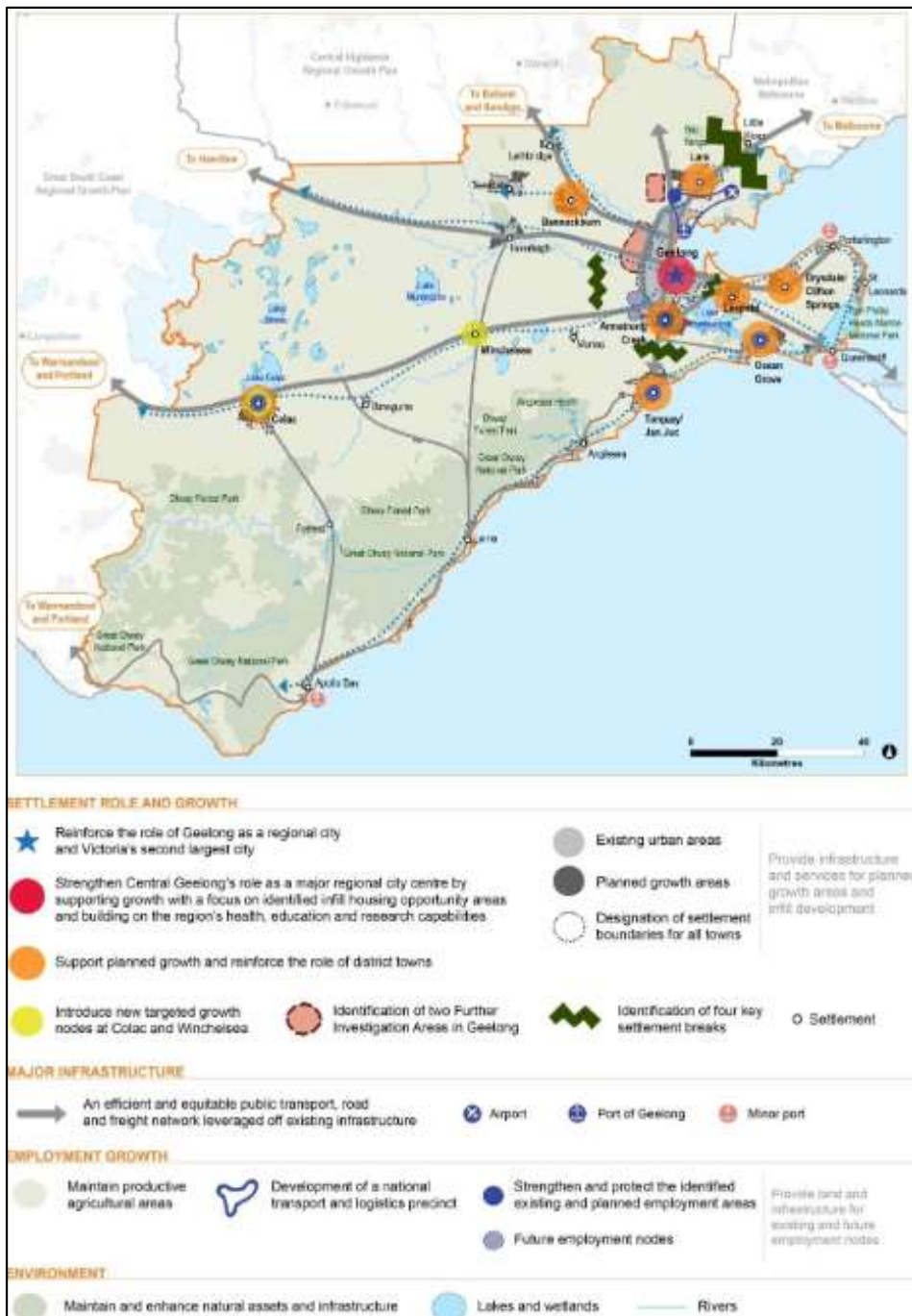


Figure 15 – G21 Regional Growth Plan

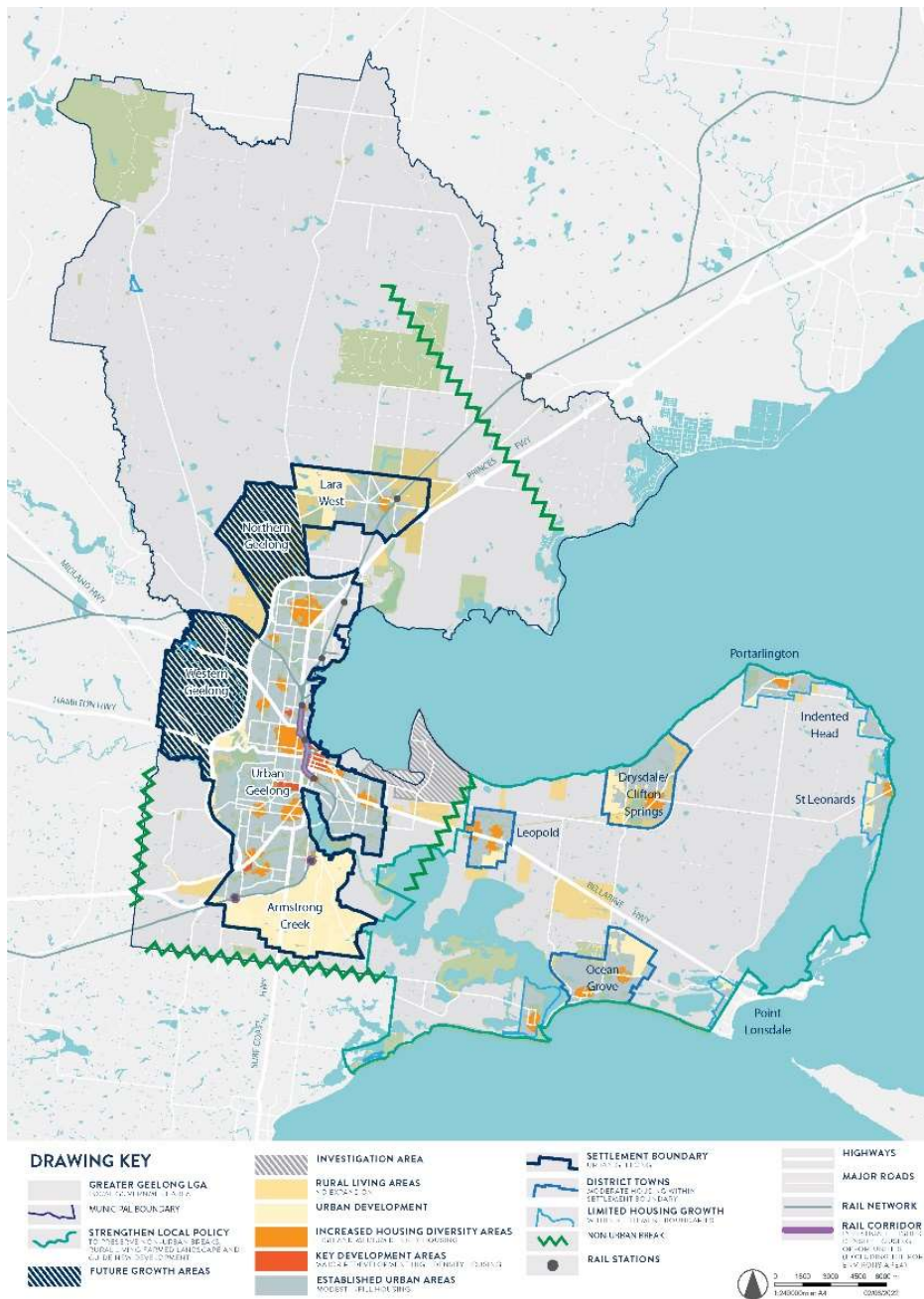


Figure 16 – Greater Geelong Settlement and Housing Framework Plan Source: CoGG

**Defining the Green Break**

Armstrong Creek Growth Area to the Municipal Boundary

The rural break between the ACUGA and Surf Coast Shire municipal boundary varies in width from 425m near Horseshoe Bend Road to 1.65km near the Mount Duneed Recreation Reserve. The visual qualities of the break vary from open farmland with urban views (housing) beyond to farmed landscapes with tree rows and vegetation with little urban intrusion.

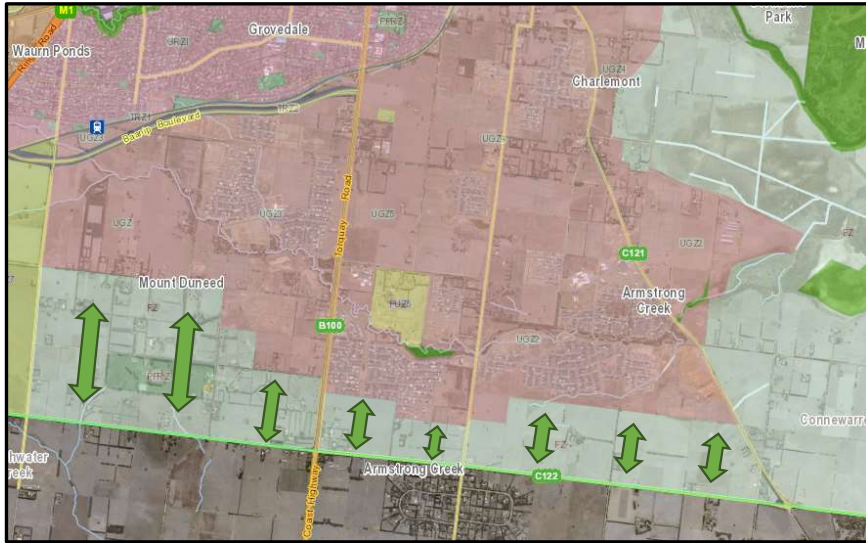


Figure 17 – Rural break between ACUGA and the Surf Coast Shire. Source: CoGG

East of Horseshoe Bend Road is relatively flat (figure 18) with more undulation and gentle slope rising up towards Mount Duneed west of Surf Coast Highway (figure 19).

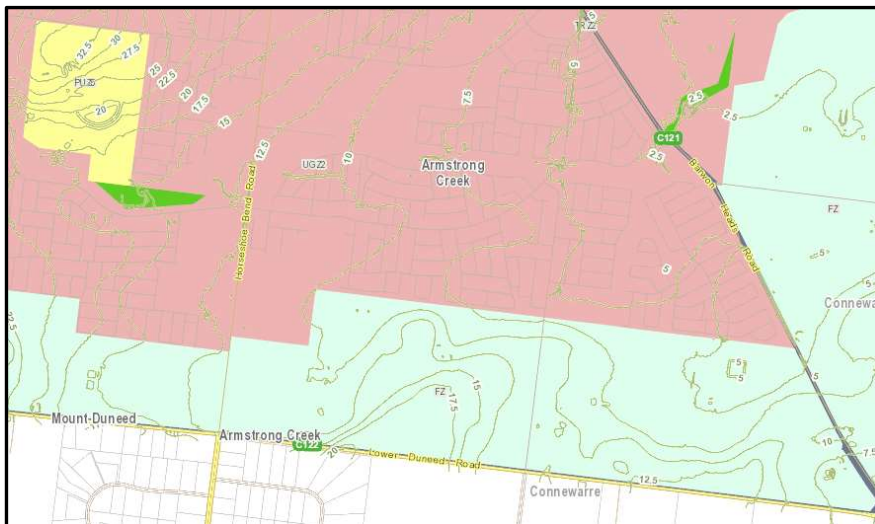


Figure 18 – Investigation area east of Surf Coast Highway showing contours. Source: CoGG

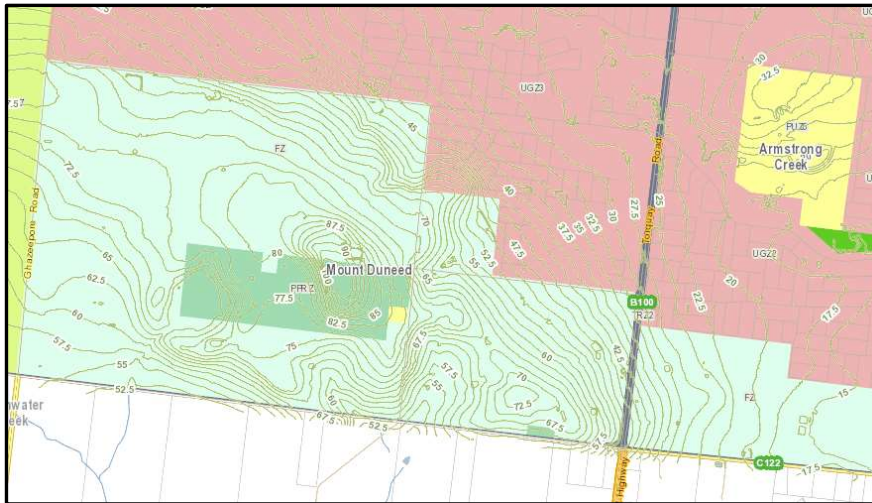


Figure 19 – Investigation area west of Surf Coast Highway showing contours around Mt Duneed.  
Source: CoGG

**Green Break between the Urban Areas of Greater Geelong (Armstrong Creek) and Surf Coast (Torquay)**

The green break between urban Geelong and urban Torquay is around 6km of farm zoned land (figure 20). The area is dominated by the Thompson Creek valley. The green break is experienced on the major transport corridors of Mount Duneed / Lower Duneed Roads, Surf Coast Highway and Anglesea Road.

The protection of this green break is supported in regional and local policy.



Figure 20 - 2022 aerial image showing the green break between urban Geelong and Torquay. Red hatched line indicates municipal boundary along Mt Duneed and Lower Duneed Roads. Orange line shows Low Density residential subdivisions in the Surf Coast Shire.  
Source: Nearmap

#### **Surf Coast SPP – Landscape Significance of the green break**

The SPP describes the Mount Duneed Volcanic Plain Landscape Character Area (figure 21 below) as:

*‘a flat-to-gently undulating landscape that forms a rural, green break between Torquay–Jan Juc and Geelong. It includes the volcanic rise of Mount Duneed, Thompson Creek and a patchwork of paddocks and eucalyptus stands.’*

The Surf Coast SPP provides the following statement for the regionally significant Mount Duneed Plain and Surrounds landscape:

*‘The Mount Duneed Plain and Surrounds is a flat-to-gently-undulating landscape formed by volcanic flows of basalt. It includes the low, volcanic rise of Mount Duneed itself, with its unique geology and communities of grasslands. It also includes Thompson Creek, which winds its way from the coast at Breamlea, its upper and middle reaches cutting a pathway through the patchwork of paddocks that characterise this agricultural landscape.’*

*Remnant eucalypts are a further feature of this landscape, found in riparian reserves, adjacent to road corridors and scattered throughout paddocks. They contrast with the mostly exotic, lineal shelterbelt planting. This is an open, expansive landscape of long, straight roads under big skies. It*

is a very important green break between the built-up areas of Geelong and Torquay and the settlements of the Bellarine Peninsula.'

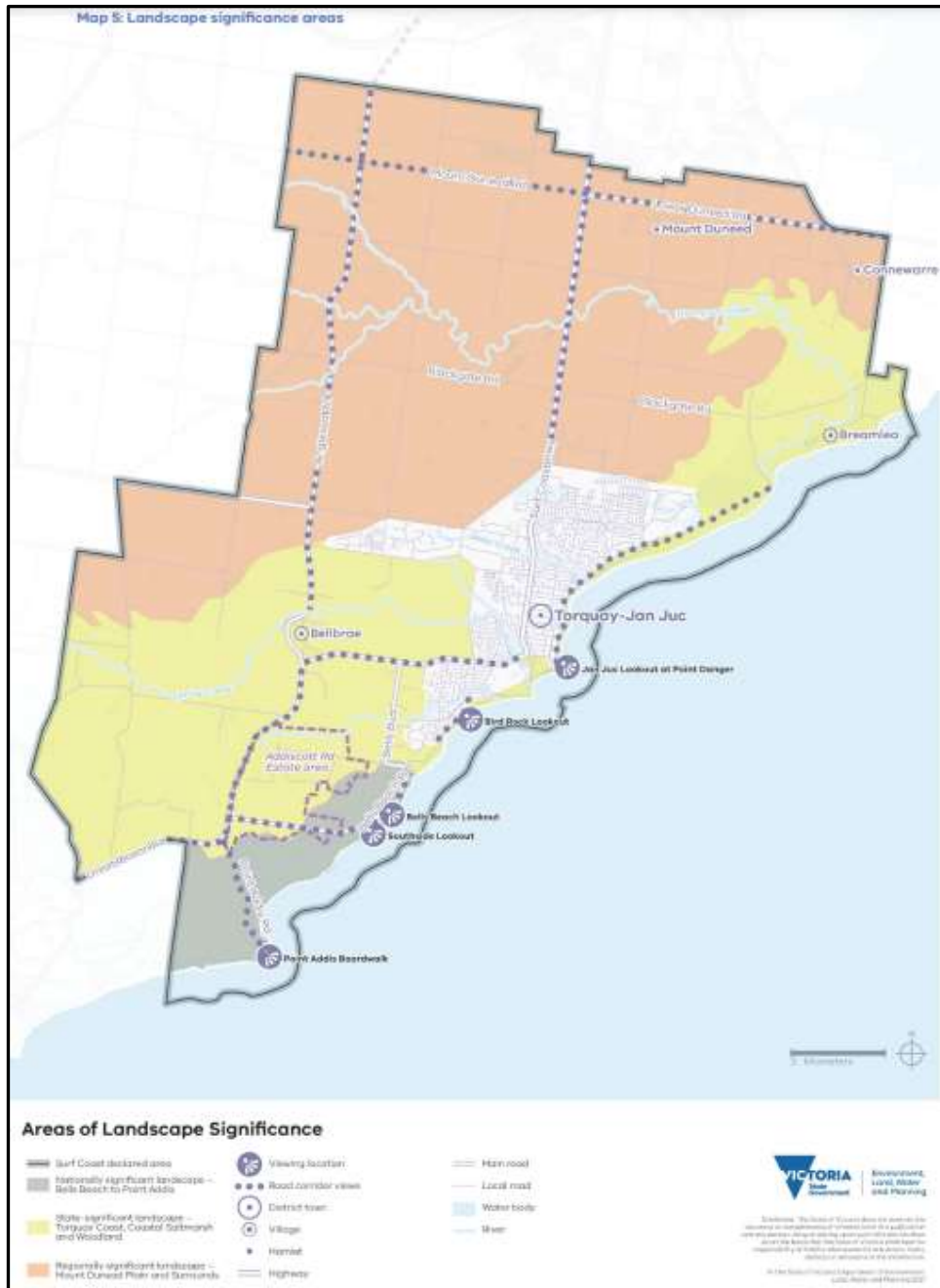


Figure 21 - Significant Landscape Areas under the Surf Coast SPP (Mount Duneed Volcanic Plain Landscape Character Area of regional significance hatched brown). Source: Surf Coast SPP

The DAL landscape assessment (*Landscape Assessment Review Volumes 1-3, Claire Scott Planning, 2020*) which informed the final SPP describes the area as:

*'Landscape Area 1.2 [Mount Duneed Volcanic Plain] within the Surf Coast Declared Area is characterised by flat to gently undulating topography. The highest point in the landscape is Mount Duneed itself, a low volcanic hill, with steeper upper and middle slopes, and gentle lower slopes, which support communities of grasslands. Mount Duneed Road is draped across the topography of this volcanic rise, emphasising further its elevation and affording expansive and long-range views across the open paddocks to the south.'*

The relevant recommendations in this report included:

- *No additional residential development beyond the current zoned Urban Growth Boundary of Greater Geelong should occur.*
- *To retain the rural outlook from inland main road corridors within the landscape, particularly Mount Duneed Road/Lower Duneed Road.*
- *Built form should be characterised by the discreet placement of simple structures in the landscape, set back from main road corridors.*
- *Remnant indigenous vegetation should be protected and increased in riparian road reserves, along waterway corridors, and throughout the rural paddocks, with consideration of the most appropriate EVCs to strengthen landscape character i.e. Plains Grassland, Grassy Woodland and Floodplain Riparian Woodland.*

The Review Implementation Vol 2 pg 7 (Claire Scott, Surf Coast Landscape Assessment Review Volume 2) states:

*'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.'*

And recommended:

*'To appropriately manage the Mount Duneed Plain and Surrounds landscape of regional significance, of which the Thompson Valley Green Break forms an integral part, by confirming a protected, long-term settlement boundary for Greater Geelong in the location of the existing Armstrong Creek Urban Growth Area (ACUGA) boundary.'*

The recommendations from the background reports to limit urban expansion were not included in the SPP. The SPP wording states:

#### *5.9.7 Armstrong Creek urban growth area*

*'The resolution of this settlement boundary is subject to the completion of local strategic planning work and public consultation, which will be led by the Greater Geelong City Council in collaboration with the Department of Environment, Land, Water and Planning, other relevant agencies and the Wadawurrung. This work should include consideration of the design and density of development in urban-rural transition areas within the protected settlement boundary that support the regionally significant landscape setting.'*

### Standing Advisory Committee for the Surf Coast SPP

In November 2020 a Standing Advisory Committee (SAC) was appointed by the Minister for Planning to consider submissions to the draft Surf Coast SPP.

The visual and landscape qualities of the break were considered in detail by the Surf Coast Standing Advisory Committee (SAC) during hearings in early 2021.

Submitters noted:

- The City of Greater Geelong should not form part of the Surf Coast declared area.
- Urban development of areas away from Mount Duneed could appropriately manage the urban/rural transition by facilitating development south of Armstrong Creek through providing larger allotments and landscape buffer strips along Mount Duneed/Lower Duneed Road.
- The nature of the topography and roadside plantings means there is no impact on Mount Duneed if development were to extend to the lower slopes of Mount Duneed and provide a transition to lower densities.
- The area is not economically viable or practical for farming purposes anymore.

The Committee found in its report made public in 2022:

- *The land holdings between Mount Duneed Road/Lower Duneed Road and the Armstrong Creek UGA should not be included in the draft SPP as a potential investigation area.*
- *Greater Geelong should determine the location of the protected settlement boundary at an appropriate time in the future.*

The Committee recommended:

- *Delete reference to the land south of the Armstrong Creek Urban Growth Area in the draft Statement of Planning Policy.*

The wording in the final SPP is referenced above under the heading *5.9.7 Armstrong Creek urban growth area*.

This boundary review project is the 'local strategic planning work' referenced in this section.

In its report the SAC noted the landscape work done to inform the SPP was not peer reviewed which they found '*perplexing given the importance of the assessment*' (Distinctive Areas and Landscapes Standing Advisory Committee Surf Coast Report, 2021 pg 68). Of the landscape work they concluded that, '*while the methodology may be appropriately high level for policy purposes, the classifications can be ambiguous and subjective when viewed at a finer scale.*'

There are limitations to the broad scale landscape approach undertaken for the SPP when dealing with specific locations. This project has taken a more fine grain approach to the investigation areas to inform the final recommendation.

### Rural Living and the green break

The key question is whether the proposed Rural Living Zone will maintain the rural break between the ACUGA and Surf Coast Shire urban Geelong and Torquay.

The Landscape Objective in the Surf Coast SPP is:

*'To conserve and enhance the declared area's significant landscapes.'*

The relevant strategies and a response to them is provided below:

○ **Strategy 3.3**

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

#### Response

A green break is defined under the SPP as:

*'Predominantly rural land located in between settlement boundaries that may comprise a variety of non-urban land uses (such as agriculture, hobby farms and agritourism businesses).'*

The purpose of the Rural Living Zone is:

- *To provide for residential use in a rural environment.*
- *To provide for agricultural land uses which do not adversely affect the amenity of surrounding land uses.*
- *To protect and enhance the natural resources, biodiversity and landscape and heritage values of the area.*
- *To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.*

Under this proposal the green break between urban Geelong and Torquay will be predominantly Farming Zoned land. The Rural Living Zone is a 'rural' zone and provides a rural environment with allowances for agriculture and the protection of landscape values consistent with strategy 3.3.

Lot sizes of 1-2.5 hectares (~2.5 – 6 acres) provides for adequate space around and between built structures, space for tree retention and new plantings, on-site storm water management and septic systems (if required, sewer may be available). Built form controls could be implemented to further manage development location, materials, scale, landscaping etc. For example, along Mount Duneed and Lower Duneed roads a buffer could be introduced to limit vehicle access, limit development directly adjacent to the roadside and preserve existing hedge row plantings to maintain 'green' views along the road corridor. Controls could also limit development above the ridgeline of Mount Duneed.

The landscape work prepared to support the development of the SPP notes:

*'Mount Duneed Road is draped across the topography of this volcanic rise, emphasising further its elevation and affording expansive and long-range views across the open paddocks to the south.'*

When travelling along Mt Duneed Road it is the long-range views to the south over the Thompson Creek valley (Surf Coast Shire) from this elevated position that contributes most to the experience of the green break between urban Geelong and Torquay in this part of the corridor.



Figure 22 - Looking west along Mt Duneed Road with Surfcoast Shire to the left and City of Greater Geelong to the right. Source: Google street view



Figure 23 - View from Mt Duneed Rd looking south over the Thompson Creek Valley in Surf Coast Shire. Source: Google street view

Lower Duneed Road does not have the same long-distance views as Mt Duneed Road given the less elevated topography in this location. The long-distance views to the south are rural in nature with views to the north a mix of rural and rural with the Armstrong Creek urban area visible beyond.



Figure 24 - Looking west down Lower Duneed Rd with Surfcoast Shire to the left and City of Greater Geelong to the right. Google street view



Figure 25 - Lower Duneed Rd looking north across farmland to urban development in Armstrong Creek. Google street view

The images below show the Mount Duneed hamlet in Surf Coast Shire which is zoned Low Density Residential Zone (~1ha lots). The hamlet has a protected settlement boundary so further expansion

is not possible without amending the SPP. When travelling along Lower Duneed Road it is not immediately obvious there is a hamlet located on the south side of the road due to the lack of driveways, dominance of roadside vegetation, private gardens and minimal views to dwellings and/or outbuildings.

The images below (figures 27-30) are taken from in and around the hamlet with the map below (figure 26) indicating the location of the images.



Figure 26 - Mount Duneed Hamlet figures 25- 28 location. Source: CoGG



Figure 27 - Lower Duneed Road looking west (purple arrow) with Mount Duneed hamlet to the left and Greater Geelong to the right. Source: Google street view



Figure 28 - Horseshoe Bend Road at the Lower Duneed Road intersection (red arrow) with the Mount Duneed Low Density Residential Zone to the left and right. Source: Google street view



Figure 29 - View west down Kalkarra Drv at the Horseshoe Bend intersection (pink arrow) with LDRZ subdivision to the left and right. Source: Google street view



Figure 30 - View east down Kestrel Cres at the Horseshoe Bend intersection (orange arrow) with LDRZ subdivision to the left and right. Source: Google street view

Figures 27-30 provide an example of views along road corridors in the LDRZ (minimum lot size 1ha in the Surf Coast Planning Scheme LDRZ schedule) which is similar to Rural Living Zone (Greater Geelong schedule) which provides lot sizes of a minimum 1 hectare.

In the SPP the Mount Duneed and Connewarre low-density residential areas are within the green break between the Armstrong Creek urban growth area in Geelong and Torquay–Jan Juc.

The Boundary Review Report (Mt Duneed Road Urban Design Analysis - Appendix 3) contains case studies from Woodend and Torquay which also looks at rural living and low-density development. It shows how design features and lots sizes influence the visual impact.

The Rural Living zone alongside design controls can preserve the attributes of the landscape and green break. The zone will help embed the protected settlement boundary by ruling out urban expansion or consolidation into the future.

○ **Strategy 3.5**

*Ensure any development that is allowed to be located in green breaks between settlements responds to the surrounding landscape character while maintaining the visual dominance of the natural landscape by:*

- *being sited so that buildings are responsive to the landscape and use established vegetation or new vegetation buffers to screen development when viewed from the public realm*
- *providing substantial setbacks from road corridors and publicly accessible land*
- *using building forms, design detailing and materials and colours that immerse buildings within the landscape, so they are not visually dominant.*

Response

The Rural Living Zone allows 2 hectare lots unless otherwise specified. Greater Geelong has a schedule allowing 1 hectare with the average area of lots in a subdivision being at least 1.5 hectares.

Any future rezoning and subdivision can include requirements to:

- Minimise new access points onto Mount Duneed and Lower Duneed Roads to preserve roadside vegetation and the rural outlook when travelling along these roads.
- Provide larger lots and building envelopes above ridgelines to maintain the dominance of the topography and vegetation against the sky.
- Provide design guidelines to control built form outcomes (setbacks, materials, heights etc.)
- Design subdivisions to preserve shelterbelt planting and significant vegetation.

The zone and development guidelines can meet strategy 3.5.

- **Strategy 3.6**

*Ensure that high points and ridgelines remain free of development and associated infrastructure so that views to elevated areas of the landscape reveal the natural form of the topography and vegetation against the sky and are not visually dominated by built form or infrastructure.*

Response

Managing lot sizes and providing built form controls can manage view lines and ensure the landscape including ridgelines remain the dominant feature of the area.

**DTP Preferred Option**

DTP have indicated a preference for the following:

*'The report includes a preliminary urban design study for addressing the interface between urban development in the Armstrong Creek urban growth area and the abutting rural area. The UGZ Interface Option 4 (excluding the land parcel at 10-40 Williams Road) in the Department's view best meets the objectives for protecting the green break between urban Geelong and Torquay and minimising the visual impact of development. It creates a logical boundary and meets the scope of the review. I would encourage you to explore this option further, including undertaking further landscape assessment work to inform an urban-rural interface treatment.'*

This option includes the addition of some urban land (see figure 31 below) with a 'landscape corridor' with trail along the UGZ interface.

This option is not preferred by Officers for a number of reasons namely:

- Stormwater issues associated with additional urban development (discussed further on pg 46)
- Cost recovery opportunities for the potential number of lots compared with the cost to upgrade infrastructure for conventional residential development as part of a DCP or similar.
- The funding, securing, delivery and ongoing maintenance for the landscape corridor with trail across the investigation area. The land and embellishment would go beyond an open space development contribution and require significant Council funding. There is a significant existing linear open space with trail along Armstrong Creek around one kilometre away.

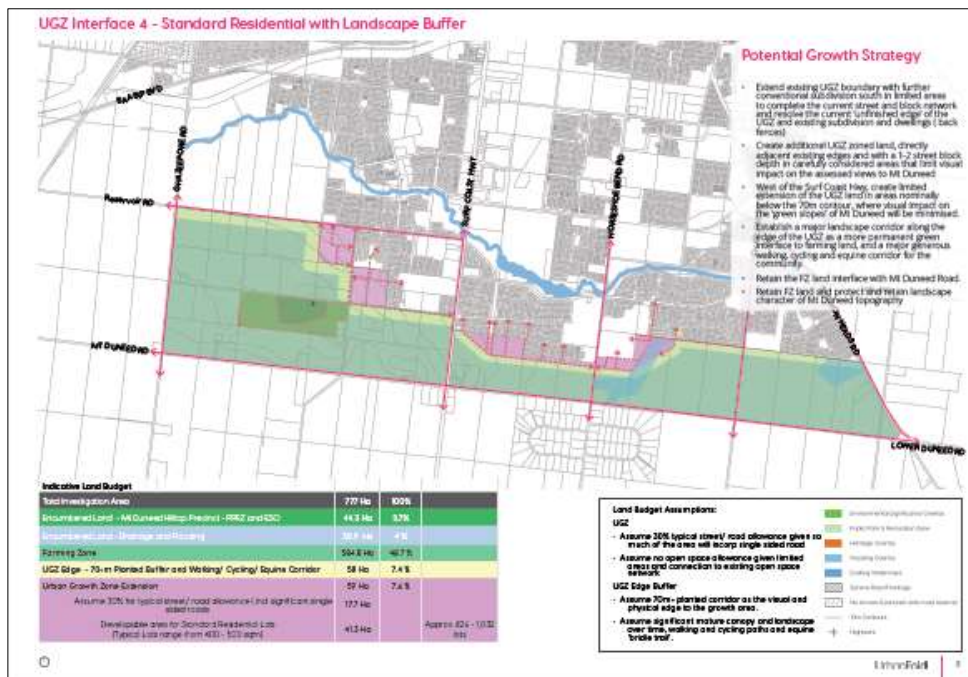


Figure 31 – Option 4 in the Mt Duneed Road Urban Design Analysis Appendix 3, Background Report.

**Other Considerations**

**Planning Practice Note 37 Rural Residential Development**

Planning Practice Note 37 Rural Residential Development (June 2015) states:

*‘Rural residential development refers to land in a rural setting, used and developed for dwellings that are not primarily associated with agriculture. Some agriculture may take place on the land however it will be ancillary to the use for a dwelling. It is likely to be carried on for ‘lifestyle’ reasons and is unlikely to provide a significant source of household income. Rural residential land is typically also used for non-agricultural home occupations or for large gardens. These lots are larger than typical residential lots, but are usually too small for agricultural use.*

*‘Because of its primarily residential function, rural residential development requires access to most of the normal services and infrastructure provided in urban settlements. Typically it also generates urban residential amenity expectations.’*

The practice note outlines broad questions to be answered in sequence when considering the application of this zone:

- *Strategy: Does rural residential development align with the overall strategic planning of the municipality?*

Greater Geelong ‘s settlement policy (02.03-1) includes the following commentary:

*‘Rural living areas offer an important lifestyle choice in the housing market. However, they can be inefficient to service and are generally contrary to the objective of maintaining a farmed rural landscape and supporting agriculture in rural areas. Farming and rural landscapes form non-urban*

*breaks and are a critical element to the settlement strategy, tourism function and lifestyle of the region.'*

And strategic direction:

- *Limit rural-living developments to existing zoned land in Lara, Drysdale/ Clifton Springs, Wallington, Waurm Ponds, Lovely Banks Batesford, Fyansford, Leopold, Newcomb, Moolap, Curlewis, Portarlinton and Ocean Grove.*

#### Response

Commentary is provided in the Background Report around why the Rural Living zone could deliver the policy objectives for the area. The reasons are summarised as:

- Agricultural practices in the area are compromised by the proximity of urban development and mix of lot sizes.
- Rural living lots between 1-2 hectares can preserve the rural landscape.
- Servicing can be accommodated given the Armstrong Creek growth area directly abuts to the north.
- Rural Living development has the potential improve access arrangements to the Mount Duneed Primary school via upgrades to Williams Road.
- The Rural Living zone will provide a diversity of housing choice in this area of Geelong.
- The Rural Living zone will strengthen the protected boundary/long-term boundary for Armstrong Creek by ruling out urbanisation in the future through fragmentation, zone and development controls.
- The Rural Living zone could provide an attractive transition from rural to urban areas.

The Surf Coast SPP notes the process to nominate a protected settlement boundary:

*'should include consideration of the design and density of development in urban-rural transition areas within the protected settlement boundary that support the regionally significant landscape setting.'*

The SPP defines the urban-rural transition area as:

*'an area that provides a soft edge between urban development within a settlement boundary and the rural land beyond, to minimise the visibility of the development and better manage the settlement's environmental and landscape impacts.'*

There is no guidance on this for the Armstrong Creek urban growth area however text in the Torquay–Jan Juc coastal character statement provides the following description:

*'At the urban-rural interface, generous transition areas within the protected settlement boundary provide a transition to the surrounding rural landscape, and the visibility of the settlement from green breaks is minimised. These character aspects are achieved with reduced dwelling densities, reduced building heights, smaller building footprints, larger lot sizes and substantial landscaping or generously vegetated buffers using fire-resistant indigenous species. Materials and finishes that temper visibility (such as darker materials and materials that weather naturally) are used. All development responds to bushfire risk.'*

In the case of the Armstrong Creek growth area this type of 'urban-rural transition' cannot be achieved given the area within the boundary has already been planned and is partially constructed.

The existing urban-rural transition or interface consists of a combination narrow vegetation strip along the roadside alternating with narrow-shared path with landscaping. See figures 32 & 33 below.



Figure 32 – Aerial image of boundary treatment between the ACGA and farming zone comprising of a local road or walkway with vegetation strip. Source: CoGG



Figure 33 – Image of boundary treatment between the ACGA and farming zone showing the vegetation strip. Source: Google images.

It is not considered this wording explicitly excludes the Rural Living zone (which is a rural zone) outside the boundary where the existing urban-rural transition within the existing boundary remains unchanged.

Arguably, the narrow landscape strip and road frontage would not meet the transition requirements if they were proposed today with the SPP in place, however, they are already planned and partially constructed.

The application of the Rural Living zone to the corridor could achieve the design outcomes being sought in the SPP without having to expand the settlement boundary. The advantage of the Rural Living zone remaining outside the settlement boundary includes consistency with rural zones being applied outside settlement boundaries, there will be no future pressure to pursue urban

consolidation within the boundary and limiting the option to expand the boundary for urban purposes in this location into the future due to fragmentation and design controls.

Where urban views of the Armstrong Creek growth area are more obvious when travelling along Lower Duneed Road the rural living zone could ‘temper’ these views through the retention of roadside vegetation (along Mount Duneed and Lower Duneed Roads), subdivision layouts that accommodate existing shelterbelts and significant vegetation, additional boundary plantings and the establishment of private gardens that will also increase screening.

The Mount Duneed hamlet in the Surf Coast Shire is an example of a Low-Density Residential estate that remains largely unseen when driving along Lower Duneed Road (previously discussed in the green break section above).

The local policy can be amended to include this rural living precinct as a node.

- *Housing need: How much rural residential development is required to provide appropriate housing diversity and choice to meet housing needs?*

The Settlement Strategy notes there is limited remaining capacity for rural living development, with demand being increasingly diverted to neighbouring municipalities such as Golden Plains Shire. The graph below also shows Rural Living makes up a relatively small proportion of housing in Greater Geelong. The addition of some RLZ land in this location will provide a housing option that is not currently provided in this part of Greater Geelong.

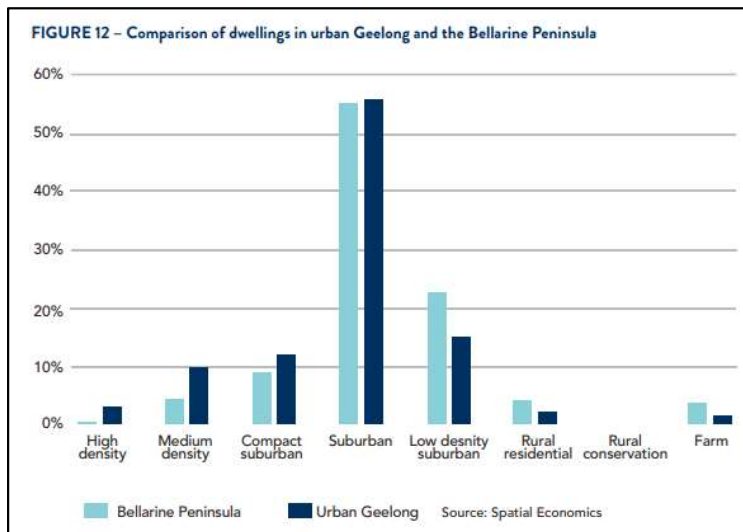


Figure 34 – Settlement Strategy figure showing dwelling types in Greater Geelong. Source: CoGG Settlement Strategy

The provision of Rural Living zoned land in this area will provide a housing and lifestyle choice not currently offered in the Armstrong Creek area. There is housing demand for this lifestyle choice and Greater Geelong has not been supplying this housing option since at least 2007, post the Rural Land Use Strategy. Greater Geelong has also been losing areas of Low Density and Rural Living areas as part of urban consolidation efforts in Lara, Leopold, Drysdale and Ocean Grove which this precinct could replenish.

- *Location: Where should new rural residential development take place?*

The location south of the Armstrong Creek Urban Growth area means the area can connect into and be serviced by infrastructure such as water and sewer, education, retail/activity centres, open space etc.

The Rural Living zone could produce between 238 – 596 lots depending on the ultimate lot size mix. Infrastructure assessments by the social planning and open space teams have confirmed the existing and planned infrastructure in the Armstrong Creek Growth Area could cater for this additional population.

The civil infrastructure team raised concerns about any additional urban development that would result in stormwater being diverted into the Armstrong Creek Growth Area drainage network. The network was designed to meet the needs of the growth area as planned and does not have additional capacity especially during high rainfall events.

The civil infrastructure and environmental planning teams also raised concerns about the Sparrovale-Nubitj yoorree Wetlands which takes stormwater from Armstrong Creek Growth Area prior to it making its way into the Lake Connewarre system. The balance of stormwater (fresh water) entering the system has an impact on salinity levels in the wetlands. Any increase in urban areas and therefore stormwater could change the ecology of the area and impact the Ramsar listed wetlands.

Due to the low site coverage and high permeability of Rural Living lots, stormwater can largely be managed on-site and the stormwater issues can be mitigated. The civil infrastructure team were not supportive of significant additional urban areas but were open to the Rural Living zone.

The planning delivery team noted the cost recovery based on the potential number of lots compared with the cost to upgrade infrastructure for conventional residential development was significantly reduced with Rural Living Zone development. Any Rural Living development would need to make an infrastructure contribution to support road upgrades and contribute to community infrastructure.

- *Subdivision and design: Is the new rural residential development subdivided and designed in an attractive setting offering high amenity and efficient infrastructure?*

The location and attributes of the area means it will be able to offer a very attractive and well serviced lifestyle option. Any future subdivision should consider:

- any treatments required along Mt Duneed and Lower Duneed Roads to preserve roadside vegetation and rural views such as a linear shared path reserve.
- No or limited vehicle access from Mt Duneed and Lower Duneed Road to preserve roadside vegetation and limit 'urban' intrusions into view lines.
- Built form guidelines to ensure development does not protrude above ridgelines and complements the landscape.
- Retention of hedge row/wind break plantings and significant scattered trees.
- Connections back into the existing or planned estates to maximise connections and efficient infrastructure provision and
- Consideration of development contributions to contribute to community infrastructure.

**Summary**

- The area forms part of a regionally significant landscape and green break between Greater Geelong and Surf Coast in the Surf Coast SPP, Surf Coast and Greater Geelong Planning Scheme and G21 Regional Growth Plan.
- The green break is experienced along the key transport corridors of Mount Duneed / Lower Duneed Roads, Surf Coast Highway and Anglesea Road as well as other minor roads.
- The rural living zone located outside the settlement boundary will strengthen the settlement boundary and preserve the green break in the long-term.
- The proposed Rural Living node will reinforce the settlement boundary by ruling out future urban consolidation or urban expansion.
- The rural living zone is consistent with green break objectives to provide a rural environment and protect landscape values.
- Landscape values can be managed using different lot sizes, subdivision design can limit access to key transport/view corridors and preserve existing vegetation and built form controls such as building envelopes and design control overlays.
- The existing rural-urban transition remains unchanged and within the settlement boundary.
- The proposed Rural Living node can take advantage of the proximity to the Armstrong Creek Growth Area for services, facilities and infrastructure.
- The Rural Living node provides a housing choice not currently available in this part of Greater Geelong.

**Bellarine Peninsula Statement of Planning Policy – Protected Settlement Boundary**

The Armstrong Creek investigation areas also takes in part of the future Bellarine Protected Settlement boundary, refer to Figure 12 - Bellarine Peninsula Framework Plan. The extent of the settlement boundary is in line with the Bellarine Declared area existing boundary. There is an opportunity to deliver the wider road reserve currently missing between the Urban Growth zone and Winklers Lane (see figure 35 below) with the introduction of the Rural Living zone.



Figure 35 – Missing road widening reservation between the UGZ and Winklers Lane (red line).  
Source: CoGG.

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## 5.0 Proposed Planning Scheme Changes

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The following changes are recommended to the ordinance and maps in the Greater Geelong Planning Scheme. These are draft only and will be subject to change as part of the amendment drafting and further consultation with stakeholders:

1. Update map in clause 02.04-1 Municipal Framework Plan and 02.04-3 Housing and Settlement Framework Plan to reflect the three inclusions into the settlement boundary and proposed Rural Living Zone node (generally in accordance with map 1 – executive summary) and to update the key on map 02.04-3 to change the ‘settlement boundary’ designation to ‘long term settlement boundary’.
2. Update 02.03-1 Settlement to include Mount Duneed-Armstrong Creek:
 

Limit rural living developments to existing zoned land in Lara, Drysdale/Clifton Springs, Wallington, Waurin Ponds, Lovely Banks, Batesford, Fyansford, Leopold, Newcomb, Moolap, Curlewis, Portarlington and Ocean Grove and [Mount Duneed-Armstrong Creek node](#).
3. Update 11.03-L Regional and local places to include a new policy for the Mount Duneed – Armstrong Creek Rural Living Node/Precinct to include objectives and strategies and include the Background Report as a policy document.

02.03-1 Draft New Policy (indicative only - final policy confirmed through the amendment process)

### **Mount Duneed – Armstrong Creek Rural Living Node**

#### **Policy application**

This policy applies to land identified in the Mount Duneed – Armstrong Creek Rural Living Node Map.

#### **Objective**

To facilitate the orderly development of a Rural Living precinct that respects the identified landscape and green break values.

#### **Strategies** (Comment: DPO/DDO may also be utilised to facilitate these outcomes)

Facilitate planning for two key investigation areas within the precinct, east and west of Torquay Road.

Facilitate a variety of lot sizes that preserve key views such as the Mount Duneed ridgeline and key road corridor views.

Minimise the number of new roads that intersect with Lower Duneed and Mount Duneed roads.

Encourage the retention of roadside vegetation.

Encourage the retention of existing vegetation such as hedge rows and significant trees through responsive subdivision design.

Encourage connections into the Armstrong Creek urban growth area.

Encourage improved connections to the Mount Duneed Primary School on Williams Road and proposed school on Feehans Road.

Support built form design controls that seek to reduce the visual impact of development from Mount Duneed and Lower Duneed Roads such as post and wire fencing and no building zones adjacent to the roadsides.

Limit development above the ridgeline of Mount Duneed to preserve the dominance of Mount Duneed in the landscape.

### **Policy Document**

Urban Geelong Long-Term Boundary Review Background Report, July 2023.

### Draft New Overlay Controls

#### **Development Plan/Design and Development Overlay (or similar)**

Any rezoning proposal will need to consider the following key matters:

- Urban Design Masterplan
- Integrated transport and access plan
- Integrated Water Management Plan
- Open Space and Landscape Masterplan
- Biodiversity Assessment
- Environmental Assessment
- Cultural Assessment
- Shared Infrastructure Funding Plan (or Development Contributions Plan)
- Servicing Plan
- Staging Plan

4. Potential to rezone land at 145-153 Harriots Road to a residential zone as part of the boundary review amendment.

Officers will seek to progress rezoning alongside the boundary review amendment in consultation with the landowners/proponents.

The rezoning should investigate servicing and connection/integration opportunities with the estate being developed west of the site.

While the proposal will need to be formally referred to the CCMA for the rezoning/subdivision application the initial advice based on the submission indicates the following requirements will be likely:

1. Before the certification of the plan of subdivision under the Subdivision Act 1988, a restriction must be placed on the plan of subdivision identifying land outside the 1% AEP floodplain on each lot which states that:

a. no building shall be constructed outside the building envelopes shown hatched on this plan.

b. All fencing within the 1% AEP floodplain to be post and wire to allow the free passage of flood flows through the fence, thereby preventing floodwaters backing up and affecting neighbouring properties and dwellings.

Definitions:

- 'AHD' – Australian Height Datum
- 'Building' – as per the Planning and Environment Act 1987 definition, excluding a fence.
- Variations: Variation of these requirements will require approval from the responsible authority.

c. No building is to be constructed on any of the lots on this plan with a finished floor level less than the level stated in the table below.

Applicable 1% AEP flood level (AHD)	Minimum lot finished surface level (AHD)	Minimum finished floor level (AHD) - dwelling	Minimum finished floor level (AHD) – garage or shed
2.66	2.66	2.96	2.81

- 5. Potential to rezone 55 & 75 Williams Road, Mount Duneed to the Neighbourhood Residential Zone with DPO/DDO.

Officers will seek to progress rezoning alongside the boundary review amendment in consultation with the landowners/proponents. Some of the key considerations will be:

**55 & 75 WILLIAMS ROAD DESIGN AND DEVELOPMENT / DEVELOPMENT PLAN OVERLAY**

Draft Overlay (indicative only - final overlay confirmed through the amendment process)

**Design objectives**

To integrate the subdivision into the existing and planned urban development to the north and east of the site.

To create a safe and integrated movement network that includes sealed access to the Mount Duneed Primary School on Williams Road, the new primary school on Feehans Road and intersection upgrade of Williams and Feehans Roads.

To retain and enhance the vegetation along Williams Road to ensure the 'green back drop' towards Mt Duneed and the ridgeline to the southeast is retained.

To ensure best practice stormwater management and water quality treatment to prevent any adverse impact on downstream areas.

**Subdivision considerations**

- Subdivision Plan
- Transport and access plan including an integrated and continuous network of safe and convenient footpaths
- Storm Water Management Plan
- Open Space and Landscape Masterplan including an open space contribution (in cash or land or a combination of both) to a minimum of 10 per cent of the developable residential land.
- Environmental and Cultural assessments
- Infrastructure Contribution / Development Contributions Plan

Depending on the timing and complexity of the rezoning it may be a separate proponent led amendment will be required in the future separate to boundary review amendment.

### Appendix A – Report Recommendations & Office Response

The following table provides the Background Report recommendations and Officer response.

Report Recommendation	Officer Response
<b>1.0 - Armstrong Creek South West</b>	
<p><b>1.1 Mt Duneed Road (west of Williams Road)</b>                      This area should not be included within the Geelong Settlement Boundary. However, further consideration should be given to rezoning land within this area to the Rural Living Zone. Any rezoning of this land be accompanied by a requirement to prepare a development plan, infrastructure plan and infrastructure funding agreements.</p>	<p>Supported. This land will remain outside the boundary and the Rural Living Zone is supported.</p>
<p><b>1.2 Mt Duneed Road (east of Williams Road)</b>                      This area should not be included within the Geelong Settlement Boundary. However, further consideration should be given to rezoning land within this area to the Rural Living Zone. Any rezoning of this land be accompanied by a requirement to prepare a development plan, infrastructure plan and infrastructure funding agreements.</p>	<p>Supported. This land will remain outside the boundary and the Rural Living Zone is supported.</p>
<p><b>1.3 Whites Road</b>                      It is recommended that the land south of Whites Road (between Ghazeepore Road and 10-40 Williams Road) remain outside of the settlement boundary.</p>	<p>Supported.                      This land will remain outside the boundary.                      Additional Recommendation:                      Officers also support the Rural Living Zone for this area.</p>
<p><b>1.4 Central (in vicinity of Whites and Williams Road)</b>  <b>Site 1 - Purdies Paddock (55 &amp; 75 Williams Road, Mt Duneed):</b></p> <ul style="list-style-type: none"> <li>• Purdies Paddock be included within the Geelong Settlement Boundary, subject to confirmation that developing this land for housing will have an acceptable visual impact on views to Mt Duneed when viewed from the east, along Lower Duneed Road.</li> <li>• A structure plan, infrastructure plan and infrastructure funding agreement be prepared for the future residential development of the land.</li> <li>• Following the preparation of the abovementioned plans and agreement, a planning scheme amendment should be initiated to rezone of the land to give statutory effect to the structure plans infrastructure funding agreements.</li> </ul> <p><b>Site 2 - 10-40 Williams Road, Mt Duneed:</b></p> <ul style="list-style-type: none"> <li>• The northern lot of 10-40 Williams Road be considered for inclusion within the Geelong Settlement Boundary, and the southern part of this site be considered for rezoning to the Rural Living Zone, subject to confirming that development on this land for housing will have an acceptable visual impact on views to Mt Duneed when viewed from the north and north east (i.e. locations such as the Armstrong Creek Waterway, town centre and Waurm Ponds Station).</li> <li>• A structure plan, infrastructure plan and infrastructure funding agreement be prepared for future residential development on the northern part of the land. This plan (together with any development plan for the southern part of the site that is identified for rural living purposes) should make provision for the creation of a wide linear open space corridor in the vicinity of the 65AHD contour. This link should connect along the western site boundary to Whites Road, to delineate the long-term edge of urban Geelong in this location.</li> </ul>	<p>Officers support the inclusion of 55 &amp; 75 Williams Road. There is the potential to rezone land as part of this boundary review amendment subject to further investigation with stakeholders.</p> <p>Officers support the exclusion 10-40 Williams Road due to landscape and drainage concerns.</p> <p>The Addendum report provides additional information of the landscape and view impacts.</p> <p>Officers support the Rural Living Zone for this area.</p>

<ul style="list-style-type: none"> <li>Following the preparation of the abovementioned plans and agreement, a planning scheme amendment should be initiated to rezone the land to give statutory effect to the structure plan's infrastructure funding agreements.</li> <li>If there is any doubt about being able to successfully realise the above outcomes then Whites and Williams Road should remain as the long-term settlement boundary in this location.</li> </ul>	
<b>2.0 - Armstrong Creek South Central</b>	
<p><b>2.1 Land north of Lower Duneed Road</b>                  The current location and form of the Armstrong Creek Central settlement boundary is not particularly logical or enduring, and it requires modification.                  Alternate settlement boundary concept could comprise:</p> <ul style="list-style-type: none"> <li>Larger (1.5-3ha) rural living lots on the land north of Lower Duneed Road and on the corners of the Surf Coast Highway and Barwon Heads Road.</li> <li>Smaller (0.2-0.4ha) rural living lots between the abovementioned larger lots and the linear open space corridor along the alignment of the settlement boundary, to provide a transition in density towards the settlement boundary.</li> </ul>	Changed recommendation.  Officers do not support moving the settlement boundary in this location.  Officers support the Rural Living Zone for this area.
<b>2.2 Land east of Barwon Heads Road</b>	
It is recommended that there be no change to the settlement boundary in this location.	Supported.
<b>3.0 - Sparrovale</b>	
<p><b>3.1 Northern area</b>                  It is recommended that 145 Harriots Road be included within the settlement boundary (subject to confirmation of the Flood Overlay and LSIO via Amendment C133).</p>	Supported. The flood overlay has been confirmed. There is potential to support rezoning as part of the amendment in consultation with stakeholders.
<p><b>3.2 Southern area</b>                  It is recommended that there be no change to the settlement boundary in this location.</p>	Supported.
<b>4.0 - Moolap</b>	
<p><b>4.1 Northern area</b>                  It is recommended the settlement boundary move to Coppards Road but land within it should remain within the existing Low Density Residential Zone unless any proposal to rezone the land can demonstrate with a high degree of confidence that the necessary infrastructure and development issues can be delivered in a cost-effective and orderly manner.</p>	Supported. Moving the boundary to Coppards Road is supported and maintaining the existing LDRZ is supported. The City's engineers have flagged stormwater issues that prevent further consolidation at this time.
<p><b>4.2 Southern area</b>                  It is recommended that there be no change to the settlement boundary in this location.</p>	Supported.
<b>5.0 - Waurm Ponds North</b>	
It is recommended that there be no change to the settlement boundary in this location.	Supported.
<b>6.0 - Waurm Pond South</b>	
It is recommended that there be no change to the settlement boundary in this location.	Supported.
<b>7.0 Lara North</b>	
It is recommended that there be no change to the settlement boundary in this location.	Supported.
<b>8.0 Lara South</b>	

It is recommended that there be no change to the settlement boundary in this location.	Supported.
<b>9.0 Avalon</b>	
It is recommended that there be no change to the settlement boundary in this location.	Supported.

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**CITY OF GREATER GEELONG**

WADAWURRUNG COUNTRY  
PO Box 104, Geelong VIC 3220  
P: 5272 5272  
E: [contactus@geelongcity.vic.gov.au](mailto:contactus@geelongcity.vic.gov.au)  
[www.geelongaustralia.com.au](http://www.geelongaustralia.com.au)

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