

# Merrimu Precinct

Tract



## Landscape Character Assessment & Framework Plan

Prepared for Victorian Planning Authority

# Acknowledgement of Country

We pay our respects to the Traditional Custodians of Country throughout Australia, their Elders and ancestors, recognising their rich heritage and enduring connection to Country and acknowledging the ongoing sovereignty of all Aboriginal and Torres Strait Islander Nations.

We recognise the profound connection to land, waters, sky and community of the First Nations peoples, with continuing cultures that are among the oldest in human history. We recognise that they are skilled land shapers and place makers, with a deep and rich knowledge of this land which they have cared for, protected and balanced for millennia.

**Our Country, 2022**

88 x 119 cm Acrylic on canvas

Original artwork by

Alfred Carter

Gunaikurnai

# Quality Assurance

**Merrimu Precinct**  
Landscape Character Assessment &  
Framework Plan

**Prepared for**  
Victorian Planning Authority

**Project Number**  
322-0740-01-U-02-RP01

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# 1 Introduction

## 1.1 Introduction

This study provides a Landscape Character Assessment of an identified study area referred to as the 'Merrimu Precinct' within its regional and local context. The purpose of the Landscape Character Assessment is to:

- Undertake a landscape, environmental and visual assessment that provides a basis for environmentally sustainable design, site conservation and rehabilitation.
- Provide a site-specific foundation structure for the development of the precinct.
- Provide an overarching Landscape Framework to inform the Merrimu Precinct Structure Plan (PSP).

The Landscape Framework aims to identify strategic requirements to guide future site development based on the landscape and visual conditions identified within the Merrimu Precinct. The intention of this Framework Plan is to inform development patterns, site characteristics and connections for the future PSP of the Merrimu Precinct.

## 1.2 Study Approach

The approach adopted for this study was to first understand and assess the study area on a regional scale. This is reflected in the Background Report (Merrimu, Parwan Station and Parwan Employment Precincts – Background and Context Study, 2023).

The background report provided a general understanding of the Precinct and contextual surrounds, while this report provides Precinct specific summary of relevant findings within:

- **Section 2: Planning policy & strategic context**
- **Section 3: Existing conditions**
- **Section 4: Landscape Assessment**
- **Section 5: Visual assessment**

The assessment of the Precinct's condition has been developed into specific recommendations for Merrimu Precinct as landscape and visual Opportunities and Constraints.

- **Section 6: Precinct Opportunities and Constraints**
- **Section 7: Framework Plan**

A Landscape Framework Plan for the precinct has then been developed, which includes landscape and visual objectives, site-specific recommendations, and a series of supporting Strategies and Guidelines to support future decision making.

This Landscape Character Assessment addresses both the characterisation process (i.e., identifying, mapping, classifying and describing landscape character) and the process of making judgements based on landscape character to inform and support a range of future decisions.

Therefore the Landscape Assessment aims to critically guide the preparation of the Merrimu PSP, providing a robust landscape and visual context analysis that addresses both the immediate site and its wider landscape setting. The study develops an overall landscape and visual response to future site development that will enable a respectful transition of the precincts rural landscape setting, ensuring it is derived from the landscapes distinguishing characteristics.

The study approach is illustrated in Figure 1.

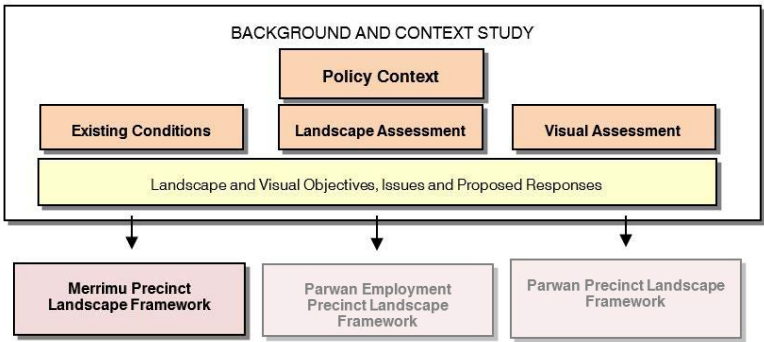


Figure 1. Study Approach





Figure 2. Merrimu Precinct PSP Boundary



### 1.3 Study Area

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The Merrimu Precinct is located east of Bacchus Marsh town centre and is the largest land ensemble within Bacchus Marsh and is proposed as a residential growth area (shown in Figure 3).

The Merrimu precinct covers approximately 1,016 ha in total area. It currently comprises both agricultural land and nature reserves and is partly located within the Bacchus Marsh Irrigation District.

Once developed, it is envisioned to be a largely residential precinct with some employment uses. This precinct is expected to accommodate up to approximately 5,900 to 6,700 households and up to 1,800 jobs.

The Merrimu Precinct is a nominated growth area within the Bacchus Marsh region. In part, the attraction in Bacchus Marsh's demand for growth is due to the quality of the rural landscape and scenic amenity within the Bacchus Marsh district (including the Avenue of Honour) and the high-quality rail and road linkages with Melbourne, Ballarat and Geelong.

The selection of Merrimu as a growth area was highly considered due to the surrounding landscapes value as a resource for the community and those that travel to Bacchus Marsh's prime agricultural landscapes, waterways, or to enjoy the surrounding visually prominent landform with State / National significance (Victorian Planning Authority & Moorabool Shire Council, 2018).

Whilst selected as a growth area, this should not prescribe a landscape of low value, rather it should highlight the importance of the associated qualities the landscape withholds for the region and what the future PSP development should consider.

The future of Merrimu should retain its classification of its landscape character type of the Western Plains and The Uplands. The related scenic qualities of this landscape should form the foundation of Merrimu and the Precinct should be perceived as a growth area nestled within the landscape, and not a landscape within a development site.



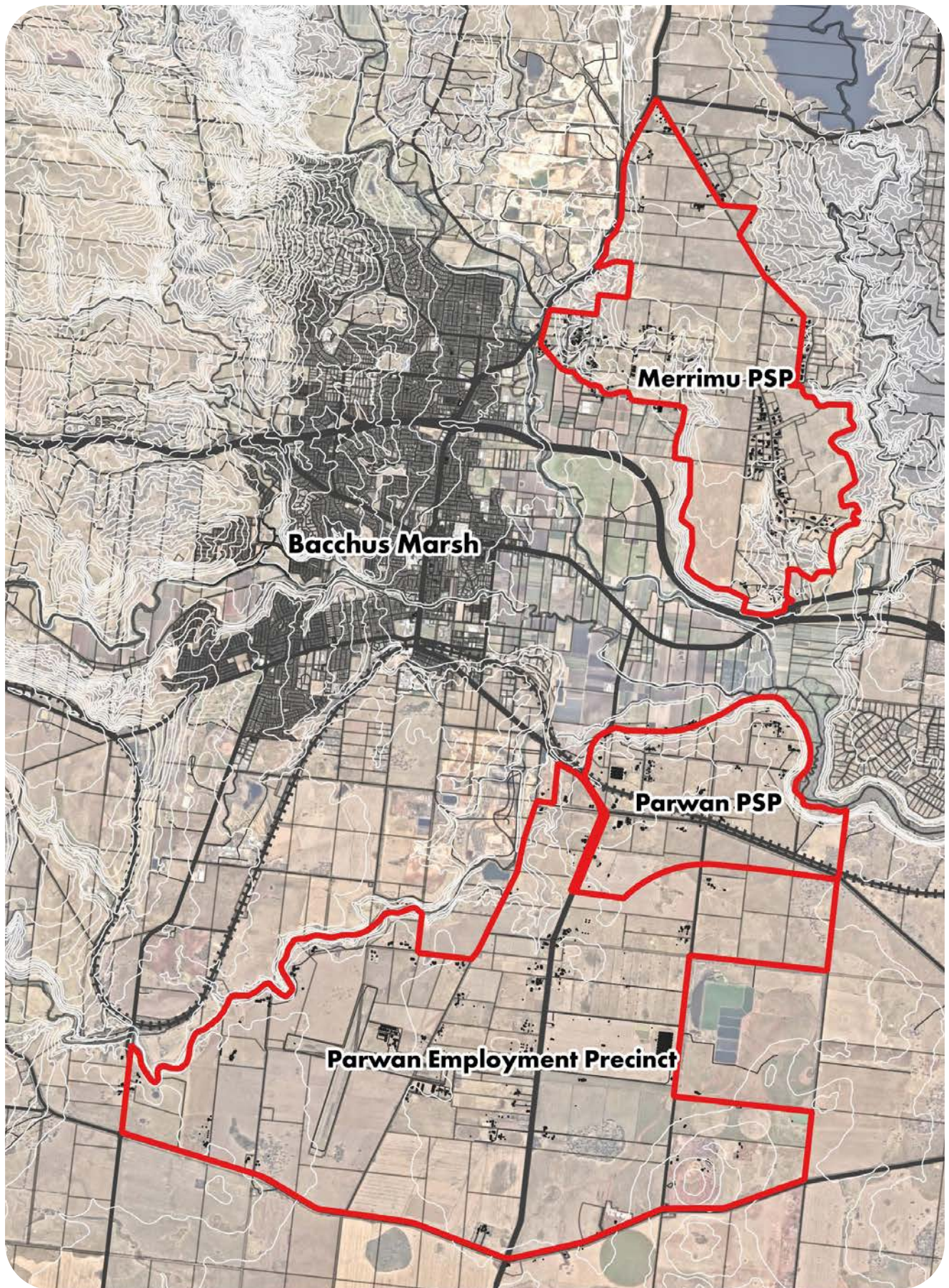


Figure 3. Regional Context Map - Merrimu and Bacchus Marsh



## 2 Planning Policy, Strategic Context and Major Projects

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The purpose of this section is to identify the policies, planning controls and the existing Urban Growth Framework, that can inform or provide an appropriate reference for the assessment of landscape values.

### 2.1 Policy context

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The Merrimu Precinct is located east of Bacchus Marsh town centre and is the largest land ensemble within Bacchus Marsh and is proposed as a residential growth area. The following relevant planning overlays which apply to the Precinct include:

- DDO1 - protects the visual and aesthetic values of views to, from and within the Merrimu Precinct.
- DDO2 - protects the visual amenity in rural, township and vegetated areas.
- HO's - conserve and enhance the heritage places of natural and cultural significance.
- ESO2 - protects waterways for 100m on either side thereof through conservation / appropriate uses.
- ESO3 - protects the natural, scientific and scenic integrity of the significant Long Forest Reserve.
- ESO8 - protects the Red River Gums, which represent the oldest living natural heritage.
- SLO1 - protects the natural scenic qualities of the hilltops and ridge line areas

- LSIO - protects waterways within the 1:100-year flood zones and other flood prone areas, ensured flood passage and improves floodplain health.
- BMO - Bushfire setbacks of various widths have been recommended along the Merrimu escarpment and along the interface with the Long Forest reserve in the east of the Merrimu Precinct. These setbacks are to protect development areas from bushfires. '...There is a small area of land west of Bences Road within the PSP boundary that is subject to the Bushfire Management Overlay (BMO). The Merrimu precinct includes significant slopes around Pyrites Creek that influence bushfire behaviour... (Victorian Planning Authority, 2022)

The following strategic context plans relevant for the Merrimu Precinct include:

- Urban Growth Framework (2018)
- Merrimu Wurundjeri Country Precinct Structure Plan (2022)
- Bacchus Marsh Eastern Link Road (BMELR)

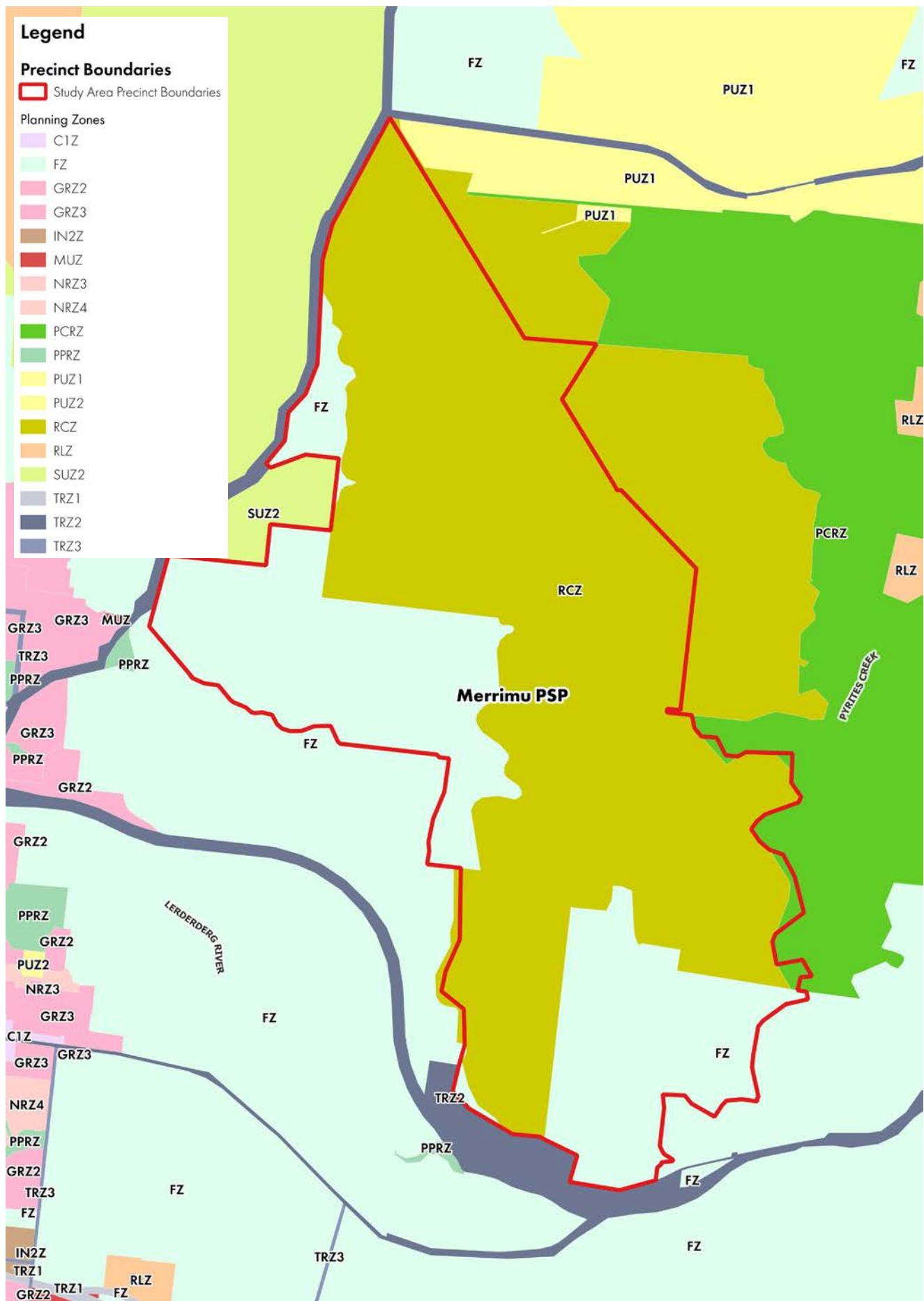


Figure 4. Planning zones map



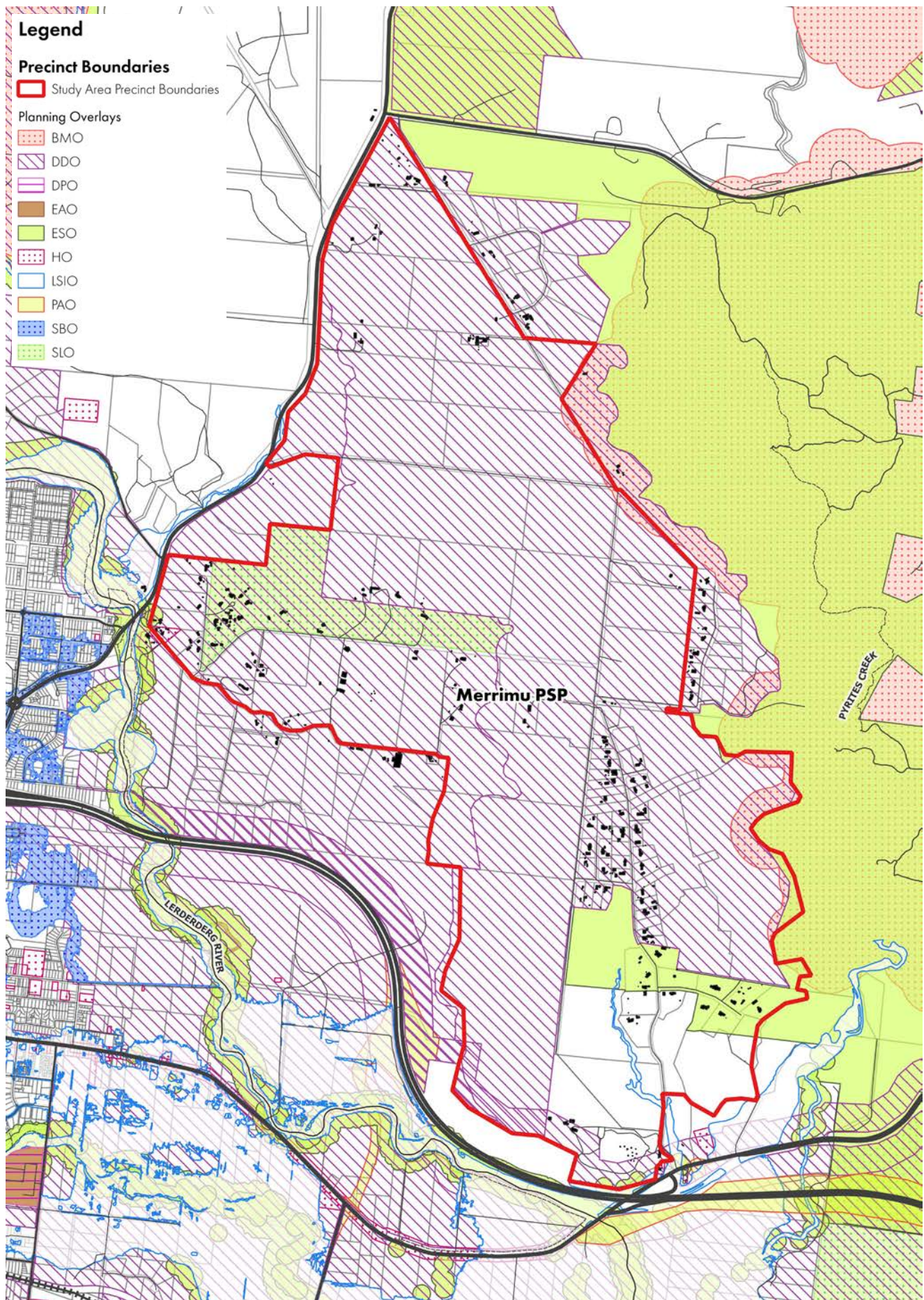


Figure 5. Planning overlays map



### 2.1.1 Urban Growth Framework (2018)

Bacchus Marsh is the second largest settlement in the Central Highlands region of Victoria and is growing rapidly due to its proximity to Melbourne and to the jobs and opportunities this brings. The Bacchus Marsh Urban Growth Framework (Victorian Planning Authority & Moorabool Shire Council, 2018) is a strategic document, guides urban growth based on land capability and growth needs. Refer to the Merrimu, Parwan and Parwan Employment Precincts – Background and Context Study for further information.

The vision for the future of Bacchus Marsh as per this Urban Growth Framework, states:

*‘Bacchus Marsh will be an emerging regional growth centre, providing metropolitan-edge convenience, set within a distinctive agricultural valley framed by steep escarpments and significant waterways. Bacchus Marsh will be planned as a rural city in a farming district, and as the gateway to Victoria’s Central Highlands region.*

The natural features considered to be key issues include:

- Waterways
- Habitat values
- Reserves and parks
- Cultural and geological heritage
- Viewsheds and landscape i.e., topography of ridge lines, hills and plateaus, and the ‘open feel’ from the rural and low-density surrounds

Several ‘Environmental Objectives’ of relevance, included:

- Protect high-value agricultural land in the Bacchus Marsh Irrigation District (BMID) from encroachment by urban development.
- Protect and enhance natural assets and landscape features such as the Long Forest Nature Conservation Reserve, waterways and escarpments.
- Protect waterway corridors to ensure their function and biodiversity are not negatively impacted by any development and seek to add strategic open space to improve wildlife corridors.
- Provide for an integrated network of parks, open space and trails to connect residents and visitors with the natural assets of the district.

It is noted within the UGF report that:

*“Recent housing growth in Bacchus Marsh has been criticised for its lack of sympathy to neighbourhood character ... in particular:*

- *the loss of rural views due to inappropriate development on surrounding ridgelines, hills and plateaus;*
- *minimal landscaping, in particular a lack of street tree plantings. The lack of landscaping has a significant impact on the character of the town*

### 2.1.2 Merrimu Wurundjeri Country Precinct Structure Plan (2022)

According to the Merrimu Wurundjeri Country Precinct Structure Plan Key Issues and Opportunities Report (Victorian Planning Authority, 2022):

‘Merrimu will be a physically separate and distinct community, sitting atop an elevated plateau, but with strong connections to other communities in the Bacchus Marsh region, including Darley and central Bacchus Marsh to the west and Parwan to the south....

... The study area is bound by Gisborne Road, Diggers Rest–Coimadai Road and Bences Road to the north and the Western Freeway to the south. The western boundary follows Gisborne Road, Lerderderg Park Road, rural property boundaries and at its most western extent Lerderderg River. The eastern boundary follows Cockatoo Creek (Pyrites Creek) and the western extent of Long Forest Nature Reserve.

The Lerderderg River runs to the south-west of the study area, and Pyrites Creek lays to the east of the study area. Both continue south to meet the Werribee River...

...Lying on an elevated plateau, the area has a strong visual landscape with rolling hills and views that extend down to Bacchus Marsh.

The plateau is relatively flat with extreme steepness around the escarpment where development is highly constrained. The escarpment

area has the potential for Aboriginal cultural heritage and biodiversity values. Long Forest Reserve defines Merrimu PSP’s eastern boundary and is a strong feature of the landscape in the area.

... Development should be located well-back from significant slopes around Pyrites Creek and forest vegetation to the east of the Merrimu precinct...’

### 2.1.3 Bacchus Marsh Eastern Link Road (BMELR) – Assessment and Recommendations

Regional Roads Victoria have nominated Option B Alternative, shown in Figure 6, as the preferred alignment after examining a range of potential options for a future north-south route to the east of the Bacchus Marsh township. The following section provides a brief and high level Visual Impact Assessment and Recommendations on the preferred alignment for the potential Bacchus Marsh Eastern Link Road (BMELR).

The assessment is based upon potential impacts to visual amenity, sense of place and landscape character. Further work will be required throughout the BMELR planning and design process to refine the design and its interface with future residents.

The assessment and recommendations are as follows:

- **Option B Alternative:** The proposed road alignment will potentially fragment the precinct as the alignment runs north/south through Merrimu. This will potentially impact on sense of place and obstruct continuity in the precinct landscape. This alignment may reduce both visual and physical connectivity between the land to the east and to the west of the BMELR. Interface treatments such as landscape buffers to the BMELR should be considered to ensure the best landscape and visual outcomes.





DTP0317/23



Department of Transport and Planning

[regionalroads.vic.gov.au](https://regionalroads.vic.gov.au)



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Figure 6. Bacchus Marsh Eastern Link Road Preferred Alignment: Option B Alternative 2023 (provided by Regional Roads Victoria)

## 2.2 Summary of Policy Context and Recommendations

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As outlined in the Urban Growth Framework (Victorian Planning Authority & Moorabool Shire Council, 2018), the recommendations and opportunities for Merrimu include the following:

- ‘...There is potential within Merrimu to create a number of smaller villages that provide different and complementary characters to suit a range of housing preferences...
- Housing should be delivered at a range of densities, noting that some existing estates such as Dodemaide Court and Possum Tail Run are subject to covenants limiting future growth. These areas can be expected to remain as lifestyle lots. Elsewhere a mix of lot sizes will be appropriate, with transition in densities a key goal between older estates (such as Tucker Court, Streeton Drive) and newer housing estates...
- Merrimu should be developed in a progressive, continuous manner, moving from the existing urban areas (generally west to east and north to south, but ultimately guided by a precinct structure plan) and delivering an activity centre with each stage of development. An activity centre should be delivered in the early stages, to serve the existing Merrimu population...

Guidelines identified to consider:

- Define smaller precincts with distinct characters.

- Consider interfaces between development and escarpments to ensure views are not lost to and from escarpments and natural edges of town
- Consider interfaces with environmental assets such as Long Forest Nature Conservation Reserve and BMID, to protect and enhance biodiversity values and agricultural land uses, and to achieve attractive development for local residents...
- Ensure that development is set back from the top of the escarpment, to minimise impacts on landscape based on appropriate landscape sensitivity analysis as well as to limit interface issues with agricultural land use (i.e. to avoid land use conflict)....
- Avoid new sensitive land uses from establishing within relevant buffers to the Darley Sand Quarries....’

Detailed planning considerations:

1. Define the western edge by Gisborne Road:
  - Manage development along the escarpment edge.
  - Use the existing escarpment within the non-sensitive use buffer as the precinct edge.
2. Define the south-western and southern border by the escarpment:
  - Provide a perimeter road along the top edge of the escarpment with pedestrian and cycling trails on the outer edge of the road cross-section.
  - Set development back from the perimeter to manage

views from the Avenue of Honour walking trail.

- Prioritise development siting, as opposed to canopy trees, to manage visual impacts of development (due to unfavourable soil conditions for canopy trees).
  - Establish building envelope limits along the southern escarpment to manage views from the Western Freeway and Avenue of Honour.
3. Define the south-eastern corner by the BMID and farming area:
    - Avoid vegetation removal and development that reduces the landscape quality in gateway views.
    - Ensure development responds to the topography and avoid using extensive retaining walls where possible.
    - Density of development must consider impacts on gateway views and BMID and farming interface.
  4. Define the eastern edge by the Long Forest Nature Conservation Reserve:
    - Provide a perimeter road of at least 20m in width along the top edge of the escarpment to provide a bushfire break and maintenance vehicle accessibility.
    - Ensure residential densities, siting and design respond appropriately to bushfire risk and the principle of protecting and enhancing biodiversity values.

- Retain areas of significant vegetation and avoid development in these areas.
5. Define the northern boundary by Bences Road:
- Apply precinct planning principles of avoiding back fences facing onto this road.
6. Amenity buffer interface areas:
- Define the range of land uses that can occur within buffer interface areas.
  - Apply a different zone control to these areas (i.e. different to the balance of the precinct), to ensure that sensitive uses, and uses with adverse amenity potential (i.e. intensive animal husbandry, saleyard, mineral extraction and uses listed under VPP Clause 52.10) are prohibited.



## 3 Existing Conditions

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This section provides a summary of the conditions that currently exist within the study area and surrounds, as identified within the Merrimu, Parwan and Parwan Employment Precincts – Background and Context Study.

The existing conditions summary is intended to highlight key landscape conditions within the Merrimu Precinct. The aim of the findings are to inform development patterns, understand site characteristics and identify potential connections for the future PSP.

### 3.1 Existing Conditions Summary

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#### 3.1.1 Geology and Soil

- Merrimu plateau is stable and resistant to erosion.
- Werribee Formation is poorly cemented and highly erodible.
- Sodic and dispersive soils are widespread and prone to erosion, especially when they come into contact with water. This is specifically prevalent on the western edges of the escarpment.
- The ground surface over the plateau included 'basalt outcrops and loose basalt boulders were noted in places...' (Coffey Services Australia Pty Ktd, 2020).

#### 3.1.2 Hydrology, Landform and Slope - *Shown in Figure 7 and Figure 10*

- The majority of the Merrimu PSP site is characterised by a slight downhill slope from north to south.
- Pyrites Creek runs from north to south within the east of the Merrimu Precinct.
- A gully is present at the southern end of the Merrimu Precinct, the slopes steepen towards the gully. Erosion features have been noted as being present.
- Drainage lines follow more erodible pathways and facilitate erosion along their edges.
- Drainage lines and wetlands are hydrologically sensitive environments.

- Flooding occurs along the Werribee River after prolonged rainfall as well after high intensity events.
- Wetlands represent additional water management structures / opportunities.
- Steep topography (>5%) represents an erosion risk.
- Very flat topography (<1%) does not facilitate runoff and ponding occurs (specific to the wetland on the northern end of the precinct).

#### 3.1.3 Vegetation - *Shown in Figure 8*

- There is limited remnant EVCs within the Precinct area include Plains Grassland, Grassy Woodlands, Rocky Chenopod Woodland, Escarpment Shrubland and small segments of Red Gum Swamp along the low-lying watercourse environs.
- 23 high retention trees were noted in Merrimu.
- Remaining indigenous vegetation is mostly confined escarpments and uncultivated areas. These are considered to have high biodiversity value.
- Long Forest Nature Reserve is of significant biodiversity value.
- Areas within Merrimu are vulnerable to bushfire, especially those adjacent to forest areas.
- 3 Significant ecological communities occur within Merrimu.
- Water dependent riparian and wetland ecosystems are sensitive environments. They are generally vulnerable to land uses / erosion and invaded by exotics that compromising native vegetation.

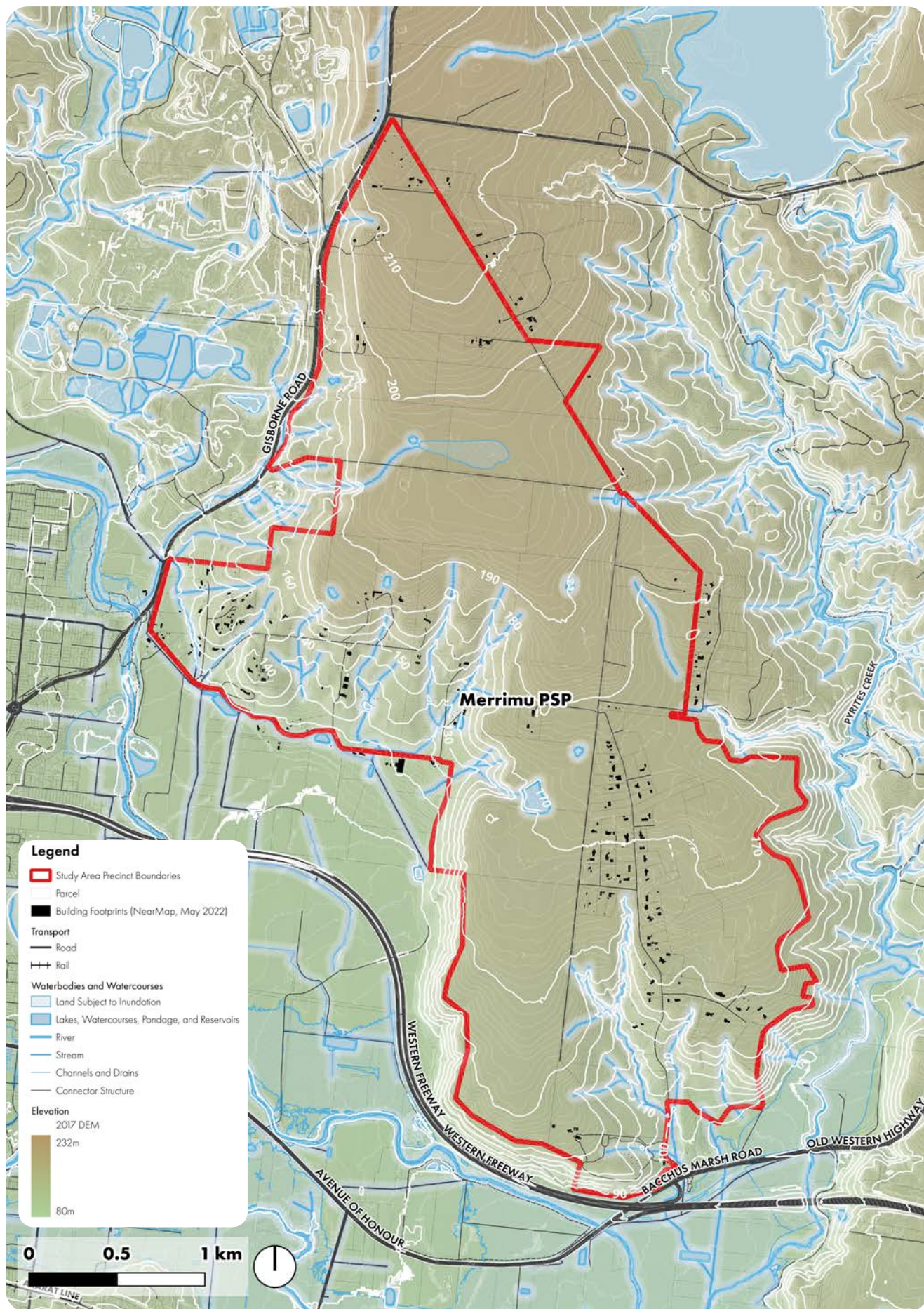


Figure 7. Merrimu - Landform and Hydrology



- Some nationally significant fauna and flora species occur within the Merrimu Precinct. Some State significant flora occurs, but no State significant fauna occur, but potential habitat for a number of species is present.

#### 3.1.4 Edge and Interface Conditions *Shown in Figure 9*

- North-western escarpment interface with the Gisborne Road and the Boral Sand Quarry.
- South-western escarpment interface with the BMID.
- Eastern interface with existing rural residential and Long Forest Flora and Fauna Reserve.
- Interface with Bences Road and existing rural residential.

#### 3.1.5 Land Use

- Long Forest Reserve conservation area on eastern edge of Merrimu.
- BMID in southwestern edge of Merrimu.
- There is existing quarrying and mining along the northwestern edge of the precinct.
- Existing pastures and dryland agricultural uses to the north and far southwest of precinct.
- Presence of new suburban land use within the central and eastern parts of Merrimu and the Ta' Pinu Shrine in the south and the requirement to integrate with these uses.
- A private airfield is located at the centre of the project area along Bences Road
- Formal conservation areas lie regionally and adjacent to Merrimu in the east.

#### 3.1.6 Built Form and Settlement

- The extent of the urban area is constrained and segmented by natural features and major transport routes, which includes:
  - The Western Freeway, separating Merrimu from the BMID and all areas to the west and south of the study area. Access off and onto the Western Freeway is limited.
  - Geelong Gisborne Road, connector road running along the northwestern boundary of Merrimu.
- The historic town centre of Bacchus Marsh is distinct from the surrounding suburban development, which is mostly homogenous.
- The BMID is distinct and characteristic of the Bacchus Marsh region.
- The paddocks and pastures of Merrimu are mostly flat and mostly undifferentiated, punctuated by occasional natural features (trees, outcrops, drainage lines and wetlands).
- Two churches, one on O'Connell Road (to the west) and the other on Flanagans Drive (to the south) are located within the project area...' (Jacobs Group Australia Pty Ltd, 2018):
- Farm residences and sheds are scattered in the project area along roads and off access tracks
- The Proposed Western Renewables Transmission Line may cross over Merrimu in the far north and is both a potential exclusion area for development and a potential visual intrusion.

#### 3.1.7 Cultural Heritage

- Refer to Merrimu Wurundjeri Country Precinct Structure Plan (2022), for further detail on key issues and opportunities.
- A number of Aboriginal cultural heritage places and historic heritage places occur across the precincts.
- Areas where Aboriginal cultural heritage are most likely to occur include identified waterways land adjacent to the escarpment, stony rises / knolls, escarpments and swampy / marshy areas.



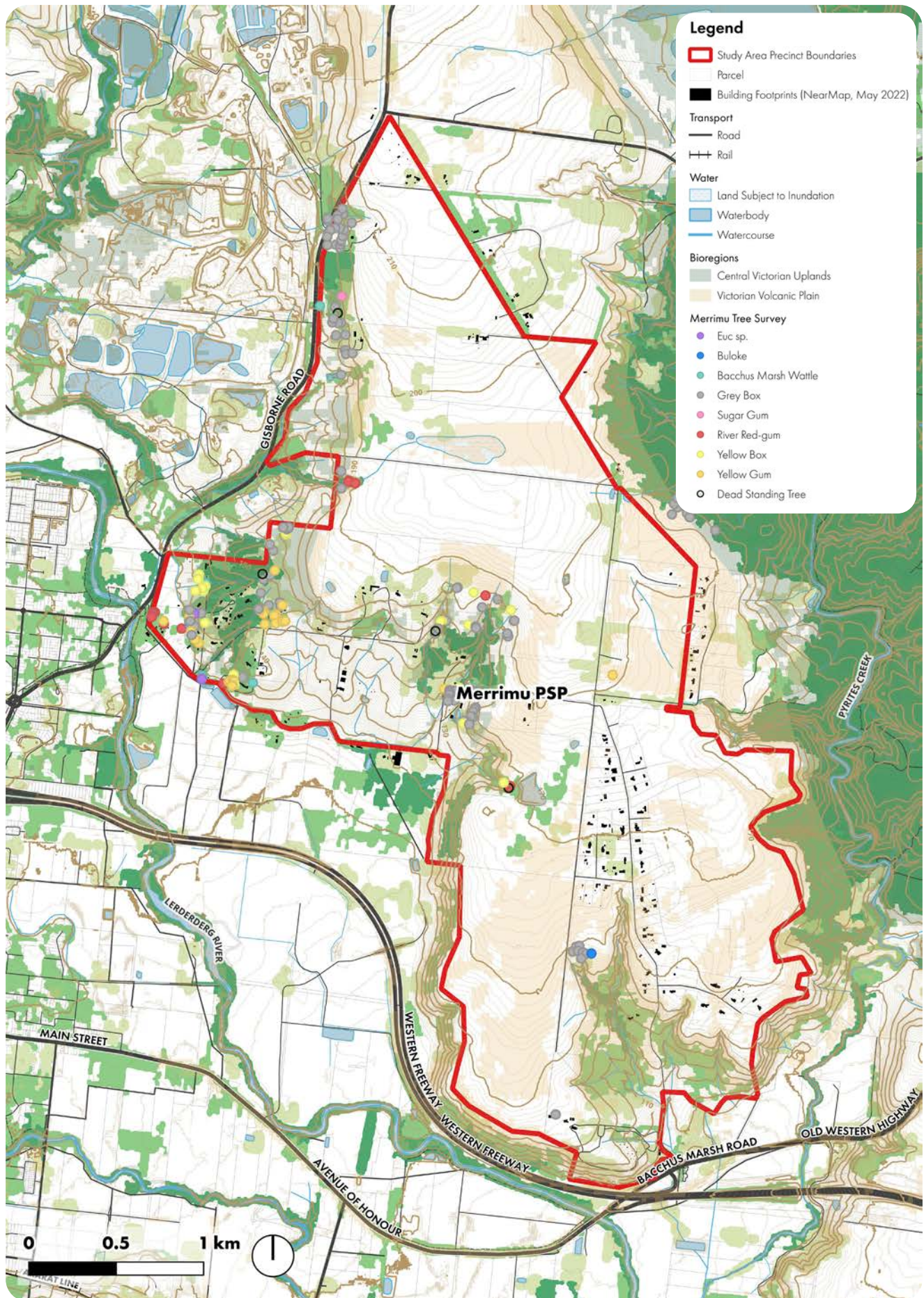


Figure 8. Merrimu - Vegetation and Bioregions



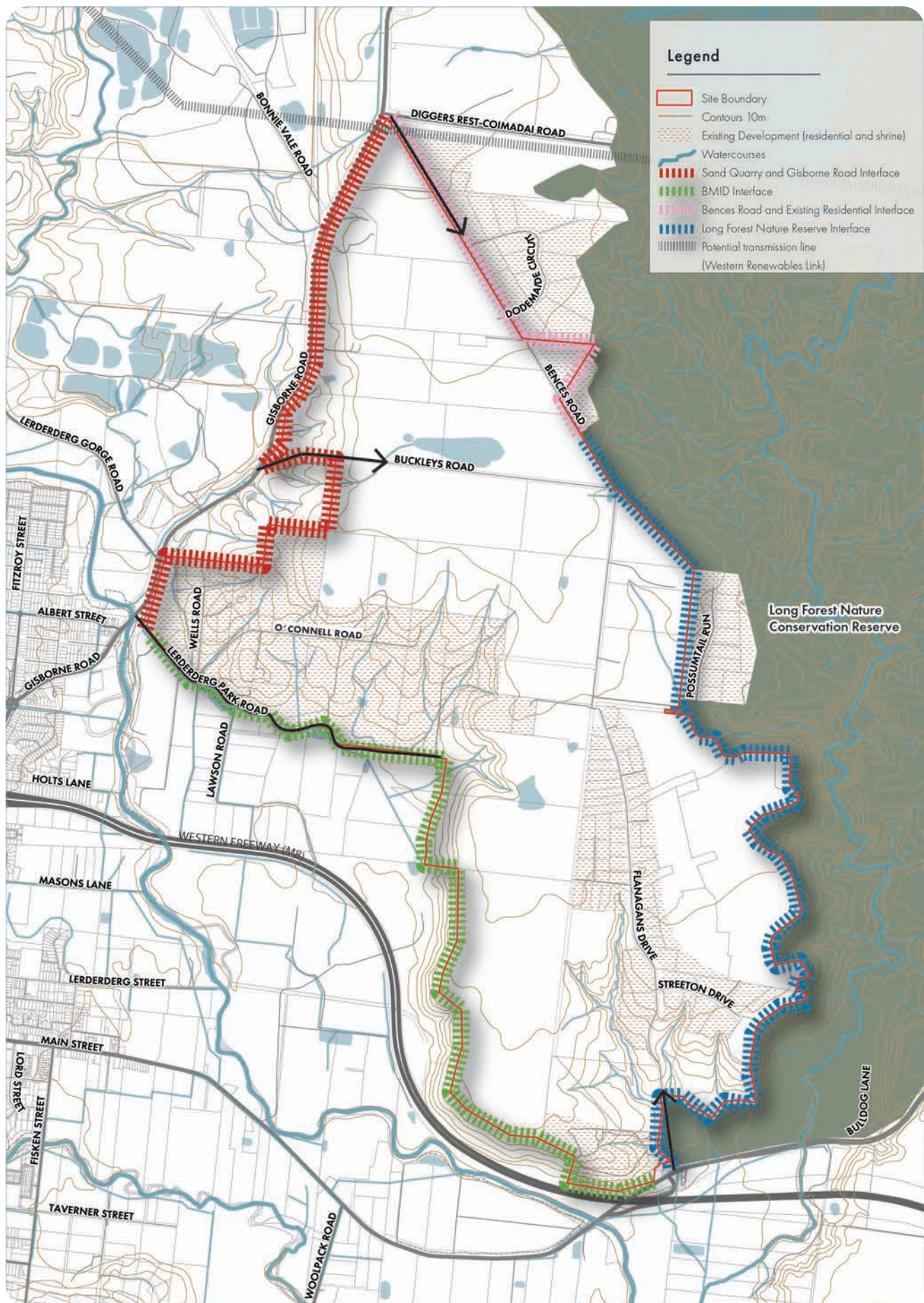


Figure 9. Merrimu - Interfaces



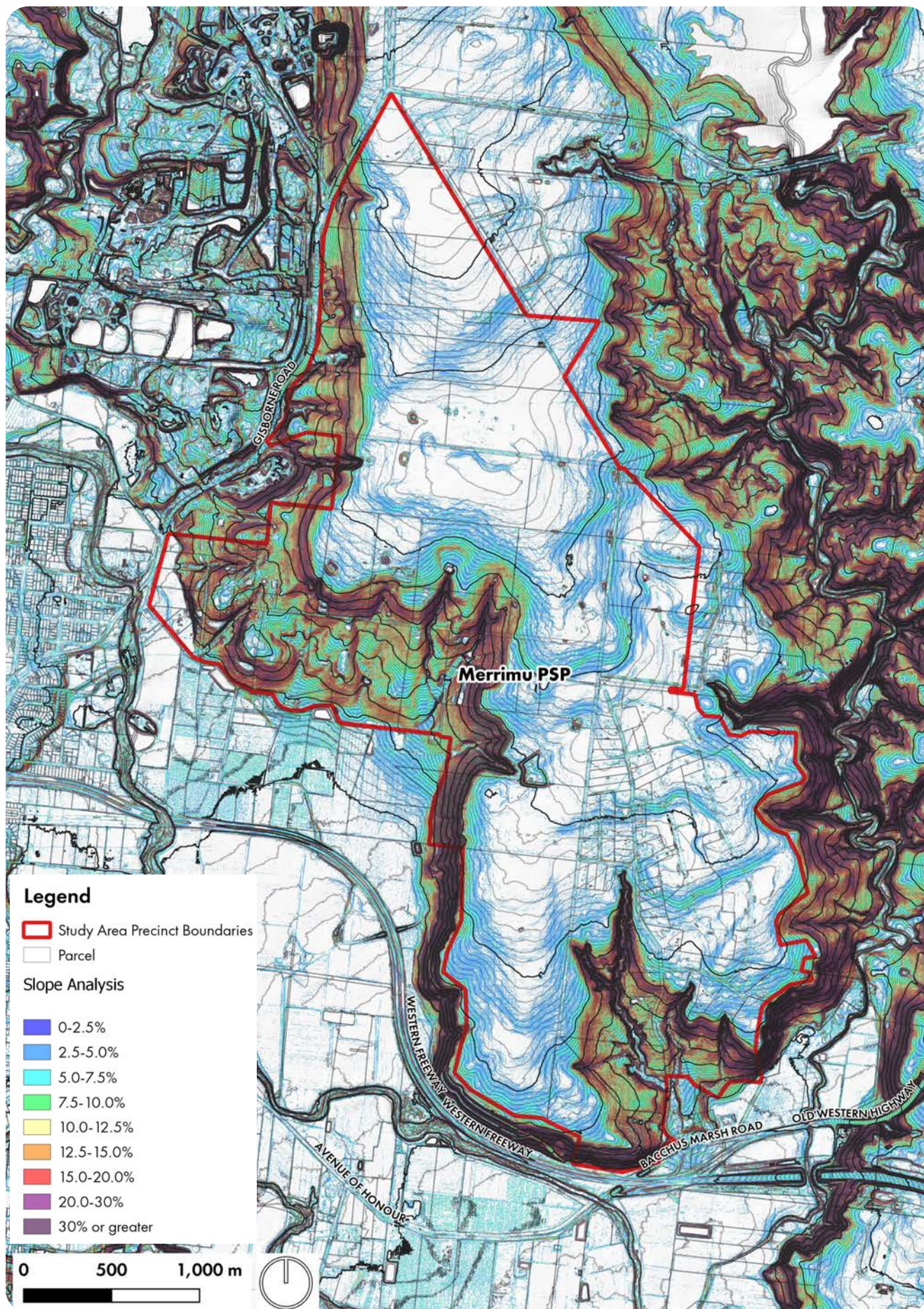


Figure 10. Merrimu - Slope Analysis



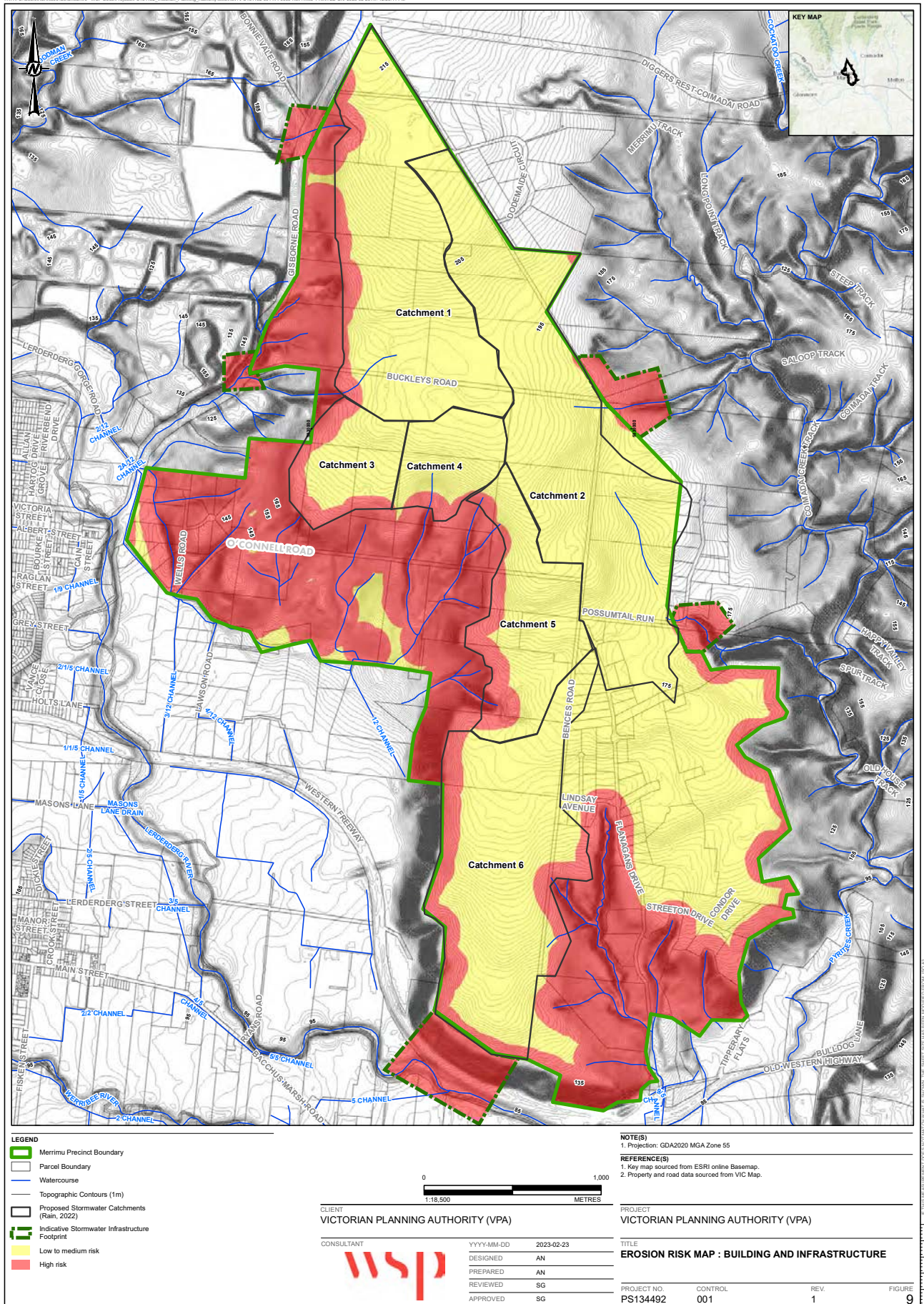


Figure 11. Merrimu Erosion Risk Map - Building and Infrastructure (WSP 2023)

RISK LEVEL	PRECINCT CONTEXT	POTENTIAL FOR EROSION	CONTROLS
<b>Building and Infrastructure Impact</b>			
<b>High risk</b>	<p><b>High risk</b> of significant erosion of subsurface soils leading to:</p> <ul style="list-style-type: none"> <li>— Tunnel erosion</li> <li>— Structural failure of infrastructure/foundations</li> <li>— Long term ongoing requirement for remedial works.</li> </ul> <p>Likely to affect all aspects of development, including residential dwelling construction.</p>	<p>Building and infrastructure impact is more likely:</p> <ul style="list-style-type: none"> <li>— In areas where soil erosion is visible pre-development</li> <li>— Where extensive soil disturbance occurs and exposes susceptible soils</li> <li>— Sodicity/dispersiveness tests indicate higher likelihood</li> <li>— If topsoil is not appropriately retained during and post construction</li> </ul>	<p>Can be controlled with typical construction environment management techniques during construction phase, plus:</p> <ul style="list-style-type: none"> <li>— Topsoil disturbance to be minimised</li> <li>— Linear infrastructure backfill designed to minimise potential for tunnel erosion</li> <li>— Linear infrastructure avoided/above ground</li> <li>— Foundations designed to minimise soil disturbance</li> </ul>
<b>Medium risk</b>	<p><b>Medium risk</b> of significant erosion of subsurface soils leading to:</p> <ul style="list-style-type: none"> <li>— Tunnel erosion</li> <li>— Structural failure of infrastructure/foundations</li> <li>— Potential ongoing requirement for remedial works.</li> </ul> <p>Likely to affect most aspects of development, particularly linear underground infrastructure and sloping ground.</p>	<p>Building and infrastructure impact is more likely:</p> <ul style="list-style-type: none"> <li>— In areas where soil erosion is visible pre-development</li> <li>— Where extensive soil disturbance occurs and exposes susceptible soils</li> <li>— Sodicity/dispersiveness tests indicate higher likelihood</li> <li>— If topsoil is not appropriately retained during and post construction</li> </ul>	<p>Can be controlled with typical construction environment management techniques during construction phase, plus:</p> <ul style="list-style-type: none"> <li>— Topsoil disturbance to be minimised</li> <li>— Linear infrastructure backfill designed to minimise potential for tunnel erosion</li> <li>— Linear infrastructure avoided/above ground</li> </ul>
<b>Low risk</b>	<p><b>Low risk</b> of significant erosion of subsurface soils leading to:</p> <ul style="list-style-type: none"> <li>— Tunnel erosion</li> <li>— Structural failure of infrastructure/foundations</li> <li>— Potential requirement for remedial works.</li> </ul> <p>Likely to affect some aspects of development, particularly linear underground infrastructure and sloping ground.</p>	<p>Building and infrastructure impact is more likely:</p> <ul style="list-style-type: none"> <li>— In areas where soil erosion is visible pre-development</li> <li>— Where extensive soil disturbance occurs and exposes susceptible soils</li> <li>— On sloping land</li> <li>— Sodicity/dispersiveness tests indicate higher likelihood</li> <li>— If topsoil is not appropriately retained during and post construction</li> </ul>	<p>Can be controlled with typical construction environment management techniques during construction phase, plus:</p> <ul style="list-style-type: none"> <li>— Topsoil disturbance to be minimised</li> <li>— Linear infrastructure backfill designed to minimise potential for tunnel erosion</li> </ul>
<b>Very low risk</b>	<p><b>Negligible risk</b> of significant erosion of subsurface soils leading to:</p> <ul style="list-style-type: none"> <li>— Tunnel erosion</li> <li>— Structural failure of infrastructure/foundations</li> <li>— Remedial works.</li> </ul> <p>Unlikely to affect any aspects of development as erosion potential is low.</p>	<p>Building and infrastructure impact is unlikely:</p> <ul style="list-style-type: none"> <li>— In areas where soil erosion has not been observed pre-development</li> <li>— Where susceptible soils are not exposed</li> <li>— Where soil sodicity/dispersiveness tests indicate non-sodic</li> <li>— Where topsoil is appropriately retained during and post construction.</li> </ul>	<p>Can be controlled with typical construction environment management techniques during construction phase, plus:</p> <ul style="list-style-type: none"> <li>— Topsoil disturbance to be minimised</li> </ul>

Table 1. Merrimu Erosion Risk Map - Building and Infrastructure (WSP 2023)

### 3.1.8 Sodic/Dispersive Soils

- Figure 11 illustrates areas that are categorized as High Risk for buildings and/or infrastructure.
- Table 1 outlines some general controls to management any future development of the area.
- This data will be used to inform areas of conservation and management within the Landscape Framework.



## 4 Landscape Assessment

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Landscape character and scenic quality are assessed at two levels: **status** and **classification**.

### 4.1 Landscape Status

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The landscape includes features that are of regional status and the characteristics within this landscape have varied scenic qualities. The Merrimu Precinct includes a large area that is zoned Rural Conservation Zone, surrounded by Farmland and the Long Forest (Public Conservation).

It also includes the Long Forest Nature Conservation Reserve, Merrimu Reservoir and a significant landscape overlay on an area defined by scenic hilltops and ridgelines.

### 4.2 Landscape Classification

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The Merrimu Precinct is positioned primary within the Western Plains Landscape Character type and The Uplands Landscape Character type, as identified in the South West Landscape Assessment Study (Planisphere, 2013).

Refer to the Merrimu, Parwan and Parwan Employment Precincts – Background and Context Study for further detailed information.

The Western Plains classification is predominantly a flat plain (mostly volcanic) including agricultural grasslands. Some stringybark woodlands are present on basalt rises, and shelterbelts are common throughout agricultural grasslands. Water form and landform are typically less common.

The Uplands classification is predominantly a landform of topographic structure with distinct variation, including dramatic rises from the flat volcanic plain. Steeply sloping peaks and ridges, with some covered in vegetation at higher elevations. The plateaus are cut by deep river gorges creating dramatic landscape features. While the Uplands are largely cleared for agriculture on the flat plains and

gentler hill slopes. This landscape also supports numerous vegetation types including wet and dry forests, Ironbark open forests on moderate hill slopes, and large areas of reserves, public land and State Forests.

Within The Uplands the following distinctive Landscape Character Areas have been identified; The Residential Forest Edges, Cleared Pastures, Fertile Valleys, Plateaus and Gorges.



Figure 12. View of Merrimu plateau and escarpment from the west (Darley).



Figure 13. Merrimu: image of the Flat Alluvial Floodplain within the Perched Plateaux.



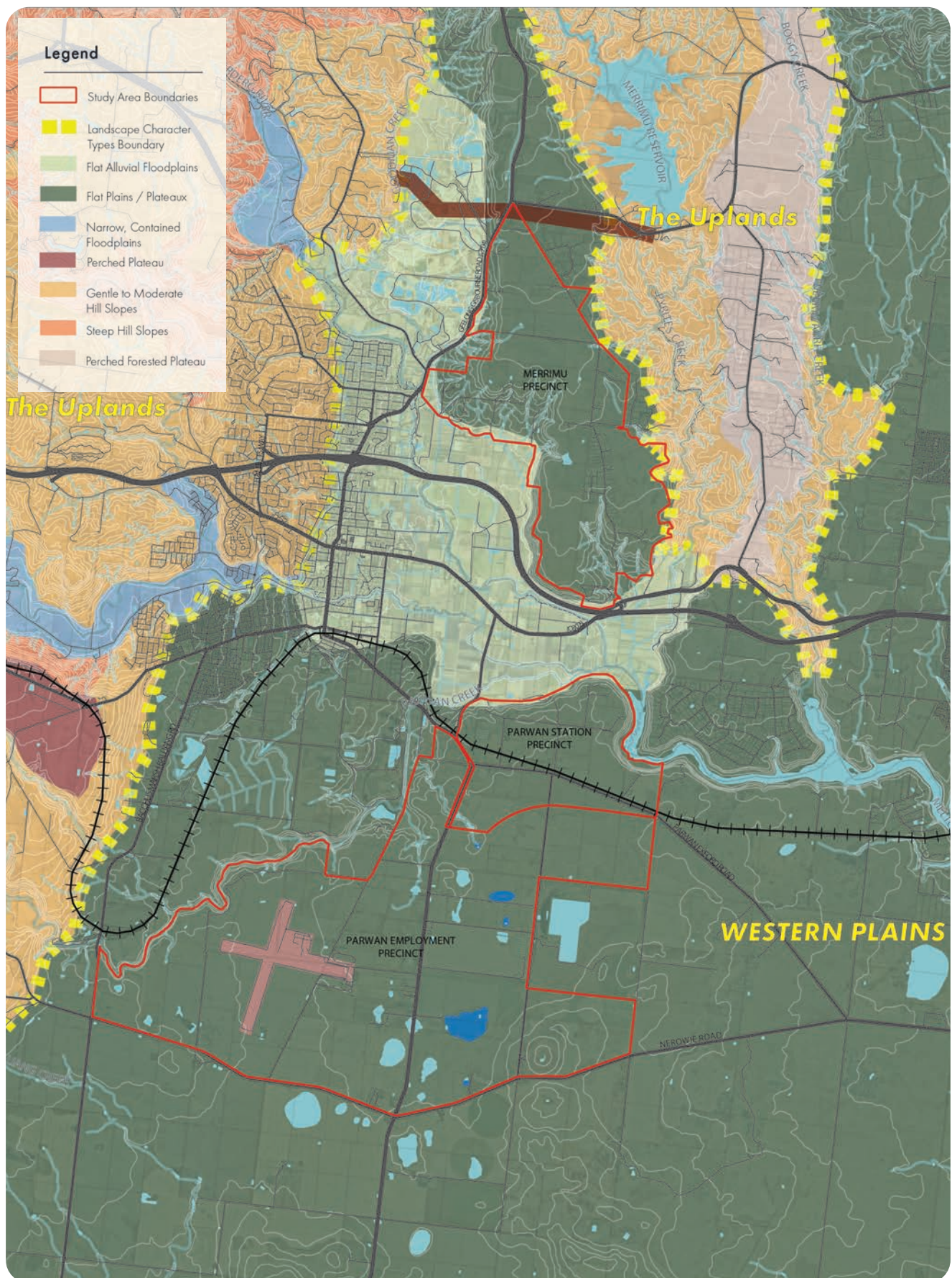


Figure 14. Landscape Character Types



### 4.3 Scenic Quality

The frame of reference for scenic quality is typically defined by landform, vegetation and water form. Within these Landscape Character Types of the Western Plains and the Uplands, the following landscape characteristics are considered to contribute to the Merrimu Precinct's scenic quality:

1. The Lerderderg River, Pyrites Creek and Escarpments, have been identified to have **High Scenic Quality** and have been noted to be of high value by the community.
2. The Hilltops and Ridgeline of the Merrimu Plateau north of O'Connell Road has been identified as a **High Scenic Quality** (identified within the SLO1).
3. The Long Forest Nature Conservation Reserve has been identified to have a **High Scenic Quality**.
4. The Werribee River and Alluvial Floodplains have been identified to have **Moderate Scenic Quality**.
5. The landform of steeply sloped terrain has been identified to have a **Moderate Scenic Quality**.
6. The agricultural and pastoral land has been identified to have a **Low Scenic Quality**.
7. The urban area and residential area has been identified to have a **Low Scenic Quality**.

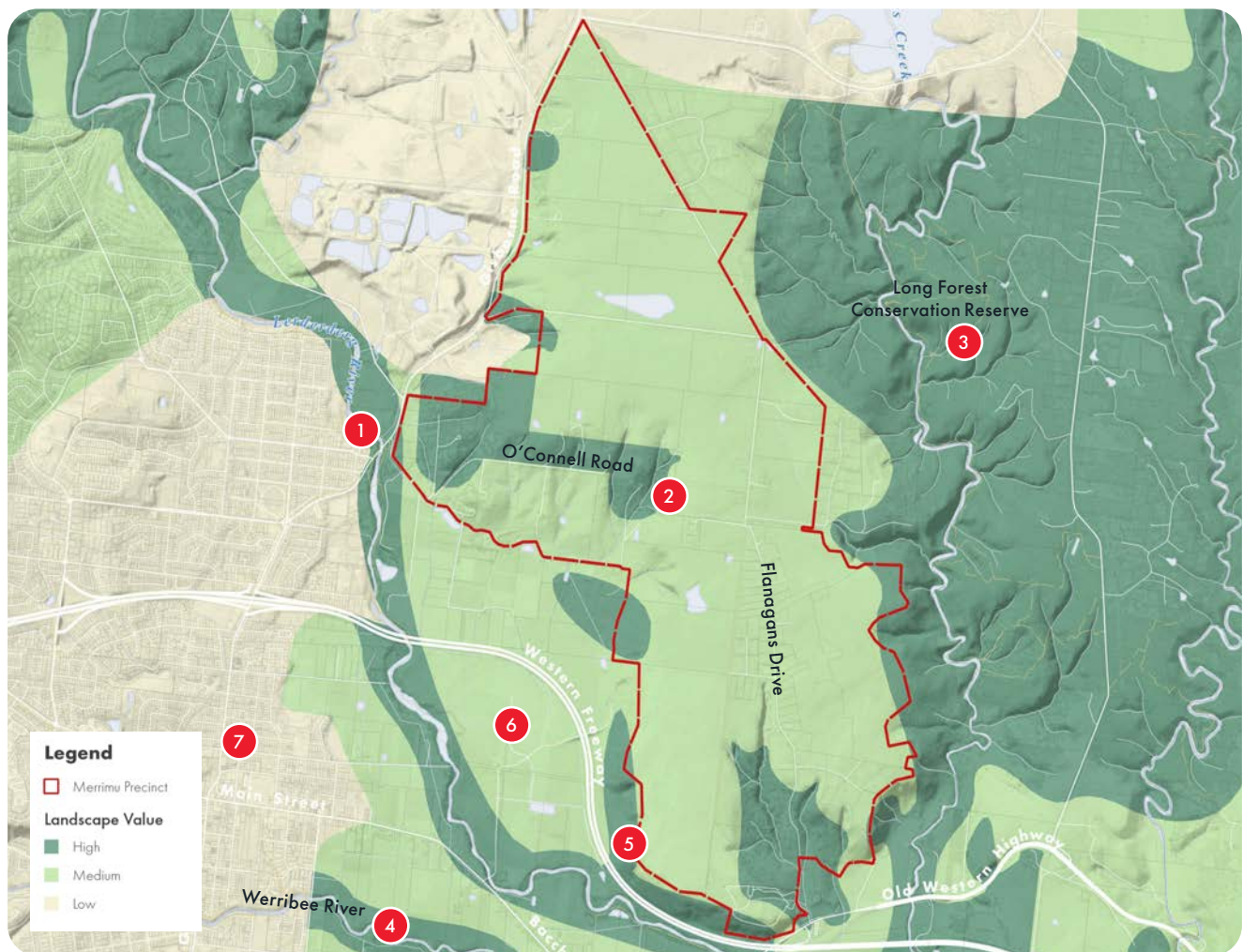


Figure 15. Landscape Value

## 5 Visual Assessment

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A high-level visual assessment has been conducted to understand the visibility towards the Merrimu Precinct.

A summary of the surrounding typical pattern of viewing has been provided and a visual analysis exercise has been conducted to understand the likely 'worst case' visibility towards the Precinct area.

### 5.1 Pattern of Viewing

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The pattern of viewing within the precinct and surrounding area has been identified to be predominantly experienced while travelling along key transport roads.

The main views of interest for the Merrimu Precinct include:

- Access and Gateways
  - Views from along Main Street (Avenue of Honour)
  - The approach to Merrimu along the Western Freeway
- Views, Sight-lines and Visual Connections which are influenced by elevation, distance and view orientation
  - Views from the top of the plateau down to Bacchus Marsh and the BMID (Figure 16).
  - Views to the Western Mountains from the top of the plateau (Figure 17).



**Figure 16.** Views and sightline from the escarpment edge over the BMID from the Merrimu Precinct.



**Figure 17.** Views and sightline to the western mountains from within the Merrimu Precinct.



## 5.2 Visibility Analysis

A visibility analysis has been conducted through the use of Zone of Visual Influence (ZVI) modelling.

The ZVI modelling identifies the areas that can be seen within a direct 'line of sight', based on a Digital Terrain Model (DTM). The purpose of the modelling is to:

- Identify all possible theoretical viewing areas.
- Indicate possible representative or 'worst case scenarios' viewing areas that can be verified on site.

The visual analysis has been used to gain an understanding of the visibility towards the Merrimu Precinct from selected data points along Bacchus Marsh Road and the Western Freeway.

The ZVI modelling used a DTM of 1m contour data. The model does not consider existing vegetation or built form. This results in a 'worst case' scenario in terms of the theoretical extent of visibility from a particular viewpoint.

Additionally, it is important to note that the proximity of a viewer to the potential change area is a key determinant in assessing the magnitude of visual impact, with closer viewpoints generally experiencing a greater degree of visual change.

Representative data points of approximately 20m intervals have been selected along the Avenue of Honour leading into Bacchus Marsh town from the east, and along the Western Freeway as it descends into the Bacchus Marsh valley.

The results of the ZVI along these routes are shown within Figure 19 and Figure 20. The key findings include:

- Theoretical visibility is possible along the Avenue of Honour, foreground and middle ground views are most relevant, meaning the Merrimu precinct on the plateau would be discernible and potentially constitute visual discernibility.
- Along the Western Freeway, viewpoints are either foreground or middle ground views and thus would all include potential visual discernibility.
- The main factors that allow or prevent viewing is dependant on elevation, distance of viewing and orientation along roads, and road side vegetation.



Figure 18. View from the eastern gateway along the Western Freeway.

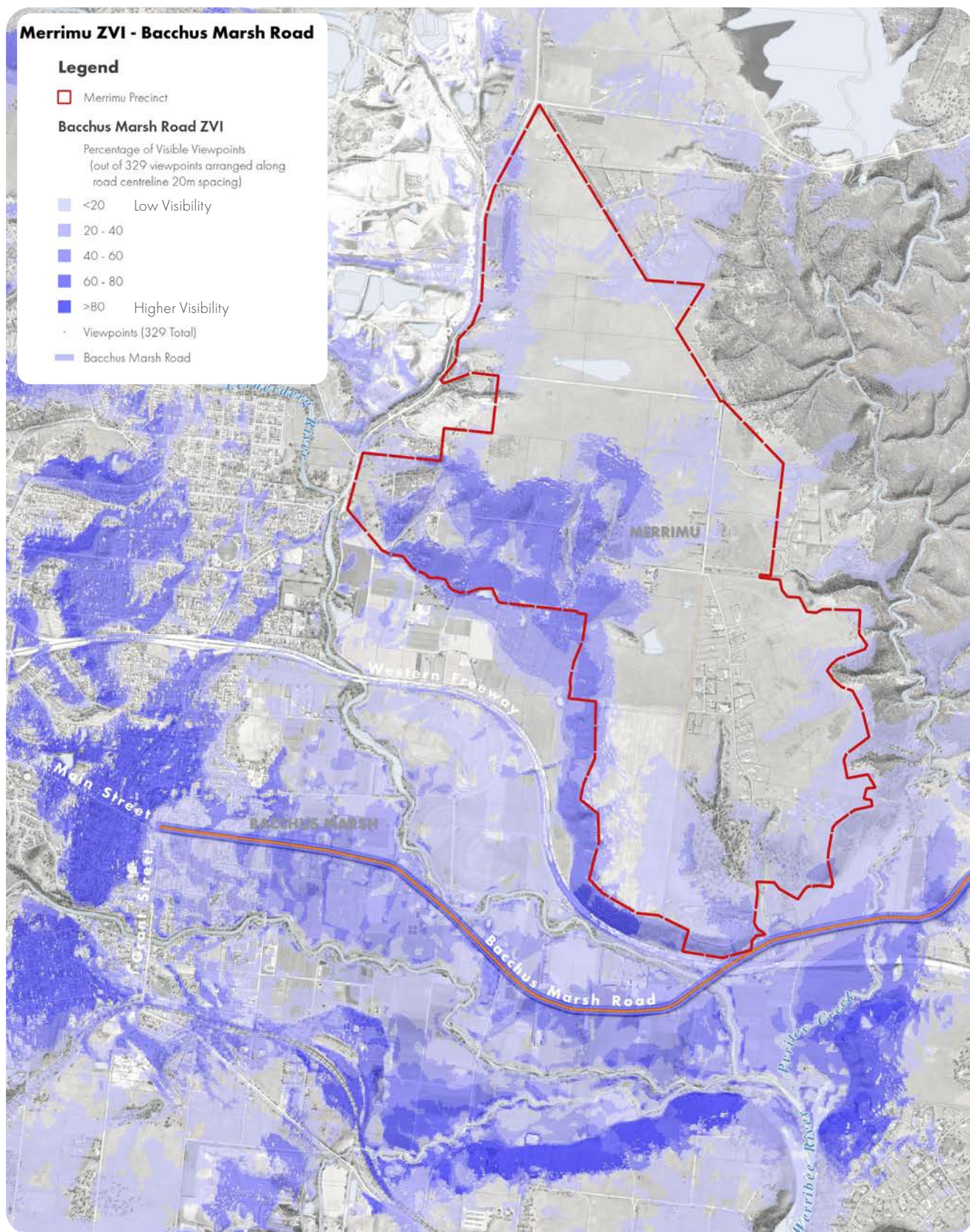


Figure 19. ZVI from Representative Points along Bacchus Marsh Road



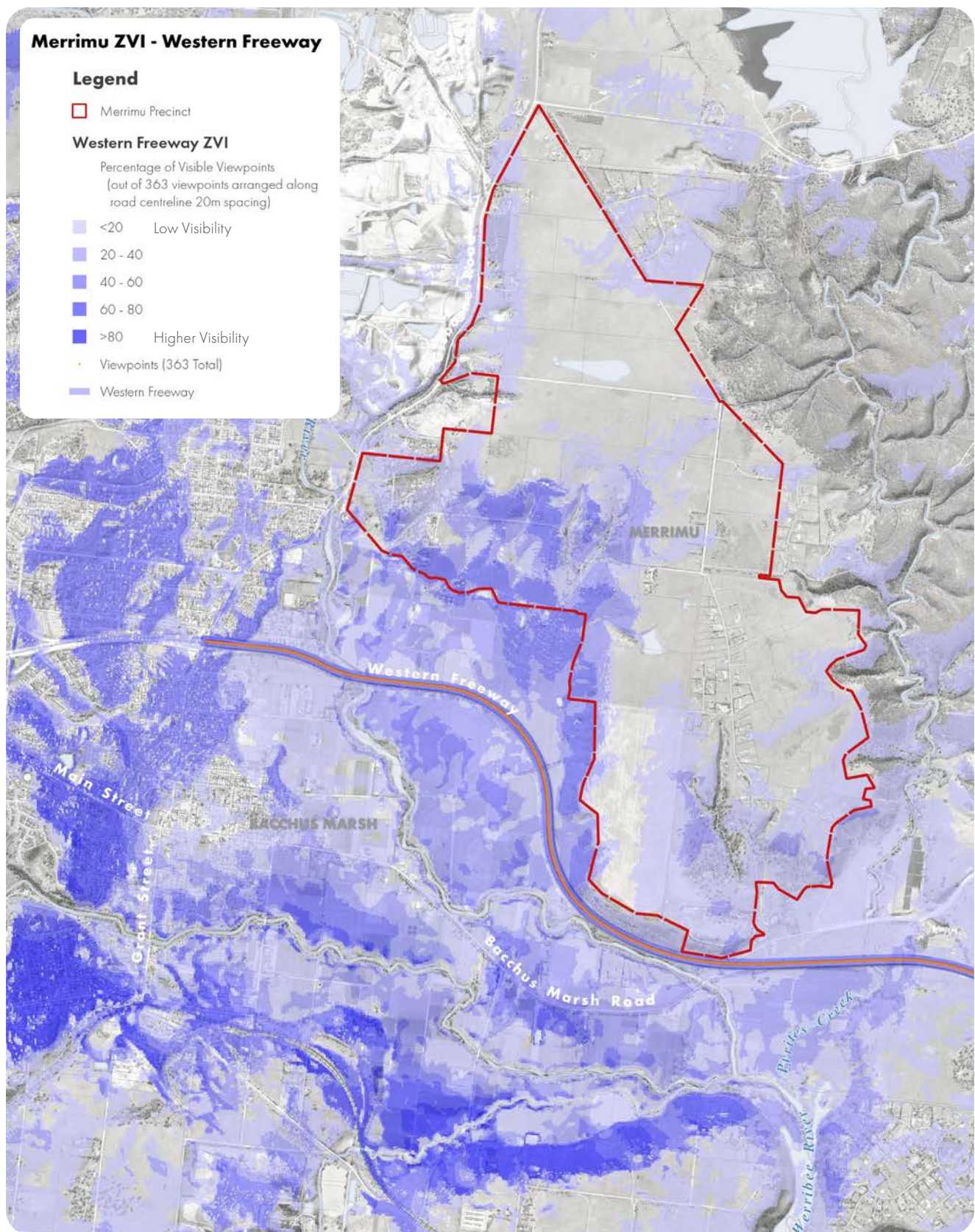


Figure 20. ZVI from Representative Points along the Western Freeway



5.3 Visual Sensitivity

**Visual sensitivity** is defined as the susceptibility of visual receptors to changes in views and visual amenity. This typically involves considering factors such as the location and context of the receptor, the nature of the view, and the importance of the view to the receptor (including scenic quality).

For this assessment **visual sensitivity** has been determined through the matrix set out below including the combination of landscape values (scenic quality) and visual exposure from the identified visual receptor from key road corridors (visibility analysis through ZVI).

Visual Exposure	High	Moderate	High	Very High
	Moderate	Moderate	Moderate	High
	Low	Low	Moderate	Moderate
	Negligible	Very low	Low	Low
	No Change	Nil	Nil	Nil
		Low	Moderate	High
		Landscape Value		

Table 2. Visual sensitivity matrix

Refer to Figure 15 for Landscape Value and Figures 19 - Figure 20 for the visual expose analysis.

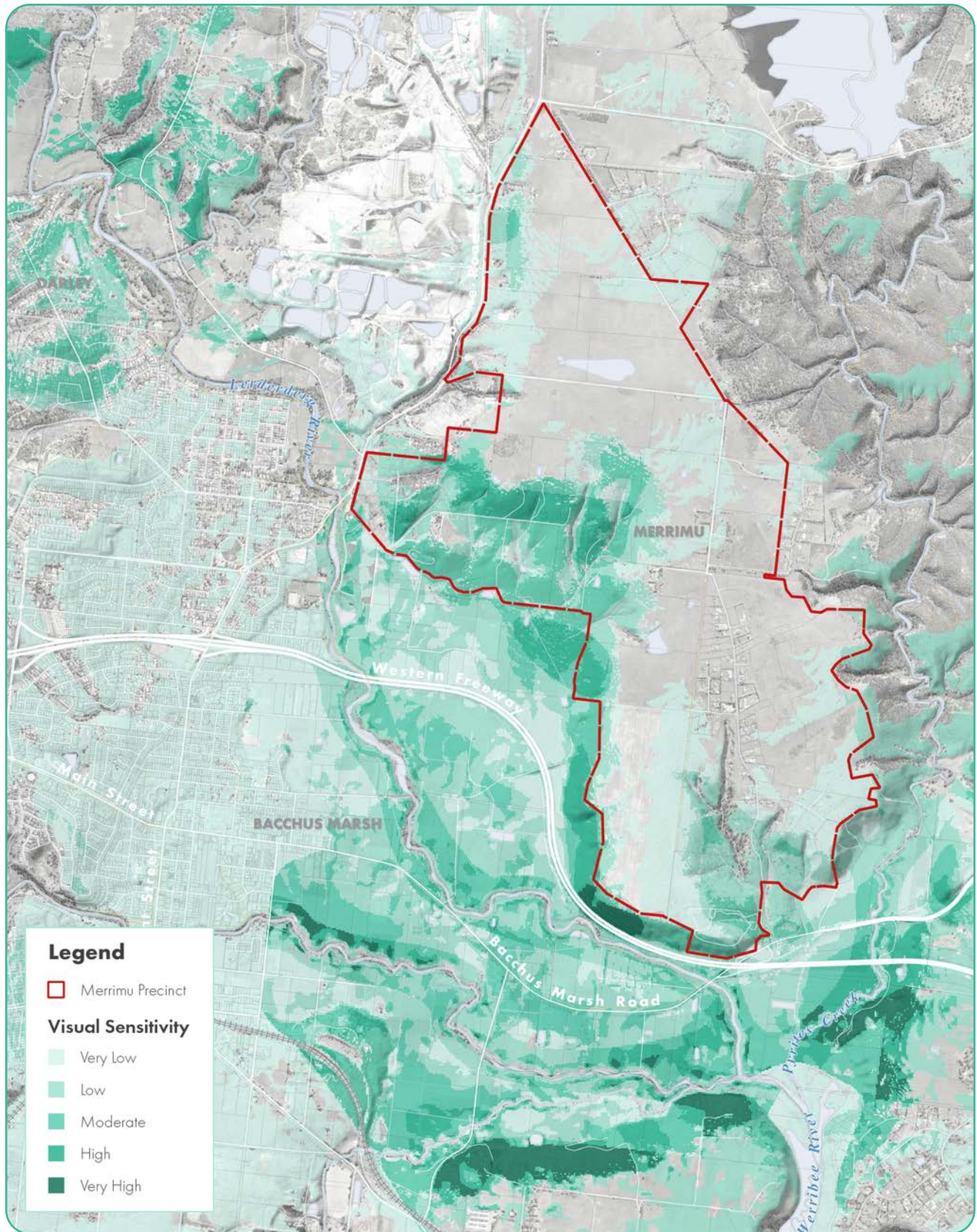


Figure 21. Visual Sensitivity

## 5.4 Visual Assessment Findings

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The landscape and visual assessment identified the following findings within the Merrimu Precinct. The findings are derived from field observations and ZVI modelling.

### ZVI Modelling indicates:

- Visibility from the Bacchus Marsh Valley is limited to the immediate escarpments. The plateau beyond is not visible from the valley.
  - Areas of moderate to high visual sensitivity, defined by prominent visibility and significant landscape value, are concentrated along the escarpment edge.
  - There is theoretical visibility to and from the Western Freeway and Bacchus Marsh Road and associated gateways, as shown in Section 5.2.
- There are views back towards the hills in the west from the Merrimu Precinct.
  - There is potential visibility to and from the Long Forest Reserve along the eastern edge towards the Merrimu Precinct.
  - Potential visibility both to and from Gisborne Road.
  - Potential visibility from Ta'Pinu Shrine towards the Precinct.
  - Potential visibility to and from the Bacchus Marsh Irrigation District (BMID), Avenue of Honour and Bacchus Marsh old town towards the Precinct.
  - Potential views over the quarry from the escarpment edge (noting the buffer in place).
  - Potential visibility of the proposed Western Renewables Link (based on the proposed alignment).
  - Potential visibility to and from the proposed Bacchus Marsh Eastern Link Road (BMELR).

### Field assessment indicates:

- There is visibility toward the Precinct from the hills in the west of the study area and from the regional gateways positioned within elevated areas.
- The escarpment edge from the top of the plateau within the Merrimu Precinct represents local vantage points. The views from the plateau offer unrestricted open views, including a hilly backdrop which has a strong visual presence within the study area.



## 6 Precinct Opportunities and Constraints

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### 6.1 Precinct Opportunities and Constraints

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1. Steep slopes (>10%) along the escarpment edge poses high erosion risk - as outlined in the Sodic/Dispersive Soils Report (WSP 2023).
2. Areas along the escarpment edge are highly visible from Bacchus Marsh township and key viewpoints along the Western Freeway and Avenue of Honour.
3. Existing drainage lines and water bodies need to be considered when proposing new road and lot alignments.
4. The Sand Quarry buffer (under further investigation) limits sensitive uses along the western edge of the precinct.
5. Bushfire management buffers must be considered along the eastern interface with Long Forest Reserve.
6. Opportunity to protect and enhance patches of mature vegetation within the precinct.
7. Opportunity to enhance/naturalise some existing water bodies.
8. Opportunity to create a bio-link to the Long Forest Reserve.
9. Opportunity to align streets and create vantage points to capture views to the western hills.
10. The potential transmission line on the northern end of the precinct may limit future development options.
11. Entry to the Merrimu via Buckleys Road is steep and narrow. Alternative entry points should be considered as part of the PSP process.
12. Areas of existing erosion exist along the western interface.

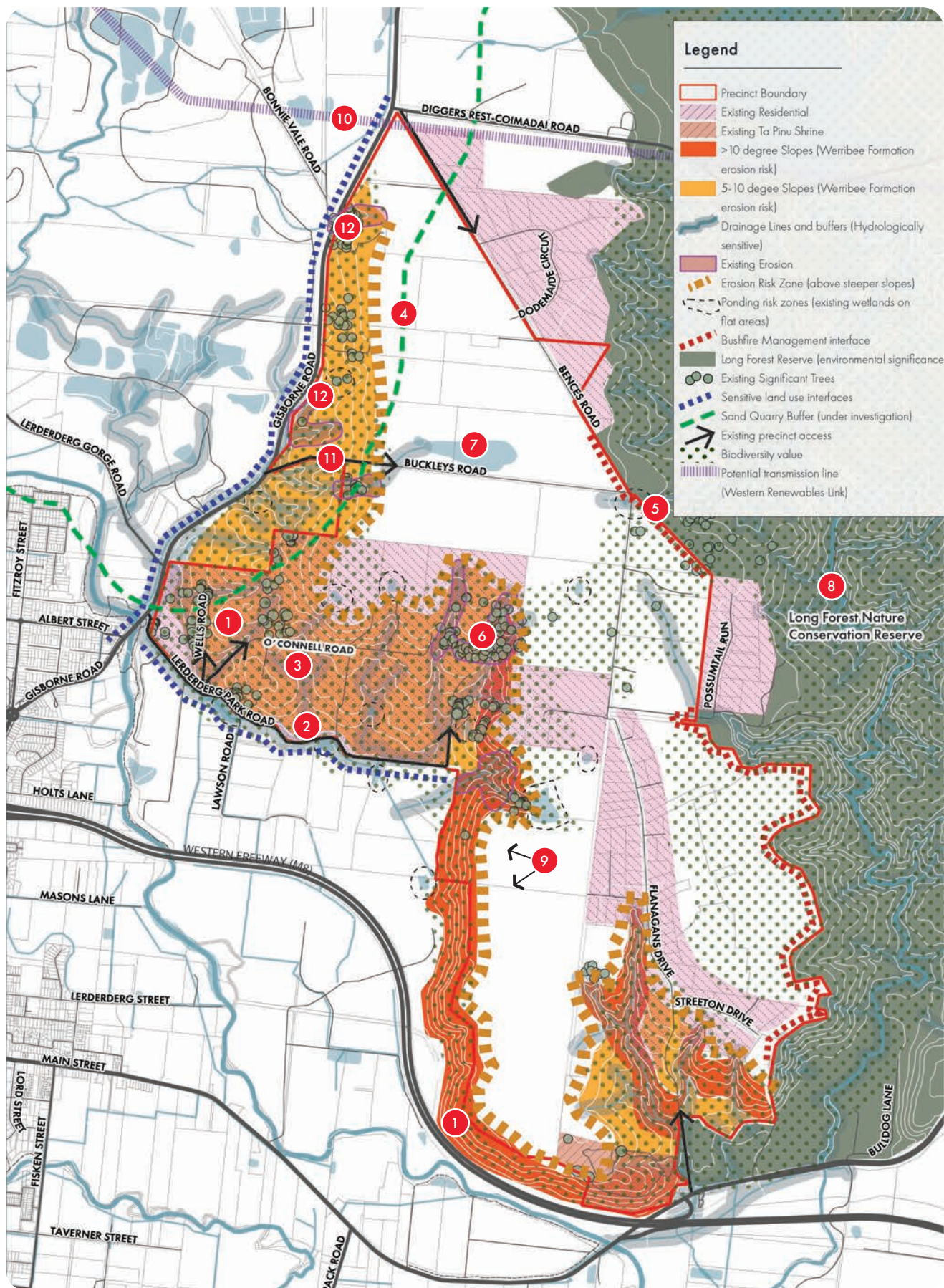


Figure 22. Merrimu Precinct Landscape and Visual Opportunities and Constraints



# 7 Landscape Framework Plan

## 7.1 Vision

The Merrimu Landscape Framework forms a fundamental step in the development of a PSP for the Merrimu Precinct.

The vision is to provide a robust framework for future development that would deliver a landscape sensitive approach, based on the key landscape and visual conditions identified within the Merrimu Precinct.

The Landscape Framework identifies the landscape values and characteristics within the precinct which should be retained, acknowledged and celebrated through development of the PSP. The Precinct is located in a unique landscape and the identified scenic qualities highlight the opportunity to create a unique sense of place and connection to the broader landscape setting as well as complementing the existing Bacchus Marsh township.

The local landscape context of Merrimu is fundamental in developing this future Precinct.

## 7.2 Framework Structure

The Landscape Framework Plan aims to identify strategic requirements to guide future site development based on the landscape and visual conditions identified within the Merrimu Precinct.

The intention of the Framework Plan is to inform development patterns, site characteristics and connections for the future PSP of the Merrimu Precinct.

The Landscape Framework adopts a three-tiered approach, supported by **Guidelines** in Section 7.4.

The three-tier approach is structured as follows:

### 1. Primary Framework - Conservation

This consists of elements that are set to be conserved within the precinct.

### 2. Secondary Framework - Management

This consists of elements that can be managed through urban design guidelines, best practice design principles and/or specific management plans (for example: slope and erosion management plans).

### 3. Tertiary Framework - Enhancement

This includes elements that will contribute to landscape character and visual amenity of the precinct.

The Merrimu Landscape Framework Plan is illustrated in Figure 23. The plan identifies site-specific recommendations for the precinct.



Figure 23. Diagram describing the Merrimu Landscape Framework process

## 7.3 Merrimu Landscape Framework Plan

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### Primary Framework - Conservation

1. Areas of steep and high risk slope (as illustrated in Figure 10 - Slope Analysis and Figure 11 - Merrimu Erosion Map) should be designated **conservation areas**.

Refer to *Sodic/Dispersive Soils Peer Review And Assessment - Merrimu Precinct (WSP 2023)* for areas of high risk slopes and sodic soils that may potentially impact built form and infrastructure.

Some of these areas also fall within area of moderate to high visual sensitivity, characterised by high landscape value and high visibility. See Figure 21 - Visual Sensitivity.

### Secondary Framework - Management

2. Where possible, areas of moderate slope with medium risk to infrastructure should be prioritised as open space to preserve the visual integrity of the landscape. This area should be integrated with the existing rural residential built form.

Incorporate landscape buffers between the escarpment and new residential areas to mitigate visual impacts and reinforce the precinct's landscape character.

Refer to Framework Strategies and Guidelines and *Sodic/Dispersive Soils Peer Review And Assessment - Merrimu Precinct (WSP 2023)* for recommended built form controls for these areas.

3. Areas of medium risk with slopes of 10% or higher (identified in Figure 12) may require specific Slope and Erosion Management plans for future development - particularly relevant in areas of existing **rural residential properties along O'Connell Road**.
4. Apply an offset from the break in slope (to be confirmed by CFA) to protect steep and sensitive slopes. Offset can be potentially achieved through a wide road reserve which allows opportunity for revegetation and soil rehabilitation.
5. Interface with Long Forest Reserve will need to meet bushfire risk guidelines and the required setback must be applied. Consider implementing a perimeter road of at least 20m in width along this interface.
6. Prioritise wetlands and WSUD infrastructure at natural low points where ponding occurs.
7. Consider minimal development and subdivision within the existing rural residential area along **O'Connell Road**, particularly where high-risk soils and steep slopes are present.

Interface to existing residential and highly erodible land should be managed through landscape treatments and buffers.

Some of these areas also fall within areas of moderate to high visual sensitivity, characterised by high landscape value and high visibility.

Refer to *Sodic/Dispersive Soils Peer Review And Assessment - Merrimu Precinct (WSP 2023)* for areas of high risk slopes and sodic soils that may potentially impact built form and infrastructure.

8. Prioritise landscape improvements along **Gisborne Road** to create a scenic gateway entry into the precinct.

### Tertiary Framework - Enhancement

9. Create bio-links through implementation of green corridors that link areas of mature vegetation to the Long Forest Reserve.
10. Align roads to maximise scenic views towards the western mountains and the Bacchus Marsh township.
11. Align roads to maximise short distance views towards local open spaces and reserves.
12. Maximise vegetation retention where possible.
13. Consider WSUD and stormwater infrastructure/swales along major road corridors.
14. Establish landscape buffers on both sides of the proposed Bacchus Marsh Eastern Link Road (BMELR) to mitigate visual impacts and integrate the road into the surrounding landscape.



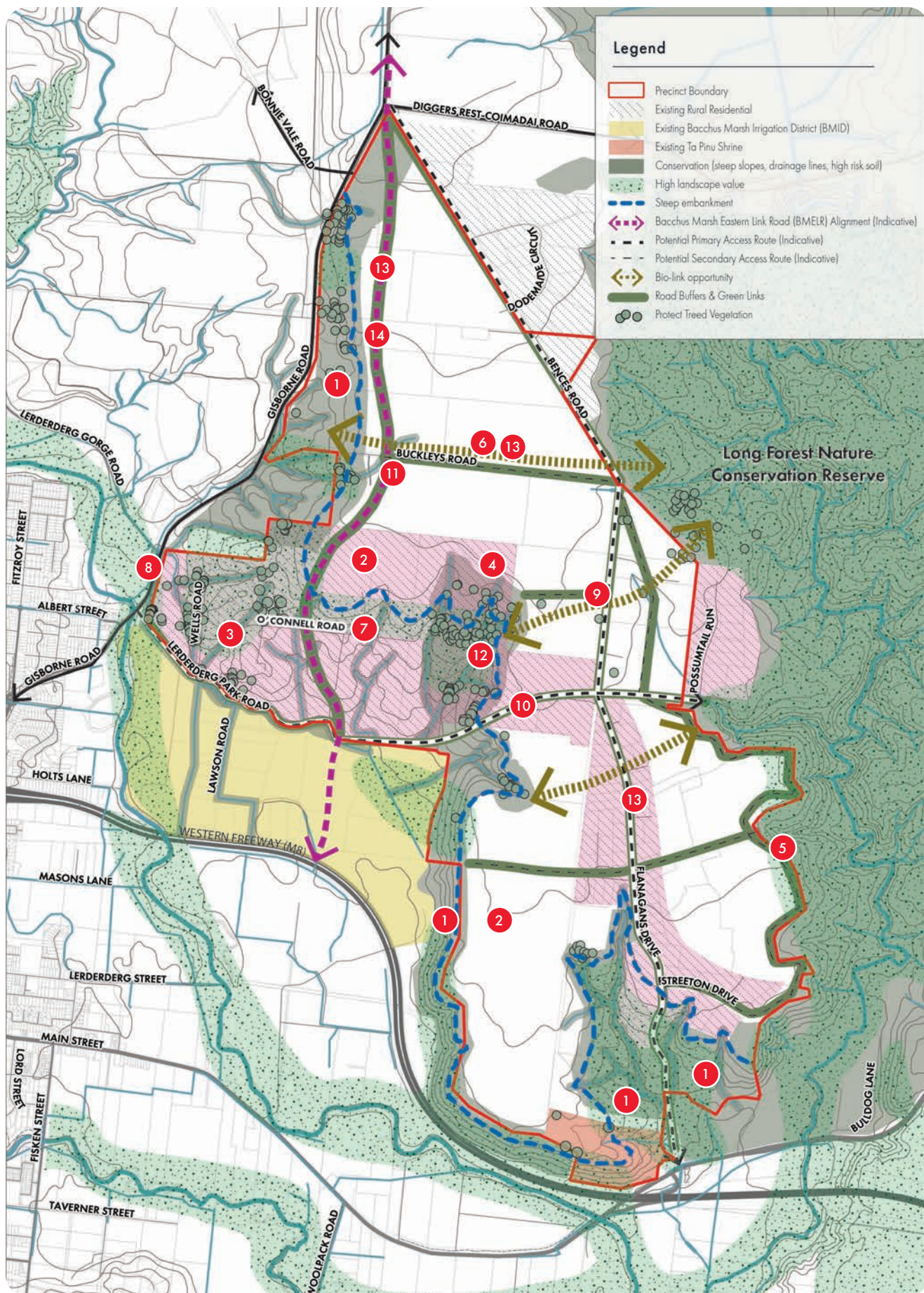


Figure 24. Merrimu PSP Proposed Landscape Framework



7.4 Strategies and Guidelines

The Strategies and Guidelines included in this section support the Landscape Framework Plan. The aim is to inform the future PSP of the Merrimu Precinct through an appropriate configuration and balance between the existing landscape features and future built form.

Landscape Character

Strategy

To support and enhance the Landscape Character of Merrimu by retaining and supplementing key features.

Guidelines

- Existing significant trees within the precinct should be retained and/or supplemented where possible.
- Appropriate property setbacks should be created along main and secondary roads to facilitate and support the continuity of new and existing planting.
- Maximise landscape treatment of spaces rather than hard surface – being grass, garden beds and re-vegetation areas in addition to canopy trees.
- Maximise opportunities for street tree planting throughout the precinct through supportive and complimentary infrastructure planning, such as under-grounding of electrical infrastructure and consolidated service corridors outside of vegetated road verges.
- Opportunities for enhancing entrance point landscape character and creating entry views into Merrimu.



Figure 25. Example of a mature tree retained as a landscape feature



Figure 26. Example of tree retention along rural property fence line, applicable to areas where existing rural residential is present.



## Key Views and Viewlines

Strategy	Guidelines
To preserve and celebrate views from the escarpments towards the western mountains and over the Bacchus Marsh Valley.	<ul style="list-style-type: none"> <li>Create a scenic drive along the escarpment edge to facilitate views to the western hills and over the Bacchus Marsh valley.</li> <li>Create opportunities for formal vantage points from the escarpment edge. Position vantage points at natural and / or points of interest in the landscape.</li> </ul>
To maximise visual connection with adjacent natural features and open space, such as the escarpment and the Long Forest Nature Reserve.	<ul style="list-style-type: none"> <li>Align and orientate roads to maximise visual connectivity with internal and neighbouring conservation areas and open space land uses.</li> <li>Where conservation areas exist in adjacent neighbourhoods (such as the escarpment in the west and the Long Forest Reserve), landscape character should be maintained through corresponding conservation space or landscape buffer within the Merrimu precinct.</li> </ul>
To create and maximise opportunities for short range views from roads and properties into open space.	<ul style="list-style-type: none"> <li>Opportunities for views into open space should be created through the placement of roads and pathways along the edges of or cutting through open space areas.</li> <li>Incorporate strategic breaks in roadside and buffer planting that would frame views into open space areas and create visual connections with open space.</li> </ul>
To manage built form impacts of the Merrimu Precinct experienced from the Avenue of Honour and the Western Freeway.	<ul style="list-style-type: none"> <li>Implement development controls to manage building height, scale and lot coverage within areas falling within the Zones of Visual Influence of the Avenue of Honour and the Western Freeway. This will ensure a landscape dominant visual environment.</li> <li>Reinstate EVC vegetation along the escarpment using appropriate EVC vegetation.</li> <li>Create a vegetation buffer using EVC vegetation along the top edge of the escarpment to further buffer foreground and middle ground views onto the precinct.</li> </ul>



**Figure 27.** Example of housing and road corridor with short range views into open space.



**Figure 28.** Views down to the Bacchus Marsh Valley and hills beyond.

### Strategy

To effectively manage conservation and developable areas in the Merrimu Precinct, supporting the protection and enhancement of its landscape character and values.

### Landscape Management Area

### Guidelines

#### Residential

These areas should consist of variable lots and interfaces and domestic scale structures. Canopy tree planting should be prioritised to enhance landscape character. Sufficient setbacks which allows for front garden planting, with roadside vegetation screening would improve visual quality within the public realm and enhance the landscape character. Align roads to maximise views towards open space and preserve scenic views towards the Bacchus Marsh township. Where possible, significant trees should be retained as features within parks and/or road reserves.

#### Conservation Areas

These areas should be conserved with strong consideration to hydrology, vegetation, slope and erosion. Conservation should maintain an offset from break of slope (high risk erosion area) - to be confirmed by CFA.

This area should prioritise tree planting to promote a 'visual break' within the landscape from urban development. Large setbacks with generous road widths to support roadside vegetation would support scenic quality and enhance this transitional space.

#### Rural Residential

Specifically noting the existing homestead/rural residential development along Possumtail Run, O'Connell Road, Flanagans Drive and Lerderderg Park Road.

These areas should be retained as large rural lots with domestic scale structures and large open space allocations with a strong conservation focus. Further subdivision of this land should be discouraged where there is strong evidence of erosion and high risk slopes. Drainage lines may cross the sites.

Large setbacks with roadside vegetation screening would improve visual quality within the public realm and support landscape character.

#### Civic

These would be local neighbourhood commercial nodes accommodating commercial and civil functions. These areas would accommodate larger scale buildings and a denser built form, capitalising on easy road access.

These may include a variety of building sizes and scales that step down to meet the public realm at a human scale. Along the street interface, the integrity of the pedestrian realm should be retained through continuous vegetation / roadside planting - as well as canopy tree planting, high quality landscape amenity and interconnected civic and open spaces.



## Edges and Interfaces

### Strategy

To protect and preserve the landscape of the escarpments that define the edge of the Merrimu plateau.

### Guidelines

- Minimise development, including roads and service infrastructure, on sensitive and erodible (high risk) slopes - as outlined in Sodic/Dispersive Soils Peer Review and Assessment - Merrimu Precinct (VPA 2023) .
- Rehabilitate erosion damage and reinstate natural vegetation (preferably EVC) to stabilise the soils.
- Manage development on sensitive and erodible slopes steeper than 10% to landscape dominant land uses. Ensure that development controls and ongoing resource management requirements are in place to ensure the continued stability of the soils.
- Ensure that development on sensitive and erodible slopes steeper than 10% is sensitive in scale and considers suitable grading outcomes and avoids excess use of retaining walls.
- Establish a protective landscape buffer along the top edge of the escarpment, with an offset from the break in slope (to be confirmed by CFA) to protect steep and sensitive slopes from runoff emanating from adjacent land uses.
- Design development on sensitive and erodible slopes to compliment topography, minimising the requirement for benching and retaining walls.
- Avoid any access perpendicularly up the escarpment slopes. Where road or foot access is required, ensure that infrastructure is designed to run along the contours.
- Where retaining walls are unavoidable, ensure that these do not visually dominate streetscapes and views to new residential areas:
- For locations where one retaining wall is required:
  - The maximum height of retaining wall should not exceed 1.0m.
- For locations where two retaining walls are required:
  - The maximum height of each retaining wall should not exceed 1.0m in height.
- The retaining walls should be staggered with minimum 1.0m distance.

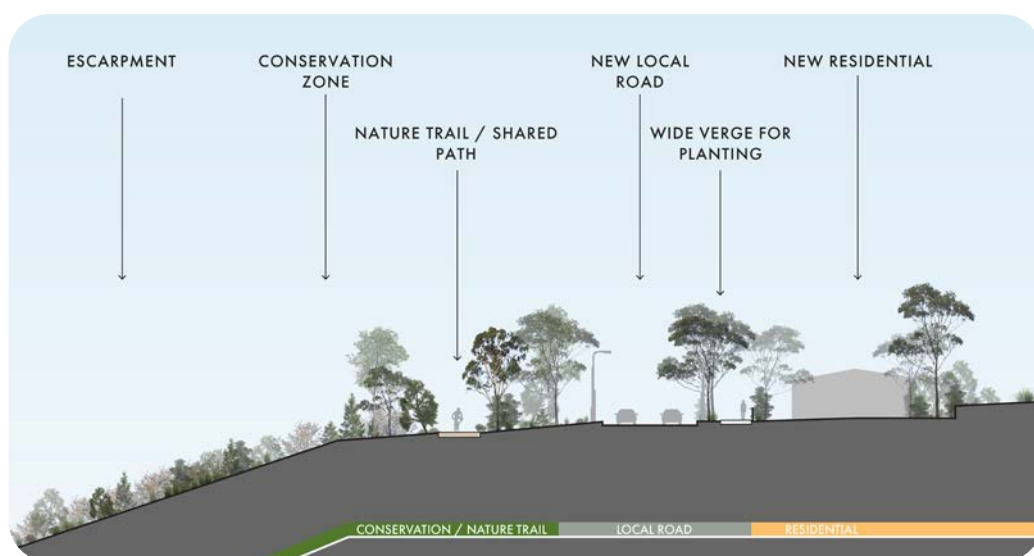


Figure 29. Interface with Escarpment (western boundary)

## Edges and Interfaces

### Strategy

To facilitate a visually responsive transition between existing and future land uses within the precinct.

### Guidelines

- Housing lots and road vistas should be orientated towards open spaces where possible to maximise visual connectivity between street networks and open space.
- The backing or siding of residential lots onto open spaces should ideally be avoided. Where this is not possible, then the interface should be softened through the use of low, visually permeable fencing or other measures which provide visual access and support passive surveillance.
- The visual interface between higher density developments and the public realm should be graded through the use of appropriate setbacks, the fragmentation of built form, the gradual increase of building scale and the inclusion of planting buffers at increasing heights.
- Physical and visual access into natural and recreational landscapes should be framed / celebrated by opening up roadside planting, increasing visual permeability and framing views of and to the amenity beyond.

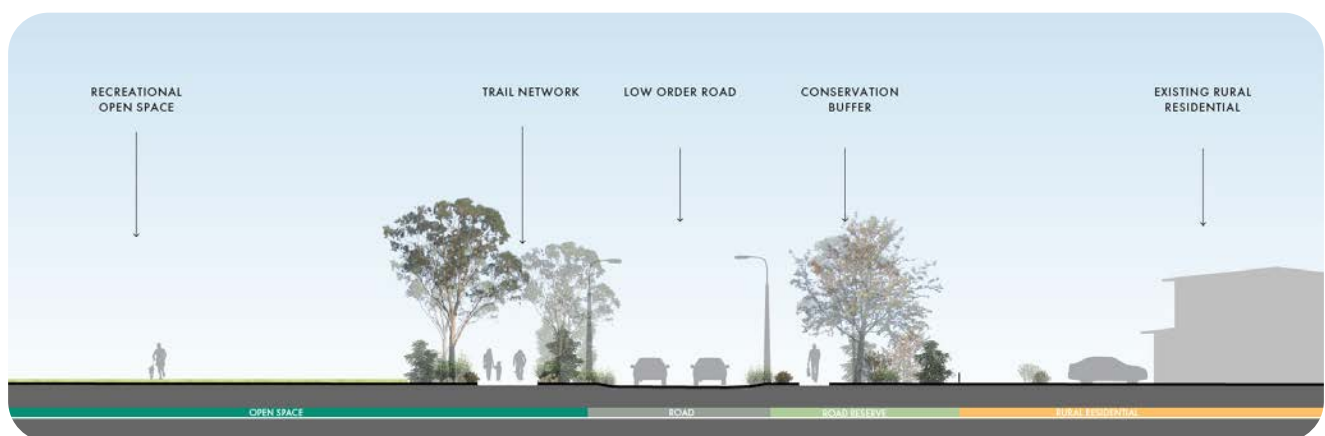


Figure 30. Interface with Existing Residential Development (eastern boundary) 1



Strategy

To buffer the interface between future precinct development and adjacent sensitive areas.

Guidelines

Eastern interface with the Long Forest Nature Reserve:

- A low order road along the interface could be developed as part of a bushfire setback (offset distance to be later advised by specialists). The visual interface of this edge could be graded through the use of buffer vegetation to appear soft and natural. This would be achievable through use of vegetation at decreasing heights from the Long Forest Reserve edge to the road, and then at increasing heights from the road edge into the precinct. Refer to Design Guidelines Settlement Planning at the Bushfire Interface, Department of Environment, Land, Water and Planning July 2020

South-western and southern interface with the BMID:

- The existing road along this interface (potentially upgraded) would form part of this interface, and would lie within the ecological buffer area required to protect the adjacent slope. The visual interface of the buffer edge with the BMID to the south could be graded to appear soft and natural. This would be achievable through use of vegetation at decreasing heights from the edge of the road toward the BMID rather than an abrupt transition.

Southern interface with the Ta Pinu Shrine:

- A low order road along the interface with the Merrimu precinct would form this edge. This edge could be graded through the use of buffer vegetation to appear soft and natural. This would be achievable through use of vegetation at decreasing heights from the edge of the road toward the Shrine site rather than an abrupt transition.

Interface with Bences Road:

- The interface between the precinct land uses and existing residential areas should be softened. This could be done by supplementing planting along road reserves and within development set-backs to create a visual buffer.
- Where visual connection is required along the road, then the visual buffer should open up to frame the view. Avoid back fences facing onto this road.

To buffer the interface between future precinct development and adjacent intrusive land uses.

Western interface with Gisborne Road (and potential Eastern Link Road):

- This interface will be naturally buffered through the adjacent escarpment conservation zone.

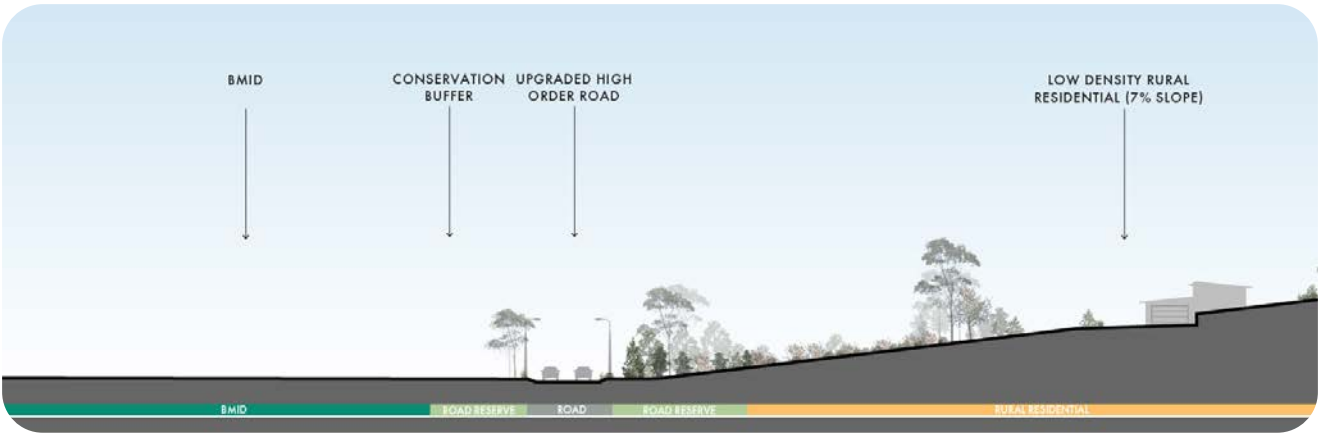


Figure 31. Interface with BMID (south western boundary)



Figure 32. Interface with Long Forest Reserve



Figure 33. Interface with Existing Residential Development (eastern boundary) 2

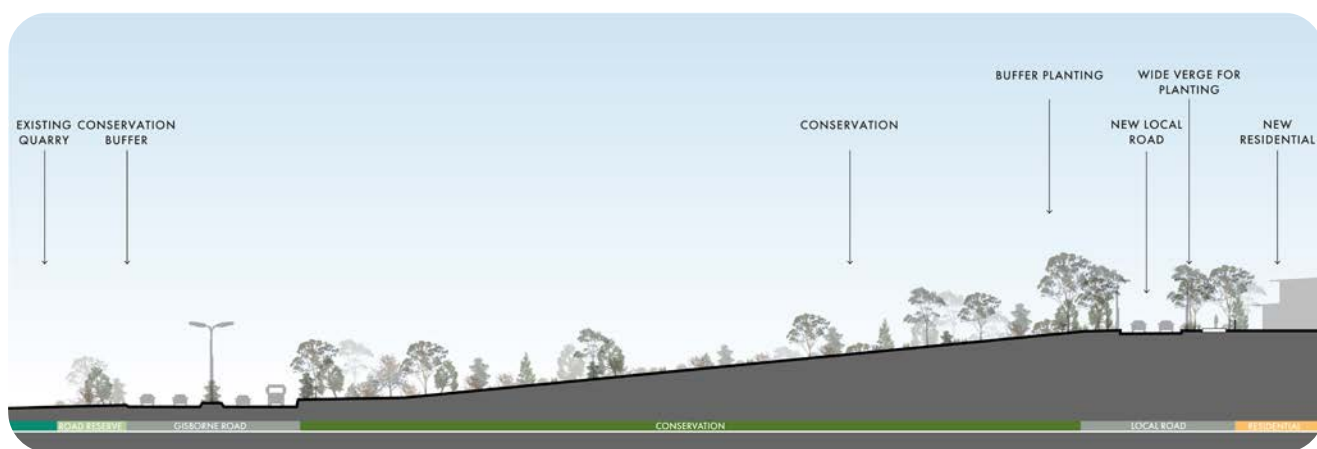


Figure 34. Interface with Bacchus Marsh - Gisborne Road



Placemaking

Strategy

Guidelines

To maintain and support the identity of Merrimu as part of the greater Bacchus Marsh landscape.	<ul style="list-style-type: none"><li>• Celebrate new gateways into the Merrimu precinct as tree - lined avenues, creating a link to the history and heritage of Bacchus Marsh's Avenue of Honour.</li><li>• Integrate cultural heritage sites and features into open space or other civic spaces and interpreted for public interest to enrich the landscape.</li><li>• Incorporate elements like roadside stormwater drains throughout the precinct, reminiscent of the surrounding rural landscape character. These could be re-imagined as modified Water Sensitive Urban Design (WSUD) infrastructure along precinct roads. These drains could replace the requirement for subsurface stormwater drainage systems.</li></ul>
To establish and build an identity for Merrimu distinct from that of surrounding landscapes and settlements.	<ul style="list-style-type: none"><li>• Celebrate the conservation rich and landscape dominant character of Merrimu as an intentional sustainable design response to a sensitive environment.</li><li>• Integrate natural features and sites such as significant trees, outcrops, wetlands and the escarpment edge into open space or other civic spaces and interpreted for public interest to enrich the landscape.</li><li>• Make use of relevant EVC vegetation mixes, incorporating both tree canopy and understory planting in conservation and landscape areas rather than using traditional horticultural species.</li></ul>
To provide an integrated network of parks, open space and trails to connect Merrimu residents and visitors with the natural assets of the precinct.	<ul style="list-style-type: none"><li>• Planning of civic spaces such as village greens, community gardens, recreations reserves, etc. should align with the principles of the '20 minute neighbourhood' and be within easy reach of residents.</li><li>• Local places of community value (i.e. natural and cultural) within the precinct should ideally be connected through walking circuits with interpretive signage and a local palette of materials to encourage appreciation and build awareness.</li><li>• New and existing roads should be designed as walkable streets with positive edge interfaces and adequate walking paths, catering for children's independent mobility.</li></ul>



Figure 35. Example of vegetation along shared path/road corridor which provides for visual amenity



Figure 36. Example of natural features integrated into open space

Corridors

Strategy

To enhance the ecosystem value of natural corridors within the precinct.

Guidelines

- Enhance roadways as green corridors, providing a framework for storm water management, biodiversity linkage and visual continuity.
- Planting along roadways and along property boundaries should be enriched and extended as continuous visual and ecological corridors.
- Drainage lines should be rehabilitated and reinstated as functional hydrological and ecological systems within the site, which link with regional systems within the greater area.
- The ecological value of easements and servitudes should be included as functional parts of the ecological and habitat corridors.
- Incorporate stormwater management into the design of all landscape beyond the drainage lines and wetlands to reduce runoff stress on drainage lines.
- Enhance the functionality and recreational value of conservation areas by creating an integrated network of trails to connect Merrimu residents and visitors with the natural assets of the precinct.

To preserve, enhance, and extend the habitat of threatened species regionally and within the precinct.

- The open space systems within the precinct should be optimised to support biodiversity and habitat creation, specifically (but not exclusively) for the Golden Sun Moth, which are expected to occur in the region and on the site.
- Links with the Long Forest Nature Reserve should be facilitated through the continuation of an open space corridor within the precinct, with appropriate attention to habitat requirements within these corridors.



Figure 37. Example of WSUD along road corridor - Melton



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## Appendix A    Precedents

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The following section examines some precedents that depict good and poor examples of developments along steep slopes and escarpments. It is noted that the UGF report suggests that “Recent housing growth in Bacchus Marsh has been criticised for its lack of sympathy to neighbourhood character ... in particular:”

- the loss of rural views due to inappropriate development on surrounding ridgelines, hills and plateaus;
- minimal landscaping, in particular a lack of street tree plantings. The lack of landscaping has a significant impact on the character of the town;..’

Therefore, it is important to any development that occurs on slopes or in elevated locations. The aim is to protect and preserve escarpments that define the edges of the Bacchus Marsh Valley and the Merrimu Plateau .



**Figure 38.** Example of stone retaining wall that positively contribute to the streetscape.



**Figure 39.** Example of poor development on highly erodible and steep land.



**Figure 40.** Example of landscaping within the front setback that is well integrated with natural fall of the land.



**Figure 41.** Example of poor site design along steep slopes resulting in the excess use of terracing and retaining walls.





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