REGIONAL ROADS VICTORIA

MARCH 2022

BEAUFORT BYPASS ENVIRONMENT EFFECTS STATEMENT

PLANNING AND LAND USE IMPACT ASSESSMENT

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Beaufort Bypass Environment Effects Statement
Planning and Land Use Impact Assessment

Regional Roads Victoria

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TABLE OF CONTENTS

CONTENTS (Continued)

CONTENTS (Continued)

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ABBREVIATIONS

ABS	Australian Bureau of Statistics
Aboriginal Heritage Act	*Aboriginal Heritage Act 2006*
CHMP	Cultural Heritage Management Plan
CMA	Catchment Management Authority
DAWE	Department of Agriculture, Water and the Environment
DELWP	Department of Environment, Land, Water and Planning
DSE	Department of Sustainability and Environment
EE Act	*Environment Effects Act 1978*
EES	Environment Effects Statement
EMF	Environmental Management Framework
EP Act	*Environment Protection Act 1970*
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
ERA	Environmental Risk Assessment
Heritage Act	*Heritage Act 2017*
LA&C Act	*Land Acquisition and Compensation Act 1986*
MPS	Municipal Planning Strategy
MNES	Matters of National Environmental Significance
Native Title Act	*Native Title Act 1993*
P&E Act	*Planning & Environment Act 1987*
PAO	Public Acquisition Overlay
PPF	Planning Policy Framework
PPS	Pyrenees Planning Scheme
PSA	Planning Scheme Amendment
PSC	Pyrenees Shire Council
RM Act	*Road Management Act 2004*
RRV	Regional Roads Victoria
TI Act	*Transport Integration Act 2010*
TRG	Technical Reference Group
VHI	Victorian Heritage Inventory
VHR	Victorian Heritage Register
VIFSA	Victoria in Future Statistical Area

EXECUTIVE SUMMARY

This report addresses the potential impacts to planning and land use resulting from the construction and operation of the Beaufort Bypass (the project).

Regional Roads Victoria (RRV) proposes the construction of a new duplicated section of the Western Highway to bypass the town of Beaufort in western Victoria. This report provides an assessment of the land use planning considerations associated with the construction and operation of the project that would have the potential to impact existing and future land uses and the strategic land use planning policy framework.

The Environment Effects Statement (EES) includes consideration of four alignments within the project study area.

EXISTING CONDITIONS

The existing conditions of the study area in terms of planning and land use were identified by a review of relevant policy, including the Pyrenees Planning Scheme (PPS), and other relevant data to determine historic, existing and future land use conditions. Site visits were conducted to ground-truth the data.

Beaufort is a small town that functions as a local service centre for the surrounding agricultural area. It is also the closest town to Melbourne that is not bypassed on the Western Highway transport corridor. Regionally it is in proximity to the regional centre of Ballarat.

The study area is located to the north of the Beaufort township and as such is mostly rural, comprising farming, rural residential and public conservation land uses.

The local planning policies note the presence of several environmental and other constraints to the north of Beaufort such as Camp Hill and the range of hill extending north through the Camp Hill State Forest, Yam Holes Creek and its associated floodplain, and the Beaufort Wastewater Treatment Plant.

Although there are environmental constraints that are reflected in land use planning policy that applies to the study area, these constraints have also prevented the northern expansion of the Beaufort township into the study area.

The majority of landholdings within the study area are privately owned, with some areas of Crown land, most notably at Camp Hill, but also along the floodplains of Yam Holes Creek to the northwest and northeast.

The Camp Hill State Forest comprises several existing Crown land uses including Apiary and Mineral Extraction as well as recreational uses.

IMPACT ASSESSMENT

The impact assessment has reviewed and assessed the PPS, relevant legislation and policy and considered the existing and future land use pattern of the study area to determine the potential impacts. The consideration of the project has determined that none of the four proposed alignments within the study area would result in any significant inconsistency with relevant planning policy and that impacts on local and adjacent land parcels would be localised and can be mitigated.

In regards to Beaufort's role as a highway service centre town, the project does not conflict with the current planning scheme strategy to "*encourage highway service facilities to locate within the town itself - with the appropriate location for these facilities being along both sides of the Western Highway to the west of the central area*".

PLANNING PATHWAY

The preferred planning pathway for the use and development associated with this project is via a Planning Scheme Amendment (PSA) to the PPS. The proposed amendment will amend the PPS by:

- applying Clause 45.12 Specific Controls Overlay and Clause 45.01 Public Acquisition Overlay to affected land; and
- inserting a new Incorporated Document into the Schedules to Clause 45.12 and Clause 72.04.

In effect, the amendment will exempt the project from the need for a planning permit, including for native vegetation clearance.

The proposed amendment will not propose any changes to the zoning of any land. Therefore, the requirements of the current zoning will continue to apply.

RRV is seeking to request the Minister for Planning to prepare, adopt and approve the amendment to the PPS under Section 20(4) of the *Planning and Environment Act 1987* (P&E Act). The *Ministerial Guidelines for Assessment of Environmental Effects under the EE Act* (Ministerial Guidelines) (Department of Sustainability and Environment 2006) states where a project requires a PSA and an EES, the proposed amendment may be exhibited concurrently. The Guidelines confirm a panel appointed under the P&E Act will also be appointed as an inquiry under Section 9(1) of the EE Act. The joint panel/inquiry will provide a single report to the Minister. As provided by the EE Act, the assessment of the EES will inform the consideration of the PSA.

1 INTRODUCTION

Regional Roads Victoria (RRV), formerly VicRoads proposes to construct a new freeway section of the Western Highway to bypass the town of Beaufort (the project), linking completed sections of the Western Highway duplication to the east and west of Beaufort.

On 22 July 2015, the Minister for Planning determined an Environment Effects Statement (EES) would be required under the *Environment Effects Act 1978* (EE Act) to assess the potential environmental effects of the project. The EES includes consideration of four alternative alignments and selection of a preferred bypass alignment which identifies the land to be reserved for the future construction. The EES process provides for identification and analysis of the potential environment effects of the project and the means of avoiding, minimising and managing adverse effects. It includes public involvement and allows stakeholders to understand the likely environmental effects of the project and how they will be managed.

1.1 PROJECT BACKGROUND

The Western Highway is the primary road link between Melbourne and Adelaide. It serves interstate trade between Victoria and South Australia and is a key transport corridor through Victoria's west. Over 6,500 vehicles utilise the Western Highway, west of Ballarat each day. Of these 6,500 vehicles, 1,500 are classed as commercial heavy vehicles. These traffic volumes are expected to increase to approximately 7,500 by 2025 and 9,500 by 2040.

RRV have identified the need to upgrade the Western Highway from Ballarat to Stawell to:

- improve road safety at intersections
- improve safety of access to adjoining properties
- enhance road freight efficiency
- reduce travel time
- provide better access to local facilities
- improve roadside facilities.

As part of planning studies commissioned by the Commonwealth and State Governments, bypass route options around the town of Beaufort have been considered to meet the objectives identified by RRV and the National Land Transport Network's Nation Building Program.

The project would include construction of a dual carriageway, connections to major intersecting roads, interchanges to connect Beaufort to the Western Highway at the eastern and western tie-in points, several waterway crossings, an overpass of the Melbourne-Ararat rail line, and intersection upgrades at local roads and provision for service roads as required.

1.2 PROJECT OBJECTIVES

The objectives of the project are to:

- improve road safety and maintain the functionality of Beaufort's road network
- improve freight movement and efficiency across the road network
- improve Beaufort's amenity by removing heavy vehicles
- improve access to markets and the competitiveness of local industries.

2 PROJECT DESCRIPTION

The project would comprise of an 11 km freeway standard bypass to the north of the township of Beaufort, connecting the two recently duplicated sections of the Western Highway to the east and west of Beaufort. The project would be constructed under a Design and Construct or Construct only contract administered by a superintendent at RRV/Major Road Projects Victoria (MRPV), following a competitive tender process. Department of Transport would manage and maintain the asset.

2.1 FREEWAY STANDARD BYPASS

The project would connect the duplicated sections of the Western Highway to the east and west of Beaufort via the Option C2 bypass to the north of Beaufort that avoids Snowgums Bushland Reserve and cuts through Camp Hill. The bypass would include the following key components:

- designed as a freeway standard bypass
- approximately 11 km long
- designed to 120 km/hr and sign posted to 110 km/hr for its entirety
- two tie-in interchanges
- one road over rail bridge
- waterway crossings
- diamond interchange to connect with the local road network
- four overpass bridge structures over the local road network.

2.2 INTERCHANGES

The project would have interchanges at the following locations:

- tie-in points to existing Western Highway at the eastern and western ends of the bypass
- diamond interchange at existing local road network connection (Beaufort-Lexton Road).

2.3 BRIDGES AND CULVERTS

The route option would have bridge structures at the following locations:

- road over rail bridge structure for the Melbourne-Ararat rail line
- several waterway bridge structures over Yam Holes Creek
- overpass bridge structures for the existing local road network:
  - Main Lead Road
  - Beaufort-Lexton Road (diamond interchange)
  - Racecourse Road
  - Back Raglan Road.

2.4 ALIGNMENT DESCRIPTIONS

Four alignment options, referred to as Options A0, A1, C0 and C2, were assessed in order to identify a preferred bypass (see Figure 2.1). Following extensive community consultation and technical assessments, Option C2 was selected as the preferred route.

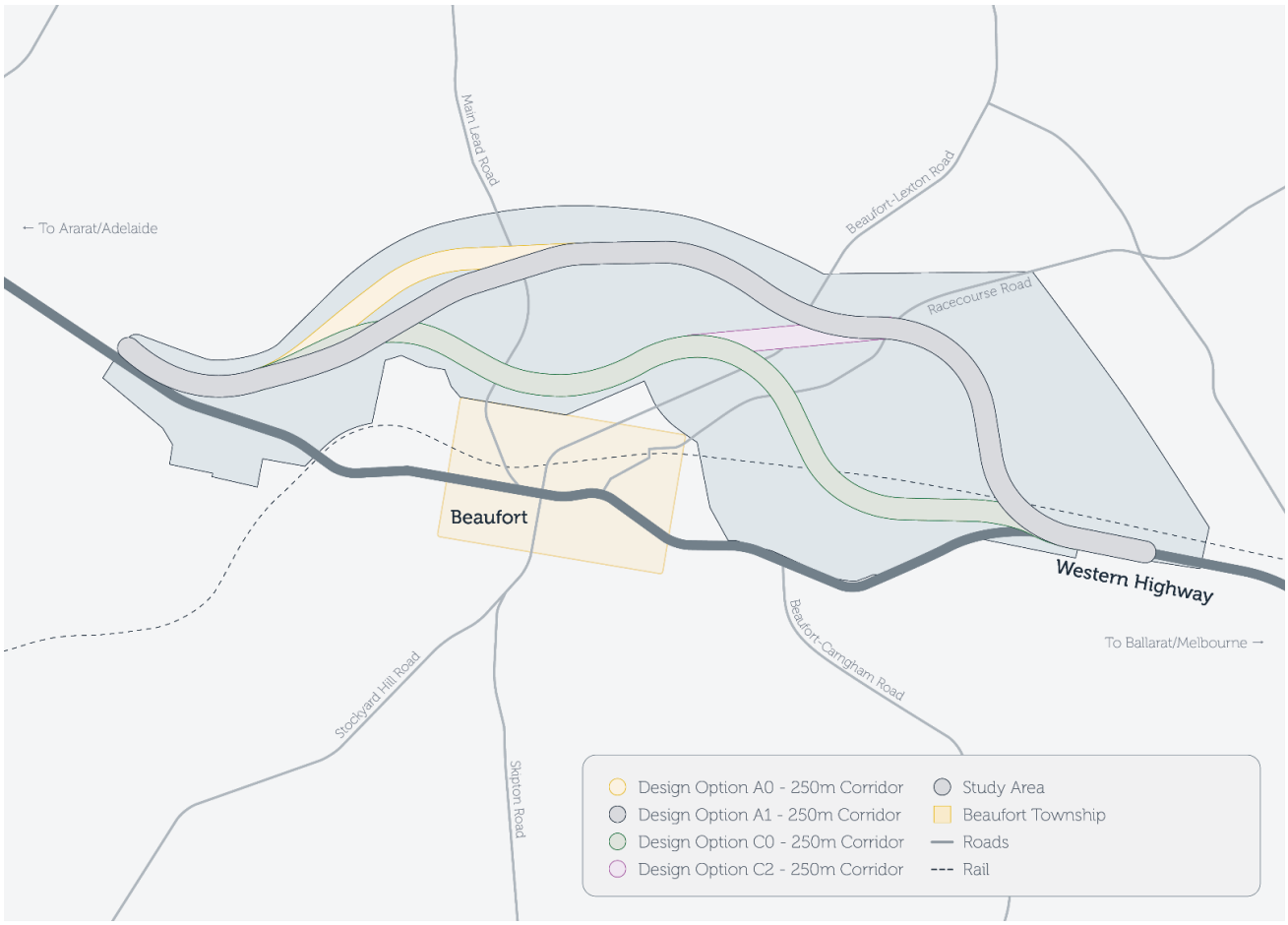


Figure 2.1 Beaufort Bypass alignment options and study area

2.4.1 OPTIONS ASSESSED

2.4.1.1 OPTION A0

The A0 bypass alignment is 11.2 km in length and is the northern most bypass option (see Figure 2.2). From the western tie-in point, approximately 3 km from the Beaufort township, this alignment curves north – north east, where there will be a west-facing, half diamond interchange to maintain access to private properties and the township via the existing Western Highway. The alignment passes over Main Lead Road then climbs through the State Forest north of Camp Hill. From here it descends to a full diamond interchange at Beaufort-Lexton Road, which will provide access to the north and south of the township, before re-joining the Western Highway at its eastern extent, approximately 4.5 km from Beaufort. An outbound exit ramp at the eastern interchange will allow for eastern access to Beaufort via the existing Western Highway. Bridges will pass over Main Lead and Racecourse Roads, as well as over the Melbourne-Ararat rail line. The main areas of fill occur at bridge and interchange locations with a large cut section north of Camp Hill.

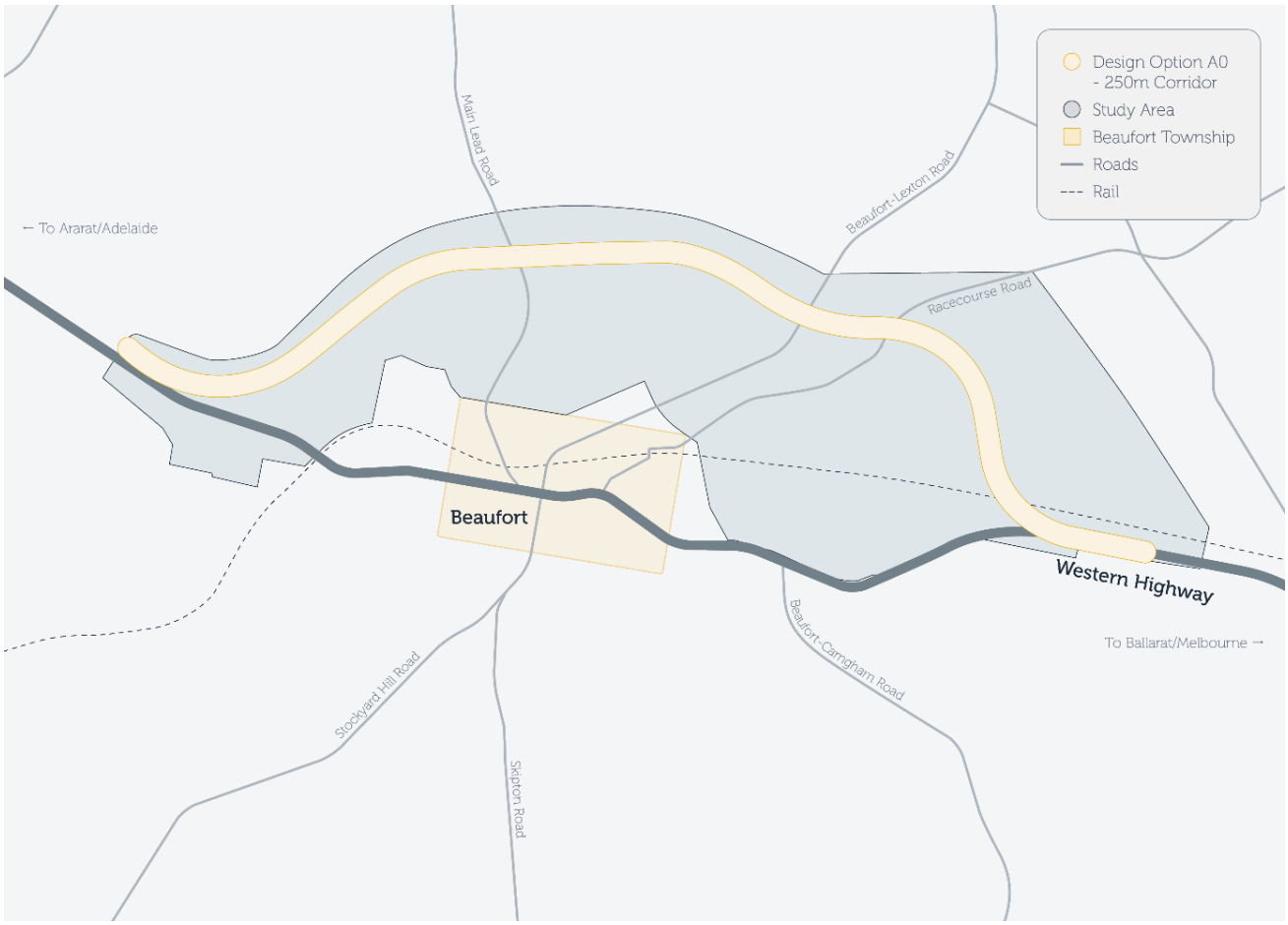


Figure 2.2 Beaufort Bypass A0 alignment option

2.4.1.2 OPTION A1

The A1 bypass alignment option is 11.1 km in length (see Figure 2.3). Approximately 3 km from the Beaufort township, this alignment deviates north-east from the Western Highway, staying slightly south of option A0 until a point east of Main Lead Road, where it re-joins the A0 alignment. There will be a west-facing, half diamond interchange at the western tie-in to maintain access to private properties and the township of Beaufort via the existing Western Highway, and a full diamond interchange at Beaufort-Lexton Road to maintain north-south access. The A1 alignment will re-join the Western Highway approximately 4.5 km to the east of the township. An outbound exit ramp at the eastern interchange will allow for eastern access to Beaufort via the existing Western Highway. Bridges will pass over Main Lead and Racecourse Roads, as well as over the Melbourne-Ararat rail line. The main areas of fill occur at bridge and interchange locations, with cuts north-east of Back Raglan Road, and north of Camp Hill.

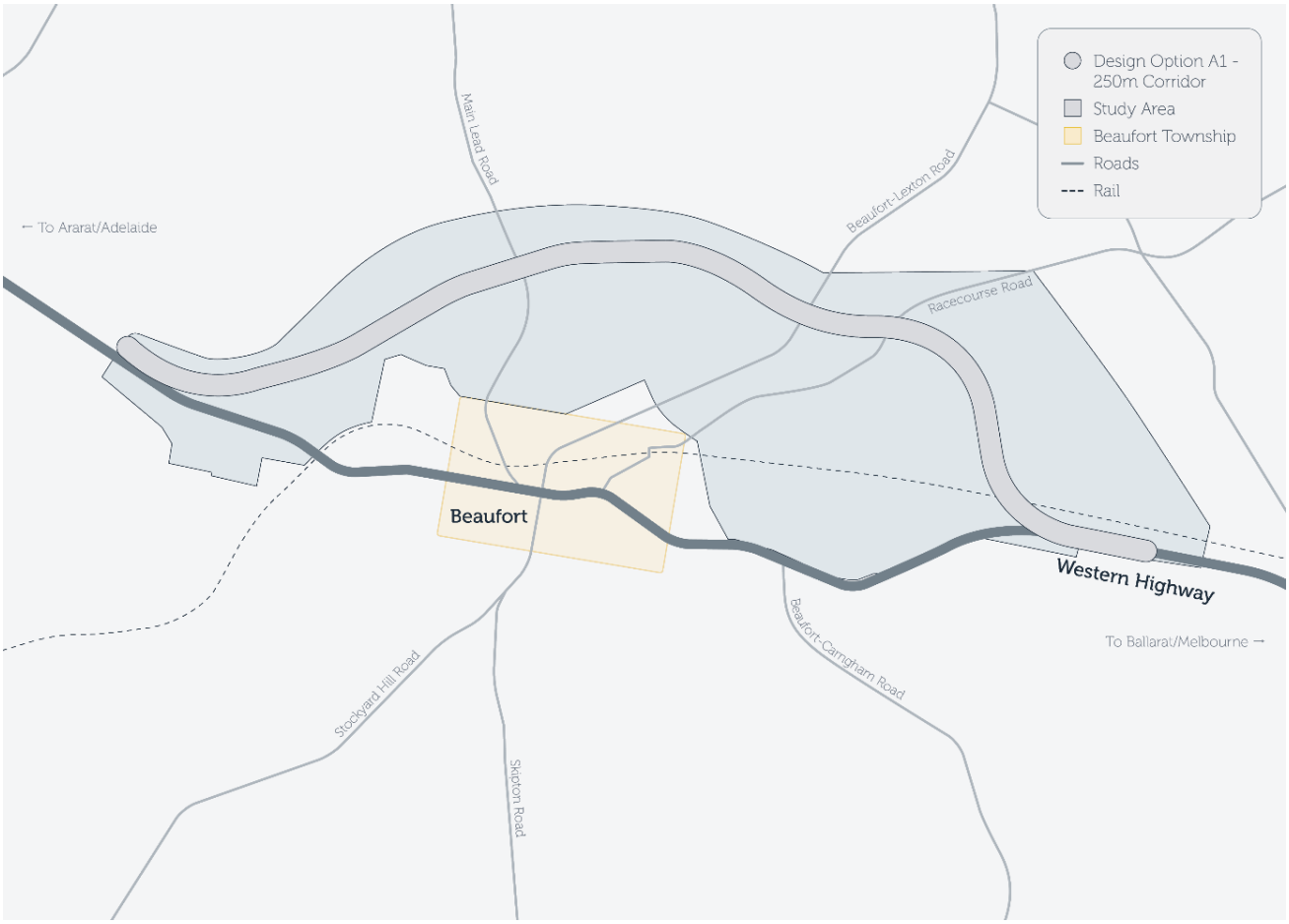


Figure 2.3 Beaufort Bypass A1 alignment option

2.4.1.3 OPTION C0

The southernmost option, C0, is approximately 10.6 km in length from the west to east tie-in points of the Western Highway (see Figure 2.4). Access to the Beaufort township via the existing Western Highway will be maintained by a west -facing, half diamond interchange in the west. The C0 option follows the A0 option from the western tie-in point, approximately 3 km from the Beaufort township, before deviating at Back Raglan Road in a more easterly direction almost parallel to the existing Western Highway. This option passes close to the north of Camp Hill, with some cut and fill required in this section, before curving south-east to a full diamond interchange at Beaufort-Lexton Road, providing north-south access. The C0 alignment will re-join the Western Highway approximately 4.5 km to the east of the township. Bridges will pass over Main Lead and Racecourse Roads, as well as over the Melbourne-Ararat rail line. The main areas of fill occur at bridge and interchange locations, with the largest cut and fill areas north and north-east of Camp Hill.

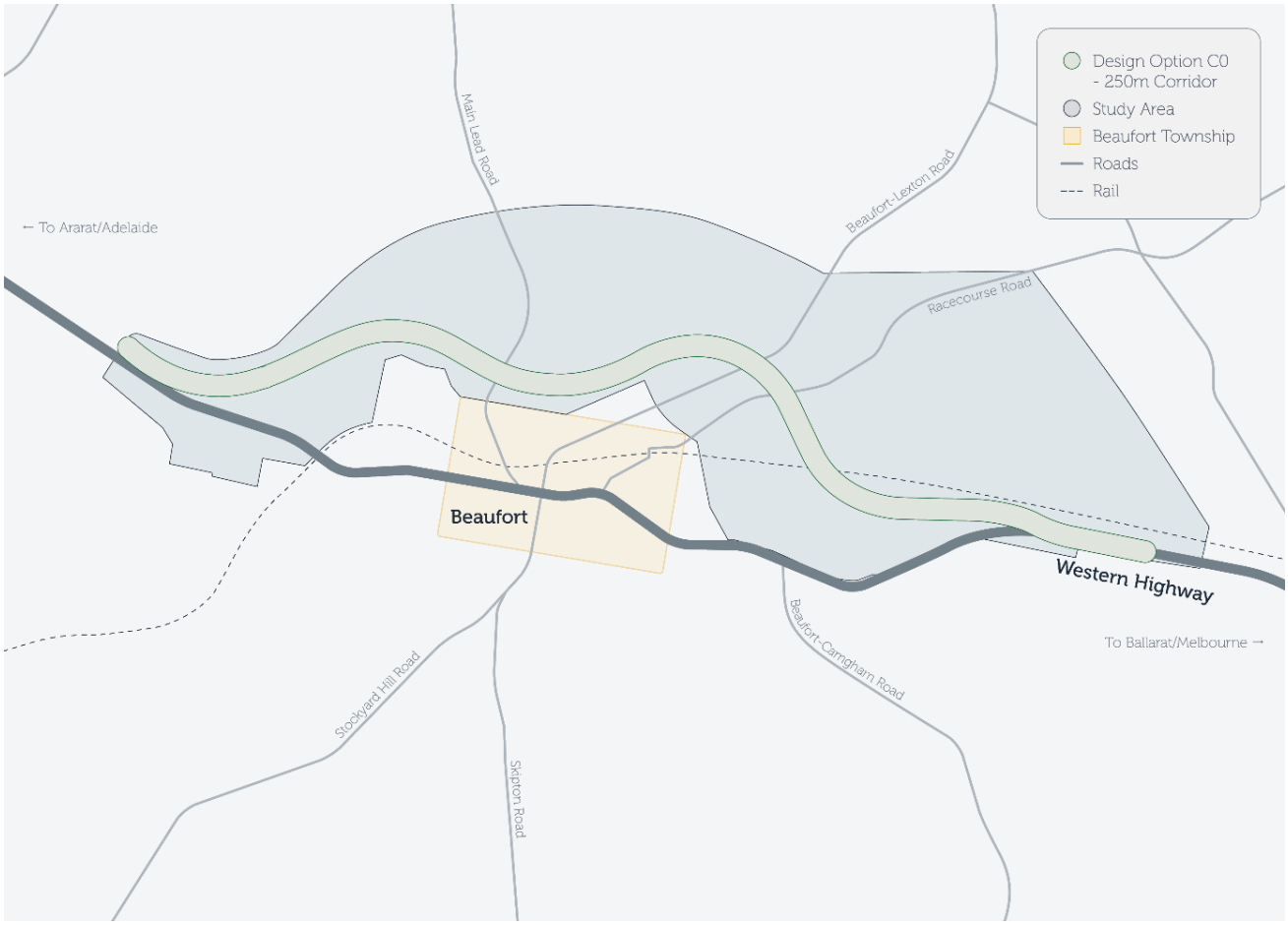


Figure 2.4 Beaufort Bypass C0 alignment option

2.4.2 PREFERRED ALIGNMENT

2.4.2.1 OPTION C2

Option C2 is 11 km in length and is a hybrid between the A0 and the C0 options (see Figure 2.5). It follows the C0 option from the western tie-in point (approximately 3 km from the Beaufort township) until Beaufort-Lexton Road, where it continues in an easterly direction and joins the A0 alignment near Racecourse Road. The C2 alignment will re-join the existing Western Highway at the eastern tie-it point, approximately 4.5 km from the township. At the western extent, access to Beaufort via the existing Western Highway will be maintained by a half diamond interchange, and there will be a full diamond interchange over Beaufort-Lexton Road. Access to Beaufort via the existing Western Highway at the eastern approach will be maintained by an outbound exit ramp at the eastern interchange. Again, bridges will pass over Main Lead and Racecourse Roads, as well as over the Melbourne-Ararat rail line. The main areas of fill occur at bridge and interchange locations, with the largest cut and fill areas north and north east of Camp Hill.

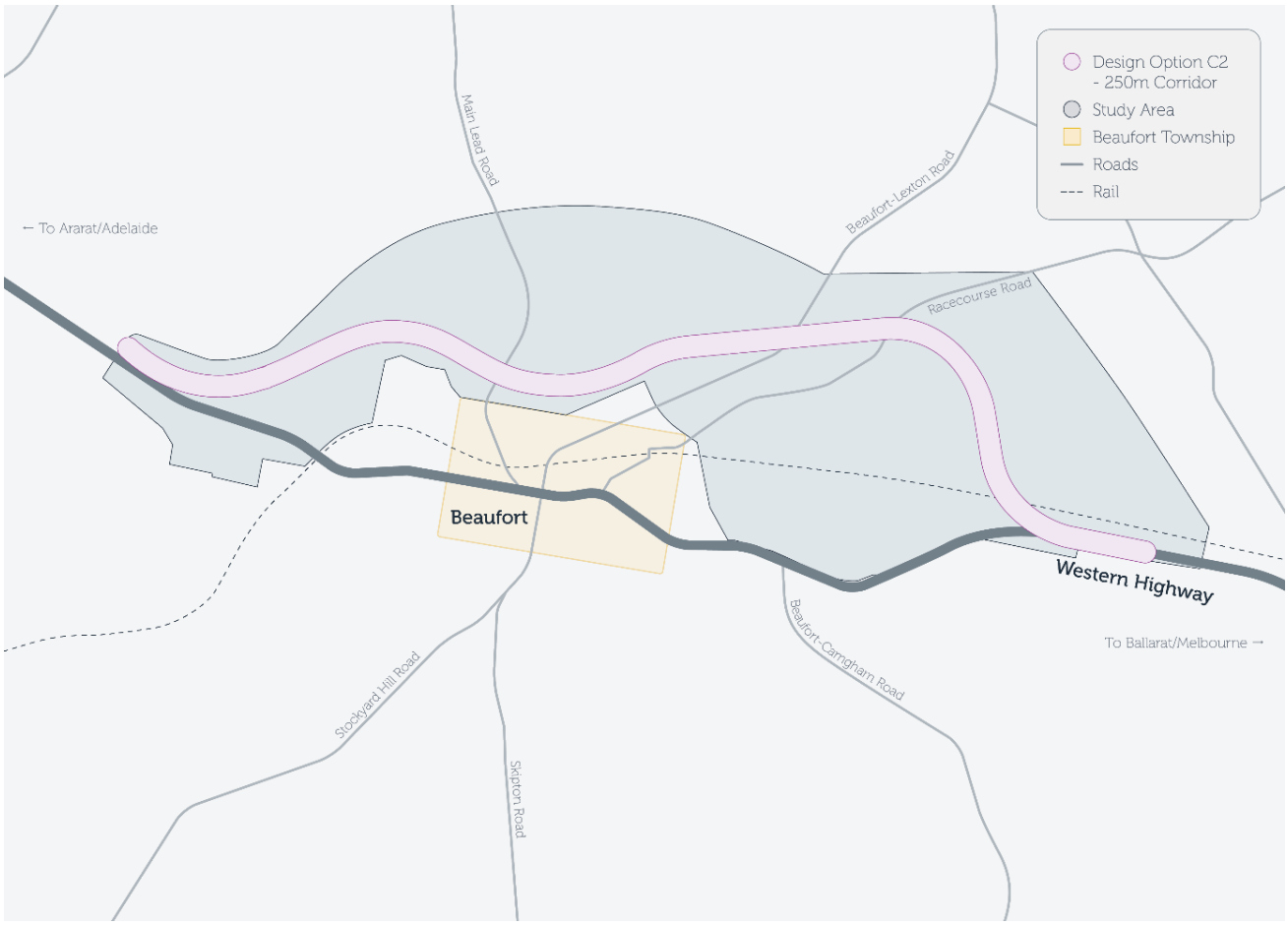


Figure 2.5 Beaufort Bypass C2 alignment option

2.5 PROJECT CONSTRUCTION

The following construction sub-sections describe the construction for the project. Construction of the bypass is expected to take two years and commence once construction funding and approvals are obtained.

2.5.1 CONSTRUCTION ACTIVITIES

Construction activities would include:

- preconstruction site delineation and compound setup, which may include (but not be limited to) tree clearance and vegetation lopping/removal, and establishment of construction site(s) and access tracks
- establishment of environmental and traffic controls
- route clearance and relocation and/or protection of utilities
- construction drainage and sediment and erosion control mitigation
- channel realignments to maintain existing flow paths
- general earthworks:
  - excavation of a cut including stripping of topsoil and placement of fill
  - import, export and stockpiling of fill
  - treatment of contaminated soil or removal of hazardous material, if required
- development of structures, interchanges, batters, drainage and pavement
- development of ancillary infrastructure:
  - noise barriers
  - lighting
  - safety barriers
  - line marking
- landscaping and site reinstatement.

2.6 OPERATIONS AND MAINTENANCE

Operations and maintenance of the project would be consistent with current practices and standards, including the VicRoads' *Roadside Management Strategy* (2011). Key objectives include:

- asset management of:
  - landscaped areas
  - stormwater drains
  - bridges and culverts
  - road pavement
  - signage
  - barriers
  - line marking
- enhancement of transport safety, efficiency and access
- protection of environmental and cultural heritage values
- management of fire risk
- preservation and enhancement of roadside amenity
- routine and life cycle maintenance activities throughout operations
- monitoring and management of areas of environmental sensitivity such as water bodies and wildlife corridors.

3 EES SCOPING REQUIREMENTS

The *Scoping Requirements for Beaufort Bypass Project Environment Effects Statement* (Department of Environment, Land, Water and Planning (DELWP) 2016) (Scoping Requirements) have been prepared by DELWP on behalf of the Minister for Planning. The Scoping Requirements set out the specific environmental matters to be investigated and documented in the EES, which informs the scope of the EES technical studies.

The following matters of the Scoping Requirements are relevant to the planning and land use impact assessment:

EES EVALUATION OBJECTIVE

Land use and economic: To minimise and manage adverse effects on local business (including agriculture) and existing or planned land uses.

Social and community: To minimise and manage adverse effects on the well-being of the local community, including potential impacts on cohesion and severance of community access to services, facilities and infrastructure.

Table 3.1 lists the specific requirements for the assessment of effects for the Land Use and Economic EES evaluation objective. Table 3.2 outlines the assessment requirements relevant to the Social and Community evaluation objective.

Table 3.1 EES scoping requirements – Land use and economic draft EES evaluation objective

SCOPING REQUIREMENTS SUB-SECTION	MATTER TO BE ADDRESSED	RELEVANT ASSESSMENT	ADDRESSED IN THIS ASSESSMENT
Key issues	Potential economic impacts of land severance/changes to existing land uses and local business or planned land uses.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*
	Economic performance of project alternatives in terms of relative benefits and costs.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*
	Potential impacts on land managers located adjacent to the proposed bypass and township entry points.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*
	Economic impacts of relevant alignment alternatives on future growth and development of Beaufort.	Planning and land use impact assessment	✓
		Regional economy impact assessment	EES Chapter 13: *Land use and economics*
Priorities for characterising the existing environment	Identify and characterise economic impacts on land-uses that could result from each alternative.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*
	Identify the extent of land severance for each alignment alternative and the potential impacts on land manager located adjacent to the proposed bypass.	Planning and land use impact assessment	✓
		Regional economy impact assessment	EES Chapter 13: *Land use and economics*
	Identify existing and potential future economic activities likely to be affected by the alignment alternatives.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*

SCOPING REQUIREMENTS SUB-SECTION	MATTER TO BE ADDRESSED	RELEVANT ASSESSMENT	ADDRESSED IN THIS ASSESSMENT
Design and mitigation measures	Identify the potential impacts on existing and proposed land uses which could be affected by alignment alternatives, and identify potential and proposed design measures that avoid or mitigate impacts.	Planning and land use impact assessment	✓
	Identify potential impacts from alignment alternatives in relation to future growth of the town and the required land capacity to accommodate forecast growth, with consideration of Council's strategic planning objectives.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*
		Planning and land use impact assessment	✓
	Identify opportunities to refine alignment alternatives that could avoid or reduce the displacement of residences and the severance of productive land.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*
		Social impact assessment	EES Chapter 12: *Social effects*
	Identify mitigation measures to avoid or reduce the negative impact of the project on residents, economic activities and productive land during construction.	Social impact assessment	EES Chapter 12: *Social effects*
		Regional economy impact assessment	EES Chapter 13: *Land use and economics*
		Planning and land use impact assessment	✓
Assessment of likely effects	Assess the likely displacement of residences, businesses and farmers by alternative alternatives and the degree of social dislocation and inconvenience that may be experienced within the community.	Social impact assessment	EES Chapter 12: *Social effects*
	Assess the likely effects of alignment alternatives on existing and proposed land use patterns, policies and strategies in Pyrenees Planning Scheme.	Planning and land use impact assessment	✓
	Assess the likely economic costs and benefits and impacts of each alignment alternatives, having regard to construction costs, land use effects, social and community impact and development stimulus.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*
	Assess the likely impacts on land managers on each of the route alternatives including those near town entry points.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*

SCOPING REQUIREMENTS SUB-SECTION	MATTER TO BE ADDRESSED	RELEVANT ASSESSMENT	ADDRESSED IN THIS ASSESSMENT
Approach to manage performance	Identify proposed measures to manage residual effects on existing economic activities and land uses, consistent with relevant land use planning objectives, policies or plans.	Regional economy impact assessment	EES Chapter 13: *Land use and economics*
		Planning and land use impact assessment	✓
	Identify measures to avoid and mitigate project risks.	Planning and land use impact assessment	✓

Table 3.2 EES scoping requirements – Social and community draft EES evaluation objective

SCOPING REQUIREMENTS SUB-SECTION	MATTER TO BE ADDRESSED	RELEVANT ASSESSMENT	ADDRESSED IN THIS ASSESSMENT
Key issues	Potential social impacts from displacement of residences, existing land uses and impacts on businesses.	Social impact assessment	EES Chapter 12: *Social effects*
	Variable (positive or adverse) effects from relevant alignment alternatives on community access to and within Beaufort, including severance/access to community facilities, services and infrastructure.	Social impact assessment	EES Chapter 12: *Social effects*
		Planning and land use impact assessment	✓
	Impacts of relevant alignment alternatives on opportunities for the future growth and development of Beaufort.	Social impact assessment	EES Chapter 12: *Social effects*
		Planning and land use impact assessment	✓
Priorities for characterising the existing environment	Potential for inconsistency with existing strategic land use planning objectives, policies or plans.	Planning and land use impact assessment	✓
	Identify and characterise impacts on residences and social and community environments that could result from each alternative.	Social impact assessment	EES Chapter 12: *Social effects*
	Identify potential change to land use plans for Crown land or land occupied by community facilities and infrastructure within or adjacent to relevant alignment alternatives.	Planning and land use impact assessment	✓
	Describe local movement patterns of residents and farmers with respect to access to Beaufort Township and community facilities and services.	Social impact assessment	EES Chapter 12: *Social effects*

SCOPING REQUIREMENTS SUB-SECTION	MATTER TO BE ADDRESSED	RELEVANT ASSESSMENT	ADDRESSED IN THIS ASSESSMENT
Design and mitigation measures	Identify the potential impacts on places of cultural significance which could be affected by alignment alternatives, and identify potential and proposed design measures that avoid or mitigate impacts.	Social impact assessment	EES Chapter 12: *Social effects*
		Historic heritage impact assessment	EES Chapter 10: *Cultural heritage*
	Identify potential and proposed design responses and other mitigation measures which could either reduce adverse effects or enhance opportunities for community access.	Social impact assessment	EES Chapter 12: *Social effects*
	Consider and incorporate the Pyrenees Shire Council's strategic planning objectives in the design where appropriate.	Planning and land use impact assessment	✓
	Seek to identify opportunities to improve community wellbeing.	Social impact assessment	EES Chapter 12: *Social effects*
Assessment of likely effects	Assess the potential for direct effects on community facilities or other assets and significant disruption patterns of community access or interaction.	Social impact assessment	EES Chapter 12: *Social effects*
	Assess the wellbeing and community cohesion effects, with consideration of effects identified from other town bypass projects.	Social impact assessment	EES Chapter 12: *Social effects*
	Assess the potential for indirect effects on community wellbeing through the loss of native vegetation and culturally significant trees.	Social impact assessment	EES Chapter 12: *Social effects*
Approach to manage performance	Identify proposed measures to manage residual effects on residents' and farmers' well-being, and impacts on infrastructure during project construction, as part of the Environmental Management Framework (EMF).	Social impact assessment	EES Chapter 12: *Social effects*
		Planning and land use impact assessment	✓

4 METHODOLOGY

This section describes the method that was used to assess the impacts of the project on planning and land use. The report responds to the EES Scoping Requirements, is informed by consideration of the existing conditions and applies a methodology for risk and impact assessment. This assessment informs measures to avoid and minimise potential effects. The following section outlines the methodology adopted for this planning and land use impact assessment.

4.1 STUDY AREA

The terminology utilised throughout the current technical assessment relating to the study area and alignment options is defined below.

Study area: The study area for the Beaufort Bypass EES project includes approximately 1,800 ha of land north of the Beaufort township, which contains the four bypass options assessed in this report. During the development stages of the alignment options, the study area was assessed to determine potential environmental impacts and constraints to individual alignment options.

Alignment options: Alignment options (A0, A1, C0 and C2) refer to the four selected bypass options assessed within the study area. Each alignment option consists of a 250 m corridor in which the specific bypass option has been designed. Each alignment option, unless otherwise stipulated, is the area assessed for direct and indirect impacts resulting from the construction, operation and maintenance of the project.

Construction Footprint: The Construction Footprint is the disturbance area required for the construction of the ultimate freeway bypass. The footprint has been created by applying a buffer off the extents of the functional design and has been used to calculate vegetation impacts within EES Appendix C: *Flora and fauna impact assessment*.

Public Acquisition Overlay area: The Public Acquisition Overlay area for the project facilitates the project by ensuring that changes to the use or development of the land do not prejudice the purpose for which the land is to be acquired (see Appendix B).

Project area: The project area for the Beaufort Bypass EES will be defined by a Specific Controls Overlay in the Pyrenees Planning Scheme. The Specific Controls Overlay is the boundary which will be referenced in the incorporated document and permit works to occur with regard to permit triggers within the P&E Act.

4.2 EXISTING CONDITIONS ASSESSMENT

The existing conditions assessment established a baseline of current land use and planning conditions. To establish the existing conditions a detailed desktop assessment was undertaken. This included a review of:

- historic and existing land use patterns
- site inspections for the study area and environs
- Commonwealth, State and Local Government land use strategies and policies
- State and Local Planning Requirements, including Planning Policy Framework (PPF), Municipal Planning Strategy (MPS), zones, overlays and relevant particular and general provisions
- census and statistical data
- feedback from consultation and Pyrenees Shire Council (PSC).

4.3 RISK ASSESSMENT

An environmental risk assessment (ERA) has been utilised in the Beaufort Bypass EES to identify environmental impacts associated with the construction and operation phases of the project. The risk assessment process is consistent with the guidance provided in Sections 3.1 and 4 of the *Scoping Requirements for the Beaufort Bypass Project EES* (DELWP 2016) and the *Ministerial guidelines for assessment of the environmental effects under the Environment Effects Act 1978* (Department of Sustainability and Environment (DSE) 2006).

The purpose of the ERA was to provide a systematic approach to the identification and further assessment of potential impacts resulting from the project, whether they be environmental, social or economic. The ERA articulates the probability of an incident with environmental effects occurring and the consequence of that impact to the environment. Identified impacts with a medium or higher initial risk are subject to detailed impact assessment and mitigation treatments, detailed within each discipline impact assessment.

RRV defines risk and impact as:

- "*Environmental risk reflects the potential for negative change, injury or loss with respect to environmental assets*" (DSE 2006). This approach is consistent with ISO 31000: 2018, which defines risk as "*the effect of uncertainty of [environmental] objectives*". Both definitions reflect the fact that risk is typically expressed in terms of the likelihood of a change occurring and the consequence of that change.
- Environmental impact is described as any change to the environment as a result of project activities.

The risk assessment is a critical part of the EES process as it guides the level and range of impact assessment for the EES and facilitates a consistent approach to risk assessment across the various disciplines.

4.3.1 RISK ASSESSMENT PROCESS

The ERA has guided the environmental impact assessment for the project. The objectives of the ERA are to:

- identify primary environmental risks that relate to the construction and operation of the project
- guide the level and extent of investigation and data gathering necessary for accurately characterising the existing environment and assessing the project's environmental impact
- help identify mitigation measures to avoid, minimise and mitigate environmental risks
- inform assessment of likely residual effects that are expected to be experienced after standard controls and proposed mitigations have been implemented.

The risk assessment process for the EES adopts a risk management framework as detailed in the VicRoads Environmental Sustainability toolkit. The process includes:

- an approach to environmental management which is aligned with ISO 31000: 2018
- systems used to manage environmental risk and protect the environment, and how these are implemented at different stages of road construction, operation and maintenance
- tools and reporting requirements which provide guidance in managing environmental issues throughout the project.

The ERA identifies impact events for each relevant element of the environment, details the primary risks and has informed the level and range of technical reporting required to address predicted impacts. The ERA utilises a risk matrix approach where the likelihood and consequence of an event occurring are considered (Table 4.1, Table 4.2 and Table 4.3). All risks are reassessed at regular intervals during all phases of the project, from the development of the EES to operation and maintenance, to ensure they are still applicable, that controls are appropriate and effective, and that they reflect most recent outcomes of specialist technical studies.

Table 4.1 Risk assessment matrix

			LIKELIHOOD				
CONSEQUENCE	Risk categories		Rare (A)	Unlikely (B)	Possible (C)	Likely (D)	Almost Certain (E)
	Catastrophic	5	Medium	High	High	Extreme	Extreme
	Major	4	Medium	Medium	High	High	Extreme
	Moderate	3	Low	Medium	Medium	High	High
	Minor	2	Negligible	Low	Low	Medium	Medium
	Insignificant	1	Negligible	Negligible	Negligible	Low	Low

Based on the project objectives and context, a set of project-specific and appropriate assessment, likelihood and consequence criteria were developed.

The likelihood categories and consequence descriptors are used as a guide for evaluating risk and are shown below in Table 4.2 and Table 4.3.

Table 4.2 Likelihood categories

RARE (A)	UNLIKELY (B)	POSSIBLE (C)	LIKELY (D)	ALMOST CERTAIN (E)
Less than once in 12 months OR 5% chance of recurrence during course of the contract	About once in 6 months OR 10% chance of recurrence during course of the contract	About once in 4 months OR 30% chance of recurrence during course of the contract	About once in 2 months OR 50% chance of recurrence during course of the contract	About once in a month OR 100% chance of recurrence during course of the contract
The event may occur only in exceptional circumstances	The event could occur but is not expected	The event could occur	The event will probably occur in most circumstances	The event is expected to occur in most circumstances
It has not happened in Victoria but has occurred on other road projects in Australia.	It has not happened regionally but has occurred on other road projects in Victoria	It has happened in the Beaufort region	It has happened on an adjoining section of the Western Highway	It has happened on more than one of the adjoining Western Highway projects OR It has happened multiple times on an adjoining Western Highway project.

Consequence criteria have been developed for the project in consultation with technical specialists. The result is a discipline and aspect-specific set of consequence descriptors used to define what would be considered an Insignificant, Minor, Moderate, Major and Catastrophic consequence associated with a risk event.

Table 4.3 Planning and land use environmental risk assessment consequences descriptors

ASPECT	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC
Design results in land use changes	Project would result in land use changes consistent with local and state planning policies	Project would result in land use changes with minor inconsistency with local and state planning policies	Project would result in land use changes with some inconsistency with local and state planning policies	Project would result in land use changes with significant inconsistency with local and state planning policies	Project would result in land use changes with extensive conflict with local and state planning policies
Design has impact on utility and infrastructure services	Negligible impacts on existing utilities and infrastructure	Temporary impediment to operation and/or maintenance of existing utilities during construction but still able to be adequately operated and maintained with mitigation measures	Impediment to operation and/or maintenance of existing utilities but still able to be adequately operated and maintained with mitigation measures	Significant disruption to the operation and/or maintenance of existing utilities but still able to be adequately operated and maintained with mitigation measures	Utilities not able to be maintained and/or operated
Design results in acquisition and fragmentation	Negligible fragmentation of land uses or land holdings	Some minor fragmentation and acquisition of land uses but properties still able to be used for existing purposes	Fragmentation/ acquisition of land results in 1-10 properties no longer being viable/ accessible/useable for existing purpose	Fragmentation/ acquisition of land results in 10-20 properties no longer being viable/accessible/ useable for existing purpose	Fragmentation/ acquisition of land results in 20+ properties no longer being viable/ accessible/useable for existing purpose

The risk assessment was undertaken for each discrete alignment option as each option had a distinct profile, type and extent of environmental impacts. The assessment of these impacts is detailed within Sections 7 and 9 of this report.

4.4 IMPACT ASSESSMENT

The impact assessment for the project has utilised the environmental risk assessment to inform the areas for further investigation. Impacts assessed within this assessment have typically been identified as having a medium or higher initial risk within the risk assessment when standard controls were applied. The project describes and assesses impacts in terms of the following:

- description of impact
- identification of whether impacts are direct or indirect
- prediction of the magnitude, extent and duration of impact
- overall rating of impact (without mitigation)
- residual rating of impact (with mitigation).

Planning and land use impacts occur when a project has an effect on the form, function, amenity or appearance of the existing environment and/or the character of a place or location. The impact assessment has considered the planning and land use impacts and the future potential land use impacts the project will or may have on the surrounding land uses. To determine the impact of the project on land use, the following have been assessed:

- future land use patterns
- identifying potential land use, planning and economic related impacts during the project's construction and operation
  - consistency with existing or future land use policy and planning framework (such as PPF, MPS, zones, overlays and strategic plans)
  - permanent and temporary change in land use due to acquisition (partial or full land acquisition) including impact on business operations
  - permanent and temporary changes to the ongoing use of land from changes in access or amenity
- identification of measures to avoid or minimise potential impacts on land use.

4.4.1 CONSULTATION

As part of this impact assessment, the targeted engagement with key stakeholders undertaken by RRV has been used to inform proposed land use impacts.

4.5 MITIGATION

Mitigations for identified impacts were developed by discipline specialists in consultation with RRV. All identified mitigations developed for the project have been informed by specialist experience with proven feasible control measures for major civil infrastructure projects, industry best practice measures and regulatory measures defined by State, Commonwealth and International Government agencies.

Mitigations for the project were developed throughout the impact assessment process to inform the residual impacts of the project defined in Section 10.

4.6 OPTIONS ASSESSMENT

The alignment refinement for the Beaufort Bypass has been undertaken in three distinct phases since project inception. These are discussed in EES Attachment IV: *Options assessment* as:

- Phase 1 – Concept alignment development
- Phase 2 – Option development and assessment
- Phase 3 – Identification of preferred alignment.

This options assessment method section considers the Phase 3 assessment and details the process for selection of the preferred alignment. The Planning and land use impact assessment contributed to the EES Attachment IV: *Options assessment* for key aspects. The first was in identifying planning contentions with early bypass options to the south of the Beaufort Township and the Pyrenees Shire Councils strategic plan to develop these areas for residential growth. the second was for comparison of acquisition of property between the four options.

The Phase 3 assessment considered four alignment options to select the preferred alignment, utilising a customised comparative options assessment to rank each option against the following areas:

- biodiversity
- catchment values and hydrology
- cultural heritage (Aboriginal and historic)
- social and community
- amenity
- landscape and visual.

Multiple scoring scenarios and sensitivity testings were undertaken against each option to ensure the environmental, social, heritage and economic assessment criteria aligned with the EES evaluation objectives. The scoring framework developed sought to ensure a wholistic decision-making process was undertaken, and that no single scoring or sensitivity scenario would be the primary determining factor in the identification and selection of the preferred alignment.

Weightings for the assessment included the application of six scenarios and sensitivity tests to eliminate bias of specific environmental constraints. These scenarios included:

- Scenario 1: Apply a score of 1 to 4 from least to highest impact.
- Scenario 2: Alignment with highest number of least impact scores.
- Scenario 3: Apply a score of 1 to the highest impact and the subtract the percentage difference between alignments.
- Scenario 4: Apply a score of 1 to least impact and then add the percentage difference between remaining alignments.
- Scenario 5: As per Scenario 3, but minus criteria that can be mitigated.
- Scenario 6: As per Scenario 4, but minus criteria that can be mitigated.

The sensitivity tests included:

- Scoring sensitivity scenario 1:
    - Options with the lowest impact and other options within 5% of the lowest impact are apportioned a score of one point and a green light.
    - Options within 5–20% of the lowest impact option are apportioned a score of zero points and an amber light.
    - Options with an impact of 20% or greater than the lowest impact option are apportioned a score of minus one and a red light.

- Scoring sensitivity scenario 2:
  - Options with the lowest impact and other options within 5% of the lowest impact are apportioned a score of one point and a green light.
  - Options within 5–25% of the lowest impact option are apportioned a score of zero points and an amber light.
  - Options with an impact of 25% or greater than the lowest impact option are apportioned a score of minus one and a red light.
- Scoring sensitivity scenario 3:
  - Options with the lowest impact and other options within 5% of the lowest impact are apportioned a score of one point and a green light.
  - Options within 5–15% of the lowest impact option are apportioned a score of zero points and an amber light.
  - Options with an impact of 15% or greater than the lowest impact option are apportioned a score of minus one and a red light.

The assessment process included an iterative process with RRV, the Technical Reference Group (TRG), legal and discipline specialists to refine the assessment environmental risk workshops and develop a customised assessment matrix. The suite of assessment criteria are detailed within EES Attachment IV: *Options assessment* (RRV 2019).

5 LEGISLATIVE CONTEXT

This section assesses the project against the relevant Commonwealth and State legislation, policies and guidelines to confirm primary approvals and to identify key planning objectives and strategies that need to be considered in the impact assessment. It provides a planning assessment of the project against the Pyrenees Planning Scheme (PPS) and identifies planning permit triggers.

5.1 COMMONWEALTH LEGISLATION

It is noted that there is no Commonwealth land located within the study area. However, the following Commonwealth legislation is still applicable.

5.1.1 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The *Environment Protection and Biodiversity and Conservation Act 1999* (EPBC Act) is the Commonwealth Government's primary piece of environmental legislation and applies to all Australian territory and waters. The EPBC Act is administered by the Department of Agriculture, Water and the Environment (DAWE). Under the EPBC Act, approval from the Minister for Environment is required where an action is likely to have a significant impact upon Matters of National Environmental Significance (MNES).

The EPBC Act prescribes nine categories of MNES as triggers for Commonwealth assessment. These categories are World Heritage Properties, National Heritage Places, Wetlands of International Importance, Great Barrier Reef Marine Park, Commonwealth Marine Area, Listed Threatened Ecological Communities, Listed Threatened Species and Listed Migratory Species.

Three out of the nine matters are relevant to the study area. These are nationally threatened species, ecological communities and migratory species. Accordingly, the project will be referred to the Minister for Environment in accordance with the EPBC Act to determine if the project will have, or is likely to have, a significant impact on MNES, prior to the commencement of construction.

5.1.2 NATIVE TITLE ACT 1993

The *Native Title Act 1993* (Native Title Act) recognises and protects traditional rights and interests to land and waters of Aboriginal and Torres Strait Islander people. The Native Title Act gives statutory recognition and protection of native title. It sets out a procedure for making a claim for a determination of native title, provides a regime for governments to do things in relation to land validly, notwithstanding the existence of native title, as well as validating some acts done on land in the past.

A search of the Native Title Services Victoria and National Native Title Tribunal for any application claims and determinations that have been lodged concerning the study area were conducted. There are no Native Title claims or applications over the study area.

5.2 STATE LEGISLATION, REGULATION AND POLICY

5.2.1 ENVIRONMENT EFFECTS ACT 1978

Assessment of the potential environmental, cultural and social impacts of proposed public works in Victoria may be required before works can proceed. This assessment process is done through the preparation of an EES guided by the EE Act. The process aims to identify negative impacts and develop mitigation measures to suit the local environment.

An EES may be required when the Minister for Planning determines that a proposed development might:

- require more thorough assessment than is currently provided in existing statutory processes
- have regionally or state significant adverse impacts on the environment; or
- require an integrated assessment of potential environmental, social and economic impacts.

On 22 July 2015 the Minister for Planning determined that an EES was required for the project due to the potential for significant effects.

5.2.2 PLANNING AND ENVIRONMENT ACT 1987

The *Planning & Environment Act 1987* (P&E Act) establishes the framework for planning the use, development and protection of land in Victoria, in the present and long-term interest of all Victorians. The P&E Act sets out the structure and administration of land use and development in Victoria and provides for the preparation, approval and adoption of planning schemes as subordinate instruments to govern use and development of land in specific detail.

A planning scheme sets out the objectives, policies and provisions relating to the use and development of land in the area to which it applies. The project is within the Pyrenees municipality and therefore the PPS applies to the project.

The various planning zones and overlays in the PPS which apply to the project are identified in the land use and planning assessment of the EES. A discussion as to whether the project meets the planning policy and statutory requirements of the PPS is included in Section 5.3. Under the provisions of the planning scheme, a planning approval is required for the proposed works.

A planning scheme amendment (PSA) is the preferred approval pathway for this project. A PSA to facilitate the use and development of the project via an Incorporated Document is proposed via Clause 45.12 Specific Controls Overlay. The PSA will also apply Clause 45.01 Public Acquisition Overlay (PAO) to the project area to reserve land for the future construction of the project. No rezoning of land is required or proposed as part of the EES.

5.2.3 HERITAGE ACT 2017

The primary purpose of the *Heritage Act 2017* (Heritage Act) is to protect historic cultural heritage in Victoria. The Heritage Act is Victoria's principal legislation for the identification and management of heritage places and objects of State significance, historical archaeological sites and maritime heritage. The Heritage Act established the Victorian Heritage Register (VHR) and Victorian Heritage Inventory (VHI) for the registration and recording of heritage places and objects.

There are three sites within the study area which are currently registered on the VHI. These include the Nil Desperandum Mine Feature (H7523-0071) which is impacted by alignment options A0, A1 and C2, the Racecourse Road Mullock Feature 1 (H7523-0074) which is impacted by alignment options C0, and Camp Hill Shallow Workings North (H7523-0098) which is impacted by alignments A0 and A1.

5.2.4 ABORIGINAL HERITAGE ACT 2006

An objective of the *Aboriginal Heritage Act 2006* (Aboriginal Heritage Act) is to recognise, protect and conserve Aboriginal cultural heritage in Victoria in ways that are based on respect for Aboriginal knowledge and cultural and traditional practices. Part 4, Division 2 of the Aboriginal Heritage Act states that certain activities will require a Cultural Heritage Management Plan (CHMP) to be prepared if they are high impact activities within areas of cultural heritage sensitivity.

Section 52(3) of the Aboriginal Heritage Act provides that no statutory authorisation can be given before a CHMP is approved. A mandatory CHMP (no. 13830) comprising a desktop assessment of the study area and standard assessment (pedestrian ground surface survey) of the four alignment options has been prepared by Archaeology at Tardis. The complex assessment for the project and finalised CHMP will be approved prior to the commencement of construction.

5.2.5 TRADITIONAL OWNER SETTLEMENT ACT 2010

The *Traditional Owner Settlement Act 2010* provides for an out-of-court settlement of native title. The Act allows the State Government to recognise traditional owners and certain rights in Crown land. In return for entering into a settlement, traditional owners must agree to withdraw any native title claim, pursuant to the Native Title Act and not to make any future native title claims. Under the Act, the State Government decides whether to enter into a settlement with a particular group. The group must meet the definition of 'traditional owner group' under the Act. There is currently no native title claim over land within the study area and as such the *Traditional Owner Settlement Act 2010* does not apply.

5.2.6 TRANSPORT INTEGRATION ACT 2010

The *Transport Integration Act 2010* (TI Act) is the principal transport statute for Victoria and establishes a common policy framework for use by state and local government bodies when making decisions about the transport system. It achieves this through the vision statement, transport system objectives and decision-making principles set out in the Act. The vision for transport in Victoria is:

"an integrated and sustainable transport system that contributes to an inclusive, prosperous and environmentally responsible state."

The project must be consistent with all relevant requirements of the TI Act having regard to the transport system objectives and principles identified in this legislation. This requirement is triggered for projects likely to have a significant impact on the transport system.

The project addresses key transport system objectives and decision-making principles set out in Part 2, Division 2 (Transport System Objectives) and Division 3 (Decision-Making Principles) of the TI Act. A summary is set out below:

5.2.6.1 DIVISION 2 – TRANSPORT SYSTEM OBJECTIVES

- *S8 Social and economic inclusion*: The project will reduce congestion and travel times and therefore improve the access to jobs. The project is expected to enhance the social amenity of Beaufort by improving pedestrian access and safety in the town centre as a result of the reduction in the amount of freight and through traffic travelling along Neill Street.
- *S10 Environmental sustainability:* The project adopts an 'avoid and minimise' approach to managing possible impacts on remnant native vegetation, fauna habitats, adjacent areas of ecological, environmental or landscape significance and Aboriginal and historic Heritage.
- *S11 Integration of transport and land use*: The project will improve the capacity of the road network and improve freight efficiency. Reducing the amount of freight and through traffic travelling along the main street will result in reduced pedestrian and freight conflict in the town centre.
- *S13 Safety and health and wellbeing:* The program of works will reduce congestion and improve road safety for all users. The number of incidents are expected to be reduced as a result of the project. Reducing the amount of freight and through traffic travelling along Neill Street results in a reduction of pedestrian and freight conflict in the town centre.

5.2.6.2 DIVISION 3 – DECISION-MAKING PRINCIPLES

- *S15 Principle of integrated decision-making:* The project has been the subject of an EES process under the EE Act which involved extensive consultation between RRV, statutory authorities, local government and other relevant agencies. It is jointly funded by the State and Commonwealth Governments, and will be delivered with the support of PSC and DELWP.
- *S18 Principle of transport system user perspective:* The project will enhance the reliability, safety and connectivity of the transport system, improve the user experience with reduced congestion.
- *S19 Precautionary principle:* The precautionary principle was considered throughout the development of the project, with extensive technical investigations aiming to avoid irreversible environmental and cultural heritage damage.
- *S21 Principle of transparency:* The project has been assessed through the EES process under the EE Act and together with the IAC report and the Minister's assessment, this process has informed the preparation of the amendment.

A full assessment will be provided within the Explanatory Report, which will form part of the draft PSA lodged with the EES.

5.2.7 ROAD MANAGEMENT ACT 2004

The *Road Management Act 2004* (RM Act) sets out the regulations and requirements regarding arterial roads and working within the road reserve.

Code of practices are set out under the RM Act to provide guidance for road authorities, works and infrastructure managers. RRV will be operating under delegated authority under the RM Act.

5.2.8 LAND ACQUISITION AND COMPENSATION ACT 1986

The *Land Acquisition and Compensation Act 1986* (LA&C Act) outlines the process for the acquisition of land by State Government for public purposes, either compulsorily or by negotiation. The Act also provides procedures for the determination of compensation. Section 5 of the LA&C Act states that an authority cannot commence to acquire the land "*unless the land has been first reserved by or under a planning instrument for a public purpose*".

As the project would require land acquisition, a PAO would need to be applied to the affected area.

RRV have consulted with affected landowners regarding land acquisition. The procedure for acquisition and compensation will comply with the LA&C Act and once the PAO has been applied to the affected areas of the approved alignment.

5.2.9 CROWN LAND (RESERVES) ACT 1978

The *Crown Land (Reserves) Act 1978* provides for the reservation and management of Crown land in Victoria for certain purposes, and these areas are identified in the current assessment to determine if changes to the care, control and management is required.

5.2.10 LAND ACT 1958

Unreserved Crown land is all Crown land that has not been reserved or set aside for a public purpose. This land is subject to the *Land Act 1958* and may be sold, leased or licensed under the Act subject to the approval of the Minister for Energy, Environment and Climate Change, who is responsible for Unreserved Crown land. A number of other Ministers also have responsibilities under the *Land Act 1958*. The *Land Act 1958* would apply to any unreserved Crown land within the study area that are impacted by any of the project options.

5.2.11 FORESTS ACT 1958

The *Forests Act 1958* outlines that all forest produce in state forests is the property of the Crown. The Act also prohibits the removal of produce from state forests except in accordance with the regulations. Provisions are also made in relation to the development and implementation of working plans for state forests with respect to control, maintenance, protection and taking of produce; fire management in state forests; and outlines offences in state forests.

5.3 PYRENEES PLANNING SCHEME

The P&E Act establishes subsidiary statutory instruments known as planning schemes, which set out the objectives, policies and provisions that regulate land use, development and protection of land, and are usually administered by local government. The purpose of the planning scheme is to:

- provide a clear and consistent framework within which decisions about the use and development of land can be made
- express State, regional, local and community expectations for areas and land uses
- provide for the implementation of State, regional and local policies affecting land use and development.

The study area is subject to the PPS which controls the use and development of land within the municipality. Relevant sections of the PPS are identified below.

5.3.1 PLANNING POLICY FRAMEWORK (PPF)

The PPF comprises planning policies that apply to all land in Victoria and are to be taken into account in the assessment of applications for the use and development of land and PSAs. The following planning policy areas are applicable to the project:

- Clause 11 – Settlement
- Clause 12 – Environmental and Landscape Values
- Clause 13 – Environmental Risks and Amenity
- Clause 14 – Natural Resource Management
- Clause 15 – Built Environment and Heritage
- Clause 17 – Economic Development
- Clause 18 – Transport
- Clause 19 – Infrastructure.

The objectives and strategies of these Clauses, and their aims of relevance to the project, are outlined in Table 5.1 below.

Table 5.1 Planning Policy Framework summary

RELEVANT CLAUSE	OBJECTIVES	AIMS
Clause 11: Settlement	Planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure. Planning is to recognise the need for, and as far as practicable contribute towards: Health, wellbeing and safety; Diversity of choice; Adaptation in response to changing technology; Economic viability; A high standard of urban design and amenity; Energy efficiency; Prevention of pollution to land, water and air; Protection of environmentally sensitive areas and natural resources; Accessibility; and Land use and transport integration. Planning is to prevent environmental and amenity problems created by siting incompatible land uses close together. Planning is to facilitate sustainable development that takes full advantage of existing settlement patterns and investment in transport, utility, social, community and commercial infrastructure and services.	Clause 11.01 provides for a hierarchy and network of settlements across Victoria and for the sustainable development of individual settlements in accordance with regional and local context, provision of facilities and services, transport infrastructure and linkages, land use and natural resources. The applicable regional plan is Central Highlands Regional Growth Plan (Victorian Government, 2014), which is outlined in Section 6.3.2 of this report. Clause 11.01-1R Settlement – Central Highlands establishes several strategies which seek to direct growth to well serviced settlements, such a Beaufort, with good access to Melbourne or Ballarat. Clause 11.01-1L Settlement in Pyrenees Shire – supports rural use and restructuring of obsolete and defunct Crown Townships, fragmented rural land and environmentally hazardous hilly land.

RELEVANT CLAUSE	OBJECTIVES	AIMS
Clause 12: Environmental and Landscape Values	Planning should help to protect the health of ecological systems and the biodiversity they support (including ecosystems, habitats, species and genetic diversity) and conserve areas with identified environmental and landscape values. Planning must implement environmental principles for ecologically sustainable development that have been established by international and national agreements. Foremost amongst the national agreements is the Intergovernmental Agreement on the Environment, which sets out key principles for environmental policy in Australia. Other agreements include the National Strategy for Ecologically Sustainable Development, National Greenhouse Strategy, the National Water Quality Management Strategy, the National Strategy for the Conservation of Australia's Biological Diversity, the National Forest Policy Statement and National Environment Protection Measures. Planning should protect, restore and enhance sites and features of nature conservation, biodiversity, geological or landscape value.	Clause 12 provides for consideration of the impacts of land use and development in terms of the protection and conservation of biodiversity, waterways and landscapes. Land use and development should avoid impacting on important areas of biodiversity, protect significant and sensitive areas and ensure there is no net loss to biodiversity as a result of native vegetation clearance including consideration of cumulative impacts, fragmentation of habitat, and the spread of pests into the environment (Clause 12.01-1L, 12.01-1S and 12.01-2S). Removal of native vegetation in gullies and along streams and drainage lines is discouraged, except where this is necessary to improve streamway or floodplain management (Clause 12.03-1L). River corridors, waterways, lakes and wetlands should be protected and enhanced, and land use and development designed and enhanced to maintain and enhance the environmental, cultural and landscape values (Clause 12.03-1S). Clause 12.05-2S seeks to protect and enhance environmentally sensitive areas including significant landscapes and open space and maintain distinctive breaks and open rural landscapes between settlements.

RELEVANT CLAUSE	OBJECTIVES	AIMS
Clause 13: Environmental Risks and Amenity	Planning should strengthen the resilience and safety of communities by adopting a best practice environmental management and risk management approach. Planning should aim to avoid or minimise natural and human-made environmental hazards, environmental degradation and amenity conflicts. Planning should identify and manage the potential for the environment and environmental changes to impact on the economic, environmental or social wellbeing of society. Planning should ensure development and risk mitigation does not detrimentally interfere with important natural processes. Planning should prepare for and respond to the impacts of climate change.	Clause 13 provides for strengthening resilience and safety by minimising impacts of natural hazards and adapting to impacts of climate change including: — applying Bushfire Planning Policy to prioritise protection of human life (Clause 13.02-1S) — protection of floodplain areas by ensuring land use and development does not increase flood impacts, and locating facilities (including transport facilities) above probable maximum flood level (Clause 13.03-1S) — ensuring potentially contaminated land is suitable for its intended future use and development (Clause 13.04-1S) — identifying areas subject to erosion and promoting rehabilitation in areas prone to land instability (Clause 13.04-2S) — reduce the potential for erosion and impacts on stream banks and waterways and discourage development on steep country within land systems that would destabilise land (Clause 13.04-2L) — minimising impacts of salinity and preventing inappropriate development in areas affected by groundwater salinity (Clause 13.04-3S) — encourages measures to reduce salinity and land degradation (Clause 13.04-3L) — ensuring community amenity is not reduced by air and noise emissions using design and land use separation (Clause 13.07) — ensuring land use planning and transport infrastructure provision contribute to improved air quality and provide suitable separation (Clause 13.07-1S).

RELEVANT CLAUSE	OBJECTIVES	AIMS
Clause 14: Natural Resource Management	Planning is to assist in the conservation and wise use of natural resources including energy, water, land, stone and minerals to support both environmental quality and sustainable development. Planning should ensure agricultural land is managed sustainably, while acknowledging the economic importance of agricultural production.	Clause 14 provides for the protection of Victoria's agricultural base through the preservation of productive farmland (Clause 14.01-1S and Clause 14.01-2S), restructuring small lot subdivisions, facilitating land and water management plans (Clause 14.01-1L and 14.01-2L), the protection and restoration of catchments, water bodies and groundwater through consideration of impacts of land use and development to water quality and encourage exploration and extraction of natural resources in accordance with acceptable environmental standards (Clause 14.02-1S and Clause 14.02-2S).

RELEVANT CLAUSE	OBJECTIVES	AIMS
Clause 15: Built Environment and Heritage	Planning is to recognise the role of urban design, building design, heritage and energy and resource efficiency in delivering liveable and sustainable cities, towns and neighbourhoods. Planning should ensure all land use and development appropriately responds to its surrounding landscape and character, valued built form and cultural context. Planning should protect places and sites with significant heritage, architectural, aesthetic, scientific and cultural value. Planning must support the establishment and maintenance of communities by delivering functional, accessible, safe and diverse physical and social environments, through the appropriate location of use and development and through high quality buildings and urban design. Planning should promote development that is environmentally sustainable and should minimise detrimental impacts on the built and natural environment. Planning should promote excellence in the built environment and create places that: — are enjoyable, engaging and comfortable to be in — accommodate people of all abilities, ages and cultures — contribute positively to local character and sense of place — reflect the particular characteristics and cultural identity of the community — enhance the function, amenity and safety of the public realm.	Clause 15 aims to ensure development respects valued areas of rural character, including the protection of visual amenity along township approaches and minimising visual impacts on surrounding landscape (Clause 15.01-1S and Clause 15.01-6S). It also aims to ensure the conservation of places of heritage significance (Clause 15.03-1S), encouraging retention of physical evidence of the Shire's important gold history in the mining sites, mullock heaps and related workings (Clause 15.03-1L), and the protection and conservation of places of Aboriginal cultural heritage significance (Clause 15.03-2S).

RELEVANT CLAUSE	OBJECTIVES	AIMS
Clause 17: Economic Development	Planning is to provide for a strong and innovative economy, where all sectors are critical to economic prosperity. Planning is to contribute to the economic wellbeing of the state and foster economic growth by providing land, facilitating decisions and resolving land use conflicts, so that each region may build on its strengths and achieve its economic potential.	Clause 17 aims to support rural economies (commercial, industrial and tourism) by improving access, and supporting infrastructure investment where it will support business investment (Clause 17.02, Clause 17.03 and Clause 17.04).
Clause 18: Transport	Planning should ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe.	Clause 18 seeks to integrate land use and transport planning (18.01-1S Land Use and Transport Planning), the transport system (18.01-2S Transport system and 18.01-2R Transport system – Central Highlands), Sustainable Personal Transport 18.02-1S, and developing the road system to include freight links in inner and outer Melbourne (18.02-3S Road System, 18.05-1S Freight Links).

RELEVANT CLAUSE	OBJECTIVES	AIMS
Clause 19: Infrastructure	Planning for development of social and physical infrastructure should enable it to be provided in a way that is efficient, equitable, accessible and timely. Planning is to recognise social needs by providing land for a range of accessible community resources, such as education, cultural, health and community support (mental health, aged care, disability, youth and family services) facilities. Planning should ensure that the growth and redevelopment of settlements is planned in a manner that allows for the logical and efficient provision and maintenance of infrastructure, including the setting aside of land for the construction of future transport routes. Planning should facilitate efficient use of existing infrastructure and human services. Providers of infrastructure, whether public or private bodies, are to be guided by planning policies and should assist strategic land use planning. Planning should minimise the impact of use and development on the operation of major infrastructure of national, state and regional significance, including communication networks and energy generation and distribution systems. Planning authorities should consider the use of development and infrastructure contributions in the funding of infrastructure.	Clause 19 provides that planning for development of social and physical infrastructure should enable it to be provided in a way that is efficient, equitable, accessible and timely. It further states providers of infrastructure, whether public or private bodies, are to be guided by planning policies and should assist strategic land use planning. Clause 19.02-6S aims to provide for open space networks that are linked, integrated with adjacent development, incorporate places of natural and cultural interest, maintain public accessibility and create opportunities to enhance open space networks. Furthermore, Clause 19.03-03S seeks to ensure that development protects and improves the health of water bodies including creeks, rivers, wetlands. An objective of Clause 19.03-2S is to provide timely, efficient and cost-effective development infrastructure that meets the needs of the community.

5.3.2 MUNICIPAL PLANNING STRATEGY

Planning Scheme Amendment C48 Pyrenees (gazetted 6 May 2021) introduced the Municipal Planning Strategy and integration of local content into the PPF. The Municipal Planning Strategy provides the context, vision and strategic framework and the strategic justification for application of zones and overlays. The local planning policies guide decision making in relation to a specific discretion in a zone, overlay or particular provision. It aids decision making by providing greater understanding of how a project will be considered and what will influence decision making.

The relevant aspects of the Municipal Planning Strategy are identified in Table 5.2. These clauses provide an understanding of the strategic land use framework and the objectives and strategies which guide decision making. The relevant EES technical reports provide detail on policies relevant to other considerations of the project.

Table 5.2 Municipal Planning Strategy

CLAUSE	AIMS	POLICIES AND STRATEGIES
02.03-1 Settlement	The aim of Clause 02.03-1 is to provide strategic direction in regard to settlement within Pyrenees Shire.	Specific policies relevant to the project are: Settlement (Clause 02.03-1): — to promote Beaufort's role as the Shire's principal town for urban development — to develop consolidated townships and settlements to provide improved access to services and community facilities — to facilitate a compatible relationship between residential and non-residential uses, including the maintenance of appropriate environmental buffers — to encourage consolidation of rural lots into larger holdings to minimise rural land fragmentation.
02.03- 2 Environmental risks and amenity	The aim of Clause 02.03-2 is to provide strategic direction to the management of environmental and amenity risks.	Specific policies relevant to the project are: Environmental Risks and Amenity (Clause 02.03-2) — to discourage use and development that causes pollution of water resources — to minimise use and development that causes land degradation, fire hazards or other adverse environmental impacts — to protect existing native vegetation and encouraging further planting of native vegetation, particularly on land in areas with erosion and salinity problems — to discourage development on land demonstrated to have serious environmental management constraints. Bushfires (Clause 02.03-2) — to ensure strategic and settlement planning decisions prioritise the protection of human life and minimise the risk to property — to ensure that fire risks are carefully considered throughout the planning and development process. Floodplains (Clause 02.03-2) — to identify areas that have the greatest flood risk — to discourage development on floodplains and low-lying areas subject to drainage difficulties — to maintain the capacity of the floodplain to convey and store water and minimise the risk of damage to property — to discourage the intensification of land use and development in the floodplains of the Yam Holes, Ding Dong, Cemetery and Cumberland Creeks at Beaufort.

CLAUSE	AIMS	POLICIES AND STRATEGIES
02.03-3 Natural resource management	The aim of Clause 02.03-3 is to provide strategic direction to the management of Pyrenees land systems, agriculture, rural subdivision, viticulture and water.	Specific policies relevant to the project are: — protect significant flora and fauna habitats and remnant vegetation. Pyrenees Land Systems — encourages land uses and development within appropriate land uses. Agriculture — to protect agricultural land from fragmentation — to encourage sustainable and diverse agriculture — to consolidate inappropriately subdivided rural land — to discourage rural-residential development where it impacts on agricultural land. Rural subdivision — to identify areas that are unsuitable for small lot development and encouraging the consolidation of small lots — to restructure rural areas with subdivisional patterns that are not conducive to responsible land management. Water — to conserve water resources — to minimise possible contamination of water supplies from urban, industrial and agricultural land use — to restrict subdivision, land use and development within water supply catchments.
02.03-4 Built environment and heritage	The aim of Clause 02-03-4 is to provide strategic direction on the built environment and heritage values of the shire.	Specific policies relevant to the project are: — to encourage a diverse range of housing to attract and maintain a socially diverse population base — to protect known Aboriginal heritage places from development — to retain the established character of existing townships.

5.4 PLANNING ASSESSMENT

The primary use of the project is for a road. A road is defined under section 3 of the P&E Act and includes "*a highway, street, lane, footway, square, court, alley or right of way, whether a thoroughfare or not and whether accessible to the public generally or not".* The project would also result in the relocation of minor utility installations from within the road reserve or within land being acquired to facilitate construction. A Minor Utility Installation is defined as land used for a utility installation comprising any of the following: (a) sewerage or water mains; (b) storm or flood water drains or retarding basins; (c) flow measurement device or a structure to gauge waterway flow; (d) gas mains providing gas directly to consumers; (e) a sewerage treatment plant, and any associated disposal works, required to serve a neighbourhood; (f) a pumping station required to serve a neighbourhood; (g) power lines designed to operate at less than 220,000 volts but excluding any power lines directly associated with an energy generation facility or Geothermal energy extraction; or (h) an electrical sub-station designed to operate at no more than 66,000 volts but excluding any sub-station directly associated with an Energy generation facility or Geothermal energy extraction.

The project has been assessed against the relevant zones, overlays, particular and general provisions contained within the PPS to identify the relevant planning permit triggers and requirements.

5.4.1 GENERAL PROVISIONS

The following General Provisions of the PPS are relevant to the project:

5.4.1.1 CLAUSE 62 USES, BUILDINGS, WORKS, SUBDIVISIONS AND DEMOLITION NOT REQUIRING A PERMIT

There are general exemptions from permit requirements for roads under Clause 62 of the PPS. Under Clause 62.01 the requirement for a permit for the use of land, does not apply to:

> *"The use of land for a Road except within the Urban Floodway Zone and a Public Conservation and Resource Zone.*
>
> *The use of land for a minor utility installation*
>
> *The use of land for environmental monitoring (including monitoring groundwater, noise or air quality) carried out by or on behalf of the Head, Transport for Victoria.".*

In addition, under Clause 62.02-1 building and works not requiring a permit include:

> *"Buildings and works associated with a minor utility installation*
>
> *Temporary buildings and works associated with environmental monitoring (including monitoring groundwater, noise or air quality) constructed or carried out by or on behalf of the Head, Transport for Victoria".*

Under Clause 62.02-2, unless it is specifically required by the planning scheme. Any requirement in the scheme:

> *"relating to the construction of a building or the construction or carrying out of works, other than a requirement in the PCRZ, does not apply to roadworks*.

Under Clause 62.04 Subdivisions not requiring a permit states that any requirement in this scheme relating to the subdivision of land does not apply to:

> *A subdivision by an authority acquiring the land which does not create an additional lot.*

Under Clause 62.05 Demolitions does not require a permit for:

> *"the demolition or removal of a building or works unless a permit is specifically required for demolition or removal".*

Unless specifically mentioned, the exemptions under Clause 62.01, Clause 62.02-2, Clause 62.04 and 62.05 apply to the zones and overlays described in the tables below.

5.4.1.2 CLAUSE 66 REFERRAL AND NOTICE PROVISIONS

In accordance with Clause 66.02-2, an application to remove, destroy or lop native vegetation in the Detailed Assessment Pathway must be referred to the Secretary of DELWP as a recommending referral authority, and an application under the Floodway Overlay and Land Subject to Inundation Overlay must be referred to the Glenelg Hopkins Catchment Management Authority as the relevant floodplain management authority.

5.4.2 ZONES

The various zones under the provisions of PPS within the study area are outlined in Table 5.3, with the objective of each zone, whether a planning permit is triggered by the project and the extent of each alignment option within each zoning.

A map of the study area showing the spatial distribution of the land use zonings in relation to the four alignment options is provided in Figure 5.1. The Farming Zone (FZ) is the predominant zoning, which reflects the existing farming uses in the area. The Rural Conservation Zone (RCZ) and Public Conservation and Resource Zone (PCRZ) include areas of high quality vegetation.

Table 5.3 Pyrenees Planning Scheme: Study area zones

ZONE	PURPOSE OF ZONE	PERMIT TRIGGER	A0	A1	C0	C2
Clause 32.03 **Low Density Residential Zone (LDRZ)**	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to provide for low-density residential development on lots which, in the absence of reticulated sewerage, can treat and retain all wastewater.	No Any use listed in Clause 62.01 is a section 1 use (no permit required) provided it meets the requirements of Clause 62.01. The use of land for a road is exempt under 62.01 and, therefore, no permit is required for use of the land as a road. A permit is not required for buildings and works associated with a Section 1 Use.	N/A	N/A	0.41 ha	0.41 ha
Clause 35.03 **Rural Living Zone (RLZ)**	— to implement the Municipal Planning Strategy and the Planning Policy Framework — 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.	Yes In respect of use, any use listed in Clause 62.01 is a section 1 use (no permit required) provided it meets the requirements of Clause 62.01. The use of land for a road in the RLZ is exempt under 62.01 and, therefore, no permit is required for use of the land as a road. In respect of development, a permit is not required for buildings and works except for earthworks which change the rate of flow or the discharge point of water across a property boundary.	3.88 ha	3.88 ha	3.88 ha	3.88 ha

ZONE	PURPOSE OF ZONE	PERMIT TRIGGER	A0	A1	C0	C2
Clause 35.06 **Rural Conservation Zone (RCZ)**	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to conserve the values specified in a schedule to this zone. To protect and enhance the natural environment and natural processes for their historic, archaeological and scientific interest, landscape, faunal habitat and cultural values — to protect and enhance natural resources and the biodiversity of the area — to encourage development and use of land which is consistent with sustainable land management and land capability practices, and which takes into account the conservation values and environmental sensitivity of the locality — to provide for agricultural use consistent with the conservation of environmental and landscape values of the area — to conserve and enhance the cultural significance and character of open rural and scenic non-urban landscapes.	Yes In respect of use, any use listed in Clause 62.01 is a section 1 use (no permit required) provided it meets the requirements of Clause 62.01. The use of land for a road is the RCZ is exempt under 62.01. Therefore, a permit is not required for use of the land as a road pursuant to Clause 35.06-1. In respect of development, a permit is required for buildings and works, and earthworks which change the rate of flow or the discharge point of water across a property boundary pursuant to Clause 35.06-5. Therefore, a planning permit would be required for earthworks associated with the roadworks.	17.53 ha	16.84 ha	2.05 ha	2.05 ha

ZONE	PURPOSE OF ZONE	PERMIT TRIGGER	A0	A1	C0	C2
Clause 35.07 **Farming Zone (FZ)**	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to provide for the use of land for agriculture — to encourage the retention of productive agricultural land — to ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture — to encourage the retention of employment and population to support rural communities — to encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision — to provide for the use and development of land for the specific purposes identified in a schedule to this zone.	Yes In respect of use, any use listed in Clause 62.01 is a section 1 use (no permit required) provided it meets the requirements of Clause 62.01. The use of land for a road in the FZ is exempt under 62.01 and, therefore, no permit is required for use of the land as a road. In respect of development, a permit is not required for buildings and works except for earthworks which change the rate of flow or the discharge point of water across a property boundary.	229.32 ha	227.79 ha	243.62 ha	253.92 ha
Clause 36.03 **Public Conservation and Resource Zone (PCRZ)**	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to protect and conserve the natural environment and natural processes for their historic, scientific, landscape, habitat or cultural values — to provide facilities which assist in public education and interpretation of the natural environment with minimal degradation of the natural environment or natural processes — to provide for appropriate resource based uses.	Yes The use of land for a Road in the PCRZ is not exempt under Clause 62.01 and as such a road is a Section 2 Use which requires a permit pursuant to Clause 36.03-1. Under Clause 36.03-2 a permit is required to construct a building or carry out works.	19.96 ha	19.96 ha	4.12 ha	4.12 ha

ZONE	PURPOSE OF ZONE	PERMIT TRIGGER	A0	A1	C0	C2
Clause 36.04 **Transport Use Zone** Schedule 1 (TRZ1) State Transport Infrastructure	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to recognise public land use for public utility and community services and facilities — to provide for associated uses that are consistent with the intent of the public land reservation or purpose.	No In respect of use, any use listed in Clause 62.01 is a section 1 use (no permit required) provided it meets the requirements of Clause 62.01. The use of land for a road in the PUZ4 is exempt under 62.01 and, therefore, no permit is required for use of the land as a road. In respect of development, a permit is not required for buildings and works associated with a Section 1 Use.	1.33 ha	1.33 ha	1.53 ha	1.33 ha
Clause 36.04 **Transport Zone – Category 2 (TRZ2)** Principal Road Network	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to identify significant existing roads — to identify land which has been acquired for a significant proposed road.	No In respect of use, any use listed in Clause 62.01 is a section 1 use (no permit required) provided it meets the requirements of Clause 62.01. The use of land for a road in the RDZ is exempt under 62.01 and, therefore, no permit is required for use of the land as a road. A permit is not required for buildings and works associated with a Section 1 Use.	12.12 ha	12.06 ha	12.79 ha	12.74 ha

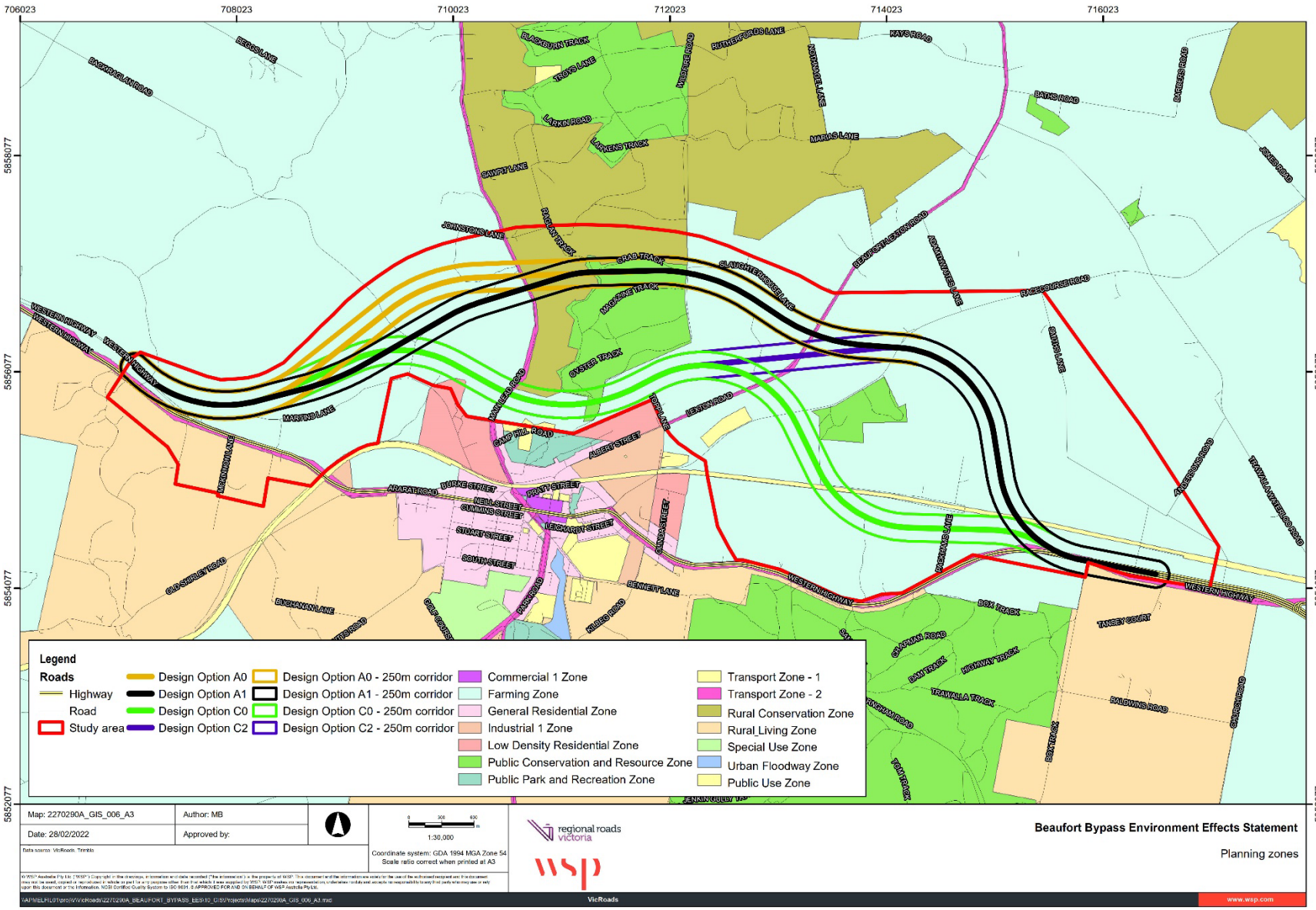


Figure 5.1 Planning zones

5.4.3 OVERLAYS

The various overlays under the provisions of PPS within the study area are outlined in Table 5.4, with the objective of each overlay, whether a planning permit is triggered by the project and the extent of each alignment option within each overlay.

A map of the study area showing the spatial distribution of the overlays in relation to the four alignment options is provided in Figure 5.2.

Table 5.4 Pyrenees Planning Scheme: Study area overlays

OVERLAY	PURPOSE	PERMIT TRIGGER	A0	A1	C0	C2
Clause 42.02 **Vegetation Protection Overlay** Schedule 1 (VPO1) Roadside Grassland Protection and Conservation	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to protect areas of significant vegetation — to ensure that development minimises loss of vegetation — to preserve existing trees and other vegetation — to recognise vegetation protection areas as locations of special significance, natural beauty, interest and importance — to maintain and enhance habitat and habitat corridors for indigenous fauna — to encourage the regeneration of native vegetation.	No A planning permit is not required to remove, destroy or lop native vegetation carried out by or on behalf of the Head, Transport for Victoria to the minimum extent necessary to construct or maintain transport system infrastructure on transport land.	0.76 ha	0.76 ha	4.64 ha	1.33 ha
Clause 44.03 **Floodway Overlay (FO)**	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to identify waterways, major floodpaths, drainage depressions and high hazard areas which have the greatest risk and frequency of being affected by flooding — to ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting — to reflect any declarations under Division 4 of Part 10 of the *Water Act 1989* if a declaration has been made — to protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria) — to ensure that development maintains or improves river and wetland health, waterway protection and flood plain health.	Yes A planning permit is required for roadworks within this overlay where the water flow path is redirected or obstructed. Note: The C0 alignment has a greater area subject to the FO and Land Subject to Inundation Overlay (LSIO) because these overlays do not extend beyond the motorcycle track. The AO/A1/C2 crossing is further downstream to the north-east and not affected by these overlays.	N/A	0.02 ha	13.62 ha	5.81 ha

OVERLAY	PURPOSE	PERMIT TRIGGER	A0	A1	C0	C2
Clause 44.04 **Land Subject to Inundation Overlay (LSIO)**	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority — to ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity — to reflect any declaration under Division 4 of Part 10 of the *Water Act, 1989* where a declaration has been made — to protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria) — to ensure that development maintains or improves river and wetland health, waterway protection and flood plain health.	Yes A planning permit is required for roadworks within this overlay where the water flow path is redirected or obstructed.	N/A	0.47 ha	9.07 ha	9.07 ha
Clause 44.06 **Bushfire Management Overlay (BMO)**	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire — to identify areas where the bushfire hazard warrants bushfire protection measures to be implemented — to ensure development is only permitted where the risk to life and property from bushfire can be reduced to an acceptable level.	No A planning permit is required for buildings and works associated with specific uses, which does not include a road.	148.89 ha	140.82 ha	108.35 ha	117.55 ha

OVERLAY	PURPOSE	PERMIT TRIGGER	A0	A1	C0	C2
Clause 45.01 **Public Acquisition Overlay** Schedule 1 (PAO1)	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to identify land which is proposed to be acquired by a Minister, public authority or municipal council — to reserve land for a public purpose and to ensure that changes to the use or development of the land do not prejudice the purpose for which the land is to be acquired — to designate a Minister, public authority or municipal council as an acquiring authority for land reserved for a public purpose.	No The planning permit requirements do not apply to acquiring authority of the land if the land has been acquired, and for a use consistent with the purpose for which the land was acquired. As the purpose of the PAO is the development of the adjacent sections of the Western Highway upgrade, by VicRoads, a planning permit is not required.	20.10 ha	20.10 ha	18.83 ha	20.10 ha
Clause 45.05 **Restructure Overlay** Schedule 27 (RO27)	— to implement the Municipal Planning Strategy and the Planning Policy Framework — to identify old and inappropriate subdivisions which are to be restructured — to preserve and enhance the amenity of the area and reduce the environmental impacts of dwellings and other development.	No NB. the overlay controls subdivision and dwelling permissibility based on size of lot (generally described by the zone).	232.96 ha	230.52 ha	213.65 ha	233.56 ha

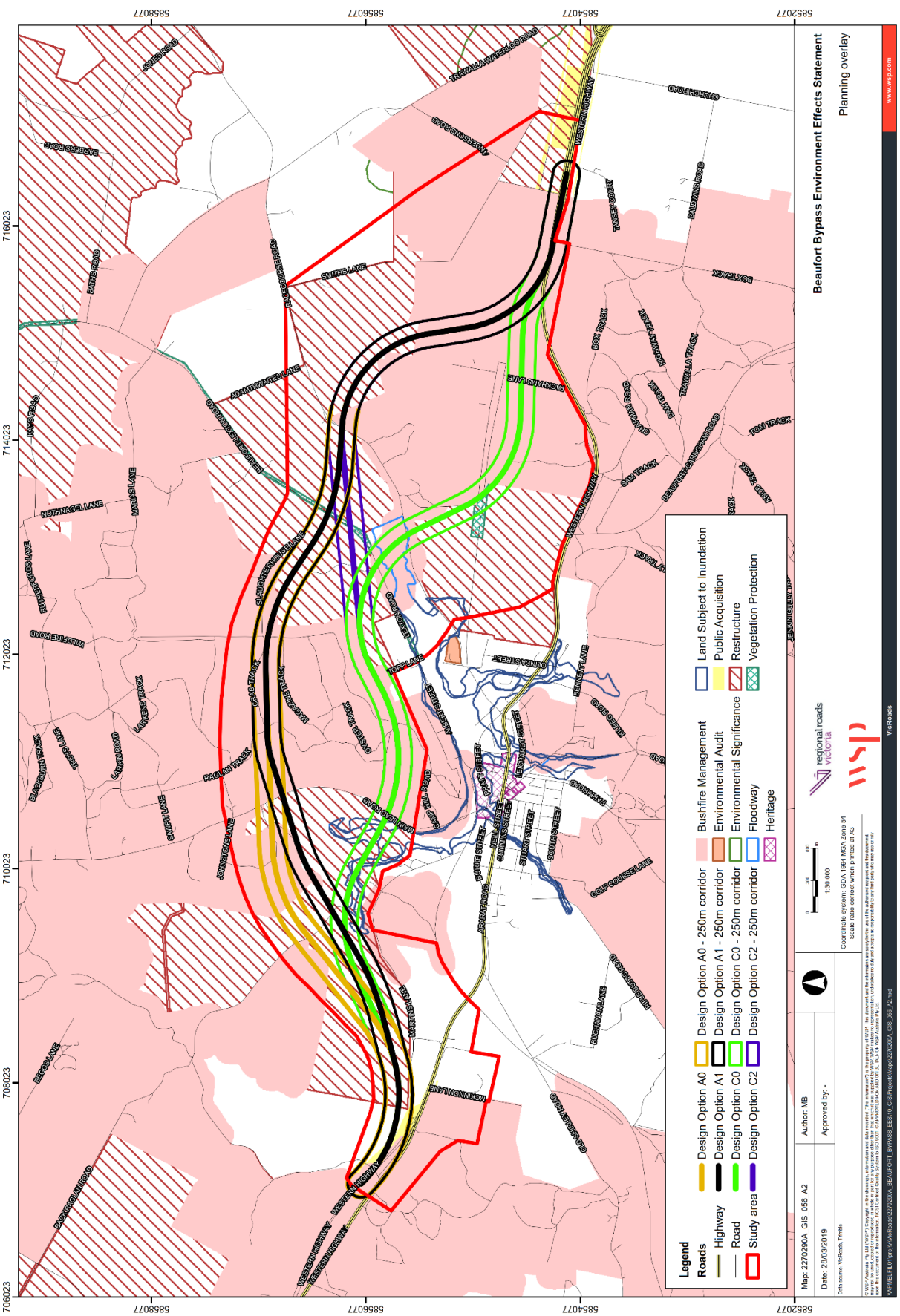


Figure 5.2 Planning overlays

5.4.4 PARTICULAR PROVISIONS

The Particular Provisions of the PPS outlined in Table 5.5 are relevant to the project:

Table 5.5 Particular provisions

PARTICULAR PROVISION	PURPOSE	SUMMARY
Clause 52.02 **Easements, Restrictions and Reserves**	To enable the removal and variation of an easement or restrictions to enable a use or development.	A planning permit would be required to create, vary or remove an easement or restriction.
Clause 52.17 **Native Vegetation**	The purpose of Clause 52.17 is to ensure permitted clearing of native vegetation results in no net loss in the contribution made by native vegetation to Victoria's biodiversity This requires reference to the new Incorporated Document, *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017) or request to DELWP to have the application for vegetation impact treated under transitional arrangements. A planning permit is required under this Clause to remove, destroy or lop native vegetation, including dead native vegetation, except if a specified exemption applies. An exemption from requiring a planning permit does exist where the vegetation removal is "carried out by or on behalf of the Head, Transport for Victoria to the minimum extent necessary to construct or maintain transport system infrastructure on transport land… with the written agreement with the Secretary to the Department of Environment, Land, Water and Planning (DELWP)". However written agreement from DELWP for the use of this exemption has not been provided. An application to remove, destroy or lop native vegetation must be supported by an ecological assessment that takes consideration the steps required to avoid, minimise and offset the loss of vegetation.	An ecological assessment has been undertaken for the project in accordance with the Guidelines (refer to EES Chapter 9: *Biodiversity and habitat*). A planning permit would be required to remove native vegetation.

PARTICULAR PROVISION	PURPOSE	SUMMARY
Clause 52.29 **Land Adjacent to the Principal Road Network**	The purpose of Clause 52.29 is to ensure appropriate access to existing and future arterial roads, as well as the appropriate subdivision of land adjacent to identified roads. Under the provisions of this Clause, a permit is required to create or alter access to a road in a Transport Zone Category 2 or land in a public acquisition overlay if a transport manager (other than a municipal council) is the acquiring authority, and the purpose of the acquisition is for a road.	A permit is not required for proposals which, in the opinion of the responsible authority, satisfy requirements or conditions previously agreed in writing between the responsible authority and the Roads Corporation. As RRV is the referral authority, it can provide advice to the PSC that they are satisfied with the proposal to remove this permit requirement.
Clause 53.02 **Bushfire Planning**	The purpose of Clause 53.02 is to ensure that the development of land prioritises the protection of human life and strengthens community resilience to bushfire. This Clause applies to any application under the Bushfire Management Overlay (BMO). Clause 53.02 provides several objectives that apply to the application.	A planning permit is not required under this clause because it only applies an application under Clause 44.06 – Bushfire Management Overlay, which is not triggered by the project.

5.4.5 INCORPORATED DOCUMENTS

The P&E Act provides that planning schemes may include strategic plans, policy statements, codes or guidelines relating to the use or development of land, referred to as Incorporated Documents.

The following Incorporated Documents included in Clause 72.04 of the PPS and are relevant to the project:

5.4.5.1 BEAUFORT LOCAL FLOODPLAIN DEVELOPMENT PLAN

The *Beaufort Local Floodplain Development Plan* (Pyrenees Shire Council 2012) was introduced by amendment C31 to the PPS and provides an approach to decision making that reflects floodplain management best-practice. The Development Plan applies to the floodplain areas within the Urban Floodway Zone (UFZ), Floodway Overlay (FO) or the Land Subject to Inundation Overlay (LSIO) of the PPS. This includes the Yam Holes Creek floodplain to the north and west of the Beaufort township, and the floodplains of the tributary local streams within the township.

The bypass alignments A1, C0 and C2 intersect areas covered by the Floodway Overlay (FO) and Land Subject to Inundation Overlay (LSIO). As such, the Local Floodplain Development Plan is applicable to the project. This plan is considered further in EES Appendix L: *Surface water impact assessment*.

5.4.5.2 OTHER RELEVANT INCORPORATED DOCUMENTS

- Building in bushfire-prone areas – CSIRO & Standards Australia (SAA HB36-1993), May 1993 (introduced by amendment NPS1).
- Code of Practice for Bushfire Management on Public Land, 2012 (introduced by amendment VC101).
- *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017) (Introduced by amendment VC138).
- Restructure Plan No 27 (Beaufort Environs Sheet A & B) (introduced by Amendment C18 (October 2007)).
- Western Highway Project: Section 1 – Ballarat to Beaufort (introduced by amendments C134 of the Ballarat Planning Scheme and C29 of the Pyrenees Planning Scheme) and Section 2 – Beaufort to Ararat Incorporated Document (Introduced by amendment C37 (July 2013)).

5.4.6 PLANNING APPROVAL PATHWAY

An amendment to the PPS is the appropriate approval mechanism for the project. This pathway is generally preferable where a project's planning permits are either numerous, complex, contain appeal rights and/or where land acquisition is required.

An amendment to a PPS for this type of project would generally entail project specific controls (Clause 45.12 Specific Controls Overlay) applied to all land associated with the use and development of the project. This control is introduced via an Incorporated Document into the Schedule to Clause 45.12 (Specific Controls Overlay).

In order to facilitate the project this requires both amendment to Clause 72.03 (What Does This Planning Scheme Consist Of?) to include the Overlay in the planning scheme maps and the insertion of reference to the Incorporated Document in the Schedule to Clause 72.04 (Documents incorporated in this Planning Scheme). The use of the Specific Controls Overlay mechanism would provide a single approval document which would have the effect of exempting all the other provisions of the planning scheme applicable to the use and development associated with the project, subject to conditions. It would also apply a PAO over any land not within Transport Zone Category 2 or subject to an existing PAO. The PAO would allow for the future public acquisition of land for the project in accordance with the *Land Acquisition and Compensation Act 1986* (see Section 5.2.8). A draft PSA and ancillary documentation will be placed on exhibition as Attachment V to the Beaufort Bypass EES.

There are two pathways that a PSA may be assessed and approved:

- Standard Amendment; and
- Ministerial Amendment under Section 20(4) of the P&E Act.

5.4.6.1 STANDARD AMENDMENT

A Standard Amendment entails preparation of the amendment, formal exhibition, submissions, directions hearing, panel hearing, panel report and recommendations, adoption by the Planning Authority (PSC) and finally publication in the government gazette. The submissions invited by this process as well as subsequent recommendations can result in uncertainty and extended timeframes. A Standard Amendment can be implemented by:

- the Minister for Planning under Section 8 of the Act
- another Minister or a public authority (i.e. PV) under Section 9 of the Act; or
- a municipal council under Section 8A and Section 8B of the Act.

A Standard Amendment would provide a single approval document (Incorporated Document inserted into the PPS) for the project. This would exempt all works within the identified project boundary from the requirements of the planning scheme including the application of a PAO over any parcels that required acquisition. This is a transparent process given the amendment would be formally exhibited and invite submissions. However, exhibition and submissions opens up the amendment to objections. All submissions would be considered by an independent panel appointed to make recommendations on project approval and the process would remain transparent. A Standard Amendment process would likely require a separate exhibition and panel process to the EES with separate statutory timeframes which may result in delays to the project. Notwithstanding, a Standard Amendment is a viable option for the project approvals.

5.4.6.2 A MINISTERIAL AMENDMENT

A Ministerial Amendment, as with a Standard Amendment, would provide a single approval document (Incorporated Document inserted into the PPS) for the project. This would exempt all works within the identified project boundary from the requirements of the planning scheme.

However, a Ministerial Amendment is pursued under Section 20(4) of the P&E Act. Under Section 20(4) the Minister for Planning may prepare an amendment and exempt oneself from any referral, exhibition and public notice requirements as specified under Sections 17, 18 and 19 of the Act. The project must, in the opinion of the Minister, satisfy the relevant criteria outlined in the *Ministerial Powers of Intervention in Planning and Heritage Matters Practice Note 2004*. The relevant criteria include, but are not limited to:

- *Criterion 1 – The matter is one of genuine State Significance as it raises a major issue of State public interest.*
- *Criterion 2 – The matter will give effect to an outcome where the issues have been reasonably considered and views of effected parties are known.*
- *Criterion 5 – The mater requires the co-ordination to facilitate decision-making by more than one agency.*

(DSE Nov 2004, p.2).

In exercising this part of the Act, the Minister is taken to have considered that *"compliance with any of those requirements is not warranted or that the interests of Victoria or any part of Victoria make such an exemption appropriate"* (S20(4)) and before exercising this power that the views of the parties are known (S20(5)). In practice, Government places a strong emphasis on the importance of the *"views of the affected parties are known"*.

There is broad discretion for the Minister for Planning in terms of amending a planning scheme under Section 20(4). The Minister can decide to amend a planning scheme immediately without any notice to any party. Therefore, the timeframes for a Ministerial Amendment can be considerably shorter than that of a Standard Amendment.

Furthermore, where a Ministerial Amendment is pursued and further consultation is required, engagement and communications are essential in delivering the project. The expectation is not that all stakeholders and the community support the project, but rather the Minister needs to be satisfied that their views are known with a record of how this has been addressed (e.g. in the past or in recent times).

Where the Minister may decide that some form of consultation is required or that further consideration of matters is required, before exercising the powers of intervention under Section 20(4), an Advisory Committee may be appointed under Section 151(1) of the Act. The Minister may establish committees to advise on any matters which the Minister refers to them prior to approving a project under Section 20(4) of the Act. The Advisory Committee, managed by Planning Panels Victoria, operates in a similar manner to a planning panel in that they can invite submissions and conduct hearings and can only provide recommendations to the Minister. Section 151 of the Act allows for the establishment of an Advisory Committee to consider a request for the preparation of a PSA. A Section 20(4) amendment may also allow for concurrent exhibition of a draft PSA with the EES and joint assessment of the EES and PSA via a joint Inquiry and Advisory Committee. While utilisation of concurrent exhibition may specifically reduce timeframes, it does afford a more efficient assessment process and avoids the need for the convening of multiple planning and advisory panels.

On the establishment of the committee the Minister agrees the terms of reference and refers the proposal to the Advisory Committee. These terms of reference are specific to each Advisory Committee and establish the purpose, scope, process, outcomes and possibly timeframes for the Advisory Committee. It is noted that Advisory Committees may recommend that a project is not approved via a Section 20(4) amendment and that Standard Amendment process should be followed.

This pathway provides for a streamlined approval process for the project. In principle, a Ministerial Amendment provides a short approvals timeframe, assuming no delays from the Minister for Planning. It carries a small risk in regard to meeting the Ministerial Reasons for Intervention. However, it is likely that a case can be made to DELWP for the project to meet the State significance criteria and the need for coordination of numerous agencies. Comprehensive community consultation has been undertaken which has ensured that affected parties have been notified of the project and that the views of these, and those of the community more broadly, are known.

A Ministerial Amendment would provide the opportunity for concurrent assessment and exhibition. Furthermore, as the Minister for Planning would be the Responsible Authority, any conditions of the approval will also be dealt with by the Minister ensuring the whole process is streamlined.

6 EXISTING CONDITIONS

This section of the report provides a description of the existing land use within and adjacent to the study area to provide the local context of the road and frames the project within its broader regional context, where relevant. A review of the existing strategic plans which guide the use and development of land adjacent to the road corridor has also been undertaken.

6.1 BEAUFORT AND SURROUNDING AREA

The Beaufort township is situated on Yam Holes Creek, an upper tributary of Mount Emu Creek that originates north-west of Beaufort and flows south towards Beaufort. Yam Holes Creek then touches on the northern extent of the urban area of Beaufort where it changes direction to flow east and then north east around the southern base of Camp Hill. There are three tributaries that flow through Beaufort; the Cumberland, Cemetery and Ding Dong Creeks which join Yam Holes Creek as it exits the town flowing north-east through a broad valley, joining Mount Emu Creek to the north of Trawalla.

Beaufort is mostly located on the southern side of Yam Holes Creek and is generally laid out in a grid. A prominent exception to the grid being the diagonal axis of Havelock Street, which is aligned with the visually prominent Mount Cole to the north-west of Beaufort. Havelock Street comprises a main feature of the Beaufort town centre containing the rotunda and war memorial on its axis. The town centre is situated on Neill Street (A8 Western Highway) which bisects the town, separating the north of the town from the south.

The main residential area is located south and west of the town centre, with some smaller areas to the east adjacent to the town centre and in the narrow area between Camp Hill State Forest and Yam Holes Creek to the north. There is an industrial area to the east and north-east within the flatter areas of the Yam Holes Creek valley. There are three low density residential areas located on the eastern township boundary, to the north-east of Camp Hill summit and to the north-west near Deep Lead Road and Back Raglan Road. Beyond these, is farming land, except for the ridge that extends northwards from Camp Hill, which is zoned for public use or conservation. There is a large area identified in the local planning scheme as rural living, extending from the southern township boundary.

As noted in Section 6.4 below, the current residential population of Beaufort is 4,395. The regional economy impact assessment (EES Appendix I) (Ethos Urban 2021) indicates that the residents in Beaufort are employed across a broad range of sectors, including primary, secondary and tertiary sectors, with the most significant being the tertiary sector that employs almost three quarters of the town's workforce.

Most of the population resides in the residentially zoned land located mainly south of the Melbourne-Ararat rail line. A smaller residential area lies to the north of the railway line and in the vicinity of Camp Hill summit immediately south of the study area.

Industry in the PSC has a significant reliance on the road network for its delivery of produce, goods and services from its agricultural, manufacturing, transport and logistics and construction activities. These activities are spread across the Shire and typically involve the use of large commercial vehicles and machinery. Within the township these activities are predominantly located in the industrial zoned land, east of the Beaufort town centre straddling the railway line.

6.2 LAND USE IN THE STUDY AREA

6.2.1 STUDY AREA

The study area is predominantly in broadacre faming use interspersed with native forested woodland. In the *Beaufort Bypass Agricultural Report* (Phillips Agribusiness 2017), included in Appendix C, the overall description of the study area is as a farming environment "*grazing based and associated with conservation management*". This is most evident in the rolling hills and plains, which are under agricultural use. The more steeply sided hills, unsuited to agriculture are generally vegetated, such as Camp Hill which as a result has been provided recognition in its zoning for its conservation 'values'

The Phillips Agribusiness (2017) report also states that the land use of the study area is typical of land use across the region being principally livestock grazing.

The Phillips Agribusiness (2017) finally reports a loose correlation between tenement size and soil type and proximity of land to the Beaufort township. The report notes that tenements in the west of the study area are generally greater than 40 hectares and are in productive agricultural land. The report also notes that in the east of the study area lots are of more "moderate" size but still in agricultural use. The report observes that the lots near Main Lead Road and closer to Beaufort are on poorer quality soils, are smaller in area.

Other notable land uses in the study area include:

- Camp Hill, which is used for recreation including walking, cycling and picnicking, and also hosts several active and historical mining tenements
- the extension of the dry forest areas north of the township beyond Camp Hill State Forest
- the disused trotting track on the west side of Main Lead Road, referred to as the 'Beaufort Commons', in the vicinity of Camp Hill summit that is used for passive recreation
- the wastewater treatment plant east of Beaufort township east of the study area
- the Beaufort trunk water main, located along Main Lead Road and extends from Musical Gully Reservoir north of the project through to Beaufort
- the Beaufort Motorcycle Track and pistol/gun club north east of Beaufort township located on Yam Holes Creek between the Beaufort-Lexton Road and Racecourse Road
- the Snowgums Bushland Reserve on the south side of Racecourse Road near the Beaufort Motorcycle Track
- blue-gum plantations located north of the Melbourne-Ararat rail line at the proposed eastern-tie in to the existing Western Highway
- the rural living zone south of the Western Highway in the west.

6.2.2 LAND USE DESCRIPTION

The study area extends from the termination of the Western Highway upgrade to the west and east of Beaufort. Commencing approximately three kilometres to the west of Beaufort, the study area includes rural and rural residential areas on the southern side of the Western Highway from the top of the ridge to the west of Beaufort, to the railway overpass.

From the west of Beaufort, the study area extends generally east-northeast through rural grazing land, generally following Martins Lane and an unnamed waterway to Back Raglan Road. Although there are several houses to the south of Martins Lane, the alignment options traverse open grazing farmland with no houses directly impacted. Figure 6.2 is a photograph looking west from Back Raglan Road over the study area to the north of Martins Lane.

Figure 6.1 South-east view of study area from west of Martins Lane with new fencing, planting associated with the recently completed Stage 2A of the Western Highway Duplication

Figure 6.2 View of study area looking west from Back Raglan Road

To the east of Back Raglan Road, the study area widens as it crosses the floodplain of Yam Holes Creek on the western side of the Camp Hill ridgeline. The study area immediately to the east of Back Raglan Road contains relatively large farming properties and two houses and is adjacent to the low-density residential area of Beaufort that extends north-west along Back Raglan Road from the Beaufort township. This area of the floodplain, that is overlooked by the low-density residential area on Back Raglan Road, includes a section of Crown land used for the Beaufort Training and Trotting Track.

There are several residential and commercial developments along the western side of Deep Lead Road, including a small cluster of four houses, an earthmoving/sand and gravel business. There are eight houses located on either side of Main Lead Road in the northern half of the study area.

To the east of Main Lead Road, and west of Beaufort-Lexton Road, the study area crosses the Camp Hill ridgeline, which is mostly Crown land within the Camp Hill State Forest, bordered on either side by freehold farmland. The Crown land is used for several purposes, including apiary, recreation and prospecting.

The area between the Camp Hill Crown Land and Beaufort-Lexton Road comprises mostly dryland agricultural land with low density rural residential areas to the south closer to the Beaufort township. There are dwellings along the northern side of Beaufort-Lexton Road, mostly at the southern end closest to the Beaufort township.

To the north-east of Beaufort, between Beaufort-Lexton Road and Racecourse Road, the study area crosses the floodplain of Yam Holes Creek, which contains mostly irrigated farmland, as well as the Beaufort Wastewater Treatment Facility and the Beaufort Motorcycle track.

Figure 6.3 View of study area looking north-west from Racecourse Road

To the south-east of Racecourse Road, the study area covers a wide rural area with alignment options passing through grazing land on either side of a former municipal sanitation depot, since left aside as a nature reserve called the Snowgums Bushland Reserve. The area to the east of the reserve includes farmland and blue-gum plantations on the western side of Smiths Lane, and four houses. The area to the west follows farmland to cross the railway, then follows open woodland immediately south of, and adjacent to, the railway, connecting to the Western Highway at the intersection of Smith Lane. A single dwelling is located on the northern side of the Western Highway to the west of the Smiths Lane intersection within the study area.

6.3 STRATEGIC PLANNING CONTEXT

6.3.1 REGIONAL CONTEXT

The study area is located immediately to the north of Beaufort township within the PSC in western Victoria, approximately 45 km north-west of Ballarat or 150 km from Melbourne.

Beaufort is the largest settlement within and is the administrative centre of the PSC. The PSC has a total municipal population of 7,238 (Australian Bureau of Statistics (ABS) 2016). The municipality covers an area of 3,457 m^2, extending approximately 90 km in a north-south direction and 40 km in an east-west direction. It is bordered by Ararat Rural City to the west, Northern Grampians Shire to the north, Central Goldfields Shire to the north-east, City of Ballarat and Hepburn Shire to the east, Golden Plains Shire to the south-east and Corangamite Shire to the south.

The municipality is in the Central Highlands region of Victoria and is within the hinterland of the major regional city of Ballarat to its east, and to a lesser extent Ararat to the west, both of which provide higher level services not available within the smaller settlements of the Pyrenees Shire. The proximity to these larger settlements, particularly Ballarat, places much of the Pyrenees Shire within the Ballarat hinterland, which combined with the attractive landscapes, is increasingly a factor driving growth of low density and rural residential development.

PSC contains several significant transport corridors, the most significant being the A8 Western Highway that links Ballarat and Melbourne to the east with Adelaide and the Grampians and Wimmera regions to the west. Other major road corridors are the Pyrenees Highway (B180) that links western and northern Victoria, and the Sunraysia Highway (B220) that extends northwest from Ballarat to Mildura. The Beaufort-Lexton Road and Skipton Road (C172) is the only significant north-south road through the Shire. The Melbourne-Ararat rail line and Ararat-Avoca/Maryborough freight rail line crosses the Shire from east to west.

The main settlements in PSC comprises the two small rural service towns of Avoca in the northern part of the municipality and Beaufort in the south. There are also smaller rural settlements scattered throughout the municipality. Primary industry dominates the local economy, particularly in wool, meat, hay production, grain, potatoes and nurseries, grape production and forestry in the south, with viticulture and tourism more prominent in the north.

The northern part of the municipality drains to the Wimmera and the Avoca Rivers in the Murray Darling system and the southern half of the Shire is within the Hopkins River catchment.

Beaufort is located within the southern part of the municipality, at the southern foothills of the Pyrenees ranges. To the south of Beaufort, the landscape flattens into the western basaltic plains. Beaufort is situated on Yam Holes Creek, within the upper catchment area of Mount Emu Creek, a major tributary of the Hopkins River that enters the Southern Ocean at Warrnambool.

6.3.2 CENTRAL HIGHLANDS REGIONAL GROWTH PLAN

The *Central Highlands Regional Growth Plan* (Victorian Government 2014) is a policy document referenced with Clause 11.01-1S (Settlement) within the PPS. It has been developed in a partnership between local government and state authorities. The Plan provides an approach to land use planning in the Central Highlands, which covers the municipalities of Ararat, Ballarat, Golden Plains, Hepburn, Moorabool and Pyrenees. The Plan identifies opportunities to accommodate and encourage growth over the next 30 years. The Plan aims to provide a 'productive, sustainable and liveable region for its people', which is also the shared vision for this Plan.

The Plan identifies:

- where future development will be supported
- environmental, economic, community and cultural assets of regional significance that should be preserved and developed
- how the region can respond to opportunities and challenges
- key regional priorities for future infrastructure and investment to support growth.

In relation to Beaufort, the plan notes the following future directions:

- support Beaufort as a town providing services in the Ballarat hinterland
- encourage residential growth to take advantages of existing services
- support local employment opportunities
- plan for managing the opportunities and impacts associated with upgrades to the Western Highway.

Specifically, with regards to future upgrades of the Western Highway, the plan states that transport infrastructure upgrades "*may lead to a change in the role and function of the town*" and "*further increase the attractiveness of Beaufort as an alternative location for residential development in Ballarat's hinterland*". A land use planning action of relevance is to "*plan for a potential longer-term highway bypass of the town both in terms of preferred route and in consideration of how to manage any impacts on employment, the existing road network and the character of the town*".

6.3.3 GLENELG HOPKINS REGIONAL CATCHMENT STRATEGY 2013-2019

The *Glenelg Hopkins Regional Catchment Strategy 2013-2019* (Glenelg Hopkins Catchment Management Authority (CMA) 2013), now in its third iteration, establishes a vision and framework for managing the region's natural resources. The strategy was developed through a collaborative effort from local community members, government representatives and other stakeholders. Each version of the strategy has been guided by an overarching vision statement that summates the overall purpose of the strategy. The current vision statement is:

> *"Achieving a healthy and sustainable relationship between the natural environment and the community's use of land and water resources."*

The vision over the next 50 years aims to foster an environment where:

- biodiversity thrives
- environmental assets are valued
- the community is proactive and aware of ecological sustainability.

At the time of writing this report, the Glenelg Hopkins CMA were currently developing the fourth iteration of the Glenelg Hopkins Regional Catchment Strategy and is due to be submitted for Ministerial approval by 30 June 2021.

6.3.4 PYRENEES SHIRE COUNCIL PLAN 2017-2021

The *Pyrenees Shire Council Revised Council Plan 2017-2021* (Pyrenees Shire Council 2020) was adopted by Council on the 19 May 2020. The plan has the overall vision of achieving "*healthy, vibrant, prosperous and connected communities*". The Plan includes several strategic objectives, these include:

- Roads and Townships: Plan, manage, maintain and renew infrastructure in a sustainable way.
- Relationships and Advocacy: Build and maintain effective relationships with community, government and strategic partners.
- Community Connection and Wellbeing: Engage with communities to provide responsive and efficient services that enhance quality of life.
- Financially Sustainable, High-performing Organisation: Respond to community needs and strive for excellence in service delivery.
- Development and Environment: Undertake forward planning and facilitate growth in the local economy.

6.3.5 PYRENEES SHIRE COUNCIL GROWTH STRATEGY 2015–2018

Developed as a complementary document to the council plan, the Growth Strategy establishes an action plan towards delivering on one of the plans identified key objectives, this being to develop the local economy and increase the population of the Pyrenees Shire.

The Growth Strategy needs to be read in conjunction with several other strategies and policies developed by Pyrenees Shire to facilitate long term growth and wellbeing within the municipality.

The Western Highway and Beaufort Bypass projects are referenced several times throughout the strategy. The highway is identified as a key economic asset and the development of the bypass will further enhance its value to the community. According to the Growth Strategy, "*the development of the Beaufort Bypass in the near future will further improve accessibility to Ballarat and Melbourne*".

The existing highway environment is identified as a key challenge for the local economy and community, with amenity and safety of the community standing out as a key concern. Increasing volumes of traffic and large transport vehicles are also a key concern that will be addressed through the construction of a bypass.

6.3.6 PYRENEES TOURISM STRATEGY 2016–2019

Tourism in Pyrenees Shire is a valuable sector for employment, recreation and additional services and facilities. The Pyrenees region attracts over 40,000 visitors a year through its strong events calendar and historic features (Pyrenees Shire Council 2016a). Beaufort is considered to have the following tourism strengths:

- refreshment stop (cafes)
- nature – bushwalking, mountain biking.

Opportunities to improve competitive positioning of Beaufort are also identified, these are:

- main street improvement
- improve directional signage to/at nature reserves
- enhance business proactivity and collaboration
- interpret history.

The Pyrenees Shire Council *Tourism Strategy 2016-2019* (2016a) is to be implemented in conjunction with local tourism businesses, regional tourism organisations, community groups, government agencies and other stakeholders.

6.3.7 BEAUFORT WALKABILITY PLAN 2016

The PSC *Beaufort Walkability Plan* (2016b) aims to improve the health and wellbeing of all Beaufort residents. Improving walkability and cyclability in Beaufort is key to improving the wellbeing of residents, as well as opening opportunities for underused transport modes, and reducing the car dependence within the town. This plan includes Universal Design principles to ensure that spaces are designed for all members of the community to use. As aforementioned, the construction of the project will reduce traffic through the town centre, allowing for a greater level of safety and provision of walking facilities. Working alongside neighbouring municipalities, this plan will also help to develop cycling trails between towns and regions, promoting sustainable transport options in the Central Highlands region.

A range of objectives have been identified to guide the development of Beaufort's walkability, these being:

- to increase participation in physical activity through the development, maintenance and management of quality and better integrated infrastructure suitable for walking, cycling and where appropriate equestrian use
- to enable walking and cycling to be a legitimate form of transport for short trips within the township for people of all ages and mobility
- to make the Beaufort Town Centre more pedestrian and bicycle friendly and make walking and cycling a safer form of transport for residents and visitors
- to connect places that people want to get to including; the central shopping area, train station, schools, pool, skate park and playgrounds, Lake Beaufort and Recreation Reserve/Caravan Park and Camp Hill
- to identify and improve existing path and trail facilities
- to extend existing path and trail facilities to provide a comprehensive and connected network of circuits for recreation and functional use
- to celebrate Beaufort's history and artistic culture, by making local sites and attractions easily accessible to residents and visitors
- to complement Beaufort's local character.

The Walkability Plan seeks to increase walking as a mode of transport within the town of Beaufort. It is noted that the Western Highway is one of the key constraints to improving walking safety and infrastructure within the town and the lack of footpaths on some of the routes nominated. The east-west route of the highway cuts a direct barrier through the centre of the town, isolating residents in the north from accessing many community facilities in the south.

6.4 FUTURE LAND USE AND DEVELOPMENT

Assessment of the likely effects of the project on proposed future land use patterns takes into account projected population growth and the designated areas proposed to accommodate such growth. The rate of building development and direction of development are also important considerations. These matters are discussed below.

6.4.1 POPULATION DATA

As outlined in Table 6.1 below, in the five years between the 2011 and 2016 census, the Beaufort Statistical Area Level 2 geographical area (SA2) grew by 562 persons, at an annual growth rate of 2.9% over the period. Pyrenees Shire's population grew from 6,670 persons in 2011 to 7,240 persons in 2016, presenting an annual growth rate of 1.7%.

SA2 boundaries are defined by the ABS for the Census of Population and Housing. SA2s are the smallest level of output for the Census and are determined based on population. However, in areas of low residential density, a SA2 can cover a large geographical area. These boundaries remain consistent with the SA2 areas defined in the 2011 Census, which enables direct comparison of demographic data.

Table 6.1 Beaufort and Pyrenees Shire population statistics, 2011 and 2016

	2011 CENSUS	2016 CENSUS	CHANGE (2011-2016)	ANNUAL AVERAGE GROWTH RATE (2011–2016)
Beaufort (SA2)	3,833	4,395	+562	+2.9%
Pyrenees Shire (S)	6,670	7,240	+570	+1.7%

Source: Australian Bureau of Statistics, Census of Population and Housing 2011 and 2016

6.4.2 POPULATION PROJECTIONS

Population forecasts prepared by the State Government (Victoria in the Future 2019) provide projections until 2036 for both Pyrenees Shire (S) and the Victoria in Future Statistical Area (VIFSA) of Beaufort-Snake Valley District, which encompasses an area that is wider than the aforementioned Beaufort SA2.

The population forecasts for Pyrenees Shire and the Beaufort-Snake Valley District VIFSA between 2019 and 2036 show annual growth rates of +0.3% and +0.9% respectively.

Table 6.2 Population projections, 2019 and 2036

	2019	2036	CHANGE (2019-2036)	ANNUAL AVERAGE GROWTH RATE (2019–2036)
Beaufort-Snake Valley District VIFSA	4,246	4,526	+280	+0.4/%
Pyrenees Shire (S)	7,350	7,710	+360	+0.3%

Source: Victoria in the Future 2019, DELWP 2019.

6.4.3 FUTURE LAND USE STRATEGIES

6.4.3.1 CENTRAL HIGHLANDS REGIONAL GROWTH PLAN

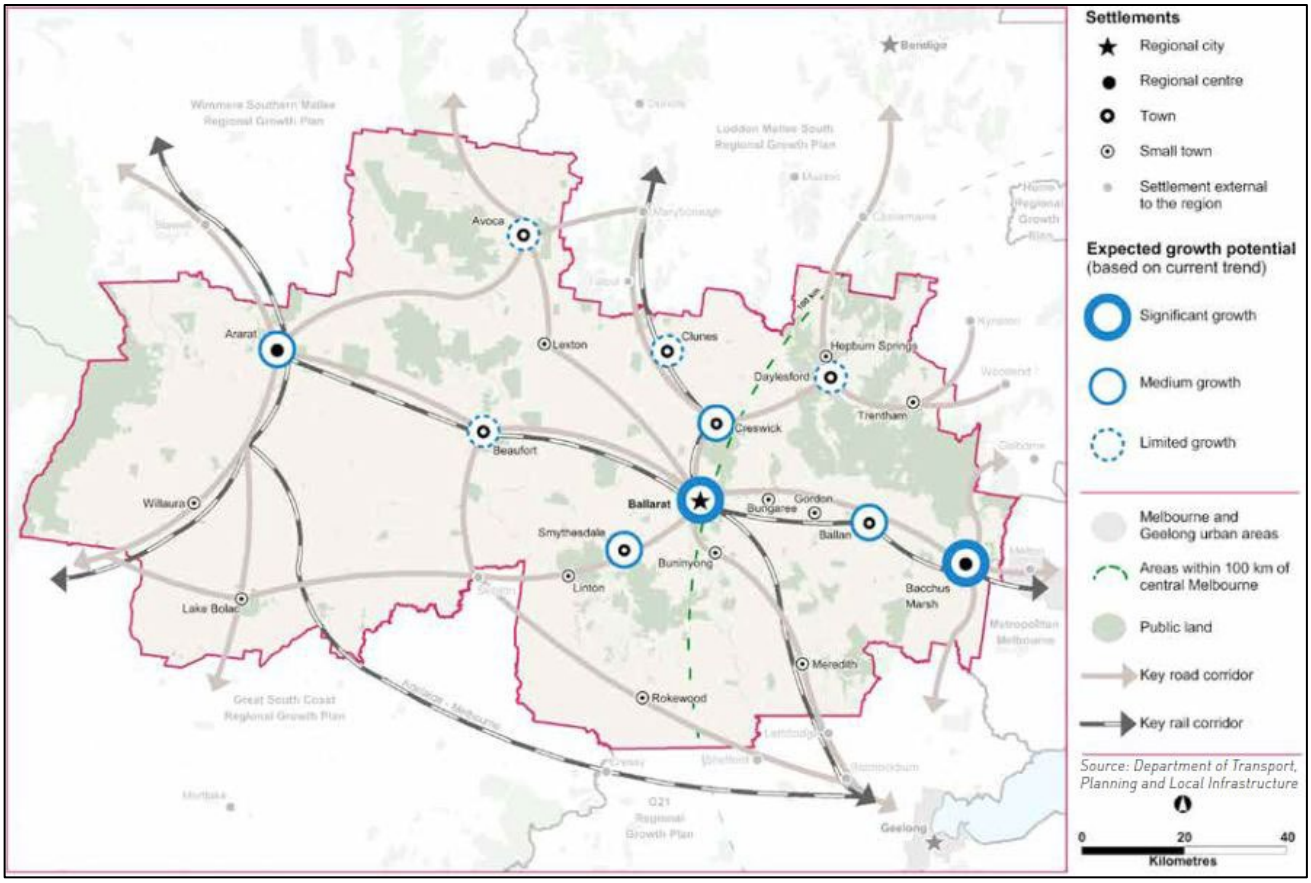
The *Central Highlands Regional Growth Plan (Victorian Government 2014)* identifies key directions for land use planning, and supports decision making at the local level. The Plan identifies Beaufort as having a key settlement relationship with Ballarat, and consistent with current trends, the Plan provides that Beaufort would be subject to a limited growth projection in the future. This limited growth potential is expected to:

- have slow and sporadic growth patterns occurring mostly on the fringes of existing towns, and meet demand, which is steady and low and generally localised
- have a typical annual population growth rate of between 20 and 100 people.

As such, the Plan aims to support growth in Beaufort, rather than promote growth. The Plan also states that proposals that are consistent with the Municipal Strategic Statement (now MPS) will be favourably considered, providing development requirements are met.

The Plan identifies several future directions specifically for Beaufort, these are:

- support Beaufort as a town providing services in the Ballarat hinterland
- encourage residential growth to take advantage of existing services
- support local employment opportunities
- plan for managing opportunities and impacts associated with upgrades to the Western Highway.



Source: Central Highlands Regional Growth Plan 2014, Department of Transport, Planning and Local Infrastructure.

Figure 6.4 Regional growth map

BEAUFORT FRAMEWORK CONTEXT REPORT (2017)

The 2017 *Beaufort Framework Context Report* was prepared for PSC by Hansen Partnership. The project study area was publicly available at the time this report was prepared. The aim of this document is to provide a series of background investigations, contributing to an understanding of the township of Beaufort as it exists in 2017. This document will then form the basis for a Beaufort Framework Plan, which will sit within the wider strategic planning project of 'Pyrenees Futures'. The report includes analysis of existing conditions, current policy, infrastructure, built form, as well as the future growth, economics and landscape of Beaufort township.

Important points to note from the Framework Context Report that have relevance to the project include:

- overlays will have a significant influence on the future growth of the township specifically the Restructure Overlay (RO), Bushfire Management Overlay (BMO), Land Subject to Inundation Overlay (LSIO) and Floodway Overlay (FO)
- the Restructure Overlay (RO) to the north and east of the township may warrant review subject to the final bypass alignment
- around 20 dwellings per year are being approved in the township and immediate rural surroundings
- several areas that will possibly be impacted by the bypass have been identified as growth areas for future population:
  - west of Main Lead Road
  - Martins Lane
  - south east of Racecourse Road
  - north of Beaufort-Lexton Road
- consideration will need to be given to how heavy vehicle movement will be managed into the future.

As the plan has not been adopted by PSC this will not be further considered as part of this assessment.

6.4.4 PYRENEES FUTURES

The PSC is undertaking a review and update of the existing land use policies of nine towns within the Shire, this review will be the first review of local planning policy since 1998. Whilst in its infancy, Pyrenees Futures will have long term land use and planning implications for Beaufort as extensive consultation and research will be undertaken to deliver a new planning framework for the town.

The framework plans for Beaufort, which are being developed in light of extensive community engagement undertaken in May and June 2017, are currently in draft form. These plans will be presented to Council, before being released for public review. On completion, the Beaufort Township Framework Plan will include directions for land use, urban design and policy reform. It will also include a specific Town Centre Activation Plan to look at short-term improvements aimed at bringing more life to the town centre and helping make the town bypass ready.

Key priorities of the Beaufort Township Framework Plan which relate to the project have been identified in the *Pyrenees Futures in Beaufort: Your Views* 2017 and comprise:

- **Priority 1 – Destination Beaufort:** People want Beaufort to be seen as more than a highway stopover. This relates as much to the proposed highway bypass as a desire to explore opportunities to define the town's identity and make the town centre a more vibrant focus for activity.
- **Priority 4 – Activating key sites:** Better pedestrian movement is vital to the main street's function, and more opportunities should be explored for al fresco dining and outdoor activity – particularly in view of the bypass.
- **Priority 7 – Defining and beautifying gateways:** Beaufort's entrances help define its sense of place. Each is unique and has a particular rural characteristic that can be brought out. A potential bypass brings forward the need to plan for a new northern approach. The Pyrenees Futures and Beaufort Township Framework Plan therefore acknowledge the project and strategic planning is being considered in the context of the project being delivered in the near future.

6.5 LAND TENURE

6.5.1 CROWN LAND

DELWP manages Camp Hill State Forest and several unreserved crown land blocks, all immediately north of Beaufort. Camp Hill Forest is an important community asset providing opportunity for many informal recreation pursuits such as bush walking, gold prospecting and mountain bike riding.

The Crown land within the study area includes:

- Beaufort Common (Beaufort Trotting Track), the northern part of which is affected by the C alignments (Community Use Area) (DELWP)
- Camp Hill State Forest (the northern part of which is affected by the A alignments, and the southern most part (including the summit of Camp Hill which is within the adjacent Camp Hill Recreation Reserve – Beaufort) is severed by the C alignments. (DELWP)
- Beaufort Wastewater Treatment Facility, managed by Central Highlands Water, the eastern part of which is affected the C0 alignment. (Central Highlands Water)
- Snowgums Bushland Reserve, (Parks Victoria) is not directly impacted by any of the four alignment options
- Melbourne-Ararat rail line which is crossed by all alignments (VicTrack).

Figure 6.5 below shows the location and distribution of Crown land within the study area. Various road reserves within the study area have not been shown on the Crown land map.

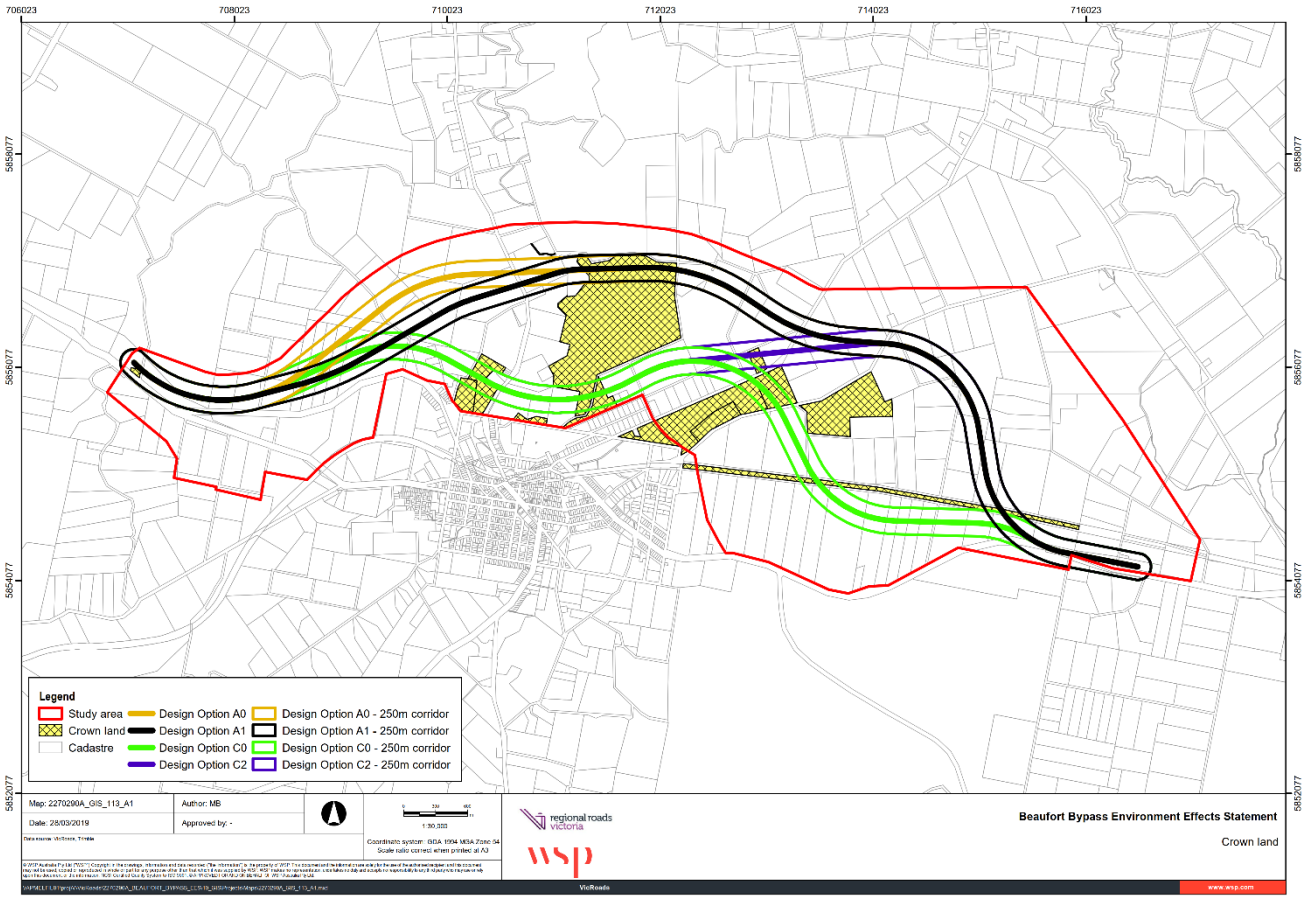


Figure 6.5 Crown land within the study area

6.5.1.1 APIARY LICENCES

There are two commercial apiary sites within Camp Hill Forest. Figure 6.6 shows the location of these existing Apiary Licences within the study area.

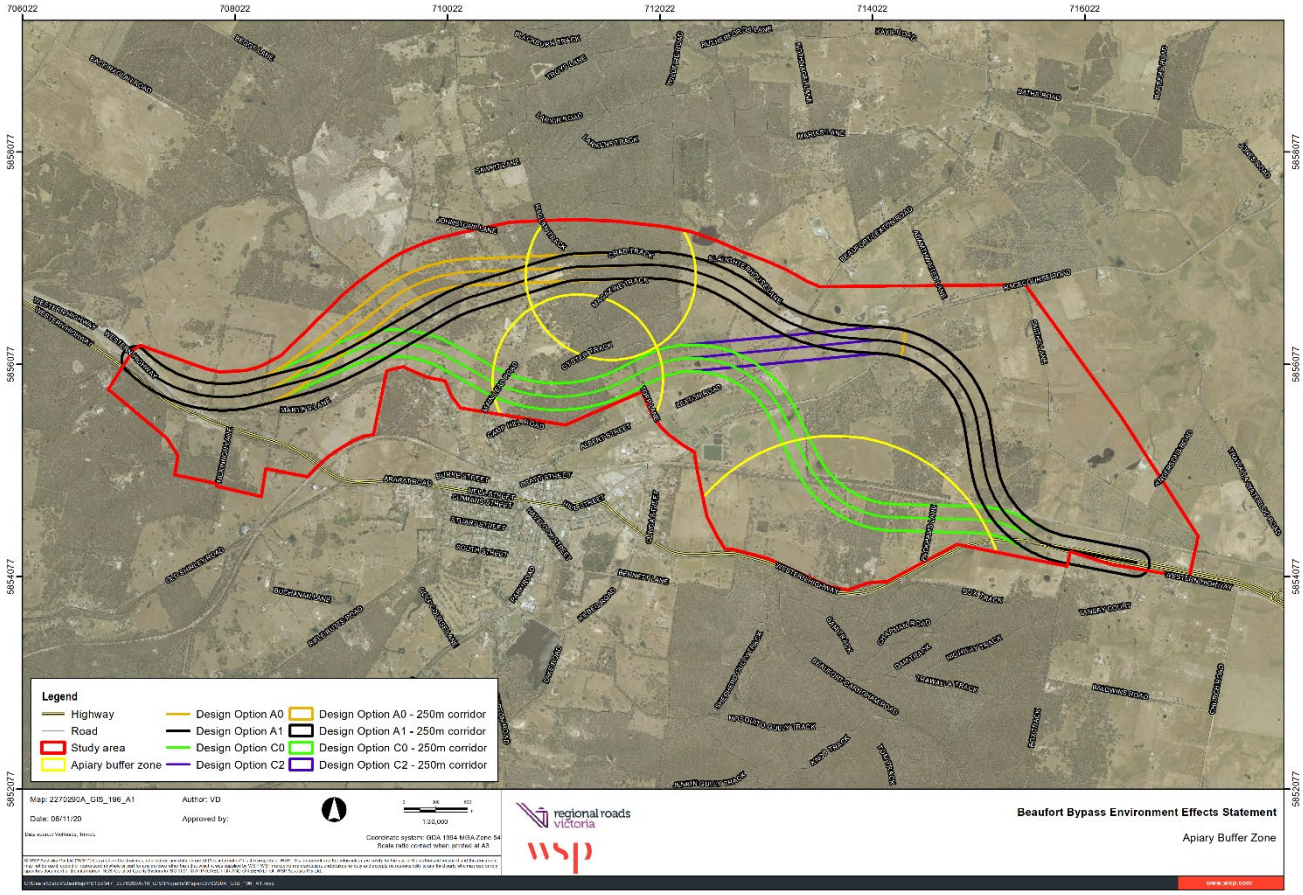


Figure 6.6 Existing Apiary Licence buffer zones within the study area

6.5.1.2 MINING LEASES

There are two types of mining licenses: 'Prospecting', whereby prospectors and small-sale miners can explore for and mine the minerals in an area of five hectares or less, and 'exploration', whereby the holder can explore for minerals in the licence area. In regard to the study area, there are two active mining leases, as well as a single 'surrendered' license that has been closed. Figure 6.7 illustrates the location of the two active prospecting licenses (PL1016 & PL1038), located in between the A and C alignments. The active exploration license (EL006454 – not shown on map) is an application for mineral exploration. As is typical for exploration licenses, this covers a wider area than prospecting licenses, and in this instance, encompasses the entire study area and both prospecting license sites.

The project will not require statutory approval under the *Mineral Resources (Sustainable Development) Act 1990*.

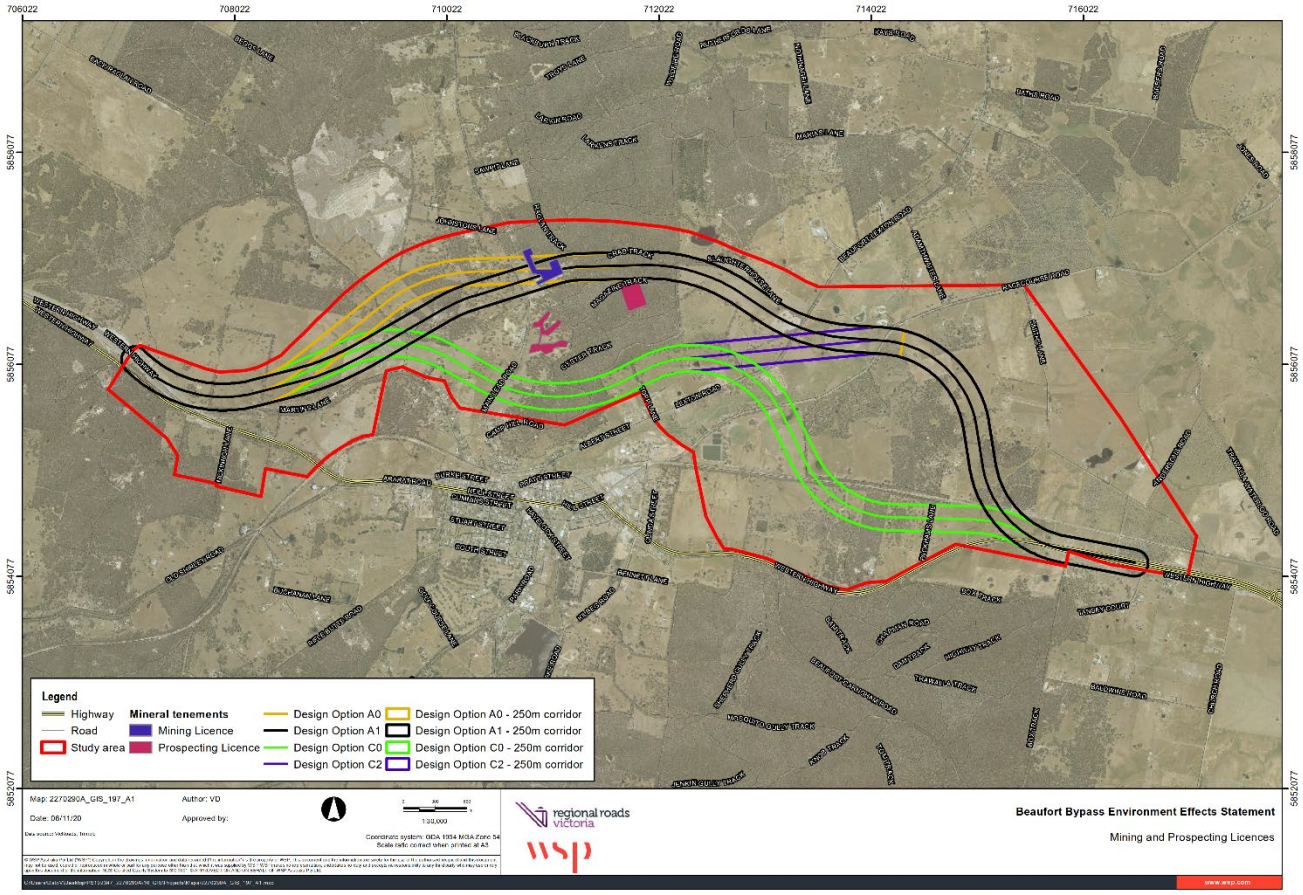


Figure 6.7 Mining licenses

6.5.2 FREEHOLD LAND

The majority of the land within the study area is freehold land in private ownership. All alignment corridor options of the project will involve land acquisition and potential impacts to dwellings. Table 6.3 below outlines the number of dwellings within each 250 m corridor, as well as the total area of potential acquisition of freehold land as described by the 250 m corridor to each alignment, while Table 6.4 outlines the number of lots and owners impacted. Figure 6.8 displays land ownership in the study area, with colours indicating separate ownerships (also see Appendix B for a more detailed view of individual land parcels).

Table 6.3 Land and dwelling impacts for alignment options

OPTION NO.	TOTAL AREA OF ACQUISITION (m^2)	NUMBER OF DWELLINGS (250 m CORRIDOR)
Option A0	2,495,375	2
Option A1	2,503,380	3
Option C0	2,351,106	5
Option C2	2,434,279	4

*** Total area of acquisition for each option is a preliminary indicative value – not the final area of acquisition ****

Table 6.4 Lots impacted

OPTION NO.	LOTS IMPACTED (250 m CORRIDOR)	LANDOWNERS IMPACTED (250 m CORRIDOR)
Option A0	59	24
Option A1	55	21
Option C0	65	22
Option C2	66	25

Landowner numbers do not include Crown land parcels*

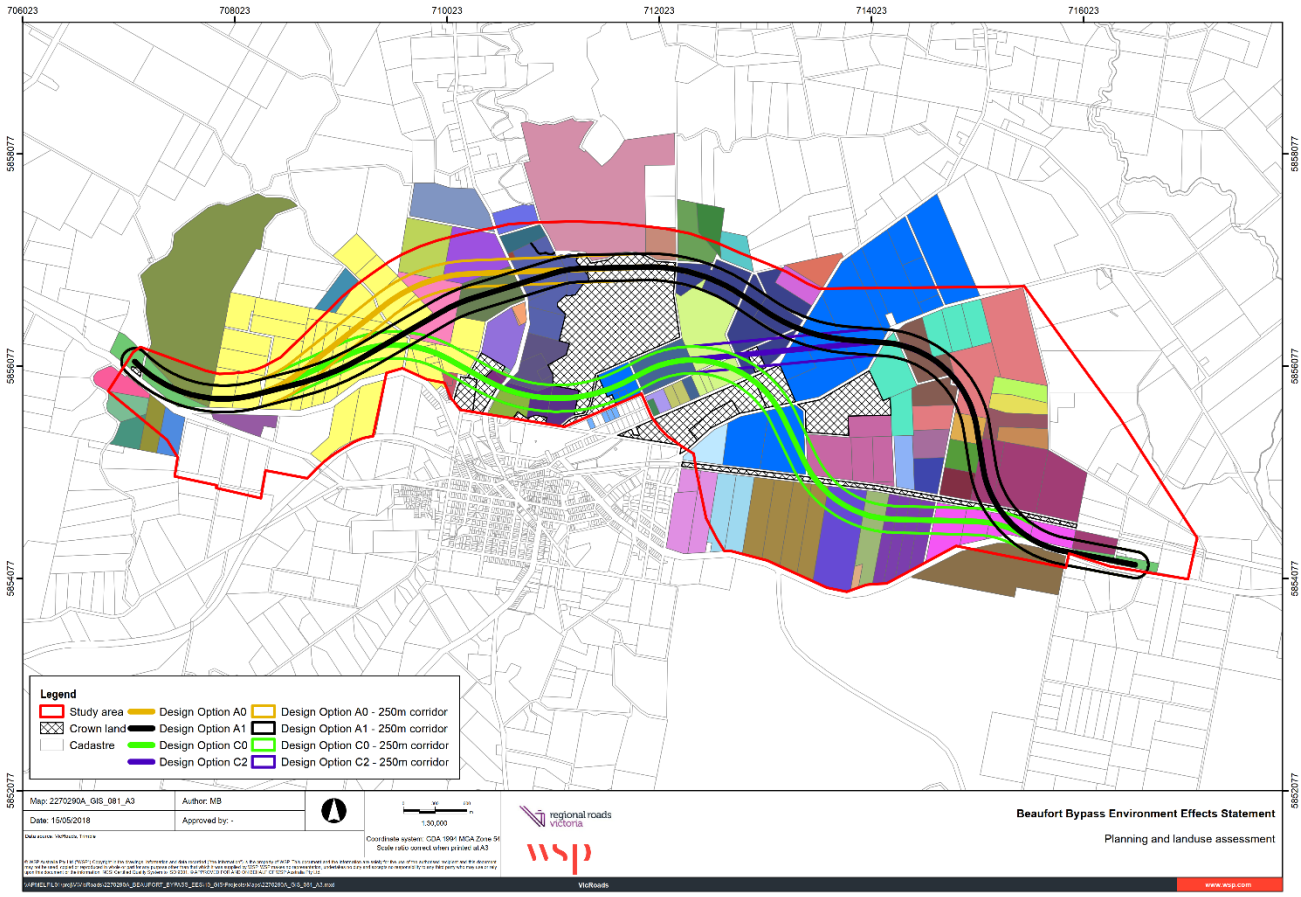


Figure 6.8 Land ownership within the project study area

7 IMPACT ASSESSMENT – FOUR ALIGNMENT OPTIONS

This section of the report addresses potential planning and land use impacts associated with the construction and operation of the project. These land use and planning impacts have been informed by the risk pathways identified in Section 4.3. The impact assessment also identifies potential benefits and opportunities to land use the project is expected to generate.

7.1 CONSISTENCY WITH PLANNING POLICY

7.1.1 CONSISTENCY WITH PLANNING POLICY FRAMEWORK

The PPF, and its relevance to the project are outlined in Section 5.3.1 of this report. The following sections assess the potential impacts of the project against relevant policies of the PPF in the PPS.

7.1.1.1 CLAUSE 11: SETTLEMENT

Clause 11 outlines a hierarchy and network of settlements across Victoria and the sustainable development of settlements. The applicable regional plan is Central Highlands Regional Growth Plan.

The project will promote the sustainable growth of Beaufort and surrounding areas by improving travel efficiency, access, connectivity, safety and capacity of the transport network. The project will improve connections between Beaufort and surrounding towns, as well as the connection between Melbourne and Adelaide, a key trade route for both states and nationally as a significant freight route.

Furthermore, this project will deliver an important bypass for freight and regional traffic from the Beaufort town centre. This reduction in traffic in the town centre reduces vehicle pedestrian conflict and will have positive implications for road safety and urban amenity thereby facilitating the sustainable growth of the Beaufort town centre. The Central Highlands Regional Growth Plan is discussed in Section 6.4.3.

All options are consistent with Clause 11 of the PPS.

7.1.1.2 CLAUSE 12: ENVIRONMENTAL AND LANDSCAPE VALUES

Clause 12 seeks to protect and conserve Victoria's biodiversity (12.01-1S Protection of Biodiversity), ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation (12.01-2S Native Vegetation Management), protect and enhance river corridors, waterways, lakes and wetlands (12.03-1S River Corridors, Waterways, Lakes and Wetlands) and maintain distinctive breaks and open rural landscapes between settlements (12.05-2R Landscapes – Central highlands).

All project options would require the removal of native vegetation, require multiple crossings of Yam Holes Creek and cross the natural landscape feature of the range of hills extending north from Camp Hill.

The potential for the project to impact on environmental values (biodiversity and waterways) of each option have been assessed in EES Appendix C: *Flora and fauna impact assessment*, including native vegetation clearance and the optimal outcome in avoidance, minimisation and offsetting of native vegetation clearance, potential impacts on threatened fauna including habitat connectivity and ecological communities (12.01-1S, 12.01-2S). Based on the alignment options, the following total vegetation losses estimated for each alignment are 62.61 ha (A0), 62.55 ha (A1), 62.30 ha (C0) and 50.70 ha (C2), using the classifications of 'patch' and 'scattered tree' under *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017b). The total amount of mapped Ecological Vegetation Classes (i.e. patches only) assumed impacted for each alignment are 58.15 ha (A0), 57.8 ha (A1), 58.88 ha (C0) and 47.06 ha (C2). Each alignment impacts 12 different Ecological Vegetation Classes. There is a clear distinction between the impacts on native

vegetation on the alignment options, with A0 having the highest impact, followed closely by A1 and C0. C2 clearly has lower levels of impacts on native vegetation.

The potential for the project to impact on waterways have been assessed in the surface water report including location and number of waterway crossings, flood impacts disturbance within the floodplain and water quality. While all options require multiple crossings of Yam Holes Creek and tributaries, the A Options generally cross waterways and floodplain perpendicular to the direction of flow and in the western part of the study area, are further up the catchment, and the C0 Option has a narrower floodplain crossing than the A Options and C2 Option on the downstream side of Beaufort. The impacts on surface water are assessed in EES Appendix L: *Surface water impact assessment*.

The potential for the project to impact on landscapes have been assessed in EES Appendix F: *Landscape and visual impact assessment*, which assessed that the A Options would have a greater visual impact on the Camp Hill State Forest, and the C0 Option would have a greater visual impact on the adjacent Beaufort motorcycle track and Snowgums Bushland Reserve than other project options. With regards to open space, the C Options will result in severance of the Camp Hill Recreation Reserve (which is located at the summit of Camp Hill and to the south of the C alignments) from the Camp Hill State Forest to the north. However, this follows the boundary between Crown land managed as a recreational area to the south, and Crown land managed as a State Forest to the north. Access could be maintained to and between both sections could be provided through the inclusion of appropriate linkages in the project design. In terms of wider landscape and open space linkages in the study area, all options will impact on the Camp Hill ridgeline. The more southerly C Options are closer to the existing landscape boundary between Beaufort and its rural surrounds. Potential visual impacts are assessed in EES Appendix F: *Landscape and visual impact assessment*.

7.1.1.3 CLAUSE 13: ENVIRONMENTAL RISKS AND AMENITY

Clause 13 seeks to strengthen the resilience of communities by seeking to ensure that settlements and land uses appropriately respond to risks and environmental constraints, including bushfire (13.02-1S Bushfire Planning), flooding (13.03-1S Floodplain Management), land contamination (13.04-1S Contaminated and Potentially Contaminated Land), as well ensuring amenity is not prejudiced by noise and air quality emissions (13.05-1S Noise Abatement, 13.06-1S Air Quality Management).

The study area is within a designated bushfire prone area and as such all options must take Clause 13.02-1S into consideration. The project is also affected by a Bushfire Management Overlay (BMO). It is considered that the project will not increase the risk to life, property, community infrastructure and the natural environment from bushfire and the project may improve emergency access to bushfire prone areas in accordance with Clause 13.02-1S. RRV has undertaken consultation with the Country Fire Authority and DELWP, which has indicated the need to maintain fire management access within the Camp Hill State Forest, where the Bypass would sever existing fire access. Access into higher risk bushfire areas of Camp Hill State Forest will be maintained through the inclusion of appropriately designed alternative access roads that will be refined as a part of detailed design work on confirmation of the approval of a preferred alignment.

A detailed assessment of potential flooding impacts is provided within EES Appendix L: *Surface water impact assessment*.

The potential risk of contaminated land adversely impacting the future land uses is low (Clause 13.04-1S). A detailed assessment is provided within EES Appendix K: *Soils and geology impact assessment*.

In regard to amenity impacts, the project triggers the requirement for noise attenuation based on the *VicRoads Noise Reduction Policy, 2005,* which would be designed to the standards described within the *VicRoads A Guide to the Reduction of Traffic Noise, 2003* (Clause 13.05-1S) as specified in EES Appendix H: *Noise and vibration impact assessment*. A detailed assessment is provided within EES Appendix H: *Noise and vibration impact assessment*. In addition, air quality impacts for the project will be managed in accordance with the Intervention Levels prescribed in the State Environment Protection Policy (Air Quality Management) for NO_2, PM_{10} and $PM_{2.5}$ using the Air Quality Screening Tool [Revision 3, October 2018] (Clause 13.06-1S). A detailed assessment is provided within EES Appendix B: *Air quality impact assessment*.

The project will redirect the majority of freight traffic from the centre of Beaufort and so reduce amenity impacts relating to noise and air pollution for residents in the Beaufort town centre. Subsequently community amenity is improved by the construction of this new transport route. Noise and air impacts are anticipated to be marginally higher for the C alignments due to their closer proximity to a higher number of houses than the A alignments, although there will be less overall impact on people due to the dispersal of noise and air pollution in areas of lower density housing.

7.1.1.4 CLAUSE 14: NATURAL RESOURCE MANAGEMENT

Clause 14 seeks to protect the State's agricultural base by preserving productive farmland (14.01-1S Protection of agricultural land), to assist in protection and restoration of catchments, water bodies, ground water and the marine environment (14.02-1S Catchment Planning and Management) and to protect water quality (14.02-2S Water Quality).

The project will involve the removal of some agricultural land in the eastern and western sections of the study area (refer to Table 5.3). This land is not of identified strategic significance in the local or regional context and therefore potential impacts are not considered to be high. The C options have the least direct impact on agricultural land as they impact on smaller lots than the A options. Long term impacts caused by land acquisition will need to be considered, refer to the Agriculture Report (Appendix C to this report) and EES Appendix I: *Regional economy impact assessment* for further details.

Planning of the project has considered the State Environment Protection Policy (Waters), *Construction Techniques for Sediment Pollution Control 1991* and the *Environmental Guidelines for Major Construction Sites 1996*. In accordance with these policies, consultation has occurred and will continue to occur with the Glenelg Hopkins Catchment Management Authority to understand if any works have the potential to impact nearby land uses, drainage or flood paths (Clause 14.01-1 and 14.02-2). A detailed assessment is provided within EES Appendix L: *Surface water impact assessment*.

7.1.1.5 CLAUSE 15: BUILT ENVIRONMENT AND HERITAGE

The Aboriginal cultural heritage impact assessment (EES Appendix A) concluded that all options have the potential to impact on known cultural heritage values located within each alignment. The assessment confirms option C2 has the least area of Aboriginal cultural heritage potential based on values and landscape units with potential to contain sensitivity. Refer to EES Appendix A: *Aboriginal cultural heritage impact assessment* for further discussion.

Two historic sites in the study area are included on the VHR, these being the Nil Desperandum Mine and the Racecourse Road Mullock Feature. In addition, eight heritage places are listed within the study area, several of which are impacted by different alignment options. It was concluded that Option C2 has the least impact on heritage sites. Refer to EES Appendix E: *Historic heritage impact assessment* for further discussion.

The study area also includes areas of cultural heritage sensitivity (15.03-1S, 15.03-2S), being previously registered as Aboriginal cultural heritage places. The project has sought to avoid impacts where possible, and otherwise minimise impacts to the extent practicable. Appropriate management and mitigation measures will be implemented via the project's Construction Environmental Management Plan and approved CHMP for the project.

7.1.1.6 CLAUSE 17: ECONOMIC DEVELOPMENT

In general, the regional economy impact assessment (EES Appendix I) concludes that the economic impacts are similar across all four alignments. It advises that the C Options are marginally better suited due to there being less direct impacts on agricultural land than the A Options. In addition, it is noted from consultation feedback that there is a perception from business owners within the Beaufort township that the C Options perform better as they are closer to the town.

The project will create long term economic benefits to local, regional and national freight industries, through efficient freight movement via the bypass route.

Economic benefits of the project are also expected to be realised for the Beaufort Township during the construction phase, through:

- temporary uplift in in local commercial accommodation occupancy
- temporary uplift in revenue in retail spending
- temporary uplift in construction aligned industry.

Longer term economic benefits of the Beaufort township relate to the leveraging the environmental benefits from removing through traffic from the town centre, to broaden the townships amenity appeal to visitors and potential residents. Economic impacts of the project relate to:

- land acquisition required for the project
- potential loss in highway dependant trade in the Beaufort township
- potential loss of employment positions from the associated loss of highway dependant trade.

7.1.1.7 CLAUSE 18: TRANSPORT

The project supports the creation of a safe and connected transport network for the town of Beaufort and surrounding areas. It will assist in connecting residents to jobs in surrounding areas, as well as increase potential economic activity in the town centre by the increased efficiency of the key trade connection between Melbourne and Adelaide.

The project will complement the works east and west of Beaufort completed for the Western Highway Upgrade Project. By increasing the efficiency and safety of the Western Highway and upgrading this key freight route, the project will create a high-quality connection between Metropolitan Melbourne and key regional towns and cities and support the optimisation of the freight and logistics network in Victoria, in particular the interstate freight transport between Victoria and South Australia. Additionally, the project will improve the urban amenity of Beaufort by removing the presence of trucks in the centre of town.

Accessibility and connections are improved throughout town, by reducing the traffic congestion, and providing new access points to the national freight transport network for businesses in Beaufort.

All alignment options are considered to perform very well in terms of this clause. Refer to EES Appendix M: *Traffic and transport impact assessment* for further information on the transport impacts of the bypass.

7.1.1.8 CLAUSE 19: INFRASTRUCTURE

Clause 19 provides that planning for development of social and physical infrastructure should enable it to be provided in a way that is efficient, equitable, accessible and timely. It further states providers of infrastructure, whether public or private bodies, are to be guided by planning policies and should assist strategic land use planning. Clause 19 further provides for the efficient use of existing infrastructure and specifically relevant to the project, manage a diverse and integrated network of public open space that meets the needs of the community. The strategy is to ensure that land use and development adjoining regional open space networks, national parks and conservation reserves complements the open space.

All options are generally consistent with strategic planning for the area. Strategic and local planning documents and the PPS have identified the project and have subsequently shaped their land use policies in light of the proposed construction of the bypass.

The study area includes two areas of public open space: the Beaufort Common (Trotting Track), which is abutted by the C Alignments only; and Camp Hill State Forest (including the Camp Hill Recreation Park at the summit), which is affected by both the A Alignment corridors along its northern boundary, and both the C Alignments, which sever the larger state forest area to the north from the recreational area around the Camp Hill summit to the south. Although the A options will directly impact on a larger amount of land within the Camp Hill State Forest and require a larger amount of vegetation clearance within an area of public open space, the C options are considered to have a higher potential impact due to their severance of open space (if local access is not re-established) and a higher level of noise and visual impact on public open space.

All alignment options intersect the Central Highlands Water Beaufort trunk water main along Main Lead Road, where an overpass bridge structure is proposed. The project design will consider location of Central Highlands Water assets and provide appropriate setbacks from any bridge structures.

7.1.2 CONSISTENCY WITH LOCAL PLANNING POLICY

7.1.2.1 CLAUSE 02 MUNICIPAL PLANNING STRATEGY

The context, vision, strategic directions and strategic framework plans of the PPS are provided in Clause 02: Municipal Planning Strategy. A summary of the strategies of this Clause are summarised below.

7.1.2.2 CLAUSE 02.03-1 SETTLEMENT

The study area is located to the north and outside of the boundary of the Beaufort township. The planning scheme contains no local planning policy of expanding settlement into the study area and all options would include three principal road entrances to Beaufort, and which could be designed to be consistent with the policy to create and enhance principal road entrances to Beaufort.

Most of the alignment corridors contain areas of obsolete or inappropriate subdivision for which it is council policy to apply the Restructure Overlay to encourage consolidation of rural lots into larger holdings to minimise rural land fragmentation. The creation of a 'new' lot out of any potential severance of existing parcels would need to be considered against the intent of this overlay and the relevant zoning provisions. It is noted that such a lot would be subject to a framework of discouraging small lot rural residential development and preventing inappropriate development of environmentally constrained land, this would need to be recognised in any acquisition and compensation discussion with affected landowners.

The Clause also identifies directions to retain Beaufort's character and sense of place, and rural character and amenity of areas adjacent to the Western Highway on the eastern approach to the township. This has been addressed in EES Appendix F: *Landscape and visual impact assessment*.

7.1.2.3 CLAUSE 02.03-2 ENVIRONMENTAL RISK AND AMENITY

The retention of native vegetation and the planting of additional vegetation are important as a means of minimising the potential for erosion and salinity problems, and to maintain the health of catchments. The potential impacts and mitigation of the project on waterways, groundwater, floodplains and native vegetation are assessed within the surface water, groundwater and flora and fauna impact assessments.

Loss of vegetation will be minimised where possible and offsets will be obtained where sensitive vegetation is removed. EES Appendix C: *Flora and fauna impact assessment* includes further information regarding vegetation impacts of each bypass option.

7.1.2.4 CLAUSE 02.03-3 NATURAL RESOURCE MANAGEMENT

Clause 02.03-3 provides strategic direction for the management of natural resources, agriculture, viticulture and water in Pyrenees Shire. The bypass will involve the removal of some agricultural land in the eastern and western sections of the alignment. This land is not of identified strategic significance in the local or regional context.

7.1.2.5 CLAUSE 02-03-4 BUILT ENVIRONMENT AND HERITAGE

Clause 02.03-4 highlights the directions for built environment and heritage in the Pyrenees Shire. The study area includes areas of cultural heritage sensitivity, being previously registered as Aboriginal cultural heritage places. An Aboriginal cultural heritage impact assessment (EES Appendix A) has been prepared for the project in parallel to the CHMP for the project. The CHMP will manage potential cultural heritage impacts and ensure places of heritage significance are conserved in line with the Aboriginal Heritage Act.

7.1.3 CONSISTENCY WITH LOCAL AND REGIONAL PLANS

Generally, the alignment options are equally consistent with the regional and local strategies and rank similarly in levels of consistency. The C alignment options are more consistent with the *Glenelg Hopkins Regional Growth Strategy 2013-2019* (Glenelg Hopkins CMA 2013) due to the lower levels of vegetation removal than the A options. Conversely, the A options are more consistent with the *Beaufort Walkability Plan* (Pyrenees Shire Council 2016) due to the increased distance from Beaufort township and the lesser impact in relation to severance of Camp Hill State Forest from the Camp Hill Recreation Area.

Overall, it is considered that potential impacts of the four proposed alignments would not result in any significant inconsistency with relevant planning policies and local and regional plans.

7.2 AVOID AND / OR MINIMISE ADVERSE IMPACT ON SENSITIVE LAND USES

Residential dwellings are particularly sensitive to road-based activities and the loss of residential dwellings can have detrimental impacts in the local community. Major land use impacts of the project are to agricultural land, which is not considered sensitive to road-based activities and therefore a low impact. All options unmitigated potentially impact sensitive land uses from social, hydrological, ecological and amenity perspectives, whether those sensitive land uses comprise of public spaces, watercourses, native vegetation or dwellings. These discipline specific land use impacts are discussed within the following reports:

- EES Appendix J: *Social impact assessment* (WSP 2021b)
- EES Appendix L: *Surface water impact assessment* (WSP 2021a)
- EES Appendix C: *Flora and fauna impact assessment* (WSP 2021c)
- EES Appendix B: *Air quality impact assessment* (Consulting Environment Engineers 2021).

7.3 FUTURE GROWTH AND DEVELOPMENT

The Pyrenees Shire Council has commenced the Pyrenees Futures strategy, including the Beaufort Township Framework Plan, which are premised on the assumption that a bypass will exist in the future and will facilitate the transition of Beaufort to a post-bypass context. As previously noted, the Beaufort Township Framework Plan has not been adopted by Council.

The location of the study area to the north of Beaufort generally aligns with the future land use strategies within the PPS, which identifies several constraints to the future expansion of the township into the study area including Camp Hill, the Yam Holes Creek floodplain and the buffer around the Beaufort Wastewater Treatment Plant.

Overall it is considered that none of the project options would impact on the future growth and development of Beaufort, as policy does not favour future growth and development occurring to the north of the town within the study area.

7.4 SEVERANCE AND MANAGEMENT OF ADJACENT LAND

7.4.1 SEVERANCE

All project options will involve the severance of properties and land acquisitions within the alignment. Options C0 and C2 impact more dwellings, however, Option A0 and A1 impact more productive agricultural land, and therefore are assessed equally. All Options impact between 22 and 26 property owners by acquisition of land, with the highest impact from alignment A0 (26), and the lowest being alignments A1 and C0 (23).

All project options will result in land severance and the creation of subminimal lots within the Beaufort Environs Restructure Area.

At the western end between the western interchange and Back Raglan Road, all project options will sever eight lots from the existing access to the south onto Martins Lane and a further 5 lots will have access onto Martins Lane indirectly severed. The eastern end of the study area, four lots will have their access onto Packhams Lane severed by the A0, A1 and C2 options. The A options will sever access to a property on the western side of Camp Hill State Forest and A1 will sever a lot on the north-eastern side of Back Raglan Road into two lots without direct access onto a road. The C Options will sever a Crown land parcel north of the trotting track and adjacent to the Camp Hill State Forest. The C2 will also sever access to a property on the Western Highway.

7.4.2 ADJACENT LAND USES

7.4.2.1 AGRICULTURE

The Agriculture Report has concluded that due to the combination of landform, soils, vegetation and climate characteristics, the natural resource base for agriculture is moderate to low. The tenement pattern reinforces this characterisation whereby the larger lots appear to follow the more productive agricultural land and the smaller lots on less productive land that were associated with the gold mining history of the area. The agricultural land use of the region is predominantly livestock grazing, dominated by wool and prime lamb production, with some cropping and timber (forestry) also present.

The potential impacts on adjacent agricultural land use are from land severance of lots into isolated sections and potential need for duplication of facilities, less efficient movement of stock and vehicles.

All project options sever a large agricultural landholding between the western interchange and Back Raglan Road. The A Options sever a large agricultural landholding between the Camp Hill State Forest and Beaufort-Lexton Road, and the A Options and C2 Option sever a large agricultural landholding between Beaufort-Lexton Road and Racecourse Road, which includes irrigation pivots associated with reuse of recycled wastewater. The C0 Option severs a moderate sized agricultural landholding to the south of Racecourse Road.

7.4.2.2 CROWN LAND

Any loss of public land will negatively impact on these land values and land activities. Furthermore, noise from the freeway could negatively impact on bush user's experience.

Options C0 and C2 results in less public land loss than options A1 and A0.

Beaufort is a high bushfire risk town within the Grampians region with private and public forest to the north contributing significantly to the bushfire risk. Camp Hill State Forest is a fire management zone 'asset protection' along the southern section and 'bushfire moderation' zone on the northern section. All Options will provide a significant fuel break to the north of Beaufort. This will provide substantial assistance to stop or slow a bushfire either moving north to south or travelling from the south west.

It is noted that the freeway may be a source of ignition. However, with detailed design work and further work done to ensure local access, further refinement to fire access track each side of any of the alignments could assist with fire management. All realignment options provide satisfactory emergency vehicle access to major roads north of the proposed alignment. DELWP would require all overpass structures and new road sections to be made to accommodate over size over mass vehicle standard. For all realignment options a maintenance road would need to be constructed on the outside of the freeway footprint where the freeway borders the forest. This maintenance road would need to be at least a class 5C or 5D standard road and must link into the existing track network.

7.4.2.3 VITICULTURE

The proposed A Options pass within 200 m of a vineyard located to the north of Slaughterhouse Lane. No acquisition of this parcel is proposed, as such, there will be negligible impacts to the existing land use of this site as a result of the project. Impacts to air quality are also considered negligible. This is discussed in EES Appendix B: *Air quality impact assessment*.

7.4.2.4 TIMBER

The blue-gum plantations located north of the Melbourne-Ararat rail line near the proposed eastern-tie in to the existing Western Highway will be intersected by the proposed A Options. The C Options, which cross the Melbourne-Ararat rail line at a more westerly point, avoid impacts to the plantations.

7.4.2.5 RECREATION

Option C0 will directly impact the Bluelight Motorcycle Club and adjacent shooting club. Both C Options impact land occupied by the currently disused trotting track and will also sever the informal tracks and connections between the existing network and the crown land north of Camp Hill. While both A Options also impose a barrier across currently accessible crown land, this impact is not as significant as recreational activity, including pedestrian and cycle paths, is likely to be more concentrated in the southern section of Camp Hill.

8 OPTIONS ASSESSMENT AND PREFERRED ALIGNMENT SELECTION

The options assessment completed for the project assessed alignment options A0, A1, C0 and C2 against the customised set of criteria summarised in Section 4.5. The results of the options assessment and sensitivity testing are detailed in Table 8.1. As well as the score for each alignment under each scenario, a colour coding has been applied to rank the performance of the options under each scenario as follows:

- best performing alignment option: Green
- second performing alignment option: Yellow
- third performing alignment option: Orange
- worst performing alignment option: Red.

Table 8.1 Combined alignment option scenario scoring

SCENARIO	ALIGNMENT A0	ALIGNMENT A1	ALIGNMENT C0	ALIGNMENT C2
Scenario 1	128	123	126	111
Scenario 2	18	22	20	27
Scenario 3	45.85	44.89	50.01	43.95
Scenario 4	81.03	77.59	93.98	74.12
Scenario 5	24.16	22.70	27.03	19.44
Scenario 6	47.74	42.69	56.16	35.49
Sensitivity Scenario 1	-6	-3	-5	9
Sensitivity Scenario 2	-3	2	-4	11
Sensitivity Scenario 3	-11	-6	-9	5

The alignment scoring scenarios outlined in Table 8.1 show that the best performing option is the C2 Alignment, while the worst performing options are the A0 and C0 Alignments. The primary drivers for this outcome were due to the C2 alignment having:

- the lowest amount of total native vegetation clearance
- the least impact on threatened vegetation communities identified under the EPBC Act and *Flora and Fauna Guarantee Act 1988*
- the least impact on wildlife corridors, particularly the core habitat areas
- the lowest amount of native vegetation with high conditions to be removed by Ecological Vegetation Class Conservation Status
- the lowest potential impacts on known or registered sites of Aboriginal and historic heritage significance
- the least number of dwellings within 100 m, 200 m and 300 m of the alignment corridor.

Further detail on the options assessment process is provided in the EES Attachment IV: *Options assessment*.

9 IMPACT ASSESSMENT – PREFERRED ALIGNMENT

The preferred alignment (C2 Option) assessed in this report is the outcome of progressive refinement through each phase of the options assessment process. The preferred alignment was also refined following consideration of the environmental risk and preliminary impact assessments.

9.1 CONSISTENCY WITH PLANNING POLICY

The preferred alignment is generally consistent with the PPF and MPS of the PPS, as outlined in Section 5 and Section 7 of this report.

The PPF, and more particularly Clause 18 (Transport) seeks to ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe. The preferred alignment responds to these objectives, improving road capacity and the function of the Western Highway which is recognised as a nationally significant freight route and vital to the economy of Victoria (Clause 11).

The preferred alignment is responsive to the environmental and landscape values (Clause 12) and has sought to avoid and minimise native vegetation removal and habitat impacts to as far as practicable. The design and options assessment has adopted the alignment requiring the least native vegetation removal by a factor of over 10 ha (RRV, 2019). The project does intersect the approximately 2 km of floodplain, however the proposed cross drainage design and culvert realignments have been incorporated to improve the floodplain management. Where impacts are unavoidable offsets will be secured in accordance with the State legislation (Clause 02.03-3).

The preferred alignment, in relation to noise and air quality impacts has assessed potential impacts and incorporated controls into the design to minimise amenity impacts. Noise and air quality assessments and mitigations have been considered consistent to objectives in Clauses 13.05-S and 13.06-1S.

The preferred alignment is within a designated bushfire prone area and affected by the BMO. RRV has undertaken consultation with the Country Fire Authority and DELWP, which has indicated the need to maintain fire management access within the Camp Hill State Forest, where the Bypass would sever existing fire access. As a result of this, the project has incorporated new fire break connections, which have been considered across all impact assessments. It is considered that the project will not increase the risk to life, property, community infrastructure and the natural environment from bushfire and the project may improve emergency access to bushfire prone areas (Clause 13).

The preferred alignment will involve the removal of some agricultural land in the eastern and western sections of the project. Severance and the removal of this agricultural land has been minimised when compared to compared to the A options (Clause 14). The Agriculture Report (Appendix C) and the regional economy impact assessment (EES Appendix I) determined the C options (containing the preferred alignment) will have the least direct impact on agricultural land as they impact on smaller, less productive lots than the A options. Severance of agricultural land will impact existing Central Highlands Water recycled water irrigation systems. Key concerns for Central Highlands Water include their treatment pond capacity to manage sewage inflows as well the irrigation capacity for recycled water. The project does not impact treatment pond capacities, but does sever one of four centre pivots currently utilised for recycled water irrigation within the study area. RRV is working closely with Central Highlands Water to determine to what extent and in which location impacted irrigation systems can and need to be relocated to future proof Central Highlands Water recycled water assets, consistent with Clause 19.03-3S.

The Aboriginal cultural heritage impact assessment (EES Appendix A) concluded that preferred alignment has the potential to impact on known cultural heritage values (Clause 02.03-4), however, of the options assessed, it has the least area of known Aboriginal cultural heritage potential based on values and landscape units with potential to contain sensitivity. The preferred alignment also has the least impact on heritage sites.

On balance, the preferred alignment responds to the existing planning policies and strategies contained in the PPF and MPS. The preferred alignment meets the strategic objectives associated with the Western Highway in the PPS, which acknowledge the importance of the highway as a Key Freight Route of national significance and promote the sustainable growth of Beaufort by improving travel efficiency, access, connectivity, safety and capacity of the transport network.

Impacts to land use will be permanent in nature but confined to the project area. The project aligns with the strategic planning framework and as such the impacts to land use in relation to inconsistency with strategic planning policy, is low.

In addition to impacts associated with strategic planning policy, impacts related to statutory planning project approvals also have the potential to occur during the construction phase of the project. Potential impacts related to inconsistencies with statutory planning approvals during the construction phase have the potential to extend beyond the project area. Inconsistencies could manifest through the contractor not acquiring the appropriate secondary consents or complying with the conditions posed on primary approvals. Without the implementation of project wide mitigations, captured in the EMF, there is the potential for inconsistencies with statutory planning approvals, which could result in additional planning approvals being required. This impact, unmitigated is assessed as medium impact.

9.2 AVOID AND / OR MINIMISE ADVERSE IMPACT ON SENSITIVE LAND USES

The preferred alignment has been selected based on it having the least overall impact on environmental, social and economic considerations. The largest land use impact of the preferred alignment is to agricultural land, which will be permanent and be retained within the project area. Agricultural land is not considered sensitive to road-based activities and therefore the impact is assessed as low.

The preferred alignment, unmitigated, will impact sensitive land uses from social, hydrological, ecological and amenity perspectives, whether those sensitive land uses comprise of public spaces, watercourses, native vegetation or dwellings These discipline specific land use impacts are discussed within the following impact assessments:

- EES Appendix J: *Social impact assessment* (WSP 2021b)
- EES Appendix L: *Surface water impact assessment* (WSP 2021a)
- EES Appendix C: *Flora and fauna impact assessment* (WSP 2021c)
- EES Appendix B: *Air quality impact assessment* (Consulting Environment Engineers 2021).

9.3 FUTURE GROWTH AND DEVELOPMENT

The preferred alignment is generally consistent with the future land use strategies within the PPS, which identifies several constraints to the future expansion of the township into the study area including Camp Hill, the Yam Holes Creek floodplain and the buffer around the Beaufort Wastewater Treatment Plant.

Overall it is considered that the preferred alignment would not detrimentally impact the future growth and development of Beaufort, as outlined Section 7.3. The impact of the project on future growth is low.

9.4 SEVERANCE AND MANAGEMENT OF ADJACENT LAND

The preferred alignment will involve the severance of properties and acquisition of public, private and Crown land.

A total of 22 private landowners are expected to be permanently impacted by the preferred alignment, covering a total of 47 private lots (Appendix B). One dwelling has been identified as being directly impacted by this alignment and occupants will be permanently displaced.

Partial land acquisition required for the preferred alignment severs large agricultural landholdings between the western interchange and Back Raglan Road, and between Beaufort-Lexton Road and Racecourse Road, which includes land used for irrigation associated with the reuse of recycled wastewater.

Segments of existing landholdings along the preferred alignment are currently below the minimum lot size stipulated in the PPS. Land severance will result in the creation of additional subminimal lots within the Beaufort Environs Restructure Area, however, severance associated with the preferred alignment is still considered to have the least direct impact on more productive agricultural land due to the impact to smaller parcel sizes when compared to the A options.

Potential impacts on adjacent agricultural land are also from land severance of lots into isolated sections and potential need for duplication of facilities, less efficient movement of stock and vehicles. In addition to land acquisition, some farm infrastructures (such as sheds/dams) and one dwelling are located within the construction footprint and would therefore need to be demolished/removed.

The preferred alignment will result in severance of the Camp Hill Recreation Reserve from the Camp Hill State Forest resulting in removal of informal tracks and pedestrian connections between the existing network. As outlined in Section 9.1, consultation between the Country Fire Authority and DELWP indicated the need to maintain fire management access within the Camp Hill State Forest, where the Bypass would sever existing fire access, which has been incorporated into the design and accounted for within native vegetation loss calculations (see EES Appendix C: *Flora and fauna impact assessment*). RRV would continue to liaise with DELWP regarding opportunities to retain or reinstate access between Camp Hill Recreation Reserve and the Camp Hill State Forest to the north.

It is noted that the Low Density Residential Zone applies to a residential subdivision in the south of the study area near Back Raglan Road (west of the trotting track), and may impose a minimum land area for residential lots. However the proposed PAO does not impact any parcels zoned Low Density Residential Zone. While associated environmental, social and economic impacts will result from severance, through the proposed planning pathway, and subordinate instruments that require compensation for acquisition, land use impacts, which will be permanent and confined to the project area will be low.

10 MITIGATION

All but one identified impact were assessed as having a low impact in relation to land use. The low impacts identified, relate to the project objectives contributing to, allowing for or consistent with:

- the Planning Policy Framework
- avoidance and or minimisation to sensitive land uses
- future growth and development
- severance and management of adjacent land.

As these impacts relate to the justification over whether the project should proceed, it is assumed that approvals are acquired prior to construction and therefore mitigations for these impacts rated as low are not required.

One planning and land use impact was identified as having a medium impact, which was related to the project being inconsistent with statutory planning approvals during the construction phase.

To mitigate the medium impact, the design and construction contractor would need to prepare and implement an Environmental Management System and subordinate Construction Environmental Management Plans that includes standard Road Authority environmental measures, implements standard controls as specified in 'RRVs Standard Contract Specification Section 177' and any additional project specific controls specified by project approvals.

The following standard controls are recommended for the medium land use and planning impact:

- the contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with RRV Standard Contract Specification Section 177.A5
- engage with community, affected properties and stakeholders early and throughout
- acquisition and compensation for land and assets required for the construction of the project to be undertaken by RRV consistent with the provisions of the LA&C Act
- continue investigations with Central Highlands Water to understand capacity requirements for wastewater irrigation ponds to understand where impacted wastewater irrigation ponds can be relocated
- engage with landholders throughout the detailed design and during construction where severance of land and impacts to access results and manage reinstatement of access through an access management strategy
- implement relevant management plans (e.g. traffic management plan, project management plan, noting the oversight of DELWP and similar agencies with approval functions built into these management plans).

Additional project controls are:

- minimise the extent of land acquisition through the detailed design process, once the extent of ancillary areas required for construction, earthworks, drainage and other environmental management such as ecological sites or surface water storage, has been determined
- ensure penalty clauses in Contractor's contracts that match the cost of the risk. Build in clear early warning and 'corrective action' provisions
- the development of an access management strategy will be required to respond to the alteration of temporary and permanent accesses throughout the alignment. Where relocation of access points is required, relocation points must occur within the project approvals footprint or in consultation with relevant stakeholders. Relocation of access must not impact native vegetation that has not already been accounted for through the vegetation impacts defined in EES Appendix C: *Flora and fauna impact assessment*. Modified access will be managed through the inclusion of appropriate linkages in the access management strategy during the design and through the construction phases.

10.1 SUMMARY OF MITIGATIONS

A summary of mitigations is provided in Table 10.1 and will require incorporation into the EMF for the management of residual impacts.

Table 10.1 Summary of mitigations

NO.	MITIGATION	PROJECT PHASE
PLU1	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with RRV Standard Contract Specification Section 177.A5.	Detailed design, construction and operation
PLU2	Engage with community, affected properties and stakeholders early and throughout.	Detailed design, construction and operation
PLU3	Acquisition and compensation for land and assets required for the construction of the project to be undertaken by RRV consistent with the provisions of the LA&C Act.	Detailed design and pre-construction
PLU4	Implement relevant management plans (e.g. access management strategy, traffic management plan, project management plan, noting the oversight of DELWP and similar agencies with approval functions built into these management plans).	Detailed design and construction
PLU5	Continue consultation with Central Highlands Water to understand wastewater irrigation capacity requirements.	Detailed design and construction

11 RESIDUAL IMPACTS

For impacts identified in Section 9 as having an initial low impact from the project, no further mitigations were required. The residual impacts therefore remain low.

Following implementation of the recommended mitigation measures to manage impacts related to the project being inconsistent with statutory planning approvals during the construction phase, the impact is considered to reduce to low. the EMF, which would be approved by the Minister for Planning will provide the structure and framework for compliance with the project approvals.

12 CONCLUSION

This planning and land use impact assessment has been undertaken to determine the impacts of the project on planning and land use. This assessment has identified the potential risks and impacts associated with the four proposed alignments including: existing and future land use, affected dwellings, consistency with planning policy and statutory planning controls. The assessment influenced the outcome of progressive refinement through each phase of the options assessment process to nominate the C2 Option as the preferred alignment. Subsequently, the assessment has informed management and mitigation measures to reduce the potential planning and land use risks and impacts associated with the project.

12.1 EXISTING CONDITIONS

The Western Highway is the principal road between Melbourne and Adelaide and is one of Victoria's busiest rural highways. The project seeks to provide a new duplicated section of the Western Highway to bypass the town of Beaufort, linking completed sections of the Western Highway duplication to the east and west of Beaufort.

Beaufort is a small town that functions as a local service centre for the surrounding agricultural area. The project study area is located to the north of the Beaufort township and is mostly rural, comprising farming, open space and rural residential land uses. The majority of landholdings within the study area comprise private property. The remaining land parcels constitute Crown land.

The project has been identified in the local planning policy and the strategic planning for the region. The *Pyrenees Shire Council Growth Strategy 2015* in particular, identified the Western Highway as a key economic asset and the development of the Beaufort Bypass would further enhance its value to the community.

12.2 IMPACT ASSESSMENT

The planning and land use impact has been assessed all four proposed alignments. The project is generally supported by strategic planning for the region and local planning policies. Importantly, the location of the study area to the north of Beaufort generally aligns with the future land use strategies within the PPS, which identifies several constraints to the future expansion of the township into the study area including Camp Hill, the Yam Holes Creek floodplain and the buffer around the Beaufort Wastewater Treatment Plant.

Overall it is considered that none of the four proposed alignments would impact on the future growth and development of Beaufort, as policy does not favour future growth and development occurring to the north of the town within the study area.

12.3 PLANNING PATHWAY

The preferred planning pathway for the use and development associated with this project is via a PSA to the PPS. The Amendment will amend the PPS to insert Clause 45.12 (Specific Controls Overlay) and apply Clause 45.12 and Clause 45.01 (Public Acquisition Overlay) to affected land, and insert a new Incorporated Document into the Schedules to Clause 45.12 and Clause 72.04. This will exempt all use and development associated with the project from the need for a planning permit, subject to conditions.

RRV is seeking to request the Minister for Planning to prepare, adopt and approve the proposed Amendment to the PPS under Section 20(4) of the P&E Act.

In accordance with the *Ministerial Guidelines for Assessment of Environmental Effects under the EE Act* (Ministerial Guidelines) (DSE 2006), the proposed Amendment will be exhibited concurrently with the EES and a joint Advisory and Inquiry Committee may be appointed to consider submissions on the draft PSA and EES. The Minister for Planning's assessment of the EES report will inform the consideration of the draft PSA.

13 LIMITATIONS

This Report is provided by WSP Australia Pty Limited (*WSP*) for Regional Roads Victoria (*Client*) in response to specific instructions from the Client and in accordance with WSP's proposal dated 2 September 2020 and agreement with the Client dated 10 September 2020 (*Agreement*).

13.1 PERMITTED PURPOSE

This Report is provided by WSP for the purpose described in the Agreement and no responsibility is accepted by WSP for the use of the Report in whole or in part, for any other purpose (*Permitted Purpose*).

13.2 QUALIFICATIONS AND ASSUMPTIONS

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Except as otherwise stated in the Report and to the extent that statements, opinions, facts, conclusion and / or recommendations in the Report (*Conclusions*) are based in whole or in part on information provided by the Client and other parties identified in the report (*Information)*, those Conclusions are based on assumptions by WSP of the reliability, adequacy, accuracy and completeness of the Information and have not been verified. WSP accepts no responsibility for the Information.

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REFERENCES

ABS (2011 & 2016) *Census of Population and Housing*, Australian Bureau of Statistics.

Consulting Environment Engineers (2021) EES Appendix B: *Air quality impact assessment.*

Glenelg Hopkins CMA (2013) *Glenelg Hopkins Regional Catchment Strategy 2013-2019*, State of Victoria, Glenelg Hopkins Catchment Management Authority.

Hansen Partnership (2017) *Beaufort Framework Context Report*

Phillips Agribusiness (2017) *Beaufort Bypass Agricultural Report*, Phillips Agribusiness, Hampton, Victoria.

Pyrenees Shire Council (2016a) *Pyrenees Shire Council Tourism Strategy 2016-2019*, Pyrenees Shire Council, Beaufort, Victoria.

Pyrenees Shire Council (2016b) *Pyrenees Shire Council Beaufort Walkability Plan*, Pyrenees Shire Council, Beaufort, Victoria.

Pyrenees Shire Council (2018) *Pyrenees Shire Council Plan Revised Council Plan 2017-2021*, Pyrenees Shire Council, Beaufort, Victoria.

Regional Roads Victoria (2019) *Beaufort Bypass Options Assessment Report.*

Victorian Government (2014) *Central Highlands Regional Growth Plan*, State of Victoria, Melbourne.

WSP (2021a) EES Appendix L: *Surface water impact assessment*.

WSP (2021b) EES Appendix J: *Social impact assessment*.

WSP (2021c) EES Appendix C: *Flora and fauna impact assessment*.

APPENDIX A

RISK REGISTER

Project	Beaufort Bypass	**Lead**	WSP
Description	EES Environmental Risk Register	**Last Updated**	Dec-20

				Impact Pathway					Initial Risk				Residual Risk		
Risk No.	**Alignment Option**	**Discipline**	**Project Phase**	**Project Activity / Aspect**	**Primary Environmental Impact**	**Secondary Environmental Impact (if applicable) (further details provided in column V)**	**Description of risk and impact**	**Standard Controls (i.e. VicRoads Contract Specification e.g. Section 177, Section 720, Section 750; EPA Environmental Guidelines for Major Construction Sites and other relevant industry standards) (please detail)**	**Consequence**	**Likelihood**	**Risk Rating**	**Additional Controls (recommended to further reduce risk)**	**Consequence**	**Likelihood**	**Risk Rating**
PLU1a	A0	Planning and landuse	Initial	Design	Compulsory land acquisition		The project design does not identify all the land required for acquisition, resulting in additional planning approval and land acquisition and project delays.	Due diligence, project quality management control and Government agency review through project assessment and approval process to ensure compliance with all relevant statutory controls.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU1b	A1	Planning and landuse	Initial	Design	Compulsory land acquisition		The project design does not identify all the land required for acquisition, resulting in additional planning approval and land acquisition and project delays.	Due diligence, project quality management control and Government agency review through project assessment and approval process to ensure compliance with all relevant statutory controls.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU1c	C0	Planning and landuse	Initial	Design	Compulsory land acquisition		The project design does not identify all the land required for acquisition, resulting in additional planning approval and land acquisition and project delays.	Due diligence, project quality management control and Government agency review through project assessment and approval process to ensure compliance with all relevant statutory controls.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU1d	C2	Planning and landuse	Initial	Design	Compulsory land acquisition		The project design does not identify all the land required for acquisition, resulting in additional planning approval and land acquisition and project delays.	Due diligence, project quality management control and Government agency review through project assessment and approval process to ensure compliance with all relevant statutory controls.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU2a	A0	Planning and landuse	Initial	Design	Changes land use		The project design is inconsistent with strategic planning policies relevant to future land use.	Planning approval will address consistency with planning policy relevant to future land use.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU2b	A1	Planning and landuse	Initial	Design	Changes land use		The project design is inconsistent with strategic planning policies relevant to future land use.	Planning approval will address consistency with planning policy relevant to future land use.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU2c	C0	Planning and landuse	Initial	Design	Changes land use		The project design is inconsistent with strategic planning policies relevant to future land use.	Planning approval will address consistency with planning policy relevant to future land use.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU2d	C2	Planning and landuse	Initial	Design	Changes land use		The project design is inconsistent with strategic planning policies relevant to future land use.	Planning approval will address consistency with planning policy relevant to future land use.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU3a	A0	Planning and landuse	Initial	Design	Changes land use		The project design is not compliant with the statutory project approvals.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Major	Unlikely	Medium	Ensure penalty clauses in Contractor contracts that match the cost of the risk. Build in clear early warning and 'corrective action' provisions	Minor	Unlikely	Low
PLU3b	A1	Planning and landuse	Initial	Design	Changes land use		The project design is not compliant with the statutory project approvals.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Major	Unlikely	Medium	Ensure penalty clauses in Contractor contracts that match the cost of the risk. Build in clear early warning and 'corrective action' provisions	Minor	Unlikely	Low
PLU3c	C0	Planning and landuse	Initial	Design	Changes land use		The project design is not compliant with the statutory project approvals.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Major	Unlikely	Medium	Ensure penalty clauses in Contractor contracts that match the cost of the risk. Build in clear early warning and 'corrective action' provisions	Minor	Unlikely	Low
PLU3d	C2	Planning and landuse	Initial	Design	Changes land use		The project design is not compliant with the statutory project approvals.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Major	Unlikely	Medium	Ensure penalty clauses in Contractor contracts that match the cost of the risk. Build in clear early warning and 'corrective action' provisions	Minor	Unlikely	Low
PLU4a	A0	Planning and landuse	Initial	Planning	Land access issues for local land users		The project planning does not identify and assess land fragmentation that would impact viability for local land users.	Engage with community, affected properties and stakeholders early and throughout. Implement relevant management plans (e.g. traffic management plan, project management plan)	Moderate	Rare	Low	Not required	Moderate	Rare	Low

				Impact Pathway					Initial Risk				Residual Risk		
Risk No.	Alignment Option	Discipline	Project Phase	Project Activity / Aspect	Primary Environmental Impact	Secondary Environmental Impact (if applicable) (further details provided in column V)	Description of risk and impact	Standard Controls (i.e. VicRoads Contract Specification e.g. Section 177, Section 720, Section 750; EPA Environmental Guidelines for Major Construction Sites and other relevant industry standards) (please detail)	Consequence	Likelihood	Risk Rating	Additional Controls (recommended to further reduce risk)	Consequence	Likelihood	Risk Rating
PLU4b	A1	Planning and landuse	Initial	Planning	Land access issues for local land users		The project planning does not identify and assess land fragmentation that would impact viability for local land users.	Engage with community, affected properties and stakeholders early and throughout. Implement relevant management plans (e.g. traffic management plan, project management plan)	Moderate	Rare	Low	Not required	Moderate	Rare	Low
PLU4c	C0	Planning and landuse	Initial	Planning	Land access issues for local land users		The project planning does not identify and assess land fragmentation that would impact viability for local land users.	Engage with community, affected properties and stakeholders early and throughout. Implement relevant management plans (e.g. traffic management plan, project management plan)	Moderate	Rare	Low	Not required	Moderate	Rare	Low
PLU4d	C2	Planning and landuse	Initial	Planning	Land access issues for local land users		The project planning does not identify and assess land fragmentation that would impact viability for local land users.	Engage with community, affected properties and stakeholders early and throughout. Implement relevant management plans (e.g. traffic management plan, project management plan)	Moderate	Rare	Low	Not required	Moderate	Rare	Low
PLU5a	A0	Planning and landuse	Development	Pre-construction activities	Land access issues for local land users		Pre-construction activities inconsistent with statutory approvals or policy, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU5b	A1	Planning and landuse	Development	Pre-construction activities	Land access issues for local land users		Pre-construction activities inconsistent with statutory approvals or policy, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU5c	C0	Planning and landuse	Development	Pre-construction activities	Land access issues for local land users		Pre-construction activities inconsistent with statutory approvals or policy, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU5d	C2	Planning and landuse	Development	Pre-construction activities	Land access issues for local land users		Pre-construction activities inconsistent with statutory approvals or policy, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU6a	A0	Planning and landuse	Development	Clearing	Land access issues for local land users		Project clearing requirements are inconsistent with statutory approvals requiring additional approvals and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU6b	A1	Planning and landuse	Development	Clearing	Land access issues for local land users		Project clearing requirements are inconsistent with statutory approvals requiring additional approvals and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU6c	C0	Planning and landuse	Development	Clearing	Land access issues for local land users		Project clearing requirements are inconsistent with statutory approvals requiring additional approvals and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU6d	C2	Planning and landuse	Development	Clearing	Land access issues for local land users		Project clearing requirements are inconsistent with statutory approvals requiring additional approvals and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU7a	A0	Planning and landuse	Development	Earthworks	Land access issues for local land users		Project earthworks cause amenity impacts on land use that are non-compliant with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low

				Impact Pathway					Initial Risk				Residual Risk		
Risk No.	Alignment Option	Discipline	Project Phase	Project Activity / Aspect	Primary Environmental Impact	Secondary Environmental Impact (if applicable) (further details provided in column V)	Description of risk and impact	Standard Controls (i.e. VicRoads Contract Specification e.g. Section 177, Section 720, Section 750; EPA Environmental Guidelines for Major Construction Sites and other relevant industry standards) (please detail)	Consequence	Likelihood	Risk Rating	Additional Controls (recommended to further reduce risk)	Consequence	Likelihood	Risk Rating
PLU7b	A1	Planning and landuse	Development	Earthworks	Land access issues for local land users		Project earthworks cause amenity impacts on land use that are non-compliant with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU7c	C0	Planning and landuse	Development	Earthworks	Land access issues for local land users		Project earthworks cause amenity impacts on land use that are non-compliant with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU7d	C2	Planning and landuse	Development	Earthworks	Land access issues for local land users		Project earthworks cause amenity impacts on land use that are non-compliant with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU8a	A0	Planning and landuse	Development	Earthworks	Land access issues for local land users		Project earthworks non-compliant with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU8b	A1	Planning and landuse	Development	Earthworks	Land access issues for local land users		Project earthworks non-compliant with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU8c	C0	Planning and landuse	Development	Earthworks	Land access issues for local land users		Project earthworks non-compliant with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU8d	C2	Planning and landuse	Development	Earthworks	Land access issues for local land users		Project earthworks non-compliant with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU9a	A0	Planning and landuse	Development	Earthworks	Unauthorised clearing		Project earthworks resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, impacting on reputation with other Government agencies..	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU9b	A1	Planning and landuse	Development	Earthworks	Unauthorised clearing		Project earthworks resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, impacting on reputation with other Government agencies..	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU9c	C0	Planning and landuse	Development	Earthworks	Unauthorised clearing		Project earthworks resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, impacting on reputation with other Government agencies..	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU9d	C2	Planning and landuse	Development	Earthworks	Unauthorised clearing		Project earthworks resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, impacting on reputation with other Government agencies..	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low

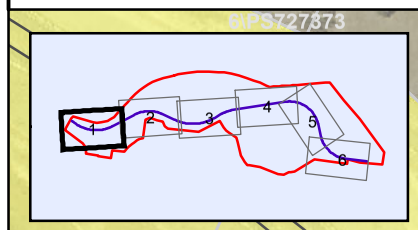
				Impact Pathway					Initial Risk				Residual Risk			
Risk No.	Alignment Option	Discipline	Project Phase	Project Activity / Aspect	Primary Environmental Impact	Secondary Environmental Impact (if applicable) (further details provided in column V)	Description of risk and impact	Standard Controls (i.e. VicRoads Contract Specification e.g. Section 177, Section 720, Section 750; EPA Environmental Guidelines for Major Construction Sites and other relevant industry standards) (please detail)	Consequence	Likelihood	Risk Rating	Additional Controls (recommended to further reduce risk)	Consequence	Likelihood	Risk Rating
PLU10a	A0	Planning and landuse	Development	Earthworks	Unauthorised clearing		Project earthworks resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU10b	A1	Planning and landuse	Development	Earthworks	Unauthorised clearing		Project earthworks resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU10c	C0	Planning and landuse	Development	Earthworks	Unauthorised clearing		Project earthworks resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU10d	C2	Planning and landuse	Development	Earthworks	Unauthorised clearing		Project earthworks resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU11a	A0	Planning and landuse	Development	Construction	Land access issues for local land users		Project construction is inconsistent with statutory project approvals requiring additional permitting and project delays, this may include potential for locating unidentified infrastructure during construction	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU11b	A1	Planning and landuse	Development	Construction	Land access issues for local land users		Project construction is inconsistent with statutory project approvals requiring additional permitting and project delays, this may include potential for locating unidentified infrastructure during construction	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU11c	C0	Planning and landuse	Development	Construction	Land access issues for local land users		Project construction is inconsistent with statutory project approvals requiring additional permitting and project delays, this may include potential for locating unidentified infrastructure during construction	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU11d	C2	Planning and landuse	Development	Construction	Land access issues for local land users		Project construction is inconsistent with statutory project approvals requiring additional permitting and project delays, this may include potential for locating unidentified infrastructure during construction	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU12a	A0	Planning and landuse	Development	Construction	Unauthorised clearing		Project construction resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU12b	A1	Planning and landuse	Development	Construction	Unauthorised clearing		Project construction resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU12c	C0	Planning and landuse	Development	Construction	Unauthorised clearing		Project construction resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low
PLU12d	C2	Planning and landuse	Development	Construction	Unauthorised clearing		Project construction resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting and project delays.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Possible	Low	Not required	Minor	Possible	Low

				Impact Pathway					Initial Risk				Residual Risk		
Risk No.	Alignment Option	Discipline	Project Phase	Project Activity / Aspect	Primary Environmental Impact	Secondary Environmental Impact (if applicable) (further details provided in column V)	Description of risk and impact	Standard Controls (i.e. VicRoads Contract Specification e.g. Section 177, Section 720, Section 750; EPA Environmental Guidelines for Major Construction Sites and other relevant industry standards) (please detail)	Consequence	Likelihood	Risk Rating	Additional Controls (recommended to further reduce risk)	Consequence	Likelihood	Risk Rating
PLU13a	A0	Planning and landuse	Operation/Maintenance	Maintenance	Land access issues for local land users		Maintenance activities are non-compliant with statutory approvals, requiring additional permitting.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU13b	A1	Planning and landuse	Operation/Maintenance	Maintenance	Land access issues for local land users		Maintenance activities are non-compliant with statutory approvals, requiring additional permitting.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU13c	C0	Planning and landuse	Operation/Maintenance	Maintenance	Land access issues for local land users		Maintenance activities are non-compliant with statutory approvals, requiring additional permitting.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU13d	C2	Planning and landuse	Operation/Maintenance	Maintenance	Land access issues for local land users		Maintenance activities are non-compliant with statutory approvals, requiring additional permitting.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.A5.	Minor	Unlikely	Low	Not required	Minor	Unlikely	Low
PLU14a	A0	Planning and landuse	Operation/Maintenance	Maintenance	Unauthorised clearing		Maintenance activities resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Rare	Negligible		Minor	Rare	Negligible
PLU14b	A1	Planning and landuse	Operation/Maintenance	Maintenance	Unauthorised clearing		Maintenance activities resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Rare	Negligible		Minor	Rare	Negligible
PLU14c	C0	Planning and landuse	Operation/Maintenance	Maintenance	Unauthorised clearing		Maintenance activities resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Rare	Negligible		Minor	Rare	Negligible
PLU14d	C2	Planning and landuse	Operation/Maintenance	Maintenance	Unauthorised clearing		Maintenance activities resulting in unauthorised vegetation clearing and non-compliance with statutory approvals, requiring additional permitting.	The contractor shall be responsible for obtaining all necessary permits and approvals from the relevant authorities, other than those already obtained by RRV, in accordance with VicRoads Standard Contract Specification Section 177.Part I.	Minor	Rare	Negligible		Minor	Rare	Negligible

APPENDIX B

LAND ACQUISITION

706735



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Legend

- Detailed Design Option C2
- Highway
- Road
- Cadastre
- Study area
- Proposed Public Aquisition Boundary
- Public Aquisition Overlay

5855211

Map: 2270290A_GIS_195_A5	Author: VD
Date: 02-Feb-21	Approved by: -

Data source: VicRoads 2016,

0 50 100 m

1:5,000

Coordinate system: GDA 1994 MGA Zone 54
Scale ratio correct when printed at A3

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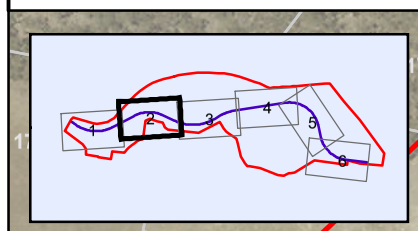
Beaufort Bypass Environment Effects Statement and Planning Scheme Amendment

Figure 1
Beaufort Bypass Alignment Option C2
Proposed Public Aquisition

708622



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Legend

- Detailed Design Option C2
- Road
- Cadastre
- Study area
- Proposed Public Aquisition Boundary

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Map: 2270290A_GIS_195_A5	Author: VD
Date: 02-Feb-21	Approved by: -

Data source: VicRoads 2016,

0 50 100 m

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Coordinate system: GDA 1994 MGA Zone 54
Scale ratio correct when printed at A3

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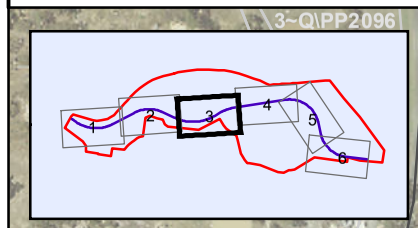
Beaufort Bypass Environment Effects Statement and Planning Scheme Amendment

Figure 2
Beaufort Bypass Alignment Option C2
Proposed Public Aquisition

710511

5855337



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RACECOURSE ROAD
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Legend

- Detailed Design Option C2
- Road
- Cadastre
- Study area
- Proposed Public Aquisition Boundary

Map: 2270290A_GIS_195_A5	Author: VD
Date: 02-Feb-21	Approved by: -

Data source: VicRoads 2016,

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1:5,000

Coordinate system: GDA 1994 MGA Zone 54
Scale ratio correct when printed at A3

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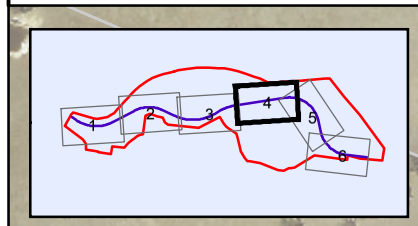
Beaufort Bypass Environment Effects Statement and Planning Scheme Amendment

Figure 3
Beaufort Bypass Alignment Option C2
Proposed Public Aquisition

712408



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Legend

- Detailed Design Option C2
- Road
- Cadastre
- Study area
- Proposed Public Aquisition Boundary

5855571

Map: 2270290A_GIS_195_A5	Author: VD
Date: 02-Feb-21	Approved by: -

Data source: VicRoads 2016,

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Coordinate system: GDA 1994 MGA Zone 54
Scale ratio correct when printed at A3

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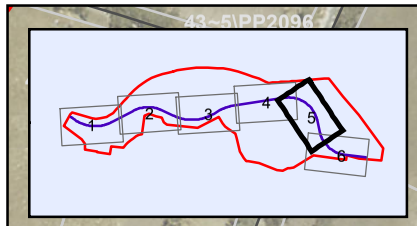
Beaufort Bypass Environment Effects Statement and Planning Scheme Amendment

Figure 4
Beaufort Bypass Alignment Option C2
Proposed Public Aquisition

5855571

5856530

715699



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RACECOURSE ROAD

Legend

- Detailed Design Option C2
- Road
- Cadastre
- Study area
- Proposed Public Aquisition Boundary
- Public Aquisition Overlay

Map: 2270290A_GIS_195_A5	Author: VD
Date: 02-Feb-21	Approved by: -

Data source: VicRoads 2016,

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Coordinate system: GDA 1994 MGA Zone 54
Scale ratio correct when printed at A3

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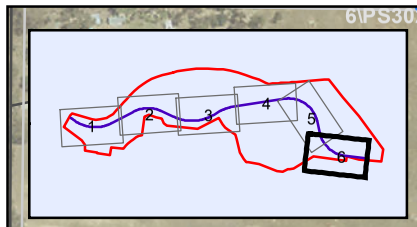
Beaufort Bypass Environment Effects Statement and Planning Scheme Amendment

Figure 5
Beaufort Bypass Alignment Option C2
Proposed Public Aquisition

716492



Legend

- Detailed Design Option C2
- Highway
- Road
- Cadastre
- Study area
- Proposed Public Aquisition Boundary
- Public Aquisition Overlay

716492

Map: 2270290A_GIS_195_A5	Author: VD
Date: 02-Feb-21	Approved by: -

Data source: VicRoads 2016,

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Coordinate system: GDA 1994 MGA Zone 54
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Beaufort Bypass Environment Effects Statement and Planning Scheme Amendment

Figure 6
Beaufort Bypass Alignment Option C2
Proposed Public Aquisition

APPENDIX C

BEAUFORT BYPASS AGRICULTURAL REPORT (PHILLIPS AGRIBUSINESS 2017)

PHILLIPS
AGRIBUSINESS

BEAUFORT BYPASS

Agricultural Report

Phillips Agribusiness
66 Linacre Road
Hampton Vic 3188

August 2017

Agricultural Management Consultants
Ph: 03 9598 4018; e-mail: ray@phillipsagribusiness.com.au

Contents

1.0 INTRODUCTION

The Beaufort Bypass is to be subject to an Environmental Effects Statement and Planning Scheme Amendment. Three Design Options (A, B & C) are being considered. All pass north of Beaufort with their eastern commencement point off the Western Highway near Tansley Court, terminating west of Beaufort near the Eurambeen-Streatham Road.

This report considers the agricultural impacts that are likely to be incurred through the construction of the preferred Design Option. It provides an overview of the agricultural resource base that is common to the study area, the land use patterns within the immediate district and the agricultural impact(s) the bypass is likely to impose.

The study process was desktop based and no field inspection was conducted. Reliance was based on previous investigations[1] and current project data.

2.0 STUDY AREA CHARACTERISTICS

2.1 The Farming Environment

The Study Area is shown in Figure 1 where the three Corridor Design Options are superimposed to illustrate locational effects. The farming environment within the study area is grazing based and associated with conservation management due to the combination of landform, soils, vegetation and climate characteristics. There is a small area of Eucalyptus plantations in the eastern section of the study area for wood pulp production. However, forestry in the region is a marginal enterprise due to poor growing conditions and low commodity prices. Many plantations are being removed to allow for the re-establishment of pasture or crop.

The natural features of the study area are discussed below.

Landform and soils

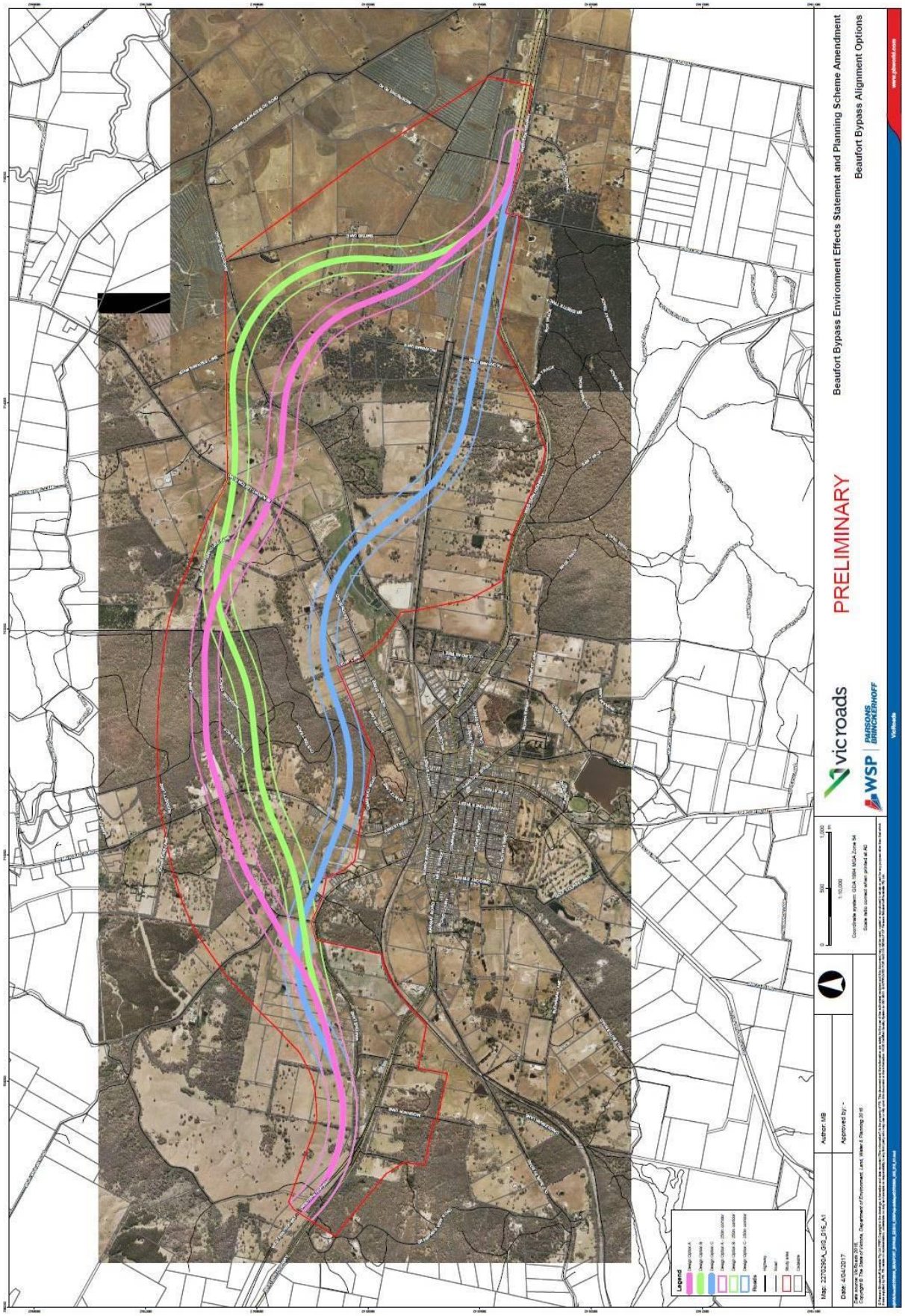
The major landforms are undulating rises and rolling low hills. The soils are derived from marine and non-marine sandstone[2]. Profile characteristics comprise an A horizon[3] of dark greyish-brown clay loam, clear transition to a brown clay loam, conspicuous bleaching and a sharp transition to the B horizon. It comprises a yellowish-brown mottled medium clay with ferruginous nodules. The crests and steeper slopes are stony gradational soils which are restricted in use due to landform, soil type and drainage constraints. The steeper slopes are generally unsuited to agriculture and remain as forest woodland. The rolling hills and plains have been cleared for pasture production.

Vegetation

Approximately 25% of the study area is uncleared and remains as forest woodland unsuited to agriculture. It occupies the steeper slopes and poorer soils. The cleared areas are of more gentle terrain and have been sown down to pasture species for livestock grazing. However, reversion to volunteer grass and weed species readily occurs under low input agriculture. Productivity of these types of pastures is in the 8-10 dry sheep equivalents[4] per hectare range while improved perennial pastures on the better land can support stocking rates of up to 15 dse/ha.

[1]Western Highway Duplication Project, Section 2, Beaufort to Ballarat, Phillips Agribusiness November 2012
[1] Bureau of Meteorology Beaufort
[2] Victoria Resources Online Glenelg-Hopkins
[3] Soil horizons are a description of the soil profile according to changes in texture, colour and structure.
[4] Dry sheep equivalent (dse) is that amount of dry matter required by one mature wether per annum

Figure 1: Study Area Corridor Design Options



Climate

The annual average rainfall in the Beaufort is 679mm[5] with an expected seasonal range between 500mm-800mm. The distribution pattern is for an April autumn break, most of the rainfall occurring over the winter and spring months and a dry summer. The rainfall distribution pattern and temperature range support the growing conditions for pasture and annual cropping.

2.2 District land use patterns

Land use across the region is principally livestock grazing with a strong orientation to wool sheep and prime lamb. Cattle represent approximately 25% of livestock equivalents and cropping less than 10% of land use.

Sheep enterprises are wool production and prime lamb production with the latter growing in significance. Merinos remain the dominant breed for wool production while first cross ewes are favoured for prime lamb production. Cattle enterprises are both breeding and fattening. Cropping is a minor enterprise, traditionally as a phase in the pasture renovation process but more recently a specialist cash crop growing in importance.

A livestock monitoring program[6] has been conducted across the South-West Region of Victoria for many years to provide information on farm profitability and enterprise performance. The most recent data is for 2015-16 and is summarised by enterprise in Table 1 below.

Table 1: Livestock performance 2015-16

Item	Unit	Wool	Lamb	Beef
Stocking rate	dse/ha	11.6	15.3	14.9
Gross margin	$/dse	18.14	31.92	41.6
Gross margin	$/ha	210	488	620

The data is only broadly applicable to the study region due to its extensive source across South-West Victoria. However, there are some conclusions rising from the table that can apply to the study region.

- Wool is the least profitable grazing enterprise, a function of stocking rate and lower gross margins per dse. Lower stocking rate is due to the type of country being farmed and the lower gross margin, a commodity price effect. Wool growing is likely to be the major enterprise in the Beaufort Study Region;
- Cattle prices have peaked due to demand and a numbers shortage hence their high returns per dry sheep equivalent. Historical performance has been at lower levels than other livestock enterprises;
- The values shown are the average for all producers. The top 20% of the sample demonstrate significantly better performance in all measures, generally a function of applying Best Management Practice;
- Livestock performance varies significantly between seasons and between enterprises due to climatic effects and movements in commodity prices.

[6] Livestock Farm Monitor Project, Victoria 2015-16

3.0 TENEMENT PATTERNS

The tenement pattern is quite variable across the study area and seems to be linked with soil quality as well as location to Beaufort. The tenement pattern is moderate in the western section of the study area where tenements appear greater than 100ha. The land is cleared and likely to be engaged in productive agriculture. Moving east to Main Lead Road, tenements reduce in size, likely to be a function of declining soil quality, rising contour and rural living demand. East of Main Lead Road is a large forested area unsuited to agriculture. Further east past the Beaufort-Lexton Road to the commencement of the study area, the land becomes more open with moderate tenement sizes and greater indication of commercial agriculture although patches of woodland areas still prevail.

The overall impression is moderate to poor agricultural land with retained woodland forest on the steeper slopes. The larger tenements appear to follow the more productive agricultural land while rural living demand, with smaller tenements, is concentrated on the poorer country.

3.0 AGRICULTURAL IMPACTS

3.1 Description of impacts

There are five major agricultural impacts that can be imposed on land holdings through the construction of a highway. These include:

- Direct land loss;
- Severance;
- Loss or damage to infrastructure;
- Changes in access;
- Vehicle and livestock movement

Direct Land loss

The importance of direct land loss is subject to land quality, level of productivity and area of land involved. In this case, where land is moderate to poor quality and the area involved no greater than 130ha direct land loss is unlikely to be significant to district rural productivity.

Severance

The main severance effect is likely to be through the selected Design Option passing across an allotment to isolate one section from the other. The major impacts that can arise include the need for facilities duplication, an increase in cost and inconvenience in having to transport stock across the highway and a reduction in farming efficiency due to increases in time, costs and the loss of management flexibility.

Of the design options, Option C appears to have the least agricultural impact as it lies closest to the town where tenements are small, land quality is only fair and rural activity likely to be low.

Design Options A and B appear similar in their impact. Both impose significant severance on some properties. The economic effects assessment of the proposed bypass corridors will include some measure of this impact.

Impacts to Infrastructure

The major infrastructure impacts are those that can be imposed on dams, buildings, yards, drains, and vegetation removal. Design Option C is the one most likely to be at risk due to its close

location to the town. Infrastructure density is low for the other two options. Overall, it is likely to be a minor impact.

Impact on Access

Access impacts are likely to be greater for Design Option C because of smaller tenement sizes and close location to Beaufort. It is unlikely to be significant for the other two options.

Vehicle and stock movement

This impact is significant where a larger land holding is severed by the highway and stock transfers are required to meet normal husbandry and management needs (shearing, stock handling, changes in grazing rotation). It may also affect those land holders who own several parcels of land and require stock transfers between them.

At this stage, the impact appears relatively minor due to the small number of commercial agricultural holdings in the study area.

Amelioration

Amelioration strategies are mostly directed at the individual property level. They may involve facility replacement, facility extension, improved access arrangements and compensation for any permanent affects that lowers agricultural performance.

3.2 Economic and financial impacts

No measurement of relative agricultural economic performance between the three design options was undertaken due to the lack of relevant data. Input data required includes area of direct land loss, severance and the number and type of facilities affected. Disruptions to access and changes in vehicle and livestock movement are other important considerations but are difficult to measure and usually excluded from any calculation.

4.0 CONCLUSIONS

The natural resource base for agriculture across the study area is moderate to low due to the combination of landform, soils, vegetation and climate characteristics. The tenement pattern reinforces this impression where the larger tenements appear to follow the more productive agricultural land while the smaller tenements are concentrated on the poorer country to meet rural living demand.

Agricultural land use across the broader region is predominately livestock grazing. Wool and prime lamb production are the main livestock enterprises while cropping is a minor use but growing in importance. Forestry is a minor and declining use.

There are numerous agricultural impacts that can be imposed on land holdings within the study area through the construction of the bypass. The most important ones are likely to be direct land loss, severance and restrictions to vehicle and livestock movement. However, all are receptive to amelioration.

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