

Figure 7Precinct Map{ TC "Figure 3.0

Precinct Map" \f F \I "4" }

3.7.2 Precinct 2 – Echuca West Residential Area

The Echuca West Residential Area is located to the east of the Murray Valley Highway, south of Anstruther Street and west of the Campaspe River. It is generally characterised by recently developed residential urban form including dwellings and Echuca College.

3.7.3 Precinct 3 – Campaspe Floodplain (south of Warren Street)

This land is characterised with generally undeveloped land within an Urban Floodway Zone. This land has been subdivided for effectively medium density housing, however due to current planning controls within an environment which is subject to the risk of flooding, urban development is generally prohibited.

3.7.4 Precinct 4 – Campaspe Floodplain (north of Warren Street)

This land is generally undeveloped bushland land within an Urban Floodway Zone. This land has been subdivided to a range of densities, however due to current planning controls within an environment which is subject to the risk of flooding, urban development is generally prohibited.

3.7.5 **Precinct 5 – Echuca Cemetery**

Echuca Cemetery is located north of Warren Street approximately 500m from the intersection with the Murray Valley Highway. The site is bounded by Homan Street to the east, Jarman Street to the north and the Nolan Street road reservation to the west. The Cemetery Trust is currently in negotiations with Campaspe Council to expand its site to the north.

3.7.6 Precinct 6 – Warren Street Residential Area

A small pocket of residential development is located north of Warren Street adjacent to the Echuca Cemetery. This land is elevated meaning that the flood risk on this area of development is lower than the areas which surround this precinct. It contains approximately 30 detached dwellings, mostly located on Jarman, Hansen and Warren Streets. The housing stock is of good quality with a number of dwellings constructed in recent years.

3.7.7 Precinct 7 – Echuca Town Centre Precinct

The Echuca town centre provides a range of businesses, Government and community services, and includes the historic Port of Echuca area on the Murray River that is the focal point for tourism in the area. It has high quality urban development with a number of historical buildings.

3.7.8 Precinct 8 – Port Precinct Area

The precinct defined as the Port Precinct is the northern-most residential area in Echuca, bounded by the Campaspe River to the west, Crofton Street to the north, Watson Street and the Murray River to the east and the Echuca town centre precinct to the south. This is a wellestablished area which was developed as part of the original Echuca Township. There is a number of heritage listed buildings located in this precinct. Other than residential dwellings, the precinct also includes St Joseph's College, Echuca police station and a number of short stay accommodation facilities including bed and breakfasts and motels.

3.7.9 Precinct 9 – Victoria Park Reserve

Victoria Park Reserve is the undeveloped bushland area adjacent to the Murray River. The land is designated Crown Reserve land in which the Campaspe Shire Council has been appointed the Committee of Management of Victoria Park under the Victorian *Crown Land Reserves Act 1978.* The Council therefore has responsibility for the overall management of the facilities and building maintenance within the park.

There are a number of public areas within Victoria Park with bbq facilities and a boat ramp available for public use. There is also a developed 'scenic drive' which winds around the perimeter which effectively goes along the banks of the Murray and Campaspe Rivers.

3.7.10 Precinct 10 – Echuca High School Site (Crofton Street Campus)

Precinct 10 contains the former Echuca High School site including associated buildings and sporting fields. Echuca High School was a mid-sized government secondary school functioning between 1903 and 2005. Located to the north of Echuca's business district, the Echuca High School campus was situated at the end of Crofton Street and next to the Campaspe River. Sections of its facilities, particularly the sports fields, were prone to occasional flooding.

In 2006, Echuca High School merged with Echuca College and relocated to the Butcher Street campus. The school buildings were still utilised until 2009 but since then have been removed from site. The site however still remains under the control of the Department of Education and Early Childhood Development (DEECD).

3.7.11 Precinct 11 – Victoria Park Sporting Facilities

The Victoria Park sporting facilities are located within the overall Victoria Park Reserve off Crofton Street. As with the Victoria Park Reserve, the land is designated Crown Reserve land in which the Campaspe Shire Council has been appointed the Committee of Management under the Victorian *Crown Land Reserves Act 1978*. The Council therefore has responsibility for the overall management and maintenance of all facilities, buildings and playing surfaces. The sporting facilities include: sporting fields; a grandstand; a pavilion; a grass tennis complex including courts and clubrooms; and the Echuca Urban Fire Brigade Training and Events Complex.

3.7.12 Precinct 12 – Echuca Holiday Park

The Echuca Holiday Park is located to the north of Crofton Street adjacent Victoria Park Reserve (to the north), Victoria Park sporting facilities (to the west) and the Murray River (to the east). The Holiday Park is predominantly for tourist use and caters for a variety of casual and permanent accommodation needs, including ensuite cabins, tent sites and caravan sites. It also has other recreational facilities such as a swimming pool, tennis court and a children's adventure playground. The Holiday Park is within walking distance to the Port of Echuca's shops, restaurants and cafes.

3.7.13 Precinct 13 – Echuca Boat Ramp and Moorings

The Echuca boat ramp and moorings are located on the Victorian bank of the Murray River. They are located in proximity to partly cleared bushland in the south-east corner of Victoria Park which can be utilised for car parking. There is also a toilet block facility in proximity.

Approximately 50 metres south of the boat ramp, the moorings commence in the Murray River, continuing south towards the Echuca CBD. The northern most moorings are occupied by Murray River Safaris and Echuca Boat and Canoe Hire.

4. Planning and Policy Context

4.1 Overview

At the investigation phase of this Project it is important to evaluate relevant legislation and policy for alignment options being considered, ensuring that concepts taken forward meet national, state and local policy direction and objectives.

The alignment options fall within the Victorian and NSW jurisdiction and therefore require assessment under both of these planning frameworks. Figure 8 below identifies key planning legislation, policy and plans relevant to this Project. Further details in relation to these documents are provided in the sections below.

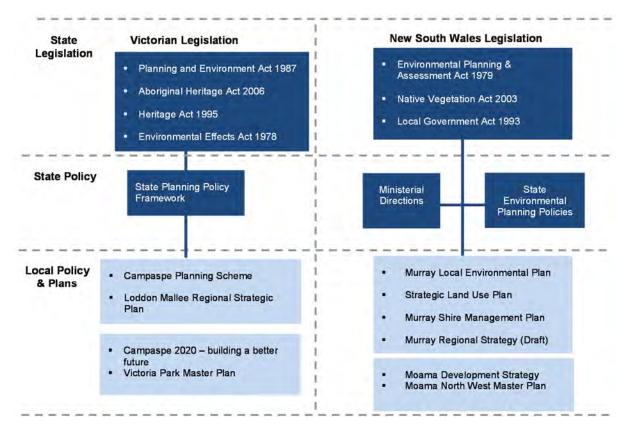


Figure 8 Planning and Policy Context { TC "Figure 4.0 Diagram of relevant legislation, policy and pla

However, it is noted for the purposes of this Report, that the scope only requires consideration of the Victorian planning and policy context.

4.2 Commonwealth Legislation

4.2.1 The Environmental Protection and Biodiversity Conservation Act 1999

The *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) is Australia's central piece of environmental legislation. The EPBC Act provides a national framework for environmental protection through a focus on protecting matters of national environmental and heritage significance and the conservation of Australian's biodiversity.



The EPBC Act contains a list of threatened species and ecological significant communities and any impacts on these species require the approval of the Minister for Sustainability, Environment, Water, Population and Communities (SEWPaC).

The Flora and Fauna Assessment prepared for this project by Brett Lane and Associates, dated July 2012 identified twelve EPBC listed fauna species likely to occur within or near the study area, including five birds, two mammals, one reptile, one frog and three fish. Site inspections were undertaken to confirm the presence of these species and the EPBC threated Corben's Longeared Bat was recorded at the site. No EPBC bird species were observed and while no fish survey was undertaken it is considered that the project works can be managed so as to not have significant impacts on these communities if they do exist.

A referral to the Minister of the Department of the Sustainability, Environment, Water, Population and Communities (DSEWPaC) is required under the EPBC Act as the EPBC listed Corben's Longeared Bat was recorded in the study area and is likely to be impacted by the proposed corridor. The Minister for SEWPaC will make a decision within 20 working days as to whether the proposal is likely to have a significant impact and therefore requiring approval under the EPBC Act. As noted in the Flora and Fauna Assessment, further survey of the site to determine the abundance of the species may be required. If the Minister decides that the activity does require an approval, then an environmental assessment must be carried out in accordance with the EPBC Act assessment criteria.

4.3 Victoria Planning Provisions

4.3.1 Planning and Environment Act 1987

The *Planning and Environment Act 1987* (the Planning and Environment Act) sets the framework for planning the use, development and protection of land in Victoria. The seven key objectives of the Planning and Environment Act as set out in Clause 4 relate to:

- Sustainable use and development of land
- Protection of man-made and natural resources
- Ensuring a pleasant and safe environment
- Preserve and enhance features of scientific, aesthetic, architectural, heritage or cultural value
- Protect utilities and assets
- Balance the needs of existing and future generations.

The Planning and Environment Act sets out the assessment, processes and procedures for the use and development of land as outlined in the Victoria Planning Provisions (VPP) and relevant Planning Schemes.

4.3.2 Heritage Act 1995

The purpose of the *Heritage Act 1995* is to conserve places and objects of cultural heritage significance and the registration of such places and objects and features. Sites listed on the Victorian Heritage Register are considered to be state significant and should be avoided.



It is noted that none of the alignment options affect any sites on the Victorian Heritage Register.

4.3.3 Aboriginal Heritage Act 2006

The main purpose of the *Aboriginal Heritage Act 2006* (the Aboriginal Heritage Act) is to provide for the protection and conservation of Aboriginal cultural heritage in Victoria. Under Section 27-28 it is an offence to knowingly harm Aboriginal cultural heritage. If an activity is likely to or has the potential to impact on Aboriginal heritage areas, a Cultural Heritage Management Plan (CHMP) may be required under the Aboriginal Heritage Act. Division 2 and 3 of the Aboriginal Heritage Act outlines when a CHMP is likely to be required, which may be because the activity:

- Is located in an area of cultural sensitivity; and
- Is an activity of high impact.

As noted in the Cultural Heritage Study prepared for the project titled 'Detailed Aboriginal Cultural Heritage Study for a Second Murray River Crossing at Echuca – Moana, dated August 2010, prepared by Heritage Insight Pty, a CHMP is required for the project as the activity is located within areas of cultural sensitivity, is a high impact activity and is also situated in close proximity to a waterway.

4.3.4 Environmental Effects Act 1978

The *Environmental Effects Act 1978* (EE Act) was the first environmental planning control in Victoria, with its purpose to ensure assessment of the environmental impact of significant developments via an Environmental Effects Statement (EES).

The Environment and Natural Resources Committee (ENRC) of the Victorian Parliament has tabled its report into the Victoria's Environmental Impact Assessment regime under the EE Act, 1978. The Committee recognised that the EE Act is failing and requires substantial reform to 'improve the transparency and rigour of the 'process' and better protect the environment. The Committee has made a number of recommendations including a recognition that the primary object of the EE Act is to protect the environment, to insert clear triggers for assessment, to provide statutory time frames for assessment, to make Ministerial approvals and conditions legally binding, and to have a legislative requirement for public participation.

In light of these recommendations, the Victorian Government has subsequently committed to reform Victoria's Environmental Impact Assessment (EIA) Framework, including necessary legislative changes, on the basis of the following elements:

- EIA processes to be reformed to provide certainty for all parties about processes, considerations and timeframes.
- The reforms will be grounded in a clear set of objectives to guide their implementation.
- A tiered suite of EIA processes will be developed to enable efficient assessment of project proposals with a variable potential for significant environmental impacts.
- The reforms will embody principles of fairness, including for third party rights, as well as for reviews of key procedural decisions.



- Opportunities will be addressed for establishing clear links between the outcomes of the EIA process and regulatory decision-making under applicable laws, as well as compliance oversight by relevant bodies, to both drive improved environmental outcomes and streamline overall regulatory requirements.
- The reforms will provide an option for enabling the assessment of strategic proposals that are wider in scope than individual projects, where this would offer both efficiency and environmental benefits.

At the date of this report, the EIA Framework review being undertaken by the Department of Planning and Community Development is currently unfolding and new EIA Guidelines, Policy and legislative amendments are expected in the near future.

4.4 Campaspe Planning Scheme

The alignment options are located within the municipalities of Campaspe (Victoria) and Murray (New South Wales), and are therefore affected by the provisions of the Campaspe Planning Scheme and the Murray Local Environmental Plan (2011).

The Shire of Campaspe is the responsible authority for administration of the Campaspe Planning Scheme in accordance with the Planning and Environment Act.

4.4.1 State Planning Policy Framework

The State Planning Policy Framework (SPPF) contains strategic issues of State importance which must be considered when development and land use decisions are made. The SPPF contains a number of clauses which are of direct relevance to the alignment options.

The following Clauses and Objectives are of particular relevance to the proposed alignment options land use planning study. An assessment of how the project meets the objectives of each relevant Clause is also provided.

Clause 11 – Settlement

The following urban growth and regional development clauses and objectives are relevant:

Clause 11.02-2 Planning for Growth Areas

The objective of this Clause:

'To locate urban growth close to transport corridors and services and provide efficient and effective infrastructure to create benefits for sustainability while protecting primary production, major sources of raw materials and valued environmental areas.'

Comment:

The location of the corridor is consistent with the strategic direction of Echuca in guiding future urban growth in a western direction. This will therefore ensure that the future urban growth is close to a transport corridor. The alignment options will also not impact on agriculturally productive land. It is therefore considered that the proposed alignment options are consistent with this Clause.



Clause 11.03 Open Space

The objective of this Clause is:

'To assist creation of a diverse and integrated network of public open space commensurate with the needs of the community.'

Comment:

The Victoria Park & Environs Master Plan is a strategic report that assesses the open space and recreational precinct in Echuca. It was completed in January 2010 with the report considering the 2010 Mid-West alignment option for the second crossing of the Murray River as part of its assessment of the area.

Based on this, and the fact that the alignment options which are subject of this report are different to the 2010 Mid-West alignment option, it is noted that Options 2B and 2D will impact on the overall Master Plan recommended by the Victoria Park & Environs Master Plan as indicated in Appendix 3. It is therefore considered that Option 2B and Option 2D are inconsistent with this strategic document.

Clause 12 – Environment and Landscape Values

The following objectives relate to the protection and conservation of the environment including preservation of native vegetation and habitats for native species. The policy also seeks to preserve places and sites of heritage significance, both European and Aboriginal heritage.

Key objectives related to the proposed alignment options are:

Clause 12.01-1 Protection of habitat

The objective of this Clause is:

'To assist the protection and conservation of biodiversity, including native vegetation retention and provision of habitats for native plants and animals and control of pest plants and animals.'

Clause 12.01-2 Native vegetation management

The objective of this Clause is:

'To achieve a net gain in the extent and quality of native vegetation.'



Clause 12.01-3 Preparation of biodiversity strategies

The objective of this Clause is:

'To protect native habitat and areas of important biodiversity through appropriate land-use planning.

Comment:

Native vegetation is present within the corridor and would need to be removed for the development of the road. The Detailed Flora, Fauna and Native Vegetation Assessment (Brett Lane and Associates, 2012) was completed on a study area that encompassed the alignment options. The following recommendations were provided:

- One EPBC Act species, the Corben's Longeared Bat was recorded in the study area at a low abundance. Despite the occurrence of the species in the area, the removal of a small amount of habitat is not considered to have a significant impact on the species. Based on the amount of native vegetation proposed to be removed under either four options it is considered prudent that a referral under the EPBC Act be prepared for the project. Based on the details presented above, it is recommended that the project be referred as 'Not a Controlled Action'.
- A permit will be required under Clause 52.17 of the Campaspe Shire Planning Scheme for the removal of native vegetation in Victoria.
- The current proposal will trigger a referral to the Victorian DSE due to the amount of native vegetation proposed for removal in Victoria.
- Approval will be required by the Victorian Minister for Environment for the removal of very high conservation significance vegetation within the study area.
- The removal of native vegetation within the study area will require offsetting in accordance with Victoria's Native Vegetation Management Framework. Offset targets are detailed as followed for each alignment option:
 - Alignment Option 2A: This option will result in the removal of 25.97 hectares (14.94 habitat hectares) of native vegetation in Victoria as well as the loss of 485 large old trees within patches. This will result in an offset target of 29.28 habitat hectares as well as the protection of 3,820 large old trees and recruitment of 19,100 new plants.
 - Alignment Option 2B: This option will result in the removal of 24.71 hectares (14.09 habitat hectares) of native vegetation in Victoria as well as the loss of 414 large old trees within patches. This will result in an offset target of 27.54 habitat hectares as well as the protection of 3,236 large old trees and recruitment of 16,180 new plants.
 - Alignment Option 2C: This option will result in the removal of 22.21 hectares (12.25 habitat hectares) of native vegetation in Victoria as well as the loss of 379 large old trees within patches. This will result in an offset target of 23.88 habitat hectares as well as the protection of 2,972 large old trees and recruitment of 14,860 new plants.



- Alignment Option 2D: This option will result in the removal of 21.04 hectares (11.52 habitat hectares) of native vegetation in Victoria as well as the loss of 374 large old trees within patches. This will result in an offset target of 22.41 habitat hectares as well as the protection of 2,916 large old trees and recruitment of 14,580 new plants. Additional offsets, namely the protection of 26 trees (24 very large and 2 large) and recruitment of 170 new plants OR the recruitment of 1010 new plants are required for the removal of 11 scattered trees.
- Based on the proposed level of removal of very high conservation significance vegetation in Victoria, the first criterion is met for either of the four alignment options. A Referral to the Victorian Minister for Planning who will determine if an EES is required is therefore considered to be necessary for the project.
- The following *Flora and Fauna Guarantee Act 1988* (FFG Act) listed values were recorded in the study area:
 - Corben's Longeared Bat;
 - Weeping Myall.
- A Protected Flora Licence under the FFG Act would be required from DSE to remove Weeping Myall from public land. The responsible authority will consider impacts on the Corben's Longeared Bat when assessing the planning application.
- Three flora species and five fauna species listed under the DSE Advisory Lists were recorded in the Victorian section of the study area during the initial assessment. The responsible authority will consider impacts on these values when assessing the planning application.

Clause 13 – Environmental Risks

The following Objectives are relevant from Clause 13:

Clause 13.02-1 Floodplain Management

The objectives of this Clause are:

- 'To assist the protection of:
- Life, property and community infrastructure from flood hazard.
- The natural flood carrying capacity of rivers, streams and floodways.
- The flood storage function of floodplains and waterways.
- Floodplain areas of environmental significance or of importance to river health.'

Clause 13.03-3 Salinity

The objective of this Clause is:

'To minimise the impact of salinity and rising watertables on land uses, buildings and infrastructure in rural and urban areas and areas of environmental significance and reduce salt loads in rivers.'



Comment:

It is understood that a Geotechnical Report is being completed for the alignment options. At present, this report has not been sighted. The recommendations of this report should be considered and assessed to determine if it will be consistent with the objectives of this Clause.

Clause 13.04-1 Noise Abatement

The objective of this Clause is:

'To assist the control of noise effects on sensitive land uses.'

Comment:

A noise impact assessment (Renzo Tonin and Associates, 2010) was completed for the study area. It indicated that noise mitigation measures would be implemented where warranted in accordance with VicRoads Traffic Noise Reduction Policy to control the noise effects on sensitive land uses. Potential noise impacts associated with construction would be managed through an Environmental Management Plan. The proposed alignment options are therefore considered to be consistent with the objectives of this Clause.

Clause 13.04-2 Air Quality

The Objective of this Clause is:

'To assist the protection and improvement of air quality.'

Comment:

The proposed alignment options will provide an alternative to the existing river crossing which is already congested. It will also provide an alternative to needing to enter the Echuca town centre, where there are numerous intersections requiring vehicles to brake and accelerate. As air emissions from cars are improved by constant speed and reducing acceleration, the proposed corridor is considered to be consistent with the objectives of this Clause.

Clause 15 Built Environment and Heritage

The following Objectives are relevant from Clause 15:

Clause 15.01-1 Urban Design

The Objective of this Clause is:

'To create urban environments that are safe, functional and provide good quality environments with a sense of place and cultural identity.'

Clause 15.01-2 Urban Design Principles

The Objective of this Clause is:

'To achieve architectural and urban design outcomes that contribute positively to local urban character and enhance the public realm while minimising detrimental impact on neighbouring properties.'

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Comment:

Options 2B and 2D are inconsistent with the Victoria Park Master Plan (Simon Leisure Consulting, 2010). No other report has been provided to Parsons Brinckerhoff that discusses the urban design treatments of the alignment options. It is therefore unclear (at the date of this report) whether the alignment options will be consistent or inconsistent with Clauses 15.01-1 and 15.01-2.

Clause 15.03-1 Heritage Conservation

The Objective of this Clause is:

'To ensure the conservation of places of heritage significance.'

Comment:

The proposed corridor impacts on a place of heritage significance for which <u>a planning</u> permit would be required for road works carried out by a public authority.

Clause 15.03-2 Aboriginal Cultural Heritage

The Objective of this Clause is:

'To ensure the protection and conservation of places of Aboriginal cultural heritage significance.'

Comment:

Options 2A and 2C have the potential to impact the intact section of a sandhill which may contain both buried Aboriginal archaeological sites and human burials. A method of construction across the section of the sandhill crossed by Options 2A and 2C that is acceptable to the Registered Aboriginal Party for the Echuca area has yet to be determined. For Options 2B and 2D, construction across the remnant sandhill would be concrete slabbed to avoid any excavation of the sandhill. The *Detailed Aboriginal Cultural Study for a Second Murray River Crossing at Echuca-Moama* (Heritage Insight Pty Ltd, 2010) study indicates that there are 14 Aboriginal scarred trees within the alignment which they studied. It noted that these would be avoided by elevated structures or retaining walls into the embankments to avoid the trees. A Cultural Heritage Management Plan would also be required for the preferred alignment option, and provided this is completed, it would be consistent with this Clause.

Clause 17 – Economic Development

Maintaining and enhancing economic development within Echuca and Moama is of utmost importance. The need to create a sustainable urban city relies on access to employment opportunities, transport linkages and the achievement of higher levels of self-containment. It is considered that the proposed alignment options will assist in achieving economic outcomes for Echuca and Moama.



The following commercial and tourism Clauses and Objectives are relevant from Clause 17:

Clause 17.01-1 Business

The objective of this Clause is:

'To encourage development which meets the communitie's needs for retail, entertainment, office and other commercial services and provides net community benefit in relation to accessibility, efficient infrastructure use and the aggregation and sustainability of commercial facilities.'

Comment:

The preferred route alignment will provide an alternative route alignment to through-traffic in central Echuca, leading to improved amenity and access to the town centre. Therefore it is considered that the alignment options are consistent with this Clause.

Clause 18 – Transport

The following Objectives are relevant from Clause 18:

Clause 18.01-1 Land use and Transport Planning

The objective of this Clause is:

'To create a safe and sustainable transport system by integrating land-use and transport.'

Comment:

The Echuca town centre is experiencing capacity constraints due to increasing urban development in the Region. The preferred alignment option would alleviate the capacity constraints, particularly over the existing Murray River bridge crossing. Furthermore, the proposed alignment options location is consistent with the predominately western direction of urban development in Echuca and is therefore consistent with integrated land-use and transport planning. The alignment options are therefore considered to meet the Objective of this Clause.

Clause 18.01-2 Transport System

The objective of this Clause is:

'To coordinate development of all transport modes to provide a comprehensive transport system.'

Comment:

The alignment options are consistent with the management and development strategy contained within the Route B75 Corridor Strategy – Northern Highway: Hume Freeway (near Wallan) to NSW Border, of investigating options for a second crossing of the Murray River. The preferred alignment option would include a pedestrian/cyclist pathway throughout the project length. The alignment options are therefore considered to meet the Objective of this Clause.



Clause 18.02-1 Sustainable Personal Transport

The objective of this Clause is:

'To promote the use of sustainable personal transport.'

Comment:

A cycle/pedestrian pathway will be incorporated into the design of the preferred option. The alignment option is therefore consistent with this Objective.

Clause 18.02-2 Cycling

The objective of this Clause is:

'To integrate planning for cycling with land use and development planning and encourage as alternative modes of travel.'

Comment:

A cycle/pedestrian pathway will be incorporated into the design of the preferred option. The alignment option is therefore consistent with this Objective.

Clause 18.05-1 Develop Freight Links

The objective of this Clause is:

'To further develop the key transport gateways and freight links and maintain Victoria's position as the nation's premier logistics centre.'

Comment:

The alignment options are consistent with the management and development strategy contained within the Route B75 Corridor Strategy – Northern Highway: Hume Freeway (near Wallan) to NSW Border, of investigating options for a second crossing of the Murray River. The preferred alignment option will provide improved vehicle access within the Echuca-Moama urban areas and will improve industrial transport operations. The alignment options are therefore considered to meet the Objective of this Clause.

Clause 19 - Infrastructure

Infrastructure is a key component for building economically viable towns and settlements. The following policy statement is relevant to the alignment assessment:

'Growth and redevelopment of settlements should be 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'.

4.4.2 State Planning Policy Framework Assessment Summary

The proposed route alignments generally meet the principles, provisions and objectives of the SPPF. Careful detailed design and construction management is required to ensure that the preferred route alignment minimises impacts on cultural heritage, amenity values and biodiversity.



4.4.3 Campaspe Local Planning Policy Framework

The following key land use planning objectives are in the Municipal Strategic Statement of the Campaspe Planning Scheme and assist Council by guiding decision making and strategic thinking for the municipality. The following apply to the route alignment options:

Municipal Strategic Statement

Clause 21.04-1 Settlement

The relevant objective of this Clause includes:

'To ensure that the future development of each of the townships occurs in accordance with the strategic directions provided in the Town Structure Plans at Clause 21.04-4.'

The relevant strategy of this Clause includes:

'Implement the attached Town Structure Plans at Clause 21.04-4.'

Comment:

The alignment options are consistent with the Echuca Town Structure Plan and are therefore considered consistent with the Objective and Strategy of Clause 21.04-1.

Clause 21.04-2 Environment

The relevant Objectives of this Clause include:

Water

'To ensure any new use or development does not cause water pollution or land degradation.

To protect the health of waterways, wetlands and floodplain areas of environmental significance.'

Biodiversity

'To protect, manage and restore native vegetation, including grasslands and wetland vegetation.

To protect and enhance indigenous roadside vegetation.'

Flooding

'To protect life, health, safety and community well being from flood hazard.

To minimise the impact of flooding on the community.'

Heritage

'To protect and maintain Aboriginal and historic heritage assets.'

The relevant Strategies of this Clause include:

General



'Ensure any new use or development does not pose a threat to the sustainable productive capacity of the Shire's major agriculture economic base.

Ensure that new uses and developments:

- are located on land that has the capability to sustain the development;
- do not impact on significant native vegetation or habitat;
- includes appropriate revegetation and tree planting programs;
- do not impact on adjoining environmentally sensitive areas;
- meet approved guidelines for soil erosion control;
- are undertaken in accordance with the Guidelines for the Protection of Water Quality (2001)

Water

Protect waterways, wetlands and floodplain areas of environmental significance.

Ensure effective design and construction of wetlands and stormwater pollutant traps.

Encourage developments on land abutting Waranga Basin or any watercourses or waterways to make provision for vegetated riparian buffer zones along foreshores and stream banks to improve water quality, local amenity and biodiversity values.'

Biodiversity

'Provide effective management of road reserves, railway lines and other public land.'

Flooding

'Protect property and community infrastructure from flood damage.'

Heritage

'Ensure the protection, maintenance and enhancement of Aboriginal and historic places and features.

Protect Aboriginal and historic places and features of significance.'

Comment:

While the alignment options pass through environmentally sensitive areas (Murray River, Campaspe River, floodplains, areas of Aboriginal cultural heritage sensitivity and areas of ecological sensitivity on public land, provided that appropriate design and construction management procedures are implemented the preferred alignment should be consistent with the Objectives and Strategies of this Clause. The construction and management procedures could include: the minimisation of vegetation clearance; the provision of offsets to compensate any vegetation removal; the implementation of measures to reduce erosion impacts and avoid impacts on flow water movement and the protection of Aboriginal and historic places and features.



4.4.4 Local Planning Policies

Clause 22.03 – Port of Echuca Heritage Policy

The relevant Objective of this Clause includes:

'To protect the heritage character and integrity of the historic port and environs.'

Under the provisions of this policy:

'Development proposals are discouraged which impinge upon existing significant view lines towards and from the Port of Echuca area, including the view towards the forested area opposite the wharf, and the view line from the Iron Bridge and towards the Port.

The aesthetic, historic and environmental values of the Campaspe River and public land to its west is encouraged to be preserved and links between the Campaspe and Murray Rivers are to be encouraged and enhanced.'

Comment:

The corridor, including the proposed bridge over the Murray River, would generally not be visible from the Echuca Town Centre Precinct.

The alignment options are, in part, located within public land, however the distance between the location of these options and the area subject to the Port of Echuca Heritage Policy is approximately 1km which is such that it is considered unlikely that there will be any impacts on aesthetics, historic and environmental values of the heritage area. The alignment options are also considered to improve the existing amenity conditions in the Port of Echuca area due to the likely reduction of heavy vehicle movements through this area.

The alignment options are therefore considered consistent with the Objectives of this Clause.

4.4.5 Statutory Planning Assessment

This section provides an analysis of the current relevant planning zones, overlays and particular provisions as they apply to permitting the preferred option pursuant to the Campaspe Planning Scheme.

The proposed alignments are affected by a number of zones and overlay provisions.

The majority of the route alignment options are affected by the Urban Floodway Zone (UFZ) the Public Park and Recreational Zone (PPRZ) and the Public Conservation and Resource Zone (PCRZ). Options 2B and 2D are also affected by the Public Use Zone – Schedule 2 (PUZ2).

The current planning provisions relevant to the use and development of a road are outlined in this Section. However, it is anticipated that once an alignment has been adopted by Government a planning scheme amendment will follow to place the alignment within a Road Zone – Category 1 (RDZ1). This zone does not require a permit for use or development of a road. Only where the alignment is affected by an overlay control will a permit be required if triggered by that overlay provision.

Figure 9 below demonstrates the typical statutory process – from current zoning provisions to acquisition of the alignment to rezoning of the land for road purposes:



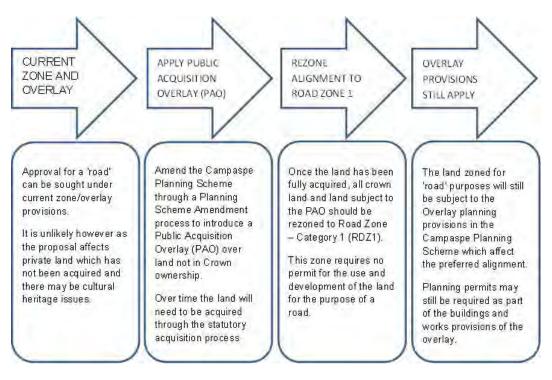


Figure 9 Statutory Planning Process{ TC "Figure 4.0 Public Acquisition Overlay Process

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The use of the Public Acquisition Overlay (PAO) is considered the most appropriate Victorian Planning Provision (VPP) instrument to achieve the reservation of the preferred alignment of the second Murray Crossing.

As stated in Clause 45.01 of the Campaspe Planning Scheme, the purpose of the PAO is to:

'To identify land which is proposed to be acquired by an authority.

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.'

The overlay will identify the land proposed to be acquired for the public purpose and has the effect of reserving the land under the Victorian *Land Acquisition and Compensation Act 1986*. The schedule to the overlay identifies the acquiring authority and the purpose of the acquisition.

The application of a PAO is the most appropriate planning provision to implement the strategic intent of the amendment.

Upon completion of the acquisition, the Road Zone – Category 1 will be applied and the PAO removed.



Current Zoning Controls

Table 4.1 and Figure 10 identify the current zones affecting each of the alignment options.

	5	5	5		
Alignment Option	RDZ1	UFZ	PPRZ	RCRZ	PUZ2
Option 2A	\checkmark	\checkmark	\checkmark	\checkmark	
Option 2B	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Option 2C	\checkmark	\checkmark	\checkmark	\checkmark	
Option 2D	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

 Table 4.1
 Planning Zones Affecting each Alignment Option

Zone Requirements

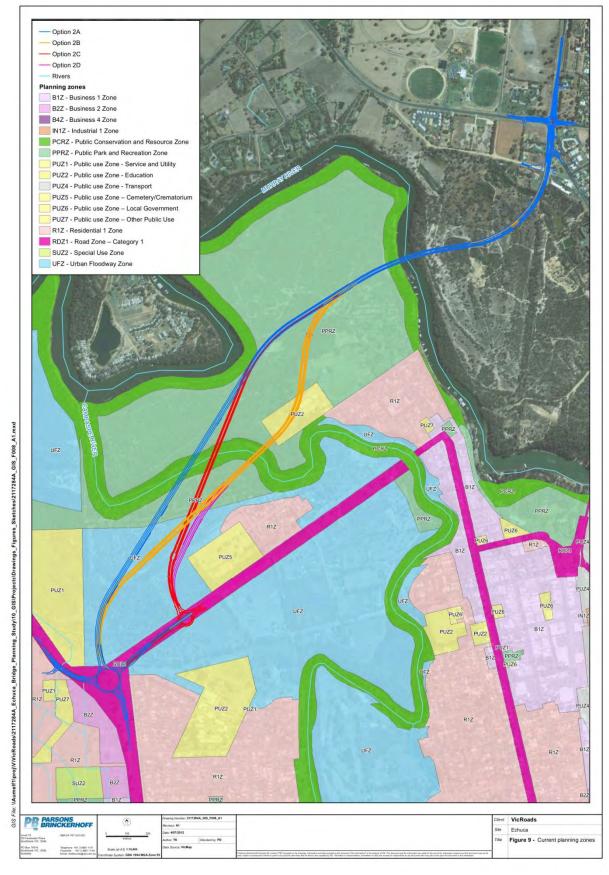
The requirements of each zone include:

Road Zone – Category 1 (RDZ1)

Pursuant to Clause 36.04 of the Campaspe Planning Scheme, <u>a planning permit is not</u> required for land use or development for the purposes of a road.

Urban Floodway Zone (UFZ)

Pursuant to Clause 37.03 of the Campaspe Planning Scheme, <u>a planning permit is required</u> to use land and construct or carry out works for the purposes of a road within an UFZ.





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Public Park and Recreation Zone (PPRZ)

Pursuant to Clause 36.02 of the Campaspe Planning Scheme <u>a planning permit is not</u> <u>required</u> to use the land or to construct or carry out works for the purposes of a road within a PPRZ, <u>providing it meets the following condition</u>:

'A use or buildings and works conducted by or on behalf of a public land manager or Parks Victoria under the relevant provisions of the Local Government Act 1989, the Reference Areas Act 1978, the National Parks Act 1975, the Fisheries Act 1995, the Wildlife Act 1975, the Forest Act 1958, the Water Industry Act 1994, the Water Act 1989, the Marine Act 1988, the Port of Melbourne Authority Act 1958, or the Crown Land (Reserves) Act 1978.'

An exemption to this Clause could be sought through the planning scheme amendment process.

Public Conservation and Resource Zone (PCRZ)

Pursuant to Clause 36.03 of the Campaspe Planning Scheme, <u>a planning permit is not</u> required to use the land for the purposes of a road <u>providing it meets the following condition</u>:

'A use conducted by or on behalf of a public land manager or Parks Victoria under the relevant provisions of the Local Government Act 1989, the Reference Areas Act 1978, the National Parks Act 1975, the Fisheries Act 1995, the Wildlife Act 1975, the Forest Act 1958, the Water Industry Act 1994, the Water Act 1989, the Marine Act 1988, the Port of Melbourne Authority Act 1958, or the Crown Land (Reserves) Act 1978.'

Pursuant to Clause 36.03-2 states <u>a planning permit is required</u> to construct a building or construct or carry out works.

An exemption to this Clause could be sought through the planning scheme amendment process.

Public Use Zone – Schedule 2 (PUZ2)

Pursuant to Clause 36.01 <u>a planning permit is not required</u> to use the land or to construct or carry out works for the purposes of a road.

Summary of Zone Requirements

Table 4.2 provides a summary of the relevant zones and the permit requirements.

Zone	Land Use Permit Requirements	Development Permit Requirements
RDZ1	No Permit	No Permit
UFZ	Permit Required	Permit Required
PPRZ	No Permit (provided it meets condition)	No Permit (provided it meets condition)
PCRZ	No Permit (provided it meets condition)	Permit Required
PUZ2	No Permit	No Permit

Table 4.2 Permit Requirements



Current Overlay Controls

Table 4.3 and Figure 11 identify the current overlays affecting each of the alignment options.

Alignment Option	FO	LSIO	WMO	НО
Option 2A	\checkmark			
Option 2B	\checkmark		\checkmark	
Option 2C	\checkmark	\checkmark	\checkmark	
Option 2D			\checkmark	

 Table 4.3
 Planning Overlays Affecting each Alignment Option

Overlay Requirements

The requirements of each overlay include:

Floodway Overlay (FO)

All of the alignment options are partly affected by the FO.

Pursuant to the Schedule to Clause 44.03-1 of the Campaspe Planning Scheme <u>a planning</u> <u>permit is not required</u> to construct a building or to construct or carry out works, in regards to a roadway, within an area subject to this overlay if they are conducted by a public authority.

Land Subject to Inundation Overlay (LSIO)

All of the alignment options are partly affected by the LSIO.

Pursuant to Clause 44.04 of the Campaspe Planning Scheme a planning permit is required to construct a building or to construct or carry out works, including roadworks within the area covered by this Overlay. However, pursuant to the Schedule to Clause 44.03, <u>no permit is required</u> for roadworks carried out by a public authority.

Wildfire Management Overlay (WMO)

All of the alignment options are partly affected by the WMO.

Pursuant to Clause 44.06-1 of the Campaspe Planning Scheme <u>a planning permit is not</u> required for the purposes of roadworks.



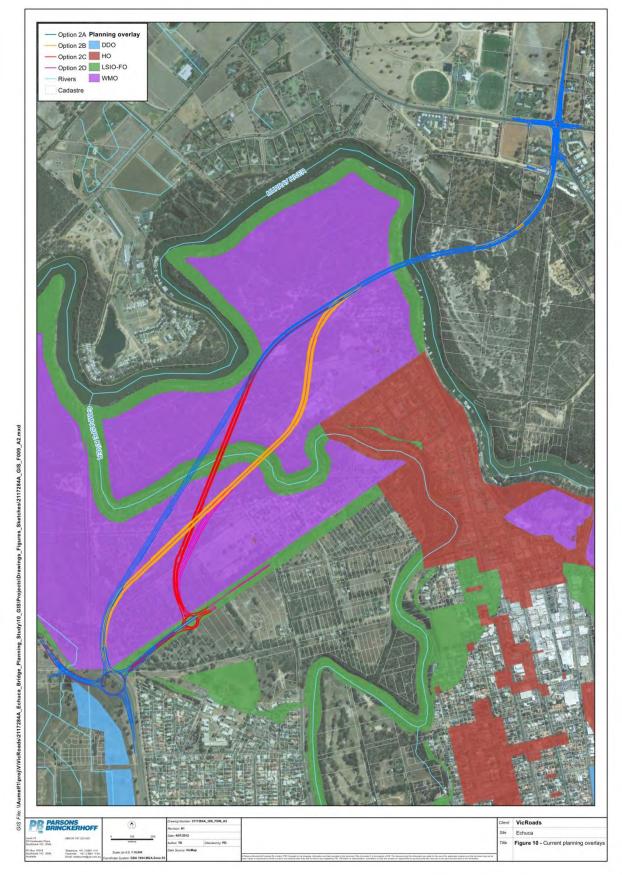


Figure 11Current overlay controls{ TC "Figure 4.0





Heritage Overlay (HO)

The proposed corridor is not located within an HO, however, a stand of Murray Pine trees is identified in the Campaspe Planning Scheme (HO79) located approximately 50m north of the Echuca High School site which may be affected by the preferred alignment.

This needs further identification and confirmation on site to ensure that the preferred alignment and associated works do not affect the identified stand of Murray Pine.

Pursuant to Clause 43.01-1 of the Campaspe Planning Scheme, <u>a planning permit is</u> <u>required to:</u>

'Construct a building or construct or carry out works, including roadworks.

Remove, destroy, prune or lop a tree if the schedule to this overlay identifies the heritage place as one where tree controls apply'

If the preferred alignment affects the identified stand of Murray Pine a planning permit would be required.

Summary of Overlay Requirements

Table 4.4 provides a summary of the relevant overlays and the permit requirements.

Overlay	Development Permit Requirements
FO	No Permit
LSIO	Permit Required
WMO	No Permit
НО	Needs to be confirmed on site prior to final design

Table 4.4Overlay Permit Triggers

Particular Provisions

The Particular Provisions section of the Campaspe Planning Scheme outlines any other requirements that need to be considered when assessing the merits of a development. The following are of relevance:

Clause 52.17 – Native Vegetation

The purpose of this Clause is to:

'To protect and conserve native vegetation to reduce the impact of land and water degradation and provide habitat for plants and animals.



To achieve the following objectives:

- To avoid the removal of native vegetation.
- If the removal of native vegetation cannot be avoided, to minimise the removal of native vegetation through appropriate planning and design.
- To appropriately offset the loss of native vegetation.

To provide for the management and removal of native vegetation in accordance with a property vegetation plan.

To manage vegetation near buildings to reduce the threat to life and property from bushfire.'

In accordance with Clause 52.17 of the Campaspe Planning Scheme <u>a planning permit is</u> <u>required</u> to remove, destroy or lop native vegetation including dead native vegetation.

Comment:

As per the recommendations of the Detailed Flora, Fauna and Native Vegetation Assessment (Brett Lane and Associates, 2012), the preferred alignment will be subject to this Clause of the Campaspe Planning Scheme.

Clause 52.29 – Land adjacent to a Road Zone – Category 1 or a Public Acquisition Overlay for a Category 1 road

The purpose of this Clause is to:

'To ensure appropriate access to identified roads.

To ensure appropriate subdivision of land adjacent to identified roads.'

In accordance with Clause 52.29 of the Campaspe Planning Scheme <u>a planning permit is</u> <u>required</u> to create or alter access to and subdivide land adjacent to a road in a Road Zone – Category 1 or land in a Public Acquisition Overlay.

Comment:

The proposed route alignments adjacent to Warren Street will trigger the requirement of a permit under Clause 52.29. This provision requires referral of applications to VicRoads, as the Responsible Authority.

4.5 New South Wales Planning Policies

This section outlines the New South Wales State planning policy applicable to the alignment.



4.5.1 New South Wales Environmental Planning and Assessment Act 1979

The *Environment Planning and Assessment Act 1979* (EP&A Act) and the Environment and Assessment Regulation 2000 (the Regulation) provide the framework for the assessment and approval of proposed developments in New South Wales. The applicable planning controls and environmental assessment and determination process is governed by Part 4 of the EP&A Act for designated development, in which the original EIS was prepared and approved by the NSW Minister for Planning in 2000/2001.

Section 5 of the EP&A Act outlines the objectives as:

(a) to encourage:

(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,

(ii) the promotion and co-ordination of the orderly and economic use and development of land,

(iii) the protection, provision and co-ordination of communication and utility services,

(iv) the provision of land for public purposes,

(v) the provision and co-ordination of community services and facilities, and

(vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and

(vii) ecologically sustainable development, and

(viii) the provision and maintenance of affordable housing, and

(b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

The development of a road within the Mid-West 2 Corridor will need to be assessed and approved under the provisions of the EP&A Act.

4.5.2 NSW State Environmental Planning Policy (SEPP)

State environmental planning policies (SEPPs) deal with issues significant to the state and people of New South Wales. They are made by the Minister for Planning and may be exhibited in draft form for public comment before being gazetted as a legal document.



The following SEPPs are considered relevant to the Mid-West 2 alignment options:

SEPP (Infrastructure) 2007

This SEPP provides a consistent planning regime for infrastructure and the provision of services across NSW, along with providing for consultation with relevant public authorities during the assessment process. The SEPP supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.

This is the primary instrument to determine permissibility of the works.

Clause 94(1), Development permitted without consent—general, of the SEPP (Infrastructure) allows for the development of roads and road infrastructure facilities (i.e. embankments) to be carried out by or on behalf of a public authority without development consent from Murray Council.

SEPP (Major Development) 2005

Defines certain developments that are major projects to be assessed under Part 3A of the EP&A Act and determined by the Minister for Planning. It also provides planning provisions for State significant sites. In addition, the SEPP identifies the council consent authority functions that may be carried out by joint regional planning panels (JRPPs) and classes of regional development to be determined by JRPPs. Note: This SEPP was formerly known as State Environmental Planning Policy (Major Projects) 2005.

4.5.3 Regional Environmental Plans

As part of improvements to simplify the State's planning system, as of 1 July 2009, regional environmental plans (REPs) are no longer part of the hierarchy of environmental planning instruments in NSW. All existing REPs are now deemed State Environmental Planning Policies (SEPPs).

Murray Regional Environmental Plan (REP) No.2 - Riverine Land

Murray REP No.2 ensures the river and its floodplain are able to support a range of productive land uses. The plan coordinates planning along the Murray River and the implementation of planning-related aspects of the Murray Darling Basin Commission strategies. It simplifies the consultation process between agencies and councils established in REP No. 1. It also promotes consistency between NSW and Victoria planning in relation to the river and its floodplain.

The objectives of the Murray REP No.2 are:

(a) to ensure that appropriate consideration is given to development with the potential to adversely affect the riverine environment of the River Murray, and

(b) to establish a consistent and co-ordinated approach to environmental planning and assessment along the River Murray, and

(c) to conserve and promote the better management of the natural and cultural heritage values of the riverine environment of the River Murray.



Comment:

Provided that the detailed design of the Mid-West 2 preferred alignment is consistent with the objectives of the Murray Regional Environmental Plan, the proposed road would be compliant.



4.5.4 New South Wales Local Environmental Plans

This section of the report outlines the local planning policies for Murray Shire relevant to the Mid-West 2 corridor.

Murray Local Environmental Plan 2011

The Murray Local Environmental Plan 2011 was introduced on 16 December 2011. It sets out the regional context for the Murray Shire and comprises a number of Zone provisions and Special provisions. The aims of the plan include:

(a) to encourage sustainable economic growth and development within Murray,

- (b) to encourage the retention of productive rural land in agriculture,
- (c) to identify, protect, conserve and enhance Murray's natural assets,

(d) to identify and protect Murray's built and cultural heritage assets for future generations,

(e) to allow for the equitable provision of social services and facilities for the community,

(f) to encourage and focus growth in the Moama and Mathoura townships,

(g) to provide for future tourist and visitor accommodation in a sustainable manner that is compatible with, and will not compromise, the natural resource and heritage values of the surrounding area.

The Murray Local Environmental Plan 2011 repeals the Murray Local Environmental Plan 1989.

Zoning

Under Part 2 of the Murray Local Environmental Plan 2011 land within the Mid-West 2 corridor is located within the *Environmental Management (E3)* Zone.

The objectives of the zone are:

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.

Comment

The development of a road within the Mid-West 2 corridor would be approved under the provisions of the SEPP (Infrastructure) 2007.

Pursuant to Section 76 of the EP&A Act, development consent under the Murray Local Environmental Plan 2011 is not required.



5. Future Land Use

5.1 **Population Data**

Table 5.1 provides a summary of the population change in Echuca. For the purposes of this report, the census data included is from the Echuca Statistical Local Area (SLA – Code 240101371) which includes Echuca town centre, Echuca West and Echuca South:

	2006 Census	2011 Census	Change (no.)	Change (%)
Total Persons	12,358	12,983	+625	5.06%
Total Dwellings	5,373	5,530	+157	2.92%
Separate Dwellings	3,911	4,022	+111	2.84%
% Dwellings that are separate houses	79.7	80.8		
Persons per dwelling	2.3	2.3		

Table 5.1 Population Statistics

Echuca has experienced an increase in both population and the amount of dwelling construction over the last five years. Based on its strategic planning projections and land use strategies, this trend is likely to continue at a similar rate.

5.2 Future Land use strategies

5.2.1 Victorian policies and strategies

Loddon Mallee Regional Strategic Plan: Northern Region

The Loddon Mallee Regional Strategic Plan (the Regional Strategic Plan) identifies land use issues at a regional level and presents a framework for managing future growth and development in a collaborate manner. The Strategic Plan, which includes the municipalities of Buloke, Campaspe, Gannawarra, Mildura and Swan Hill, identifies seven key strategic directions to address the challenges and respond to the opportunities of the region.

Infrastructure is identified as one of these key directions, with the success of the region noted as being dependent upon the quality of the infrastructure available in the region. Key actions to achieve these directions are noted throughout the Strategic Plan and include the need to ensure:



"Continued investment in highways, local roads and rail infrastructure and transport connections to support economic social growth."3

A second Murray River Bridge crossing is identified as a high priority under the Strategic Plan. In addition, it is noted that the second river crossing will assist in meeting some of the other strategic directions within the Plan which include the need to strengthen and improve access to local settlements and improve the local economy. This will be achieved through the provision of an alternative river crossing which will relieve capacity and congestion issues at the existing bridge crossing.

Victoria Park & Environs Master Plan (2010), Shire of Campaspe

The Shire of Campaspe Council prepared the Victoria Park & Environs Master Plan (the Master Plan) (2010) with the purpose of creating a long term strategic framework for the development of Victoria Park to ensure appropriate facilities and spaces are provided to meet the future sporting and recreational needs of the community in the future. This report is a revised version from the original which was prepared in 2006.

The Master Plan was initiated in response to two key planning matters:

- The decision to proceed with the development of Echuca's first synthetic hockey field as a joint venture with Echuca College at its Butcher Street Campus. This decision means that an area previously set aside in the 2006 Master Plan will now no longer be required.
- The planning study being completed in 2009/2010 to assess the feasibility of the midwest route for the planned second river crossing of the Murray River.

As the mid-west corridor (previous study completed by VicRoads on a second river crossing of the Murray River in 2010) was to impact some of the existing facilities and areas within its immediate environs, the Master Plan enabled the Shire of Campaspe Council, in conjunction with existing user groups and other relevant stakeholders, to jointly assess the impact and the opportunities for Victoria Park. It was effectively completed to direct future development to reallocate recreational land in the precinct. It also allowed a long term 'vision' for the precinct to be determined.

Based on the refined alignment options, and ultimately the preferred option, this study may need to be revisited to ensure that it still meets the needs of the community. Options 2B and 2D will affect the direction of this Master Plan.

Campaspe 2020: Building a better future

Campaspe 2020 sets the vision and direction for growth and development of the Campaspe Shire over the next 20 years. The Strategy was developed through an extensive community consultation process and includes recommendations from other current strategies such as the Small Towns Strategy and the Economic Development Strategy.

The Strategy focuses around five key objective themes, as follows:

- Providing leadership
- Enhancing the environment

³ Loddon Mallee Regional Strategic Plan: Northern Region, Strategic Direction 4



- Encouraging industry (economic)
- Servicing people (social)
- Providing infrastructure (physical and amenity)

Particularly relevant to this project are the objectives under the 'Providing infrastructure' theme which essentially seek to provide and maintain planned infrastructure which meet the needs of the community and improve the competitiveness of the region. One of the key strategies to achieve this objective is the need to *"ensure second Bridge crossing is pursued politically until constructed"*⁴. Strategies specific to Echuca include the need to: develop tourism links with other towns within the Shire; investigate opportunities to expand the caravan park; provide streetscape works for Echuca CBD and historic Port precinct; and to construct a second Bridge crossing *"utilising the western option"*.

The alignment options are considered consistent with these overall objectives and strategies. Specifically, the construction of a second bridge crossing will address capacity issues on the existing bridge and provide an alternative access connecting Echuca with Moama and across to NSW. The preferred alignment option will also ensure that there is no disturbance of the heritage precincts within the Echuca CBD.

While it is noted that the alignment options will limit opportunities to expand the Echuca Caravan Park, it does not prohibit the future expansion as there may be opportunities to expand west of its existing location.

Echuca Housing Strategy

The Echuca Housing Strategy, prepared in 2011 identifies the issues associated with housing provision within Echuca and sets the framework for addressing these issues. Most importantly, the Strategy seeks to manage future residential growth by directing development to existing areas through 'infill 'as well as providing for development in new 'residential expansion areas'.

The Strategy recognises that both Echuca and Moama have been, and are expected to continue to experience, an increase in population, leading to increasing demand for new housing. Figures provided within the Strategy estimate that by 2031 there will be a demand for a total of 4645 dwellings in Echuca and Moama, translating to an average of 111 additional houses required each year for Echuca and 75 houses each year for Moama⁵.

To meet these requirements, the Strategy directs future development to 'infill' areas within existing residential precincts to the south of Pakenham Street, east and west of the railway, and to the east of Northern Highway, south of Murray Valley Highway.

⁴ Campaspe 2020: Building a better future, page 7

⁵ Echuca Housing Strategy 2011, prepared by Beca Pty Ltd, page 6.



The Strategy also identifies six precincts to the west of Murray Valley Highway where future residential development is to occur, referred to as 'expansion' areas. Development is to occur in stages as demand requires, with Precinct 1 to be developed first, through to Precinct 6, which is identified as a 'long term option'. Precinct1, located between the Northern Highway and Mt Terricks Road, west of the study area, has already been approved for residential development. Community facilities and neighbourhood convenience stores/facilities are also to be located within Precinct 1, however the location of these is yet to be determined. Precincts 2,3,5 and 6 are located to the south of Precinct one, also west of the Murray Valley Highway, and Precinct 4 is located to the north of Mt Terrick Road.

The Strategy also notes proposed changes to the existing Residential zones as a result of a reform of the Victorian planning system currently being investigated by the State government. Proposed changes to the reform include replacement of the existing Residential 1 Zone to instead provide zones for 'Substantial Change', Incremental Change' and 'Limited Change'. While the zoning changes are yet to be undertaken, and are still in the process of being reviewed, the Strategy identifies existing residential areas to the north of Warren Street, east and west of Campaspe River to be areas of 'limited change', to ensure that any future developments within these areas protect the neighbourhood character of the area.

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6. Land Use Assessment

6.1 Methodology

This land use assessment considers the potential impacts the alignment options have on existing land uses and the mitigation methods available, through design or management prior to or during construction, to minimise the degree of impact. It will also provide commentary on the likely resultant level of impacts if mitigation methods are adopted.

To complete this assessment, an assessment has been carried out based on the likely impacts of the proposed route alignments on each of the different land uses within and adjacent the identified route alignments.

The methodology to complete this task is based on the Mid-West corridor assessment (2011) criteria to ensure consistency.

6.1.1 Component 1

The first component is to assess the broad level of sensitivity of each category of land use to the impacts of roads based on a high, medium to low scale. This is based on the experience of professional judgement of experience land use planners and the sensitivity levels relate to the level of amenity usually expected by each type of use present within or adjacent the alignment options. Table 6.1 indicates the level of sensitivity allocated to each land use.

Land Use Category	Level or sensitivity to impact of roads
Residential (permanent or tourist accommodation)	High
Rural Residential	High
Commercial	High
Industrial	Low
Public Open Space – Active (i.e. sports fields)	Medium
Public Open Space – Passive (i.e. bushland)	Medium
Public Use – Cemetery	Medium

Table 6.1 Land Use Sensitivity



6.1.2 Component 2

The second component of the methodology is an assessment of the projected levels of detrimental impact (high, medium or low) of the proposed alignments on each land use precinct identified in Section 3 of this report. The impacts considered include:

- Loss of land
- Noise
- Alteration of established movement patterns
- Visual impacts
- Environmental Impacts.

Potential measures available to mitigate each type of negative impact and enhance each type of positive impact could then be applied to each land use precinct. The resultant would be an assessment of the degree of impact (high, medium, low) on each area if such measures were implemented.

6.1.3 Land use Impact Assessment

The impact assessment assigns a sensitivity of the land use within each precinct. A low sensitivity to the development of a road is given a value of 1, a medium sensitivity to the development of a road is given a value of 2 and a high sensitivity is given a value of 3. The sensitivity value of each land use precinct is then used when assessing the following impacts by multiplying the score of each precinct against the impacts by the sensitivity value. This means that impacts within a highly sensitive area will receive a score that is three times the value of the same impact within a land use precinct with a low sensitivity as determined by Table 6.1.

The impact assessment then considers the loss of land, noise, alternation of established movement patterns, visual impacts and environmental impacts on each land use precinct.

Loss of Land

It the alignment options result in the loss of land within the land use precinct, a score of 1 is applied. If there is no loss of land, a score of 0 is applied.

Noise Impact

If the alignment options will likely result in an increase in noise generated by traffic a score of 1 is applied, whereas if there will be no net increase in noise a score of 0 is applied.

Alteration of Established Movement Patterns

It the development of the alignment options will block or prevent access to existing vehicle, bike or pedestrian access a score of 1 is applied. If there is no impact 0 will be applied.

Visual Impact

If the development of a road within the corridor has potential to cause a significant visual impact within a land use precinct a score of 1 is applied. If there is no impact 0 will be applied.



Environmental Impact

If the development of a road within the corridor has potential to cause a significant environmental impact within a land use precinct a score of 1 is applied. If there is no impact 0 will be applied.

6.2 Assessment

6.2.1 Precinct 1 – Murray Valley Highway Business Precinct

Impacts

There will likely be an increase in traffic volumes along the Murray Valley Highway with the associated adverse impacts of noise, vibration and air quality, however land use within this Precinct has low sensitivity and the increase in traffic may be a positive force on the development of currently undeveloped business zones.

Mitigation measures

None proposed

6.2.2 Precinct 2 – Echuca West Residential Area

Impacts

This precinct is characterised by residential development with a high degree of sensitivity to the development of a road. The precinct may be affected by adverse effects associated with increased traffic flows including noise, vibration and air quality.

Mitigation Measures

The following mitigation measures may lessen the impacts:

Consider restricting access from Nolan, Homan and Redman Streets to Warren Street.

6.2.3 Precinct 3 – Campaspe Floodplain (South of Warren Street)

Impacts

This precinct is a rural residential area which has high sensitivity. It is noted that the likelihood of this area being developed any further is low, given its location being within a floodplain, but regardless of this, the amenity to existing developments needs to be considered.

Impacts include the potential increase in traffic flows on adjacent roads, particularly if Option 2B or Option 2D is preferred. Other impacts include noise and visual impacts experienced from areas adjacent to Warren Street.



Mitigation Methods

The following mitigation measures may lessen the impacts:

Consider restricting access from Nolan, Homan and Redman Streets to Warren Street.

6.2.4 Precinct 4 – Campaspe Floodplain (North of Warren Street)

Impacts

This precinct is generally undeveloped bushland. It provides the community with an area for passive recreational opportunities. All of the four alignment options go through this land and accordingly there will be a number of impacts including loss of land, noise impacts, visual impacts, and environmental impacts from loss of natural habitat.

Impacts include the potential increase in traffic flows on adjacent roads, particularly if Option 2B or Option 2D is preferred. Other impacts include noise and visual impacts experienced from areas adjacent to Warren Street.

Mitigation Methods

Screening methods, including landscape treatments, to reduce the visual bulk of the preferred option should be employed, as well as noise walls to reduce the acoustic impacts if warranted in accordance with VicRoads' Traffic Noise Reduction Policy.

6.2.5 **Precinct 5 – Echuca Cemetery**

Impacts

This precinct relates to Echuca Cemetery which is generally defined as a medium sensitivity land use. It will mostly be impacted in the event of increased traffic levels on Warren Street and associated amenity impacts for people visiting the Cemetery. The *Echuca-Moama Bridge Mid-West 2 Options Traffic Modelling Report* prepared by Sinclair Knight Merz indicates that there would be a significant reduction in traffic levels along Warren Street adjacent the Cemetery, for all Mid-West 2 Options.

Mitigation Methods

No mitigation methods proposed.

6.2.6 Precinct 6 – Warren Street Residential

Impacts

Precinct 6 is a residential area with high sensitivity. It will be impacted by noise, increased traffic flow and the visual impacts from some residential properties.

Mitigation Methods

Screening methods, including landscape treatments, to reduce the visual bulk of the preferred option should be employed.



6.2.7 Precinct 7 – Echuca Town Centre Precinct

Impacts

The Echuca town centre will benefit from the development of a new road at the proposed location as it will potentially decrease the level of traffic (and associated impacts) utilising the main road in central Echuca.

Mitigation Methods

No mitigation methods proposed

6.2.8

Precinct 8 – Port Precinct Area

Impacts

This residential area may experience impacts including noise and visual.

Mitigation Methods

Screening methods, including landscape treatments, to reduce the visual bulk of the preferred option should be employed, as well as noise walls to reduce the acoustic impacts if warranted in accordance with VicRoads' Traffic Noise Reduction Policy..

6.2.9 Precinct 9 – Victoria Park Reserve

Impacts

The passive recreation area of Victoria Park Reserve will be impacted by the direct loss of land and environmental values as well as the adverse impacts due to traffic, noise and visual. The presence of existing established native vegetation would make visual screening more achievable; however, the visual impacts are still considered an issue of this precinct.

Mitigation Methods

Screening methods, including landscape treatments, to reduce the visual bulk of the preferred option should be employed, as well as noise walls, as recommended in the noise impact assessment, to reduce the acoustic impacts. Access to Victoria Park should be maintained and if any accesses are to be lost, other alternatives should be established.

6.2.10 Precinct 10 – Echuca High School Site (Crofton Street Campus)

Impacts

The school site closed in 2009 and all buildings on the site have been demolished. As the future land use of this site is unknown, the impact of the precinct cannot be determined. It is noted that the route alignment Options 2B and 2D would require this land to be utilised.

Mitigation Methods

No mitigation measures are proposed.



6.2.11 Precinct 11 – Victoria Park Sporting Facilities

Impacts

Victoria Park sporting facilities will be impacted by the direct loss of land and environmental values as well as the adverse impacts due to traffic, noise and visual. It is noted that the route alignment Options 2B and 2D would require part of this land to be utilised.

Mitigation Methods

Screening methods, including landscape treatments, to reduce the visual bulk of the preferred option should be employed. Access to Victoria Park should be maintained and if any accesses are to be lost, other alternatives should be established.

It is also noted that the existing tennis courts will be relocated which will help reduce the impacts of the development.

6.2.12 Precinct 12 – Echuca Holiday Park

Impacts

Given the location of the Echuca Holiday Park it is expected that there will be a number of adverse impacts including the loss of the environment values of the adjacent land in Victoria Park Reserve and the increase in traffic, noise and visual impacts from the development. All four alignment options are proposed to a component of the roadway located adjacent the northern boundary of the Echuca Holiday Park.

Mitigation Methods

Screening methods, including landscape treatments, to reduce the visual bulk of the preferred option should be employed, as well as noise walls to reduce the acoustic impacts.

6.2.13 Precinct 13 – Echuca Boat Ramp and Moorings

Impacts

The boat ramp and moorings will be impacted by the corridor from the alteration of existing movement patterns, the temporary loss of land through construction and visual and noise impacts.

Mitigation Methods

Screening methods, including landscape treatments, to reduce the visual bulk of the preferred option should be employed, as well as noise walls, as recommended in the noise impact assessment, to reduce the acoustic impacts. Access to the boat ramp and Victoria Park should be maintained throughout construction and operation of the road.



6.3 Overall Assessment

The overall land use implications of the alignment options are the summary of the impacts of loss of land, noise, air quality, visual, traffic volumes, alterations of established movement patterns and environmental. The overall impact assessment is demonstrated in Table 6.2.

Precinct	Sensitivity	Loss of land	Noise Impact	Alteration of established movement patterns	Visual impact	Environmental Impact	Overall
Precinct 1	Low -1	No - 0	Yes -1	No - 0	No - 0	Yes -1	2 – Low
Precinct 2	High - 3	No - 0	Yes -1	No - 0	No - 0	Yes -1	6 - Medium
Precinct 3	High - 3	No - 0	Yes -1	No - 0	No - 0	Yes -1	6 - Medium
Precinct 4	High - 3	Yes -1	Yes -1	No - 0	Yes -1	Yes -1	8 - Medium
Precinct 5	Medium - 2	No - 0	Yes -1	Yes - 1	No - 0	No - 0	4 – Low
Precinct 6	High - 3	No - 0	Yes -1	Yes - 1	Yes -1	No - 0	9 - Medium
Precinct 7	High - 3	No - 0	No - 0	No - 0	No - 0	No - 0	0 - Low
Precinct 8	High - 3	No - 0	Yes -1	No - 0	Yes -1	No - 0	6 - Medium
	High - 3	Yes -1	Yes -1	No - 0	Yes -1	Yes -1	8 - Medium
Precinct 9	Low -1	Yes -1	Yes -1	No - 0	Yes -1	Yes -1	4 - Low
Precinct 10	Medium - 2	Yes -1	Yes -1	No - 0	Yes -1	Yes -1	8 – Medium
Precinct 11	High - 3	No - 0	Yes -1	No - 0	Yes -1	Yes -1	9 - Medium
Precinct 12	Low - 1	Yes -1	Yes -1	No - 0	Yes -1	No - 0	3 - Low
Precinct 13 Overall	Medium - 2	Yes -1	Yes -1	No - 0	Yes -1	Yes - 0	6 - Medium

Table 6.2Summary of Impacts

The assessment has found that the development of a road will have high land use impacts, particularly on areas with high sensitivity to this type of development (Precincts 4, 6, 9, 12).

It is noted that with the application of mitigation methods that the level of these impacts should reduce in most of the precincts.



7. Objective Based Evaluation Matrix

As part of this report, an assessment also needs to be completed on how well each alignment option preforms against the project objective, sub-objectives and assessment criteria so that a preferred option or options can be recommended.

7.1 Methodology

The Objective Based Evaluation Matrix (OBEM) will be used to assess how well each alignment option performs against the assessment criteria.

In accordance with the OBEM process, the options will be rated according to:

Rating	Defined Values	Colour
Very well	Best practice, strong level of compliance, major positive impact	Green
Well	Improved practice, good policy compliance, positive impact	Light Green
Moderately well	Partial policy compliance, no distinctive positive or negative impact	Yellow
Poor	Policy non-compliance and negative impact	Orange
Very poor	Major policy non-compliance/ and or negative impact	Red

 Table 7.1
 The Objective Based Evaluation Matrix

The road alignment options have been assessed against the following land use planning assessment criteria:

- Consistency with State and local planning policy
- Avoid and/or minimise adverse impacts on sensitive land uses
 - Extent of change to existing land uses
 - Extent of impact on proposed land uses
- Ensure safe access and avoid and/or minimise, where practical, adverse impacts on property
 - Minimise land acquisitions where practical
 - Minimise disruption to private and public property.

This criteria has been based on key land use impacts identified as part of the policy review, site visits and an analysis of land uses along the alignment.

The alignment options have been assessed having regard to existing and proposed land uses and using the OBEM. On the balance all options will provide significant benefits to both existing and proposed local and regional users of the road network through facilitating regional transport movement.



7.2 Assessment Criteria Discussion

7.2.1 Consistency with State Planning Policy

All four alignment options will improve links within and to the northern Victoria (Loddon Mallee) and southern New South Wales regions. All bridge options will improve road infrastructure at a local level through providing an alternative Murray River crossing. The demand on the existing bridge, which is already at capacity, will be relieved. The alignment options are therefore consistent with regional transport planning objectives as they will assist in the movement of vehicles between the Murray Valley Highway and the Cobb Highway.

The alignment options will also service the growth direction of Echuca, providing an integrated transport connection for new urban development – catering to private vehicle movements but also cycling, walking and public transport movements. This is important to recognise.

Options 2B and 2D are in conflict with the Victoria Park & Environs Master Plan (2010), with areas recommended for development of an oval and associated facility buildings impacted by these alignments. Further work would need to be done with the Shire of Campaspe to negotiate an alternative resolution for the Master Plan if Options 2B or 2D were preferred.

With regard to State planning policy objectives related to the protection of areas of environmental significance, all options will have impacts on the environment, including native vegetation and amenity values, particularly those of local users of Victoria Park and of the Echuca Holiday Park.

Options 2A and 2C have the potential to impact the intact section of a sandhill which has the potential to contain both buried Aboriginal archaeological sites and human burials. Mitigation measures would be required to ensure that these alignment options don't affect this area of cultural heritage.

Therefore on the balance, whilst all of the alignment options generally provide good outcomes against State policy, further work is required on each of the options to ensure full compliance.

Assessment Criteria	Option 2A	Option 2B	Option 2C	Option 2D
Consistency with State Planning Policy	Moderately Well	Moderately Well	Moderately Well	Moderately Well

Table 7.2 Consistency with State Planning Policy

7.2.2 onsistency with Local Policy

The alignment options are within the Council adopted Echuca Town Structure Plan which provides consistency with local planning policy that has highlighted the need to provide for a second crossing of the Murray River. All Mid-West 2 alignment options will create a better connected community in Echuca and will provide a road network which supports the transport needs of businesses and industry which is less constrained.

Environmental procedures relating to the minimisation of vegetation clearance, the provision of offsets to compensate any vegetation removal, the implementation of measures to reduce erosion impacts and the protection of Aboriginal and historical places and features will be required for the preferred option to ensure full compliance with local policy.

Table 7.3	Consistency with Local Policy
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Assessment Criteria	Option 2A	Option 2B	Option 2C	Option 2D
Consistency with Local Planning Policy	Well	Well	Well	Well

7.2.3 Avoid and/or Minimise Adverse Impacts on Sensitive Land Uses

There have been a number of potential impacts of the Mid-West 2 options on sensitive land uses identified in Section 6.2 of this report.

Generally, all alignment options will have some degree of impacts on the adjacent land uses identified as part of this report. Careful planning and management of mitigation measure will ensure that the severity of the impacts can be minimised.

Options 2A and 2C have the potential to impact the intact section of a sandhill which may contain both buried Aboriginal archaeological sites and human burials. A method of construction across the section of the sandhill crossed by these two options that is acceptable to the Registered Aboriginal Party for the Echuca area has yet to be determined. It is assumed however, for either of these two options to progress and gain approval that a method of constructability will need to be confirmed.

For Options 2B and 2D, construction across the remnant sandhill would be concrete slabbed to avoid any excavation of the sandhill. The *Detailed Aboriginal Cultural Study for a Second Murray River Crossing at Echuca-Moama* (Heritage Insight Pty Ltd, 2010) study indicates that there are 14 Aboriginal scarred trees within the alignment which they studied. It noted that these would be avoided by elevated structures or retaining walls into the embankments to avoid the trees. A Cultural Heritage Management Plan would also be required to be prepared for the preferred alignment option.

Also, Options 2B and 2D will require more consideration as these commence from Warren Street, they would utilise the existing Victoria Park sporting facilities and are located in closer proximity to other identified existing land uses.



From a land tenure point of view, whilst all of the options would require some sort of acquisition along Warren Street, none of the options require the relocation of existing dwellings to allow the development of the road. This is a positive outcome.

 Table 7.4
 Avoid and/or Minimise Adverse Impacts on Sensitive Land Uses

Assessment Criteria	Option 2A	Option 2B	Option 2C	Option 2D
Avoid and/or minimise adverse impacts on sensitive land use	Well	Moderately Well	Well	Moderately Well

7.2.4 Ensure Safe Access and avoid and/or Minimise Adverse Impacts on Property

Figure 12 provides details of land tenure in proximity to the alignment options.

All of the alignment options will require the development of a roundabout access point at the Murray Valley Highway and options 2C and 2D will have a second roundabout on Warren Street. All intersections will provide safe vehicle access to the route alignment.

Generally, most of the land required for the alignment options is Crown Land. Options 2C and 2D will however require the full acquisition of up to five properties and the partial acquisition of two properties to allow the construction of the roundabout on Warren Street. These are indicated on Figure 13. None of these properties contains existing dwellings that would require relocation.



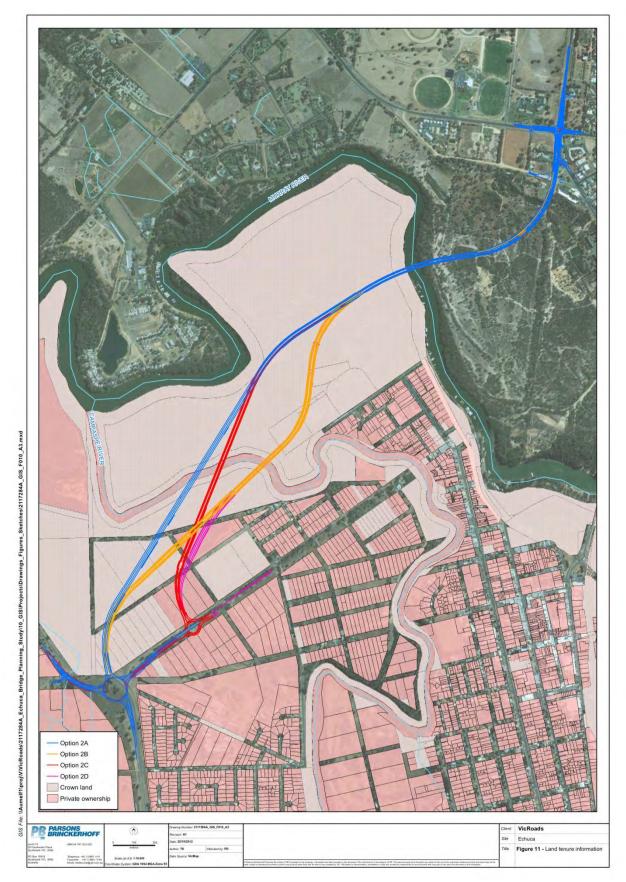


Figure 12 Land Tenure Information { TC "Figure 7.0





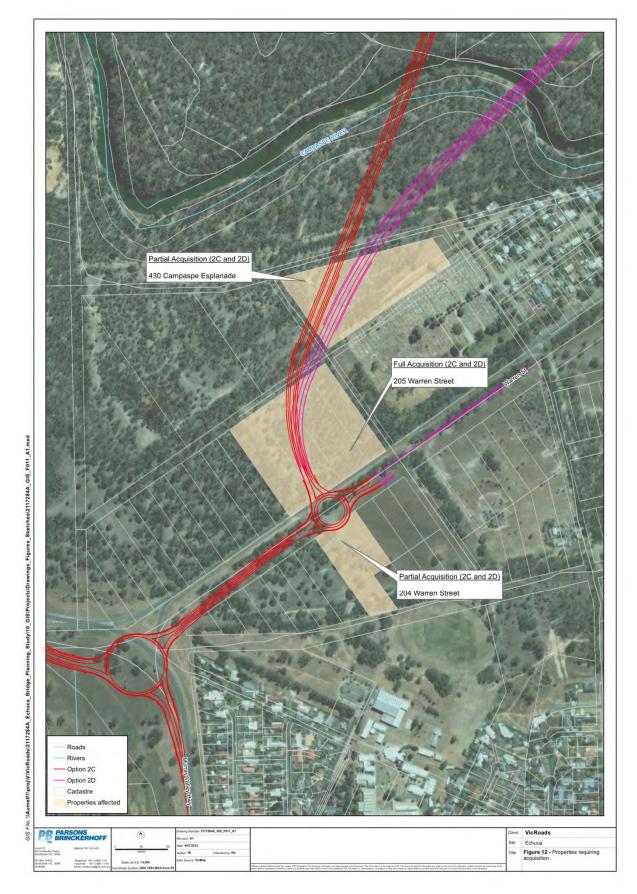


Figure 13 Land Acquisition Requirements{ TC "Figure 7.0

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Assessment Criteria	Option 2A	Option 2B	Option 2C	Option 2D
Ensure safe access and avoid and/or minimise adverse impacts on property	Very Well	Very Well	Well	Well

Table 7.5 Ensure Safe Access and avoid and/or Minimise Adverse Impacts on Property

7.2.5 Preferred Alignment

Based on the above analysis of each alignment option against the developed assessment criteria, Table 7.6 provides the consolidated assessment.

Table 7.6 Summary Assessment

Assessment Criteria	Option 2A	Option 2B	Option 2C	Option 2D
Consistency with State Planning Policy	Moderately Well	Moderately Well	Moderately Well	Moderately Well
Consistency with Local Planning Policy	Well	Well	Well	Well
Avoid and/or minimise adverse impacts on sensitive land use	Well	Moderately Well	Well	Moderately Well
Ensure safe access and avoid and/or minimise adverse impacts on property	Very Well	Very Well	Well	Well



8. Conclusion

Based on the assessment, the alignment option which preforms the best against the assessment criteria is:

- Option 2A Very Well/Well
- Option 2B Well
- Option 2C Well
- Option 2D Well/Moderately Well

The preferred option recommended by this report is **Option 2A**. It provides the following:

- Connects to an existing road alignment (Murray Valley Highway) and provides effective connectivity through the Region and beyond.
- Avoids areas of urban development where extensive acquisition of dwellings is required
- Is effectively located to service a growing urban development area
- Links major highways efficiently and safely
- Connects the proposed arterial to the wider and sustainable transport network
- Creates an effective city centre by-pass route
- Integrates the proposed arterial road with residential, employment, community, commercial and open space land uses.