

Major Road Project Victoria
Yan Yean Road Upgrade - Stage 2
Environment Effects Statement
Business Impact Assessment

MRPV-YYDS-EES-RPT-BIA-

| 16 July 2020

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 272536-11

Arup
Sky Park, One Melbourne Quarter
699 Collins Street, Docklands VIC 3008



ARUP



ARUP

Document verification

Job title		Yan Yean Road Upgrade - Stage 2 Environment Effects Statement		Job number 272536-11	
Document title		Business Impact Assessment		File reference	
Document ref		MRPV-YYDS-EES-RPT-BIA-0			
Revision	Date	Filename	MRPV-YYDS-EES-RPT-BIA-A.docx		
Version A	17 Apr 2020	Description	First draft		
			Prepared by	Checked by	Approved by
		Name	Marianne Stoettrup	Noel Matthews Natalie Jiricek	Siobhan Gordon
		Signature			
Version 0	12 May 2020	Filename	MRPV-YYDS-EES-RPT-BIA-0.docx		
		Description	For issue to TRG		
			Prepared by	Checked by	Approved by
		Name	Marianne Stoettrup	Noel Matthews Natalie Jiricek	Siobhan Gordon
		Signature			
	24 June 2020	Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name	Marianne Stoettrup	Saba Eskandanian	Natalie Jiricek
		Signature			
	16 July 2020	Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name	Marianne Stoettrup	Saba Eskandanian	Natalie Jiricek
		Signature			
Issue Document Verification with Document <input checked="" type="checkbox"/>					

Contents

List of Abbreviations	4
Executive Summary	5
1 Introduction	8
1.1 Background	8
1.2 Scoping requirements	8
1.3 Project description	9
1.4 Construction process	13
2 Methodology	15
2.1 What is a business?	15
2.2 Study area	15
2.3 Existing conditions	17
2.4 Environmental performance objective	18
2.5 Impact and risk assessment	18
2.6 Impact assessment	21
2.7 Limitations	21
3 Legislation, Policies and Strategies	22
3.1 Legislation, policy and strategy	22
3.2 Commonwealth legislation	22
3.3 State legislation	22
3.4 State strategies	23
3.5 Local planning schemes and policy	25
3.5.1 Victorian Planning Policy	25
3.5.2 Local Planning Provisions Framework	26
3.6 Local strategy and other policy	27
3.6.1 Shire of Nillumbik	27
3.6.2 City of Whittlesea	28
4 Existing Conditions	30
4.1 Study Area	30
4.1.1 Businesses in the Study Area	30
4.1.2 Business Distribution by Industry	35
4.2 Wider Study Area	36
5 Risks of Business Impacts	38
6 Business Impact Assessment	39
6.1 Impacts during site establishment	39
6.1.1 Land acquisition	39
6.1.2 Business access	41
6.1.3 Business amenity	44

6.2	Impacts during road construction	44
6.2.1	Business access	45
6.2.2	Business amenity	45
6.3	Impacts during reinstatement and operation	45
7	EPRs for mitigation and management	47
7.1	Minimise the nature and extent of impacts	47
7.1.1	EPRs	47
7.2	Residual risk assessment	50
8	Conclusion	52
9	References	54

Table of Figures

Figure 1 Main components of the Project	10
Figure 2: Project area boundary	12
Figure 3: Bridge Inn Road intersection design	13
Figure 4: Project Study Area	16
Figure 5: Project context in Wider Study Area and showing LGA boundaries	17
Figure 6: Doreen Activity Centre (MUZ2)	29
Figure 7: Identification key for businesses and other facilities for Figures 8 and 9.	31
Figure 8: Yan Yean Road: Kurruk Road to Jorgensen Avenue - business locations	33
Figure 9: Yan Yean Road: Jorgensen Avenue to Bridge Inn Road - business locations	34
Figure 10: Entrance to Yarrambat Park Golf Course, 649 Yan Yean Road	42
Figure 11: Entrance to Homestead Farm/ J&C Slate Wholesalers, 25 Doctors Gully Road	42
Figure 12 Yan Yean Road and Bridge Inn Road Intersection	43

Table of Tables

Table 1 Impact pathway and Environmental Performance Requirements	6
Table 2: Generic and business specific consequence criteria	19
Table 3: Likelihood criteria	20
Table 4: Risk matrix	20
Table 5: Applicable Victoria Planning Provisions for Nillumbik Shire and City of Whittlesea	25
Table 6: Applicable Municipal Strategic Statement for Shire of Nillumbik and City of Whittlesea	26
Table 7: Businesses by industry in the Study Area, Wider Study Area and local government area, 2018	35
Table 8: Building activity in the Wider Study Area, 12 months to January 2020	37
Table 9: Initial risks to businesses	38
Table 10: Land acquisition impacts on businesses – south to north	40
Table 11: EPRs relevant to business	47
Table 12: Residual risks to businesses and mitigation measures	50

List of Abbreviations

Abbreviation	Definition
ABS	Australian Bureau of Statistics
EES	Environment Effects Statement
EPR	Environmental Performance Requirement
km	Kilometre
LAC Act	Land Acquisition and Compensation Act 1986
LPPF	Local Planning Policy Framework
MRPV	Major Road Projects Victoria
SA2	Statistical Area Level 2 are medium-sized general-purpose areas with the purpose is to represent a community that interacts together socially and economically.
VPP	Victoria Planning Provision

Executive Summary

Yan Yean Road is a significant north-south arterial road serving Melbourne's northern growth area and providing connectivity for Doreen, Yarrambat and Plenty to employment and services in established neighbouring suburbs such as Greensborough and Diamond Creek.

Yan Yean Road is being upgraded from a two-lane arterial road to a four-lane road with improved safety features, six intersections with traffic lights, two with a roundabout, pedestrian crossings, and new walking and cycling paths.

Stage 2 involves upgrade of the section between Kurrak Road and Bridge Inn Road with the aim to improve travel times and reliability to and from growing residential areas in Doreen and Mernda, enhance north-south travel in the area, and improve safety along the corridor. Construction is planned to be completed over a 24-month period.

This Business Impact Assessment informs a broader and more comprehensive Environment Effects Statement for the Project about business impacts of the Project.

An audit of businesses was undertaken, and 42 businesses have been identified within 300 metres of the project area with groups of businesses (south to north) on Kurrak Road, at the intersection with Ironbark Road, on Ashley Road and at the intersection with Bridge Inn Road. Of the 42 businesses, ten businesses are part of the Accommodation and Food Services Industry, nine businesses are part of the Other Services industry (which includes automotive repair and maintenance), and seven businesses are part of the Retail industry.

A risk review identified potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity as result of preconstruction, construction, reinstatement and operation/ maintenance of the Project.

Partial land acquisition would affect six properties, some of which have more than one business on the premises. The businesses include a veterinary hospital, a school, two childcare facilities and horse breeding/slate wholesale business. The partial land acquisitions would not displace these businesses, but in some cases would require a restructure of operations to accommodate the business on a reduced land area. Acquisition of road reserve would significantly impact amenity at one business, a golf course.

During construction, access to businesses would likely affect all businesses along the alignment due to construction activity and changed road conditions. However, access to businesses may not be disrupted for the full construction timeframe, due to staging of works along the alignment over time i.e. not all businesses would be affected for the full 24 months of construction. Any reduction in the level of access, or function of the businesses needs to be managed carefully and mitigated where possible, including any reduction in car parking. Detailed design will also endeavour to accommodate convenient B-double access at 25 Doctors Gully Road.

The initial risk assessment assessed three impact pathways as having a significant risk rating and three as having a medium risk rating. Through implementation of mitigation measures as part of the design and construction process the residual risk of the identified impact pathways was reduced to four medium risks and two low risks.

Overall, it is expected that there would be a medium-term (i.e. one to two years) reduction in business functionality as a result of the Project, which is commensurate with the construction

period of two years. Business impacts as a direct result of this Project are unlikely to result in business closures.

However, many non-essential businesses are experiencing significant impacts due to restrictions on activities placed by the Victorian and Australian government in response to COVID-19. These impacts are likely to reduce the resilience and viability of some businesses and whether businesses have recovered to their prior level by commencement of construction of Yan Yean Road Upgrade Stage 2 is uncertain. If not, minor restrictions in access or amenity may have a greater impact than would otherwise be the case.

The EPRs and associated impact pathways are described in the Table 1 below.

Table 1 Impact pathway and Environmental Performance Requirements

Impact pathway	EPR Code	Risk no.	Environmental Performance Requirement	Project phase
Performance Objective - Business To avoid where possible, and otherwise minimise adverse impacts on business and commercial facilities				
<p>Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity</p> <p>Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of operation</p> <p>Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of maintenance activities</p>	B1	4, 24, 44, 64, 84 and 104	<p>Avoid and minimise business disruption</p> <p>Avoid and minimise to the extent practicable any reduction in the level of access, amenity or function of any business or commercial facility, including any reduction in car parking available for businesses or commercial facilities.</p> <p>Ensure that the construction program minimises impacts on businesses and facilities to the extent practicable, with consideration of operating hours and peak visitation times (see also EPR B2).</p>	Design and construction
<p>Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity</p>	B2	4, 24, 44 and 64	<p>Implement a Trader Engagement Plan</p> <p>Prepare and implement a Trader Engagement Plan in accordance with <i>Victorian Small Business Engagement Guidelines</i> to manage impacts to non-acquired businesses and to engage with business and property owners throughout the construction phase. The plan shall include:</p> <ul style="list-style-type: none"> • Timely information on key project milestones • Changes to traffic conditions and duration of impact • A project construction schedule developed in coordination with transport authorities and City of Whittlesea and Shire of Nillumbik and in consultation with businesses to minimise cumulative impacts of this and other projects • Plans for signage to notify customers of proposed changes to business operations, including the setting of 	Design and construction

Impact pathway	EPR Code	Risk no.	Environmental Performance Requirement	Project phase
			<p>suitable timeframes for notification prior to commencement of changes</p> <ul style="list-style-type: none"> Measures to ensure access to businesses is maintained for customers, delivery and waste removal unless there has been prior engagement with affected businesses (including mutually agreed mitigation measures as required). This could include the installation of directional and business signage to assist customers and minimising reduction in carparking available to shoppers and traders Process for registering and management of complaints from affected businesses and potential support services offered Ensure emergency services are notified ahead of major works Provide the opportunity for issues / concerns to be raised through a 24-hour phone number (see also EPR S2). 	
Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of maintenance activities	B3	84 and 104	<p>Business access and car parking</p> <p>All permanent access to and parking for business and commercial facilities affected by the works is to be restored, in consultation with the relevant stakeholders, including associated landscaping and restoration works. Any temporary access arrangements put in place for the duration of construction must be removed when construction has ceased, unless they become the permanent arrangement. Any reduction in current parking numbers at existing businesses will be avoided; however, where a loss in existing car parking is unavoidable, losses must be minimised and occur in consultation with relevant stakeholders.</p>	Design and construction

1 Introduction

1.1 Background

Yan Yean Road is a significant north-south arterial road serving Melbourne's northern growth area and providing connectivity for Doreen, Yarrambat and Plenty to employment and services in established neighbouring suburbs such as Greensborough and Diamond Creek.

Yan Yean Road is being upgraded from a two-lane arterial road to a four-lane road with improved safety features. Stage 1 of the upgrade between Diamond Creek Road and Kurruk Road was completed in December 2019. Stage 2 (**the Project**) involves upgrade of the section between Kurruk Road and Bridge Inn Road and involves five new signalised intersections, two new roundabouts, pedestrian crossings, and new walking and cycling path on the western side and footpath on the eastern side of Yan Yean Road. Planning for Stage 2 is underway with construction expected to take 24 months.

The Victorian Minister for Planning confirmed in October 2018 that an Environment Effects Statement (EES) was required for Yan Yean Road Stage 2. The Federal Minister for Environment then determined in April 2019 that the Project will be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Both assessments are completed as part of the EES to avoid duplicating the environmental assessment process.

1.2 Scoping requirements

The purpose of the EES is to provide a detailed description of the Project, assess its potential effects on the environment and assess alternative project layouts, designs and approaches to avoid and mitigate effects.

The final scoping requirements included the following key matters for the EES to examine:

- *projected traffic growth volumes and related uncertainties for Yan Yean Road and related roads in the network;*
- *design alternatives and refinements and their associated impacts, particularly how they avoid and minimise native tree loss with proposed locations of tree and vegetation removal, no go zones and offset requirements and a demonstration that avoid and minimise principles have been applied; and*
- *consideration of carriageways, medians, shared pathways, footpaths, intersections and other treatments to minimise the loss of preferred foraging trees for the critically endangered Latham us discolour (Swift Parrot) and avoidance of high retention trees of ecological and cultural value.*

The Minister determined an EES was required for the Project due mainly to the potential significant effects on biodiversity, social and cultural values as a result of the proposed clearance of a very large number of trees and habitat. He also directed that the EES should identify other potential adverse environmental effects of the Project, such as social, land use, community amenity and planning, and canvass an environmental management approach and performance measures to ensure any effects are identified and avoided, minimised or mitigated.

Due to the potential displacement of businesses by some of the design options and varying degree of potential impacts on access to businesses, a Business Impact Assessment has been included to inform the EES.

Developing an understanding of the potential impacts to businesses is important as it enables the development of a framework to reduce and mitigate risks. Businesses are important because they provide jobs, generate economic activity and serve important community functions, including the convenient provision of goods and services that contribute to sustainable, vibrant and inclusive neighbourhoods.

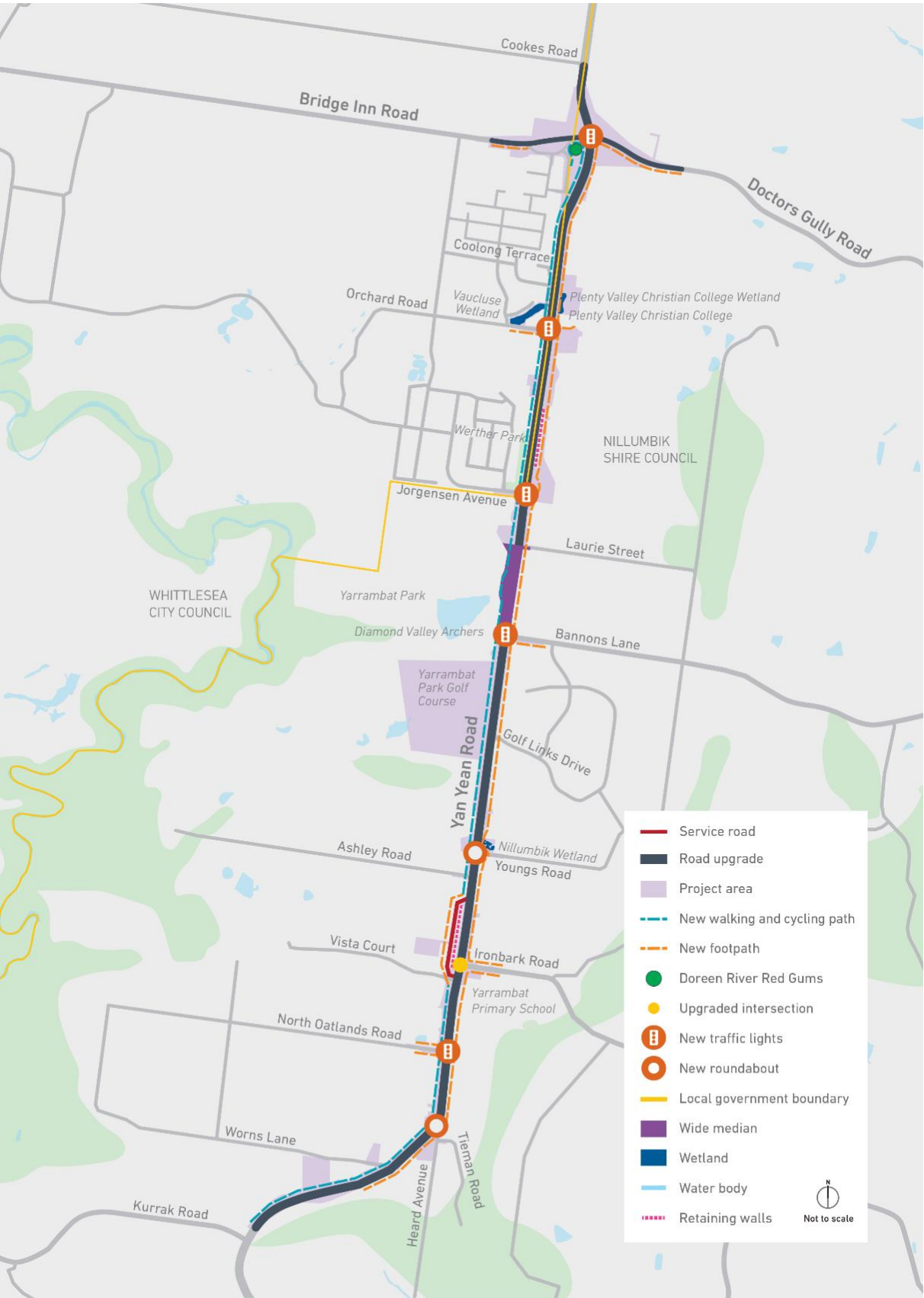
To inform the above, this Business Impact Assessment will establish the existing conditions of a Study Area and of business communities, and consider potential impacts with respect to the following:

- effects of any redistribution of traffic and implications for businesses during construction and operation
- business displacement as a result of property acquisition for the Project
- disruption to access to businesses for staff, customers and deliveries
- disruption to amenity and land use for businesses as a result of construction activity
- disruption to amenity and land use for businesses as a result of Project operation

1.3 Project description

The proposed upgrade of Yan Yean Road from Kurrak Road to Bridge Inn Road is the second stage of the Yan Yean Road upgrade. Figure 1 shows the main components of the upgrade.

Figure 1 Main components of the Project



The Project is proposed to:

- duplicate 5.5 km of Yan Yean Road, between Kurrak Road, Yarrambat, and Bridge Inn Road, Doreen, from two to four lanes;
- replace the roundabouts at Bridge Inn Road and Orchard Road with traffic lights;
- construct two new roundabouts at Heard Avenue and Youngs Road and three new signalised intersections at Jorgensen Avenue, North Oatlands Road and Bannons Lane;
- upgrade the signalised intersection at Ironbark Road;
- upgrade street lighting at intersections, road signage and landscaping;
- construct new drainage and upgrade/relocate utility services;
- construct a 3 metre wide shared user path on the western side and a 1.2 metre wide footpath on the eastern side for the entire length of the upgrade; and
- install continuous safety barriers along both sides of the road and in the centre median.

Each lane of the road will be 3.5 m wide and there will be a 2.2 m wide centre median except as noted below.

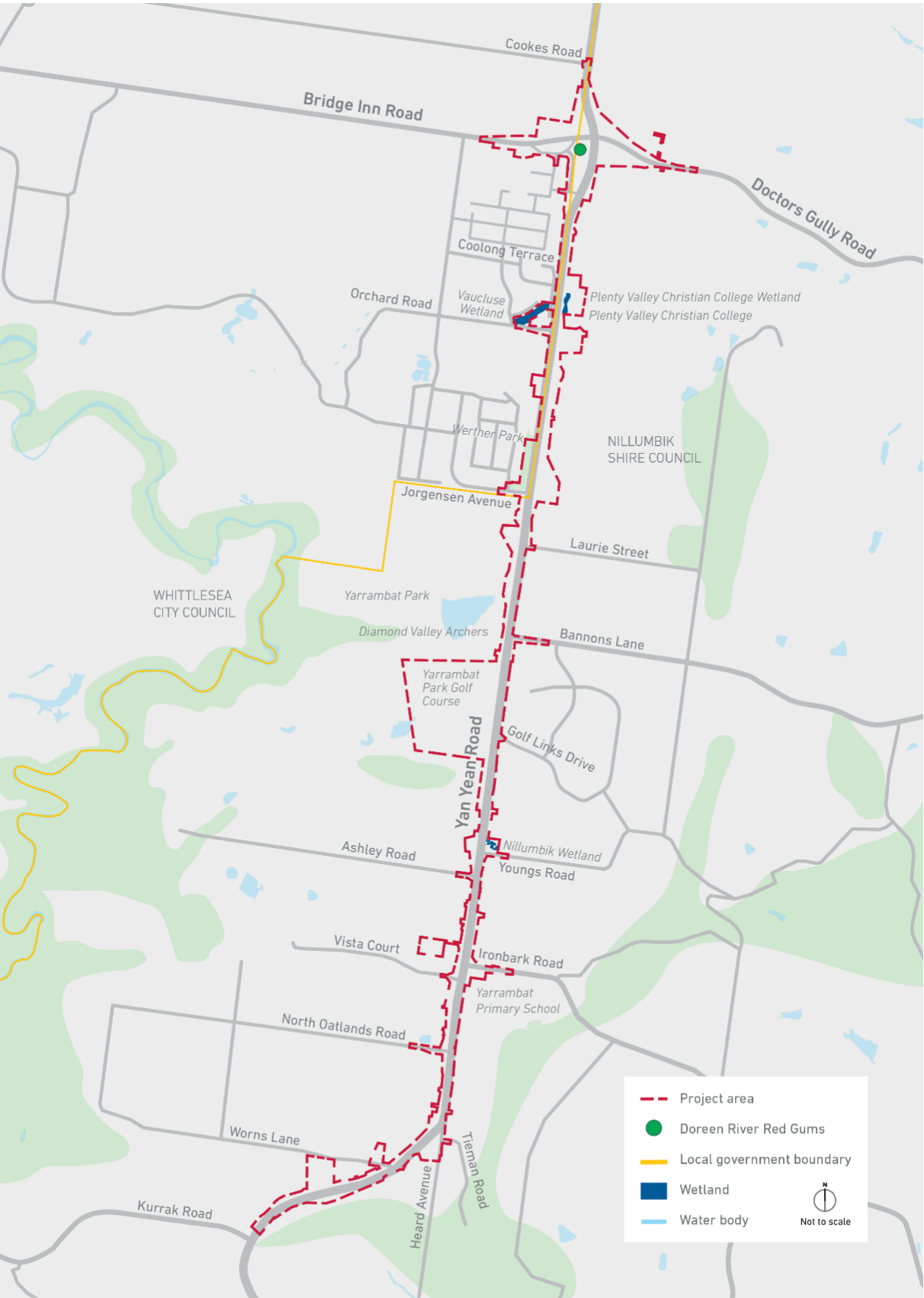
For the section between Bannons Lane and Jorgensen Avenue, the upgrade is a divided carriageway (boulevard design) as it minimises tree removal and results in the preservation of two Matted Flax-lily (*Dianella amoena*) plants within the median strip. This option increases the median width from 2.2 metres to approximately 14 metres by aligning the northbound carriageway between Bannons Lane and Jorgensen Avenue such that it will minimise the removal of existing trees as much as possible. The maximum width of Yan Yean Road at this point will be approximately 33 metres, although the cross section will taper at either end to tie back into the standard cross section as described above.

The wide median section of the road design tapers back to the standard cross section width at Bannons Lane. This was adopted to accommodate the safe tapering of the road back to the standard road width while avoiding private land acquisition further south of the golf course.

The southbound carriageway is aligned to follow the existing carriageway edge to retain the existing separation distance between driveways, residences and Yan Yean Road to utilise as much of the existing pavement as possible, and to further minimise the impact to existing trees by maintaining the tree root zone.

Figure 2 shows the project area boundary. The Project requires partial acquisition of a number of properties abutting Yan Yean Road to its east and west, and partial acquisition of properties at the Bridge Inn Road intersection and on Doctors Gully Road. At this point, Yan Yean Road forms the municipal boundary between City of Whittlesea and Nillumbik Shire.

Figure 2: Project area boundary



The project design at Bridge Inn Road/Doctors Gully Road would retain the two Doreen River Red Gums situated adjacent to the Bridge Inn Road and Yan Yean Road T-intersection and the General Store / former post office on the corner of Doctors Gully Road. It proposes shifting the whole intersection to the north east of the existing roundabout with two lanes in each direction. This project design at Bridge Inn Road has been refined since community consultation in response to additional arboriculture advice on the Doreen River Red Gums, which would be situated south west of the proposed intersection (refer to Figure 3).

Figure 3: Bridge Inn Road intersection design



For illustrative purposes only and subject to change

1.4 Construction process

Construction is proposed to be of two years' duration. Proposed construction activities would be standard road construction activities to be undertaken in accordance with the EPRs for the Project.

The Project area shown in Figure 1 indicates the outer boundaries of the area within which construction activities could occur. Construction traffic would occur to and from the Project area.

The Project will require some laydown areas, but the locations have not been decided as yet. Following the engagement of a contractor, they would identify one or more sites that are suitable for this purpose based on minimal environmental impact. The project area has allowed for a site on the western side of Yan Yean Road in close proximity to the Yarrambat Horse and Pony Club, which is currently being used as laydown area by Yarra Valley Water. The Project may also utilise the existing Department of Transport owned land at 423-437 Yan Yean Road, Yarrambat at the southern end of the Project area.

Standard construction work hours are:

Monday to Friday, 7am to 6pm

Saturday, 7am to 1pm.

Construction outside standard hours might occur at discrete stages to enable particular tasks to be undertaken more safely than could otherwise be achieved. Night works would be required to minimise impacts on traffic or nearby stakeholders. Works proposed for outside standard hours would need to be approved in advance by Major Road Projects Victoria, following consultation with all relevant stakeholders in line with the requirements of the Communications and Stakeholder Engagement Plan and relevant requirements in the contract. Further details about the Project, construction method and construction process are provided in the Project Description, Chapter 5 of the EES.

2 Methodology

2.1 What is a business?

For this report, a business is a commercial entity where people work to make and sell products or services. Government facilities like schools and not for profit facilities like churches have not been considered as businesses.

2.2 Study area

Stage 2 of the Yan Yean Road upgrade is in the suburbs of Yarrambat and Doreen, using the Australian Bureau of Statistics (ABS) geography. Urban development in this area is mainly west of Yan Yean Road, north of Jorgensen Avenue due to the urban growth boundary restricting growth to the east. Around Bridge Inn Road, development occurs subject to the planning scheme of the City of Whittlesea, while areas east of Yan Yean Road and in the Yarrambat suburb are subject to the Nillumbik Planning Scheme.

For the business impact assessment, a local Study Area has been identified that comprises the area within 300 metres of the Project boundary. The local Study Area is shown in Figure 4.

This local Study Area has been identified to understand which businesses are near the location of the Project works and are within an area where amenity impacts of the Project works are likely to occur.

A Wider Study Area has also been defined to include the suburbs (using the Australian Bureau of Statistics definition) in which the Project is located, namely:

- Yarrambat and
- Doreen

This Wider Study Area has been defined because the businesses in the Study area also have catchment and impact in these areas.

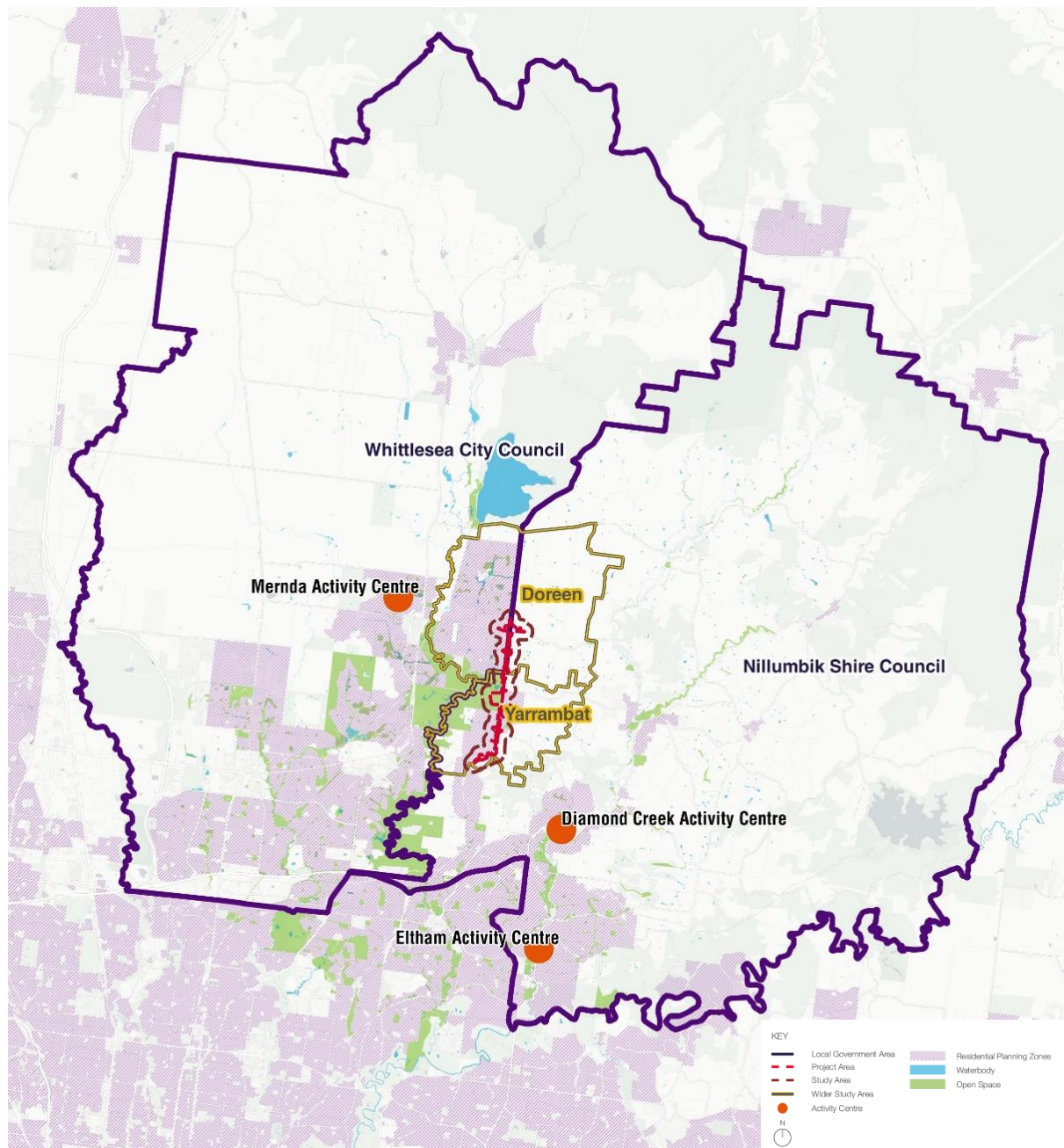
Finally, a broader reference area has also been established that includes the combined area of City of Whittlesea and Shire of Nillumbik. The reference area is used to provide information about the distribution of the business community in the area that serves the population and businesses of Whittlesea and Nillumbik.

The wider study area and the reference area is shown in Figure 5.

Figure 4: Project Study Area



Figure 5: Project context in Wider Study Area and showing LGA boundaries



2.3 Existing conditions

A requirement of the EES is to characterise the existing environment to underpin impact assessments having regard to the level of risk.

The existing environment for businesses in Study Area and Wider Study Area is described to provide a baseline for understanding business impacts as a result of the Project.

The description of existing conditions relies on the following methods:

- Desktop research using publicly available resources
- Briefing on findings and outcomes of stakeholder engagement activities undertaken for the Project by Major Road Projects Victoria

- Site visit to the Project area and the Wider Study Area on Friday 27 March 2020
- Online meeting with Nillumbik Shire Council on 8 April 2020 to understand business context regarding matters of interest, including equine industries, agriculture and domestic animal boarding facilities as well as Council's economic development priorities.
- Online meeting with City of Whittlesea on 15 June 2020 to understand business context regarding matters of interest, including Doreen Neighbourhood Activity Centre businesses as well as Council's view on Project design at the Bridge Inn Road intersection.

2.4 Environmental performance objective

For the Project, the environmental performance objective is *'to avoid where possible, and otherwise minimise adverse impacts on business and commercial facilities.'*

2.5 Impact and risk assessment

In preparation of the EES, a risk-based approach should be adopted so that suitable methods can be applied to accurately assess those matters that involve relatively high levels of risk of significant adverse effects, while less comprehensive methods of investigation may be applied to matters that can be shown to involve lower levels of risk.

The environmental risk assessment process has been undertaken in accordance with the MRPV Environmental Risk Management Guideline.

The risk assessment considered risks to the environment that may arise from nineteen aspects across six activities (site establishment, earthworks, civils and structures, reinstatement, operation and maintenance). Environmental aspects assessed in the risk assessment are grouped under themes, as they relate to Evaluation Objectives as established by the Minister for Planning. For risk of impacts to businesses, they are grouped under the theme 'effects on land use planning'.

To estimate the impacts to businesses, the following process was undertaken:

1. Determine the impact pathway i.e. how the Project impacts on the businesses
2. Describe the consequences of the impact pathway
3. Establish the maximum likely consequence level of the impact in Table 2 below
4. Establish the likelihood consequence occurring in Table 3 below
5. With reference to the risk matrix shown in Table 4, establish the risk rating of the impact.

Communication and consultation have informed the risk process in a number of ways. Initial risk ratings were tested at a multi-disciplinary facilitated workshop with the project team and suitably qualified specialists held on 24 February 2020 to contribute to a robust environmental risk assessment. The risk register was updated with specialist input following the risk workshop. Details of the process to identify and assess risks can be found in the Environmental risk report, Yan Yean Road Upgrade – Stage 2 (Kurruk Road to Bridge Inn Road), April 2020.

Table 2: Generic and business specific consequence criteria

Likelihood	Explanation	Explanation for business
Critical	A critical degree of impact on an environmental asset, value or use of moderate or higher significance	Permanently reduced accessibility/ functionality of multiple key business areas¹.
Major	A high degree of impact on an environmental asset, value or use of moderate or higher significance	Reduced accessibility/ functionality to a single key business area, or multiple local businesses. Long-term (i.e. over two years) reduction in business functionality.
Moderate	A moderate degree of impact on an environmental asset, value or use of moderate or higher significance	Reduced accessibility/ functionality within a localised area. Medium-term (i.e. one to two years) reduction in business functionality.
Minor	A low degree of impact on an environmental asset, value or use	Reduced accessibility/ functionality for a number of local businesses. Short-term (i.e. 6 to 12 months) reduction in business functionality.
Insignificant	A very low degree of impact on an environmental asset, value or use	Limited and temporary reduction in local business accessibility/ functionality (within usual business fluctuations) in a localised area.

As part of the risk assessment workshop, the impact pathways to businesses during site establishment, construction, and post-construction rehabilitation, the consequence of the impact were established.

The likelihood of the impact occurring was established using the likelihood criteria set out in Table 3.

¹ For the purpose of this assessment, key business areas are defined as Major Activity Centres such as Mernda, Eltham and Diamond Creek Activity Centres.

Table 3: Likelihood criteria

Likelihood	Description
Almost certain	76-99% Has occurred before and is expected to occur again Is expected to occur each year or more frequently All of the controls associated with the risk are extremely weak/non-existent. Without control improvement there is almost no doubt that the risk will eventuate
Likely	51-75% Has occurred before with a chance of it occurring again Has occurred several times at the Department, Group, Division, Program or Project before The majority of the controls associated with the risk are weak. Without control improvement it is more likely than not that the risk will eventuate
Possible	26-50% Has occurred before with a chance of occurring again Has occurred at the Department, Group, Division, Program or Project once before There are some controls that need improvement, however unless there is improvement the risk may eventuate
Unlikely	6-25% Has occurred elsewhere before, therefore a small chance of occurring The majority of controls are strong with no control gaps. The strength of this control environment means that is likely that the risk eventuating would be caused by external factors not known to the organisation
Rare	0-5% Has never occurred but may occur Is expected to occur 1/100 or more years All controls are strong with no control gaps. The strength of this control environment means that if this risk eventuated, it is most likely as a result of external circumstances outside of the control of the organisation

Final risk levels were determined using the matrix in Table 4, which was informed by the MRPV corporate risk matrix.

Table 4: Risk matrix

Likelihood	Consequence level				
	Insignificant	Minor	Moderate	Major	Critical
Almost Certain	Medium	Significant	High	High	High
Likely	Medium	Medium	Significant	High	High
Possible	Low	Medium	Medium	Significant	High
Unlikely	Low	Low	Medium	Medium	Significant
Rare	Low	Low	Low	Medium	Medium

The business impact pathway was developed based on:

- review of the Scoping Requirements for this Project
- the findings and outcomes of stakeholder engagement activities with businesses, landowners, City of Whittlesea and Nillumbik Shire Council undertaken for this project by Major Road Projects Victoria

- online meeting with Nillumbik Shire Council on 8 April 2020 to understand economic development priorities about matters of interest, including equine industries, agriculture, and domestic boarding facilities
- online meeting with City of Whittlesea on 15 June 2020 to understand the circumstances around businesses at Doreen Neighbourhood Activity Centre and sensitivities in access, parking and amenity.
- a review of other EES business impact assessments to understand business impacts of other road projects and identify those that are applicable for this Project
- the impacts that were experienced by businesses during Yan Yean Road Upgrade Stage 1 as these were roadworks of similar extent and on Yan Yean Road.

2.6 Impact assessment

The impact assessment was undertaken having regard to the existing conditions, the potential impacts, the associated level of risk of the impacts and the relevant legislative and policy framework.

Level of impact was categorised as according to the risk matrix (refer Table 4) with the application of the likelihood and risk levels.

2.7 Limitations

This report was prepared during the period of government restrictions of movement to address the serious public health risk posed to Victoria by Novel Coronavirus 2019 (2019-nCoV). The directions required everyone in Victoria to limit their interactions with others by restricting the circumstances in which everyone leaves the premises where they ordinarily reside and by placing restrictions on gatherings.

In preparation of this report, current directions arising from the declared state of emergency have been followed. One site visit has been undertaken, supplemented with door-knock of businesses in Doreen Neighbourhood Activity Centre on 17 June 2020 as permitted by government restrictions.

Many non-essential businesses are experiencing significant impacts due to restrictions on activities placed by the Victoria and Australian government. These impacts are likely to reduce the viability of some businesses and whether businesses have recovered to their prior level by commencement of construction of Yan Yean Road Upgrade Stage 2 is uncertain. If not, minor restrictions in access or amenity may have a greater impact than would otherwise be the case.

3 Legislation, Policies and Strategies

3.1 Legislation, policy and strategy

As part of the EES process, the Business Impact Assessment must identify relevant legislation, policies, strategies and guidelines, and assess their specific requirements or implications for the Project.

This section identifies Commonwealth, state and local legislation and policies to assess their requirements or implications for existing businesses within the Study Area and Wider Study Area of the Project.

3.2 Commonwealth legislation

There is no Commonwealth legislation or policy that has significant relevance to this assessment.

3.3 State legislation

Transport Integration Act 2010

The *Transport Integration Act 2010* establishes a framework to achieve an integrated and sustainable transport system in Victoria. There are six legislated objectives, which are social and economic inclusion; economic prosperity; environmental sustainability; integration of transport and land use; efficiency, coordination and reliability; safety, health and wellbeing. The Act then outlines eight principles that guide the decision-making process for regulators considering transport Projects across Victoria.

Of particular relevance to this Project and Business Impact Assessment include:

- Economic prosperity – the transport system should enable efficient and effective access to employment, markets and services; increase efficiency through reduced costs and travel time, thereby also fostering competition and facilitating investment
- Efficiency, coordination and reliability – the transport system should facilitate network wide efficient, coordinated and reliable movements of persons and goods at all time.

The Project will be designed to support business and jobs growth in Melbourne's north east. Business owners and employees can reasonably expect the transport network ability and effectiveness to move people and goods to improve. Where people and traffic movement may be interrupted, it has been considered as part of this assessment. These effects are considered further in Section 6.

Planning and Environment Act 1987

The *Planning and Environment Act 1987* manages the use, development and protection of land in the present and long-term interests of all Victorians. Its guiding principles are to:

- Provide for the fair, orderly, economic and sustainable use, and development of land
- Secure a pleasant, efficient and safe working, living and recreational environment for all
- Protect public utilities and other assets and enable the orderly provision and coordination of public utilities and other facilities for the benefit of the community.

For this assessment, these objectives must be considered due to potential impacts where the land is used for business purposes. In particular, land use disruption through temporary occupation and permanent land acquisition has the potential to disrupt the way in which land is utilised and developed for business purposes. For this Project in most cases, partial acquisition of the land would be required along the frontage of landholdings. These are limited in extent and are unlikely to result in long-term change to the existing land use but would result in a permanent reduction in the land area of those land parcels. Several properties may be more substantially impacted. These effects are considered further in Section 6.

Temporary and permanent changes to the environment which affect amenity for businesses also requires consideration, as does Project related disruption or relocation of utilities. Ongoing communication to directly affected landowners and adjacent landowners and tenants will be important to minimise the impact of business disruptions and access to employment. These effects are addressed in Chapter 12 *Environmental Management Framework*.

Land Acquisition and Compensation Act 1986

The *Land Acquisition and Compensation Act 1986* provides a framework for compensation to landowners where Government compulsorily acquires land for public purposes. It further provides the legislation required to mitigate and/or manage land acquisition impacts.

As the Project requires the full or partial acquisition of 96 parcels of land (as the existing road corridor is not sufficiently wide enough to accommodate the duplication and supporting infrastructure), the Project must consider the relevant provisions of the Act. This process should enable landowners to be reasonably compensated for any losses. This assessment relies on the legislative procedures set out in this Act to inform the assessment of impacts in Section 6.

Environment Effects Act 1978

On 14 October 2018 the Minister for Planning required MRPV to prepare an EES under the *Environment Effects Act 1978* to assess the potential environmental effects of this Project. Therefore, specific procedures and requirements which apply to the Project must be considered in this assessment.

They are summarised and addressed below:

- Potential effects on existing land uses, (including Crown Land) and community and business activities; with respect to acquisitions, services, connectivity and social impacts.
- Potential temporary and permanent effects on transport capacity, connectivity and redistribution of traffic, both for residents and businesses located in the vicinity of the Project. Beyond this assessment, this will be responded to through ongoing stakeholder and public consultation.

3.4 State strategies

Plan Melbourne and Plan Melbourne Update (Addendum) 2019

Plan Melbourne is the Victorian Government's strategic plan for metropolitan Melbourne. It sets out land use, infrastructure and transport directions, initiatives and actions to support jobs and growth.

Plan Melbourne supports an integrated transport system that connects people to jobs, services and goods to market. This includes improving local travel options in growth areas and outer suburbs, arterial road connections across Melbourne for all road users and promotes freight efficiency while protecting urban amenity.

The Project will seek to support a growing demand for north-south travel connecting Doreen and surrounding suburbs to established northern suburbs for employment and major services including health, education, commercial and industrial facilities. The projected employment growth in northern metropolitan Melbourne between 2015–2031 is 1.5%, the second largest in the State. While the region is also predicted to have the second highest net dwelling additions. From 2006 to 2016, the population of the Whittlesea suburbs of Doreen, South Morang and Mernda increased by almost 50,000 combined, or 300 per cent (ABS Regional Population Growth 2016). The Project aims to support the growth anticipated in the northern region of Melbourne.

Victorian Infrastructure Plan

The Victorian Infrastructure Plan lists the state government's future direction, priorities and commitment to key infrastructure projects. The Victorian Infrastructure Plan is organised around nine critical sectors. Each sector plan outlines the vision, overarching priorities, projects, reforms and long-term policy directions for that sector.

The Victorian Infrastructure Plan identifies the Yan Yean Road upgrade as a key commitment under the transport sector 'to improve and maintain metropolitan roads to ensure safe and free flowing corridors'.

Northern Roads Upgrade

The Northern Roads package will be procured as an 'upgrade and maintain' with availability to Public Private Partnerships. The package involves the design, construction and financing of capital projects, rehabilitation works and road asset maintenance services for Melbourne's northern suburbs.

Projects within the package include:

- Childs Road, from Beaumont Crescent to Prince of Wales Avenue, Mill Park;
- Craigieburn Road, from Mickleham Road to the Hume Highway, Craigieburn;
- Epping Road, from Craigieburn Road East to Memorial Avenue, Epping;
- Fitzsimons Lane intersection upgrades in Eltham and Templestowe, and Leane Drive in Eltham;
- Sunbury Road, from Bulla-Diggers Rest Road to Powlett Street, Sunbury; and
- Bridge Inn Road, from Plenty Road to Yan Yean Road, Doreen.

Of interest is the Bridge Inn Road project, which will connect directly to Yan Yean Road. The Bridge Inn Road project will include road upgrades and a new walking and cycling path to help ease congestion, improve travel times. This will support access to employment, education and retail in and around Doreen; as well as the works and effects of this Project, however there is potential for cumulative impacts as a result of prolonged construction on the road network. The Northern package is expected to be completed within the next five years.

3.5 Local planning schemes and policy

Development in each municipality is subject to local planning regulations and the policies of their local government. In this instance, the Project traverses through the local government areas of Shire of Nillumbik and City of Whittlesea.

A number of planning regulations and policies have been considered for this assessment for a range of economic development and transport objectives. The assessment has considered the key planning regulations and policies for each Council.

3.5.1 Victorian Planning Policy

The State Planning Policy Framework and the Victoria Planning Provisions (VPP) provide a clear and consistent framework within which decisions about the use and development of land can be made across Victoria. Below in Table 5 is a list of applicable VPP Clauses for the Shire of Nillumbik and City of Whittlesea and how the Project addresses each identified objective.

Table 5: Applicable Victoria Planning Provisions for Nillumbik Shire and City of Whittlesea

VPP Clause and applicable objectives	How the Project addresses the objectives
Clause 11.01-1R 3 Green wedges - Metropolitan Melbourne - To protect the green wedges of Metropolitan Melbourne from inappropriate development.	Development in the green wedge that provides for environmental, economic and social benefits is supported by the VPP and the Project enables this kind of development. The Project aims to improve existing infrastructure to provide a more efficient road network and offer local residents and visitors access to unique townships and local businesses.
Clause 11.01-3 Activity centre network - Are able to accommodate significant growth for a broad range of land uses.	The Project will facilitate the movement of people to the area's Activity Centres including Mernda, Diamond Creek, Eltham and Doreen. The VPP identifies these activity centres, town centres and neighbourhood activity centres for new education, justice, community, administrative and health facilities that attract users from large geographic areas in or on the edge of Metropolitan Activity Centres.
Clause 17 Economic Development - 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	The Project will facilitate access to Mernda, Diamond Creek and Eltham, creating greater employment opportunities, increased economic activity in the area, and access to community facilities.
Clause 17.01-1S Diversified economy - Facilitate regional, cross-border and inter-regional relationships to harness emerging economic opportunities.	The Project aims to enable growth in a range of employment sectors, based on the emerging and existing strengths of the northern region. This will be done by ensuring more efficient access to jobs and services, while managing community and business needs.
17.02-1S Business - To encourage development that meets the community's needs for retail, entertainment, office and other commercial services.	The Project will support business development in the region by providing more efficient road access to the area's activity centres and smaller business precincts.
18.02-1S Sustainable personal transport - To promote the use of sustainable personal transport.	This Project will diversify transport options through walking and cycling. Currently, Yan Yean Road does not provide sufficient space or infrastructure for on-road cyclists and there are no shared use paths and limited and disconnected

VPP Clause and applicable objectives	How the Project addresses the objectives
	footpaths. This Project will provide these alternative travel option as part of the upgrade.
Clause 18.02-3S Road system - To manage the road system to achieve integration, choice and balance by developing an efficient and safe network and making the most of existing infrastructure.	In 2015 Yan Yean Road was declared an arterial road and is now struggling to cater for the daily volumes of traffic. This Project will help accommodate the increase in traffic volumes by selectively expanding and upgrading the road network to provide high-quality road connections between Metropolitan Melbourne. It will support access to jobs and services in growth areas and outer suburban areas by improving roads for all road users.

3.5.2 Local Planning Provisions Framework

The Local Planning Policy Framework (LPPF) sets out the Municipal Strategic Statements that apply to the area covered by a planning scheme and includes provisions about their operation. Table 6 below identifies key provisions in both the Shire of Nillumbik and City of Whittlesea and how the Project will address these provisions.

Table 6: Applicable Municipal Strategic Statement for Shire of Nillumbik and City of Whittlesea

Shire of Nillumbik	
Municipal strategy	How the Project addresses the objectives
The Nillumbik Planning Scheme Municipal Strategic Statement has been developed to provide a vision with strategic framework and objectives, as well as address the key land-use issues which face the Shire. Applicable areas include:	
To develop a prosperous local economy through partnerships with local business, governments and the community, consistent with our Green Wedge values.	The Project will help build upon the economic development and competitive strengths of the Shire. This will be done by supporting a transport network that will help safely and efficiently allow people to move around the local area and greater region for work and leisure. It will also support strategic visions to showcase Shire of Nillumbik's visitor, recreation and cultural economy, and overall Green Wedge Values.
To facilitate environmentally sustainable economic development	Sustainable utilisation of natural resources in proximity to Melbourne's population centres is facilitated by ease of access to market. With improved road infrastructure, this Project aims to support decreased travel time in order to providing greater flexibility for business opportunities and employment options. Reduced travel time could broaden the customer base for local services and products as it is easier for customers to access local businesses.
To promote Eltham and Diamond Creek Major Activity Centres as the main commercial and community activity areas in the Shire and support the viability and vitality of these areas.	Eltham and Diamond Creek have been identified as the Major Activity Centres in the Shire which provide for a range of commercial, entertainment and social activities for local and district catchments. The Project will contribute to facilitating employment in these centres by improving labour force and customer access. Creating commercially attractive centres, through improved transport links, may also help address Shire of Nillumbik residents' high level of escape expenditure.
To provide safe and efficient roads and road links within the municipality and to the wider region	The Project is supportive of a road network which allows access to and from other key employment areas without significantly impacting upon current land uses. Physical infrastructure such as roads is an important component of the municipal operation. New development is encouraged to

	take advantage of the existing infrastructure, of which this Project does. Therefore, the upgrade of Yan Yean Road will improve the established and congested transport network and movement of the local business and residential community while hoping to maintain current lifestyle values.
City of Whittlesea	
Municipal strategy	How the Project addresses the objectives
The Whittlesea Planning Scheme's Municipal Strategic Statement provides the Vision and Strategic Framework has been developed to provide guidance for long-term development of the municipality. Applicable areas include:	
Economic Development - To provide sustainable economic development opportunities and support economic activity which is responsive to the investment and employment needs of the community, has respect for the environment and is resilient to changes in the economic climate.	By improving access, the Project supports the continued supply of serviceable employment land within growth areas that meets the needs of new industry and the local workforce. This will be done by providing physical infrastructure through improved transport links that will facilitate the movement of employees and good to employment hubs.
Transport - To establish an efficient, interconnected multi-modal transportation system which increases the level of accessibility and choice within and beyond the City of Whittlesea.	The Project specifically supports this objective by improving a key arterial road to enable better connectivity between activity areas, places of employment and community services.

3.6 Local strategy and other policy

Beyond the planning scheme, some other key strategies have been identified and considered for this assessment because of their economic development, transport and industrial objectives.

3.6.1 Shire of Nillumbik

The implementation of the municipal vision will require a range of actions by Council, the resident and business communities and government agencies. The key policies relevant to businesses that support the Council's vision for creating a prosperous economy are summarised below.

Council Plan 2017 – 2012: Living in the Landscape

A key pillar to the Council Plan is '*a strong local economy that supports business growth, jobs and community wealth.*' One of the strategies to achieve this is to identify new economic development opportunities and improve amenity for our villages in conjunction with key stakeholders including residents. Priority actions are to provide support to enable the growth of local businesses.

Economic Development Strategy 2020-2030

To achieve sustainable development, the Economic Development Strategy 2020-2030 has been finalised post community feedback. The aim of the strategy is to strengthen the economy and facilitate job creation over the next 10 years. Council's vision is to capitalise on Nillumbik's strengths to grow the economy through advocacy, collaboration, partnerships and innovation, compatible with the Shire's unique natural environment.

The strategy identifies four key sectors within the economy, namely:

- Knowledge-based – education, health care and professional services
- Creative and culture – arts, culture, recreation and tourism
- Primary industry and trade – construction, agribusiness and manufacturing
- Population driven – retail and hospitality.

Town Centre and Activity Centre Planning

Nillumbik Council has drafted the Diamond Creek Activity Centre and Eltham Town Centre policies to shape the commercial focal points within the Shire of Nillumbik. Both areas contain a range of retail, commercial, community and leisure activities and facilities. Council seeks that these centres are well served by improvements to the transport network. The areas also aim to provide more employment opportunities by intensifying and expanding the range of commercial and community activities in the centre, accessible through better transport networks.

Nillumbik Green Wedge Management Plan (November 2020)

Nillumbik's Green Wedge Management Plan aims to support a vibrant, resilient, connected and diverse community; living in the landscape to enhance the environmental, social and economic sustainability of Nillumbik's green wedge. This Plan specifies that some places within the green wedge area including Yarrambat act as focal points for rural communities. Supporting the small businesses within the area and strengthening the link between them and food retailers are among other aims to be achieved by this Plan.

Project outcomes in regard to Nillumbik strategies, plans and policy

The Project is fully aligned with Council policy and documents. Overall, a cohesive approach to planning and major road projects within the Shire will improve the benefits captured for the local community and businesses. The upgrade to an existing major road asset in the green wedge aims to provide environmental, economic and social benefits.

3.6.2 City of Whittlesea

The key policies relevant to businesses that support the Council's vision for creating a prosperous economy in the City of Whittlesea are summarised below.

Council Plan 2017 – 2021: A Place for All

The Council Plan identifies goal to shape the cities growth and connectivity. Specifically, the Council aims for the city to be the smart choice for innovation, business growth and industry investment as well as well-planned and beautiful and our neighbourhoods and town centres are convenient and vibrant places to live, work and play. There is alignment between Council's desire to upgrade local roads by improving traffic flow and the overall condition of the road network and road safety and the provision of ongoing services and programs to attract investment and support local businesses.

Economic Development Strategy

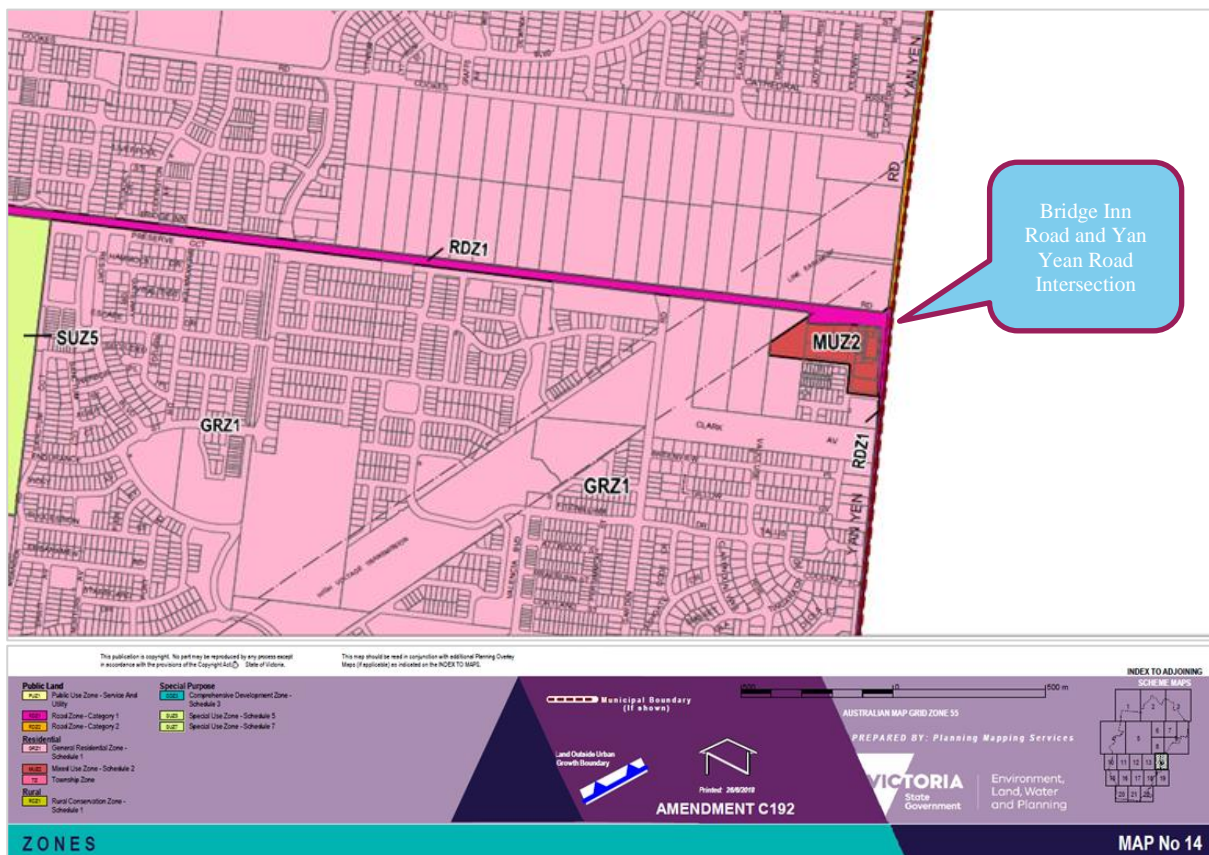
The Economic Development Strategy has a clear objective to create 10,000 new jobs in the City of Whittlesea in five years. The Council identifies the need for the city to support and grow a range of existing businesses, create more employment opportunities for a growing population and to improve access to services and infrastructure are critical for economic

prosperity. There is opportunity to collaborate and create public, business and non-government sector partners to create better conditions for economic growth and employment generation. Connectivity through improved road network, is an opportunity to support economic growth.

Neighbourhood Activity Centre Planning

Doreen Neighbourhood Activity Centre aims to provide for land to be used for a mixture of retail, commercial and residential activity, as outlined in Schedule 2 to Clause 32.04 in the Whittlesea Planning Scheme. There are no specific land use requirements within the schedule. Doreen Neighbourhood Activity Centre is identified below in Figure 6 as Multi-Use Zone (MUZ2).

Figure 6: Doreen Activity Centre (MUZ2)



Project outcomes in regard to City of Whittlesea strategies, plans and policy

The Project is fully aligned with Council policy and documents. Overall, an integrated approach to transport and business development aims to see growth in a range of employment sectors, including health, education, retail, tourism, knowledge industries and professional and technical services within the region.

4 Existing Conditions

This section provides an overview of the businesses and business community in the Study Area, Wider Study Area and local government areas. The business context is quantified in the terms of the following factors:

- Number of businesses
- Existing employment and industries of employment
- Key industries and role of businesses in the Study Area in the key industry context

4.1 Study Area

Yan Yean Road is a primary north-south arterial road. The road connects with Diamond Creek Road in the south, then runs to the township of Doreen in the north, through Plenty and Yarrambat.

Traffic volume data collected for the Transport Impact Assessment (Arcadis, 2019) indicates that Yan Yean Road typically carries between 20,000 to 24,000 vehicles per weekday (Monday to Friday average) through the Project area. Traffic volumes are generally higher in the south, where it captures traffic movements from existing and growing residential areas, while traffic levels are lower in the north.

Forecasts indicate that by 2031, traffic demand is expected to increase by between 30 to 40 percent in the peak direction of travel, which means that without the project, the capacity of the road to accommodate vehicles will constrain traffic volumes and increase intersection queues.

The road passes through hilly terrain, largely within an established lower density residential and semi-rural area and at the edge of the urban growth corridor. Land uses in proximity to Yan Yean Road include:

- Residential ranging from low density residential in Nillumbik Shire to general residential near Bridge Inn Road in City of Whittlesea.
- Educational facilities ranging from childcare and early learning centres through primary schools and to colleges such as Plenty Valley Christian College.
- Businesses ranging from homebased businesses through standalone businesses and a precinct namely the Doreen Neighbourhood Activity Centre.
- Recreational uses in parkland (Public Park and Recreation Zone) including the Yarrambat Park Golf Club and café (a business), Diamond Valley Archery, Yarrambat Horse and Pony Club and Diamond Valley Pistol Club.
- Agriculture, mainly grazing supported by some equestrian, poultry and egg businesses.
- Kennels and catteries that require buffers to residential areas.

4.1.1 Businesses in the Study Area

An audit of businesses and education facilities along Yan Yean Road and in proximity to the Project area was undertaken by Major Road Projects Victoria in 2019.

A review of this audit, confirmed by site visit on 27 March 2020, indicated that there are 42 businesses within the Study Area.

Location of businesses and other facilities is shown in Figure 8 and Figure 9 and a key to business and facility identification provided in Figure 7.

From Figure 8 it is evident that there are collections of businesses on Kurrak Road (the Rivers of Yarrambat development), at the intersection between Ironbark Road and Yan Yean Road (Yarrambat township community and education facilities), and on Ashley Road. Figure 9 shows a collection of businesses at the intersection of Yan Yean Road and Bridge Inn Road. These are further discussed below.

The key for Figure 8 and Figure 9 for identification of businesses and other facilities is provided in Figure 7.

Figure 7: Identification key for businesses and other facilities for Figures 8 and 9.

KEY		
1. 7-Eleven	20. Smokin' Joes Pizza and Grill	37. Sparrows in the Treetop
2. Hodges Plumbing Australia	21. Ashley Park Primary School	38. Diamond Valley Egg Farm PTY LTD
3. Plant Junction Nursery	22. Doreen Primary School	39. John's Pampered Pooch
4. T Hutchinson Transport	23. Ray White Doreen	40. Welcome Boarding Kennels and Cattery
5. Bridgestone Select	24. Riverstone Community Centre	41. High Tea At High Gate
6. Alison Stockfeed Doreen Pet Supplies and Stockfeeds, Hadlow and Son	25. Orchard Road Community and Early Learning Centre	42. Hippy Hop Childcare Yarrambat
7. Doreen General Store and Post Office	25. Schembris Taekwondo Doreen	43. Yarrambat Junior Football Club
8. J and C Yeoman Slate Wholesalers	26. MandS Franco Builders	44. Ironbark Plumbing Services
8. Homestead Farm	27. Magnolia on Orchard	45. Tancks Corner
9. En Pointe Osteopathy & Wellness Centre	27. Shanghai Blossom	46. Mums With Turns
10. Yarrambat Poultry	27. Riverstone Medical Practice	47. Yarrambat Plenty Preschool
11. United Petrol/Pie Face	27. The Bottle-O	48. CFA Yarrambat
11. Repco Authorised Car Service Doreen	27. TSG Riverstone Convenience Café	49. Smiling Children Childcare and Early Learning Centre
11. Doreen Noodle Bar	27. Pier 4 Fish and Chippery	50. Yarrambat Veterinary Hospital
11. Lilydale Free Range Roast Chicken	27. Doreen Kebab House	51. Yarrambat Primary School
11. Capt'n's Cove	28. Riverstone Laundromat Doreen	52. Oneschool Global Melbourne Campus
11. McDonald's Doreen	29. Diamond Valley Pistol Club	53. Rivers Cafe and Foodstore
12. Doreen Car and Dog Wash	29. Yarrambat Horse and Pony Club	53. Hair by I
13. Ziba Barbers	29. Greensborough Model Aircraft Club	53. Rivers Functions, Events and Conferences
14. KFC Doreen	30. Diamond Valley Archers	53. Flo Chiropractic
15. RE Workshop	31. Yarrambat Estate	53. Womenkind Physiotherapy
16. Topdeck Tiling	32. Canvas Things	53. Enso Kinesiology and Lifestyle Solutions
17. Plenty Valley Christian College	33. Yarrambat Park Golf Course	53. Hearing Technologies Centre
18. Butterflies Childcare and Early Learning Centre - Doreen	33. Bunkers Cafe Bar and Bistro	53. Sentience Personal Training
19. Warm Nest Family Daycare - Doreen	34. Ashley Park horses and agistment	53. Rivers Garden Centre
	35. Gumnut Kennels and Cattery	53. The Shop @ Rivers of Yarrambat
	36. Ritten Kennels	54. CSWraps

Kurrak Road

The collection of businesses on Kurrak Road is the Rivers of Yarrambat development which includes a garden centre, gift shop, café, events and function facility and a wellness centre with yoga, personal training and allied health practitioners. Kurrak Road provides a connection between South Morang and Yarrambat and the businesses enjoy a relatively quiet semi-rural location with exposure to significant levels of through traffic.

Customers are attracted to this business because it provides convenient access to allied businesses, and the businesses cooperate to mutual benefit saving on marketing, staff and facility costs.

The Rivers collection of businesses experienced disruption to customer access and a subsequent reduction of trade during construction of Yan Yean Road Upgrade Stage 1, so it

will be important to minimise negative impacts as a result of this next stage of the road upgrade.

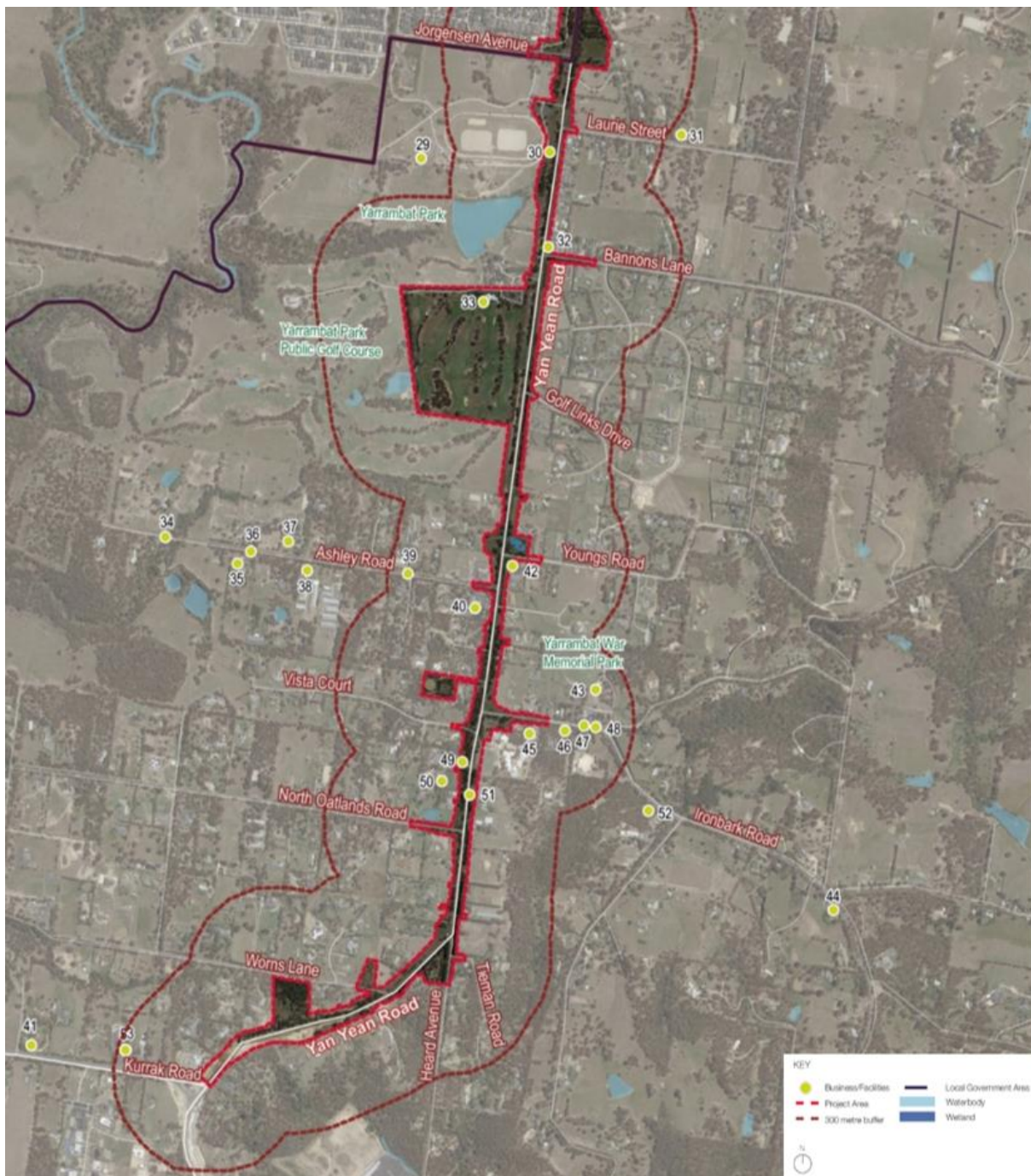
Ironbark Road intersection

The collection of businesses at the intersection between Yan Yean Road and Ironbark Road are supported by the Yarrambat township facilities. The businesses include an early learning centre, retail (post office, milk bar), a veterinary hospital and a café. Customers are attracted to the convenience of a café and shopping in conjunction with visits to education and community facilities such as the primary school and church. The businesses enjoy a relatively quiet semi-rural location with low to normal levels of noise and dust. Business functionality in this location is also dependant on ease of access for vehicles that include delivery trucks and horse floats. Businesses with frontage to Yan Yean Road have roadside signage which provides exposure to significant levels of daily traffic.

Ashley Road

Businesses located in Ashley Road provide domestic animal boarding (kennels and catteries and horse agistment) and include a poultry farm for egg production. Two of these businesses are located within the Study Area, both of them boarding kennels and catteries. These businesses rely on ease of access of Yan Yean Road for their customers, for pickup and deliveries and for staff. A couple of businesses have roadside signage which provides exposure to significant levels of daily traffic.

Figure 8: Yan Yean Road: Kurrak Road to Jorgensen Avenue - business locations



Source: Arup and Major Road Projects Victoria, 2020

Bridge Inn Road

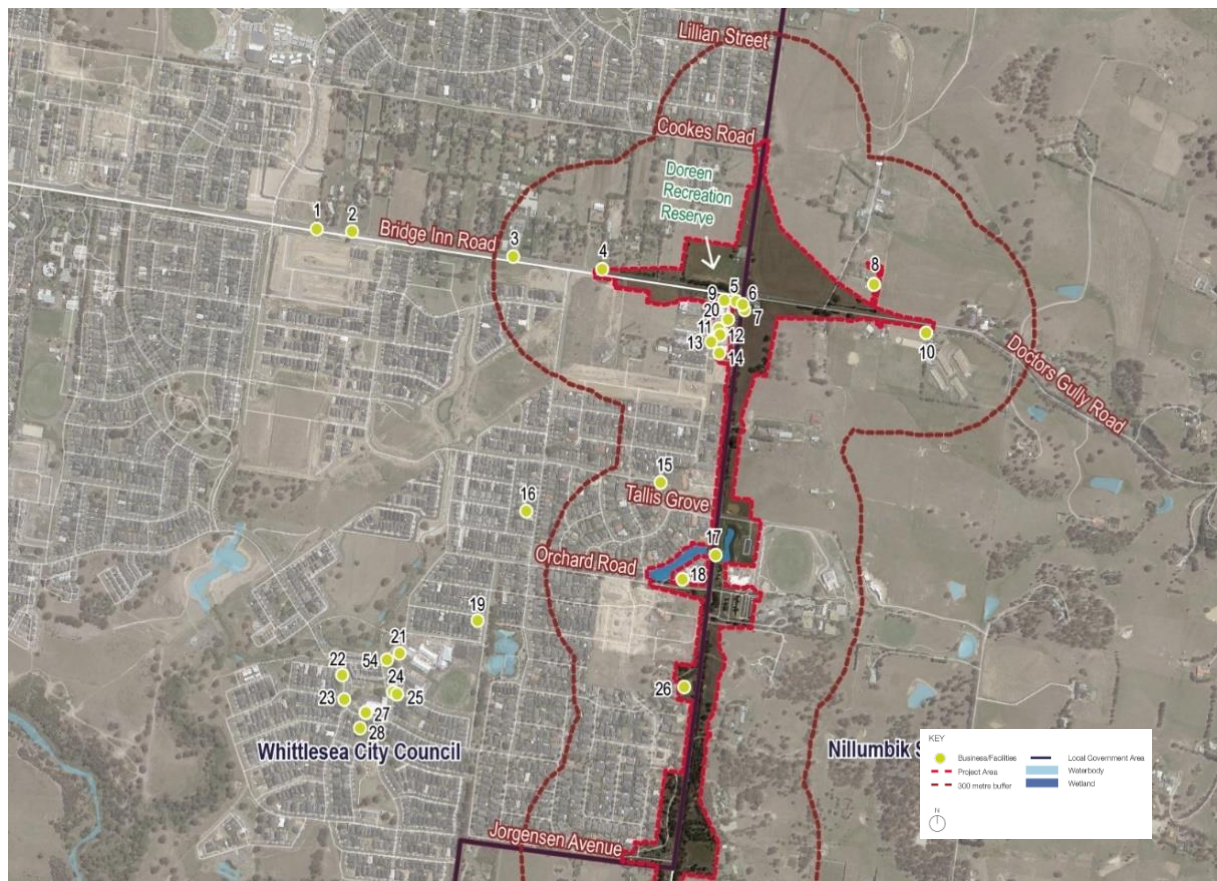
From Figure 9, a significant collection of businesses is evident at the intersection between Bridge Inn Road and Yan Yean Road. This is the Doreen Neighbourhood Activity Centre, located on the west side of Yan Yean Road and developing west along Bridge Inn Road. Businesses here mainly belong to the retail or accommodation and food services industries and fast food businesses are very well represented. Businesses include a petrol station, vehicle repair and services, fish and chips, chicken takeaway, noodle shop as well as a KFC. A residential development is under construction within the neighbourhood activity centre located between the McDonalds restaurant and the automotive tire and repair business. On the east side of Yan Yean Road, a general store— with the business location dating back to the

1890s after the primary school was established - and a stockfeed and pet supplies store are located². These two businesses are ‘technically’ outside of the boundary of the Doreen Neighbourhood Activity Centre (refer Figure 6) being located in a different municipality, but are also physically functionally separated by Yan Yean Road. As traffic increases, this separation will become more pronounced.

The businesses at Bridge Inn Road provide convenience shopping for the residential areas to the south, west and north, for rural residential settlement in the Wider Study Area and for through traffic along Yan Yean Road. The neighbourhood centre is dependent on vehicular access from both Bridge Inn Road and Yan Yean Road for customers, deliveries and for parking.

Construction is underway for a childcare facility and medical centre/offices suitable for general practitioner, dentist, physiotherapy, chiropractor, psychologist, pilates studio, real estate agent, hairdresser and more. These commercial premises are planned to be completed by December 2020 and additional businesses will be in operation by commencement of the Project.

Figure 9: Yan Yean Road: Jorgensen Avenue to Bridge Inn Road - business locations



Source: Arup and Major Road Projects Victoria, 2020

² www.victorianplaces.com.au/doreen

4.1.2 Business Distribution by Industry

The distribution of businesses by industry is shown in Table 7.

The number of businesses in the Study Area (42 businesses) account for 7.9% of the total number of businesses in the Wider Study Area (535 businesses).

The Accommodation and Food Services industry is the largest industry within the Study Area with 10 businesses (24%) in this industry. The distribution by industry also shows significant representation of businesses (21%) in Other Services which includes such diverse services as automotive maintenance and repair, boarding kennels, hairdressing, and personal training. This highlights the diverse nature of businesses within the Study Area, which indicates that potential impact pathways are likely to be similarly diverse.

By comparison, in the combined Nillumbik and Whittlesea area, the Accommodation and Food Services industry accounts for only 4% of businesses and the Other Services industry accounts for only 6.2% of businesses, also based on WorkSafe Victoria business counts. Three possible explanations are offered:

1. The difference can partly be explained by the different data sources: WorkSafe Victoria business counts are based on worker compensation insurance data, whereas the Study Area business audit includes any business and therefore also sole trader businesses that may not need workers compensation insurance. Further, to avoid double counting, WorkSafe data does not include all retail outlet premises as separate when the business registration remains in a central location.
2. The time of data collection is different: WorkSafe Victoria data was collected for the year 2018 and the Study Area business audit covers the current situation (i.e. the year 2020) and also includes businesses that are under construction but are planned to be in operation when Yan Yean Road construction works are underway.
3. The Study Area business audit may not have captured possible homebased businesses in the general residential areas within the Study Area boundary north of Jorgensen Avenue and south of Lilian Street, Doreen whereas such businesses that have employees would be captured in the WorkSafe Victoria data. Many businesses in the construction industry are homebased with employees and are therefore included in the WorkSafe Victoria data.

Table 7: Businesses by industry in the Study Area, Wider Study Area and local government area, 2018

Industry	Total businesses in Study Area ¹	% of businesses in Study Area ¹	Total businesses: Wider Study Area	% of businesses: Wider Study Area	Total businesses: Nillumbik and Whittlesea	% of businesses: Nillumbik and Whittlesea
Agriculture, Forestry and Fishing	2	5%	7	1%	43	0.5%
Mining	0	0%	0	0%	8	0.1%
Manufacturing	1	2%	18	3%	711	7.8%
Electricity, Gas, Water and Waste Services	0	0%	2	0%	46	0.5%
Construction	2	5%	243	45%	2382	26.2%
Wholesale Trade	1	2%	17	3%	667	7.3%
Retail Trade	7	17%	24	4%	870	9.6%

Industry	Total businesses in Study Area ¹	% of businesses in Study Area ¹	Total businesses: Wider Study Area	% of businesses: Wider Study Area	Total businesses: Nillumbik and Whittlesea	% of businesses: Nillumbik and Whittlesea
Accommodation and Food Services	10	24%	16	3%	360	4.0%
Transport, Postal and Warehousing	1	2%	38	7%	845	9.3%
Information Media and Telecommunications	0	0%	3	1%	59	0.7%
Financial and Insurance Services	0	0%	12	2%	156	1.7%
Rental, Hiring and Real Estate Services	0	0%	9	2%	145	1.6%
Professional, Scientific and Technical Services	1	2%	39	7%	776	8.6%
Administrative and Support Services	0	0%	24	4%	281	3.1%
Public Administration and Safety	0	0%	3	1%	58	0.6%
Education and Training	1	2%	18	3%	321	3.5%
Health Care and Social Assistance	7	17%	26	5%	652	7.2%
Arts and Recreation Services	0	0%	11	2%	131	1.4%
Other Services	9	21%	25	5%	565	6.2%
Total	42	100%	535	100%	9076	100%

Note 1: within 300 meters of the boundary of the Project area

Source: Study Area – MRPV audit, Wider Study Area and LGAs, Worksafe Victoria, business by industry, 2018

4.2 Wider Study Area

The Wider Study Area comprises the suburbs of Doreen and Yarrambat. The Wider Study Area is the broader corridor within which the Yan Yean Road is located.

Doreen consists of parts located in a residential growth corridor and parts in a semi-rural landscape, while Yarrambat is located outside of the urban growth boundary and is semi-rural in nature. The suburb of Doreen is undergoing change, with ongoing residential development and associated development of activity centres and infrastructure. The extension of the South Morang line to Mernda was completed in 2018, with construction of a new station and associated carparking, contributes to and supports this growth.

Building permit data from the Victorian Building Authority (accessed through MyVictoria, 2020) shows the amount and types of projects happening in an area. According to building permit data there were 415 building permits granted for the suburb of Doreen and 40 granted for the suburb of Yarrambat in the 12 months to January 2020. Doreen accounts for 16% of the new building permits granted in the City of Whittlesea, indicating that this is a suburb with a high level of construction activity. This significant new residential development between the Plenty River and Yan Yean Road is contributing to increasing traffic along Yan Yean Road. In Shire of Nillumbik, building activity is more dispersed but with greater activity

in southern parts of the Shire in Diamond Creek and Eltham which does not contribute to traffic on Yan Yean Road.

Table 8 shows the number of building permits granted in the suburbs of the Wider Study Area compared to the number of permits granted in the local government area.

Table 8: Building activity in the Wider Study Area, 12 months to January 2020

Area	No of building permits	
	Wider Study Area	LGAs
Yarrambat suburb	40	
Doreen suburb	415	
Nillumbik		1,074
Whittlesea		2,612
Total	445	3,686

Source: Victorian Building Authority, 2020

Table 7 above shows the number of businesses by industry in the Wider Study Area. Some 535 businesses are in the Wider Study Area. The largest industry by far is the construction industry with 243 of 535 businesses, or 45% of businesses. It is likely that most of the businesses in the construction industry would be trades people, including bricklayers, plumbers, electricians, tilers, carpenters, and services to the construction industry. Many of the construction businesses would be homebased, as their office space requirements would be limited, and the nature of the work entails frequently changing work sites. Some of these may be present in the Study Area and have not been found in the desktop assessment. Any such that are identified must be included in plans for businesses for the Project.

The number of jobs in the Wider Study Area is estimated at approximately 4,000 to 4,500. The estimate is based on ABS Census data for SA2 statistical areas for Doreen and Plenty – Yarrambat. This SA2 area extends further south than the Wider Study Area but excludes part of the Doreen suburb that is outside of the urban growth boundary.

Approximately three quarters of the working population drive to work, but significantly, approximately 20%, or 800-900 work from home. In comparison, in Banyule which is the local government area immediately to the south of Nillumbik, approximately 16% worked from home at the 2016 Census. Note that the data includes people who did not go to work on the day of Census.

5 Risks of Business Impacts

A risk assessment of Project activities was performed in accordance with the methodology described in Section 2.4.

Risks were assessed for the site pre-construction, construction, and reinstatement phases of the Project because the risks at each stage are not the same e.g. acquisition occurs in the pre-construction phase, and reinstatement works are mainly on the verges of the road.

The identified risks and associated risk ratings are listed in Table 9. These risk ratings are a combination of the maximum likely consequence level of the impact and the likelihood consequence.

Detailed explanations of the risks of business impacts are provided in Section 6.

Table 9: Initial risks to businesses

Activity	Impact Pathway	Likelihood	Consequence	Initial Risk Rating
Pre-construction - site establishment	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	Likely	Moderate	Significant
Pre-construction - earthworks	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	Likely	Moderate	Significant
Construction of civils and structures	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	Likely	Moderate	Significant
Reinstatement	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	Possible	Moderate	Medium
Operations	Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of operation	Possible	Moderate	Medium
Maintenance	Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of operation	Possible	Minor	Medium

6 Business Impact Assessment

In this section, the potential effects on businesses in terms of magnitude, extent and duration of change are assessed.

In the context of duration, note that the road upgrade works are planned to be completed 24 months after commencement.

Impacts to businesses are described in the order they would occur i.e. the phases of the construction process.

- First phase is pre-construction when site establishment occurs as well as land acquisition and establishment of any temporary access ways in preparation for construction.
- Second phase is the construction of the road itself.
- Third phase is reinstatement following construction with replanting of vegetation, cleaning lay down areas and reinstatement of access to their permanent form and location.
- Fourth and final phase is operation of the road in its new upgraded status.

6.1 Impacts during site establishment

Site establishment works will involve tree clearance and vegetation lopping and removal within the Project area, establishment of construction site compounds, clearing and grubbing, temporary sediment and erosion control works, and establishment of environmental and traffic controls.

Site establishment will involve truck movements. Temporary access restrictions are likely when work is being undertaken in a constrained road reserve.

Prior to or during site establishment, potential business impacts such as business displacement (due to temporary occupation of land) or land acquisition would occur.

During site establishment, potential business impacts such as impact to business operation due to changes in access and/or amenity are also likely.

6.1.1 Land acquisition



The Project requires partial acquisition of six parcels of land occupied by businesses or commercial uses as the proposed road alignment is not sufficiently wide to accommodate the duplication and supporting infrastructure such as services roads, shared use path and drainage. In most cases, partial acquisition of the land would be required along the frontage of landholdings, which are limited in extent, and will not likely result in a long-term change in the existing land use but would result in a permanent reduction in the land area on those land parcels. Some businesses lose formal carparking as a result of partial acquisition which would be restored as negotiated with the relevant stakeholders.

Compensation for land acquisition will be provided for all land acquired for the Project in accordance with the *Land Acquisition and Compensation Act 1986* (LAC Act).

Table 10 shows the street view of businesses occupying land that would be affected by partial acquisition. Generally, the businesses along Yan Yean Road are affected and a business with agricultural pastureland on Doctors Gully Road.

Table 10: Land acquisition impacts on businesses – south to north

Business location	Impacts
<p>Yarrambat Veterinary Hospital 541 Yan Yean Rd, Yarrambat</p> 	<p>This property would lose part of its front paddock fronting Yan Yean Road. It is used for grazing animal patients, and trees that provide screening in front of the property.</p> <p>Availability of space to accommodate animals under observation or care is an attribute of the business and this attribute would be diminished by the loss of land. Some restructure of practices would be needed.</p> <p>Loss of screening may increase exposure to traffic and noise for animal patients in the paddocks.</p>
<p>Smiling Children Childcare and Early Learning Centre 553 Yan Yean Rd, Yarrambat</p> 	<p>This property would lose part of the land and vegetation abutting Yan Yean Road, however as the business is located to the rear of the site, the current use would be able to continue. No buildings would be affected.</p>
<p>Hippety Hop Childcare 6 Youngs Road, Yarrambat</p> 	<p>This property is under construction and yet to open for business. It would lose land abutting Yan Yean Road, significantly reducing open space between Yan Yean Road and the childcare centre. A permanent increase in road noise levels would also be likely. This could affect its ability to attract customers and risk reduced viability of business. Access would need to be realigned and is likely to be affected during construction.</p>
<p>M&S Franco Builders, Personal Training, Firewood 815 Yan Yean Road, Doreen</p> 	<p>The current design indicates that part of the land abutting Yan Yean Road would be required for road widening, with resulting loss of land and change in access to left in, left out. The current use is unlikely to be affected by the loss of land as the businesses are unlikely to rely on the full size of the property for operation. Change in access arrangements will be an inconvenience that adds travel time to vehicle trips.</p>

Business location	Impacts
<p>Plenty Valley Christian College 840 Yan Yean Road, Doreen</p> 	<p>The current design indicates that part of the land abutting Yan Yean Road would be required for road widening. This would result in the loss of car parks, dam and vegetation. All would need to be reinstated.</p>
<p>J&C Yeoman Slate Wholesalers & Homestead Farm 25 Doctors Gully Road, Doreen</p> 	<p>This agricultural property is engaged in horse breeding and is also the base for a slate wholesaler. The property would lose land along its abuttal with Yan Yean Road and Doctors Gully Road, being part of a paddock at the front of property.</p> <p>The current design requires realignment of entry to the property.</p> <p>Land acquisition would permanently reduce the carrying capacity of the agricultural property. The amount of land required reduces the area of level ground available for horse training purposes and has impacts on the capacity to train harness horses on the property.</p> <p>Infrastructure impacts on Homestead Farm would be loss of fences and possibly loss of the brick front entry, which would be reinstated as part of the Project.</p>

6.1.2 Business access

During site establishment, some businesses would begin to experience impacts in terms of business access.

Businesses that are affected by partial land loss would experience issues with access as the acquisition is undertaken and works to establish a temporary access or permanently realign access and/or restore fences and replant vegetation within a smaller land area are undertaken.

Business access would need to be maintained at all times for all types of vehicles, noting that as some businesses require truck and horse float access to operate.

Directional signage into Ashley Road to the cluster of domestic animal boarding facilities would assist with wayfinding to businesses in Ashley Road as traffic levels along Yan Yean Road increases after the upgrade. Likewise, directional signage to other business clusters accessed from Yan Yean Road is also recommended.

Along Yan Yean Road, one business will have its brick entrance treatment affected due to acquisition of road reserve. The business is located at 649 Yan Yean Road and is a golf course, mini golf, and associated café. The existing entrance to the business is shown in Figure 10. Current designs also require relocation of the brick entry and tree removal, however through detailed design this may be able to be avoided.

Figure 10: Entrance to Yarrambat Park Golf Course, 649 Yan Yean Road



Source: Google maps, accessed 6 April 2020

At 25 Doctors Gully Road, one property occupied by two businesses will have its brick entrance treatment affected due to partial acquisition to accommodate the Bridge Inn Road intersection. The property is used as an agricultural property for horse breeding and is the location for a slate wholesale business. The entrance is shown in Figure 11.

Horse float and B-double truck access is required to this property. This size truck delivers stock for the business and loss of access would have implications for efficiency (and cost) of incoming stock. Current design shows left in left out access which is unsuitable for horse floats and B-double trucks, in part because it would increase traffic on a local road. Detailed design will need to resolve how to accommodate access for trucks.

Figure 11: Entrance to Homestead Farm/ J&C Slate Wholesalers, 25 Doctors Gully Road



Source: Google maps, accessed 6 April 2020

Businesses in Doreen Neighbourhood Activity Centre with frontage to Yan Yean Road, will have their access changed as shown in Figure 12.

Figure 12 Yan Yean Road and Bridge Inn Road Intersection



For illustrative purposes only and subject to change

The realignment of Yan Yean Road to the north east at the Doreen Neighbourhood Activity Centre has access implications, as follows:

1. Stockfeed and pet supplies business operating from Doctors Gully Road (site indicated by Old Post Office in Figure 11):
 - a. Changed the alignment of both Yan Yean Road and Doctors Gully Road to be east and north of the Doctors Gully frontage eliminating direct frontage to Doctors Gully Road
 - b. The new alignment of the Project would require permanent realignment of access to the business.

2. General store operating from corner of Yan Yean Road and Doctors Gully Road (site indicated by Old Post Office in Figure 11):
 - a. The new alignment of the Project is east and north of the current corner frontage to Doctors Gully Road and Yan Yean Road, eliminating direct frontage to a busy intersection
 - b. Improved connection to Doreen Neighbourhood Activity Centre as Yan Yean Road would be replaced with a service road (old Yan Yean Road) that provides dedicated access to the activity centre and ease of parking
3. Businesses in Doreen Neighbourhood Activity Centre:
 - a. New access arrangements for businesses in the Doreen Neighbourhood Activity Centre. As in 2b above, access would be from a dedicated service road (old Yan Yean Road), eliminating direct access from a busy intersection.

6.1.3 Business amenity

Project wide, construction works undertaken during daytime operation, particularly of businesses such as childcare centres and schools, have the potential to impact on the ability of the business to continue their practice.

The golf course at 649 Yan Yean Road would have significant amenity impacts during construction and operation. The upgrade of Yan Yean Road requires acquisition of road reserve to the fence line of the golf course, in particular along the golf hole that is aligned along the fence line (10th hole). This involves removal of some trees that are in the road reserve that currently act as a buffer to the road. A significant safety fence/barrier would need to be erected along the property boundary. In operation, traffic will have increased, be closer to the boundary of the golf course and loss of trees result in reduced amenity.

The new alignment around the Bridge Inn Road/Yan Yean Road intersection provides additional land north and south of the general store and the stockfeed and pet supplies business adjoining the neighbourhood activity centre. This provides opportunity to use this land differently and in a way, which could support/complement other business activity in the area.

6.2 Impacts during road construction

Road construction activities include earthworks and civil construction.

According to the Chapter 5 *Project description*, earthworks will involve:

- remediation of any existing contamination as appropriate,
- protecting and relocating services,
- widening of existing rock cuttings (approximately 750 metres of existing cut along the Project would be widened by approximately 20 metres),
- new cuttings (approximately 1300 metres of new rock cut would be required to a width of approximately 5 metres along the Project), and
- bulk earthworks and haulage.

Civil and structure works will involve construction of infrastructure, including roundabouts and intersection upgrades, shared use path and pedestrian path construction and connections,

retaining walls, drainage works, and pavement works. However, the construction process is still to be determined and construction process will not be finalised until a further design is completed.

6.2.1 Business access

A construction process that allows traffic to move unhindered for as long as possible during the 24-month construction timeframe would provide a better outcome for access to businesses in this area than construction that requires lengthy lane closures. Businesses will need to retain undiminished access for customers, deliveries and staff during the construction period. There is a risk if access deteriorates that customers become discouraged and shift their patronage elsewhere. It is difficult to win customers back if they change their shopping habits.

The risk of this occurring is relatively low as these businesses are in a convenient location for residents of Doreen and for commuters along this section of Yan Yean Road. Keeping in mind that at any one time approximately 20% of employed people in this area work from home or did not go to work, it is likely that they will continue to frequent businesses that are located in their neighbourhood, despite short term access disruption. However, over the longer-term shopping patterns may change permanently if disruption is significant or occurs over a long period of time as a result of consecutive construction projects.

It will be important to work with businesses to encourage continued patronage of businesses that have already been adversely affected by the current government restrictions, in particular cafes and takeaway food businesses.

6.2.2 Business amenity

Earthworks and civil construction are dusty, noisy and cause vibration, and there are businesses along the alignment that are likely to experience adverse impacts due to construction activity. Childcare centres, education facilities, restaurants, outdoor recreation businesses, home offices, veterinarian hospital, and animal boarding facilities (kennels and catteries) are likely to experience some impacts during the construction period.

Community and business consultation will be needed to inform affected parties about duration and noise/dust/vibration levels of upcoming works and to discuss how best to meet the needs of the businesses and community while also progressing the roadworks in line with the Communication and Stakeholder Engagement Plan for the Project.

6.3 Impacts during reinstatement and operation

Reinstatement will involve implementation of traffic management systems and landscaping.

Potential business impacts during reinstatement include changes to amenity or changed road conditions.

Some businesses along Yan Yean Road will have permanently changed access patterns to left in, left out instead of being able to turn from the opposite side of the road. This is an inconvenience, but not a significant impact for businesses not relying extensively on opportunistic custom, but whose customers who plan their visits.

Businesses that rely on convenience shopping, e.g. petrol sales, convenience stores and some fast food businesses risk losing some patronage if their access is permanently changed and becomes cumbersome.

All permanent access to and parking for businesses and to the Doreen Neighbourhood Activity Centre affected by the works must be restored or relocated as agreed with the relevant property owner, including associated landscaping and restoration works. Any temporary access and car parking arrangements put in place for the duration of construction must be efficiently removed when construction has ceased.

The design for the Bridge Inn Road/Yan Yean Road interchange continues to provide access to the convenience shopping at this location, with the additional opportunity to strengthen the function of the neighbourhood activity centre, with the provision of some vacant adjacent space. During consultation with Council, this was mentioned as a possible benefit to activity centre operation.

7 EPRs for mitigation and management

Mitigation and management of impacts require a set of environmental management measures and requirements, some of which become contractual obligations of the contractor and others which remain with Major Road Projects Victoria.

Mitigation and management measures and requirements need to address the three impact pathways identified for business, namely:

- land acquisition
- business access and
- business amenity.

7.1 Minimise the nature and extent of impacts

Any reduction in the level of access, amenity or function of any business or commercial facility, and the extent of land required must be minimised to the duration necessary to carry out the relevant construction works. These efforts are articulated in environmental performance requirements (EPRs) specific for businesses but augmented by EPRs for other specialist areas. For example, EPRs for traffic and transport have been developed as part of the Transport Impact Assessment and likewise for social impacts.

Any acquisition required by the Project would be carried out according to the LAC Act which provides a framework for compensation to landowners where Government compulsorily acquires land for public purposes. It further provides the legislation required to mitigate and/or manage land acquisition impacts.

Otherwise, the following measures are proposed to minimise the nature and extent of impacts specific to businesses.

7.1.1 EPRs

EPRs relevant to business are shown in Table 11 below.

Table 11: EPRs relevant to business

Performance objective	Applicable legislation, policy and guideline	Impact pathway	EPR Code	Risk no.	Environmental Performance Requirement	Project phase
Effects on land use planning- Identify other potential adverse environmental effects of the project, such as on land use, and planning, and canvass an environmental management approach and performance measures to ensure any effects are identified and avoided, minimised or mitigated.						
Business To avoid where possible, and otherwise minimise adverse impacts on business and	<i>Land Acquisition and Compensation Act 1986</i> Victorian Small Business	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity Potential business impacts such as changes to	B1	4, 24, 44, 64, 84 and 104	Avoid and minimise business disruption Avoid and minimise to the extent practicable any reduction in the level of access, amenity or function of any business or commercial facility, including any reduction in car parking available for	Design and construction

Performance objective	Applicable legislation, policy and guideline	Impact pathway	EPR Code	Risk no.	Environmental Performance Requirement	Project phase
commercial facilities	Engagement Guidelines	amenity, or changed road conditions affecting businesses as a result of operation Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of maintenance activities			businesses or commercial facilities. Ensure that the construction program minimises impacts on businesses and facilities to the extent practicable, with consideration of operating hours and peak visitation times (see also EPR B2).	
		Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	B2	4, 24, 44 and 64	Implement a Trader Engagement Plan Prepare and implement a Trader Engagement Plan in accordance with <i>Victorian Small Business Engagement Guidelines</i> to manage impacts to non-acquired businesses and to engage with business and property owners throughout the construction phase. The plan shall include: <ul style="list-style-type: none"> • Timely information on key project milestones • Changes to traffic conditions and duration of impact • A project construction schedule developed in coordination with transport authorities and City of Whittlesea and Shire of Nillumbik and in consultation with businesses to minimise cumulative impacts of this and other projects • Plans for signage to notify customers of proposed changes to business operations, including the setting of suitable timeframes for notification prior to commencement of changes • Measures to ensure access to businesses is 	Design and construction

Performance objective	Applicable legislation, policy and guideline	Impact pathway	EPR Code	Risk no.	Environmental Performance Requirement	Project phase
					<p>maintained for customers, delivery and waste removal unless there has been prior engagement with affected businesses (including mutually agreed mitigation measures as required). This could include the installation of directional and business signage to assist customers and minimising reduction in carparking available to shoppers and traders</p> <ul style="list-style-type: none"> • Process for registering and management of complaints from affected businesses and potential support services offered • Ensure emergency services are notified ahead of major works • Provide the opportunity for issues / concerns to be raised through a 24-hour phone number (see also EPR S2). 	
		Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of maintenance activities	B3	84 and 104	<p>Business access and car parking</p> <p>All permanent access to and parking for business and commercial facilities affected by the works is to be restored, in consultation with the relevant stakeholders, including associated landscaping and restoration works. Any temporary access arrangements put in place for the duration of construction must be removed when construction has ceased, unless they become the permanent arrangement. Any reduction in current parking numbers at existing businesses will be avoided; however, where a loss in existing car parking is unavoidable, losses must be minimised and occur in consultation with relevant stakeholders.</p>	Design and construction

7.2 Residual risk assessment

The residual risk assessment has been undertaken following the initial risk assessment and the application of the EPRs that have been proposed to reduce risks to businesses. The residual risks have been scored after the identified mitigation measures have been considered. These are outlined in the column headed 'Mitigation measures to inform Environmental Performance Requirement' of the risk assessment in Table 12 below.

Table 12: Residual risks to businesses and mitigation measures

Activity	Impact Pathway	Mitigation measures	EPR	Likelihood	Consequence	Residual Risk Rating
Pre-construction - site establishment	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	<p>Any reduction in the level of access, amenity or function of any business or commercial facility must be mitigated where possible, including any reduction in car parking available for businesses or commercial facilities.</p> <p>Prepare and implement a Trader Engagement Plan to manage impacts to businesses and to engage with business and property owners throughout the site establishment phase to ensure all stakeholders are aware of upcoming impacts. The plan shall include:</p> <ul style="list-style-type: none"> • Timely information on key Project milestones • Changes to traffic conditions and duration of impact • A Project construction schedule developed in coordination with transport authorities and City of Whittlesea and Nillumbik Shire Council and in consultation with businesses to minimise cumulative impacts of this and other projects • Plans for signage to notify customers of proposed changes to business operations, including the setting of suitable timeframes for notification prior to commencement of changes • Measures to ensure access to businesses is maintained for customers, delivery and waste removal unless there has been prior engagement with affected businesses (including mutually agreed mitigation measures as required). This could include the installation of directional and business signage to assist customers and minimal reduction in car parking available, • A 24-hour emergency number to reach the construction team. 	B1 B2	Possible	Moderate	Medium
Pre-construction - earthworks						

Activity	Impact Pathway	Mitigation measures	EPR	Likelihood	Consequence	Residual Risk Rating
		<ul style="list-style-type: none"> Process for registering and management of complaints from affected businesses and potential support services offered. 				
Construction of civils and structures	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	<p>Implement the Trader Engagement Plan to manage impacts to non-acquired businesses and to engage with business and property owners throughout the construction phase to ensure all stakeholders are aware of impacts.</p> <p>Any reduction in the level of access, amenity or function of any business or commercial facility must be mitigated where possible, including any reduction in car parking available for businesses or commercial facilities.</p>	B1 B2	Possible	Moderate	Medium
Reinstatement	Potential business impacts such as displacement or acquisition, or impact to business operation due to changes in access and/or amenity	<p>Implement the Trader Engagement Plan to manage impacts to non-acquired businesses and to engage with business and property owners throughout the construction phase to ensure all stakeholders are aware of impacts.</p> <p>Any reduction in the level of access, amenity or function of any business or commercial facility must be mitigated where possible, including any reduction in car parking available for businesses or commercial facilities.</p>	B1 B2	Possible	Moderate	Medium
Operations	Potential business impacts such as changes to amenity, or changed road conditions affecting businesses as a result of operation	<p>All permanent access to and car parking for business and commercial facilities affected by the works is to be restored, or relocated as agreed with the relevant stakeholders, including associated landscaping and restoration works. Any temporary access arrangements put in place for the duration of construction must be removed when construction has ceased, unless they become the permanent arrangement. Any reduction in current parking numbers at existing businesses should be avoided, however, where a loss in existing car parking is unavoidable, losses must be minimised and occur in consultation with relevant stakeholders.</p> <p>Any reduction in the level of access, amenity or function of any business or commercial facility must be mitigated where possible, including any reduction in car parking available for businesses and commercial facilities.</p>	B1 B3	Unlikely	Minor	Low
Maintenance						

8 Conclusion

The proposed upgrade of Yan Yean Road Stage 2 aims to improve travel times and reliability to and from growing residential areas in Doreen and Mernda, enhance north-south travel in the area, and improve safety along the corridor.

The Business Impact Assessment is one study that informs a broader and more comprehensive Environment Effects Statement for the Project.

Impacts at intersection of Yan Yean Road and Bridge Inn/Doctors Gully Road as well as along the corridor south of this intersection can and should be minimised as discussed, noting that updates in detailed design at Doctors Gully Road is likely to further reduce access impacts on businesses in that location.

Partial land acquisition is required from properties that accommodate businesses. In most cases, the land acquisition does not compromise the current use of the property for business purposes. An exception is noted for the capacity of the horse breeding business to train horses on site (loss of flat land suitable to this purpose), and the loss of convenient B-double access to the property with cost implications for deliveries and supplies. The impacts would be mitigated through application of EPRs and compensation is available in accordance with LAC Act.

In terms of the environmental performance objective is ***‘to avoid where possible, and otherwise minimise adverse impacts on business and commercial facilities’***, the current design performs well – even though it entails loss of convenient B-double access to the slate wholesaler in Doctors Gully Road - in that it retains all the businesses in the Doreen Neighbourhood Activity Centre and their associated employment, and supports the role of the Doreen Neighbourhood Activity Centre by improving the connection between businesses east of Yan Yean Road and the activity centre, and by providing new space that could accommodate activities in the activity centre. While direct access from Yan Yean Road is no longer available for the petrol station and convenience businesses, the increase in traffic along Yan Yean Road, the signalised intersection and the dual carriageways would make access and egress safer for motorists.

Applications of the EPRs, especially prior to and during construction would mitigate impacts to businesses. There is evidence that these EPRs are being considered during the planning stage of the Project to further reduce impacts according to individual business circumstances.

However, many non-essential businesses are experiencing significant impacts due to restrictions on activities placed by the Victoria and Australian government as a result of 2019-nCoV. These impacts are likely to reduce the resilience and viability of some businesses and whether businesses have recovered to their prior level by commencement of construction of Yan Yean Road Upgrade Stage 2 is uncertain. If not, minor restrictions in access or amenity may have a greater impact than would otherwise be the case. Benefits of the Project have not been calculated, but as observed at similar scales of construction, convenience type businesses typically see increased sales to workers in the area while construction is ongoing.

9 References

ABS Cat. № 3218.0 Regional Population Growth 2016.

Arcadis (2019), Yan Yean Road (Stage 2) Upgrade, Environment Effects Statement, Technical Appendix A, Transport Impact Assessment

City of Whittlesea (2017), Economic Development Strategy, Growing our economy together,

DELWP (2020), Whittlesea Planning Scheme, accessed 26/3/2020 <https://planning-schemes.delwp.vic.gov.au/schemes/whittlesea/>

DELWP (2020), Nillumbik Planning Scheme, accessed 26/3/2020 <https://planning-schemes.delwp.vic.gov.au/schemes/nillumbik/>

Department of Sustainability and Environment (2006), Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978

Arup (2020), Chapter 12 Environmental Management Framework, Yan Yean Road Upgrade – Stage 2 EES

MRPV (2020), Environmental Risk Report, Yan Yean Road Upgrade – Stage 2 (Kurraak Road to Bridge Inn Road)

Project Description (2020), draft EES Chapter 5.

Shire of Nillumbik (2020), Nillumbik Economic Development Strategy 2020 – 2030

Victorian Building Association (2020), data accessed through MyVictoria portal at <https://myvictoria.vic.gov.au>

Victorian Government (2013), Plan Melbourne Metropolitan Planning Strategy

Victorian Small Business Engagement Guidelines, Victorian Small Business Commission (2018)

<https://www.victorianplaces.com.au/doreen>, accessed 8 May 2020

Worksafe Victoria (2018), data accessed through MyVictoria portal at <https://myvictoria.vic.gov.au>